Economic Institutions and the Development of Burma/Myanmar's Private Sector

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AFC – Asian Financial Crisis

BSPP - Burma Socialist Programme Party

CAGR – Compound Annual Growth Rate

CBM – Central Bank of Myanmar

CIL – Citizens Investment Law

DG – Director General

DV – Dependent Variable

DICA – Directorate of Investment and Company Administration

DSI – Defense Services Institute

FDA – Food and Drug Administration

FDI – Foreign Direct Investment

FIL – Foreign Investment Law

FX – Foreign Exchange

FY – Fiscal Year

GAD – General Administration Department

GDP – Gross Domestic Product

HS – Harmonized System

IBRD – International Bank for Reconstruction and Development

IFI - international financial institutions

IHLCA - Integrated Households Living Conditions Assessment

IMF – International Monetary Fund

IRD – Internal Revenue Department

ISIC – International Standard Industrial Classification

IV – Instrumental Variable

IZ – Industrial Zone

IZMC – Industrial Zone Management Committee

K - kyat

LAO – Limited Access Order

MEC – Myanmar Economic Corporation

MEHL – Myanmar Economic Holdings Limited

MFTB – Myanmar Foreign Trade Bank

MIC – Myanmar Investment Commission

MNPED - Ministry of National Planning and Economic Development

MOGE – Myanma Oil and Gas Enterprise

NGO - Non-government organizations

NIE – New Institutional Economics

OAO – Open Access Order

OECD – Organization for Economic Cooperation and Development

OLS – Ordinary Least Squares

RC – Revolutionary Council

RCT - Randomized Controlled Trial

SDR – Standard Drawing Right

SEZ – Special Economic Zone

SLORC – State Law and Order Restoration Council

SME – Small and Medium Enterprise

SOE – State-owned Enterprises, (in Myanmar, State-owned Economic Enterprises)

SPDC – State Peace and Development Council

UMFCCI – Union of Myanmar Federation of Chambers of Commerce and Industry

UN – United Nations

UNDP – United Nations Development Program

US – United States

USDP – Union Solidarity and Development Party

Notes

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Abstract

Economic institutions are the rules of the economic game that define the incentives and constraints for businesses, and are integral to the development of an economy. Myanmar's institutions have a turbulent history, shifting repeatedly due to the frequent changes in ruling regimes. In the 19th century, British colonization brought market-supporting institutions to replace the existing traditional, informal institutions. Despite their success in facilitating export-led economic growth, the Burmese population viewed colonial institutions as exploitative, which contributed to increasing state-domination of institutions throughout the 20th century. The socialist government that came to power in 1962 abolished markets and their supporting institutions, and gave the government widespread authority to control and implement economic activity. Though the government was incapable of exploiting this authority, successive regimes retained many of these formal powers, delegating them through an opaque system which limits access to economic opportunities and gives the state power to dictate economic outcomes. The state also exerts influence over transactions, which often hinge on permissions, connections, and bribery. Property rights, which depend on a 'strong but limited state' for their defence, instead face a 'weak but unlimited state' in Myanmar, with few bounds on government's formal authority and weak market-supporting institutions. Arbitrary implementation and unpredictability are fundamental characteristics of Myanmar's institutional framework, incentivizing businesses to engage in bribery, build relationships and result depend on informal, relation-based mechanisms to facilitate exchange.

This thesis examines the impact of economic institutions on businesses in Myanmar, drawing on over 150 quantitative surveys and 60 interviews conducted during almost two years in country. It examines how institutions shape transactions, firm-level outcomes, and decision-making, and finds that they have a material impact on firm performance. Weak institutions deter investment, restrict competition, lead to lower productivity, and distort price signals, skewing the allocation of capital and labour. It argues that Myanmar's existing economic institutions are heavily influenced by history, and that the socialist-era governance of business has left a legacy that continues to influence economic outcomes. It also shows that institutional enforcement characteristics and informal institutions matter for economic outcomes. State weakness leads to an institutional framework characterized by enforcement that is non-existent, arbitrary, preferential, or opportunistic. The result is heterogeneity of

institutional experiences that depend not only on business-government relationships, but also changes in the external environment, changes in personnel within government, poorly codified laws, and weak monitoring and enforcement mechanisms.

Statement

This thesis is substantially my own work and has not been submitted for a higher degree to any other university or institution. I affirm that, to the best of my knowledge, the thesis contains no material previously published or written by another person, except the references in the thesis utilised. This research is approved by the Ethics Committee of Macquarie University, Australia on November 25, 2011 (Reference: 5201100879). This approval of project is guiding by the National Statement on Ethical Conduct in Human Research (2007).

Jared Bissinger

September 12, 2014

Chapter 1: Introduction

1.1: Research Purpose

Economic institutions are integral to the development and sustained success of economies. They are the rules that shape the economic game and the incentives and constraints that influence the decisions of economic actors. They affect relative and actual prices, the participation in and functioning of markets, the distribution of benefits from economic activity, and the investment in human and physical capital which drives future economic growth. Consistent, efficacious institutions promote investment in and efficient use of both physical and human capital. Inconsistent and ineffectual institutions can deter investment and productive economic activities, and incentivize rent-seeking and the inefficient use of capital and labour.

Economic institutions are fundamental to the development story of Myanmar. Before the 19th century, the economy of Myanmar (or Burma, as it was referred to for much of the 19th and 20th centuries) was characterized by traditional, informal institutions which relied on personal relationships and social networks to facilitate economic activity. In the 19th century, the British progressively colonized Burma, gradually introducing a set of formal market supporting institutions and reshaping the economy from a traditional agrarian to an export-oriented resource and agriculture based economy. The colonial institutions continued to expand their reach into the early 20th century, and while they succeeded in facilitating economic expansion, they largely failed as a legitimate set of rules governing the distribution of wealth. They were viewed by the Burmese as part of the exploitative colonial economy which enriched foreigners and excluded locals, a narrative that drove nationalism and anti-capitalist sentiment. The formal colonial institutions often contradicted the informal institutions of traditional Burmese society, and were only adopted to a limited degree by the populace despite their importance in the formal economy.

After short stints with an occupying Japanese administration during World War II and a post-war reincarnation of the colonial administration, an independent Parliamentary government was established in 1948. The new leadership had a much different economic agenda, which emphasized the nationalization, Burmanization and industrialization of the economy. The state would play a major role in key sectors such as finance and manufacturing, and also engage in a greater degree of economic planning. Yet the parliamentary government lasted only 10 years before a military 'caretaker' government came to power in 1958. Just four years later, a coup ended the parliamentary experiment and brought in a military government called the Revolutionary Council (RC) that would dramatically change Myanmar's formal economic institutions. The key to the RC's economic agenda was the abandoning of markets and the adoption of a form of socialism as the model of economic organization. The socialist economy was planned and administered by the state, while most private enterprises were criminalized. The colonial era market-supporting institutions that deteriorated during the parliamentary era were mostly abolished by the RC, though the structures and facades of some institutions lingered. Both the implementers and patrons of these economic institutions, whose shared conceptions about economic exchange legitimized those institutions, had largely left the country. While the ineptitude of the RC and rampant corruption doomed Burma's socialist aspirations in only a few years, socialism and its formal institutional framework was officially retained until 1988. That year another coup brought to power a military junta which officially abandoned socialism, adopted markets, and opened the country to greater international economic engagement. The junta ruled for almost a quarter century, until 2012, when a military-dominated quasi-democratic regime came to power. In the last three quarters of a century, Myanmar experienced frequent changes in governments, which brought periodic changes to economic institutions and contributed to their arbitrary and unpredictable enforcement.

The laws, rules, and regulations that underpin Myanmar's formal institutional framework were dramatically revised during socialist and military rule to give widespread economic authority to the state, powers which are largely retained by the existing government. Economic sectors that have historically been Myanmar's most lucrative, such as forestry, mining, oil and gas, and the rice trade, continue to have laws that reserve these activities for the state. For sectors with less historical 'weightiness,' the government is largely laissez faire, providing little regulation and few market-supporting institutions. Despite the state's wide-ranging authority to control and administer lucrative sectors of the economy, current and past governments have been unable to exploit these rights to anywhere near their full extent. The state's formal authority to exploit and control these sectors far outstrips its ability to do so. When the state does not exploit these sectors directly, it controls the delegation of that authority to private interests either explicitly, implicitly or through wilful ignorance (the latter is exemplified by the government’s neglect of rampant cross-border smuggling). This creates an opaque system which limits access to key sectors and often determines participation through government fiat, not market mechanisms. It incentivizes businesses to invest in relationships with government officials, while reducing their incentives to improve performance. It also increases uncertainty for businesses that depend on continued state sanction to operate, as they lack any inalienable right to do so.

As well as exclusive authority in key economic sectors, the state also exerts wide-ranging controls over basic transactions and the rights and benefits derived from private property ownership. For example, many basic business transactions, such as registration and land transfers, are encumbered by the need to obtain numerous permissions from government officials, a relic of the socialist system. These examples evidence a system in which business transactions are governed by permissions, not rules, resulting in time and financial costs for businesses. Property rights, which the New Institutional Economics literature argues are fundamental to capital accumulation and economic development, depend on a ‘strong but limited state’ which can credibly commit to respecting these rights. Yet present-day Myanmar is much the opposite - a ‘weak but unlimited state’ with few bounds on its formal authority yet limited strength to create and sustain the independent institutions necessary to protect property rights. Laws that facilitate state infringement of property rights are common, from blatant examples such as state confiscation of traditional communal lands or more subtle transgressions such as restrictions on the crop choice of farmers. The state’s interference in both economic exchange and property rights is detrimental to Myanmar’s economic development.

While the state places much emphasis on controls and permissions to engage in economic activity, little attention is devoted to the development of market supporting or regulatory institutions to facilitate impersonal exchange and competitive markets. Key market supporting institutions such as the judiciary and the financial system are incapable of providing needed public goods and lack legitimacy among businesses. Formal institutions are also inconsistent and unpredictable, and laws implemented arbitrarily. This is not evidence of ‘weak institutions,’ but instead is an integral characteristic of the state’s economic institutional framework and a central part of the incentive and constraint structure that businesses encounter. The challenges of the formal institutional framework incentivize businesses to use relationships, bribery, and informal institutions to facilitate transactions. In present-day Myanmar, relationships play an integral role in facilitating economic exchange, the result of weak formal institutions, expansive state authority, and no credible commitment from the sovereign to protect private property rights.

The purpose of this thesis is to examine the role of institutions in Myanmar's economy, and the way that they shape transactions, outcomes, and the decisions of businesses. It makes three major lines of argument. First, a country's existing economic institutions are inherently shaped and descendent from its historical economic institutions. In Myanmar, these formal economic institutions have a turbulent history, changing regularly based on the whims and ideologies of the regime of the day. Institutional characteristics that have their roots in previous eras, such as state control of the 'commanding heights' or the weakness of market-supporting institutions, continue to characterize the present-day institutional framework despite changes in the economic system. Historical institutions are also important because they influence the set of organizations that exist in the present economy, all of which were founded in the past based on the incentive structure that existed under the historical institutions. In sum, both the institutions and organizations of the present come from the past, which makes a thorough understanding of the present context impossible without an understanding of its history.

Second, institutions matter for Myanmar's economic success, not just at the level of the macro economy but also for the individual business. This study focuses on the effects at the firm level, and finds that the implementation and enforcement of Myanmar's institutions often raise the costs for businesses of interacting with government, while also increasing risk and uncertainty. Weak institutions deter investment by changing the relative costs and benefits of engaging in transactions. They restrict the range of entrepreneurs who can engage in a marketplace, and therefore the competition in that market. The lack of competition can lead to greater inefficiencies at the firm level, quasi-monopoly pricing, and lower levels of economy-wide output. Institutions also distort price signals, which can lead to the misallocation of labour and capital to otherwise unproductive activities. While in more developed market economies, prices communicate changes in supply and demand in a relatively steady institutional environment, in Myanmar prices reflect changes in supply and demand as well as variations in institutional enforcement and market distortions such as scarcity rents.

Lastly, while most of the literature addresses the formal institutions, informal institutions and the enforcement characteristics of *both informal and formal institutions* are integral for economic outcomes. In Myanmar, most existing formal institutions suffer from deficient implementation. While they may exist on paper, the weaknesses of the state mean that institutional rules are not enforced, enforced arbitrarily or preferentially, or enforced opportunistically to extract bribes from businesses. The result is that the institutional environment affects different businesses in different ways, and these heterogeneous effects have been poorly understood and represented, especially in the quantitative literature. Relationships are a key aspect of doing business in Myanmar, yet their effect on firm-level outcomes is not addressed in the institutional economics and investment climate literature. Beyond relationships, there are many other factors that influence the enforcement characteristics of formal institutions, such as changes in the external environment, changes in personnel within the government administration, poorly codified laws, processes, and procedures, and weak monitoring and enforcement mechanisms within the civil service that creates principal-agent problems and allows conflicts of interest to thrive. This thesis aims to incorporate enforcement characteristics into its analysis in an integral and grounded way.

1.2: Contributions

This thesis aims to make a number of major contributions to the literature. First and foremost, it is the first significant analysis of Myanmar's economic institutions based on extensive field research in some time. While many other works have addressed the macro economy, economic history, or important subsectors such as agriculture, this work focuses particularly on the country's economic institutions and their effect on private sector development. It includes a significant amount of original data based on over 150 firm level surveys, more than 60 qualitative interviews, and almost two years of in-country experience. Secondly, it combines qualitative, quantitative and historical analysis to provide both rigour and context. This methodological contribution is in part due to the necessities of collecting information in Myanmar. However, it is also a response to the quantitative-centric approaches in the literature that lack context and the knowledge to translate econometric results into practical conclusions, and then to take those practical conclusions one step further to inform policy decisions. A regression analysis that can show that electricity is the biggest constraint to growth across 140 countries is interesting for academics but has no practical or policy relevance at the level at which policy-making occurs. Lastly, the thesis aims to show that informal institutions play an important role in the economy and merit greater attention in the work of both academics and practitioners, especially in developing countries where informal institutions play an important role in facilitating economic exchange.

1.3: Thesis Structure

This thesis is structured as follows. Chapter Two is the literature review, which starts with a brief review of the evolution of development economics before turning to the New Institutional Economics literature. It focuses especially on the contributions of Douglass North, whose work on institutions and development is central in the literature. It then shifts to explore the practitioner-oriented investment climate literature and the use of firm-level data to examine how the institutional environment and investment climate affect firm performance. Chapter Three reviews the methodology of the thesis, with a focus on the quantitative data collection process. It also highlights the limitations of both the qualitative and quantitative data and provides the reader with a better understanding of their context. The intimate knowledge of both the quantitative and qualitative data is one of the strengths of this PhD, as it allows more insights into the analytical results. Chapters Four and Five review the historical development of Burma/Myanmar's economic institutions and private sector. Significant emphasis is placed on the creation, successes, and failures of the colonial era institutions, as well as their undoing during the Parliamentary and Socialist eras. The thesis also examines the institutional turmoil of the socialist and military eras, and its effects on the private sector and business-government interactions.

Chapter Six explores the present-day economic institutions in Myanmar, including the key laws, rules, and regulations that govern the private sector and state-business interactions. It highlights the centrality of the Union government and the secondary status of subnational governments and individuals. It also argues that arbitrary enforcement and uncertainty are key institutional characteristics, and not only the result of 'weak' institutions. It closes with an examination of the strategies businesses adopt in the present-day institutional environment, examining bribery, relationships, and business associations. Chapter Seven explores the quantitative data collected from businesses in Myanmar. The first section explores a range of descriptive statistics about firm characteristics and firm performance. The second section employs regression analysis, examining the importance of institutional variables on firms of different sizes. The final section explores the relationship between institutions and firm performance, as measured by changes in either firm sales or number of total employees. The thesis concludes with Chapter Eight, a brief review of the findings.

Chapter 2: Literature Review

2.1: Introduction

The economics of development as a discrete focus in academia is relatively new but has intellectual roots in both political economy and classical economics.[1] Interest in development economics grew after World War II, when many former colonies became independent, self-governing countries, yet there were no academic frameworks to analyse their economies (Todaro and Smith 2009, 110). The first theories of development were heavily influenced by two factors: (1) the Marshall Plan in Europe, in which massive capital injections helped countries rebuild their economies in a matter of years; and (2) the historical precedent of then-developed countries, that just a few centuries earlier were also undeveloped, agrarian societies (Todaro and Smith 2009, 111). These experiences figured centrally into early theories of economic development. One of these, put forth by American economist Walt Rostow, famously (or infamously) argued that economic growth occurred in a series of five consecutive stages through which all economies pass: (1) the traditional society; (2) preconditions for take-off; (3) take-off; (4) drive to maturity; and (5) age of high mass consumption (Rostow 1960, 4-11). Capital accumulation was the fundamental catalyst for Rostow's take-off, and accelerated because of the benefits of compounding accumulation. The stages of growth were linked to the economy's accumulation of the factors of production, which different scholars attributed to different savings rates (Solow 1956), preferences (Cass 1965, Koopmans 1965) or other parameters. The relationship between capital accumulation and growth in output, according to the Harrod-Domar growth model, was linked through the savings rate (which represented how much of a nation's output could be invested back into capital), the marginal product of that capital, and the depreciation rate of the capital (Domar 1946, Harrod 1939). Changes in any of these three would affect the growth in output.

The dual-sector model, commonly referred to as the Lewis model, was another important early contribution to development economics. The model hypothesized that developing country economies had two sectors: an over-populated 'subsistence' sector dominated by agriculture, and a higher-productivity 'capitalist' sector (Lewis 1954, 402). The more

[1] This section does not aim to provide a comprehensive overview of the rich history of economics and, more specifically, the subfield of development economics. This is far beyond the scope of this thesis. Instead this cursory review aims to show how New Institutional Economics fits in the intellectual evolution of the discipline.

productive capitalist sector, with industrialists who reinvested profits into capital and created new employment opportunities, drew labour from the ‘subsistence’ sector because of the higher wages offered (Lewis 1954, 448). The abundant supply of labour in the ‘subsistence’ sector meant that the wages needed to draw labour away from that sector and into the ‘capitalist’ sector remained constant until all surplus labour had moved to the ‘capitalist’ sector. The result of this process was a “rising share of profits in the national income” (a higher savings rate) which was reinvested by capitalists to create more employment opportunities. The Lewis model received much praise but also significant criticism, including critiques that the model:

(1) Proposed that the marginal product of labour in the subsistence sector could be zero or negative.
(2) Used the average, not marginal, product of labour in the subsistence sector to determine the capitalist wage.
(3) Portrayed a “smooth process of transfer of labour from underemployment in rural areas to full employment in a growing modern industrial urban sector,” despite most urban cities of the day having widespread under- and unemployment.
(4) Assumed capitalists would reinvest all their profits, failed to address the creation of a capitalist class in a traditional society, and failed address the creation of demand for capitalist sector output (Leeson 2008, 197-199).

Other key contributions to the early literature on development economics included Paul Rosenstein-Rodan’s ‘Big Push’ model, which argued that development required a critical mass of investment in order to succeed (Rosenstein-Rodan 1943). Rosenstein-Rodan and Nurske contributed to ‘Balanced Growth Theory,’ which argued that development depended on economy-wide investment to enlarge markets and increase productivity (Nurske 1953). Many early contributions to development economics placed heavy emphasis on exogenous factors, notably capital, and did not focus on any of the structural or endogenous characteristics of an economy (Zagha and Nankani 2005, 2). Using these early models, the discipline of development economics boomed in the 1960s, a high that ended “with a whimper” in the early 1970s as growth declined because of the cumulative effects of distortions and inefficiencies combined with economic shocks (Yusuf 2009, 13). The emphasis on capital accumulation led to mounting criticisms of early theories when growth slowed below the levels predicted at given rates of capital accumulation. Economic institutions, government policies and the business environment were not important for growth and development in these models.

In the 1960s and 70s, 'dependency' theory rose to prominence because of growing evidence of the shortcomings of the classical liberal and structural change models. Dependency theory had its roots in the work of two UN economists, Raúl Prebisch and Hans Singer, who separately published papers in 1949/50 arguing that the terms of trade between primary products and manufactures deteriorate over time (United Nations Economic Commission for Latin America 1950, Singer 1949). Their hypothesis would come to be known as the Singer-Prebisch thesis. This constant deterioration meant that the development prospects for countries that relied on primary product exports were grim, as they faced increasing difficulties accumulating capital. The policy prescription from the UN's Economic Commission for Latin America was to adopt import-substituting industrialization (ISI), which was supposed to help developing countries escape dependence on imported manufactures and accumulate capital. The structural inequalities that were characteristic of the existing international system, as outlined in the Singer-Prebisch thesis, also attracted interest among Marxist economists in the United States, for example Baran (1957). Dependency theorists generally posited that underdevelopment was the result of: (1) poor quality but well-intentioned advice from IFI's and 'development' experts; or (2) the "historical evolution of a highly unequal international capitalist system of rich-country, poor country relationship" in which the rich-countries dominate the poor through unequal power relationships (Todaro and Smith 2009, 122). However, the failures of ISI policies in Latin America, especially in comparison with the trade-oriented economies of East Asia, led to the eventual decline of dependency theory.

In the late 1970s and 1980s, there were significant shifts within the discipline. In developed Western countries, poor economic performance and stagflation throughout the 1970s brought scepticism about state-led development policies. It also contributed to the rise of conservative governments who believed that underdevelopment was the result of poor policies and interventionist governments, which led to highly inefficient resource allocations and consequently slower growth (Todaro and Smith 2009, 126-127). Within the World Bank, there was a similar ideological shift "from macroeconomic concerns with the availability of foreign finance to microeconomic advice on 'getting the prices right.' External causes were de-emphasized, and blame for the crisis was laid predominantly on domestic policy errors, notably the use of borrowed funds for consumption or for investment purposes that were badly directed, partly due to distorted prices" (Stern and Ferreira 1997, 560). The new ideology of market-based solutions was exemplified by the 'Washington Consensus,' which gained widespread acceptance within the US Treasury Department and the Washington-based international financial institutions (IFIs) of the IMF and World Bank. This agenda, whose roots lay in John Williamson's 1990 article "What Washington Means by Policy Reform," outlined ten 'neoliberal' policy prescriptions to guide the advisory and policy agenda for these organizations (Williamson 1990a). Policies included a push for fiscal discipline and altered fiscal priorities, tax and exchange rate reform, liberalization of the financial, trade and foreign investment regimes, privatization, deregulation and security of the property rights regime (Williamson 1990a).

The early 1990s, especially the post-Soviet transition, was the pinnacle of the neoliberal Washington Consensus. Yet the neoliberal-informed advice given to former Soviet, sub-Saharan African and Latin American countries by the IFIs produced results that were generally viewed as underwhelming or outright disappointing (Rodrik 2006, 974). Downturns in GDP were greater than predicted for post-Soviet countries. For many others, growth and development outcomes were below expectations. In the wake of these shortcomings, other theories began to rise to prominence in the 1990s and 2000s. These new theories, generally speaking, emphasized the importance of "complementarities between several conditions necessary for successful development. These theories often highlight the problem that several things must work well enough, at the same time, to get sustainable development underway" (Todaro and Smith 2009, 159). The re-emergence of discourse around institutions, of which New Institutional Economics played a central part, was a direct result of the failures of orthodox policies in post-Soviet transition economies which were developed without any regard to institutions (Murrell 2005, 691, Chang 2006, 2).

One of these new theories, endogenous growth theory, proposed that growth comes from changes in the systems governing the production process rather than forces outside that system, such as the introduction of additional labour, capital or technology (Todaro and Smith 2009, 151). Endogenous growth, according to Paul Romer, "distinguishes itself from neoclassical growth by emphasizing that economic growth is an endogenous outcome of an economic system, not the result of forces that impinge from outside" (Romer 1994, 3). Economic growth is not just a result of combining labour, capital and technological change, but other considerations far more difficult to measure such as the movement of knowledge and human capital (Lucas 1988). North and Thomas argued that the factors often used as explanations for growth – innovation, economies of scale, education, and capital accumulation – were not causes of growth but instead growth itself (North and Thomas 1973, 2). These essential insights are often ignored because they are difficult to measure, resulting in a body of literature that focuses on testing and rejecting models that are too narrowly defined. Endogenous growth helped economists understand a number of previously unexplained phenomena, for example international capital flows from developing to developed countries (Romer 1987). Engerman notes that the rise of endogenous growth theory was part of a more general move from a "concentration on the role of narrowly defined economic factors to a focus on the significance of various social structures and culture in providing the conditions conducive to economic development" (Engerman and Sokoloff 2005, 641).

2.2: New Institutional Economics

Even before the zenith of neoliberals and the 'Washington Consensus,' interest in the role of institutions had been growing within the economics profession. By the mid-1980s, the "economics of institutions" was cited as one of the "liveliest areas" in the discipline (Matthews 1986, 903). Though the term 'New Institutional Economics' (NIE) was coined by Oliver Williamson in 1975, it was not until the 1990s that NIE began to coalesce and gain prominence, a result of the failing of post-Soviet reform policies informed by neoliberal economics. Milo argues that the post-Soviet transition exposed the limits of "one-size fits-all" policies (Milo 2007). Institutions differed across countries, and these differences mattered greatly for the outcome of neoliberal policies (Milo 2007). John Nye argued that this "turn to focus on governance and institutions" came as Western organizations realized that development entailed more than capital and technology transfer (Nye 2011, 4). Revived interest in the role of institutions started to become evident in international organizations in the 1990s, specifically in the work of the World Bank (for example, see World Bank 1997, 2002).

The importance of institutions was not a new discovery in the late 20th century (Zagha and Nankani 2005). It was addressed, albeit from different perspectives, by thinkers in previous decades and centuries including Adam Smith, Karl Marx, Max Weber, and in the mid-20th

century, Burma's own Hla Myint. They all "highlighted the role of institution in the development of a market economy and formation of a capitalist society"(Zagha and Nankani 2005, 5). Glaeser notes that the foundations of the literature that argues that institutions (and democracy) bring development lies in the work of Montesquieu and Smith (Glaeser et al. 2004). Institutional economics, sometimes referred to as old institutional economics, had flourished in the 1920s and 1930s through the work of scholars such as John Commons. The field later fell into disrepute as other scholars criticized it for lacking rigorous, theoretical foundations and supporting empirical analysis, as well as a tendency to be country-specific and politically motivated (Joskow 2008, 6).

NIE is not a general theory of institutional economics and does not have any general models (Ménard and Shirley 2014, 2). Its roots lie in related but distinct bodies of work which evolved around two basic propositions: "(i) institutions do matter, (ii) the determinants of institutions are susceptible to analysis by the tools of economic theory" (Matthews 1986, 903). In the Handbook of New Institutional Economics, Menard and Shirley state that NIE is "characterized by its stress on institutions as rules and norms, its examination of the microanalytics of firm and market organizations and the ramifications for public policy, its search for dynamic rather than static explanations of economic evolution, its acceptance of interdisciplinary approaches, and its openness towards case studies and other less mathematical methodologies" (Ménard and Shirley 2014, 2). NIE "extends economic theory by incorporating ideas and ideologies into the analysis, modelling the political process as a critical factor in the performance of economies, as the source of the diverse performance of economies, and as the explanation for 'inefficient' markets" (Harriss, Hunter, and Lewis 2003, 19).

2.2.1: Definitions

There is not a consensus definition of institutions in the NIE literature, and different authors have put forward a range of different interpretations. Among the most cited is North (1981). He views institutions as a set of constraints, or "a set of rules, compliance procedures, and moral and ethical behavioural norms designed to constrain the behaviour of individuals in the interests of maximizing the wealth or utility of principals" (North 1981, 201-202). North notes that institutions can include "formal constraints (e.g., rules, laws, and constitutions), informal constraints (e.g., norms of behaviour, conventions, self-imposed codes of conduct), and their enforcement characteristics" (North 1994a, 360). Other scholars, including de Haan and Glaeser et. al., have also emphasized the role of institutions as permanent or durable constraints on behaviour (Glaeser et al. 2004, De Haan 2007). As well as providing a constraint, institutions are also important because they create incentives. North says that institutions "structure incentives in human exchange, whether political, social, or economic," (North 1981). Often scholars include both of these concepts in their definition of institutions, as did Acemoglu when noting that institutions are humanly devised, set constraints and shape incentives (Acemoglu 2004, 9). In a lecture on the role of NIE, Matthews argued that the unifying characteristic of the many interpretations of institutions are as "rights and obligations affecting people in their economic lives" (Matthews 1986, 905). The result of institutions is to influence the behaviour of actors. As North noted, institutions structure human interaction and "alter the price individuals pay" for their actions (North 1990, 22). Defined in this way, economic institutions are inclusive conceptions. Acemoglu et al. note that economic institutions include "the structure of property rights and the presence and perfection of markets" (Acemoglu, Johnson, and Robinson 2005, 1).

Early definitions of institutions, especially those of North, left open the possibility that societies could have conflicting institutions, for example, when a formal constraint (like a law on land rights) stood at odds with a long-held convention (such as communal land ownership). To clarify such cases, more recent work by North has introduced new terms into the NIE lexicon. 'Institutional form' is used to refer to "explicit and formal institutional arrangements, like a written constitution," (North et al. 2007, 25). 'Mechanisms' are the "formal or informal way the institutional forms are implemented and sustained" (North et al. 2007, 25). Institutional forms and mechanisms differ from North's former definition of institutions because they "explicitly do not include beliefs, cultures, or whether the institution is embedded in a limited or open access order" (North et al. 2007, 25).

To give greater structure to the differing conceptualizations of institutions in the literature, Williamson puts forth an analytical framework that identifies four levels of social analysis that are relevant to institutional economics, which is shown in Table 2.1. Williamson's framework differentiates between the different types of institutions and how they relate to different branches of thought in NIE. While all of the levels of institutions outlined by Williamson are relevant for development, NIE focuses on the second and third levels of institutions (Williamson 2000, 596). North's definition of institutions focuses on Level 2 institutions though with a significant influence from embedded Level 1 institutions. The

Level 2 institutions which are the focus of NIE are sometimes collectively referred to as the 'institutional environment' (Williamson 1990b, 1997).

Table 2.1: Economics of Institutions

Level		Frequency (years)	Purpose	Relevant theoretical discourse
Level 1	Embeddedness: informal institutions, customs, traditions, norms, religion	100 to 1,000	Often noncalculative; spontaneous	Social theory
Level 2	Institutional environment: formal rules of the game – especially property (polity, judiciary, bureaucracy)	10 to 100	Get the institutional environment right. 1st order economizing	Economics of property rights/positive political theory
Level 3	Governance: play of the game: especially contract (aligning governance structures with transaction)	1 to 10	Get the governance structures right. 2nd order economizing.	Transaction cost economics
Level 4	Resource allocation and employment (prices and quantities; incentive alignment)	continuous	Get the marginal conditions right. 3rd order economizing.	Neoclassical economics/agency theory

Source: Williamson, Oliver E., "The New Institutional Economics: Taking Stock, Looking Ahead," Journal of Economic Literature, Vol. 38, No. 3 (Sep., 2000), pp. 595-613.

While the definitions of institutions employed in the literature vary, they can still provide some useful clarity about the concept of institutions. Other definitions, however, are too broad to be useful. In the 2002 World Development Report entitled "Building Institutions for Markets," the World Bank defined institutions as the "rules, enforcement mechanisms and organizations supporting market transactions" that together "help transmit information, enforce property rights and contracts, and manage competition in markets" (World Bank 2002, 4). This definition includes both institutions and organizations, which Shirley argues "makes a mockery of efforts to measure the impact of institutions on markets or policies or the interactions between institutions and organizations" (Shirley 2005, 632). This thesis will adopt the usage of North, viewing institutions as rules, compliance procedures, norms and behaviours that constrain and incentivize individuals.

2.2.2: Organizations and Governance Structures

If institutions are the rules of the game, organizations are the players of the game. According to North, organizations are “groups of individuals bound by a common purpose to achieve objectives. They include political bodies (political parties, the senate, a city council, a regulatory agency); economic bodies (firms, trade unions, family farms, cooperatives); social bodies (churches, clubs, athletic associations); and educational bodies (schools, colleges, vocational training centers)” (North 1993, 6). Organizations come into being to “win the game” or “achieve objectives” based on the existing institutional structure (North 1990, 4-5). Organizations are purposefully created, and *done so in the context of the existing rules of the game.* Though organizations are the players of the game, they are also major agents of institutional change in the pursuit of their objectives (North 1990, 4).

If organizations are the players of the game, governance structures are the ways that these players internally organize. Governance structure (often referred to simply as governance) is closely associated with the work of Oliver Williamson on Transaction Cost Economics (TCE) at the third level of institutional analysis, or the ‘play of the game.’ According to Williamson, “governance is an effort to craft *order*, thereby to mitigate *conflict* and realize mutual *gains*” (Williamson 2000, 599). Governance happens through the structure or arrangement of the different organizations at this level of the institutional analysis.

The three governance structures that are central to Williamson’s analysis are markets, hybrids, and hierarchies. Williamson defines governance structure as the “institutional matrix within which the integrity of a transaction is decided. Within the commercial sector, three discrete structural governance alternatives are commonly recognized: classical market, hybrid, and hierarchy” (Williamson 1993, 55). Menard and Shirley refer to these governance structures as ‘organizational arrangements’ and define them as the “different modes of governance that agents implement to support production and exchange. These include (i) markets, firms and the various combinations of forms that economic actors develop to facilitate transactions and (ii) contractual agreements that provide a framework for organizing activities, as well as (iii) the behavioural traits that underlie the arrangements chosen” (Shirley and Ménard 2005, 1). Therefore, governance structures also provide constraints and incentives for human interaction much like institutions, except they do so inside the organization (North 1990, 4, 1994b, 2). Organizations adopt governance structures based on the institutional environment, which shapes the costs of transacting.

2.3: The Assumptions of NIE

2.3.1: Bounded rationality

One of the key assumptions that separates NIE from neoclassical economics is that actors have ‘bounded rationality,’ or as North puts it, “incomplete information and limited mental capacity by which to process information” (North 1993, 1). The idea of bounded rationality is associated closely with Herbert Simon and his 1957 book “Models of Man” (Simon 1957). Simon defines bounded rationality as behaviour which is “intendedly rational, but only limitedly so” (Simon 1957, xxvi). As he elaborates, there are numerous bounds on the knowledge of actors. They are unable to know risk and uncertainty in the future, have incomplete information about alternatives in the present, and are unable to fully comprehend complexity (Simon 1962, 163-164).

There are many implications that derive from the presumption of bounded rationality. When market actors lack all relevant information about a transaction, they often incur costs to acquire that information. As North notes, “costs of transacting arise because information is costly and asymmetrically held by the parties to exchange” (North 1993, 2). Another ramification is “all complex contracts are unavoidably incomplete” (Williamson 1993, 11). Actors cannot foresee all potential risks and uncertainties that might avail themselves in the future and therefore cannot incorporate those eventualities into the contract. Bounded rationality is also important because it means that institutions, which also lack unboundedly rationality, are inherently inefficient, as noted by North. Lastly, bounded rationality means that actors perceive, through theories or models, the world around them based on limited information. This gives rise to ideology, and this assumption allows institutional economists to understand and include the role of ideology in the formation of economic institutions.

2.3.2: Opportunism

Another key assumption in NIE is that actors are opportunistic, or as Williamson puts it, they are “self-interested with guile” (Williamson 1993, 11). They may defect from the spirit of cooperation in a transaction under certain conditions. Human actors often will not disclose their full knowledge when asked and will fail to fulfil promises, which means that a "contract as (a) mere promise, unsupported by credible commitments, will not be self-enforcing" (Williamson 2000, 601).

If it were not for opportunism, behaviour could be governed by basic rules without the need for comprehensive, ex ante planning. Opportunism is a source of uncertainty in transactions and as such, spurs the creation of institutions to protect against it. These institutions help "protect a (well-socialised) majority against the predatory tendencies of a determined minority" (Williamson 1993, 12). The question of when defection is likely, and the role of institutions in altering these incentives, gives rise to the concept of 'credible commitment'.

2.4: The Importance of Institutions

NIE proposes that institutions matter for economic analysis. Economic institutions stem from problems in markets, a key insight of Coase, who argued that without transaction costs, there would be no need for institutions (Coase 1937). Arrow echoed this when he noted that "there is a wide range of social institutions, in particular generally accepted social norms of behaviour, which serve in some means as compensation for failure or limitation of the market" (Arrow 1971, 5). They form constraints, increase predictability and reduce the uncertainty that is inherent in human economic exchange (Harriss, Hunter, and Lewis 2003, 18).

The importance of institutions is better understood by looking at three concepts central to NIE: property rights, transaction costs, and contracts. Menard and Shirley refer to these as the "golden triangle of NIE" (Ménard and Shirley 2014, 4). They lie at the core of the work of Coase, Williamson, North and many other NIE scholars. While these concepts may not seem directly related, they connect through the concept of institutions. Simply put, institutions determine the rules of the game, which directly affect the transaction costs of making a contract-based exchange of rights over goods, services or anything from which an actor derives utility. "The theoretical core of NIE starts from the premise that because transaction costs are positive, information is costly and contracts and property rights are imperfectly defined and enforced. Under such circumstances, the institutional framework is a crucial determinant of economic performance" (Ménard and Shirley 2014, 6).

2.4.1: Property Rights

One of the key intellectual contributions of NIE is the centrality of property rights in the economic system. NIE approaches property rights somewhat differently than previous literature, primarily by emphasizing the importance of 'rights' and de-emphasizing the importance of the physical 'property'. Coase was one of the first to note this difference in a 1959 paper entitled "The Federal Communications Commission," in which he examined the allocation of radio frequencies. He found that actors trade in rights over property, not the physical property itself (Coase 1959). Furubotn and Pejovich summarize this conception by stating that "property rights do not refer to relations between men and things but, rather, to the sanctioned behavioural relations among men that arise from the existence of things and pertain to their use" (Furubotn and Pejovich 1972, 1139). The literature also points out that property rights are best thought of as a bundle of rights over an asset, which include "the right to use it, to change its form and substance, and to transfer all rights in the asset through, e.g., sale, or some rights through, e.g., rental" (Furubotn and Pejovich 1972, 1139-1140).

However, property rights are not an unlimited license to use assets for any and every purpose. They are a limited set of rights accompanied by obligations that result from the externalities of property use, when that use abridges the property rights of others. Property rights "specify how a person may be benefited and harmed" (Demsetz 1967, 347). Coase argues very clearly that by restraining the right of party A to use their property because it would cause harm to party B, party A is being harmed. The problem is reciprocal (Coase 1960, 87). Coase notes "all property rights interfere with the ability of people to use resources. What has to be insured is that the gain from interference more than offsets the harm it produces" (Coase 1959, 27). The purpose of property rights is to internalize the externalities that come from property use so that the gains from internalization outweigh the costs (Demsetz 1967, 349). Given the complexity of the rights and obligations, property rights also help owners form expectations about their future dealings with other actors by outlining the rights and obligations of externalities ex ante (Demsetz 1967, 347).

Property rights are one of the key behavioural and social norms, or institutions, of a society. "The rights of individuals to the use of resources (e.g. property rights) in any society," argues Alchian, are "supported by the force of etiquette, social custom, ostracism, and formal legally enacted laws supported by the states' power of violence or punishment" (Alchian 1965, 5). Property rights "specify the norms of behaviour with respect to things that each and every person must observe in his interactions with other persons, or bear the costs for non-observance. The prevailing system of property rights in the community can be described, then, as the set of economic and social relations defining the position of each individual with respect to the utilization of scarce resources" (Furubotn and Pejovich 1972, 1139). Demsetz notes that they are, simply, "an instrument of society" (Demsetz 1967, 347).

Early NIE scholarship on property rights was criticized for overstating their importance. For example, Coase argued that "a private-enterprise system cannot function properly unless property rights are created in resources," but when that happened, "chaos disappears; and so does the government except that a legal system to define property rights and to arbitrate disputes is, of course, necessary" (Coase 1959, 14). More recent work has shown that, like labor and capital, property rights are a necessary but not sufficient condition for the growth of private enterprise. Later scholars have suggested differentiating property rights into two categories: contracting institutions and property rights institutions. The former are defined as "the rules and regulations governing contracting between ordinary citizens, for example, between a creditor and a debtor or a supplier and its customers" (Acemoglu, Johnson, and Robinson 2005). They point out that the most important component of contracting institutions is a functioning, independent judiciary. The later, property rights institutions, are defined as, "the rules and regulations protecting citizens against the power of the government and elites" (Acemoglu, Johnson, and Robinson 2005). Unlike the former, these institutions are related to "political and state-society interactions" (Acemoglu, Johnson, and Robinson 2005).

2.4.2: Transaction Costs

Transaction costs are the costs to "define and protect property rights and to enforce agreements," and derive in part from economic institutions (North 1990, 5). Some academics equate them almost wholly with property rights – for example Demsetz refers to transaction costs simply as the "cost of exchanging ownership titles" (Demsetz 1968, 35). The concept of transaction costs was first explored in Ronald Coase's 1937 paper "The Nature of the Firm" which sought to explain why firms formed, as opposed to fulfilling all transactions in the market (Coase 1937, 388). He argued that, in contrast to neo-classical economic theory in which transacting was costless, "the operation of a market costs something," so firms (which command resources directly) save costs compared to transacting on the market (Coase 1937, 392). He finds:

> *"The main reason why it is profitable to establish a firm would seem to be that there is a cost of using the price mechanism. The most obvious cost of 'organizing' production through the price mechanism is that of discovering what the relevant prices are. This cost may be reduced but not eliminated by the emergence of specialists who sell this information. The costs of negotiating and concluding a separate contract for each exchange transaction which takes place on a market must also be taken into account" (Coase 1937, 390-391).*

Coase noted that governments often regard transactions within the firm differently than market transactions, especially for taxation purposes (Coase 1937, 393). Lastly, market transactions can incur monitoring and enforcement costs. These information costs, whether in time or money, are a significant barrier to market transacting and key to transaction cost economics.

Oliver Williamson took the initial findings of Coase and expanded them into other areas, including vertical integration in firms – the question of whether they should "make or buy" (Williamson 1971). Williamson argued that the governance structure that was chosen by firms – be it markets, hierarchies, or hybrids – depends on the transaction costs: "efficient intermediate product market exchange is usually well served by simple market contracting if the assets are generic; but the advantage shifts to hierarchy as bilateral dependency (and the resulting risk of costly mal-adaptations) builds up by reason of asset specificity and outlier disturbances" (Williamson 2009, 460). One of the major transaction costs was the governance of contractual relations, which became important because TCE "rejects the proposition that the courts can administer justice in an informed, low cost, and efficacious way" (Williamson 1990b, 67). Williamson also noted that the principal dimensions of the transaction that determine the governance structure are the "frequency with which transactions recur, the uncertainty to which transactions are subject, and the degree of asset specificity on which they rely" (Williamson 1993, 16).

Williamson's work has significant implications. First, since transactions are no longer assumed to be costless, the cost of doing business was equal to the production costs plus transaction costs. Consequently, high transactions costs could change the behaviour of economic actors, explains Coase: "If the costs of making an exchange are greater than the gains which that exchange would bring, that exchange would not take place and the greater production that would flow from specialization would not be realized. In this way transaction costs affect not only contractual arrangements but also what goods and services are produced" (Coase 2005, 35). Transaction costs affect not only the decisions of operating firms, but also the decisions of individuals on whether to form organizations, and of what kind. Adopting a TCE perspective, the firm was no longer a black box, as Tadelis and Williamson put it, "for transforming inputs into outputs according to the laws of technology but was interpreted instead as an alternative mode of contracting" (Tadelis and Williamson 2012, 6). Therefore, there is a direct relationship between transaction costs and the types of organizations observed in an economy (Acheson 2002, 28). TCE argues that transaction costs affect both the distribution of organizations in an economy and the internal structure of those organizations/actors in regards to their decisions to 'make or buy.'

While most TCE literature has focused on transaction costs between market-based actors, some scholars have also suggested that there are transaction costs for organizations working to change the institutional structure. This was argued by Furubotn and Richter, who note that "the creation, enforcement and, if required, the restructuring of institutions and the "rules of the game" in an autonomous community represent activities that are associated with the first kind of transaction cost" (Furubotn and Richter 1991, 8). While information-related costs for organizations trying to influence institutions occur, they fall outside the scope of this thesis.

2.4.3: Contracts

The third integral concept of NIE is the contract, a device that facilitates exchange. They are directly linked with property rights because they are the "effective means by which the bundles of rights are exchanged" (Furubotn and Pejovich 1974, 7-9). A contract can be defined as "an agreement between a buyer and a supplier in which the terms of the exchange are defined by a triple: *price, asset specificity,* and *safeguards*" (Williamson 1997, 377). Contracts are designed to include structures to deal with problems including information asymmetry, moral hazard, and enforcement costs (Goldberg 2005, 491).When transactions are simple, contracts are simple. However, when transactions are complex, so are the contracts, which makes them costly to construct and enforce. A contingent-claims contract is the most comprehensive contract that can govern a transaction, as it includes all possible contingencies that might affect the exchange and discounts them according to their likelihood and time horizon (Williamson 1979, 236). Such comprehensive contracting is rare due to the cost and difficulty of specifying the full range of contingencies. Instead, NIE proposes that all contracts have two key characteristics: they are never perfectly enforced and never perfectly complete (Ménard and Shirley 2014, 5). The first is due to the costs associated with monitoring and enforcement, while the second is due to the bounded rationality of actors who are incapable of specifying all potential contingencies in a contract (which would also be prohibitively costly) (Williamson 1990b, 68). These contractual characteristics, when combined with the assumption of NIE that actors can be opportunistic, create uncertainty and hazard. The result is that companies lock themselves into exchange despite uncertainty and divergent interests, resulting in opportunistic behaviour or joint losses (Williamson 1971, 117). Contractual hazards often arise in long-term contracting, when contracts are incomplete and unexpected disturbances in implementation incentivize defection from the spirit of cooperation in the presence of courts that are unable to resolve disputes in a timely, knowledgeable and efficient fashion (Tadelis and Williamson 2012, 11).

2.5: Institutions and Economic Growth

Institutions matter for growth and economic performance because they are the rules that shape certainty and affect the costs of exchange and production (North 1990, 5). This insight has spurred significant empirical research into the relationship between institutions and economic growth. The literature often uses rough approximations for institutions in large cross-country regressions to determine correlation. These studies largely find a link between the two, bolstering the proposition that "institutions matter," but reveal little about the causal links between institutions and development (Aron 2000, Jütting 2003, Milo 2007). Key studies from this body of literature found a direct link between per capita incomes and the quality of economic institutions, as proxied by an internationally standard measure of property rights, "protection against appropriation risk."(Acemoglu, Johnson, and Robinson 2004). Other studies (for example, Easterly and Levine 1997) that sought to explain growth through traditional measures such as labor, physical capital, human capital, etc. turned to institutional explanations when initial models failed to explain experiences in Africa (Aron 2000).

Scholars have empirically tested numerous explanations for the link between institutions and growth. Glaeser examines the "political institutions of limited government," and finds them to be important for growth (Glaeser et al. 2004). Another paper argues that growth comes when "political institutions allocate power to groups with interests in broad-based property rights enforcement, when they create effective constraints on power-holders, and when there are relatively few rents to be captured by power-holders."(Acemoglu, Johnson, and Robinson 2004). The theme of enforcing contracts and constraining coercion is echoed by Greif, who argues that growth comes when institutions "reward production and exchange rather than expropriation and redistribution" (Greif 2005). Using a database of 30-56 country risk factors available for up to 68 countries, Mauro conducted an analysis on the links between growth and bureaucratic honesty and efficiency, proxied by subjective measures of institutional efficiency including 'corruption,' 'bureaucracy and red tape,' 'legal system, judiciary' and six others (Mauro 1995, 684). He found that corruption lowers private investment and private marginal product of capital thereby reducing growth (Mauro 1995, 683). In a 1997 study of 29 countries, Knack and Keefer use the World Values Survey to find that trust and civic cooperation are correlated with stronger economic performance. They also find that "trust and norms of civic cooperation are stronger in countries with formal institutions that effectively protect property and contract rights, and in countries that are less polarized along lines of class or ethnicity" (Knack and Keefer 1997). Hall and Jones find that "a country's long-run economic performance is determined primarily by the institutions and government policies that make up the economic environment within which individuals and firms make investments, create and transfer ideas, and produce goods and services" (Hall and Jones 1999). Acemoglu et al. echo this in their article "Unbundling Institutions," which finds that property rights institutions that protect citizens from the state and elites have a "first-order effect on long-run economic growth, investment, and financial development" but note that contracting institutions "appear to matter only for the form of financial intermediation" (Acemoglu and Johnson 2005, 949). They hypothesize that the difference may result from actors using alternative means of dispute resolution, though these mechanisms are not as effective against expropriation (Acemoglu and Johnson 2005, 949). Acemoglu et. al emphasize the equalizing role of institutions, defining good institutions as "those that provide security of property rights and relatively equal access to economic resources to a broad cross-section of society" (Acemoglu, Johnson, and Robinson 2005, 9).

Other scholars, including Bardhan, argue that there is a preoccupation in the literature with property rights and a misconception that if governments have "rule of law that protects property rights (and preferably, the laws themselves are of the Anglo-Saxon type which are supposed to protect minority shareholders against insider abuse in the corporate sector), the market will take care of much of the rest" (Bardhan 2005, 500). This excludes other investigations of worthwhile aspects of development and hinders a deeper understanding of it. He points to economic growth in many Southeast Asian nations, which were often dominated by wealthy Chinese business families, and suggests that "collectivist organizations can be reshaped in particular social-historical contexts to facilitate industrial progress, and clan-based or other particularistic networks can sometimes provide a viable alternative to contract law and impersonal ownership" (Bardhan 2005).

Part of the challenge in understanding the relationship between institutions and development is that institutions are difficult to measure and analyse, as pointed out by Glaeser et al. The literature has relied on proxy measures to help approximate the quality and characteristics of institutions. For example, Acemoglu et al use the 'risk of expropriation' index from Political Risk Services on property rights and checks against government power as an institutional proxy (Acemoglu and Robinson 2001). Others use the Polity dataset (Marshall, Jaggers, and Gurr 2002) or the Governance Matters dataset (Kaufmann, Kraay, and Mastruzzi 2009). These indexes are comprised of objective measures and analyst assessments, though the weighting of these is opaque and arbitrary (Pande and Udry 2005). Often, these indexes use qualitative judgements, usually of businessmen and experts, many of whom were educated in the US (Chang 2006, 484). They can also misinterpret or fail to identify the effect of institutions. Glaeser et al. argues that much of this literature actually measures the outcomes of policies, not institutions. He notes that growth can result from constitutions and electoral rules (which are institutions) but also from the good policy choices of a unconstrained dictator (not as institutional) (Glaeser et al. 2004).

Institutions are often more complex than the data used in this early literature captures. Composite measures, such as property rights systems, are "composed of an impossibly wide range of component institutions – land law, urban planning law, zoning law, tax law, inheritance law, contract law, company law, bankruptcy law, intellectual property laws, and customs regarding common property, to name only the most important ones" (Chang 2006, 485). The 2005 World Development Report echoes this, noting that general cross-country regressions about the importance of institutions does little to illuminate the heterogeneity of institutions between countries, or how those institutional arrangements affect economic actors differently (World Bank 2004). Initial econometric work on the institutions-growth link also faced methodological critiques. For example, De Haan criticized the work of Barro 1996, one of the central and most cited works in the literature, arguing that it has four "fundamental problems": (1) an arbitrary model; (2) possible sample heterogeneity; (3) measurement of democracy problems; and (4) treatment of time dimension problems (De Haan 2007, 282-283). While the cross-country regression literature on the link between growth and institutions "provided compelling evidence for a causal link between a cluster of 'good' institutions and more rapid long run growth," Pande and Udry argue that it has largely run its course (Pande and Udry 2005). Scholars have spent enough time on cross-country regressions on the link between growth and institutions. Mary Shirley counted 59 studies showing a significant correlation between GDP and institutional variables including property rights, political and economic freedoms, civil liberties, etc., illustrating the diminishing marginal returns of further work (Shirley 2008). Shortcomings of this literature include its failure to distinguish between the effects of different institutions on growth and the lack of meaningful insights on institutional change. Pande suggests the use of micro-data to gain further insights in the relationship between institutions and growth (Pande and Udry 2005).

2.6: NIE and Economic Development

With the importance of institutions largely established, NIE scholars have shifted to addressing other questions about the role of institutions. One of the most important of these is how institutions affect economic development. North places institutions at the centre of his analysis of growth over the long run, stating that they are "the underlying determinant of the long-run performance of economies" (North 1990, 107). Institutions are the key to understanding why some countries are rich and other countries are poor. North attributes differences in levels of development to the social and political norms within a polity, the historical institutions that these norms and beliefs informed, and the constraints on actors from path-dependent institutions. North gives heavy emphasis to polities, which "shape economic performance because they define and enforce the economic rules of the game" (North 1994b, 3). Level 1 institutions, the norms and customs that govern a society, play an integral role in separating rich and poor countries.

Institutions such as "the structure of property rights and the presence and perfection of markets" are integral in part because they help shape the incentives for economic activity (Acemoglu, Johnson, and Robinson 2004, 1). Frameworks that reward productive economic activity are essential for development, and more commonly found in developed countries (North 1991, 110). Developing country institutions often fail to reward productive activity, instead favouring "activities that promote redistributive rather than productive activity, that create monopolies rather than competitive conditions, and that restrict opportunities rather than expand them" (North 1990, 9-110). Institutions influence the creation of organizations and the activities they undertake in an economy. Incentivizing productive activity encourages firms to form and exploit those opportunities (North 1994a, 361). Incentive structures that reward rent seeking encourage organizations to form and exploit these opportunities. Harriss et al. give an example of the results of a misaligned institutional framework: "If the institutional framework made the highest pay-offs for organisations' piracy, then organizational success and survival dictated that learning would take the form of being better pirates. If on the other hand productivity-raising activities had the highest pay-off, then the economy would grow" (Harriss, Hunter, and Lewis 2003, 21). Piracy is clearly a redistributive enterprise, and an economy with these incentives would invest significantly in unproductive human capital.[2] Institutions that promote productivity are central to the performance of economies over the long run – as Bardhan states, "the major difference between the economics of rich and poor countries is arguably in the different institutional frameworks we implicitly or explicitly use in understanding or analysing them" (Bardhan 2010, 15).

NIE argues that there are major differences between the institutions of a developed country and those of a developing country. Developed Western countries have institutions including "elaborately defined and effectively enforced property rights, formal contracts and guarantees, trademarks, limited liability, bankruptcy laws, large corporate organizations with governance structures to limit the problems of agency, and what Williamson (1985) has called *ex post* opportunism" (Bardhan 2000, 217). In developing countries these institutions are underdeveloped, and often completely lacking. Sometimes informal institutions substitute for well-developed formal ones, yet this substitution has significant economic consequences.

2.6.1: How do Institutions Influence Business?

Institutions influence economic incentives by changing costs. North notes exactly this, stating that "institutions affect the performance of the economy by their effect on the costs of exchange and production" (North 1990, 5). There are many ways in which the costs of exchange and production are influenced, and these affect the accessibility of economic

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[2] Investments in physical and human capital for warfare and violence are similarly unproductive, and more common in present-day Myanmar than piracy.

opportunities within an economy. Institutionally-influenced costs may make some opportunities so 'expensive' that they cease to be viable, or are available to only a select group of individuals. Therefore, institutions help determine the opportunity set in an economy (Demsetz 2000, 69). This section examines, in detail, each of the specific transmission mechanism through which institutions affect costs and opportunities, and thereby structure incentives and influence organizations. The literature is sometimes weak on describing the exact mechanisms through which institutions affect economic performance, a shortcoming this section hopes to address.

One of the most obvious of these costs is through the formal government institutions that create *regulatory barriers and transaction costs*. These costs derive from formal rules and regulations and their enforcement and are incurred by economic organizations in their direct interactions with the state. For example, the cost of obtaining a business operating license derives directly from a formal institution of government. These costs result from the non-predatory operations of the state and are often paid in exchange for government services. They are conceptually different from the use of regulations and laws by a predatory state (or factions within) to limit access, seek rents, promote monopolies, etc.

A closely related and more oft-examined influence of both informal and formal institutions is on the *transaction costs of intra-firm exchange*. Institutions affect how costly it is to use the price mechanism and hence the decision of a firm to exchange through market, hierarchy, or hybrid. These costs are the traditional transaction costs in the work of Coase and Williamson, and derive from activities such as gathering information, contracting, and monitoring and enforcing agreements. Examples of institutions that affect intra-firm transaction costs abound. For example, many developing countries, including India and Pakistan, have state-run credit bureaus to provide information on businesses, reducing the costs of obtaining information. In Vietnam, businesses employ informal information gathering tools, such as interviewing the neighbours, friends, and other business partners of a new potential trading partner, in order to ascertain the risks of transacting with new clients (McMillan and Woodruff 1999, 650). A functioning judicial system removes uncertainty and reduces the risk-related discount that buyers of property rights would otherwise demand. These transaction-enabling institutions lie at the heart of the success of Western and many other industrial countries. As Menard and Shirley note: "new institutional arrangements such as written contracts enforced by courts were largely responsible for successful European economic development" (Ménard and

Shirley 2014, 10). However, other institutions impede transacting and raise costs, for example institutions that "raise information costs, or make property rights less secure" (North 1990, 63). North argues that low costs of transacting – both measuring what is being traded and enforcing contracts – are the key to efficient markets (North 1994b, 1). These conditions are not met in developing countries, and consequently markets are characterized by failures and inefficiencies.

The costs of production also include *the transformation costs*, and *institutions similarly have an effect on those*. For example, formal rules of the state, such as import restrictions or legislation on pollution, can affect the technology available or employed by firms engaged in production of a good or service. They can also affect the ability of enabling sectors of the economy to deliver the supporting infrastructure needed for transformation. For example, rules in the financial sector can inhibit lending or rules in the electricity generation sector can inhibit greater investment in power production. The effects of institutions on both the transaction and transformation costs, when considered in the context of a country or region, are largely analogous to the concept of the business environment or investment climate.

Another important mechanism through which institutions influence development is in how they define *the degree and distribution of property rights*. The fundamental question is one of credible commitment – whether the "restrictions on the state preventing massive economic intervention are binding in practice" (Weingast 1993, 288). The challenge is that the state must be strong enough to protect property rights, because without this the incentives for investment would decrease dramatically. Yet as Weingast notes and others have since echoed, "a government strong enough to protect property rights is also strong enough to confiscate the wealth of its citizens" (Weingast 1993, 287). The traditional argument is that development required a 'strong but limited state' or a self-binding ruler, which could credibly commit to not infringe property rights of private parties. Bardhan argues that this is not always needed, as recent cases in East Asia demonstrate that development can also come from an active state that intervenes in capital markets, regulates of credit allocation, underwrites loans, establishes public banks and development institutions, and encourages firms to upgrade technology (Bardhan 2000, 222). In developing countries, states are often too weak to guarantee property rights and/or too predatory and pose a threat to them (Bardhan 2000, 217). Predatory institutions can often take the form of controls on economic activity that abridge property rights. Controls increase the transaction costs of business while simultaneously decrease property rights and create uncertainty about them. The other key aspect of property rights is the enforcement of contracts. Greif argues that "market-based exchange relies on the support of two institutional pillars," which he notes are "contract-enforcement institutions and coercion-constraining institutions" (Greif 2005, 727). The later, he argues, are less-oft studied in the NIE literature, but nonetheless essential as they govern whether actors bring goods and services to the market.

While institutions play a role in maintaining order within a society, in many developing countries they are manipulated by elites to *generate economic rents*, the costs of which are directly or indirectly borne by the rest of the economy. This argument was termed by North et al. as a "limited access order," and is discussed in more detail later (North et al. 2007, 2-3). The institutions that are used to generate rents are often formal, state-controlled rules and regulations. While they can help maintain social stability, they also lead to inefficient economic outcomes. Rents are generated through: (1) the abridgement of existing property rights through arbitrary application and enforcement of rules and regulations; and (2) the altering of economic incentives through formal and informal barriers, which shifts the opportunity set within an economy. An example of the first would be the use of municipal institutions to delay the renewal of land titles in Myanmar, forestalling projects and investment. An example of the second would be rules that restrict entry into economic sectors, such as licensing requirements.

These five channels are not the only ways that institutions influence development and do not address how organizations influence institutional frameworks to alter the relative costs of economic activity and the development trajectory of a country. However, these five channels are fundamental in the way they alter incentives to engage in either productive or non-productive activity. They affect the creation and continued operation of organizations, such as firms, within the economy. If the costs imposed are great enough, they can deter productive economic exchange and specialization. In an extreme case, when costs are so great and enforcement of agreements uncertain, "many otherwise lucrative transactions will not occur and economic performance will suffer" (Shirley and Ménard 2005, 7). Institutional problems transmitted through these mechanisms plague firms in developing countries, who regularly face "insecure property rights, poorly enforced laws, barriers to entry, and monopolistic restrictions" (North 1990, 67). The result is that firms, being boundedly rational entities, tend to have short time horizons, little fixed capital, and operate on a small scale. The "most profitable businesses may be in trade, redistributive activities, or the black market. Large firms with substantial fixed capital will exist only under the umbrella of government protection with subsidies, tariff protection, and payoffs to the polity" (North 1990, 67).

2.6.2: Enforcement Characteristics and the Principal-Agent Problem

While often neglected in the literature, the enforcement characteristics of formal and informal institutions are integral in defining the incentives and constraints in an economy. Enforcement characteristics are included in many definitions of institutions (North 1994a, 360), however they are less frequently integrated into the literature because they are difficult to measure. The 'limited access order' (LAO) model, to be discussed shortly, makes efforts to do this but in a generic way. As Alston et al. note, more properly integrating enforcement characteristics into the analysis is essential because the degree to which formal rules matter depends on enforcement (Alston, Eggertsson, and North 1996, 92). Enforcement of formal rules also depends on the incentives of the enforcers.

Enforcement of formal rules is largely done through regulation and related government activities (like taxation) and has previously been examined in the literature as an 'implicit' contract between the regulator and the firm (Spiller and Tommasi 2005, 517). Many scholars look at the bureaucracy of government as a formal, level 2 institution. Williamson states that level 2 institutions include "the executive, legislative, judicial, and bureaucratic functions of government as well as the distribution of powers across different levels of government (federalism). The definition and enforcement of property rights and of contract laws are important features" (Williamson 2000, 598). The executive, legislature, judiciary, and bureaucracy all constrain and incentivize organizations by setting and implementing the 'rules of the game.' These formal functions of government are essential in this analysis, and are akin to the institutional analysis found in literature on the business environment or investment climate.

At the same time, they also exhibit many characteristics of organizations, or 'players of the game,' because their incentives are often poorly aligned with the state. The result is a principal-agent problem, with the principal largely akin to the institution and the agent to the organization. Just as one firm faces costs for monitoring and enforcement in a transaction with another firm, the state (and the polity it governs) faces the same monitoring and enforcement costs in its oversight of government units and officials (though of course these are generally organized through a hierarchy as opposed to market, which is especially the case in Myanmar). The consequences of these misaligned incentives and imperfect monitoring and enforcement are corruption and rent-seeking, which affect the price of public goods. In many developing countries, "the transaction costs of key public goods – such as education, health, information, public services and democratic governance – are extremely high because public sector rent seeking institutions have been able to monopolize those markets and the inputs of those markets" (Wiesner 1998, 108). Principal-agent problems are especially important in centralized bureaucracies. Monitoring and enforcement costs are greater in larger bureaucracies, increasing the likelihood of shirking by local agents who are tasked with delivering services or implementing the goals of the principal. The result is summarized by Bardhan and Mookherjee:

> *"Bureaucrats are thus able to extract bribes from customers in their role as monopoly providers of an essential service. The centralised system ends up differentiating services to different categories of customers based on their willingness to pay bribes, resulting in non-uniform delivery patterns. However, the bureaucrats are unable to engage in perfect bribe discrimination, so the centralised system gives rise to monopoly distortions, resulting in loss of efficiency and equity (Bardhan and Mookherjee 2006, 103).*

One of the challenges for the centralized principal is the difficulty in obtaining information about the motivations of the agent, specifically connections to financial and commercial interests.

2.6.3: The Limited Access Order

Developing countries often share similar institutional arrangements, social norms and organizational structures, creating a social order that has been termed a 'limited access order' (North et al. 2007, 3). A limited access order (LAO) is an arrangement in which elites limit access to political and economic powers to generate rents. These rents are dispersed among the elite and depend on stability to be generated, which incentivizes elites to maintain the existing order (North et al. 2007, 3). LAOs work because restrictions on access to organizational forms and contract enforcement create "rents through exclusive privileges" which "directly enhances the value of privileges by making elites more productive through their organizations" (North et al. 2007, 8). They do not assume order and the resulting state to be a unitary or benevolent entity, but instead the product of a limited access agreement.

The LAO is a specific nomenclature to refer to a common set of arrangements among institutions, organizations, and beliefs, or roughly the levels 1-3 of Williamson's definitions of social analysis. LAOs share common features including:

- Reliance on personal relationships among the elites;
- Limited access to resources (North et al. 2007, 3);
- Limited access to forms of social organization (North et al. 2007, 3);
- Selective suppression of economic and political competition;
- Centrality of "state-controlled industries, problematic business licensing regimes (for new entrants), and corrupt patron-client networks" (North et al. 2007, 9).

By contrast, open access orders (OAOs) are characterized by political and economic competition, as well as the ability to form organizations at will and compete with existing organizations freely.

Social structures are central to LAOs but often neglected by development economics and development actors. This disregard is central to the failure of development actors to inspire growth and structural transformation in the developed world. As North notes, "much of the assistance the World Bank offers to its clients come as recommendations and incentives to adopt specific institutional forms and mechanisms. Understanding why reform of institutional forms often fails to produce transformations in developing countries requires recognizing that the same institutional forms work differently in limited and open access orders, even if the recipient country has the political will to implement the reform" (North et al. 2007, 25). Often developing countries have many of the formal institutions of an OAO, for example, legislatures, courts, bureaucracies, and the proceedings of elections. Yet these institutions are regularly used to enforce the existing limitations on access as opposed to facilitating the political and economic competition characteristic of an OAO (North et al. 2007, 31). Todaro echoes this by noting that "the key finding of recent research is that forces that protect narrow elites in ways that limit access of the broader population to opportunities for advancement are major obstacles to successful economic development. If institutions are highly resistant to attempts at reform, this helps clarify why development is so challenging" (Todaro and Smith 2009, 88).

2.7: NIE and Economic History

Historical experience is central in the NIE literature for many reasons, including the insights it provides into how the present-day institutions that shape economic exchange came to be. History matters "not just because we can learn from the past, but because the present and the future are connected to the past by the continuity of a society's institutions" (North 1990, vii). Because present-day economic performance is affected by institutions which evolved through history, current economic performance is part of a "sequential story" (North 1991, 97). Historical economic institutions defined the incentives and constraints under which all present economic organizations were created in the past. These existing organizations are the vested interests whose survival derives from the current institutional framework, and who therefore "tend to oppose fundamental institutional change" (North, Summerhill, and Weingast 2000, 8). History also holds lessons about informal institutions. Many of these personal, trust-based institutions closely resemble the informal institutions governing exchange in the developing world today. Examining the evolution or stagnation of these institutions helps economists understand the prospects for developing countries to transition to a modern, impersonal, state-governed exchange system.

2.7.1: The Evolution of Institutions and Organizations

What causes institutions to change and evolve? This question is central to understanding why some polities develop growth-supporting institutions but others do not. One argument is that institutional change occurs when economic or political entrepreneurs with the bargaining power to change institutions perceive that their payoffs would improve by altering the existing institutional framework (North 1990). Similarly, institutional change can result from the organizations within a polity influencing the institutional framework. North argues that "it was organizations pursuing profitable opportunities in the context of expanding trading opportunities that drove the institutional evolution" (North 1990, 122). Institutional change is often sparked by exogenous events, such as wars or natural disasters, or technological developments. Understanding the causes of change in the institutional framework and the subsequent structure and enforcement of property rights, contracts and transaction costs is the major challenge for economic history (North 1979, 250).

NIE is also concerned with the closely related question of why sub-optimal institutions persist. One reason is that existing organizations, or vested interests, resist change because their economic survival rests on preservation of the current framework. Another is that economies can get stuck in sub-optimal equilibria in which inefficient institutions persist because no actor or coalition of actors has sufficient incentive to promote change. Lastly, change can be slow because institutions, both formal and informal, are path-dependent. North notes this when he discusses revolutionary change, stating "informal norms usually change only gradually. Since it is the norms that provide 'legitimacy' to a set of rules, revolutionary change is never as revolutionary as its supporters desire, and performance will be different than anticipated" (North 1994a, 366).

First, we address institutional change. These changes in the relative costs and benefits to economic and political entrepreneurs are often the result of exogenous shocks. In an examination of British North American colonies, North et al. argue that the federal structure of institutions and existential threat of proximate French interests encouraged both the British crown and the colonies to uphold their cooperative relations. However, the Seven Years War removed the French threat and pushed the crown to encroach on the federal structure of institutions – in part an effort to pay for the war. The resulting change in incentives "lowered the cost each side was willing to bear to retain the relationship," with the American revolution coming a few years later (North, Summerhill, and Weingast 2000, 19). In an examination of the development of Icelandic fisheries, Eggertsson notes that the country was stuck in a sub-optimal equilibrium for the better part of a millennium, and only broke free when shocks of disease and economic deterioration led the Danes to liberalize their policies over Iceland (Eggertsson 1996, 20-21). The same example also illustrates the persistence of sub-optimal institutions. Iceland long had incentives that discouraged the development of the fishing industry despite proximity to some of the world's richest fishing grounds. Eggertsson argues that it was economic self-interest and high transaction costs that led to a persistent, sub-optimal Nash Equilibrium (Eggertsson 1996). The economic interests were dominated by landowners and farmers who feared that growth of the fishing industry would increase labour costs and making farming untenable. This was combined with the external control of Danish and other European powers, which for centuries isolated the island and awarded monopoly trading rights to continental companies who, among other things, set the purchase price of fish artificially low. The continental powers had strong links with the Icelandic landed class, whose vested interests led to institutions that linked labour to land (Eggertsson 1996). These institutions persisted for centuries until external shocks led to changes in the institutional framework.

Shocks often present an opportunity for radical institutional change. Property rights under the English crown were relatively insecure in the 1600s, as fiscal demands led the crown to arbitrarily alter these rights in its favour (North and Weingast 1989, 804). After a civil war, failures with other political institutions, and a second reign of the monarchy, government institutions were fundamentally reshaped after the Glorious Revolution in 1688. New institutions bound the legislative and judicial powers of the crown, restricted its ability to arbitrarily alter property rights, gave many taxation and spending powers to the parliament, and enshrined a relative balance between the parliament and monarch that limited the power of all parties (North and Weingast 1989, 829). The result was a significant increase in property rights, demonstrated by a notable increase in bond market lending to the sovereign that was credibly committed to repay. Though shocks can often bring institutional change, there is no guarantee that the new institutional framework will protect property rights more effectively than the old one.

Among the most cited case studies of institutional change are Korea and Germany. Both countries provide rare natural experiments in which largely homogenous polities were separated after a shock (in this case WWII) and subsequent rapid change of formal institutions in one part of that polity led to vastly different economic outcomes. Both countries were separated after WWII into two states, one with a market-based economy and one a socialist, planned economy. In both instances, important factors for economic growth, such as resources, human capital, culture and geography, were largely the same before the bifurcation. After the split, the formal institutions of both North Korea and East Germany changed significantly, to hierarchical systems with economic exchange guided by state planning. The market economies dramatically outperformed the planned neighbours, largely due to their institution frameworks (Feld and Kirchgässner 2008). These cases evidence the importance of formal rules of the game. North argues that "societies with the same cultural heritage but different formal rules will have different patterns of economic growth" (North 1979, 249).

Besides the natural experiments of Germany and Korea, there are many studies in the literature that examine near-natural experiments through economies that have diverged significantly from either regional or historical trends. Many of these studies are institutional analyses of the reasons for these outcomes. Acemoglu et. al conduct such as study about the economic performance of Botswana, one of the wealthiest countries in Sub-Saharan Africa per capita and a significant regional outlier (Acemoglu, Johnson, and Robinson 2001). They argue that the country's strong performance is the result of favourable institutional development and the adoption of good economic policies, despite poor initial conditions (having only 12km of paved roads upon independence), tropical landlocked geography, and the threat of the resource curse from the country's abundant diamonds (Acemoglu, Johnson, and Robinson 2001, 1-2). Botswana had comparatively participatory tribal institutions which helped to constrain leaders, mild effects from British colonization given its remote location, powerful political interests that supported protection of private property rights, and effectively managed natural resource revenues (Acemoglu, Johnson, and Robinson 2001, 3). Botswana's success, they argue, resulted from the interactions of formal and informal institutions with powerful organizations that together reinforced private property rights, thereby encouraging growth.

While Botswana diverged from the trend of other regional countries, another example – Argentina – diverged significantly from its long-run growth trajectory. In the 19^{th} and early 20^{th} centuries, Argentina was among the richest countries in the world. Yet the rise of Juan Peron to the Argentinian presidency in 1946, supported by urban labourers, rural tenants and small landholders, brought a challenge to the longstanding power of major landowners of the Pampas, the country's agricultural heartland (Gallo and Alston 2008, 163). The confrontation culminated in the impeachment of all but one Supreme Court justice and the drafting of a new constitution. These institutional revisions eliminated checks and balances that had helped ensure property rights and free markets. The Peron era changes fostered a political culture in which the government's adherence to rule of law was weak and the formerly 'strong but limited state' was unencumbered by the judiciary, with "deleterious effects on domestic business and foreign investment" (Gallo and Alston 2008, 154). The long-run effects on Argentina's growth are marked, as the country has slid from among the richest in the world to only a middle income country.

Lastly, there is a significant body of literature that looks at the relationship between colonial institutions and a country's subsequent economic performance. Acemoglu et al. argue that colonizers adopted different institutional strategies in different colonies, from extractive institutions typified by Congo or the Gold Coast to inclusive frameworks such as Canada, the U.S., and Australia. These strategies were linked with the variance in mortality rates, with extractive states set up in disease-ridden areas (Acemoglu and Robinson 2001, 1395). They argue that institutional legacies have a significant impact on present-day economic outcomes and are valuable because they are exogenously determined. Other studies have examined the relationship between institutional history and development by comparing the experiences of Spanish and British colonies in the Americas. Spanish colonies granted property rights through a "system of privilege based on personal and corporate connections to the crown" while the British system granted private, transferrable property rights upheld by a judiciary (North, Summerhill, and Weingast 2000). Large land grants by the Spanish monarch often prevented land from being put to its most economically valuable use. Spanish colonies faced greater trade restrictions and the Spanish monarch was more financially constrained, increasing the likelihood of abrogation of property rights. Conversely, trade was much more free among British colonies, and the political institutions were federal, with many powers given to colonies and their assemblies (North, Summerhill, and Weingast 2000, 44). Though many of these colonies obtained independence in the late 18th and early 19th century, economic performance diverged greatly which the authors attribute this to the differing structure of colonial political and economic institutions (North, Summerhill, and Weingast 2000, 48).

2.7.2: Historical Informal Institutions

While economic history is often employed to understand institutional change or stagnation, historical analyses have also helped examine markets before the advent of the modern state. In a stylized examination of medieval trade fair such as the Champagne Fairs, Milgrom et al. investigate the institutions that facilitated trade. The first was an information transmission mechanism – attendance at the fair. Because entry and exit to the fair were controlled, it communicated to other traders that all attendees were merchants in good standing. This information mechanism for large trading communities was similar in purpose to the use of reputation in small trading circles (Milgrom, North, and Weingast 1990, 20). They also had 'Law Merchants' who would resolve disputes, enforce contracts, and collect and distribute information. These market-facilitating institutions together helped keep trade fairs as a centre of commerce in medieval Europe. Maghribi traders coalitions, which facilitated wide-ranging trade in the medieval period, are another example of informal market facilitating institutions (Greif 1993). Traders in one locale sent goods to be traded in another by an agent, however this presented principal-agent problems. Coalitions arose in response to "problems of contract enforceability and coordination that arose in a complex trade characterized by asymmetric information, slow communication technology, inability to specify comprehensive contracts, and limited legal contract enforceability" (Greif 1993, 544). If a merchant cheated, he was ostracized from the coalition, a collective punishment more costly than the benefits of cheating. If individual merchants did not participate in the collective punishment, they too could be ostracized. In short, membership in the collective was valuable (Greif 1993). Notably, however, the Maghribi collective institutions fit a pattern of stagnation in traditional institutions, which often failed to evolve into more modern institutions which facilitate impersonal, rule based exchange (Bardhan 2000, 219).

2.8: NIE and the Investment Climate

While NIE focuses on the role of institutions as a key determinant of economic performance, the recent literature on the investment climate, which includes institutions as a key element, proposes that a broader range of metrics including infrastructure, financial systems, and macroeconomics and macro politics are together integral for economic growth. The overlap between NIE and the investment climate (often referred to as the business environment) literature is significant. NIE argues that institutions affect transaction and transformation costs, which together equal production costs. The investment climate literature says development depends on keeping production costs low in an efficient and predictable environment. All other aspects of the investment climate are influenced by government institutions – for example financial systems are heavily influenced by the formal rules and regulations of government. Given the close links between the two, and the advances made on firm-level analysis in the investment climate literature, it is important to briefly examine this body of literature as well.

Literature on the business environment, like NIE, began to grow significantly in the 1990s, due in part to the aforementioned failures of current development theory to explain growth. Hindson and Meyer-Stamer argue that the focus on the business environment was in response to "disappointing experiences with direct support measures to firms, including finance and business development services," which were often "undermined if the wider environment is characterised by burdensome regulations, poor service delivery, corruption and a weak entrepreneurial culture" (Hindson and Meyer-Stamer 2007, 1). This focused governments and donors on improving government policy and behaviour, because that "drives growth and reduces poverty"(World Bank 2004, 6). Improving the business environment improves total factor productivity, while failure to do so result in less value added by labour and capital, thereby lowering wages and returns to capital (Dollar, Hallward-Driemeier, and Mengistae 2005). Differences in rates of return to capital accumulation lead to slower growth in locations with poor institutions and policies (Dollar, Hallward-Driemeier, and Mengistae 2005, 4).

2.8.1: Definitions

The business environment is the sum of the external conditions that affect the returns to doing business. Stern defines the business environment as the "policy, institutional and behavioural environment, both present and expected, that influences the returns, and risks, associated with investment" (Stern 2002). Xu defines it as the "external environment that affects the returns and risks faced by investors" (Xu 2011). Eifert et al. refer to the business environment as the "nexus of policies, institutions, physical infrastructure, human resources, and geographic features that influence the efficiency with which different firms and industries operate" (Eifert, Gelb, and Ramachandran 2005, 7). All of the factors external to businesses that inhibit or incentivize their development could be included in analysis of the business environment. As noted earlier, the business environment is largely analogous to the investment climate, which is defined in the World Development Report as "the set of location-specific factors shaping the opportunities and incentives for firms to invest productively, create jobs and expand" (World Bank 2004). The Donor Committee for Enterprise Development notes that there is a distinction between the business environment and investment climate. It defines the former as "a complex of policy, legal, institutional, and regulatory conditions that govern business activities," which is a subset of the investment climate, which "includes the administration and enforcement mechanisms established to implement government policy, as well as the institutional arrangements that influence the way key actors operate (e.g., government agencies, regulatory authorities, and business membership organisations including businesswomen associations, civil society organisations, trade unions, etc.)" (IFC 2008, 14). However, they are largely used interchangeably in the literature and will be used as such here.

2.8.2: Infrastructure

Infrastructure is a key aspect of the business environment, and generally includes transport (road, rail, water and air), electricity, power for heating and cooking, telecommunication (telephone and internet), and water and sanitation (Straub and Terada-Hagiwara 2011). Other studies have included toxic waste disposal and financial infrastructure. The focus on infrastructure came about for two reasons: (1) the retrenchment since the 1980s of the public sector as the key infrastructure provider in most developed countries and the consequent increase of the private sector infrastructure provisions (Calderón 2004, 1); and (2) link between infrastructure and poverty reduction, because infrastructure measures are often directly linked to measures of poverty (Straub and Terada-Hagiwara 2011). Greater access to infrastructure reduces poverty and links with key international poverty reduction goals such as the UN's Millennium Development Goals.

There is a large body of literature examining the links between infrastructure and economic performance, including output, growth and productivity. Straub notes that about two-thirds find a positive, significant link across macroeconomic, microeconomic and economic geography studies (Straub 2008b). The seminal work, by Aschauer, uses US government data from 1949 to 1985 to examine the productivity of public capital. He finds that the stock of non-military public capital is "dramatically more important in determining productivity than is either the flow of non-military or military spending," and that military capital has little relation to productivity (Aschauer 1989, 177). He finds that core infrastructure of "streets, highways, airports, mass transit, sewers, water systems, etc. has most explanatory power for productivity" (Aschauer 1989, 177). Esfahani and Ramirez find that infrastructure services contributed substantially to GDP (Esfahani and Ramírez 2003, 445). Easterly and Rebelo, using cross-sectional and panel data from up to 100 countries, find that "the share of public investment in transport and telecommunications is robustly correlated with growth" (Easterly and Rebelo 1993, 2). Limao and Venables (2001) find correlation between poor infrastructure and low levels of trade, while Canning and Bennathan (2000) and Bougheas, Demetriades and Mamuneas (2000) find links between infrastructure and productivity.

Some measures of infrastructure are not always linked to growth, according to some authors including Levine and Renelt and Sala-i-Martin, who argue that there is no robust effect of public expenditure on growth (Levine and Renelt 1992, Sala-I-Martin 1997). Pritchett argues that the link is conditional, because investment can be inefficient (white elephant projects) and therefore the "cost of public investment is not the value of public capital" (Pritchett 2000, 1). The 1994 World Development Report voiced similar concerns about infrastructure that was deficient, unresponsive to user needs, and generally ignored as a means of alleviating poverty (World Bank 1994).

Infrastructure can drive growth in many ways, including as a factor of production complementary to private capital. Its increase impacts productivity as in the following aggregate production function:

$$Y = A * f(K, G, N, L)$$

where Y is aggregate output, K is private capital, G is public capital, N is natural resources, L is labor and A is technology/total factor productivity (Anderson 2006, 5). An increase in G increase Y, though the magnitude of benefits is context-specific (Anderson 2006, 6). Public infrastructure can also affect private investment decisions. Poor infrastructure can deter private investment or push investors towards public infrastructure substitutes like generators. If public and private investment are complementary, public infrastructure investment raises the returns to private investment, which increases the rate of private savings and the level of growth (Anderson 2006, 7). However not all studies find a significant relationship. Barro finds that there is "little relation of growth to the quantity of public investment" (though he does not specify infrastructure investment specifically, infrastructure is normally a large part of the public investment) (Barro 1991, 437).

Infrastructure investment can affect growth through increasing fiscal spending, which then increases government revenues through taxes on wages, goods and services created by the multiplier effect stemming from increased fiscal spending (Anderson 2006, 9). Infrastructure can spur labour productivity gains, improvements in health and education, improved information technologies and improved economies of scale and scope (Straub and Terada-Hagiwara 2011). It can induce firm growth by altering the relative prices of goods and services (Anderson 2006, 17). However, the macro-literature on the growth-infrastructure link has little applicability. Cross-country and aggregate indicators cannot help improve policymaking, which would require "both more theory and better data sets, that go beyond the macroeconomic level, to combine the existing insights with those from sector- and project-level microeconomic studies and allow policy makers to better assess the potential linkages between specific infrastructure investments and growth, and chose the right composition and sequencing of these investments" (Straub 2008a).

2.8.3: Finance

Efficient financial systems are essential for economic growth. Levine argues that there is a "positive, first-order relationship between financial development and economic growth" and that "the development of financial markets and institutions is a critical and inextricable part of the growth process" (Levine 1997, 688-689). The five aspects of financial systems that matter for growth are: "(1) facilitate the trading, hedging, diversifying, and pooling of risk; (2) allocate resources; (3) monitor managers and exert corporate control; (4) mobilize savings; and (5) facilitate the exchange of goods and services" (Levine 1997, 688). These functions allow organizations to undertake investments or other activities that they otherwise could, with benefits for the economy.

2.9: NIE, the Business Environment and Firm-Level Data

The macro-literature on the business environment suffers from similar problems to the NIE macro-literature: limited sample size and robustness due to the limited number of countries; imprecise indicators and use of proxies; and heterogeneity across economies (Dethier, Hirn, and Straub 2008). However, in the 1990s the World Bank and others began to collect *firm-level data*, which allows economists to investigate the links between institutions and outcomes at the firm level. In the 2000s, many firm-level surveys were standardized internationally and included in a database of 100,000 firms across 123 countries. This data set opened up significant room for new analysis, which the World Bank says has contributed to 248 academic papers by 2010 (World Bank 2013b). These studies allow researchers to examine business environment variation based on geography, firm size, firm characteristics and other metrics, and together reveal "substantial heterogeneity in choice and outcomes across firms" (Bigsten and Söderbom 2006). The World Bank also conducts an annual "Doing Business" report, which asks local experts (such as lawyers, accountants, etc.) about their opinions of the business environment (World Bank 2004).

Firm-level studies generally employ regression analysis, with a performance measure used as the dependent variable and independent and control variables (and an error term) on the right hand side of the equation. Performance measures include total sales, change in sales, profits, number of employees, change in employment, and productivity. Studies cover topics including stability and security, regulation and taxation, finance and infrastructure, and workers and labour markets (World Bank 2004).[3] The literature largely neglects macroeconomic and macropolitical investigations (for example on inflation, exchange rate,

[3] Dethier break down the topics somewhat differently, grouping them as infrastructure, competition & regulation, financial constraints, and corruption and crime (Dethier, Hirn, and Straub 2008).

and political instability), as most authors assume these variables are constant across an economy. Some firm level studies aim to show that business environment costs, or indirect costs, are sizable. In a study of 7,000 manufacturing firms from 17 countries, Eifert et al. confirm that 20 to 30 percent of firm expenditure is indirect costs (outside of labour, capital and raw materials), with the biggest three being energy, transportation and land costs (Eifert, Gelb, and Ramachandran 2008, 21).

Most studies investigate the effect of a particular aspect of the business environment, such as the institutions of property rights, on firm performance. The micro-literature shows a correlation between property rights and one metric of performance: investment. In a survey of 1,400 firms in five Eastern European countries (Poland, Romania, Slovakia, Ukraine, and Russia), Johnson et al. find that weak property rights discourage firms in these transition countries from reinvesting profits, even when bank loans are available (Johnson, McMillan, and Woodruff 2002, 1). They conclude that insecure property rights are a more important constraint than the availability of finance. Cull and Xu conduct a similar investigation with Chinese companies, though they find both property rights and external finance to be statistically significant. They argue that insecurity of property rights was never as severe because China did not experience rapid liberalization, and the competitive, low-margin market increased the importance of external finance (Cull and Xu 2005). Xu argues that the importance of property rights in transition countries "likely depends on the stage of transition" (Xu 2011). Cull and Xu also investigated the importance of property rights and contracting institutions, and employ a firm-level dataset from China to find that both are significant predictors of firm reinvestment rates (Cull and Xu 2005). Beck et al. use data from 54 countries to investigate the same two institutions, and find that "while proxies of property rights institutions (for example general bribes, bribes to bank officials, and managerial burdens in dealing with regulators) are negatively associated with firm growth, the speed of the court (that is, a proxy of contracting institutions) in resolving disputes is not significantly so" (Beck, Demirgüç-Kunt, and Maksimovic 2005).

Other studies have examined the links between firm performance and regulation. Escribano and Guasch conducted a study of three Central American countries and found that the category of 'corruption, red tape and crime' was the most significant obstacle for firm performance (2005). They found that a one-day increase in 'time spent with regulators,' their proxy for regulation, decreased firm level productivity between 5.8% and 10.7% (Escribano and Guasch 2005). However, Beck et al. find the opposite, that regulation does not negatively affect performance, and can be positively correlated when enforcement is consistent (Beck, Demirgüç-Kunt, and Maksimovic 2005). However, analysis of regulation (and other aspects of the business environment) is limited because of the lack of panel datasets showing change in regulation over time (Dethier, Hirn, and Straub 2008, 273). Competition has also been examined regularly, with much of the literature finding a positive effect on firm performance primarily driven by productivity improvements, which encourage firms to reduce costs, improve processes and introduce new products (Dethier, Hirn, and Straub 2008, 273). Competition has also been examined by Bastos and Nasir (2004), Escribano and Guasch (2005), Beck, Demirgüç-Kunt, and Maksimovic (2005), Hallward-Driemeier, Wallsten, and Xu (2006) and Commander and Svenjar (2007).

Studies have also investigated the link between firm performance and perceptions of the business environment. One study by Brunetti, Kisunko, and Weder employs a perceptions-based survey of over 3,600 entrepreneurs in 69 countries, with 25 questions about the institutional and regulatory environment. They find that policy uncertainty and unexpected rule changes were major fears for investors. In developing countries they found that unreliable judiciaries were a major concern, whereas in developed countries the greatest concern was "tax regulation and high taxes." In South and Southeast Asia, they note that the top obstacles were "high taxes and tax regulations, inadequate infrastructure, inflation, labor regulations, and regulations for starting new business operations" though the results are significantly dated (Brunetti, Kisunko, and Weder 1997). In a similar study, Svenssen finds that top obstacles are lax crime enforcement, weak court systems, excessive regulation, and poor patent protection (Svensson 1998, 3).

There are many studies using firm-level data to explore the link between performance and corruption, with the later used as a proxy for weak institutions. Corruption can take many forms, including bribery, state capture, and nepotism/cronyism, with each having different economic effects (De Rosa, Gooroochurn, and Gorg 2010, 2-3). Using data from 243 Ugandan firms across 5 cities and 14 industries, Fisman and Svensson find a "strong, robust, and negative relationship between bribery rates and the short-run growth rates of Ugandan firms" (Fisman and Svensson 2007, 73). Aseidu and Freeman used data from over 10,000 firms from 81 countries and found that the effects of corruption (employing 6 different corruption measures) varied by region. They found that "corruption has an adverse effect on investment growth for Transition countries, but has no significant effect for Latin America and the Caribbean and Sub-Saharan Africa" (Asiedu and Freeman 2009). Corruption was the most important determinant of investment growth in transition countries, greater than firm size, firm ownership, trade orientation, industry, GDP growth, inflation and openness to trade (Asiedu and Freeman 2009).

Studies often look at a specific aspect of the corruption question. Clarke and Xu use firm-level data from 21 countries to examine characteristics of businesses in the infrastructure sector that more regularly pay bribes. They find that firms are more likely to pay bribes if they are more profitable or have overdue utilities payments (Clarke and Xu 2004, 2068-2069). Bribe payments were found to be lower in countries with more-developed infrastructure, more competitive telecommunications sectors, and privately owned utilities. Another study uses transaction-level records to show that, while pervasive in both the public and private sector, "public organizations tend to be more corrupt than private ones" (Cole and Tran 2011, 15). It also showed that government contracts were regularly inflated to hide bribes and evade income tax (Cole and Tran 2011, 16). DeRosa et al. use data from over 11,000 firms in 28 post-Communist countries to find that bribery is negatively correlated with firm-level productivity, while time spent with government officials is indeterminate (De Rosa, Gooroochurn, and Gorg 2010, 2). They also find that bribery is not an effective way to circumvent regulatory hurdles and improve productivity (De Rosa, Gooroochurn, and Gorg 2010, 2).

2.9.1: Infrastructure and Financial Systems

Firm-level analyses have also extended to other aspects of the business environment, including infrastructure and financial systems. In firm-level surveys, entrepreneurs often cite deficient infrastructure as "important barrier to their operation and growth" (Straub 2008a). This became increasingly important as IFIs recognized that infrastructure services were "important intermediate inputs for productive activities of manufacturing and commercial enterprise" (Lee, Anas, and Oh 1996). Improvements in infrastructure help firms "lower transport and communication costs and therefore lower total costs to compete with their rivals and to export" (Xu 2011, 315). One of the first studies examining these links was from Nigeria in the late 1980s, and it documented the large costs of private substitution for deficient public infrastructure, especially in electricity (Lee and Anas 1989). Later work included Thailand and Indonesia, allowing cross-country comparisons, but similarly found that “the private costs of infrastructure deficiencies are substantial” (Lee, Anas, and Oh 1996). The study found that private substitution for deficient public infrastructure was common. A study of 243 businesses in Uganda showed that poor public provision of electricity reduced productive investment by firms (Reinikka and Svensson 2002). According to the authors, “the firm-level data… reveal how firms cope with deficient public capital: when public services are poor they can invest privately in complementary capital. The cost, however, is the installation of less productive capital” (Reinikka and Svensson 2002).

Various studies have found that deficient infrastructure has negative consequences on growth and productivity, while infrastructure improvements have positive impacts. Collier and Gunning use both firm and household level data to find that “poor infrastructure is a serious constraint to growth” in Africa (Collier and Gunning 1999). A study of firms in Guatemala, Honduras and Nicaragua, found that infrastructure deficiencies have a major negative impact on productivity (Escribano and Guasch 2005). Mobile telephone access for South Indian fisheries markets enhanced “market efficiency and the welfare of participants” (Straub 2008b). Datta used improvements in India’s highway network, which were exogenous to the firm and only reached part of the country, to find that firms near newly constructed highways performed better with the new infrastructure. They held 6-12 days less inventory, were more likely to switch suppliers of a primary input, and reported a decrease in transportation obstacles (Datta 2012). Alby et al. found that poor electricity supplies damaged sectors that relied on energy-hungry technology. Electricity problems pushed firms to either purchase expensive generators or select sub-optimal technologies that reduces efficiency and their ability to compete (Alby, Dethier, and Straub 2013). The literature does not provide consensus on what types of infrastructure deficiencies are the biggest constraint on growth. A firm-level study of enterprises in China, Bangladesh, Pakistan and Ethiopia found that, in four of six specifications, the delay in getting a phone line was the most significant bottleneck to growth (Dollar, Hallward-Driemeier, and Mengistae 2005). Customs delays and electricity were also important, suggesting that “the government’s role in providing a good regulatory framework for infrastructure and access to the international market is particularly important,” (Dollar, Hallward-Driemeier, and Mengistae 2005). However, this is reasonable as infrastructure deficiencies are context specific.

Accessing finance is regularly cited as a major challenge faced by businesses. 31% of firms who completed World Bank enterprise surveys from 2006 to 2009 reported “access to finance" as a major operating constraint (Chavis, Klapper, and Love 2010, 1). The literature widely supports the argument that underdeveloped financial systems are a significant impediment to firm growth, whereas functioning financial systems are integral in starting and expanding businesses. Love and Gatti call this proposition a 'stylized fact' (Love and Gatti 2006). Well-developed financial infrastructure can lower the cost of financial transactions and help firms smooth income and manage cash flow (Koivu 2002, Coricelli and Masten 2004). Levine suggests that finance can encourage growth through its impact on savings rates, investment decisions and technological innovation (2005). Firm-level studies support the link between finance and growth. Using data from 80 countries, Ayyagari et al. compare the relative importance of business environment obstacles and find that finance (specifically the cost of borrowing) gives the most robust results, which are binding regardless of the countries and firms included in the sample (Ayyagari, Demirgüç-Kunt, and Maksimovic 2008, 4). Other studies have found a strong positive link between credit and total factor productivity (Love and Gatti 2006, 1) and credit and higher labour productivity (Kuntchev et al. 2013, 4). Some studies confront the conventional wisdom, however. Hallward-Driemeier, Wallsten, and Xu find no significant link between bank access in China (proxy for financial system development) and a number of firm performance indicators. However, the single country study may reflect unique aspects of the Chinese banking sector, which tends to be inefficient and subsidize politically connected entrepreneurs (Hallward-Driemeier, Wallsten, and Xu 2006). Dollar, Hallward-Driemeier and Mengistae find no link between "access to overdraft facility" and firm productivity but did find a link with the "annual sales growth" variable (Dollar, Hallward-Driemeier, and Mengistae 2005). McMillan and Woodruff find that the importance of financial systems (and other market-supporting institutions) increases with a country's level of development because trust-based institutions become increasingly ill-suited for business (McMillan and Woodruff 2002).

2.9.2: Comparative and Single Country Assessments

Studies have also sought to compare the relative importance of different obstacles for firms to identify bottlenecks to growth in small groups of countries. In a study of China, Bangladesh, Pakistan and Ethiopia, the delay in getting a phone line was found to be the most significant bottleneck to firm growth, followed by customs delays, power outages, burden of government inspections of facilities and availability of overdraft services (proxy for financial services) (Dollar, Hallward-Driemeier, and Mengistae 2005, 28). Escribano and Guasch assess the productivity of firms in Guatemala, Nicaragua, and Honduras, and find four important categories of obstacle: “ (a) read tape, corruption and crime, (b) infrastructure, (c) quality, innovation and labor skills, and (d) finance and corporate governance” (Escribano and Guasch 2005, 73). Together, these explain over 30% of productivity. The top categories are ‘red tape, corruption and crime,’ and ‘infrastructure,’ which account for 12 and 9 percent of productivity respectively (Escribano and Guasch 2005, 73). Beck et al. finds that three groups of business environment obstacles - financial, legal, and corruption – all have a negative impact on firm growth. Administrative difficulties with banks, collateral requirements, access to finance, high interest rates and lack of liquidity in the banking system all reduce firm growth rates. However, access to long term loans does not, despite its high ranking by firms (Beck, Demirgüç-Kunt, and Maksimovic 2005, 29). The amount of bribes paid, time spent with regulators and corruption of bank officials constrain growth, but court efficiency and side payments do not (Beck, Demirgüç-Kunt, and Maksimovic 2005, 29). In a study of firms from 80 countries, Ayyagari et al. find that only finance, crime and political instability have a direct impact on firm growth (Ayyagari, Demirgüç-Kunt, and Maksimovic 2008, 3).

Single country studies have also been conducted, spurred by a growing consensus in the development community that “there is no unique universal set of rules” about how development works (World Bank 2005). The emphasis is on specific constraints within a country, producing the most policy relevant though least generalizable results. A study of manufacturing firms in Uganda found that poor public capital significantly reduces productive investment, as firms divert capital to invest in complementary private capital (Reinikka and Svensson 2002, 67). A study of 1,500 manufacturing and services firms in China found “firm performance is positively correlated with foreign and domestic private ownership, light regulatory burdens, limited corruption, technological infrastructure and labour market flexibility” (Hallward-Driemeier, Wallsten, and Xu 2006, 629). However, they find that improvements in banking access and physical infrastructure have a limited influence on firm performance, a statistically significant finding in China that stands in contrast with the broad literature. Firm-level country studies such as Hallward-Driemeier, Wallsten, and Xu (2006) or those of India by Honorati and Mengistae (2007) and Amin (2007) are promising future research endeavours because they produce allow econometric results to be directly connected with on-the-ground realities (Dethier, Hirn, and Straub 2008, 283).

2.9.3: Institutions and Firm Heterogeneity

NIE argues that economic institutions in developing countries often derive from elite power relations, and their application across organizations varies. Firm-level data allows economists to test this by using proxies for institutions on firms with different characteristics. The most commonly investigated firm attribute is size, with small and informal firms the most affected by a weak business environment, regardless of the country (World Bank 2004, 24). This is because smaller firms rely more on public goods and services, while larger firms can exploit their economies of scale to more easily provide substitutes (Lee, Anas, and Oh 1996, 7). Small firms struggle with the additional costs of an inefficient business environment, for example generators to provide electricity when public supplies fail. One study found that "micro and small enterprises have less access to formal finance, face greater interruptions using infrastructure, and pay a higher percentage of their sales in bribes" (Aterido, Hallward-Driemeier, and Pages 2007). The result was that fixed costs for micro and small firms comprised a larger percentage of their sales, putting them at a competitive disadvantage with larger firms.

The literature consistently finds that small firms are disproportionately constrained by poor financial systems. Beck, Demirguc-Kunt, and Maksimovic (2005) find that "the extent to which financial and legal underdevelopment and corruption constrain a firm's growth depends very much on a firm's size," and that the smallest firms are consistently the most constrained (Beck, Demirgüç-Kunt, and Maksimovic 2005, 28). In a similar study, Kuntchev et al. find that credit constraints decrease with firm size, with SME's "more likely to be credit constrained than large firms" (Kuntchev et al. 2013, 3). SMEs tend to rely more on different types of finance, namely trade credit and informal loans, than large firms, which more commonly use equity and formal debt (Kuntchev et al. 2013, 4). Bigsten and Soderbom found that about 65% of African microfirms are credit constrained but only 10% of large firms. They also found that the success rates for loan applications varied directly with firm size, other factors being equal (Bigsten and Söderbom 2006). Another study found that smaller firms finance investment differently, sourcing a lower proportion externally (Beck, Demirgüç-Kunt, and Maksimovic 2008, 4). The same study found that small firms gain disproportionately from improvements in property rights protections, and increase their use of formal finance such as banks and equity markets. These results, say the authors, "underline the importance of improving the institutional environment for increasing the access of small firms to external finance" (Beck, Demirgüç-Kunt, and Maksimovic 2008, 4).

Some studies suggest that the business environment influences the size and distribution of firms. Aterido and Hallward-Driemeier show that a weak business environment shifts the size distribution of firms downward (Aterido, Hallward-Driemeier, and Pages 2007). Another study found that countries with efficient judicial systems on average had larger firms, while "the average size of firms in industries dependent on external finance is larger in countries with better financial markets, suggesting that financial constraints limit average firm size" (Kumar, Rajan, and Zingales 1999, ii).

Firm-level assessments are not without their shortcomings, as the data can be very difficult to appropriately analyse and interpret. In his 2011 review of firm-level business environment studies, Xu states that "most research using the investment climate data cannot establish causality convincingly," due to common problems including reverse causality, omitted variable bias, and other issues (Xu 2011). Despite this, he argues, the "body of correlations gathered from the studies does point to a plausible story: the effects of the business environment vary across industry, complementary institutions, and initial conditions" (Xu 2011). The literature is valuable as it often confirms insights gained from the macro-level literature and contributes additional insights about how those obstacles affect firms with different characteristics.

Chapter 3: Methodology

3.1: Introduction

The failure of the Washington consensus, which was integral to the rising prominence of NIE, caused widespread methodological reconsiderations among development economists. At the core of the Washington consensus were a set of 'positive' economic policies that were universally applicable (Gay 2007, 84). Yet despite neoliberal praises, the track record of these policies was poor. Their failure is evident in the track record of adoptees, which routinely experienced lower growth rates, increasing income inequality and regular financial crises (Rodrik 2002, 1). At the same time that the Washington Consensus was failing, numerous countries in Asia were experiencing long periods of sustained, comparatively broad-based economic growth. Yet these countries had "marched to their own drummers" and were "hardly poster children for neoliberalism" (Rodrik 2002, 1). Rodrik cites three cases, China, India and Vietnam, and says that they have "violated virtually all the rules in the neoliberal guidebook even while moving in a more market-oriented direction" (Rodrik 2002, 1). These contrasting outcomes – the failure of Western policy prescriptions and the success of the heterogeneous policies of Asia's developing countries – led to a newfound appreciation of the need for contextual economic policies (Rodrik 2008, 1-2). The increasing focus on context was not only on a country's economic structure, but also its institutional framework and cultural values (Dow 2007a). Questions on context and institutions became integrated across the discipline. The macro-level quantitative literature, which regularly employs cross-section and panel data, began to incorporate institutional variables (using a wide range of aforementioned proxies) into regression analyses. The micro-level quantitative literature, which has increasingly moved towards randomized trials, began incorporating institutional questions into experimental studies. The qualitative literature incorporated institutional analysis into interviews and other data collection. The wide variation in findings has given further impetus to the need for relevant, contextualized research.

Institutional questions have been integrated into qualitative and quantitative studies, each of which offers important advantages in the investigation of institutions. As Rodrik notes:

> *"Cross-section and panel regressions have the advantage that they can have broad coverage and they can control for at least some of the background conditions*

explicitly. Interviews and other qualitative approaches have the advantage that they can be carried out in a more open-ended manner, allowing unanticipated new information to play a role. Randomized evaluations have the advantage that they can nail down identification within the confines of the experiment" (Rodrik 2008, 16).

Each of these methodologies also has weaknesses. The regression literature, especially cross-country regressions, has few insights on local context and greater internal validity challenges than the randomized controlled trial (RCT) literature (Rodrik 2008, 16). RCTs are strong with internal validity but very weak on external validity. Both historical investigations and qualitative research have problems with both internal and external validity, but are essential in generating new ideas and understanding institutional development. This thesis employs three different methodologies – historical, qualitative, and quantitative – because each adds unique value. One helps understand the context, one explains its origins, and the last tests its importance. While in isolation each can produce some insights about economic institutions, together they allow for cross-checking ideas and results that are more relevant, rigorous and applicable. They also fit well with the NIE literature, which is receptive towards "less formal approaches and inductive reasoning" (Ménard and Shirley 2014, 2).

3.2: The Lack of Data in Myanmar

The methodology employed for this thesis has distinct advantages and yields strong complementarities, but was also selected out of necessity given the context of this study. The thesis looks exclusively at one country, Myanmar, where many types of quantitative data are inaccurate, incomplete, or unavailable. For example, until March of 2014, Myanmar had not conducted a census since 1983. Similarly, no comprehensive private sector survey was conducted for decades, though numerous smaller studies were undertaken. The IMF noted the following about data shortcomings in Myanmar: "Data remain grossly inadequate for surveillance due to capacity constraints and inadequate resources" (IMF 2012a, 12). Among the data challenges listed by the IMF were:

- National accounts are available only once per year and are significantly delayed (IMF 2012b, 11);
- Private sector coverage is lacking because there is no proper business directory (IMF 2012b, 11);

- Price data represented only urban households even though rural data was collected. There was also some improper categorization, including the use of some construction costs, the exclusion of rentals of owner-occupied housing, the failure to impute missing price data, and the use of an outdated classification system (IMF 2012b, 11);
- Fiscal data is only compiled annually and released with up to 12 months delay (IMF 2012b, 11).

As the IMF noted, capacity and resource constraints are central to the shortcomings of data in Myanmar. Collection is generally handled by a civil service that lacks experience, funding, and instruction in appropriate data collection and analysis methods. Inappropriate laws and policies also skew some information, with the most important example being the multi-tiered exchange rate used in official data until March 2012. The official exchange rate was fixed at approximately 8.5 kyat per Standard Drawing Right (SDR), instead of market rates that reached 150 times that (IMF 2012a, 4). This resulted in massive inaccuracies in import and export data, government budget figures, etc. Myanmar also did not receive cooperation in data collection from the World Bank and many other organizations because of U.S. sanctions.[4]

There has been speculation that political considerations influenced key economic figures in Myanmar, notably GDP. Official government data put GDP growth at over 10% per annum for much of the 2000s, around twice the IMF's estimates (IMF 2012a, 17). Disaggregated data was sometimes kept confidential by the government and the organizations with which it was cooperating. In 2009, the United Nations Development Program (UNDP) and the Government of Myanmar partnered to conduct the Integrated Households Living Conditions Assessment (IHLCA), a survey of over 18,000 households. However, disaggregated data was not available publicly, upon request, or even to the author of three reports for UNDP based on the data, despite two requests (Shaffer 2013, 2). The challenges with obtaining data of sufficient quality and quantity in Myanmar are closely tied to the fifty years of socialist and military rule. During the socialist and military eras, there was significant variation in economic policies and the country was largely closed to foreigners including international organizations that assist or provide technical advice on data collection and analysis. As such, no data from either pre-existing household or firm-level surveys were available for this thesis.

[4] It is interesting to note that during and even after the British era into the 1950s, Burma had a 'very sophisticated and robust' statistical under the leadership of U Thet Tun, the long-time head of the country's central statistical agency.

Little qualitative research from international financial institutions (IFIs), non-government organizations (NGOs) and other organizations had been done on Myanmar's private sector. Up-to-date information, either qualitative or quantitative, was rare at the time that planning and fieldwork for this thesis commenced. As such, the collection of qualitative and quantitative data was one of the major aims of this research and represents one of the major contributions of this thesis.

3.3: The Advantage of Mixed Methods

Though economics has its academic roots in political economy, the discipline has become increasingly quantitative and abstract in recent decades. As such, qualitative and historical insights have often been relegated to a second tier status because they lack the 'mathematical rigor' of the quantitative work. Before going into the methodology employed in this thesis, it is worth highlighting the value of qualitative and historical research to complement and contextualize the quantitative. One major distinction between qualitative and quantitative research is that qualitative work is characterized by open-ended data collection. Martha Starr states "although economists often think of qualitative research as involving words and quantitative research as involving numbers, a more valuable way of thinking of the distinction is in terms of open- vs. closed-end approaches to gathering data" (Starr 2012, 2).

Open-ended investigations are especially useful when little is known about the context, and little broad exploratory research has been conducted (Starr 2012, 3). This is the case in Myanmar, which for reasons stated above has been the subject of little academic research over the last half-century. Little has been written on either the formal institutional framework or the informal norms and institutions that govern private exchange. Freeman et al. note the relative advantages of quantitative and qualitative research, stating that "formal surveys are most effective for collecting representative data on the economic activities of households (assets, activities, incomes expenditures and outcomes) while qualitative methods are essential for capturing the social and institutional context" (Allison 2005). Qualitative research provides a "rich picture of social phenomena in their specific contexts," an integral aspect of institutional analysis (Hulme 2007, 14). A more developed understanding of the context of information also results in greater applicability of quantitative research. Dow notes simply that "while mathematical argument is internally precise, giving meaning to mathematics is not" (Dow 2007b, 458). Theorizing and modelling does require autonomy and assumptions, but “it cannot be completely autonomous, for then it would have lost all contact with what it was originally about” (Coddington 1975, 557). This thesis uses qualitative and historical research to give meaning and context to the data collected, and to generate insights which are complementary to those of the quantitative analysis.

One of the biggest challenges when conducting research of any kind, but especially work on institutions in under-studied contexts, is to ask the right questions. Quantitative research is often rigidly structured, and respondents are limited to answering the pre-determined questions in a given format. This assumes that the researcher “knows the specific informational items that played a central role in the subjects’ behaviour, perceptions and/or decisions, and can compellingly hypothesize how these items interrelate” (Dow 2007a, 3). Conversely, open-ended qualitative research is useful in revealing new or unanticipated phenomena (Hulme 2007, 14). As Piore notes, “one of the advantages of open-ended interviews is that the respondents often answer questions you would not have thought to ask” (Piore 2006, 5). The generation of new ideas and the ability to refine the subjects under investigation is essential for understanding context. Similarly, case studies and qualitative methodologies can also be useful because they can “identify the assumptions of conventional theory that seemed to be wrong and the alternative assumptions to put in their place” (Piore 2006, 12). Enforcement characteristics, which are one of the integral aspects of the institutional framework, are often best understood through qualitative interviews because they can reveal complexity and practicalities that quantitative research cannot capture.

Collecting primary data through surveys and interviews is integral in providing context to data and analysis. However, with the exception of development economists this is relatively rare in the economics discipline, though it is more common in other fields such as anthropology (Alston, 103). Collecting data gives the researcher strong familiarity with the information and unique insights into its strengths and weaknesses (Hulme 2007, 14). This is especially important given the assumption of NIE that actors are not rational economic individuals but instead boundedly rational actors. If both interviewer and interviewee are fully aware of all information and options available to the actor, there is no need conduct an interview. However, both have incomplete information and insufficient mental cognition to process complex decisions. Therefore, one cannot assume knowledge of decisions, motives and constraints, necessitating interviews to understand the mental models of the agent (Bewley 2002, 350). Interviews can investigate the limitedly rational behaviour of actors and help elucidate the theories and frameworks that inform their decision making (Bewley 2002, 350). This is especially relevant in contexts where many decision makers lack formal education or training in business management and related disciplines.

Many of the shortcomings in quantitative firm-level surveying can be complemented by qualitative interviews. Among the areas where standard enterprise surveys are insufficient to address aspects of the institutional framework are:

- Frequency of interactions;
- Variability of interactions and their distribution between actors;
- Costs imposed by variability and frequency of interactions;
- The limitations of the entrepreneur in their comprehension of the survey and terminology;
- Sensitive areas of questioning and potential for resulting bias;
- Changes in processes;
- Informal institutional arrangements;
- Differentiating between the effects of formal and informal institutions on the performance of the firm.

While qualitative research has strengths, it also faces limitations. The most obvious is that qualitative interviews cannot be used to provide data or generate statistics, which is not done in this thesis. They are used to help provide insights, understand processes and elucidate context. Further, they are also limited because of language barriers. Many qualitative interviews were conducted through interpreters, which has the potential to add "layers of meanings, biases, and interpretations, which may lead to disastrous misunderstandings" (Fontana and Frey 2000, 655). Often things are lost or gained in translation, necessitating regular checking and the use of highly-skilled translators.

To complement the qualitative research, this thesis also relies heavily on a business survey conducted to gather quantitative data. Business surveys are one of the most common tools used to gather data on the private sector. There are many reasons to conduct a business survey, however the research undertaken for this thesis aimed to identify constraints in the business environment and their institutional links. It resembles surveys done by other academics and international organizations such as the International Finance Corporation

(IFC). The IFC has conducted enterprise surveys in 121 countries, including over 73,000 interviews (IFC 2014). The goal of these is to help governments "identify, prioritize and implement reforms of policies and institutions that support efficient private economic activity," and focus on topics such as business performance, employment, gender, informality and trade (IFC 2014). They are also useful because they help explore the structural dimensions of a country's business environment.

3.4: Methodology & Data Analysis

Given the aforementioned limitations, the data and interviews in this thesis are drawn from nearly two years of field research and related work in Myanmar. The first round of fieldwork was conducted from January 2012 to August 2012, with subsequent visits in September 2012 and December 2012. Follow-on research and related work was conducted from January 2013 to March 2014. During this time both quantitative and qualitative interviews were conducted and historical research was done at a limited number of public and private libraries in Yangon, Myanmar. The historical research accessed a number of rare historical documents about the country's private sector and institutional evolution. Fieldwork consisted of quantitative surveys, interviews and business visits. In total, there were 153 quantitative surveys, 65 interviews and 10 field visits. The types and locations of the visits are noted in Table 3.1:

Table 3.1: Field Research Overview

	Surveys	Interviews			Visits	
Location	Quantitative Surveys	Entrepreneurs	Government	Business Association	Factory	Trading Floor
Yangon	146	21	-	6	2	-
Mandalay	7	8	-	4	5	2
Mawlamyine	-	10	6	2	-	-
Monywa	-	1	5	2	-	1
Total	153	40	11	14	7	3

3.5: The Quantitative Methodology

During the first stage of fieldwork, from January to August 2012, a small quantitative business environment study of 153 firms was conducted in Yangon and Mandalay. The choice to collect data, rather than employ another set of publicly available data, was one of necessity as noted above. The survey tool consisted of 100 close-ended questions, which took firms an average of 55 minutes to complete. The survey interviewed business owners, managers, and top executives about their experiences in and perceptions of doing business in Myanmar. Surveying started in April 2012, after Myanmar's New Year Festival (Water Festival, or *Thingyan*) and was completed in July. The survey was conducted in conjunction with Myanmar Egress, a prominent civil society organization based in Yangon. The survey team consisted of a team leader, a local coordinator, and five surveyors.

The survey included businesses in all sectors of industry, services and trade, and was administered to firms of all different sizes. While the sample size is large enough to allow for some stratification, this generally erodes the statistical significance of the results. The survey was conducted in Myanmar language, version of which is attached in ***Appendix 1.*** The English language version is attached as ***Appendix 2***. The survey was divided into six sections, including:

- General information: The section investigates business operating registrations, ownership structures, management experience and other characteristics, business location and activities, and other characteristics of the business.
- Perceptions of the business environment: This section asks businesses to assess 23 different metrics of the business environment on a scale of 0 to 4, in the areas of infrastructure, macroeconomic, regulatory and financial sector. Businesses were also asked to rank the top 3 obstacles, and estimate the cost of their most severe obstacle.
- Labour and employment: This section examines labour and employment patterns broken down into full time workers and daily/part-time workers. It also estimates total employment and future hiring outlook.
- Capital and investment. This section examines a firm's rented and owned capital, utilization rates, and recent capital investments.
- Finance, banking and credit. This section asks business record keeping and banking habits, as well as recent loans from banks, other institutions and informal sources. It also asks about future borrowing intentions.
- Firm performance. This section asks about a firm's annual expenses and sales, the types of transactions and clients the firm does business with, as well as the financial and time costs of doing business. It also investigates prior and projected sales and expenses.

Each question solicited a closed-ended, quantifiable answer. Some were yes or no questions, for example whether the manager had a university education. Others asked for perceptions-based ratings about business environment obstacles, assessed on a scale from 0 for "no obstacle" to a 4 for "very severe obstacle." Firms were also asked for raw figures on number of employees, amount of capital, sales and expenses. No open-ended questions were included on the quantitative questionnaire. However, the survey produced data in a standardized, quantitatively useful format that includes a number of relevant institutional variables.

3.5.1: Selection of the Sample Frame

The sample frame for the survey was the active membership list of Myanmar's peak commercial body, the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI).[5] UMFCCI is the largest association of businesses in Myanmar and the umbrella organization over the country's network of regional and sectoral business associations. It is headquartered in Yangon and at the time of surveying had an active membership of 4,307 businesses. Sampling from a chamber of commerce business list is a commonly employed strategy in business surveys in other countries, with the business list often being used as a proxy for an economy's 'formal' sector. Sampling from this list lends credibility to studies, which can help increase participation rates among businesses. However, this survey was not conducted in direct cooperation or official partnership with UMFCCI, only with the permission of the organization's leadership and the use of their membership list as a sample frame. However, this approval was signaled in the surveying process and provided additional legitimacy to the survey.

The use of the UMFCCI membership list as the sampling frame had a number of shortcomings. First, the list used for the survey was not a complete registry of businesses in Myanmar, and was not representative of the country's population of businesses. In previous years, trading businesses were required to become UMFCCI members to obtain some import and export licenses. Membership requirements have changed and are no longer compulsory, however the previous membership requirements are likely to have contributed to a distribution of businesses within UMFCCI that does not mirror the total population. UMFCCI members are heavily concentrated in major cities, with 89% in Yangon alone and nearly 94%

[5] The organization has since changed its official name to the Republic of the Union of Myanmar Federation of Chambers of Commerce and Industry (RUMFCCI) to reflect the country's official name change, though it is still widely referred to by its former abbreviation, UMFCCI.

in either Yangon or Mandalay. The UMFCCI list does not distinguish between different types of businesses, such as firms or establishments. The list excludes any members who have not paid annual dues, which could skew the sample frame by excluding firms that are performing poorly and have not renewed UMFCCI membership to cut costs. It may also skew firm distribution geographically (businesses that are further from UMFCCI's Yangon headquarters face greater transaction costs for their payments and greater challenges accessing benefits of membership). Businesses whose UMFCCI membership dues were not up-to-date were excluded from the list of businesses provided to the research team. The cumulative number of businesses that were a UMFCCI member at any point since its' founding is approximately 20,000.

Other sample frames were also considered, including government lists of businesses with operating licenses. Myanmar's Ministry of Industry has the largest such list, with 125,689 registered businesses as of September 2011. However, the list includes all firms that received operating licenses in the last 23 years, containing many inactive businesses. Utilizing this list would have necessitated government cooperation, a significant challenge at the time the research was planned. This could have complicated the approach to potential respondents by potentially giving the impression that the survey team was collecting data on behalf of the government. This could decrease respondents' willingness to complete a survey or create unintended feelings of coercion. As such, this option was deemed impractical. Another sampling frame that was considered was the Yellow Pages phone directory, published by a leading market research firm in Yangon. Though this is a more comprehensive list than the one from UMFCCI, it is also produced in cooperation with a State-owned Enterprise (SOE), Myanmar Post and Telegraph. The Yellow Pages lists companies by category, thereby duplicating listings for businesses that operate in multiple sectors and creating problems with sampling. These two drawbacks made the use of this sampling option unviable. Other potential methods of sampling, including block enumeration, were ruled out due to associated financial constraints and logistical challenges. Sub-association lists from sector-based organizations (which fall under the umbrella of UMFCCI) were also considered. This could have increased the response rate and provided stratification by sector. However, obtaining the approval of 34 different sub-associations was logistically challenging, and including only self-selected associations could result in a biased sampling frame. Further, many businesses are members of multiple associations, creating problems with duplication in the sample frame.

3.5.2: Survey Stratification

While stratification would be ideal to allow deeper insights into how institutions affect different businesses, resource and sampling frame limitations meant that stratification was not possible to the degree seen in much of the literature. Business surveys often cover multiple cities to ensure more representative data, which can allow geographical stratification. However, only 171 of the 4,307 total businesses from the sampling frame were from Mandalay, Myanmar's second-largest city, far too small to allow for any statistical significance of a 'Mandalay strata.' After Mandalay, the third-highest concentration of UMFCCI registered businesses (35) was in Muse, a major border crossing with China. The cities with the fourth, fifth and sixth largest numbers of registrations are Tacheliek, Myitkina, and Lashio with 18, 17, and 15 UMFCCI members respectively. All of these cities are in ethnic minority areas where travel is prohibited by Macquarie University restrictions that derive from Australian government travel warnings. These restrictions, as well as budget constraints, restricted surveying to Yangon and Mandalay.

Another common stratification is by firm size. While this survey collected data on a range of business size metrics, including the number of full-time permanent employees, it was not possible to stratify by size because the sampling frame did not contain any data on employee numbers. Another challenge for stratifying by business size is in the definition. World Bank enterprise surveys generally categorize firms as noted in Table 3.2.

Table 3.2: World Bank Business Size Definition

Business Classification	Number of Employees
Micro and Small	1-19
Medium	20-99
Large	100+

Source: World Bank. 2014. Survey Methodology. World Bank 2014 [cited June 3 2014]. Available from http://www.enterprisesurveys.org/methodology.

In Myanmar, business size is defined only in the 1990 Private Industrial Enterprise Law, as noted in Table 3.3. There are four different metrics to distinguish between small, medium and large enterprises: power used (in horsepower), the number of workers, the enterprise's capital outlay, and the enterprises annual production value. Firms which fall below the established minimums are classified as 'cottage industries.' However, this definition suffers from numerous shortcomings. It is only applicable to industrial businesses, not to service or trading businesses. It incorporates an out dated and oft-ignored measurement of power consumption. It gives no guidance on the classification of firms that meet criteria for multiple categories. Despite the lack of stratification, the survey does incorporate business size into analysis elsewhere.

Table 3.3: Classifications for Small, Medium and Large Enterprises in Myanmar

Category	Small	Medium	Large
Power used (in horsepower)	3 - 25	25 - 50	50 +
Number of workers	10 - 50	51 - 100	100 +
Capital outlay (million kyat)	0 - 1	1 - 5	5 +
Production value per year (million kyat)	0 - 2.5	2.5 - 10	10 +

Source: Government of the Union of Myanmar. 1990b. The Private Industrial Enterprise Law. State Law and Order Restoration Council Law No. 22/90. Yangon, Myanmar.

The third common level of stratification is by sector. In the World Bank Enterprise Survey and some other business surveys, responses are split equally between the manufacturing, retail and other sectors of the non-agricultural economy. However, the sector of activity was not given in the sampling frame, making it impossible to pre-sort respondents by sector to ensure an equal spread. However, the final distribution of respondents did allow post-survey grouping into three similarly sized sectors: industry, trade, and services.

3.5.3: Preparation and Surveyor Training

The survey was implemented by the lead researcher, local coordinator and a team of five local surveyors, selected and trained in conjunction with Myanmar Egress. These surveyors conducted interviews in person with respondents. The team was overseen by a coordinator, who was a staff member from Myanmar Egress. The surveyors were regularly accompanied to interviews by the team leader or team coordinator. All of the enumerators had surveying experience, though none have experience conducting business surveys. Consequently, a two day training session was held that covered all aspects of the survey, including goals, design, methodology, and interview techniques, as well as the intended analysis of the data. The survey was originally prepared in English, drawing on other enterprise and labor market surveys. The survey was initially translated from English to Myanmar language, and then translated back to English by a separate translator to check for errors. Other survey instruments, including the initial phone screening questionnaire and the UN's International Standard Industrial Classification (ISIC, which provides codes for different types of economic activity) were translated and checked for errors.

3.5.4: Pilot Survey

A pilot survey was conducted after enumerator training, with each surveyor conducting between one and three surveys under the supervision of either the researcher or the research team director. The pilot survey took place in late March and early April 2012. Two separate methods of administering the survey were trialed. In the first, surveyors were given a two-part survey. The first part, with general firm characteristics, was completed in an interview while the second section, which included the remaining five question groups noted above, was left with the respondent (along with a detailed set of instructions). The surveyor then returned in one week to pick up the survey. In the second method, the surveyor completed the entire six section survey in a face to face interview. Upon reviewing the pilot survey, almost all of the surveys that were left with respondents were returned partially completed and often with answers that did not fit the format of the question. The quality of surveys conducted through face to face interviews was far better, and was therefore selected as the procedure for the main survey.

The pilot revealed a number of problems with the survey process. Respondents who completed the survey in interview format were not able to progress through the survey as quickly as anticipated. Some surveys took up to two hours to complete. This led to the removal of 30 questions from the final survey. The sample frame was also found to contain a large number of incorrect phone numbers. Each surveyor was allotted 32 phone numbers for the pilot survey, a total of 160 amongst the five surveyors. Of these over 60% were incorrect. This exacerbated a previously identified challenge: obtaining the needed response rate. There are a number of reasons that likely attribute to the low response rate: (1) few if any businesses had completed a firm level survey so most are not familiar with the process; (2) firms are used to operating in a secretive business environment; and (3) firms are afraid that the survey may reveal information about illegal activities. Through feedback from interviewees and enumerators, the pilot survey also demonstrated that a number of questions were sensitive for respondents. Some of these were altered, some dropped, and one important question on total sales was prefaced by a similar question asking firms to identify a range into which their sales fell. Randomized response technique were considered but not used because of the additional time and complexity. After the pilot survey, additional training was also conducted with surveyors.

3.5.5: Main Survey

The main survey was conducted between April 24 (immediately after the Water Festival) and July 25, 2012. This survey period was chosen because it fell in a relative lull in the annual business cycle for Myanmar businesses, and came shortly after the end of the Myanmar fiscal year, which runs from April to March. The survey covered 153 businesses, of which 146 were from Yangon. Firms in Mandalay were surveyed from June 6 to 8, 2012. Most surveys were conducted by enumerators, though the researcher and team coordinator also went on 18% of the surveys. Businesses were first approached through a cold call to screen them for eligibility and interest. In this call, potential participants were told about the survey and asked if they would be willing to participate. Participation in the survey was subject to numerous terms and conditions, including some resulting from the Macquarie University's 'Human Research Ethics Committee' approval of the research.[6] In order to be included in the survey, a firm must:

- Be listed on the active membership rolls of the UMFCCI as of Mar. 1, 2012;
- Be identifiable from the membership rolls of UMFCCI as being primarily located in one of the townships of Yangon City or Mandalay City;
- Not have any close existing personal or business relationship with Myanmar Egress that would compromise their participation in the survey;
- Be owned or managed by an individual above the age of 18 (the survey can be completed by another individual, but they must also be above the age of 18).

The initial phone conversation with the business owner was based on a scripted questionnaire, attached in ***Appendix 3***. The questionnaire asked basic information about the business, verified that it met the criteria for participation in the survey, asked the interviewee if they were interested in participation, and scheduled a time and date for the interview. All answers from the business were recorded on the screening questionnaire. No third party introductions were used and firms were not asked by UMFCCI to participate. These methods could have increased the response rate, but also skewed the sample and introduced a degree of coercion into the surveying process. The survey team also offered each respondent a

[6] More details about the Macquarie University ethics approval process is available online at: http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics

customized report, showing how their firm compared to the aggregate measures collected for most questions on the survey. These reports were created through a large mail merge using a modified version of the survey form as a template, and the excel database as the data set from which to draw. All survey respondents who answered at least 80% of the questions received this report as an incentive for participation.

For each company interviewed, the enumerator completed a hard copy of both the telephone survey form and the questionnaire form. These forms were delivered to the team leader in weekly meetings, quality checked, and returned to the surveyor if any follow-up was needed. Completed surveys were kept by the researcher for data entry. Data was entered into the database by the researcher, who conducted further quality control during data entry. During this phase, 20% of the surveys were selected randomly for follow up in order to ensure accuracy. The quality control process consisted of phone calls in which the business owner was greeted, thanked for their participation and asked to verify their responses on 4-6 randomly selected questions from the survey. The participants were also asked if they had any feedback on the survey experience or their interactions with survey and surveyor. Checks were also set up in the data entry sheet in order to ensure that basic mathematical tests were met and that the form was accurately completed and entered. After data entry, completed hard copy surveys were then stored in a locked cabinet.

Confidentiality was stressed during the survey training and throughout the survey process. Both enumerators and respondents were informed that the survey was confidential and that no disaggregated data would be released publicly. The only point of contact for respondents was the survey team. Myanmar Egress management and UMFCCI were not aware of the specific businesses who participate in the survey. The survey collected only basic demographic information for statistical purposes. Survey forms did not have any fields for unique identifying information, and no disaggregated survey data or business names were published. Each firm was assigned an ID code which was recorded by the enumerator on the survey. The list that matched codes and business names was kept in a separate, secure storage space. Before each survey commenced, firm representatives were read a statement approved by the ethics panel and gave verbally consent to verify their acknowledgement of the ethics protocol and signal their voluntary participation. Participants were also told that they were free to stop the survey at any time. Any respondent who did not give voluntary verbal consent was not eligible to continue the survey. Surveyors would then sign to acknowledge their witnessing of the interviewee’s verbal consent.

3.6: The Qualitative Methodology

Qualitative interviews were conducted to provide insights into context, highlight new areas for inquiry, understand institutional enforcement characteristics, and illuminate the processes and procedures that result from the current institutional framework. Qualitative interviews were not conducted with the same sampling methodology as the quantitative research. Often, interviews were conducted with knowledgeable informants about areas in which they had experience in Myanmar. Interviews were conducted as part of a number of different projects, and interview content evolved over the course of the fieldwork as the researcher learned more about the local context and the institutional framework that businesses faced. Some were unstructured conversations, some semi-structured interviews, and some formal interviews. Many interactions with businesses and government came about spontaneously during the course of the research, including some conversations that evolved after completion of quantitative data collection.

Qualitative interviews were conducted in 2013 and 2014, both in conjunction with other projects and as a stand-alone part of the PhD research. One of the larger rounds of qualitative interviews was conducted in November 2013 as part of project on subnational governments and business led by this author. In this project, interviews were conducted with 14 businesses, 4 business associations or business association representatives, and 12 government officials to discuss the business environment, specifically the relationship between businesses and government institutions and regulations. The focus of the research was the formal institutional environment at the subnational level, though some questions were asked about other aspects of the business environment such as infrastructure. Two questionnaires were developed for this project and both are included in the appendix. The questionnaire used for interviews with businesses and business associations is attached as ***Appendix 4*** and the questionnaire used to interviews with government is attached as ***Appendix 5***.

Another series of interviews was conducted in January and February 2014 with businesses and business consultants in Yangon. To conduct these 10 interviews, an open-ended questionnaire was developed, with inquiries focused on the institutional framework.

However, these interviews were semi-structured and the questionnaires were used as a guide to pursue particular areas of inquiry. These interviews focused on experiences interacting with government, and on how particular attributes of governance, such as strict controls or arbitrary policy changes, affect business performance and decision making. These interviews also discussed firm's infrastructure challenges in significant detail. They provide little information on the financial sector, however, as many interviewees raised capital overseas. This questionnaire is attached as ***Appendix 6***. A limited number of interviews were conducted as part of a project with the Overseas Development Institute, in which businesses that were members of local partner business associations were asked about their experiences with workforce skills. Nineteen of these interviews were completed and are used on occasion but do not constitute a major contribution to the core analysis of the thesis.

Outside of these groups of interviews, a wide range of unplanned opportunities to engage with entrepreneurs arose during the course of the fieldwork. Through various projects and engagements, the researcher has visited and toured Industrial Zones in Monywa, Mandalay, and Mawlamyine as well as visited numerous Industrial Zones around Yangon. Similarly, numerous visits have been made to business associations and trading centres in Mandalay, Monywa, Yangon and Mawlamyine. The research has also benefitted from the many informal conversations with associates and contacts working for private businesses, consulting firms, international organizations, governments, NGOs and others in Yangon and around Myanmar. Interviews were generally obtained through networks or through purposive selection, in which individuals were sought out based on their knowledge of particular issues. All qualitative interviews were conducted by the researcher, with some in Myanmar language with the help of a translator, and others in English. Recordings were not made for confidentiality reasons. Instead detailed notes were taken during the meeting, and additional notes made after the meeting finished. These notes were then revised and edited to improve grammar. Before each interview began, the interviewee was informed about the survey purpose and confidentiality arrangements, and asked if they were willing to participate. This statement is included in the questionnaire in ***Appendix 6***. A slightly revised version, which reflected the participation of the Myanmar Development Resource Institute and The Asia Foundation, preceded interviews from ***Appendix 4*** and ***5***.

3.7: Historical Research

The historical data gathered for this thesis come from both primary and secondary sources. In Myanmar, research visits were made to the libraries of the British Council and the American Center, as well as the libraries of select private individuals in Yangon. Some historical information came from interviews, though this tends to date only to the SLORC/SPDC era given the average age of respondents. Notably, few businesspeople were engaged in the same type of work during the socialist era, as most private businesses did not exist then. Research was also conducted at the National Library of Australia, which contains a range of historical documents on Myanmar, as well as through Macquarie University's library.

3.8: Caveats and Sources of Bias

Despite best attempts to ensure that both qualitative and quantitative data are accurate, it is important to note a number of caveats to this research. As noted earlier, limitations on data were severe and heavily influenced the design of the study. Often data employed even for illustrative purposes (GDP, population, etc.) is not accurate. Any reference to government data, unless otherwise specified, should be considered as only indicative. There are also a range of caveats necessary for the quantitative survey. First, the survey covered only urban businesses. This undoubtedly leads to an understatement of certain business environment factors that are more acute in rural areas, for example infrastructure challenges, as road transportation for rural businesses may both more important and of lower quality than that used by urban businesses. Second, scholars have shown in other contexts that there is a correlation between business association membership and firm level productivity. Guedhuys et al. found this positive correlation in a survey of Tanzanian firms, again evidencing the problematic use of the UMFCCI membership list as representative of the country's population of businesses (Goedhuys, Janz, and Mohnen 2008). The sample frame used for the survey introduces a self-selection bias because businesses must have previously registered with UMFCCI to be included in the sample frame. This was accompanied by another level of self-selection bias because firms had to agree to participate in the survey. Both of these selection biases influence the results of the survey. For example, firms in manufacturing may be underrepresented in the sample frame due to lower than average UMFCCI membership, while corrupt businesses may disproportionately opt not to take the survey when approached. It is also important to note that UMFCCI is not an apolitical institution, but was instead founded in cooperation with the military government. Many businesses may choose not to be UMFCCI members because of historical or political reasons.

Survey results were likely influenced by unpredictable events which occurred during implementation. For example, power shortages are most common in the hot season from April to June, but were particularly bad during the survey period in 2012. Because Myanmar is heavily dependent on hydropower, there were widespread electricity shortages and visible protests during survey implementation. This could have led respondents to overemphasize the cost of these shortages and worsen their perceptions of electricity infrastructure. This does not suggest that electricity is not a leading concern among private enterprises in Myanmar, only that it may have been subject to some bias. Subsequent but similar research has suggested electricity was an important concern among private sector businesses (Schwab 2013, 288).

Survey responses were also limited by the interviewees' knowledge and honesty about their experiences. Often firms did not keep precise records of all business transactions and could not give precise measures on sales and expenses, and their change over time. Businesses sometimes did not collect information that is considered routine in developed countries. One interviewee, when asked about the number of days per week that staff work, noted that workers were supposed to work six days per week but they did not keep records of absences and could not provide such data. Surveys can only reflect the knowledge of the business owner or manager, and it was often found that precise information for qualitative and quantitative questions was not available. Lack of honest responses is another limitation of the survey, and it is likely that some portion of responses given to questionnaires were deliberatively inaccurate. Due to a history of arbitrary governance and hostility towards business, there is a general reluctance among businesses to share sensitive information, regardless of confidentiality agreements or measures taken to provide data security.

Chapter 4: Economic Institutions and the Private Sector through the Independence Era

4.1: Introduction

Since its gradual annexation by the British Empire in the 1800s, the institution framework that governs economic exchange in Burma has changed frequently and dramatically. Governing regimes have changed regularly, with successive leaderships often having far different political and economic ideologies than their predecessors. Conflicts, both internal and external, have altered the country's economic landscape. Businesses have responded to these changes by adapting business models, developing coping mechanisms, thinking short-term and often struggling to survive. New entrepreneurs have often started businesses based on an incentive structure which fails to provide economic returns for productive activity, instead rewarding privilege, power, and connections, especially those with government.

This chapter traces the evolution of Burma's economic institutions in the context of the wider political and economic changes. It spans from the time of the Burmese kings through the colonial era, World War II, the brief post-war re-incarnation of British rule and the Parliamentary era. Of particular interest are the responses of the private sector to evolving incentives and constraints that result from the changing institutional framework. This chapter argues that the British created the key ingredients for the success of the private sector in Myanmar: the formal institutions and rule of law, the regulations, the civil service, the infrastructure and the financial system, all of which were conducive to private enterprise. Yet these formal institutions penetrated the lives of the majority of Burmese only to a limited degree, and often mixed with traditional, informal economic institutions. The formal British institutions were designed to promote colonial interests and were therefore rarely accessed by many Burmese. This exclusion fostered nationalism and anti-capitalist sentiment which fed the backlash against the economic system that the British had built. The result was the post-colonial destruction of much of the institutional framework built during the time of British rule. Many economic policies in Burma's history were guided by overtly political agenda, including what was the most notable example, the 'Burmese Way to Socialism.' The politics behind these policies, about which many good volumes have already been written, are undoubtedly important but not the aim of this thesis, which instead aims to highlight the evolution of the economic institutions, their effects on the business environment, and the response of the private sector.

4.2: The Burmese Kings and Early Colonialism

Until nearly the end of the 19th century, Burmese kings of the Konbaung Dynasty ruled large parts of Burma with their power centred around present-day Mandalay. Though the Konbaung Dynasty had regular dealings with the British, their economic policies were notably different. Unlike the British system, based on rule of law and property rights, Burmese customary law was traditional and "gave the king absolute power over everything and everybody in his territory" (Cheng Siok Hwa 1965, 68). Merchants, producers and anyone else doing business was subject to the unbound dictates of the throne. Under the Konbaung kings, there was no fixed land tenure (Aung Tun Thet 1989, 129). The throne maintained tight controls on external economic dealings, including various royal monopolies in external trade and restrictions on the export of rice, rubies, and other precious metals (Aung Tun Thet 1989, 128, Findlay 2013, 21). Under the Burmese kings, revenue was raised largely through the "extraction of surpluses from agricultural producers" (Van Schendel 1987, 457). Often this was collected in rice, which was kept in stores used to regulate and depress local prices (Van Schendel 1987, 459). Taxation and other administration matters were handled through district governors, though these were often loosely controlled. Local power was vested in a township headman (Aung Tun Thet 1989, 129). Modern economic institutions were largely absent and even basic ones underdeveloped; for example, in many parts of deltaic Burma standard coinage did not exist and exchange was conducted through barter (Van Schendel 1987, 458).

The Konbaung Dynasty had some suspicions about Western business, which was evident in their interactions with the British. The profit motive that was central to British economic interests was not a fundamental principle in Burmese understandings of economic activity. Private business activities, especially those of the British, were "considered a challenge to the omnipotent royal authority" (Allen 1965, 7). Richard Allen noted that:

> *Half of Britain's quarrels with the kings of Burma were caused by our attempts to secure what we considered fair treatment for our firms. The kings simply did not understand a system under which Western business operated for normal profit. It seemed to them unwarrantable greed and presumption on the part of the foreigner,*

> *and Western business, which is alleged to have exploited Burma under British rule (Allen 1965, 7).*

Trade between the British and the Burmese kings did exist, though it was subject to the 'machinations' of Burmese officials who regularly impeded the importation of these goods (Adas 2011, 68). Ship captains often complained of the burdens of tiresome regulations and the ever-present threat that "should anything be amiss goods were liable to confiscation, crews were sometimes enslaved and even whole ships seized" (Cheng Siok Hwa 1965, 68). Trade was also impeded by geography, as Mandalay was far from major trading routes. The "policy of seclusion" which banned the Burmese from private foreign trade constrained the development of import and export infrastructure such as shipping fleets (Furnivall 1957, i). There was some effort towards modernization under King Mindon, including the introduction of coinage, reduced taxation, and a range of infrastructure and industrial projects (Findlay 2013, 21). By the 1880's there were some nascent industries around Mandalay (one report indicated nearly 50 factories) (Tin Maung Maung Than 2007, 11). However, these reforms and developments were largely for naught, as the Burmese kingdom fell to the British in 1885 (Tin Maung Maung Than 2007, 11). There was little in the way of a functioning financial system, and only a "small demand for money, credit and banking facilities" during the reign of the Burmese kings (Tun Wai 1962, 1). Credit was provided through friends and relatives, normally at nominal rates of interest (Tun Wai 1962, 1). Konbaung-era Burma, a traditional monarchy with economic institutions ill-suited for promoting growth, was on a collision course with British colonizers whose drastically different institutional framework would alter the economic structure that governed exchange in Burma.

4.3: The Colonial Era

The British colonized present-day Myanmar in stages, starting with the 1822 annexation of Arakan and Tenassarim and concluding with the 1885 conquest of the Konbaung Dynasty in Mandalay and annexation of Upper Burma. The administrative capital and economic hub of colonial Burma was Rangoon, far south from the heart of Burmese civilization and more strategically located to engage in commerce with India (Steinberg 1987, 283). Between 1822 and 1885, British colonial government was rolled out gradually and in an ad hoc manner. Unlike many other colonies, Burma was not administered from London for the majority of the colonial era, but from Calcutta. Burma was an "appendage to the colonial regime in India," and consequently the governing structures were not built for purpose but instead “transported” from India (Callahan 2002, 515). British Burma was functionally much different than other colonies, and this would have a distinct influence on its colonial experience.

Colonial institutions in Burma were designed primarily to provide law and order, thereby promoting commerce. J.S. Furnivall, a colonial administrator, argued that colonial institutions were designed “in the interest of economic progress” (Furnivall 1957, s). Robert Taylor argued that “the colonial state was an instrument intended to create and free wealth as efficiently as possible, in the context of a larger set of external imperial, economic, political and strategic interests” (Taylor 2009, 69). To facilitate this economic agenda, the British brought an entirely new set of economic institutions to govern the economy. The colonial government was organized along “rational utilitarian lines” and introduced concepts such as the rule of law, a law-making legislature, and an independent, law interpreting judiciary that had little roots in the traditional economic thinking of Burmese (Furnivall 1957, s). In the early years of colonialism, the British built a minimalist state, with the aim of promoting commerce and collecting revenue through taxation (Callahan 2002, 514). It was relatively laissez faire and “sought to encourage individualism and to create the conditions which would allow for economic expansion” (Tin Maung Maung Than 2007, 7). As decades passed, the colonial government grew and began to interact with the average citizen more regularly. It was a transition that started around the turn of the century, from an economic doctrine of laissez-faire to a doctrine of efficiency (Furnivall 1957, 73). Furnivall noted that “even up to 1900 the people saw little of any Government officials, and very few ever caught more than a passing glimpse of a European official. By 1923 the Government was no longer remote from the people but, through various departmental subordinates, touched on almost every aspect of private life” (Furnivall 1957, 40).

The growth of British economic institutions was accompanied by the government’s official rejection of the traditional Burmese institutions. The British introduced new means of township level governance, as well as land laws meant to promote increased production and land use by peasant cultivators. Burma’s traditional ‘circle system’ of local community governance was replaced by a ‘village system’ (Furnivall 1956, 75). Officials were assigned to oversee village groups with which they had little connection, and generally administered them in a bureaucratic fashion with little of the social standing of former headmen (Aung-Thwin and Aung-Thwin 2012, 186). Concurrently, the role of traditional headmen was greatly diminished, including their authority to mediate disputes, subsumed by the economically-driven bureaucracy of the British (Aung-Thwin and Aung-Thwin 2012, 187). The social consequences of the institutional transformation were great. By the end of the British colonial era, social order had digressed significantly and Burma was "the most dangerous place in the empire, with Rangoon boasting the highest murder rates for any colonial city" (Harvey 1946, 40). Yet the economic outcomes of the institutional transformation were impressive, at least in terms of growth in output, at least until the outset of the Great Depression.

4.3.1: The 'Rice Bowl' of Asia

Nowhere did the new British economic institutions transform Burma more so than in the rice economy. Under the Konbaung kings, rice had largely been grown for personal consumption, and any after-tax surplus was generally sold and exported to India or East Asia (Furnivall 1956, 95). Yet under the British, it became the country's major export industry. This shift was accompanied by widespread migration from upper to lower Burma, a rapid rise (at least from the 1860s to 1910s) in land under cultivation, and the development of markets and industries that facilitated the commercialization of rice production and its export (Tin Maung Maung Than 2007, 8). Hundreds of thousands of Burmese migrated south to move into paddy cultivation. This was, more than any other factor, responsible for the boom in the Burmese rice economy (Adas 2011, 41). From 1872 to 1881 alone, the percentage of the population engaged in agriculture rose from 50% to 60% (Tun Wai 1962, 51). By 1931, it had reached 69.6% (Walinsky 1962). Land under cultivation rose nearly fifteen fold, from 600,000 acres in 1852-53 to 8.9 million acres in 1922-23 (Furnivall 1957, 48).

Rice cultivation held many challenges for peasants, including disease and land speculation, yet was pursued by hundreds of thousands of Burmese. Given the uncertainty of returns and the certainty of difficult labour, scholars including Ian Brown have asked why hundreds of thousands of Burmese agriculturalists embarked on this "epic of bravery and endurance" (Furnivall 1956, 116). The evidence suggests that the incentives made it the most profitable alternative among the given set of potential livelihoods. The British colonial government changed a number of formal rules over the sector, allowing cultivators in the early years of the rice boom "guaranteed freedom of passage…and a five-year exemption from payment of capitation tax" (Aung Tun Thet 1989, 130). Land was plentiful and could be acquired easily from the government after some years of tenancy. While there is disagreement over the degree of improvements in cultivator income, many authors argued that there was steady growth (Aung Tun Thet 1989, 131). The most important evidence of the incentives was the continued migration from upper to lower Burma under the new British system (Adas 2011, 41).

As the rice economy matured, the economic incentives and risks of cultivation changed. In the early years of the rice rush, labour was scarce and land plentiful. Yet in the later years, land became the scarce commodity, increasing rents and the bargaining power of landlords. Increasing costs of cultivation and price fixing among paddy-brokers, speculators, millers, and exporters contributed to widespread debt – a “mere 14 percent of cultivators were clear of debt” in 1929-30 (Brown 2013, 51). In late 1930, rice prices collapsed due to the Great Depression, resulting in widespread dispossession of land from Burmese growers by Indian Chettiar moneylenders who financed much of the cultivation in the delta. By 1937, non-agriculturalists owned more than half of Burma’s occupied paddy land (Furnivall 1956, 111). Burmese cultivators, whose labour had largely built the rice bowl of Asia, were at that point mostly tenants on agricultural lands. Because of debt and desperation, the average cultivator was “so completely in the hands of his landlord that he is unable to assert himself in any effective way” (Report of the Land and Agriculture Committee, Rangoon, 1938 in Furnivall 1956, 94). The rice economy was, more than anything else, the area in which the economic life of the average Burmese had been changed by colonial institutions, but by the 1930s much of the gains by Burmese cultivators had been reversed.

4.3.2: The Failures of Industrial Development

While the colonial government adopted many incentives to grow the rice economy, they had little interest or motivation to encourage domestic manufacturing and industry. As part of the colonial empire, Burma represented a potential export market for British industry, which could produce manufactures of lower cost and higher quality than Burma’s nascent industrialists. These vested interests were complemented by a strong colonial commitment to free trade and, in the early years of colonial rule, laissez faire economic policies. This led the colonial government to do “very little to promote indigenous industries” in Burma (Tin Maung Maung Than 2007, 13). Instead, they adopted a relatively restrictive regulatory framework. Colonial Burma became a significant importer of manufactured products, notably clothing and other textiles, which made up about a third of the colony’s total imports at the onset of WWII. Other key imports were metallic manufactures (iron, steel, tools and cutlery), and machinery and vehicles, which both accounted for about 10% of total imports (Ministry of Finance 1943, 167). Burma's dependence on imports became so great that "almost every modern article in daily use had to be imported" (Harvey 1946, 59).

The increasing dependence on imported manufactures and the inability of Burmese industrialists – of which there were very few anyways – to compete with these imports led to a period of what Khin Maung Kyi et al. describe as 'de-industrialization' (2000, 62). A number of traditional industries experienced a decline during the colonial period, including shipbuilding (largely undone by the move to iron ships) and salt production (competition with cheaper English salt) (Tun Wai 1962, 37). By the end of the colonial era, "Burmese manufacturing industry…was of a rather rudimentary nature. It consisted of agricultural processing plants such as rice mills, oil mills, consumer product plants such as match factories, soap factories, bottling plants and a few technologically more advanced industries such as oil refineries, some large foundries and machine tool factories for outfitting Burma Railways, the Irrawaddy Flotilla and the port installations" (Khin Maung Kyi et al. 2000, 62).

The few industries that survived and thrived in colonial Burma were linked to the processing of rice or other natural resources. The economy was "largely extractive in nature," depending first and foremost on agriculture but also oil, mining, and timber (Walinsky 1962, 31). At the eve of World War II, almost half of the colony's industrial establishments (49%, or 674 of 1,373 total establishments) were rice mills. Mines and quarries accounted for 24% (333) of the country's businesses while saw mills comprised 7.5% (103) of total establishments (Ministry of Finance 1943, 159). These same industries and the raw materials that were their major inputs dominated exports. In 1940, over 53% of the country's exports were food and beverage products, most of which was rice (Ministry of Finance 1943, 166). Kerosene, petroleum and other oil products accounted for 25% of exports, mining products 10%, and wood products 6%. Together these primary products industries made up 94% of Burma's exports (Ministry of Finance 1943, 166). Many of these industries provided only some value added to commodities and had few workers. According to the 1931 census, just 0.36% (53,144) were employed as skilled industrial workers out of a total population of 14.67 million (Ministry of Finance 1943, 161). Unskilled industrial workers comprised about 1% of the population (Ministry of Finance 1943, 161). Under the colonial government, "the material resources of Burma were developed, but not the human resources" (Furnivall 1957, j).

Burma's unique colonial arrangement as part of India shaped the country's institutional framework and economic development significantly. The colonial government had a policy of free trade, which led to specialization in areas in which Burma could compete, notably agriculture. The focus on this specialization was exacerbated by Burma's place not just as part of the colonial empire, but as part of the colony of India (Hill 1984, 136). Burma not only had "free trade with its colonial ruler, England, as was the case with most colonies, but any natural protection the distance between the two countries may have conferred was irrelevant because there was also virtual free trade between Burma and neighbouring, more industrialized India" (Hill 1984, 136). India, not Britain, was the largest trading partner for Burma in the later years of colonial rule. For example, for most years through the 1930's India bought over 50% of Burma's total exports and 60-70% of Burma's exports to the British empire (Ministry of Finance 1943, 174-75). In 1934, Burma's exports to India reached 65.7% of total exports (Ministry of Finance 1943, 174-75). India was also the biggest source of imports for Burma, accounting for about 40% of imports in the decade before WWII and peaking at 63% in 1940 (Ministry of Finance 1943, 176-77). This situation was driven not only by geography, but also government rules and regulations, such as tariff policy. One former colonial official described Burma's colonial era tariff policy as having evolved "without reference to the needs of the country at all" (Oxbury 1943, 7). It was highly protective and designed to "suit the needs of rising industrial concerns in India or of those which had sufficient political influence to obtain a measure of protection in excess of their value to the country" (Oxbury 1943, 7). The resulting tariff policy, at the time of separation from India in 1937, consisted of a distorted, tri-layer policy:

a. "Imports from India were admitted free of duty;
b. Imports from the United Kingdom and the Empire in most cases were admitted at a preferential rate which was still very high…e.g. cotton textiles from the United Kingdom at 25%.
c. Imports from foreign countries were subject to the very high rates of duty imposed for the benefit of Indian industry…" (Oxbury 1943, 7).

The colonial government on occasion passed laws that actively disadvantaged local industry. For example, Furnivall noted that "the introduction of foreign salt and the tax on local manufacture ruined the salt-boilers and the salt-fish industry" (Furnivall 1956, 90). The net effect of the decline of domestic industry and growth of imports was that the "economic activities of Burmans instead of expanding were restricted" (Furnivall 1957, j). Technological change had also shaped Burma's economic development. New technologies such as the steam engine changed labour needs in the economy. Technology-driven structural change, such as the opening of the Suez Canal in 1870 (which opened up European rice markets) altered the incentives for different types of economic activity. However, they did not significantly affect the economic relationship with India. That relationship forced Burma "into a position of dependence," an arrangement detrimental to the country's long-term development (Stephenson 1938, 400).

4.3.3: A Level Playing Field?

The tariff policy that favoured Indian interests is just one example of the colonial administration's failure to promote (or even recognize the need for) competition and indigenous participation in the economy. Burma's economy during the colonial era was transformed to advance the interests of British commerce (Tin Maung Maung Than 2007, 9). Robert Taylor argues that this transformation led to the "full flowering of a capitalist economy" but one in which indigenous Burmese were not the main beneficiaries (Taylor 2009, 70). Colonial institutions were not intended to create a level playing field between local and foreign companies, nor foster the development of local enterprise. Instead, they were designed to facilitate the interests of the British and to a lesser degree the Indian business communities, who formed much of the mercantile class in colonial Burma given their long experience dealing with the British colonial government in India. Private foreign economic interests had powerful lobbying abilities and the ear of the colonial government (Aung Tun Thet 1989, 56). Burmese scholar Aung Tun Thet describes the relationship between the colonial administration and the foreign economic interests as "intimate and close" (Aung Tun Thet 1989, 61). Foreign firms in Burma "had a powerful voice in defining the direction and character of the colonial administration" (Brown 2009, 19). The influence of private British firms was also "exerted through formal mechanisms, notably the allocation of a seat (later seats) on the Legislative Council to the Rangoon Chamber of Commerce, to represent European business interests" (Furnivall 1956, 18). Both formally and informally, British and foreign business had influence over the colonial administration and used it to further their economic interests.

The result was the dominance of British interests in businesses that required government interactions, contracts and concessions. The economy came to be dominated by a "handful of monopolistic and oligopolistic firms," which were all foreign owned (Tin Maung Maung Than 2007, 10). Tun Wai noted that the colonial economy was characterized by "industrial concentration" in the hands of a few British firms (Tun Wai 1962, 129).[7] For example, oilfield concessions were "held only by British concerns," some of whom would not even allow Burmese to have shareholder voting powers (Furnivall 1956, 190). In the early 1900's, three foreign-owned companies controlled wholly 98% of oil production (Tin Maung Maung Than 2007, 12). The largest mining and teak companies were foreign (Tin Maung Maung Than 2007, 12). They were granted longer timber leases in more economically viable locales, and they received preferential treatment in the payment of royalties (Aung Tun Thet 1989, 62). Foreign companies could extract timber without paying a bond, while Burmese traders were prohibited from timber extraction with such a prepayment (Aung Tun Thet 1989, 62). In professional services, Burmese businesses were absent from a wide range of fields, leading one author to state: "there was not in Rangoon a single banking, insurance, shipping, manufacturing, or import firm of any size that is owned or managed by Burmese" (Christian 1942, 128). Burmese owned firms were more common in other areas of the economy such as small, upcountry rice mills and small-scale businesses (Khin Maung Kyi et al. 2000, 132).

Because of the close relations between colonial government and British business, some administrators speculated that the government failed in its duties as regulator and implementer of a level economic playing field. One colonial official noted that, in 20th century colonial Burma, business was often "self-regulated" in the form of "monopolies, trade associations, and price agreements" which generally restricted competition (Oxbury 1943, 4). By reducing the likelihood of discovery and punishment, lax regulation incentivized monopolization, collusion and illicit business practices. For example in 1912-13, millers imported paddy from Bengal which they remarked as Burmese, and while shippers complained about this practice, the political influence of the millers overruled these complaints (Furnivall 1956, 98). In this instance the law was seemingly relegated a secondary concern when it conflicted with the interests of powerful business concerns. British colonial governance of the economy was characterized by rule of law, except when it was not.

Regulatory shortcomings were sometimes cited as the reason for accusations of foreign exploitation. Owners and shareholders of Burma's colonial industries (who were almost

[7] If one flashes forward, this characteristic is not dissimilar from the concentration of industry in modern Myanmar in the hands of a few Myanmar firms, who similarly had close connections in government which were used to obtain concessions and other benefits. One could argue that the crony capitalism that is now endemic in Myanmar had strong roots in the colonial era.

exclusively foreign) were generally paid out “a large part of their earnings in the form of dividends” – payments of 20% to 40% per annum were common. They did not tend to re-invest in plant expansion and modernization (Walinsky 1962, 54). This bred resentment among the increasingly distressed Burmese agrarian population. One colonial official explicitly argued that the accusations of exploitation, if true, should be attributed to “defects in the actual agreements made by Government with the firms” as opposed to “any policy of non-interference” (Oxbury 1943, 36). The narrative of exploitation, which would later be central to Burmese calls for independence, was directly linked to the sometimes collusive and sometimes naive relationship between the colonial administrators and foreign business. Though the colonial administration saw its role “as being to create and then maintain ‘a fair field and no favour,’” they failed to understand that a “contest between the advantaged and the disadvantaged was not a fair contest” (Brown 2013, 19). This would have dramatic consequences for the country’s development in the long run.

4.3.4: The Plural Society and the Human Capital Problem

During Burma’s colonial era, immigration from Britain, India and elsewhere was common, creating what Furnivall referred to as a ‘plural society’ (Furnivall 1957, k). Because of its place within both the British Empire and colony of India, immigration was not only common but often encouraged by the British. For a short time in the late 1870s immigration from India was even subsidized (Furnivall 1956, 90). The bulk of immigrants came from India, and according to one estimate totalled nearly 2.6 million between 1852 and 1937 (Adas 2011, 101). However, most of them stayed only for a few years before returning. The Indian population of the delta region did grow significantly, from 297,000 in 1901 to 583,000 in 1931, an increase from 7% to 10% of the total population of Lower Burma (Adas 2011, 162). Indian migrants were drawn by expanding opportunities in Burma but also pushed by the “continuing distress in India” including bad agricultural harvests (Adas 2011, 162).

The ‘plural society,’ much like the business community, was heavily hierarchical with different ethnic groups dominating different segments of commerce and society. The British were at the top levels, predominant in the management of government and enterprises (Furnivall 1957, aa). The working and trading classes as well as both skilled and unskilled labour was mostly Indian (Furnivall 1957, aa). One estimate put the number of Indian workers in Burma’s industries at fully 67.5% of the workforce (Tun Wai 1962, 129). At the bottom end of the workforce were the ‘coolies,’ who came to Burma in large numbers to work unskilled industrial and manual labour jobs at low pay. This group did not aim to stay in Burma, but to "earn enough money to send remittances to their families left behind in India and, eventually, to return and live at ease there" (Cheng Siok Hwa 1965, 71). The influx of Indian immigrants did hinder the movement of Burmese into industrial jobs, to the detriment of the local population. According to Furnivall:

> *No single factor contributed so greatly to limiting the range of Burmese life as the influx of Indians who, with a lower standard of living and other advantages, came, by the normal working of the unregulated economic process, to displace the Burman from labour in general and also to function at intermediaries between Europeans and Burmans in all walks of life. Once these had entrenched themselves the ordinary Burman had no occupation open to him except cultivation and dacoity (Furnivall 1957, xiv).*

The result of this segmentation in the labour market was the concentration of human capital and skills among the foreign owners, managers and employees of these businesses. According to Furnivall "the direction and management, the technical staff and practically all the skilled and unskilled labor had been foreign" (Furnivall 1957, aa). Because Burmese were rarely employed in the industrial and manufacturing sectors, they had no chance to acquire skills in these industries. While Burma's long history of monastic schooling endowed the population – especially males – with relatively high rates of literacy, the country was weak in the technical and managerial skills necessary in industry (Tin Maung Maung Than 2007, 17). This shortcoming was a key driver of skilled Indian immigration to Burma. Given the easy access to skilled Indian labour during the colonial era, the British invested little in technical and vocational education in Burma (Tin Maung Maung Than 2007, 17). This would not have been such a problem had Burma continued along its path as part of colonial India, but it would prove very meaningful in the wake of Burma's independence and the significant out-migration that accompanied it.

4.3.5: The Foreign Colonial Administration

The British colonial administration was, at least until the separation of Burma in 1937, administered as part of the Indian civil service. For almost the entire colonial experience of Burma, many key government functions were administered from India, preventing the accumulation of local experience and capacity. Many of these bureaucratic 'nerve centres' such as "Currency, Post and Telegraphs, Customs, Income Tax, Defence, and many smaller branches such as Meteorology, Aviation, Geological Survey, and so forth, were all run by central services [in India]" (Stephenson 1938, 401). Even legislation was developed and administered from India until 1897 (Brown 2013, 27). Within Burma, civil service staffing was dominated by Indians. Over 90% of the Accounts Service, "the final guardian of efficiency," were of Indian origin (Furnivall 1957, ag). The hospitals were dominated by Indian employees, from the doctors to the menial staff, and were even dubbed an 'Indian institution' (Furnivall 1956, 120). Military forces in Burma also originated mostly from India, and to a smaller degree Britain and domestic ethnic minorities. Burma had an ill-educated, ill-paid Indian police force which was the butt of constant jokes from Burmese (Callahan 2002, 521). The continued dominance of Indians in many of these occupations was a matter of efficiency and cost. The colonial government found a ready supply of Indian staff produced by an existing training infrastructure, available at lower cost than would be required to train the large numbers of Burmese staff needed to do the same work (Furnivall 1957, ag).

The colonial government did develop the capacity to train a small level of elite professionals domestically, with some notable success. The centrepiece of the elite education was Rangoon University, which had by 1940 become "one of the top universities in Asia. Outstanding scholars from Britain and Europe came to work as lecturers and professors in Rangoon, and professors from Rangoon in turn got eminent positions in leading universities elsewhere" (Khin Maung Kyi et al. 2000, 150). However, this education machinery was small and geared at supplying graduates for positions in government ministries including judges, magistrates, police and revenue officials (Khin Maung Kyi et al. 2000, 151). The education system had little capacity to develop government specialists or the skills needed for private enterprise (Furnivall 1957, o).

4.3.6: Colonial vs. Traditional Institutions

While the formal institutions of the British were widespread by the end of the colonial era, they had been only partially integrated into the daily social and economic lives of most Burmese. Human resources played an important role in this. Because of Burma's subordinate place to India, a colony within a colony, the institutions always retained a foreign flavour. Especially at the higher levels, they were staffed by British and Indians, which hindered their adoption by locals. Many of the colonial economic institutions, and British institutions generally, were based on concepts that were foreign for Burmese and differed fundamentally from traditional economic institutions, as the case of land rights (discussed later) evidences. The formal economic institutions of colonialism, such as the courts or the financial system, were rarely used by average Burmese. They were more regularly patronized by the British elite and Indian mercantile class. Lastly, compared with India and many other colonies, Burma's experience with colonialism was comparatively short. From the conquest of the old Konbaung Dynasty to the Japanese occupation of Burma was just 57 years, a short time for such drastically different economic institutions to gain complete legitimacy. Even in Arakan and Tenassarim, British rule stretched back only just over a century. The result was that, as Allen argues, institutions such as the "parliamentary system, the rule of law and legal equality for all… a free press, impartial and clean administration—did not take firm root in Burma as they did in India" (Allen 1965, 8).

The key failing of British institutions in Burma, according to Furnivall, was that they were based on the 'absurd' assumption that people would pay for public goods and services they did not want. These formal institutions did not reinforce the existing informal social and economic institutions, but instead often contradicted them, resulting in corruption and inefficiency (Furnivall 1957, o). Dispute resolution was an example of this. In British courts, the judges "applied western principles of law, and preferred what was legal, or what the judge regarded as legal, over what Burmans regarded as reasonable" (Furnivall 1956, 132). For Burmese, traditional dispute resolution had sought to find a compromise that was acceptable to both parties, a difference between mediating and adjudicating disputes. This caused significant problems because often Burmese did not and could not pursue property rights claims through formal channels. For example, housing settlements in villages were often located on small stream-side tracts that, either because of carelessness or bribery, were not properly separated from adjacent land and then recorded in the land records as a separate plot. The formal owner of the improperly recorded deed would "quite frequently" evict the dweller after some years, though the latter rarely went to court "because the hope of successful resistance is so weak," especially with the official maps supporting the formal owner and not the dweller (Furnivall 1956, 94). The colonial administration also disrupted traditional informal governance through headmen, replacing them with village committees. These appointed bodies held little sway beyond the "trial of petty civil and criminal cases, and to act as an advisory body to the village headman in the performance of his duties concerning the general welfare of the tract" (Furnivall 1956, 195). They were largely seen as artificial administrative replacements of former socially legitimate institutions.

4.3.7: Other Colonial Developments: Infrastructure and Finance

While colonial efforts to build lasting institutions and local human capacity were wanting, the development of infrastructure and parts of the formal financial system were more successful. Infrastructure improved markedly over the colonial era and was a key driver of economic growth. However it was designed not for promoting internal commerce but to open up Burma to international trade. The colonial government maintained over 3,000 miles of navigable channels and constructed two significant canals, the Pegu-Sittang and Twante (Tin Maung Maung Than 2007, 17, Andrus 1947, 208). The biggest inland shipping company, the Irrawaddy Flotilla company, had 263 powered and 383 unpowered craft by 1940 (Andrus 1947, 209). In that same year, there were 6,811 miles of improved roads, of which 2,785 miles were paved (Ministry of Finance 1943, 247). The railroad network, the most notable colonial infrastructure project, was first opened between Rangoon and Prome in 1877 and over the next six decades swelled to 2,060 miles (Ministry of Finance 1943, 234). The network was consistently profitable and a vital means of cargo transportation around the country (Andrus 1947, 206). It was also efficient, covering the 386 miles from Rangoon to Mandalay in 13 hours and 30 minutes, boasted to be the fastest in the world (Ministry of Finance 1943, 234).[8] There were 106 power plants in Burma by 1940, and irrigation works that covered 1.56 million acres. The Public Works Department also built flood defences in the Irrawaddy Delta (Andrus 1947, 16). The communications systems, consisting of post and telegraph, were "fairly complete and modern," while telephones, radios and wireless were also being adopted (Andrus 1947, 255). The country had 656 telegraph offices by 1939, covering the entire country, and a post network including 372 officers that spanned all but the remote hill tracts (Andrus 1947, 261). Modern conveniences such as air mail to foreign countries were even available in the 1930s.

Burma's financial system also developed over the colonial era, though it was heavily segmented and faced significant challenges during the 1930s. Lending to cultivators was dominated by largely unregulated informal moneylenders from India called the Chettiars. Their loans had comparatively higher interest rates than formal banks (unsurprising given the size of loans), though were somewhat less than traditional Burmese finance (Turnell 2009,

[8] An interesting note here, that the same train line continues to operate in 2013, yet is poorly maintained and out of date. The same route now takes approximately 17 hours to cover, at nothing near a world speed record.

13-14). Though a valuable source of credit, the Chettiars became controversial because of their large-scale land accumulations during the 1930s due to loan defaults by Burmese cultivators who had used land to collateralize their loans (Turnell 2009, 13). Lending to businesses was the domain of the Rangoon-based foreign banks, who mostly offered short-term loans to facilitate trade. They also extended some credit to moneylenders who then lent to agriculturalists. Demand for industrial credit was rare, due in large part to the lack of industrial development outside agricultural and resource industries (Tun Wai 1962, 6). Foreign businesses borrowed mainly from overseas, where capital was more plentiful and rates lower. Mostly all of the commercial banks did not expand past Rangoon and did not lend to agriculturalists. They justified these geographical limits by arguing that there were no businesses in other parts of Myanmar which could be potential clients, and no tradition among Burmese people of using banking facilities (Tun Wai 1962, 140). These banks did not develop as deposit-taking institutions for Burmese peasants. They also did not lend to Burmese as regularly as foreign businesses, with the Report of the Burma Provincial Banking Enquiry Committee 1929-30 stating frankly that "foreign banks practiced discrimination against Burmese entrepreneurs" (41, quoted in Aung Tun Thet 1989, 51). Other production businesses, including cottage and small industries, had low demand for credit. These businesses were dominated by Burmese, who would borrow "mostly from family and friends," inhibiting the development of an indigenous capital market (Tun Wai 1962, 107-140). For most of Burma, mediation from savings to investment remained the domain of traditional private loans between individuals, as well as moneylenders.

4.3.8: The End of the British Colonial Era

The Great Depression took a major toll on Burma's economy, but also on popular perceptions of colonial rule. In 1937, Burma was separated from India and many of the key nerves of bureaucracy were cut. India became, as far as Burma was concerned, a completely foreign country. The new colony, still recovering from the Depression, had to reconstruct the colonial administrative apparatus, rebuild the central services on a Burmese basis, and provide for the continuity without a break of the economic and administrative life of the country (Stephenson 1938, 401). Burma would have little time to do this with the outbreak of WWII just a few years away, though much of the civil service was "Burmanized" by the war's onset (Pearn 1945, 61). The colonial experience had many impressive accomplishments. Whatever albeit justified critiques were later written about the distribution of economic gains in colonial Burma, the institutions of the British created a set of incentives that increased output on a scale not seen in the country before or since. Yet over the next two decades, war, independence, self-governance, and revolution would undo many of the blessings and some of the curses of colonialism. Successive Burmese-led governments, imbued with a nationalist and socialist ideology derived in large part from their colonial experience, jettisoned many of the market economic institutions in the name of socialism and indigenization.

4.4: Japanese Occupation

In early 1942, Japanese forces were threatening to take Rangoon. As the British defeat in Burma became imminent, the colonial administration and most foreign firms departed, soon to be replaced by the Japanese military administration and Japanese companies. Not wanting to leave behind infrastructure that the invaders could then use to aid their war effort, the British conducted a scorched earth campaign. Using expert demolitionists, the British razed communications and port facilities in 1942 (Hughes 1947, 34). Power plants received special attention, and by the spring of 1942 all were at least temporarily unusable (Andrus 1947, 151). The advancing Japanese forces also destroyed much infrastructure. The efforts of both countries combined led to economic devastation that, "whilst not total…was paralysing" (Hughes 1947, 34). "Hardly a major bridge had survived. Looting of factories and houses had completed the destruction. The economic life of the city was at a standstill" (Hughes 1947, 34). Andrus noted that "by 1943, ocean shipping had been reduced to little more than small wooden craft" (Andrus 1947, 342). "Railway traffic," he continued, "was brought practically to a standstill as a result of the rising tempo of Allied bombing of bridges, locomotives, and rolling stock" (Andrus 1947, 342). The destruction also affected strategic economic sectors such as petroleum industries, dockyards, and mines (Tin Maung Maung Than 2007, 14). Khin Maung Kyi et al. noted that a "large part of whatever little industry Burma had was destroyed during the Second World War" (2000, 62). The destruction was massive: Burma was as "hard hit by the war as any Asiatic country, with the possible exception of Japan itself" (Andrus 1947, 344), with destruction on "a scale not met with in any other Eastern theatre of war" (Hughes 1947, 33).

The war also had a detrimental effect on Burma's economy. Pearn notes that this happened because previously:

> *Burma's prosperity was bound up with the rice trade, but Burma has lost her normal markets, which were principally in India, and cannot find new ones, nor could the*

Japanese provide the shipping to export the rice even if markets could be found. Equally, consumer goods cannot be imported. Prices have rocketed, and attempts to control them have failed. The transport systems, wrecked by [Britain's] own scorched-earth policy in 1942, have not been restored, and rice, the staple food of the country, cannot be taken to those districts in Upper Burma which are deficient in that commodity. What with the loss of both internal and external markets, large areas of rice-land in Lower Burma have gone out of cultivation (Pearn 1945, 60).

War had brought a double blow: lower prices for Burma's exports (resulting in a drop in output) and higher prices for imports, to the point that some textiles were unobtainable (Walinsky 1962, 57). Burmese civil servants, most of whom retained their posts from the British era, also received much reduced rates of pay (Pearn 1945, 61). This was complicated by a Japanese administration that drained resources from the economy to support the war effort. Vegetable oil was confiscated for lubricant, draft cattle (used in the cultivation of rice) were killed for meat and leather, and forced labour was required of Burmese citizens (Walinsky 1962, 57). By the end of the war much of the country's population was impoverished.

The Japanese administration structured economic exchange under far different lines than the British. Instead of a specialized, primary product producing colony that traded mostly with the colonial empire, Japanese-occupied Burma would be a heavily managed economy designed primarily to support the war effort. This required greater self-sufficiency in many areas. The Japanese military administration tightly controlled much of the country's industry. An April 1942 order from the Military Administration Department stated that Japan would "confiscate and operate or supervise all important manufacturing factories and workshops in Burma" (Trager 1971, 65). This included the confiscation of all British owned sawmills and rice mills, as well as many match, textile, sugar refining and other industries (Trager 1971, 66-69). Indian property was seized in 1942 (Bayly and Harper 2005, 309). Many important resources were monopolized, including forestry and mining products, and British firms engaged in the teak, mining, and petroleum businesses were confiscated (Trager 1971, 67). The Japanese administration discouraged heavy industries such as iron and rubber production, indicating an understanding that the country needed at least some specialization. They also retained the right to order Japanese enterprises already existing in Burma to "operate any type of business" that the military administration deemed necessary (Trager

1971, 72). War had brought institutional upheaval that had effects on the private sector that were unparalleled since the beginning of the colonial administration.

The Japanese occupation also led to changes in the social and economic order, and a wholesale redefinition of the costs and benefits of various economic activities. Massive disruptions in previous patterns of economic activity helped some get rich overnight by "trading in vital commodities such as cooking oil and cloth" while others, especially the professional class "were reduced to poverty since they had no capital with which to buy commodities" (Bayly and Harper 2005, 235). Bayly and Harper argue that:

> *"People who controlled goods and services, rather than those who had Japanese paper money or even rupees, were the ones who survived and prospered. If you could build up a sufficient credit with the Japanese military and commercial firms by supplying railway cars, women and liquor, you could make a fortune" (Bayly and Harper 2005, 312).*

Japanese paper money replaced the former rupees, but both were virtually worthless during the war (Bayly and Harper 2005, 235).[9] This was in large part due to the Japanese administration that would 'pay' for forced labour in notes which where "printed on the spot, (and) which have no backing" (Pearn 1945, 60).

The British returned to an impoverished, war-torn Burma in 1945, facing huge costs for reconstruction and a much-changed political environment. The Burmese War Damage Claims Commission estimated war damages of 2.4 billion kyat (US $4.74 billion in 2012 dollars), from private individuals and 624 million kyat (US $1.2 billion) of agricultural losses. Public sector rehabilitation costs were estimated by one source at between 9.5 to 11 billion kyat (US $18.8 to $21.7 billion), while the Ministry of Finance put the cost at 12.7 billion kyat (US $25.1 billion in 2012 dollars) (Walinsky 1962, 57). During the war "one half of the country's man made wealth was destroyed" (Walinsky 1962, 57). For all that the war had taken from Burma, it had given the country its first taste of independence, albeit in name only. In 1943, the Japanese formally recognized Burma as an independent country, a move which would make the post-war re-colonization by the British that much more unpalatable. Burma's new leaders had the confidence, the public support, and even the weapons (given by the British during the war) with which they would press their case for independence.

[9] Notably, the pre-war rupees were eventually paid out upon the return of the British administration.

4.5: Post-War British Administration

Upon its return, the post-war British administration focused on “economic reconstruction and the restoration of stability,” placing political concerns about Burmese self-governance to the side (Brown 2009, 20). The British colonial government took the lead in overseeing the reconstruction of the economy, assisted by the major British companies that were engaged in Burma before the war. Post-war reconstruction was to be carried out under a British-appointed governor (Brown 2013, 89).

Government administration, infrastructure, and the private sector were all significantly disadvantaged compared to their positions before the war. Numerous core government functions, for example tax collection, were in ruins due to the flight of human capital, decline of economic activity, and destruction of infrastructure (Brown 2009, 17). Private businesses, especially foreign ones, were wary of reinvesting. British companies, including some of the most prominent ones from before the war such as Steel Brothers, the Bombay Burmah Trading Corporation, and Burmah Oil, were concerned about the risk of nationalization or expropriation of assets under an independent Burmese government (Brown 2009, 21). Much of the Indian business class had left, many not to return. Lower domestic output meant less foreign exchange, so the government erected trade barriers, including permits for imports from non-sterling areas. There was what Andrus described as a “general feeling in business circles that there are far too many restrictions on trade” (Andrus 1947, 180).

State involvement in the post-war economy was significantly greater, if for no other reason than the necessity of providing certain services to increase production in the economy. In September 1946, the government announced that it would nationalize electricity supply (Andrus 1947, 161). It also created an Agricultural Project Board, which filled the void of other public and private sector organizations by providing loans, purchasing, milling and exporting rice (Furnivall 1960, 20). It was, as Furnivall noted, “a vast State enterprise,” foreshadowing the many state enterprises soon to follow (Furnivall 1960, 20). Initial British moves towards greater state control of the economy were only taken further by the Burmese, who pressed for and received independence in January 1948, bringing an end to British rule in Burma.

4.6: The Parliamentary Era

Burma's first independent government was a parliamentary democracy, not dissimilar from the British in form but distinct in its economic agenda. The new government, heavily shaped by Burma's colonial experience, aimed to restructure the economy from the 'free markets' and 'free trade' that characterized the colonial system to a more state-led, planned system. The new government's economic agenda was characterized by nationalization, Burmanization and industrialization (Walinsky 1962, 491). Yet before the government could turn its attention to the economic restructuring, it faced a host of insurgencies from communists and ethnic minority groups. The causes of these conflicts are beyond the scope of this summary, but the economic consequences were great. In nominal terms, the conflicts destroyed public property worth 425 million kyat (US $89.25 million, in 1950 dollars), and public property worth 1 billion kyat (US $210 million), with defence spending of another 400 million kyat (US$84 million) (Walinsky 1962, 69).[10] By the time major conflicts had largely ended in 1952, Burma's economy had been "driven back to virtually the early post-war level of output" (Walinsky 1962, 69). The conflicts also distracted the country's leadership from turning their full attention to the new economic agenda.

4.6.1: Nationalization

The new government had an ambiguous position towards private enterprise. On the one hand, the 1948 Constitution guaranteed "the rights of private property and of private initiative in the economic sphere" (Government of the Union of Burma 1948a, Ch. 2: 23(1)). Before WWII, much of Burma's economy was private, profit-seeking business, with the exception of railways, postal services and telecommunications (Andrus 1947, 161). Agricultural land was also in private hands, including the 25% that fell under Chettiar control in the 1930s. Industry was almost exclusively private. According to Tin Maung Maung Than, 97% of industrial enterprises were privately owned in 1940 (2007, 12). However, the new government envisioned playing a much greater role in the economy than had the colonial government. The constitution allowed for limits and expropriation of private property "if the public interest so requires" albeit with provisions for compensation (Government of the Union of Burma 1948a, Ch. 2: 23(4)). The impetus for a state-led economy was directly connected the experience of colonialism. Free trade and capitalism were rejected as a model of economic

[10] Exchange rate conversion from Walinsky 1962, 36. Walinsky notes that both rupees and kyat were 13.3 to the pound sterling. The pound was equal to US$2.80, resulting in an exchange rate of 1K = US$0.21.

organization because in Burma it had become “synonymous with imperialism and exploitation” (Fenichel and Huff 1975, 329). Capitalists and profit seekers were viewed as “exploitative, mercenary and evil” (Walinsky 1962, 502).

The new government set out to revise the role of the state in the economy. The constitution reserved a host of economic activities for the government, including the “exploitation of timber and mineral lands, forests, water, fisheries, minerals, coal, petroleum, power potential and other natural resources” (IBRD 1953, 22). Exemptions could only be granted by Parliament and then only to ventures where at least 60% of the capital was owned by a Burmese national (IBRD 1953, 22). The Land Nationalization Act of 1948 was another major revision, nationalizing all agricultural lands with the exception of those privately held by cultivators generally up to a maximum of 50 acres (Government of the Union of Burma 1948b, 3, Schedule 1).[11] This rid Burma of Indian landowners (notably the Chettiars) who accumulated vast agricultural holdings in the 1930s (Mya Maung 1991, 122). Burma redistributed nearly 3.5 million acres to farmers, and nearly “eliminated” landless labourers by the end of the parliamentary era (U Aung Than Tun, Four Eras of Burmese Laws (In Burmese), quoted in Mya Maung 1991). In Burma's seminal Eight Year Plan (*Pyidawtha Plan*), launched in 1952, the private sector was “not incorporated” into the import substitution-framed master plan, though “private and co-operative investment in cottage industries and consumer goods producing light industries were to be encouraged and supported” (Tin Maung Maung Than 2007, 71). While the Plan did not embrace the private sector, a “tolerance of the private sector and recognition of its importance were evident under the *Pyidawtha Plan*” (Mya Maung 1970, 535).

Nationalizations and the resulting uncertainty for investors inhibited private sector growth, especially in the early years of the Parliamentary era. The official policy of the government was to tolerate the private sector until it was capable of managing the economy more broadly. However the “duration of the official ‘interim period’ during which private enterprise would be tolerated was as uncertain as were most other factors pertinent to investment decisions” (Walinsky 1962, 503). This was a significant disincentive for private investment. Walinsky notes that the threat of a future nationalization “effectively deterred the nation’s private rice millers from maintaining and modernizing their plants, with great loss to the economy. The

[11] In 1953, a more rigid version of the law was passed and the 1948 version repealed.

same threat deterred other new investment, whether by the remaining foreign 'captive' firms or by new domestic and foreign investors" (Walinsky 1962, 492). This was complicated by the unsatisfactory and unclear implementation of a compensation policy for enterprises that had already been nationalized, further deterring investment (Walinsky 1962, 493).

The rise of public enterprises brought competition to private businesses for both human and financial resources. According to the 1953-54 Industrial Census, the most pressing problem confronted by small manufacturers was finance (Khin Than Kywe 1960, 107). At the beginning of the parliamentary era, small enterprises often lacked capital to finance operating costs, not to mention funds for expansion and investment in new capital equipment (KTA Report 1953, 812). The commercial financial system helped address this, however the state's demand for resources also increased. During the 1950s, bank loans to the government increased by 1,900%, crowding out many private enterprises (Turnell 2009, 215). More than two thirds of private enterprises (68%) used personal finances or those of friends and family, with smaller enterprises more dependent on personal financing than larger businesses (Khin Than Kywe 1960, 121). However, financial institutions generally still preferred trade financing and did not commonly lend for long term investments (Khin Than Kywe 1960, 141).

The disappointing performance of many state enterprises in the 1950s caused the government to rethink their aversion towards private business. Compared to public enterprises, the private sector thrived in the 1950s and the government came increasingly to see a role for and need of a healthy private sector in the country's development strategy. By June of 1957, Premier U Nu admitted that there were significant shortcomings in the state-driven model. He stressed the need for private investment and stated that "[f]rom practical experience, I no longer like to see [the] Government's finger in all sort of economic pies" ("Premier on Burma's 4-Year Plan," BWB, 13 June 1957, quoted in Tin Maung Maung Than 2007, 57). Growing support for the private sector was also evidenced in the 1961 Second Four Year Plan, which stated that the "private sector has not achieved the possible rate of investment in the past years" due to an overemphasis on public sector development (Ministry of National Planning 1961, 23). "In order therefore to make full utilization of private initiative and energy in the development of the economy, particularly in the field of industry," it continued, "it is necessary to take measures to strengthen the private sector of the economy" (Ministry of National Planning 1961, 23). It went on to state that strengthening the private sector would be one of the "most important objectives" of the Second Four Year Plan (Ministry of National Planning 1961, 23).

The positive evolution of government attitudes towards private businesses during the Parliamentary era did not help solve other challenges these enterprises faced. "Security remained a problem. Taxes continued to be burdensome. Labor policies and legislation were unrealistic. Import licenses for raw materials, spare parts, and operating supplies remained uncertain. Too many necessary production and distribution controls were still in effect. Essential services (water, transport, communications and so on) were no more reliable than before. Too many government employees and party adherents still needed to be paid off" (Walinsky 1962, 502-503). Tin Maung Maung Than echoes these challenges, arguing that private sector enterprises in the parliamentary era faced "numerous obstacles such as inadequate financial resources, restrictions on foreign exchange, state control on imports of capital and intermediate goods, technical backwardness and lack of managerial expertise" (Tin Maung Maung Than 2007, 89). The rising number of government employees, which was necessitated by nationalizations, was directly linked to increasing corruption in the Parliamentary era. Part of this was simply numbers – more civil servants were needed to oversee nationalized enterprises, so there were more people who could use their public offices for private gain. However, the growing bureaucracy also changed civil servant incentives. U Nu's administration was not able to effectively monitor the enlarged bureaucracy, thereby reducing the costs for shirking. Nationalizations accounted for the substantial increase in corruption (Walinsky 1962, 492).

4.6.2: Burmanization of Government and Enterprise

The new government had a strong inclination to 'Burmanize' both the civil service and business community. This was partially the result of the government's socialist-leaning ideology but also closely connected to the colonial experience. At the beginning of the Parliamentary era, there was a massive outflow of experienced civil servants. Furnivall noted that:

> *The extent of the depletion of the superior services can be illustrated by a comparison of the Quarterly Civil Lists for October, 1947, and April 1948. In the October list there were 99 members of the superior administrative Civil Service, the "steel frame" of British rule. By April 1948, 71 had retired or were oil leave preparatory to retirement; out of the top 50, two-thirds had gone, and of the top 25 only 4 remained.*

In the Police Service, so essential for the maintenance of order and the prevention of crime, only 6 officers were left out of 37 holding the rank of District Superintendent or higher. In the Frontier Service, responsible for administration in the tribal hills, there was almost a clean sweep; out of 62 officials only 9 were left (1957, ae).

Unlike India, which kept on foreign civil servants after the colonial era until suitable local replacements could be found, Burma did not retain any foreign civil servants. It often placed underqualified local staff in their place. This, combined with the deference of junior officials, resulted in "a relatively small number of experienced senior officials [who] must carry a disproportionate burden of work and responsibility and are excessively preoccupied with detail and day to day operations. Their administrative talents have been spread even more thinly as government has had to assume the vast additional responsibility of restoring, expanding, and diversifying Burma's economy" (IBRD 1953, 42). The other challenge for the new government was that, by nationalizing much of the economy, the civil service now had far more responsibility. From the beginning, the government struggled with the increased state role in the economy. Such was the shortage of internal capacity that the main economic development strategy, *Economic and Engineering Development of Burma*, was outsourced and completed by two U.S. firms, Knappen Tippetts Abbett McCarthy Engineers and Robert R. Nathan Associates (KTA Report 1953).

The government also sought to promote Burmanization of business, both in public enterprises and the private sector. The later were the beneficiaries of preferential treatment by the new government, though these advantages often failed to achieve their desired result. For example, the new government stipulated that a minimum of 60% of import licenses went to Burmese nationals. Yet local entrepreneurs often resold the licenses to foreigners for a profit, extracting a rent simply for being Burmese (Pfanner 1969, 245-246). Also, through the Industrial Acts of 1948, the new government required the majority of shares in private enterprises, as well as the majority of managers and workers, be drawn from the Union of Burma (Bandyopadhyaya 1987, 37). Yet Burma lacked the industrial and manufacturing expertise to develop either public or private industrial enterprises. As Furnivall noted, "the fundamental obstacle to industrial expansion was not the lack of capital but the lack of human resources – of manpower" (Furnivall 1957, aa). Nationalization of foreign enterprises was seen as an integral part of Burma's industrialization, but local Burmese did not have the capacity to manage or operate these industries (Furnivall, 1957, z). Those few entrepreneurs in the private sector that did have the technical knowledge often lacked the capital needed to set up new industries.

Human capital shortcomings were partly due to Burma's colonial education system, which provided only a small number of places compared to the country's population. Places increased after independence, because the new government put an emphasis on their expansion (Khin Maung Kyi et al. 2000, 151). However, the education system remained abstract and 'academic' and incapable of producing sufficient numbers of technically skilled workers. Facilities for vocational, technical and professional education were insignificant and British tertiary educational institutions were seen as irrelevant to the new state-led industrial economy (Walinsky 1962, 8-9).

4.6.3: Industrialization

The new government placed a strong emphasis on industrialization outside of the resource-based industries that developed during the colonial era, an attempt to diversify away from an over-dependence on agriculture and natural resources. The cornerstone of this strategy was the development of 65 state-owned manufacturing industries, approved in 1954 (Walinsky 1962, 300). These industries generally sought to increase Burma's self-sufficiency by developing domestic capacity in industries where imports dominated. This included a pharmaceutical factory, a steel mill, two sugar mills, a brick and tile factory, and a garment factory (Walinsky 1962, 301). While some of these facilities had greater economic potential than others, most ran into significant operating obstacles. Problems included the following: "arrangements for timely and economic procurement of raw materials and other supplies had not been made; skilled staff and technicians from abroad had not been hired; accounts had not been properly kept, which meant that costs could not be determined intelligently; and, most important of all, appropriate management arrangements… had not yet been made" (Walinsky 1962, 314). Public enterprises were plagued by a lack of autonomy from their respective government ministries, inexperienced managers and workers, a lack of initiative, poor coordination with other government agencies and public enterprises, a lack of clear and appropriate policy framework, poor accounting, and poor supervision (Walinsky 1962, 451-464). By June 1957, the poor performance of these industries and a lack of foreign exchange led the government to halt further state industrial enterprises. The state's share of industrial output was never high, but by FY1960/61 had dropped to 5.4% despite the massive investments in the early 1950s (Tin Maung Maung Than 2007, 60).

While public industrial enterprises struggled, the mid to late 1950s saw a "notable industrial advance" in the private sector (Ministry of National Planning 1961, 38). From FY1953/54 to FY1957/58, the value of goods and receipts from services of industrial establishments and cottage industries rose 150%, industrial employment rose 40% and the number of industrial establishments rose 50% (Ministry of National Planning 1961, 38). The total value of output from cottage industries increased fourfold over the same period. The World Bank noted after a 1958 visit that it was "surprised to find that the manufacturing sector was larger, and considerably more diversified than it had expected" (IBRD 1958, 25). "There had been a growing movement of people and capital into manufacturing" (IBRD 1958, 25). By 1959, some of Burma's private sector manufacturing industries, notably in labour intensive sectors such as textiles and timber processing, had grown to the point that they were "able to export their goods competitively in the international market" (Khin Maung Kyi et al. 2000, 63). There was also significant growth in military business ventures. The most prominent of these new businesses, the Defense Services Institute (DSI) was set up by the Ministry of Defense in 1950-51 to run a number of new business (Mya Maung 1991, 92). The DSI and another military venture, the Burma Economic Development Corporation, became increasingly important during the years of military caretaker governance from 1958-60 (Mya Maung 1970, 537). While these particular institutions would be dissolved in the 1960s, they were the first in a dominant trend of military business ventures in Burma.

The new government's drive to nationalize, Burmanize, and industrialize the economy led to rapid changes in many of the formal institutions of governance. For example, property ownership was thrown into chaos with the widespread nationalization of agricultural lands. Many sectors of the economy were reserved for only the government to exploit. Many of the people who had overseen the economic institutions of the colonial era – the civil servants of largely British and Indian descent – had departed the country. Many of the businesses that used these institutions, such as the large foreign companies and many of the Indian merchants, similarly had left the country. At the grassroots level, informal institutions continued to play an important role in the governance of economic exchange. Economic organization continued to be structured around the family unit, an indication that the economy was still very traditional (Pfanner and Ingersoll 1962, 346). The ethics and logic of economic exchange among Burmese peasants were "derived largely from Buddhism" (Pfanner and Ingersoll 1962, 342). The colonial institutions that sought to restructure the economic life of peasants had only taken hold to a limited degree and co-existed with traditional informal institutions. While the structure and appearance of the colonial economic institutions remained, the implementers and patrons of these institutions, whose shared conceptions about economic exchange legitimized those institutions, had largely left the country. The steel framework of the colonial institutions was but a shadow of its former self.

Chapter 5: Economic Institutions from Socialism through the SLORC and SPDC Eras

5.1: Introduction

The Revolutionary Council (RC) government that came to power in early 1962 dramatically altered the formal institutions of Burma's economy. Among the most significant changes were the abandoning of markets, the intensification of planned economic activity, and criminalization of most private enterprise. The new socialist economy was to be controlled and administered by the military government, though ineptitude and corruption doomed this agenda in only a few years. It was, however, a period of relatively strict socialism that lasted until around 1973. The RC officially dissolved itself in 1974 and transferred power to the 'elected' Burma Socialist Programme Party (BSPP) government. The new BSPP government abandoned the RC's focus on industrialization and doctrinaire socialism (Steinberg 1981b, 47). It allowed greater space for private enterprise and re-engaged with the international economy, although on a limited scale. Yet planning remained the central organizing principle for economic exchange, and much private economic activity remained illegal. It was an era described as "pragmatic authoritarian socialism" though mostly anything would appear pragmatic after the RC's economic governance (Hill and Jayasuriya 1986, 8). Following the 1988 uprisings, the military again took control of the government and formed the State Law and Order Restoration Council (SLORC). The SLORC officially ended the socialist economy and legalized private business in some sectors. However, it retained much of the socialist-era administration and preserved state (or in many cases military) control of the 'commanding heights' of the economy. During both the socialist and military eras, transactions involving the public sector were governed by official dictate, not through markets.[12] The SLORC, which later went by the moniker of State Peace and Development Council (SPDC), oversaw the economy for more than two decades in which constant policy changes, arbitrary governance, and crony capitalism were rife. Little serious effort was made to grow market-supporting institutions necessary for broad-based economic development.

[12] Henceforth, the term 'socialist era' will refer to the time from 1962 to 1988 when Burma was under the RC and then BSPP governments. The term 'military era' refers to the time from 1988 until 2011, when Burma and later Myanmar was under the SLORC/SPDC government.

This chapter examines the development of economic institutions in Burma/Myanmar from the RC government to the end of the SPDC's rule.[13] It argues that the RC instigated radical changes in economic organization and redefined many of the fundamental incentives and constraints on economic activity. The rise of socialist economic organization made market-supporting institutions unnecessary, so many ceased functioning or retained only ceremonial roles. Few have regained their former ability to facilitate economic exchange.

5.2: The Revolutionary Council: From 1962 to 1973

The RC took power in a coup on March 2, 1962, and within the first few years of its tenure dramatically restructured the incentives for businesses in Burma. In the first year of RC rule, changes were comparatively few as uncertainty about the direction and depth of economic reforms pervaded. There were significant internal disagreements within the RC about economic governance, but by 1963 the more socialist elements had prevailed. Economic restructuring gained pace in 1963, guided by a strong socialist ideology espoused in RC documents including the 'Burmese Way to Socialism.' The new economic system entailed the abandonment of market mechanisms and private enterprise. The RC opposed any semblance of a "pernicious economic system, capitalistic or mixed, which tolerates the existence and operation of private enterprises with self-interest and self-seeking profit motivation" (Mya Maung 1964, 1189). This was heavily influenced by Burma's colonial experience, which had created a strong "aversion to capitalism" (Mya Maung 1970, 534). The new Burma would be an autarkic socialist state, controlled and administered by the military, with a focus on equity and a disdain for economic incentives (Tin Maung Maung Than 2007, 111). The government would control the commanding heights of the economy through nationalization and regulation (Tin Maung Maung Than 2007, 114).

Starting in 1962, the RC began revising many of the laws, rules and regulations that governed the economy. Changing the formal institutional framework was central to the Burmese Way to Socialism, which deemed it "necessary to dismantle the old laws which protect the private enterprise system and to replace them with new laws pertaining to the socialist economy" (Burma Socialist Programme Party Central Organising Committee 1966, 98). The existing bureaucratic administration was a stumbling block which needed to be removed in order to

[13] This dissertation will use the name Burma in discussing events until the official 1989 name change to Myanmar, at which point the later will be used.

build a proper socialist economy (Revolutionary Council 1962, 2). During the first dozen years of the RC's rule, over 50 economic laws were passed (Mya Maung 1974, 13). Key laws and proclamations included:

- The Enterprise Nationalization Law (1963), which stated that major industries would be nationalized by June 1, 1963 (Steinberg 1981a, 31). This law was cited as justification for nationalizing a wide range of other businesses.
- The People's Corporation Law (1963), which gave monopoly control of agriculture, commerce, industry, and distribution of goods and services to the RC (Mya Maung 1974, 13).
- The Tenancy Law (1963), which fixed rental rates for land. The 1965 Law to Amend the Tenancy Act eliminated rents for agricultural land, though this was often immaterial because many landlords were no longer able to collect rents (Donnison 1970, 192).
- Announcement by General Ne Win, at the Garrison Theatre on February 15, 1963, that the RC did "not intend to permit private industry to set up new establishments beyond those already in existence" (Burma Socialist Programme Party Central Organising Committee 1966, 66). This move was made because of the "inability of the indigenous capitalists to restrain their greed" (Burma Socialist Programme Party Central Organising Committee 1966, 66).
- A prohibition on banks extending credit to the private sector and ban on renewal of existing loans, announced by the RC in 1966 (Emery 1970, 30).
- The Nationalisation of Banking Business Ordinance No. 1 of 1963, issued on February 23, 1963, which nationalized Burma's 24 private banks and renamed them People's Banks No. 1 to 24 (Turnell 2009, 238-239).
- The Demonetisation Act, Revolutionary Council Law No. 7, published in May 1964, which declared that all 50K and 100K notes would no longer be legal tender and could be exchanged for smaller denominations up to a maximum of 500K without delay or up to 4,200K, disbursed through bank branches with some delay (Turnell 2009, 238-239). The government gave note holders only 10 days to exchange the notes (Mya Maung 1991, 136). The expressed purpose of this demonetization was the hurt 'capitalists.'
- The Law to Invest Powers to Construct the Socialist Economy (1965), which gave the government wide-ranging powers over private enterprise, including:

- The right to "determine and fix the sale price, production cost, storage cost, transportation cost, inspection cost, hire cost and other utilisation costs in respect to any commodity" (Burma Socialist Programme Party Central Organising Committee 1966).
- The right to take actions against persons who violate the law. Minor and moderate offenders could receive a warning, confiscation of commodities, up to three years imprisonment and a fine of K5,000. Major offenders could face up to ten years imprisonment or the penalty of death (Burma Socialist Programme Party Central Organising Committee 1966).

The nationalization of private businesses was a central aspect of the economic reforms. By 1964, the RC had passed 14 new laws to facilitate the expropriation of businesses and assets (Union Bank of Burma, 2 quoted in Turnell 2009, 230). The RC nationalized businesses in agricultural production, banking, industry, distribution, transportation, communications, trade and services (Tin Maung Maung Than 2007, 113). The first nationalization was Imperial Chemical Industries in August 1962 (Steinberg 1981a, 31) The Burma Oil Company, a colonial company reconstituted as a joint venture between the government and British interests, was nationalized January 1, 1963, with Steel Brothers and Anglo-Burma Tin to follow later that year (Trager 1966, 205). In total more than 15,000 firms were nationalized (Steinberg 1981b, 35). The RC focused on medium and large businesses in heavy industry, manufacturing and services, which were either nationalized or tightly overseen (IMF 1995b). The government's 1964 *Economic Survey of Burma* gives further evidences of the extent of nationalizations:

> *The Revolutionary Government nationalized all cigarette companies in the Union on 20 October, 1963, with immediate effect, the Pearl Fishing and Culture Syndicate with retrospective effect from 16 August, 1963, the Burma Economic Development Corporation and its 42 subsidiary firms from 17 September, 1963 and the Defence Services Institute and its 5 scheduled firms from 28 September, 1963. This was followed by the nationalization of all private wholesale shops, broking houses, department stores, general stores and co-operative shops dealing in foodstuffs, textiles and 14 categories of general merchandise, first in Rangoon on 19 March, 1964 and later in the rest of the Union by the Order of 9 April, 1964… Effective 11 April, 1964, the Government took over the entire export trade of the country (Ministry of National Planning 1964).*

The result of these nationalizations was to enshrine the state as the predominant economic force in many sectors. For example, in the mining sector, the share of production by state-held mining businesses increased from 1.5 percent to 85.6 percent from FY1961/62 to FY1973/74 (Tin Maung Maung Than 2007, 130). However, in agriculture, the state was never a significant owner. In FY1973/74, 99.8% of agricultural value added was by the private sector (Tin Maung Maung Than 2007, 150). However, the state had a monopoly on buying, milling, distributing and processing rice, extracting economic rents through these methods instead of direct ownership (Mya Maung 1991, 122). During the socialist era, the private sector was reduced to "highland farmers, and peasants not wishing to participate in the state and co-operative sectors; individual livestock owners; producers of forest products for own use, small enterprises owned by nationals; building construction for own use; transport using animal-powered vehicles and mechanized services where the state is still unable to operate, private enterprises in the service sector; and retail trade outside the purview of the state and co-operative agencies" (Tin Maung Maung Than 2007, 116).

Nationalization had a significant impact on trading and distribution businesses. In trade, private entrepreneurs were banned and replaced by government trade corporations. The Myanma Export-Import Corporation had a monopoly on external trade (Mya Maung 1970, 548). The retail, distribution and marketing of many basic household goods were monopolized by the state under the People's Stores Corporation of the Ministry of Trade after the nationalization of wholesale and retail stores. This move was detrimental for the population, as it replaced an estimated 2 million private entrepreneurs with only 60,000 government employees (Silverstein 1967). It was also done in haste, giving private traders only ten days to cease their operations.

In the industrial sector, the government built up a "giant superstructure of more than fifty State Economic Enterprises and thousands of state-owned-and-operated factories" (Mya Maung 1991, 206). These enterprises comprised the core of Burma's industrial capacity, and were the centre of the military administration's economic planning. They were also highly inefficient, and the country began to suffer from shortages of key goods almost immediately due to improper incentives, poor planning, lack of human capacity, and foreign exchange shortages. The key problems for SOEs were that they:

- Had no incentive to make operations efficient. All outputs were sold to state-owned trading companies at cost, which was determined by adding mostly-bureaucratically prescribed costs of raw materials, processing costs, overheads, transportation, depreciation and a small contingency (Kyaw Myint 1978, 188). Costs were simply a matter of computation, and any reduction (for which there was clearly no incentive) only meant a reduction in budgetary allocation (Tin Maung Maung Than 2007, 124). The whole system of trade corporations and co-operatives was encumbered by bureaucratization (Arumugam 1975, 46).
- Had no ability to react to market conditions. Production decisions were "determined by capacity rather than consumer demand or taste" (Kyaw Myint 1978, 188). This resulted in stock-piling of some goods and shortages of others, and large variations in production from year to year (Kyaw Myint 1978, 188).
- Had no financial autonomy. Both working capital and fixed capital were provided through budget allocation, with the later having "no interest or repayment obligations except when foreign loans are involved" (Kyaw Myint 1978, 187). SOEs also had no ability to retain profits from their operations.
- Had little managerial autonomy. SOE's had no ability to make personnel decisions or set wage rates, which left little scope for encouraging labour-driven efficiency improvements (Kyaw Myint 1978, 188).
- Had incentives to engage in illicit activities to subsidize low staff compensation.

Investment decisions were made by central administrators, often leading to inefficient and arbitrary outcomes. There was an over-emphasis on new industrial investment and neglect of maintenance for existing facilities, leading to a 'decapitalization' of many existing industries which by then used "highly obsolete, written off equipment incurring high production costs, capacity under-utilization and frequent breakages in production" (Kyaw Myint 1978, 190). There was also a steep decline in infrastructure construction which "slowed almost to a dead stop" during the first decade of socialism (Khin Maung Kyi et al. 2000, 173). For example, from FY1964/65 to FY1986/87, Myanmar did not add a single mile of new primary highways (Ministry of Planning and Finance 1972, 1978, 1987a). Electricity production was also slow to develop and continually fell short of government plans, and the existing electricity infrastructure was of poor quality.

Private businesses that were not nationalized faced a system of tight controls, poor incentives, and increased oversight. Small businesses were "subject to increasingly tight government restrictions on production, marketing, pricing, employment, and wages" (Hill 1984, 139). Cultivators, whose land rights were protected under the Tenancy Act, faced new controls on the sale of many types of produce. The government introduced a forced procurement program for rice with an administratively fixed price that was not adjusted for changes to international market prices or the rising costs of inputs. The result was that after just a couple of years of RC rule, "the price paid to the cultivator covers his costs of cultivation barely, if at all, and does not cover the cost of fertilizers and other adjuncts to improved cultivation" and therefore "offer[s] no incentive to the cultivator" (Donnison 1970, 188). The negative effects of the government's mandatory crop procurement were especially acute for smaller farmers, because it required them to sell mandated volumes of rice below-cost. For smaller farmers, these set volumes made up a larger share of their total production, reducing their average sale price more than for larger farmers. Poor incentives such as these were not only common under the new system, but were part of the fundamental ideology of the Burmese Way to Socialism wherein economic activity was to be motivated by morality. The socialist ideology was fundamentally opposed to any system in which "self-interest and self-seeking are the motivating forces" (Revolutionary Council 1962, 2).

The private sector reacted to the changing economic landscape by dramatically decreasing investment and production after the RC came to power. Responses included "divestment, producing lower quality goods, dismissing workers, reducing capacity utilization, diverting raw materials and intermediate inputs, and closure of factories" (Tin Maung Maung Than 2007, 124). These were perceived by some in the RC as sabotage, yet were reasonable for entrepreneurs given the risks associated with short-term production and long-term investments. Statistics on the production output of private enterprises show a significant drop in the year immediately after the coup, as noted in Table 5.1. The RC's new policies constituted a wholesale emasculation of the private sector, which suffered from new regulations on property rights, government interference in prices, increased barriers to entry for many economic activities, and competition with state enterprises for finance (Tin Maung Maung Than 2007, 144). Among the foreign business community, the RC's new policies made it largely impossible to do business, pushing many to leave the country. Western business people as well as Indians and Pakistanis, who dominated much of colonial Burma's business class, were "squeezed out" and leaving at a rate of 2,000 per week by 1964 (Allen

1965, 6). The only part of the industrial and manufacturing sectors to see some success were the “tinkerers or cottage industrialists” who started producing goods on a very small scale to “satisfy the consumer needs which could not be met by the state sector” (Khin Maung Kyi et al. 2000, 63). They included small businesses such as plastic moulders, workshops, utensil makers, food processors, and others (Khin Maung Kyi et al. 2000, 63).

Table 5.1: Production of Private Sector Processing and Manufacturing Enterprises

Year	Production (in million kyat)	% change
1961	3,181	-
1962	3,499	10.0%
1963	2,553	-27.0%
1964	3,026	18.5%
1965	2,947	-2.61%

Source: Ministry of Planning and Finance, “Report to the Pyithu Hluttaw on the Financial, Economic, and Social Conditions of The Socialist Republic of the Union of Burma for 1976-77,” Rangoon, Burma: 1977.

Market-supporting institutions such as courts and contracts became ‘unnecessary’ in the new system. The widespread nationalization of private enterprises seriously eroded the former system of private property rights and disbanded any notion of the sanctity of contracts between government and business.[14] For example, the RC thought that government contracts awarded to construction companies were used to exploit contract labourers, so they terminated the system of awarding construction contracts on October 1, 1964 and undertook construction and labour contracting directly (Burma Socialist Programme Party Central Organising Committee 1966, 91). The need for contracts to specify prices, product characteristics, timings, etc. was unnecessary because these details would all be administratively dictated. As noted earlier, prices were also administratively determined under the new system and ceased to function as a signalling mechanism between suppliers and consumers. For private sector businesses that operated in prohibited sectors, which was most of the economy outside of agriculture, courts were not an option for dispute resolution because they could not adjudicate a dispute involving a party whose operations were not legal. Private businesses often relied on informal and social institutions to facilitate business transactions because they either could not or would not utilize government institutions.

[14] The nationalizations of the Burmah Oil Company, Steel Brothers and Anglo-Burma Tin, all of which had been reconstituted during the Parliamentary era as joint ventures between the state and foreign business interests, also provide vivid examples of the RC’s violation of contract rights.

5.2.1: The Unplanned Economy

The socialist economic system encountered problems almost immediately and quickly evidenced the major shortcomings in the RC's economic agenda. One of the main problems was that the system was "instituted in haste, without trained personnel and adequate planning" (Silverstein 1967, 121). Burma scholar Josef Silverstein argued that the eventual failure of the system should have been "self-evident at the outset" (Silverstein 1967, 121). Tun Wai, a leading Burmese economist of the era, argued that the RC was effectively implementing an "unplanned socialized economy" (Tun Wai 1970, 4). During the first decade of RC rule, evidence of rigid economic planning was sparse and no formal planning documents were published, though a Four Year Plan (FY1966/67 – FY1969/70) and a Seven-Year Plan (FY1964/65 – FY1970/71) were both rumoured (Steinberg 1981a, 36-171). The failures of planning were sometimes so great that even the government could not deny them. For example, the nationalization of the trading sector, which replaced nearly two million private traders with only 60,000 civil servants, led to such chaos that the government admitted its failure and restored some private trading within only eight months (Silverstein 1967, 118).[15]

The shortage and misallocation of human capital was a key reason for many of the problems encountered by the RC's socialist system. Skilled entrepreneurs were already rare in Burma during the Parliamentary era, yet instead of appointing these individuals to run state-owned enterprises, the RC appointed military officials. These "self-admitted unskilled military managers" were unfamiliar with and incapable of overseeing either the SOEs or the greater socialist system (Mya Maung 1991, 118). The RC forced around 2,000 civil servants to retire in the first years of their rule, including many of the older and more educated core members of the Parliamentary era bureaucracy whose abilities could have helped compensate for the inexperience of the military managers (Steinberg 1981b, 164). These ill-advised personnel decisions were the result of a prevailing mantra within the military that "loyalty was more important than competence" (Khin Maung Kyi et al. 2000, 152). However, these changes to the accepted order of succession within the service eroded the traditional respect for education and "adversely affecting the motivation of the younger generation to pursue

[15] The RC initially monopolized trading in a wide range of commodities and though it denationalized 34 of these in 1966, 356 others remained the domain of the state, evidencing the continuing control of the RC over wide swathes of economic activity.

learning *or to rise in the workplace through competency and hardwork (sic).*" (Khin Maung Kyi et al. 2000, 152). The military's new reward system dis-incentivized education, with detrimental long-term implications for the country.

5.3: Reconsidering the Socialist System

The shortcomings of the socialist system grew more palpable as the 1960s progressed. As early as 1965, the top leadership was already recognizing that the transformation to a socialist economy was not going as hoped. General Ne Win even publicly stated to the Lanzin (Socialist) Party Conference in December 1965 that the economy was "a mess" (Silverstein 1967, 117). In 1967, there were shortages of basic commodities, including rice. In FY1968/69, rice exports had fallen to 364,000 tons, down from colonial-era highs in the 1930s of over three million tons (Ministry of Planning and Finance 1975). This was a significant concern for a country that had, just 25 years earlier, been the world's largest rice exporter. It also meant that the country was short on foreign exchange. The RC's state-led industrialization program was also struggling. In 1971, a government report entitled "Long-Term and Short-Term Economic Policies of Burma Socialist Programme Party," which was presented at the First BSPP Congress, plainly stated the deficiencies. It identified major problems in the current system including a lack of planning, poor coordination between government organizations, the lack of commercial incentives for SOE managers, poor financial supervision of SOEs, poor price mechanisms, and poor investment and employment performance of the private sector (Steinberg 1981a, 41). The report also noted the presence of serious "structural, administrative problems," as well as the lack of responsibility and delegation within government (Steinberg 1981b, 47). Despite obvious problems, the RC largely retained its strict socialist system and even in the early 1970's showed no indication that it would ease controls or reduce state dominance in the economy (Mya Maung 1974, 16).

Though the RC was not yet addressing the economic problems, the "Economic Policies" report showed that the government was seriously considering how to modify the socialist system. One of the key admissions which was both implicit and explicit in the document was that Burma could not rely on the altruism of individuals for economic development, and instead needed to introduce incentives to encourage efficiency for both individuals and enterprises (Steinberg 1981b, 47). The report also revised the country's development priorities, calling for an end to the emphasis on industrialization and a reorientation towards the agriculture and resource industries in which Burma had a natural advantage (Steinberg 1981a, 41). However, the policy focus on self-sufficiency was still prevalent, with the report calling for the expansion of import-substituting consumer goods industries (Steinberg 1981b, 45). The "Economic Policies" document also signalled a shift in the government's stance towards the private sector, which the RC recognized had an "important function in the society" (Steinberg 1981b, 47). Poor governance of private enterprises had led to stagnation of formal employment and increased participation in black markets.

Beginning around 1973, the government started to introduce some economic reforms along the lines of those in the "Economic Policies" document. The government formalized its revised stance on the private sector through Notification No. 1/73 on August 8, 1973, which permitted private investment, ownership and operation of manufacturing industries (Kyaw Myint 1978, 218). The notification categorized industries into four groups, each with accompanying levels of restrictions. At one end were industries which used domestic raw materials bought from local private entrepreneurs, in which investment and operation was freely allowed. At the other end were industries which used mainly foreign raw materials distributed by government agencies, in which investment and operation were allowed "only after scrutiny and registration at the Office of the Divisional People's Council" (Kyaw Myint 1978, 219). The notification outlined eighty types of industries and allowed investment in all but fifteen of them (Kyaw Myint 1978, 219). In an attempt to elicit greater private sector participation in the economy, the government passed the Rights of Private Enterprise Law in 1977. This allowed private entrepreneurs to "take up ventures in fields not yet occupied by either State or Co-operative economic enterprises" (Burma Socialist Programme Party Central Committee 1981, 96). The law also provided a guarantee against nationalization until 1994 (Bandyopadhyaya 1987, 53). The government also introduced incentives to improve the performance of public enterprises. For example, in 1975 the BSPP instituted a system of performance based payments at the corporation level (Burma Socialist Programme Party Central Committee 1981, 97). That same year, the government relaxed controls over SOEs by allowing them to operate on a commercial basis, which included the right to retain profits and grant bonuses to encourage improved efficiency (Kyaw Myint 1978, 220).

Despite legal changes that allowed private enterprises to engage in a wider range of sectors, the government "failed to create an atmosphere of confidence necessary to attract more private investment" (Bandyopadhyaya 1987, 53). There remained a widespread fear among the private sector that the newfound liberal attitude towards the private sector may well be short lived (Bandyopadhyaya 1987, 53). Consequently, private sector investment did not meet the expectations of the BSPP. An official 1981 report noted that while private investment was needed, “the investments have not come up to expectation despite legislation to promote systemic utilization of private capital and to increase commodity production” (Burma Socialist Programme Party Central Committee 1981, 96). The report did not suggest reasons for the lack of private investment, and recommended an appraisal to determine why private investment did not meet the predictions of the 3rd Four Year Plan. However, commentators noted that at the time, there was a “lack of inclination among the Burman population to make long-term investments” (Steinberg 1981b, 144). This lack of private sector investment contributed directly to the general stagnation of private sector production, as the figures in Table 5.2 evidence.

Table 5.2: Production of the Processing and Manufacturing Sector, from FY1961 to FY1985 (in million kyat)

<table>
<tr><th>Year</th><th>State</th><th>Co-operative</th><th>Private</th><th>Total</th></tr>
<tr><td>1961</td><td>1,274</td><td colspan="2">3,181</td><td>4,455</td></tr>
<tr><td>1962</td><td>1,612</td><td colspan="2">3,499</td><td>5,111</td></tr>
<tr><td>1963</td><td>1,934</td><td colspan="2">2,553</td><td>4,487</td></tr>
<tr><td>1964</td><td>2,077</td><td colspan="2">3,026</td><td>5,103</td></tr>
<tr><td>1965</td><td>1,949</td><td colspan="2">2,947</td><td>4,896</td></tr>
<tr><td>1966</td><td>1,598</td><td colspan="2">3,033</td><td>4,631</td></tr>
<tr><td>1967</td><td>1,702</td><td colspan="2">3,456</td><td>5,158</td></tr>
<tr><td>1968</td><td>2,065</td><td colspan="2">3,189</td><td>5,254</td></tr>
<tr><td>1969</td><td>2,195</td><td colspan="2">3,214</td><td>5,409</td></tr>
<tr><td>1970</td><td>2,329</td><td colspan="2">3,189</td><td>5,518</td></tr>
<tr><td>1971</td><td>2,373</td><td>158</td><td>2,928</td><td>5,459</td></tr>
<tr><td>1972</td><td>1,744</td><td>353</td><td>2,929</td><td>5,026</td></tr>
<tr><td>1973</td><td>1,623</td><td>163</td><td>3,182</td><td>4,968</td></tr>
<tr><td>1974</td><td>1,838</td><td>104</td><td>3,175</td><td>5,117</td></tr>
<tr><td>1975</td><td>2,234</td><td>195</td><td>3,155</td><td>5,584</td></tr>
<tr><td>1976</td><td>2,566</td><td>201</td><td>3,236</td><td>6,003</td></tr>
<tr><td>1977</td><td>2,783</td><td>276</td><td>3,380</td><td>6,439</td></tr>
</table>

1978	2,791	273	3,543	6,607
1979	3,035	244	3,561	6,840
1980	3,313	260	3,758	7,331
1981	3,558	299	4,015	7,872
1982	3,658	307	4,256	8,221
1983	3,618	289	4,624	8,531
1984	3,680	314	5,086	9,080
1985	3,864	379	5,539	9,782

Source: Ministry of Planning and Finance, "Report to the Pyithu Hluttaw on the Financial, Economic, and Social Conditions of The Socialist Republic of the Union of Burma for 1976-77", Rangoon, Myanmar: 1977; Ministry of Planning and Finance, "Report to the Pyithu Hluttaw on the Financial, Economic, and Social Conditions of The Socialist Republic of the Union of Burma for 1981/82", Rangoon, Myanmar: 1982; and Ministry of Planning and Finance, "Report to the Pyithu Hluttaw on the Financial, Economic, and Social Conditions of The Socialist Republic of the Union of Burma for 1986/87", Rangoon, Myanmar: 1987.

The growth rate of private production (which was grouped in government statistics with the much less significant co-operative industries) was anaemic during the socialist era, at only 2.51% per annum through 1985. When viewed in per capita terms, however, performance was abysmal. Over the same time period, the per capita compound annual growth rate (CAGR) of private and cooperative productive enterprises was 0.52%. The per capita CAGR of public productive enterprises was 1.18%. The production of private enterprises declined in the early years of RC government, and took 15 years (until 1977) to return to the same level of output as in 1962. Per capita levels of output did not recover until 1985, fully 23 years after the RC coup. Despite large government investments in industrialization, the "processing and manufacturing sector" remained exactly as important in FY85/86 as it was in FY61/62, comprising 10.5% of total output (Ministry of Planning and Finance 1987a, 42). While private production was growing, albeit slowly, the number of medium and large private enterprises declined precipitously. From 1970 to 1988, the number of medium-sized private enterprises decreased by 95%, while large private enterprises decreased by 88%. By FY1987/88, there were only 13 private enterprises in Myanmar with more than 50 workers.[16] Despite the regression among larger private businesses, the total number of private enterprises grew over the socialist era. This was driven by significant growth in businesses with less than 10 workers, including a tripling of private micro-enterprises from 1970 to 1988. Over the same time, the number of public enterprises doubled to nearly 2,000. By the end of the socialist era, 94% of all medium enterprises and 99% of all large enterprises were

[16] This, of course, had significant consequences for the efficiency of private sector industries.

state-owned.[17] The dominance of inefficient SOEs during the socialist era and the regression of private business resulting in a lost quarter-century for private sector development in Burma.

The RC made a few other economic changes of some importance. They drafted a new constitution which came into effect in 1974 though the *Pyithu Hluttaw* (parliament) and executive, legislative and judicial branches of government that the new constitution prescribed were all under the control of the same Lanzin Party. While the new constitution changed some of the formal institutions of government, "it has not resulted in any real change in the political power structure within Burma" (Silverstein, Josef, "From Soldiers to Civilians - The New Constitution of Burma in Action" quoted in Moscotti 1977, 184). Likewise, the economic changes that resulted directly from the new constitution and government were not significant. The new BSPP government did open up the country to greater foreign consultation and aid, which played an important role in underwriting investment and filling Burma's foreign exchange deficit throughout the 1970s and early 1980s.

5.3.1: Illicit Responses to Socialism: Corruption and Smuggling

The socialist economic framework created many contradictions between formal rules and economic incentives, resulting in widespread illicit activities by private businesses and public officials. Because the production and sale of many necessities and other highly desirable goods was the sole purview of the state, which proved itself incapable of fulfilling these demands, black markets flourished and came to dominate Myanmar for decades (Mya Maung 1991, 118). Often entrepreneurs were forced into illicit activities because there were no other economic opportunities. Silverstein notes that "despite the promises of the military leaders and the moral sermons they issue[d] against blackmarketing and other social evils, the plain fact of the matter is that the people are forced to such actions in order to survive" (Silverstein 1967, 121). The incentives under the new socialist system rewarded corruption, smuggling, and connections that helped businesses access both resources and information. Private investment and productive activity was punished, through nationalization, imprisonment and

[17] Authors calculations based on Revolutionary Council of the Union of Burma, "Report to the People by the Government of the Union of Burma on the Financial, Economic and Social Conditions for 1971-72," Rangoon 1972; Ministry of Planning and Finance, "Report to the Pyithu Hluttaw on The Financial, Economic and Social Conditions of the Socialist Republic of the Union of Burma for 1978-79, Rangoon, 1978; and Ministry of Planning and Finance, "Report to the Pyithu Hluttaw on The Financial, Economic and Social Conditions of the Socialist Republic of the Union of Burma for 1987/88, Rangoon, 1987.

potentially death. The result was that entrepreneurs gravitated towards the most rewarding economic activity under the existing constraints: in socialist Myanmar, that activity was the illegal (*hmaung-kho*) trade (Kyaw Yin Hlaing 2002, 87). These often unregistered and illegal private businesses accounted for a significant share of the country's GDP and employment throughout the socialist era (IMF 1995b).

Because administrative dictate allocated resources and bore little resemblance to black market prices, good relations with government were integral for the success of many private businesses. For example, small factory owners without connections had to rely on smuggled raw materials sold at market prices while "well-connected factory owners could buy an excess of raw materials at government corporations" for administratively-set (e.g. lower) prices (Kyaw Yin Hlaing 2002, 89). Given the risks of smuggling goods, traders charged significant premiums for their imports and could accrue significant wealth in this line of work. However, the risks of getting caught were ever-present, which made having a patron in government invaluable. Wealthy private businesses could afford to give money to government patrons who fed them resources and information, while smaller businesses with less money to spend on patrons faced limited access (Kyaw Yin Hlaing 2002, 91). Among the most valuable pieces of information was about pending crackdowns on illegal traders. The most well connected illegal businessmen came to see these crackdowns not as a problem for their business but instead as "an opportunity to establish monopolies" (Kyaw Yin Hlaing 2002, 90). The small illegal traders were often targeted during crackdowns when officials needed to meet their arrest quotas, while large traders with patrons generally escaped the same unsavoury fate.

Often illicit activities were the result of poorly designed policies. The overvalued exchange rate is an example. This policy reduced the returns for formal exports, giving entrepreneurs a "powerful incentive for illegal exports," while lowering the costs of imports and "creating a bias towards greater import intensity" (Hill 1984, 146). Similarly, subsidized fertilizer, which was meant to help lower the production costs of cultivators, was instead diverted and smuggled to other countries where it could be sold at market prices (Steinberg 1981b, 152). These examples illustrate the negative consequences of poor policies on both economic efficiency and overall economic welfare. Yet these activities occurred and persisted because they benefited those with decision-making power. Government officials also depended on private businesses to supply many highly-demanded goods and services, creating a symbiotic relationship between officials and illegal traders. Kyaw Yin Hlaing argues that "without the assistance of business people, it would have been hard for most post-colonial Myanmar governments to keep themselves in power" (2002, 77). The socialist government's failures in planning and implementation and the low salaries of public officials aligned the incentives of both to encourage a system of "clientelistic patronage networks" in which businesses partnered with "party-state officials who could protect their activities from harm by other government officials" (Kyaw Yin Hlaing 2002, 79).

Illicit activities also flourished because the expansion of the state that was required to run the planned economy and the country's many SOEs was not accompanied by a commensurate expansion in the state's capacity to monitor government officials. Civil servants running shops and factories faced few incentives to increase efficiency and few consequences for corruption. Only four years into the RC government, corruption and 'leakages' of goods from government shops and factories had become rampant and uncontrollable (Kyay Hmoan Newspaper (Burmese), September 28, 1966 in Mya Maung 1991, 130). For example, it was common for officials to take goods from co-operatives and sell them through private tenders at the significantly higher black market price, retaining the profits (Arumugam 1975, 46). In order to maintain an appearance of compliance for their supervisors, these officials would compensate for the theft by increasing the prices of goods at the stores. This allowed officials to show a profit in their accounts, but came at the expense of consumers (Arumugam 1975, 46). This type of corruption was widespread not only in co-operatives, but throughout the lower and middle levels of the administration (Arumugam 1975, 46).

5.3.2: The End of Ne Win's Rule

For much of the late 1970s and early 1980s Burma's economy grew at a modest pace, in part due to the increase of foreign exchange provided by higher levels of foreign aid and loans. Yet in the mid-1980s, a much more vulnerable economy encountered new challenges. The international rice price dropped significantly, reducing foreign exchange income. Burma's debt service ratio nearly quadrupled to almost 60% by 1986 (United Nations Development Programme 1988, 326). In 1985, the government announced a demonetization of all 100, 50 and 20 kyat notes, and allowed note holders to exchange up to 5,000K with full reimbursement in smaller bills, while amounts over 5000K received only a 50% reimbursement (Mya Maung 1991, 218). A bad rice harvest in 1987 worsened the economic situation, as the country did not have enough rice to meet domestic consumption. Another demonetization in 1987 further shook the economy, though this round was especially damaging because the government made no provision whatsoever to reimburse note holders. GDP growth had slowed precipitously, to 1.0% in FY1986/87 and 2.2% in FY1987/88 (United Nations Development Programme 1988, 13). There were widespread shortages of consumer goods, and necessary capital and consumer imports could not be obtained for want of foreign exchange. Burma's economy had stalled, which in 1988 helped spurred the political discontent that eventually led to the formal resignation of Ne Win, widespread social upheaval, and the rise of a new military junta which would once again significantly alter the country's economic institutions.

5.4: The SLORC/SPDC Era

The SLORC took power in September 1988, and directed its immediate attention towards the restoration of 'order' to the country. However, the SLORC soon turned some attention towards restructuring the country's economic system, especially given the economic roots of the protests. Within a year of taking power, the SLORC abandoned socialism as the model of economic organization, revoking the 1965 Law of Establishment of Socialist Economic System (Myat Thein 2004, 124). In subsequent years the government introduced a number of other changes in rules governing trade, investment, production and many other economic activities. While these changes re-introduced aspects of markets, they fell far short of ushering in a free market system. The economy under the SLORC was a hybrid of both markets and planning, control and freedom. Some types of economic exchange happened in largely unregulated markets, others in heavily distorted markets, and the rest organized by fiat of the state. In many areas, state interference in prices, ownership, regulation, and licensing was common. The ideologically-informed compulsion for economic control that characterized the socialist era remained, though in a more pragmatic interpretation that legalized private enterprise in many sectors. However, the legalization of the private sector and recognition of its necessity did not eliminate the government's suspicion towards it. Legalization was also not accompanied by the redevelopment of market supporting institutions. The regulatory capacity of the state, the country's financial infrastructure and the judiciary, though reintroduced, remained underdeveloped throughout the SLORC/SPDC era. Rules and regulations for market exchange were sometimes propagated, but inconsistently implemented by government, rarely followed by businesses, and subject to regular and unpredictable revisions. Uncertainty and change in the formal institutional framework were endemic, and were used as a mechanism of state control over the private sector.

5.4.1: Economic Reforms

The SLORC began to reform the country's socialist, autarkic economic framework shortly after taking power in September 1988.[18] The government made two major economic policy moves that year. The first, on October 29, was granting permission to private entrepreneurs to import and export goods including agricultural crops. The second was the November 1988 Foreign Investment Law (FIL), which allowed foreign investment into the country for the first time in two and a half decades. The FIL, though skeletal, legalized investment through wholly foreign-owned companies or joint ventures, and included benefits such as a three-year income tax exemption, tax credits for reinvestment, accelerated depreciation, income tax relief for exports, exemption from customs duties for machinery and spare parts during construction, and materials for the first three years of production (Government of the Union of Myanmar 1988). In March 1989, SLORC adopted the State-owned Economic Enterprise Law (No. 9/89), which formally outlined a range of mostly resource and service-based economic activities which were reserved for the state (Government of the Union of Myanmar 1989). However, the law allowed the government to form joint ventures in any of the restricted sectors (and notably gave no guidelines or rules as to how these joint ventures should be formed), and allowed any person to carry out other economic activities not reserved for the state (Government of the Union of Myanmar 1989). It also officially abandoned socialism as the economic organizing principle and legalized private business, repealing the Law of Establishment of Socialist Economic System from 1965 (Myat Thein 2004, 124). In 1990, Myanmar passed a Private Industrial Enterprise Law, formally allowing private businesses to operate manufacturing and other industrial businesses (Government of the Union of Myanmar 1990b). The government adopted a Commercial Tax and a number of new laws on forestry, fisheries, mining, tourism, and numerous other sectors. In 1994, the government adopted the Myanmar Citizens Investment Law, which largely mirrored the 1988 FIL but extended the same rights and benefits to Myanmar citizens.

[18] A rather comprehensive list of reforms from 1988 through 2003 can be found in Tin Maung Maung Than (2007): 356-357.

As part of the SLORC's economic liberalization, the government reduced the state's monopolization of the financial sector. In 1990, it passed the Financial Institutions of Myanmar Law which permitted private banking for the first time in nearly three decades (Turnell 2009, 259). This was accompanied by the passage of the Central Bank of Myanmar Law and the Myanmar Agricultural and Rural Development Bank Law that same year (Myat Thein 2004, 135). While starting from a very low base, the financial sector grew significantly over the 1990s. It introduced new products including deposit accounts, loans, and trade finance. Credit to the private sector increased nearly 31 times from 1992 to 2002, while deposits increased 35 times (Authors calculations based on Turnell 2009, 271). However, the sector remained heavily regulated and struggled to fulfil the role as mediator between depositors and savers.

Changes to key laws governing the structure of the economy and the rights of private enterprise improved economic incentives and enhanced the ability of entrepreneurs to accumulate wealth. While they did legalize some economic activities (for example, trading) they did not facilitate wider access to economic opportunities. The areas with the greatest liberalizations were often those which government officials perceived as the least important and least lucrative. In areas traditionally viewed as more lucrative, the legal framework often served to limit access by giving government wide-ranging responsibilities and control. The economic system was shifting from *an autarkic, socialist system characterized by shared depravity* to a *dualistic market/control system characterized by limited access to opportunities and the exclusivity of prosperity*.

5.4.2: Continuities and their Economic Consequences

While many important rules and regulations were changed in the early years of SLORC rule, there were also many strong continuities with the previous regimes. Though socialism was officially put to rest for a 'market-based' economy, the state's desire to maintain control over strategic economic sectors showed little change (Tin Maung Maung Than 2007, xiv). Tin Maung Maung Than notes that "despite attempts to introduce market-conforming policies and practices, the state continues to play a controlling role in the managed transition towards a more outward-looking market orientation" (2007, xvi).

Continuity in the state's economic oversight was exemplified by the persistence of economic planning and the Ministry of National Planning and Economic Development. In the first few years of SLORC rule, from FY1989/90 to FY1991/92, Myanmar put out a series of one-year plans under the "Stabilization Programme." These were followed by a "Short Term Four-Year Plan" that spanned FY1992/93 until FY1995/96, which focused on the "enhancement of production, especially agriculture, and export promotion" (Tin Maung Maung Than 2007, 363). After the 'successful' fulfilment of this program the government propagated the "Short Term Five-Year Plan," which ran until FY2000/01. The 'national economic objectives' stated in these plans belied the government's ideological views on state-economy relations, stating that "the initiative to shape the economy must be kept in the hands of the State and the national peoples" (Tin Maung Maung Than 2007, 364). The plan, like the ones before it, provided an outline of how the economy *should* perform, predicting growth rates, output, trade volumes, investment, and structural change in ownership. It also established sectoral priorities, which were (1) agriculture, (2) livestock and fisheries, and (3) mining and oil and gas (Tin Maung Maung Than 2007, 364). Upon the conclusion of the Second Short-Term Plan which was similarly declared a 'success', a Third Short-Term Plan was launched in FY2001/02 with similar though more defined objectives (Tin Maung Maung Than 2007, 364).

The continued prominence of SOEs in state planning and rhetoric also evidenced the parallels between the previous and current governments. The SOE sector was relatively stable in size through the 1990s. In 1997, there were 58 SOEs which controlled about 1,600 factories, accounting for 24% of GDP in FY1995/96 (IMF 1997, 20). Yet, SOEs were only of limited importance to the economy as a whole. When SOE purchases from other businesses are excluded, the real value added of SOEs and government ministries combined was only 9.26% of GDP (Khin Maung Kyi et al. 2000, 63). Further, much of the output of the state manufacturing sector was "irrelevant to satisfying the needs of the general population," who instead depended on border trade (both legal and illegal) and local private enterprise (Khin Maung Kyi et al. 2000, 67). Regardless of their importance to meeting the needs of consumers in Myanmar, SOEs and their parent ministries were central to the exercise of government control and power. They had access to budgetary allocations, legal authority to collect revenues from a range of economic activities, and most importantly, the ability to control access to limited resources and economic opportunities.

Because many SOEs were both irrelevant for meeting the needs of consumers and loss-making, there was an impetus from some parts of the government in the mid-1990s for a limited privatization. In January 1995, the government established a Privatization Commission, which later that year announced a plan to privatize 59 companies (IMF 1997, 22). However, the SOEs included in the plan were generally unprofitable and inessential businesses such as cinema halls. The failure to offer either a larger number or more important SOEs for privatization was partially attributed to shortages of capital locally and lack of interest internationally (IMF 1999, 18). However, there was also little support among line ministries for these privatizations. The IMF noted that "line ministries are more interested in forming new producing units and joint ventures to retain or increase their influence" (IMF 1997, 22). Not only did SOEs give line ministries access to funds from the State Fund account, but they also facilitated access to a range of implicit subsidies that resulted from distortions in the economic rules and regulations, notably the ability to import goods at the official exchange rate (IMF 1995a, 22). Resistance to privatization was also linked with the long-standing nexus of economic control and social order. Tin Maung Maung Than notes that "state managers have been rather weary of relinquishing control over economic functions perceived as essential for maintaining order and stability" (2007, 352).

5.4.3: Economic Distortions

SOEs were at the heart of many economic distortions during the military era. During most of the BSPP era, SOEs had been forced to operate on a commercial basis and given permission to borrow from banks, with many incurring large debts. At the end of FY1988/89, the principals of these outstanding bank loans were converted into equity and SOEs were prohibited from taking out further loans from banks (Ministry of National Planning and Economic Development 1998, 287).[19] Instead, the SLORC moved SOEs back to operating on a non-commercial basis. The State Financial Plan for FY1989/90 notes that "in the new program, the SEEs expenditures are to be incurred from the State Fund, while depositing receipts of income into the State Fund" (Ministry of Planning and Finance 1989, 236). The newly promulgated State-owned Economic Enterprise Law gave SOEs monopolies in many lucrative sectors, delegating wide-ranging authority to line ministries. The lack of hard budget constraints and wide-ranging, unchecked authority led to widespread inefficiencies, corruption, and distortions in the relationship between government and private businesses.

[19] It is unclear as to how the state, which was already the owner in full of all SEEs, converted debt into additional equity in companies of which they were already the exclusive shareholder. In practice, this conversion was a move to wipe debts from the accounts of the SEEs, with the state incurring the losses.

Distortions also resulted from rigid economic controls and interventionist policies of the SLORC/SPDC. Among the most consequential of these was the maintenance, until 2012, of a multi-tiered exchange rate. This system included an official kyat rate that was overvalued by as much as 200 times, causing chronic shortages of foreign exchange. Instead of liberalizing the exchange rate system, the government controlled and rationed access to foreign exchange (FX). In doing so, it perpetuated two common traits of the socialist system: central allocation of resources and the importance of power and connections. Until 1992, FX was allocated by the decidedly non-market oriented Foreign Exchange Control Board, a part of the Myanmar Foreign Trade Bank (MFTB). Since 1992 these responsibilities were handled by the Central Bank (IMF 1995a, 22). Dictates of government authorities, not market mechanism, guided FX allocation throughout. In this system, rationing, power and connections became increasingly important as ministries and SOEs competed for access to scarce resources. Disparities in accessing FX were particularly acute between the private sector and government, with the later having preferential access to FX, while the former was left largely to transact in black markets at unofficial rates. The private sector was also subject to "an intricate system of private import controls, including shipment-by-shipment import licensing and other requirements" (IMF 1997, 34). These restrictions significantly increased the time and transaction costs incurred by private sector importers.

The multi-tiered exchange rate and the accompanying system of controlled, preferential access to FX, created wide-ranging distortions in economic activity. The IMF described some of these distortions in detail, noting:

> *"The overvalued exchange rate not only limits access to imported inputs; it also discriminates against the domestic production of many import substitutes. By keeping kyat prices of imports low, overvaluation makes it unprofitable for domestic producers to enter into import-substituting activities. This effect on incentives over the long period that the kyat has been overvalued is the main reason that import substitution industries have barely developed in Myanmar despite consistently high tariff protection. While imports are obviously not freely available at their low official-market prices, the incentives for producing import substitutes are still determined in part by those prices. And the existence of large scarcity rents associated with the resale of these imports means that it has been far more profitable to trade in these imports rather than attempt to produce them domestically"* (IMF 1995b).

Besides the disincentives for domestic production created through under-priced import substitutes, the scarcity rents created by the mispricing fed the system of rationing and controls. This furthered the importance of connections and cronyism amongst private sector, a key characteristic of North's LAO. Without a functioning price mechanism to equate supply of FX with demand, the system was also vulnerable to shocks and therefore characterized by uncertainty. For example, in the late 1990s the Asian Financial Crisis (AFC) eroded the regional economic outlook, especially amongst Myanmar's key trading and investment partners. This contributed to a significant shortfall of FX. The government reacted by tightening controls and reducing FX allocations for SOEs to import capital goods and inputs.

The multi-tiered exchange rate system also affected the incentives for foreign investment, as capital brought into the country was valued at the official rate upon entry while the repatriation of profits was not permitted at the same rate. This dis-incentivized large investments or those that sold the bulk of their output in Myanmar, and encouraged projects that earned FX overseas. Consequently foreigners favoured "short-term extraction of natural resources such as timber extractions, sea or coastal fishing, or procurement of local produce for export" (Khin Maung Kyi 1994, 218). The result of the complex and distorted exchange rate policy was to hinder economic development in general and the private sector in particular (Wingfield 2000, 214).

5.4.4: Uncertainty and Change

The unpredictability of the formal institutional framework, and the regularity with which the government changed it, was characteristic not only of the FX system but of the economy generally. Often economic policies were adopted based on political considerations, and were liberalized and tightened ad hoc in reaction to internal and external political and economic developments. One example was the creation and use by the Ministry of Commerce of lists of essential and optional imports. Private importers were required to submit documentation to the Ministry's Directorate of Trade detailing the items planned for import. Depending on the method of payment chosen for the import (of which there were 11), traders were required to import items from the priority list (up to a value of 50% of the total consignment) in order to receive approval for goods from the optional list (Ministry of Commerce 1997, 28). Private businesses were not allowed to freely choose the composition of their imports, a politically driven requirement to keep necessities in regular supply and at a 'reasonable' price to prevent political disturbances like those in the late 1980s. However, the drop in FX reserves that accompanied the AFC led the government to tighten these restrictions. In July 1997, the government specified that 60% of the total consignment of imports must come from essential items list. In March 1998, the Ministry of Commerce issued Order No. 4/98, which required 80% of imports to come from this list. It also specified allowable non-essential items (which comprised the 20%) (IMF 1999, 7). The shifting regulations over the composition of imports were complicated by regular changes to the lists themselves. The IMF noted that the lists of essential and non-essential items "change frequently and importers typically do not know how their import request will be handled prior to making a license application" (IMF 1995a, 21). The tightened import requirements remained in force until July 2005.

The AFC brought a range of other additional arbitrary restrictions and regulatory changes, many driven by the shortage of FX. In March 1998, commodity imports were prohibited for foods, tobacco products, alcohol and other sundries. The government introduced an export service fee of 10% for border trade in March 1998, which was revised downward to 8% in September (IMF 1999, 7). Private banks, which had just gained licenses to conduct FX transaction in 1996, were banned from conducting those transactions again in 1998 (IMF 1999, 7). The government passed new requirements that border trade be conducted only in US dollars, increased the commercial tax to 8%, and limited open general import licenses for SOEs (IMF 1999, 7). It also passed a ban on rice exports, artificially depressing prices to about half of the world market price and severely decreasing cultivators incomes (IMF 1999, 10). External events drove economic retrenchment in Myanmar, and a shift in policy focus from around 1997 onwards towards "food security, self-sufficiency, and self-reliance" (Tin Maung Maung Than 2007, 363). The consequences of constant policy shifts were many:

- Increased transaction costs for businesses, which were forced to invest resources in gathering information and learning new processes.
- Dis-incentives for long term and fixed investments due to increased uncertainty of the policy and institutional framework.
- Increased room for discretionary decision-making by officials, and concurrently increased opportunities for corruption and facilitation payments.

Pervasive uncertainty and change in the business environment was directly linked with the failure of the SLORC/SPDC to develop market supporting institutions to govern economic activity. Khin Maung Kyi et al. argued: "the institutional basis of a market economy, which the parliamentary government had tried to build up, had been destroyed by a quarter century of misrule under the socialist government. And the present regime [the SLORC/SPDC] has not done anything to repair the damage" (2000, 190). The poor state of the judiciary is an example. With state monopolization of most economic activity and the criminalization of private enterprise during the socialist era, courts largely ceased to function as a medium for settling commercial matters. However, after the SLORC came to power and private businesses were again legal, the court system did not replace alternative dispute resolution mechanism as a regular adjudicator of commercial disputes. This was due to "widespread" corruption at all levels of the court system, with one estimate placing its incidence at "more than 50 percent" of the judiciary (Kyaw Min San 2012, 224-225). In some courts, "lawyers and public prosecutors and their clerks work as brokers" negotiating between different parties in the case instead of adjudicating (Kyaw Min San 2012, 224). This may also be common in commercial cases. According to one expert, it is not uncommon for businessmen to file charges against one another. However, cases are brought not so the judiciary can provide interpretations of contracts, but to enhance the bargaining position of one party in contractual negotiations (Cheesman 2014). Another challenge for the judiciary was the legal framework governing commerce which derived from three previous institutional periods: colonial, parliamentary and socialist. As such, laws were often not suited to govern the economic system of the SLORC/SPDC era (Khin Maung Kyi et al. 2000, 191).

The development of numerous other market-supporting institutions was similarly stunted. In the financial sector, the Central Bank lacked capacity and independence from the government and had little control over monetary policy. Instead, it served as the 'financing arm' of the state, monetizing deficits and stoking multi-year double digit inflation in the 2000s as well as the depreciation of the currency from approximately 30 kyat per USD in 1988 to 960 kyat per USD in 2002 (Turnell 2009, 291-293). Other important institutions in a financial system, notably credit bureaus, were lacking and banks themselves had little capacity to deliver all but the most basic products (Foerch, San Thein, and Waldschmidt 2013). Mechanisms for disseminating information from government to the public were poor, and information asymmetries were pervasive. Public information was difficult to obtain and public records were inaccurate and inaccessible. The public service was ill-equipped and during the SLORC/SPDC era had "declined to a lower level than at any time in the whole century preceding the socialist regime" (Khin Maung Kyi et al. 2000, 190). While public service quality declined, its size increased. This created duplication between ministries and consequent uncertainty about authority, leading to reduced bureaucratic efficiency and additional red tape for businesses (Khin Maung Kyi et al. 2000, 190). Further, the regulatory capacity within the bureaucracy had eroded significantly because these administrative functions became obsolete during a socialist era with little private business. Instead, ministries became implementers of economic activity, a function which they continued into the SLORC/SPDC era. They also controlled the licensing and permissions needed for formal entry into many economic sectors. Granting licenses and permissions, as well as revenue collection, became the primary tasks of many ministries, with regulation relegated to secondary status. Lastly, the bureaucracy underwent numerous reorganizations, suggesting "that a stable institutional configuration, conducive to long-term planning, was lacking" (Tin Maung Maung Than 2007, 312)

The failure to develop market-supporting institutions was complemented by the failure to develop the infrastructure needed for private sector growth. Electricity shortages were a major issue, leading to, among other things, the failure to develop three industrial zones around Yangon in the 1990s (Khin Maung Kyi et al. 2000, 168). The distribution network was in a similar state of disrepair (Khin Maung Kyi et al. 2000, 172). Electricity theft became commonplace, contributing to a growth in distribution losses from 21.5% of total electricity generation in 1973 to 40% in 1996 (Khin Maung Kyi et al. 2000, 167). Telecommunications were likewise in a poor condition. In 1990 the country had only 2 phone lines per 10,000 people (Khin Maung Kyi et al. 2000, 166). At the turn of the 21st century, Myanmar had one of the lowest telephone densities in the world (Khin Maung Kyi et al. 2000, 171). In 2013, Myanmar's mobile telephone density was still among the world's lowest, lagging even North Korea. Roads, waterways and railroads were all inadequate, yet the government focused on developing new projects instead of maintaining existing infrastructure (Khin Maung Kyi et al. 2000, 183). While there was significant growth in the levels of capital investment, the infrastructure stock failed to improve as expected because spending growth was offset by the depreciation of the kyat and inefficiency and waste in infrastructure delivery.

5.4.5: Private Enterprise during the SLORC/SPDC Era

Upon the SLORC's abrogation of the ban on private enterprise, there were significant increases in the number of private businesses registered with the government as shown in Table 5.3. The newfound freedom of the private sector unsurprisingly led it to take on an increasingly important role in the country's economy. Yet private businesses continued to face many constraints that were similar in consequence to the socialist era, and the private sector retained similar attributes. Notably, private businesses during both the socialist and military government eras remained small in size and faced challenges competing with state firms. In the early years of SLORC rule, "almost all private establishments [were] small, employing less than 10 workers" (IMF 1995b). Out of the 45,000 registered private establishments, only 124 employed more than 51 workers (IMF 1995b). The number of medium and large private enterprises increased during SLORC/SPDC rule, but small enterprises continued to dominate the total number of registered businesses even at the end of the SPDC era. Businesses struggled to export, partly due to small size and lack of sophistication in comparison with businesses in neighbouring countries (IMF 1995b).

Table 5.3: Number of Business Enterprises Registered with Ministry of National Planning and Economic Development from 1991 to 2005

Type of Business	End April 1991	End June 2005
Exporters/Importers	2,813	19,494
Business Representatives	504	2,363
Partnership Firms	576	1,272
Myanmar Companies Ltd.	855	14,346
Foreign Companies/Branches	87	1,469
Joint Venture (Local & Foreign)	33	148
Chambers & Associations	5	41
Total	4,873	39,133

Source: Tin Maung Maung Than. 2007. State Dominance in Myanmar: The Political Economy of Industrialization, Singapore, Institute of Southeast Asian Studies.

The benefits of liberalization for most private businesses were muted by the continued privilege of SOEs in the economy and the resultant distortions to competition. For example, amongst crops that lacked compulsory procurement programs, SOEs competed with private enterprises and at times offered higher prices than the later because they faced only a soft budget constraint and were not financially responsible for their capital outlays (IMF 1997, 21). They were also exempt from import license fees for select commodities and capital goods (Ministry of Commerce 1997, 21). These inequalities also incentivized foreign investors to partner with SOEs. Through 1995, three quarters of all FDI (by value) went to joint ventures or production sharing arrangements with SOEs, while only 8% was in partnership with private enterprise (Tin Maung Maung Than 2007, 218). This was because partnership with state firms afforded many benefits, including "privileged access to raw materials, permits, domestic credit and the best locations" (Tin Maung Maung Than 2007, 218). Private businesses that did benefit from liberalizations were those that had close connections to government. Like the socialist era, "good connections under the SLORC/SPDC regime proved to be a crucial factor that decided the fortune of businessmen" (Kyaw Yin Hlaing 2002, 97). Crony capitalism became a growing characteristic of the SLORC/SPDC economic system (Kyaw Yin Hlaing 2002, 79).

Poor policies continued to plague private businesses. According to an IMF report in the late 1990s, Myanmar's continued failure to realize its considerable economic potential was the result of its poor policy record (IMF 1999, 6). Some policies constituted little more than thinly veiled taxes on private production. For example, exporters who wanted to ship gram (whole or dahl) were first required to sell one quarter of the quantity to be exported to Myanmar Agricultural Produce Trading at the government-dictated price (Ministry of Commerce 1997, 9). Other policies forced businesses to endure significant amounts of bureaucracy. For example, traders were required to get import licenses for each consignment, and often multiple licenses for one consignment if there were different categories of goods. Only companies investing under the FIL or CIL could obtain an open general license (which could be used to import multiple consignments). Financial sector policies likewise continued to hinder private business. High collateral requirements, short loan terms, high interest rates and significant political risk steered what little bank capital there was away from long-term productive investment and into business that could generate high, quick returns. Unfortunately these enterprises "tended to be involved in highly speculative activities: in particular, hotel and real estate speculation, gold trading, jade mining, fishing and logging concessions and (for a brief period), garment factories" (Turnell 2009, 273).[20]

5.5: Conclusion

By the end of the SLORC/SPDC era, Myanmar's economy was growing steadily, thanks in large part to steady exports of natural resources and commodities. Yet structural transformation and industrialization were still absent, and the economy and bulk of the population still heavily dependent on agriculture. The hierarchical military structure became imbedded in the bureaucratic administration of the state, breeding a system of rewards based on loyalty, not performance. Market-supporting institutions had been dismantled by the

[20] Also see at Dapice 2003, 10; Myat Thein 2004, 143; and Mya Maung 1998, 92.

socialist government and only restored to a shadow of their former functionality under the SLORC/SPDC. Market distortions were large and heavily influenced by the government, which created strong incentives for businesses to expend resources cultivating relationships with public officials. Economic opportunities were often the prerogative of state officials to bestow upon select entrepreneurs. Businesses responded to the incentives by investing in the most rewarding activities: trading, smuggling and micro production enterprises. Evident across all levels of the private sector was the de-specialization of business since the colonial era, partially a result of the socialist drive for self-reliance, partially as a backlash against colonialism, and partly a reflection of the declining state of the country's human capital stock. The institutional framework no longer rewarded productive activity so the private sector did not pursue it. Making money required permission and links with government, a characteristic of the economy that defines present-day Myanmar.

Chapter 6: Economic Institutions in Myanmar - The Institutions and Organizations of Business[21]

6.1: Introduction

In early 2011, the SPDC gave way to a new government 'elected' in nationwide balloting, the culmination of Myanmar's 'Roadmap to Democracy' outlined by General Khin Nyunt eight years earlier. The structure of the new government was less centralized than the SPDC, and created a range of new offices and bodies with important economic authorities such as the Upper and Lower Houses of Parliament (the *Amyotha Hluttaw* and the *Pyithu Hluttaw*, respectively) and the Office of the President. These bodies play important roles in the creation and implementation of laws, rules, and regulations. In the current government these new power centres co-exist with many others from the previous regime, including the ministries, state-owned enterprises, and the military, the latter of which the constitution places beyond the sovereignty of the government (The Republic of the Union of Myanmar 2008, 6). The new government structure also includes State and Region Governments, each headed by a Chief Minister and a range of newly created State Ministers, which oversee specific areas of authority (Nixon et al. 2013, v). The new governing structure also created unicameral State and Region Parliaments, which have some legislative authority over select economic areas. At the same time, the transition to a new government was also accompanied by the removal of a number of formerly meaningful institutions, most notably the ruling junta of the SPDC but also important economic rules such as the official exchange rate. Despite the creation of many new government bodies and formal laws that are important for business, most of the key government institutions and formal laws from previous eras remain and continue to have a significant influence on the behaviour of businesses.

Myanmar's economic institutional framework continues to give widespread power to the government, including exclusive control over key economic sectors and pervasive authority over private enterprise. State control of the economy is concentrated in sectors that have

[21] Some of the research that underlies this chapter has also appeared in other reports by this author, including Bissinger, Jared, and Linn Maung. 2014. Subnational Governments and Business in Myanmar. Yangon, Myanmar: MDRI-CESD and The Asia Foundation, and Bissinger, Jared. 2014. "Myanmar's Economic Institutions in Transition," Journal of Southeast Asian Economies 31 (2): 241-255.

historically been Myanmar's most lucrative, notably natural resources such as oil and gas, hardwoods, and minerals, as well as agricultural commodities, primarily rice. In these sectors, the state tightly controls permissions to operate through ministry-managed licenses which are bestowed upon select private entrepreneurs. These licensing processes are generally opaque, limit access to economic opportunities, and allow government fiat, not market mechanisms, to determine participation. The state also exercises a range of other authorities over transactions and property rights that encumber exchange and deter private economic activity. According to many interviewees in the private sector, Myanmar's economic institutions continue to function much as they did before the transition to a quasi-democratic government. The state focuses on controlling who engages in specific economic activities and collecting revenue from those businesses, but places less emphasis on regulation and how those activities are done.

While the formal laws and rules that underlie the state's authority exist on paper, they regularly go unenforced, or are enforced arbitrarily, preferentially, or opportunistically in order to extract bribes from businesses. The uncertain and arbitrary application of law is not only the result of 'institutional weakness,' but is instead a fundamental part of Myanmar's economic institutional framework in its own right. It serves as a mechanism of control and is an integral part of the incentive and constraint structure which shapes the economic behaviour and outcomes of businesses. Arbitrary governance is sometimes evidenced through unpredictable changes in laws, rules and regulations, or unannounced or unpredictable changes in the enforcement of existing rules and regulations. It is facilitated by poorly codified laws, processes, and procedures which provide little guidance and grant significant discretion to civil servants. Weak monitoring and enforcement mechanisms within government bureaucracies also contribute to inconsistent implementation, resulting in principal-agent problems between officials and the state. This creates a situation in which government officials and others who set the 'rules of the game' are often simultaneously its players, to the detriment of the game's fair play. Lastly, the arbitrary application of laws, rules, and regulations is facilitated by weak market-supporting institutions, which fail to provide market-supporting services or a check on state authority, resulting in a lack of certainty for businesses.

The arbitrary enforcement of laws and the uncertainty it creates couples with weak formal institutions and expansive state authority to have a notable consequences on the way that businesses in Myanmar operate. Businesses lack effective means of recourse against civil servants who have wide-ranging authority and discretion. They are often compelled to use bribery or other forms of corruption in their relations with government officials. Businesses also use relationships to navigate the state system, helping them to expedite basic processes, access state-controlled economic sectors and facilitate illegal but lucrative activities. Relationships play an integral role in business to business activity, because the failure of institutions to facilitate impersonal exchange necessitates relation-based trading. Commodity trading associations are an important example, as they perform a range of functions similar to those of state-based market-supporting institutions in Western countries, including information transmission (both reputational and price information), dispute mediation, and provision of rules governing exchange. Businesses are also often members of state-linked business associations, which serve a variety of roles including mediation between government and business and provision of public good substitutes. Despite a range of coping mechanisms, Myanmar's formal economic institutions still affect the returns to economic activity, deter investment, increase uncertainty, and reduce the likelihood of businesses taking on new clients.

This chapter is divided into five sections. The first section provides an overview of the structure of the Myanmar government, including its different power centres and levels. The second provides an overview of Myanmar's private sector, including structure and size, though the analysis is restricted because of the limitations and quality issues with the information available. The third section examines the ways in which the present-day state controls the economy, through formal laws, rules and regulations as well as power centres such as ministries. It also shows how the formal framework concentrates authority at the Union level of government. The fourth section explores how arbitrary enforcement of formal institutions is an integral part of the institutional framework. It explores how the lack of processes and procedures, the characteristics of the present-day civil service, and the lack of market-supporting institutions facilitate arbitrary institutional arrangements. The final section explores how firms react in this state-centric yet heavily arbitrary environment, through tools including bribery, relationships, informal institutions and state-linked organizations. It also argues that despite this range of coping mechanisms, the commercial decisions of private enterprises are distorted because of the institutional framework, often foregoing otherwise profitable economic exchange.

6.2: Structure of the Government Administration

Myanmar's post-transition government includes a range of administrative bodies whose functions and authorities have a bearing on the economy, including a the President's Office, thirty Union Ministries, the Union Parliament (*Pyidaungsu Hluttaw*), State/Region Parliaments, State/Region Chief Ministers, and State/Region State Ministers (who function somewhat like a cabinet for the Chief Minister, though have no actual ministries to oversee, with the exception of the Minister for Development Affairs). During the transition from the SPDC, a range of new authorities were created while others were restructured, including a few ministries which were combined (such as the Ministry of Industry I and the Ministry of Industry II). The government also devolved the municipal governments (which are directly translated as development committees) from the former Ministry of Progress of Border Areas and National Races and Development Affairs to the newly created State Minister for Development Affairs (Bissinger and Linn Maung 2014, 14).

6.2.1: The Union Government

The Union government is expansive and plays a central role in most aspects of economic governance. Control of the country's SOEs is the domain of the Union government, as is the provision of permissions and licenses for businesses in most sectors, notably natural resources. Permits for investment – both foreign and domestic – as well as licenses to import and export are also issued by the government in Nay Pyi Taw. The Union government is entitled to all major revenue streams, including the country's two most lucrative taxes, the commercial tax and income tax. It has rights to taxes and royalties from natural resources, as well as almost all other forms of natural resource-related revenues.[22]

The legislative functions of the Union government are handled by the bicameral Union Parliament, which is comprised of the Upper House of Nationalities and the Lower House of Representatives. The Union Parliament has the responsibility for drafting and passing almost all laws on economic matters. While the new parliament has passed numerous laws since its first meeting in 2011, the *pace* of reform to the formal laws and rules of the economy has sometimes led to neglect of the *quality* of those reforms. Often, new laws were modified versions of previous legislation and failed to address weaknesses in the previous

[22] For example, MOGE is an equity partner in the Shwe Gas Fields and receives income through their 15% ownership stake.

legislation while perpetuating institutional characteristics from previous eras. Similarly, the Parliament's many new laws often outstrip the ability of the country's bureaucracy to implement them.

The executive branch of government is headed by a President, supported by two Vice-Presidents and a number of Ministers who are based in the President's Office. The President's Cabinet comprises these officials plus the Ministers that head each of Myanmar's thirty ministries. These ministries control the rules and regulations for new legislation, oversee the implementation of existing laws, and govern the country's numerous SOEs. Ministries that are most relevant to the country's private sector generally fall within two categories: sector-based ministries, which have wide-ranging powers over their economic sectors, and macro-level ministries, which have important functions in managing the macroeconomic environment (see Table 6.1). Many of the sector-based ministries control SOEs that operate in natural resources, which are the country's most lucrative and among the few that are not loss-making. Another set of ministries with key business-supporting functions are those responsible infrastructure, such as the Ministry of Electric Power or the Ministry of Rail Transport.

Table 6.1: Key Sector-based and Macroeconomic Ministries

Sector-based Ministries	**Macro-level Ministries**
Agriculture & Irrigation	Commerce
Hotels and Tourism	Finance
Livestock, Fisheries, and Rural Development	National Planning and Economic Development
Industry	
Mines	
Environmental Conservation and Forestry	
Energy	

Source: President Office. 2014. Ministries. Available from http://www.president-office.gov.mm/en/?q=cabinet/ministries.

While the Union government is centred in Nay Pyi Taw, its administrative apparatus extends throughout the country by way of a hierarchy of subsidiary offices at the State/Region, District, and Township level. At the core of the Union government hierarchy is the General Administration Department (GAD) under the Ministry of Home Affairs, which exists at all subnational levels of government in Myanmar. At the State/Region level, it is responsible for administration and coordination for the state/region governments and between the Union ministries. At the District level, it supervises township GADs which are headed by a township administrator and has wide-ranging responsibilities from land registration to tax collection to local dispute resolution (Nixon et al. 2013, 33). It is also responsible for coordination among government actors such as union ministries (Nixon et al. 2013, 33). At the State/Region level, the GAD has little direct engagement with the private sector other than approving land grants and licenses for selling alcohol (Interview 014 with businessperson, 2013). The District level is similar, where the GAD mainly coordinates between higher and lower levels of government and consolidates information from lower levels to pass up (Bissinger and Linn Maung 2014).

The Township level GAD, which is headed by a township administrator and a support staff, is "responsible for promoting social and economic development through management of township affairs, oversight of implementation for higher level projects and coordinating with other parts of government" (Bissinger and Linn Maung 2014, 11). It engages with the private sector regularly, by providing recommendation letters for a range of transactions including land transfers, construction permits, and operating licenses, and also has some revenue collection responsibilities (Bissinger and Linn Maung 2014, 11). GAD officials at the Ward/Village level have fewer responsibilities, the most important of which is provision of recommendation letters for some licenses and permits. Many other Union ministries have offices at the State/Region, District, and Township level, including the Ministry of Finance (Internal Revenue Department), Ministry of Agriculture and Irrigation (Settlement and Land Records Department), Ministry of Industry (Directorate of Industrial Supervision and Inspection), Ministry of Home Affairs (Police), Ministry of Social Welfare (Fire Service Department), Ministry of Health (Health Department), and Ministry of Labor (Bissinger and Linn Maung 2014, 11).[23]

6.2.2: State/Region Governments

State/Region governments were created by the 2008 Constitution, which afforded them neither substantive power nor de facto independence. State/Region governments are headed

[23] This list is not exhaustive, but includes only local level offices of Ministries that were verified by interviewees. Other ministries, for example Ministry of Mines, Ministry of Environmental Conservation and Forestry, and Ministry of Construction, also have offices at lower levels of government but were not specifically listed by interviewees during thesis research.

by a Chief Minister who is supported by a cabinet of State Ministers, each of which oversees not a State-level ministry but instead a portfolio of responsibilities linked with their respective Union ministry. In practice, State/Region governments serve both as part of the Union government hierarchy as well as quasi-independent governing bodies. State/Region governments often lack the basic prerequisites for quasi-independent governance. For example they do not have the personnel to staff the state/region parliaments nor the authority to hire or fire them. They lack the ability to collect revenue as they have no network of revenue collection offices to exercise their limited revenue collection rights, further limiting their ability to exert their independence from the Union government (Interview 004 with government official, 2013).

6.2.3: Municipal Governments

One of the few areas where State/Region governments have significant autonomy is with the municipal governments, which fall under the direct control of the State Minister of Development Affairs. The municipal governments have a wide range of relatively mundane responsibilities for the private sector, focusing on the delivery of basic services including roads and bridges, water, sewers, garbage collection, street cleaning and public electricity (such as streetlights) (Interview 003 with government official, 2013). They also have the responsibility to issue operating licenses to businesses in some sectors, such as small shops and restaurants, as well as special permits to businesses that operate in particular sectors, such as butchers or shops that sell dangerous or flammable goods (Interview 003 with government official, 2013). They also provide construction permits and conduct a range of inspections. The municipal governments are notable because they are the only meaningful administrative bureaucracy that was placed under the direct control of State/Region governments by the 2008 Constitution and given meaningful discretion to raise revenue and control staffing decisions (Bissinger and Linn Maung 2014, 14).

6.3: The Private Sector in Myanmar

There are few reliable figures on the size and sectoral distribution of private sector enterprises in Myanmar, the result of incomplete record keeping, a disparate registration system in which businesses obtain operating licenses from various local and national authorities, and the high costs of some types of registration, which encourages informality.[24] The resulting data on the present-day private sector is incomplete and difficult to interpret given the complexity and opacity of the system. While available information is not comprehensive, it does evidence a number of important characteristics of the private sector in Myanmar. Among these characteristics is the high concentration of small-scale enterprises oriented towards the domestic market, with a heavy focus on the production of foodstuffs and trading.

According to figures released in 2013 by the President's Office and detailed in Table 6.2, the large majority of enterprises in the country (83%) are informal (Government of the Republic of the Union of Myanmar 2013b). While the figures do not specify how these estimates were calculated, it is likely that they include businesses and vendors that are registered with municipal governments or other local authorities. Of the remaining 'formal' businesses, over 99% are small and medium enterprises. Large enterprises make up just 0.1% of the total enterprises in the country (Government of the Republic of the Union of Myanmar 2013b). On a per capita basis, Myanmar has only about 12 large enterprises per million people. However, it is important to note that Myanmar lacks a consistent definition of small, medium and large enterprises and at present there are few well defined benefits for falling into each category.[25]

Table 6.2: Distribution of Businesses by Size and Registration

Type of enterprise	Number of enterprises	Percentage of formal enterprises	Percentage of all enterprises
Large enterprises	721	0.6%	0.1%
Small and medium enterprises	126,237	99.4%	16.9%
Total registered enterprises	126,958	100%	17.0%
Informal enterprises	620,000	n/a	83.0%

Source: Government of the Republic of the Union of Myanmar. 2013b. President U Thein Sein delivers an address at Small and Medium Enterprises Development Central Committee meeting at Presidential Palace. President Office, Nay Pyi Taw, Myanmar.

[24] Among the other problems with Myanmar's enterprises data is that it only keeps a registry of firms when they incorporate. No data is kept on the number of firms that cease operations. Further, some registered firms may never have commenced operations, especially those registered in the late 1980s and early 1990s. This, according to Tin Maung Maung Than, is because many of these firms were set up speculatively and "failed to capture profitable business deals in the lucrative foreign trade sector" in that time and have since been dormant. See: Tin Maung Maung Than. 2007.

[25] The only definition discovered by this author in nearly two years of fieldwork was for small and medium businesses in the industrial sector, promulgated in the 1991 Private Industrial Enterprise Law. It included measures of power used (in horsepower), total number of employees, initial capital outlay and output per year. The definition does not give guidance on how to classify enterprises that do not fall into the same classification for all criteria. Given the measures, the definition is not applicable outside of the industrial sector.

As of 2013, companies represent a small proportion of the total businesses in Myanmar. Since 1988, a cumulative total of 33,752 entities registered with Department of Investment and Company Administration (DICA) at the Ministry of National Planning and Economic Development (MNPED), details of which are included in Table 6.3. Companies can register as Myanmar enterprises, foreign enterprises, partnerships, joint ventures, hotel enterprises, and business associations. Companies can register under the FIL, the Myanmar CIL, or the Companies Act, each of which gives certain benefits to registering businesses. Company registrations were dominated by Myanmar enterprises, which comprised nearly 90% of the total registrations. Most of these enterprises are trading firms or large manufacturers (Interview 111 with business association, 2013).

Table 6.3: Company Registrations with the Ministry of National Planning and Economic Development, by type

Type of Company/Organization	Number of Companies
State-owned enterprises	639
Myanmar enterprises	30,135
Foreign enterprises	1,686
Partnerships	1,072
Joint ventures (between state-owned and local enterprises)	54
Joint ventures (between state-owned and foreign enterprises)	17
Joint ventures (between Myanmar and foreign enterprises)	92
Business associations	57

Source: Directorate of Investment and Company Administration. 2013. Data on Foreign Investment, Local Investment and Company Registration. Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar.

Many of the country's small, medium, and large enterprises register with the Union ministry that is responsible for the sector in which the business operates. Major ministries for registration include the Ministry of Industry (manufacturing businesses), Ministry of Commerce (trading businesses), Ministry of Mines (mining businesses), Ministry of Hotels and Tourism (hotels, travel agents, tour guides and others), and the Ministry of Cooperatives (businesses of any sector with less than 10 employees). Among these, the Ministry of Industry is one of the few that has a significant number of registered enterprises as well as basic publicly-available data about them. Manufacturing enterprises that register with the Ministry of Industry are categorized by size, with SMEs dominant. Of the 43,232 registered enterprises, the majority are small enterprises and nearly nine out of ten are SMEs, as noted in Table 6.4.

Table 6.4: Manufacturing Enterprises Registered with the Ministry of Industry, by size

	Number of Enterprises	Percentage of Manufacturing Enterprises
Small Manufacturing Enterprises	31,137	72%
Medium Manufacturing Enterprises	7,287	17%
Large Manufacturing Enterprises	4,808	11%

Source: OECD, Multi-Dimensional Review of Myanmar: Initial Assessment, Geneva: OECD Publishing, 107.

Of all manufacturing enterprises registered with the Ministry of Industry, the majority (63.5%) work in food and beverages, a sector which saw comparatively little government intervention during either the socialist or military eras. There are also significant numbers of manufacturing SMEs in construction materials, metals and minerals and clothing and 'wearing apparel.' A complete breakdown is detailed in Table 6.5.

Table 6.5: Distribution of Manufacturing Enterprises, by Sector and Size

Sector	*Large*	*Medium*	*Small*	*Total*	*Percentage*
Food and Beverage	2,369	4,110	20,976	27,455	63.5%
Construction Materials	510	650	2,117	3,277	7.6%
Metal and mineral	315	381	1,204	1,900	4.4%
Clothing and Wearing Apparel	341	380	1,001	1,722	4.0%
Personal goods	375	410	330	1,115	2.6%
Industrial raw materials	169	240	282	691	1.6%
Printing and publishing	60	117	183	360	0.8%
Household products	144	79	97	320	0.7%
Transport vehicles	194	40	33	267	0.6%
Industrial tools and equipment	15	49	66	130	0.3%
Agricultural machinery	9	25	37	71	0.2%
Electrical equipment	43	15	12	70	0.2%
Others	264	791	4,799	5,854	13.5%
Total	4,808	7,287	31,137	43,232	100%
Percentage	11.1%	16.9%	72.0%	100%	-

Source: Central Department of Small and Medium Enterprises Development. 2013. "Small and Medium Enterprises in Myanmar". Paper read at SME Development Center, Yangon, Myanmar. August 26.

Small-scale enterprises (or micro-enterprises) engaged in any type of business can register with the Ministry of Cooperatives, which had issued registrations to 14,956 such enterprises through July 2013. Of these, the majority (60%) were engaged in handiwork, with food and beverage production the next most common sector of activity. The Ministry of Hotels and Tourism has registrations from 5,790 enterprises in the hotels and tourism sector (OECD 2013, 107). Other firms have operating licenses from the Ministry of Trade and Commerce, Ministry of Mines, and Ministry of Forestry.

6.4: State Control of the Economy

For many of the laws, rules, and regulations that underlie Myanmar's economic institutions, the primacy of the Union government's economic authority is a central feature. Other levels of government and individuals are relegated to a subservient status. The Union government's widespread economic authorities affect the property rights of businesses and their freedom to transact. The systems of control have evolved throughout the country's recent history and are firmly engrained in the legal framework of the country as well as the operations of the administrative bureaucracy. The legal basis of the country's formal economic institutions is the laws, rules, and regulations which pertain to labour, capital, property rights, transacting, and other economic rights, and originate from the country's administrative and legislative bodies. At the core of these legitimizing laws and rules is the 2008 Constitution. It is accompanied by a range of other Union-centric laws, rules and regulations and a hierarchical system of authority which derives from military rule. Together, they formalize the widespread powers of the Union government.

6.4.1: The Constitution

Though it was designed and drafted under the previous military junta and passed in a heavily criticized referendum, Myanmar's 2008 Constitution nonetheless represents an important pillar of the new government's formal authority.[26] It outlines the structure of the government administration, delegates formal authorities to different parts of that structure, and defines the respective economic powers of the government and the individual. The 2008 Constitution resembles previous constitutions and formal legislation in Myanmar by giving the state

[26] The referendum, in which 94% of voters casted ballots in support of the constitution, received criticism on a number of fronts. The 94% "yes" vote was cited as the result of intimidation, force, vote-buying, and blatant fraud. The 98% turnout level was seen as unlikely, given that the vote was held shortly after Cyclone Nargis, one of the country's worst natural disasters.

control over key inputs to production, notably land and natural resources. It affirms that the "state is the ultimate owner of all lands and all natural resources above and below the ground, above and beneath the water and in the atmosphere in the Union" and as such "shall enact necessary law to supervise extraction and utilization of State-owned natural resources by economic forces" (The Republic of the Union of Myanmar 2008, 10). The Union's authority over lands and resources is constitutionally unbounded by any rights afforded to individuals, peoples, or any other level of government.

The rights of private individuals, as outlined in the constitution, include the "right of private property, right of inheritance, right of private initiative and patent" as well as the "right to conduct business freely in the Union" (The Republic of the Union of Myanmar 2008, 10, 153). Yet these rights, as well as numerous other individual economic rights enshrined in the constitution are made contingent by the phrase "in accord with the law" (The Republic of the Union of Myanmar 2008, 10, 153). These individual economic rights are not inalienable, but instead subservient to the law and hence to a state with few constitutionally enshrined constraints on its lawmaking authority. Only a few economic rights, for example guarantees against the nationalization of private enterprises and the demonetization of currency, are not qualified by this rejoinder (The Republic of the Union of Myanmar 2008, 10). However, these select exceptions have been the subject of promises by previous governments which failed to honour them (Turnell 2009, 238, 254).[27] While the constitution does prescribe some individual rights, the rights of the government are pre-eminent and unencumbered by those of the individual.

The 2008 Constitution also provides a framework for the distribution of economic authority between different levels of government, and gives nearly all important economic authority to the Union. These powers are most clearly delineated in two areas: the legislative authorities of the Union and State/Region Parliaments and the taxation powers of the Union and State/Region governments. Together, these serve as a de facto delineation of authority between levels of government, as the Constitution is conspicuously silent on the respective administrative authorities of the Executive Branch and the Ministries. Schedules 1 and 2 of

[27] It is notable that the 2008 Constitution is not the first instance of a Burma/Myanmar government making guarantees against nationalizing businesses, as was noted in previous chapters. Nor was it the last, as the pledge was repeated in the 2012 Foreign Investment Law. However, none of these guarantees provide much needed details on the definition of nationalization, raising the question of what recourse, if any, investors have against an overbearing state that does not explicitly nationalize private property.

the 2008 Constitution outline the respective legislative authorities of the Union and State/Region Parliaments, giving the former the vast majority of economic legislative responsibilities. For example, in the 'Economic Sector' the Union is afforded law-making authority over:

"(a) Economy;
(b) Commerce;
(c) Co-operatives;
(d) Corporations, boards, enterprises, companies and partnerships;
(e) Imports, exports and quality control thereon;
(f) Hotels and lodging houses; and
(g) Tourism" (The Republic of the Union of Myanmar 2008, 183).

States/Regions have lawmaking authority over:

"(a) Economic matters undertaken in the Region or State in accord with law enacted by the Union;
(b) Commercial matters undertaken in the Region or State in accord with law enacted by the Union; and
(c) Co-operative matters undertaken in the Region or State in accord with law enacted by the Union" (The Republic of the Union of Myanmar 2008, 188).

Schedules 1 and 2 also outline legislative authorities in areas including agriculture and livestock breeding, energy, electricity, mining and forestry, industry, and transport communication and construction. Similarly, they afford the Union government near-universal authority in these areas. A comparison of the Union and State/Region authorities in the "energy, electricity, mining and forestry" sector illustrates the disparity. The Union government has authority over:

"(a) Petroleum, natural gas, other liquids and substances declared by the Union Law to be dangerously inflammable;
(b) Production and distribution of electricity of the Union;
(c) Minerals, mines, safety of mine workers, and environmental conservation and restoration;
(d) Gems;

(e) Pearls;
(f) Forests; and
(g) Environmental protection and conservation including wildlife, natural plants and natural areas" (The Republic of the Union of Myanmar 2008, 183-184).

The States/Regions are granted the following authority:

"(a) Medium and small scale electric power production and distribution that have the right to be managed by the Region or State not having any link with national power grid, except large scale electric power production and distribution having the right to be managed by the Union;
(b) Salt and salt products;
(c) Cutting and polishing of gemstones within the Region or State;
(d) Village firewood plantation; and
(e) Recreation centers, zoological garden and botanical garden" (The Republic of the Union of Myanmar 2008, 189).

A comparison of the entirety of Schedules 1 and 2 shows that the majority of economic authority is given to the Union government, with only residual authority left for the State/Region governments. The disparity is echoed in the distribution of taxation powers between the Union and States/Regions. The Union government has the rights to revenues from natural resources, trade, and the country's two most lucrative taxes, the commercial and income tax (The Republic of the Union of Myanmar 2008, 193-194). States/Regions have taxation powers over land and excise revenue, as well as a number of regressive, direct taxation powers including over use of jetties, state-maintained toll roads, entrainments, etc. While States/Regions have a State Minister for Finance, they do not have their own revenue collection offices and instead depend on the Union government (specifically the GAD) for collection of land and excise taxes (Interview 004 with government official, 2013, OECD 2014, 167).

6.4.2: Laws, Rules, and Regulations

While the Constitution provides a foundation for the primacy of the Union government, a range of other laws, rules, and regulations flesh out its formal economic authority. One of the most important of these is the 1989 State-owned Economic Enterprises Law, passed by the previous military regime but still in force (Government of the Union of Myanmar 1989). The law gives the government the exclusive right to own and operate economic enterprises in a range of sectors including petroleum, natural gas, jade, precious stones, metals, teak and other forestry products (excluding village-owned firewood plantations), fisheries, post and telecommunications, air transport, rail transport, broadcasting, banking, insurance, electricity generation, and defence-related manufacturing (Government of the Union of Myanmar 1989, 1-2). The law also gives the state the right to permit any economic enterprise to carry out the restricted activities through either a joint venture between a private interest and the government, or exclusively by that private interest ‘subject to conditions’ (Government of the Union of Myanmar 1989, 2). In short, this law affords the state exclusive control over the most lucrative parts of the economy and the authority to license out the permission to exploit these. The result of this law is the creation of the foundations of the country’s crony economy. The law also gives the government the authority to “prohibit or prescribe conditions regarding the purchase, procurement, improvement, storage, possession, transport, sale and transfer of products derived from or produced by or used by economic enterprises” in the sectors reserved for the state (Government of the Union of Myanmar 1989, 2). The authorities that result from this clause are expansive, and give the state numerous avenues through which to collect revenue, affect prices, distribute patronage, and intervene in many aspects of the economy that may not otherwise fall under the purview of the law. This law, more than the Constitution or any other current legislation, serves to legitimize the lack of boundaries over the state’s interaction with the private sector.

In many of the economic sectors that the Constitution reserves for the state, there are sector-specific laws, rules, and regulations that detail the government’s powers. Many of the sector-specific laws share common characteristics in the way they legislate the authority of the state. First, laws require businesses to obtain a permit from a Union ministry to engage in an economic activity beyond subsistence scale. However, the laws often leave the permitting process vague and inconsistent. For example, the Forest Law requires licenses for the extraction, sales, and export of forest produce but contains an exemption to the requirement when “carried out as a State-owned enterprise” (Government of the Union Of Myanmar 1992). While the law proscribes competitive bidding as the method of award, it also includes vague and discretionary exceptions. One clause in the law allows exceptions in all cases in which “the Minister is empowered by the Government in respect of the extraction of forest produce” (Government of the Union Of Myanmar 1992). The Myanmar Mines Law makes no stipulation for the award of mining licenses, other than the requirement that applications must go to the Union Ministry for large-scale awards but to lower departments of the Ministry for smaller awards (Government of the Union of Myanmar 1994). Sectoral laws also afford the state a range of other powers that influence private enterprise outside of the licensing process, including:

- Exceptional powers to intervene in transactions.
    - The right to issue prohibitions on "purchasing, obtaining, storing, possessing, transporting, selling, transferring of any mineral obtained from mineral production" (Government of the Union of Myanmar 1994).
- The exclusive right to some types of dispute resolution.
    - Many administrative decisions are mandated to be resolved through the ministerial hierarchy and exclude the judicial system. For example, in the Forestry Law, appeals from the Township Forest Officer going to the District then State/Region, then Union level Director General and finally Minister, whose decision is final (Government of the Union Of Myanmar 1992).

Among the most valuable assets for entrepreneurs and businesses is land, and Myanmar's land regime exhibits many of the same aspects of Union dominance that is evident in the sectoral laws. The land regime was most recently updated by two laws passed in 2012, the Farmland Law and the Vacant, Virgin, and Fallow Lands Law. Both demonstrate the strong government control over land and contain numerous state-mandated burdens to exercise private rights in accord with the law. For example, the 2012 Farmland Law includes a litany of restrictions and conditions upon legal land use, including:

- A prohibition of farming the land without permission from the farmland management body;
- A prohibition on using land for non-agricultural purposes;
- A ban on growing other crops besides the 'regular crop';
- A ban on leaving land fallow without a 'good reason';
- A ban on selling, pawning, or otherwise facilitating a transaction using the land without before obtaining farming rights (Government of the Republic of the Union of Myanmar 2012b, 4)

Failure to abide by these and other conditions could result in a fine, forced change in the utilization of the land, or eviction (Government of the Republic of the Union of Myanmar 2012b, 6).

Under the military government, trade and investment laws were relatively restrictive, though a host of new laws, including the Export and Import Law (2012), Foreign Investment Law (2012), and Citizens Investment Law (2013) and their accompanying rules and regulations have relaxed state control over these areas. The Export and Import Law provides little concrete detail on any policies or procedures, being only marginally longer than three pages. It gives the Ministry of Commerce authority over many aspects of trade including the classifications of goods, the oversight of lists of restricted or banned goods, the authority to issue permits for importing and exporting, and the responsibility to draft rules and regulations to accompany legislation (Government of the Republic of the Union of Myanmar 2012a). The Foreign Investment Law (2012) and its domestic cousin the Citizens Investment Law (2013) outline the role of the state in investment of most large enterprises. These laws are accompanied by rules and regulations, which are also less restrictive than their predecessors, notably with the shift from a positive to a negative list of permitted economic activities. However, the permitting process outlined is extensive and must clear the 'scrutiny' of the Myanmar Investment Commission, which has the authority to accept and reject investment applications (Government of the Republic of the Union of Myanmar 2013a).

6.4.3: Control through Union Ministries

While the formal laws, rules and regulations constitute the basis of the Union government's economic controls, the exercise of that control is most often through the Ministries and their SOEs. One of the most important avenues of Ministerial control is limitations on the sectors in which businesses can operate. This is achieved through licensing regimes. Union-level Ministries license businesses in a wide range of sectors, including natural resources, manufacturing, trade, and many service industries (Bissinger and Linn Maung 2014). While the process to obtain these licenses varies from ministry to ministry, businesses that were interviewed for this thesis noted that they were often more complex and challenging in practice than official rules and regulations would suggest. One interviewee noted the following process to obtain a license from the Ministry of Hotels and Tourism in 2012:

- Obtain recommendation letters from the Township Health Department, Township Fire Department, Township Police and the Ward/Village Administrator.
- Take those recommendations to the Township Administrator for scrutiny and obtain his/her recommendation.

- Take these five recommendations to the Township Municipal office to obtain a municipal license.
- Township Municipal office forwards application to the State Ministers.
- State Ministers send officials to conduct an inspection and provide a report.
- State Ministers approve the project and forward it to the relevant Union ministry.
- The relevant Union ministry conducts an inspection and provides a report.
- Based on the above process, the Union ministry issues a license to the business (Interview 013 with businessperson 2013).

The wide range of inspections and approvals necessary to obtain an operating license present significant financial and time costs for businesses and are a major barrier to entry for prospective entrepreneurs. Another potential aspect of control by Union ministries is the regular inspection of businesses. Notably, these inspections were neither common nor used as a mechanism to exert control outside of the licensing process. They were not seen by interviewees as a major challenge (Interview 007 with businessperson 2013, Interview 008 with businessperson 2013). Instead, interviewees suggested that Union ministries place far more emphasis on entry into a sector than the ongoing operations of businesses in that sector. Ministries are also heavily involved in the drafting of legislation, and control the writing of the rules and regulations that accompany many laws, giving them significant authority to shape bureaucratic processes. Lastly, many ministries have authority to oversee a range of tenders in sectors including natural resources, telecommunications and others. For most private enterprises, though, the key aspect of Union ministry control is licensing. One interviewee summarized the key distinction between the Union and local levels, noting that permission and permits come from the top while services come from the local level (Interview 001 with businessperson 2013).

6.4.4: Control on the Local Level

While government controls also exist at the local level, they are more diverse in their form and function than those of the Union level. Government officials responsible for local matters are generally mid- and low-level civil servants who execute basic services for their respective Union ministries. They are often responsible for granting permissions for mundane tasks. One business noted that, when they wanted to improve the road in front of their premises, they needed government permission despite the fact that they had to pay the cost of the materials while the Ministry of Construction only contributed tools and machines. The major role of the government was to "give you permission" to improve the road, not to bear the costs (Interview 029 with businessperson 2013). The interviewee noted that despite the fact that "everything is self-reliance, you still need permission" (Interview 029 with businessperson 2013). The same firm noted that they also had to obtain municipal permission to cut trees on their own property (Interview 029 with businessperson 2013). Often permissions at this level are more consensus-based than those that come directly from the Union level. For example, construction permits are granted by the municipal government but cannot be obtained before a range of recommendations are obtained and the township administrator (GAD) 'scrutinizes' the land records (Interview 022 with government official 2013).

While most evident at the Union level, control remains an essential element of the governance of business at all levels by a state with nearly 'unlimited' authority. This control results from a set of formal economic rules which create a system in which the rights of the Union government are paramount. This state-centrality is evident most obviously but not only in the concentration of property rights with the Union government. However, these formal rules and regulations also extend state control over the ability and mechanisms that individuals use to transact, and the range of economic opportunities that are available to private citizens. They contribute to an economic system in which laws, rules and regulations are often vague, regularly out-dated, and sometimes wholly inappropriate, resulting in unpredictable, arbitrary, and variable implementation.

6.5: Uncertainty and the Arbitrary Implementation of Formal Institutions

The widespread authority and control of the economy by the Union government that derives from the country's formal laws and rules is an integral element of Myanmar's economic institutional framework. Yet while formal rules may often espouse control in principle, reality is characterized by inconsistency, unpredictability and the arbitrary application of law. North argues that institutions are not just the formal and informal constraints that restrain or incentivize economic activity, but also the enforcement characteristics of these formal and informal constraints (North 1994b). Given this definition, the uncertainty and arbitrary application of law in Myanmar is evidence not only of 'weak institutions' but instead of a fundamental aspect of the institutional framework in its own right. It constitutes an integral part of the incentive and constraint structure which shapes the economic outcomes and decision-making of firms. Uncertainty and arbitrary application of law are the result of many combining factors, including the lack of clear policies and procedures, uncertainty over decision-making and implementation authority, high bureaucratic monitoring and enforcement costs, and the roles of personalization and consensus-building. Together, these characteristics of the government illustrate some aspects of the weakness in Myanmar's 'weak but unlimited state.'

6.5.1: Arbitrary Governance

The arbitrary application of laws, rules, and regulations, and their change without notice is a major consideration for economic enterprises in Myanmar. It increases uncertainty, which reduces the incentives to make long term investments. It can result in large losses or unnecessary expenses for businesses that made investment decisions with a certain set of expectations that the arbitrary changes in policy undermined. Arbitrary changes in laws and their enforcement can be a tool of control, a tool to encourage bribery, a reaction to external circumstances, or driven by decisions within the governing structure.

Recent and immediate changes in laws, rules and regulations, for example modifications to the licensing system for import companies, provide good examples of arbitrary governance and its effect on firms. One interviewee, a long time importer, noted that traders were previously required to specify seven (out of fifteen) categories of goods that they would import, and list these on their license. In the 2000s, the government changed the policy and allowed companies to import goods from all 15 categories, but reversed this back to seven categories in 2010 (Interview 203 with businessperson 2014). After this change, the interviewee applied for another company license, incurring substantial time and financial costs in order to continue importing the same range of products. However in early 2014, the government once again changed the policy to allow imports in all 15 categories, rendering the new company license redundant and the investment worthless (Interview 203 with businessperson 2014).

Another example is the regular modifications in the car licensing regime, which have changed eight times since 2011 (Kyaw Hsu Mon 2013). Car import licenses were among the first economic liberalizations made by the new government. However, these changes were often announced with no warning and had a significant impact on local manufacturers. One interviewee, who previously owned and managed a small automobile manufacturing business, said that he "got bitten by (the) change in the automobile licensing policy"

(Interview 015 with businessperson 2013). At that time, his business was producing vehicles that he had financed through loans. However, the entrepreneur had “no idea the import policy was going to change” (Interview 015 with businessperson 2013). The arbitrary and immediate change in the import license policy forced him to lower the sale price for the vehicles under producing and take losses on them (Interview 015 with businessperson 2013). The change happened without warning which gave the business owner no time to prepare or adapt, causing a large loss to the business.

Another aspect of arbitrary governance in Myanmar is unannounced and unpredictable changes in the enforcement in formal laws, rules or regulations. This arbitrary enforcement was noted by a trader, who said that in some parts of Myanmar it is common for some importers to fail to pay duty. The police, unsure of how to determine which traders were complying with the law, resorted to “locking up traders indiscriminately” (Interview 001 with businessperson 2013). Another example of the arbitrary enforcement of policies was the crackdown in late 2013 on the importation of wine, beer and spirits, which have long been subject to restrictions and high duties in Myanmar. Despite the restrictions, some companies exploited a loophole allowing companies with a hotel registration to import these goods, a practice that continued for over a decade ("Authorities Charge City Mart for Uncertified Alcohol" 2013). In October 2013, an anonymous tip led to an investigation and charges against a major retail chain, City Mart ("Authorities Charge City Mart for Uncertified Alcohol" 2013).

6.5.2: Lack of Processes and Clear Procedures

The lack of well-defined processes and procedures, and the difficulty in finding information about these, presents a major challenge for private businesses. It creates direct challenges for businesses by increasing transactions costs, such as the time and money spent collecting information, meeting government officials, and completing procedures with government offices. Poorly crafted and vague legislation is one component, as many of Myanmar’s key laws are brief and provide few details on the specific processes and procedures that are necessary for private sector enterprises. The 2012 FIL is among the most well defined of Myanmar’s economic laws, yet in its official English version is only 23 pages long. Key procedures are dealt with only in passing. The application process receives only half a page, and the obtaining of insurance only one sentence (Government of the Republic of the Union of Myanmar 2012c, 13). The accompanying rules and notification are 24 and 22 pages respectively. While they are sufficient in defining the sectors in which foreign investment is permitted, they leave significant uncertainty about processes.

In place of well-elaborated written rules and regulations, many of Myanmar's laws mandate the creation of committees, commissions, or posts and vest them with significant and often ill-defined authority over economic activity. Select examples include:

- The 2012 FIL continued the authorization of the Myanmar Investment Commission (which was created under the 1988 FIL), which has the authority to scrutinize and approve investment proposals and coordinate with other bodies of government about the proposals (Government of the Republic of the Union of Myanmar 2012c).
- The Special Economic Zone Law (2011) authorized a Central Body, Central Working Body and Management Committees with powers over many aspects of the development and management of SEZs (Government of the Union of Myanmar 2011).
- The Electricity Law (1984) created an Inspector General post with duties including issuing permits for exploration, generation, transmission, or distribution of power, inspections, and some types of dispute resolution (Government of the Socialist Republic of the Union of Burma 1984).
- The Farmland Law (2012) established a hierarchy of Farmland Management Bodies with powers including but not limited to guidance and control of registration for farming rights, issuing land use certificates, dispute resolution, control over the sale, pawn, lease, exchange and donation of farming rights, and the authority to revoke farming rights (Government of the Republic of the Union of Myanmar 2012b).

These committees and positions are used as a replacement for codified laws, rules and regulations. They are afforded wide-ranging powers, as noted above, but given few guidelines in the respective laws about the exercise of those powers.

The lack of clear policies and procedures leads to delays and costs for business, with numerous businesses noting these challenges in relation to the licensing procedure. One business described the process was "completely opaque" as the Ministry is "always telling you next week, next month, etc. No one really explains the process but apparently you send in the application and it goes to one ministry that's related to what you do and then to a bunch of other ministries for comments" (Interview 208 with foreign consultant 2014). At this stage, line ministries can object to the issuing of a license, and according to the interviewee, only need to provide vague reasons for doing so. This forces the business to restart the licensing process. Another business similarly noted that “there’s no clarity about the process of obtaining a license. There’s no information so they need to ask a DG (director general) or minister” (Interview 202 with foreign consultant 2014). Another business, which often has to submit papers to government officials to receive approval for transactions, said that officials often do not know what paperwork is needed. As such, they regularly err on the side of caution and require a significant amount of documentation. The interviewee said “rather than being rational and logical and reasonable about what they (government officials) need to ask for and what they don't, they just ask for everything” (Interview 203 with businessperson 2014). Some businesses have attempted to deal with the lack of clear processes by outsourcing to agents or other professionals. However, even agents struggle with the lack of clarity. A foreign firm who outsourced their taxes to an ‘experienced’ local accounting firm said that they found they often “appeared to be walking in the dark” (Interview 202 with foreign consultant 2014). The only interviewee who supported the discretionary powers was a government official who noted that the lack of clear policies and procedures allowed them to apply laws on a case-by-case basis, for example by giving discounts on taxes to small and medium enterprise as long as they could justify it to their superiors (Interview 004 with government official 2013). However, even these comments support the arbitrary nature of the implementation of tax laws.

The lack of processes and clear procedures also opens the door to corruption. Civil servants have leeway in their interpretation of rules and regulations, creating an incentive for businesses to bribe the official to obtain the more favourable interpretations. One interviewee noted the example of construction permits, which are granted by the municipal governments. In Yangon, there are two types of permits: major renovations and minor renovations, the latter of which is easier to obtain and requires less paperwork. The interviewee noted that their business had recently applied for and received a minor renovation permit despite the large scale of their project, because “there’s no chart or description of what is a small renovation and what is a big renovation” (Interview 208 with foreign consultant 2014). Obtaining the minor renovation permit required a small payment, which gave the business the informal permission to conduct a larger renovation. Another business in the retail industry said that they were assessed an annual tax from the Ministry of Environmental Conservation and Forestry for selling wood-based products. The business had never heard of the tax and had “no idea how it was calculated” and said that it did not “show up in government revenue” (Interview 009 with businessperson 2013).

6.5.3: Challenges for the Civil Service

Another aspect that drives uncertainty in Myanmar’s institutional framework, and one that is closely related to the unclear policies and procedures, is the challenge of allocating decision-making and implementation authorities within the civil service. Here, the government bureaucracy can exhibit two different and seemingly contradictory characteristics: hierarchy and consensus. These distinct but interrelated characteristics present significant challenges for businesses who incur costs to determine who has authority for decision-making and implementation, whether there is any difference between those with *de facto* and *de jure* authority, and to appeal to that authority until a decision is reached.

Myanmar’s civil service is hierarchical, which is often attributed to the country’s strong Buddhist traditions. However, the recent legacy of military governance also plays an important role, argue Khin Maung Kyi et al., who note that present-day decision making “followed that of the military system, the officers at one level unwilling to take any responsibility and preferring instead to push decisions to the next higher level” (2000, 190). The unwillingness to take responsibility is partly the result of a bureaucratic culture in which failure to handle responsibilities correctly could result in punishment or other problems (Interview 203 with businessperson 2014). One interviewee, who had over a decade of business experience in which government engagement is frequent, noted that “civil servants get trapped in this mindset that you can't challenge anything or change it or else there will be consequences and retribution” (Interview 203 with businessperson 2014). One mechanism used to exert control over the civil service is the regular shuffling of staff between positions, a practice with roots in the socialist and military eras when the increasing personalization of power over government departments led to a de-institutionalization of their operations. Bureaucratic staffing was used to reward loyalty, with merit a secondary consideration (Khin Maung Kyi et al. 2000, 152).

The result is a civil service in which officials at lower levels are often unwilling to make even small decisions, because the minute risks of erring still outweigh the marginal benefits of action. Instead, trivial and routine matters are escalated to the highest levels of Myanmar’s civil service, placing heavy burdens on top administrators and resulting in delays in decision-making and distractions for senior officials. One interviewee noted an example: their business was interested in a factory that the government had slated for privatization. However, in order to visit the facility at the start of the evaluation process, the potential buyer had to obtain permission from the Minister to conduct a basic tour (Interview 204 with foreign consultant 2014). Similarly, the interviewee noted that the need to engage with high level officials also characterized the licensing process. The interviewee stated: "there's no authority given to junior staff to issue licenses, so for a license as simple as a garment factory, you need to lobby the MIC (Myanmar Investment Commission) for approval - the chairman of the MIC shouldn't be involved" (Interview 204 with foreign consultant 2014).

In areas where there are not clear policies and procedures, decision-making is similarly escalated to the highest levels of the civil service. One interviewee, working on behalf of foreign clients, wanted to explore a more complicated transaction which was not covered in the country's legal framework and for which no guidelines or process existed. The interviewee said, "when there is no process, then you just do an ad-hoc approach, but the Minister is the only one who knows how to do it so you really need to meet with him" (Interview 202 with foreign consultant 2014). These characteristics of the civil service have meaningful consequences for businesses, including delays because of the busy schedules of top officials, and increased travel expenses to meet senior officials in Nay Pyi Taw. They also increase risk for businesses that need to build relationships with key officials to achieve objectives, especially for larger projects. If officials with whom businesses have been building relationships are transferred or resign, they are forced to restart the relationship-building process with the replacement. Staff shuffling can also have more innocuous unintended consequences, such as reducing the cumulative knowledge of staff. Positions are constantly filled with new civil servants with little knowledge of the position nor incentive to acquire expertise, reducing their overall effectiveness of the bureaucracy.

Recent reforms and the creation of State/Region governments have increased the number of officials in decision-making roles and created overlapping authorities that have yet to be clarified in practice. While the 2008 Constitution delineates the legislative and taxation powers of the Union and State/Region governments, in practice some businesses note that this is still unclear. One interviewee argued that there was "no clear distinction of authority on what the state government can do and what the national government can do" (Interview 010 with businessperson 2013). The interviewee went on to state: "under the military, the

State Commander could decide on a road. Now the State government does not know if they can and they often defer to the national" (Interview 010 with businessperson 2013). The same uncertainty affects the approvals needed for doing business. Another interviewee noted that, "since decentralization, there are difficulties because you have to get approvals from more levels of government," suggesting a degree of duplication in the decentralization process (Interview 013 with businessperson 2013). The result, according to the first interviewee, was "more steps" and "more red tape" (Interview 010 with businessperson 2013). The other echoed this sentiment: "now you have to pay off many State Ministers. It takes the same amount of time, but is more costly" (Interview 013 with businessperson 2013).

Even State/Region government officials tacitly admit that they sometimes do not have authority in practice, despite the stipulations of the 2008 Constitution. Land taxes, which have not been adjusted for inflation for nearly a quarter century, fall under both the legislative and revenue collection powers State/Region governments. Despite legislation passed by the Mon State Parliament to increase tax rates, the State government has not yet implemented this legislation. This was because Mon State was "waiting for other states and regions" and for the issue to be discussed at the Union Parliament, as the Mon State law was in conflict with a Union law (Interview 004 with government official 2013). This illustration of the need for unity and consensus trumping formal delineations of authority is also encountered at the local level by businesses engaging with committees that oversee a range of local affairs, including infrastructure, township development, etc. Instead of approaching one committee for the desired public infrastructure upgrade, an entrepreneur who had experience dealing with the committees noted: "you have to deal with all the committees" and they "all must agree" before you can move on to the State government (Interview 010 with businessperson 2013).

Another key challenge for Myanmar's civil service is the difficulty that senior officials face in monitoring the behaviour of their subordinates and enforcing rules. These monitoring and enforcement challenges help facilitate both the arbitrary implementation of policies as well as corruption and bribery. There are numerous examples of policies that are subject to consistent implementation challenges, notably taxation. Though Myanmar has published commercial and income tax rates and policies, in practice interviewed businesses stated that their tax was determined by other considerations, such as the size of the business and how long it had been operating, not according to the published rates and policies (Interview 205 with businessperson 2014). One owner stated simply: “they just rate you according to the size of the business but they don't use the tax schedules” (Interview 205 with businessperson 2014). An importer faced similar enforcement issues dealing with customs. The business was importing wheat under an HS Code (harmonized system code, the international coding system for traded goods) that did not require a license and was not subject to duty. When it arrived at the port, however, the customs officers assigned the shipment a different HS code which required a license and attracted duty. The officer did this to extract a bribe, according to the businessperson (Interview 203 with businessperson 2014). Lastly, implementation can lag, for example the implementation of recent policy changes. In one example, the ‘export first’ policy which required export earnings to be used for imports was still being required for businesses importing across the Myanmar-Thai border in late 2013, despite it being abolished over a year earlier (Interview 010 with businessperson 2013).

Community opinion, particularly negative perceptions, can also encourage responses from the civil service which can endanger projects, including those that have already received approvals. This uncertainty is closely connected with the long-standing prominence of charity and corporate social responsibility in Myanmar and the historic conceptions of exchange that focused on ‘just and acceptable’ outcomes for both parties. A number of recent examples illustrate the importance of maintaining community consensus, most notably, the ‘suspension’ of the Myitsone Dam. Interviewed entrepreneurs echoed that this uncertainty also existed for projects on a smaller scale. One entrepreneur, who had already received the required permissions from the municipal government and Union ministry and an approval letter from the State/Region government had their permit suspended after protests over the land used for the project, which happened when the Minister reversed his ‘decision’ due to public pressure (Interview 014 with businessperson 2013).

6.5.4: Weakness of Market-Supporting Institutions

The weakness of Myanmar’s market-supporting institutions is a key source of uncertainty for businesses and has a material influence on their operations. One of the most important market-supporting institutions, the court system, is in a poor state and largely shunned by the private sector. According to the World Bank’s 2014 Doing Business report, Myanmar’s judicial system was ranked 188 out of 189 for ease of enforcing a contract. On average, the court system required 45 procedures, took 1,160 days, and cost 51.5% of the total claim amount to resolve a contract dispute, figures which starkly illustrate why businesses avoid

Myanmar's judicial system (World Bank 2013a, 220). In the course of research for this thesis, no interviewed business had been to a court for a business dispute. Interviewees noted that businesses generally avoid courts and that the first step in the dispute resolution process was "mutually agreed negotiation" (Interview 205 with businessperson 2014, Interview 014 with businessperson 2013). Even if businesses wanted to pursue dispute resolution through a court, interviewees noted that it was problematic for logistical reasons. Court cases in Myanmar face basic challenges, for example when some parties do not show up for the court date. If the defendant loses, they often do not have the money to pay and the court struggles to enforce the judgement. Though the court could seize assets and give them to creditors, in reality it is a time consuming and costly process (Interview 205 with businessperson 2014). The result is that "most of the time businesses just take the loss" (Interview 205 with businessperson 2014).

Another key market-supporting institution is the financial system, likewise a significant challenge for businesses in Myanmar. Country-level surveys frequently note that finance is a major obstacle to growth. For example, the World Bank's 2014 enterprise survey found it was the most significant obstacle for businesses in Myanmar (World Bank 2014a). This is largely the result of an underdeveloped financial system that faces a host of government restrictions which limits the ability of banks to lend and restricts the range of products they can offer. Many of the restrictions come from the Financial Institutions Law, including fixed interest rates of at least 8% on deposits and no more than 13% on loans, though in practice banks charge additional loan fees of 1-2% (Government of the Union of Myanmar 1990a, Interview 107 with financial institution 2013). Other restrictive measures include bans on lending directly to farmers, a maximum loan term of one year,[28] and requirements for all lending to be collateralized (Government of the Union of Myanmar 1990a). The last of these restrictions is notably onerous for private enterprise. While in theory banks can accept movable property, landed property, treasury bonds, crops, gold, and jewellery (stored at the bank) as collateral, in practice nearly all loans use land with buildings as collateral (Interview 105 with financial institution 2013). However, loan to forced sales value ratios are high, with

[28] While generally speaking loans are limited to one-year terms in Myanmar, there are a select group of specific loan programs that have legal terms greater than one year. Notably, the SME loan program administered by the SME Development Centre in conjunction with the Small and Medium Enterprise Development Bank offers terms of 3 years (Turnell 2014, 232) while the Myanmar Agricultural Development Bank offers a small loan program (of which there are less than 10 customers) to palm oil plantations with a term of 7 years (Interview 109 with financial institution 2013).

banks noting that they lend at 30% to 50% of the forced sales value (Interview 105 with financial institution 2013, Interview 106 with financial institution 2013, Interview 107 with financial institution 2013). Customers noted that they received loans with collateral valued between 10% and 50% of the forced sales value (Interview 108 with businessperson 2013, Interview 025 with businessperson 2013). Banks also face a range of prudential standards including:

- "A minimum capital adequacy ratio of 10 per cent of risk-weighted assets.
- A liquidity ratio (liquid assets to current liabilities) of a minimum of 20 per cent.
- A single borrower exposure limit of 10 per cent of capital and reserves.
- A general provision against bad and doubtful debts of 2 per cent of loan portfolio.
- A reserves-to-deposits ratio (in the form of cash and balances with the CBM) of 10 per cent.
- A minimum of K30 million of paid-up capital if engaged in both domestic and foreign exchange banking.
- A maximum 10 per cent equity holding in any non-financial institution.
- A capital-to-deposits ratio of 4 per cent" (Turnell 2014, 229).

The wide range of restrictions has reduced the incentives for banks to develop the internal capacity of financial institutions elsewhere, most notably the ability to assess risk. Decisions on extending credit are made even more challenging given the lack of a credit bureau in the country.

With the financial sector facing a plethora of challenges in the regulatory environment and with internal capacity, the sector struggles to provide finance to the private sector. In FY2011/12, the total loan portfolio of the banking sector accounted for under 38% of bank assets, with loans of 3.172 trillion kyat compared with assets of 8.352 trillion kyat. Credit to the private sector, as noted in Table 6.6, is a fraction of GDP. However, it has nearly quadrupled from FY2009/10 to FY2012/13, from 1,229 billion kyat to 4,880 billion kyat.

Table 6.6: Credit to the Private Sector, from FY2009/10 to FY2013/14 (in billion kyat)

FY2009/10	FY2010/11	FY2011/12	FY2012/13	FY2012/13 (Est.)	FY2013/14 (Proj.)
1,229	2,033	3,255	4,697	4,880	6,676

Source: International Monetary Fund. 2012. "Myanmar: 2013 Article IV Consultation and First Review Under the Staff-Monitored Program," Washington.

Lastly, the regulatory capacity of the state is relatively feeble, though this characteristic of the institutional framework often reduces the costs of compliance for businesses instead of increasing them. Inspections of businesses were not common outside of the licensing process and few interviewees perceived them as rigorous. One entrepreneur noted that the municipal inspections exist "just on paper" (Interview 008 with businessperson 2013). Another interviewee, in the health care field, noted that the Food and Drug Administration (FDA) comes for inspections with a team including FDA officials, the township medical officer (team head), and representatives of the township administrator's office, the police, the municipal authorities, and the fire department (Interview 018 with businessperson 2013). However, despite the team's significant manpower, most officials just stood around and watched the health officer (Interview 018 with businessperson 2013). Few other regulatory functions of the state were reported by interviewees, with the general emphasis being put on permissions to do business, not the actual execution of businesses operations.

6.5.5: Unfair Competition with SOEs

A final major challenge for private businesses is the widespread privilege afforded to SOEs, which significantly distorts competition and hinders private enterprise. There are a number of different types of state owned and state linked enterprises in Myanmar. The first of these are SOEs owned directly by Union ministries, and include enterprises such as the Myanma Timber Enterprise or the Myanmar Oil and Gas Enterprise. In some sectors, such as oil and gas, the SOE has a privileged monopolist position and does not compete with private businesses. In other sectors, notably manufacturing, there is direct competition between SOEs and private enterprises. According to the Ministry of Industry, which oversees the country's manufacturing SOEs, they produce a range of products including "pharmaceuticals & foodstuffs, textiles, ceramics, paper & chemical products, home utilities and construction materials" as well as "heavy industrial products such as assorted types of vehicles, earth-moving equipment, diesel engines, automotive parts, turbines & generators, CNC machines, transformers, solar-used products, agricultural machineries, rubber & tyres etc." (Ministry of Industry 2014). These enterprises largely have their roots in the socialist era, though may continue to function today. Military-linked companies are another major type of SOE, the two most prominent of which are the Myanmar Economic Holdings Limited (MEHL) and the Myanmar Economic Corporation (MEC). The last and least well known type of SOE are state-linked, privately registered companies whose shareholders are government officials or government entities.

While SOEs and other state-linked enterprises are not often accessible to researchers, an interview with a state-linked, privately registered company with government shareholders illustrated many ways in which private enterprises are disadvantaged by the privileges afforded to SOEs. The interviewed business was founded in the 1990s and registered as a private company, with initial funding from three stakeholders: the regional military command, the Union government, and the Union Solidarity and Development Party (USDP) (Interview 027 with businessperson 2013). The ownership has since shifted, with the regional military command and the USDP as the largest stakeholders, as well as the new regional government and some unidentified private shareholders (Interview 027 with businessperson 2013). One of the major benefits of this state-linked enterprise was access to government. Unlike other private enterprises in the industrial zone, it could "go directly to the State/Region government, bypassing the township and district" (Interview 027 with businessperson 2013). It also benefitted from preferential access to utilities, including a dedicated electric supply and a significant amount of Ministry-provided electrical equipment which did not necessitate a capital outlay by the SOE (Interview 027 with businessperson 2013). However, the company was subject to political pressures in its business activities. The interviewee noted that the company imported and sold cement at a government mandated price which was lower than private competitors, undercutting the market because of political dictates instead of commercial concerns (Interview 027 with businessperson 2013).

6.6: Negotiating the Weak but Unlimited State

Businesses in Myanmar adopt a range of mechanisms to compensate for Myanmar's weak but unlimited state, characterized by weak market-supporting institutions, poorly specified and vague laws, policy that is arbitrarily implemented, government officials who lack capacity and authority, and civil servants with a poor incentives and weak monitoring. In this environment, businesses regularly engage in bribery of civil servants, rely on relationships for many aspects of business to business and business to government relations, and use informal institutions to circumvent the weaknesses of the state. Businesses also use formal and quasi-governmental associations as channels for communicating with government and providers of public infrastructure substitutes. Despite the range of tools that firms use to compensate for the challenging institutional framework, they also adapt their commercial decisions based on institutional realities and forego some transactions and investments.

6.6.1: Bribery and Corruption

As discussed in the previous section, Myanmar's civil service is often characterized by weak monitoring mechanisms and misaligned incentives that encourage corruption among civil servants who find that the payoffs of illicit behaviour outweigh the risks of being caught. Given the weak nature of many state institutions, notably the judiciary, businesses often find that prosecuting civil servants for inappropriate behaviour is challenging. Therefore, they face few alternatives to bribery when engaging with some civil servants. While systemic data about the prevalence of bribery and corruption do not exist anywhere due to the intrinsically covert and illicit nature of the activity, interviewees noted that bribery was commonplace in Myanmar. As one businessperson said, "everything requires money to move along in Myanmar" (Interview 013 with businessperson 2013). Another businessperson echoed that sentiment: "if you have money, government constraints are not as bad" (Interview 015 with businessperson 2013).

Bribery is directly connected to a number of the previously noted institutional characteristics, including the lack of clarity about laws and processes. When discussing the licensing process, an entrepreneur noted that the lack of clarity "leads to lots of leeway and arbitrary implementation and therefore corruption" (Interview 202 with foreign consultant 2014). Uncertainty about the government's tax policies on accounting for US Dollar to Myanmar kyat exchange rates similarly facilitated corruption. The same firm noted that tax laws and codes were applied in some aspects of their tax filing but "as soon as there is room for interpretation, that's where the negotiation starts" (Interview 202 with foreign consultant 2014).

Bribery is also facilitated by the breadth of control granted to civil servants, the discretion to exercise their authority and the relative lack of recourse for private businesses. Often, civil servants encourage bribery by identifying and exploiting points of leverage in policies and processes where private enterprises have little recourse or few incentives to pursue them through the judiciary. This tactic was identified by numerous interviewees, often in relation to their dealings with the tax office. One technique that tax officers used to encourage bribery was to leave the tax filing of a business open, as firms could not renew their operating license until this filing had been closed (Interview 208 with foreign consultant 2014). One entrepreneur who experienced this stated: "they won't assess tax – they'll keep it (the tax filing) open until you pay them off" (Interview 208 with foreign consultant 2014). The link between tax filings and operating licenses gave tax officers additional leverage in their dealings with businesses, and the urgency of needing to renew the operating license encouraged firms to pay bribes instead of pursue other, slower means of resolution. Another example of exploiting points of leverage is the threat by tax officers to ‘calculate’ the taxes a business owes using the commercial tax rate of 5% on all revenue instead of net revenue after deductions for inputs (which is the official policy, assuming that appropriate documentation is submitted). An interviewee who experienced this noted that it was a just a “means to extract bribes” (Interview 010 with businessperson 2013).

Tax officers regularly have leverage in their dealings with private businesses, and consequently a wide range of interviewed enterprises reported that their taxes were ‘negotiated’ or necessitated bribery (Interview 008 with businessperson 2013, Interview 009 with businessperson 2013, Interview 013 with businessperson 2013, Interview 014 with businessperson 2013, Interview 015 with businessperson 2013, Interview 018 with businessperson 2013, Interview 024 with businessperson 2013). Notably, compliance varied based on the type of tax, with land and excise taxes being viewed as relatively less corrupt than either the income or commercial tax. The commercial tax was noted by one tax official as especially problematic because “the tax rate is high,” which leads to “lots of tax dodging” (Interview 004 with government official 2013). This difference is partially due to the relative size of the taxes, with commercial and income taxes being significantly more lucrative than land and excise taxes. The first two of these taxes generate 96% of Myanmar’s Union-level tax revenue (Interview 006 with government official 2013). Land taxes, however, are not indexed for inflation and have not been adjusted in 25 years, and therefore represent a very small portion of the country’s overall tax revenue. One business mentioned that their land tax on a parcel of approximately one acre of land was 100 kyat ($0.11) (Interview 015 with businessperson 2013). Businesses had the following to say about the commercial and income taxes:

- They could “get a discount on taxes paid to the IRD by bribing the revenue officer.
- You declare your commercial tax and then start negotiating (Interview 008 with businessperson 2013).
- The “revenue officer controls everything” and the business has little choice but to pay a bribe (Interview 018 with businessperson 2013).

- The tax office “just demands it” and the business has little recourse (Interview 015 with businessperson 2013).

While negotiations play an important role in determining the tax that a business pays, a number of other factors also influence negotiations. These include the amount of tax paid in previous years, the size of the business (for which a range of metrics are used) and the number of employees (Interview 008 with businessperson 2013, Interview 013 with businessperson 2013, Interview 015 with businessperson 2013). However, this did not necessarily mean that businesses of similar size in the same sector would face similar tax burdens. One business owner noted that rates could be vastly different, sometimes by a factor of three (Interview 016 with businessperson 2013).

Institutional economics offers a key insight into the prevalence of corruption in the Myanmar tax system. Some businesses testified that certain taxes, notably the income and commercial taxes administered by the IRD, were more corrupt than land and excise taxes or municipal fees (Interview 010 with businessperson 2013). Corruption in the income and commercial taxes is partly encouraged because the information needed to determine these taxes is private and difficult to verify. Land and excise taxes are simpler to verify – it is far easier to ascertain the size of a plot of land or whether a business serves alcohol than it is to determine the profit or loss of a business in the last financial year. In order to collect information, one IRD official even noted that they hired certified public accountants to do ‘field research’ on companies to assist them with commercial and income tax audits (Interview 006 with government official 2013). However, the lack of information encourages shirking by businesses and facilitates corruption by tax officers.

Similar points of leverage exist in Myanmar’s system of licensing and permissions, particularly due to the need for recommendation letters to operate in many sectors. One entrepreneur, in the hotels and tourism business, described his experience in detail. The first step was obtaining an operating license, which required recommendations from the fire and health departments, the township administrator, the police and the local ward/village, which are together submitted to the municipal office. Each recommendation required a bribe, from 5,000 kyat for the police to 200,000 kyat for the township administrator (Interview 013 with businessperson 2013). The application also required approvals from officials at the State/Region and Union level. In the entrepreneurs estimate, the license took 5 months to obtain and cost 1 million kyat, though only 20,000 kyat of that was ‘official’ (Interview 013 with businessperson 2013). The process required five inspections plus the prepayment of commercial and income taxes as well as social welfare taxes for employees (Interview 013 with businessperson 2013). The entrepreneur has little choice but to resort to bribery during this process, given the delays and associated costs that would result from non-payment. The process of acquiring land title was similar, requiring recommendations from a committee of officials including the township administrator, health and fire officials, a land measurement official, a housing official, and the township IRD, who are charged with evaluating the land price for taxation purposes (Interview 013 with businessperson 2013). In the entrepreneur's experience, the committee was offered a gift after which they lowered the assessed value of the land. Again, the entrepreneur was in a situation in which government officials held significant authority and had few incentives to execute their official duties properly without the payment of facilitation fees. Another business, which applied for and received a loan through a new government program that provides SME financing at a 'concessional' rate of 8.5% per annum, testified that he needed to pay a bribe of 250,000 kyat to receive the loan (Interview 016 with businessperson 2013, Interview 028 with businessperson 2013).

While bribery is important to move processes along in the lower levels of Myanmar's civil service, it is also indispensible when seeking licenses and permissions through Myanmar's hierarchical bureaucratic structure. In State/Region governments, the Chief Minister wields significant power and businesses "must pay bribes to him" even while they complain that he does little other than allow projects to proceed (Interview 001 with businessperson 2013). The interviewee cited one example in which a non-profit wanted to improve the city's water system but was forced to abandon the project because they could not obtain permission without paying a bribe to the Chief Minister (Interview 001 with businessperson 2013). While the country's decentralization has brought positive changes, it has also created a new set of officials who have authority and need to give consent for projects to move forward. The result, according to one interviewee, was that in present-day Myanmar there were "more people to pay off" (Interview 001 with businessperson 2013). At the same time, there is increasing talk of 'clean government,' which is increasing the risks of bribes and sometimes encouraging civil servants to ask for larger bribes (Interview 001 with businessperson 2013).

6.6.2: Relationships

Another important tool utilized by private sector businesses to negotiate the uncertainty and control of Myanmar's government is relationships, which is conceptually separate from but still closely linked with bribery and corruption.[29] Relationships play a key role in Myanmar in part because the lack of formal market-supporting institutions that facilitate transactions in Western countries force businesses to rely on relationships and trust to provide the information and security needed to facilitate these transactions. There are myriad ways in which businesses in Myanmar seek to establish and maintain personal networks. One of the most common of these is membership in a community or business organization or other social networking forum for community members. Some entrepreneurs use their expertise or another valuable aspect of their business to build relationships. One business in the IT sector noted that they offered free training to government staff as a means of improving their links with officials (Interview 009 with businessperson 2013). Relationships are also formed through shared previous experience, notably former places of employment including but not limited to state employment.

Relationships can help businesses reduce costs, increase the speed of public services, and provide access to new or privileged economic opportunities and information. They play an integral role in the success of a business. One interviewee went so far as to state that "because of networks, there are no problems doing business" (Interview 014 with businessperson 2013). Reducing costs for businesses is one of the key benefits of relationships. One entrepreneur said that businesses with good relations with the tax office faced lower tax bills, noting that "for those with good relations, they pay less. Those with bad relations pay more" (Interview 001 with businessperson 2013). It also helps firms to avoid government processes. For example, another business in the food and beverage industry that has been operating for three decades stated that their food products had not been tested by the FDA in years because they "had trust" with the government (Interview 012 with businessperson 2013). Relationships were also integral in expediting dealings with Myanmar's bureaucracy. Interviewees noted examples including one case where an entrepreneur wanted to change the title to a plot of land. The process took eight months, which the interviewee described as fast and noted that without connections and money the transfer process might have never ended (Interview 014 with businessperson 2013). Another entrepreneur, a former government official, obtained a company license from the MNPED in 10 days, far shorter than the time reported by other entrepreneurs and a fraction of the 72 days that the process took according

[29] Relationships play a similar and important role in many other countries, notably *guanxi* in China. However given the single country focus of this study, a cross-country comparison is beyond the scope of this thesis.

to the 2014 World Bank's Doing Business report (World Bank 2013a, Interview 016 with businessperson 2013). In the end, relationships can have an important effect on the experiences of foreign firms in Myanmar. According to one interviewee who worked with a range of companies interested in doing business in Myanmar, those who use a well-connected person who provides good service and has good connections can have a much better experience negotiating the rules and regulations of business than someone who uses a person that doesn't have the relationships (Interview 207 with foreign consultant 2014).

Relationships also provide access to economic opportunities and information that are not available publicly, a concept that is the cornerstone of cronyism and one which is evident across the economy. Relationships are essential to accessing the information needed to achieve business objectives. One entrepreneur noted that much of the needed information is "not in the paperwork" and went on to state "what goes on here, you have to figure out for yourself. Things have to be worked out through people and contacts" (Interview 203 with businessperson 2014). Another interviewee emphasized the importance of networks, noting that for his business, "95% of useful information is through relationship based networks" (Interview 204 with foreign consultant 2014). They also help businesses access lucrative economic opportunities. One interviewed business, in the timber industry, was owned and managed by a former Assistant Director at the Myanmar Timber Enterprise who moved into the timber extraction and trading businesses because of previous experience and the relationships needed to get licenses (Interview 104 with businessperson 2013). Another entrepreneur, in the services sector, was approached by a Minister's son who wanted to form a partnership and open a branch of the business in Nay Pyi Taw. The interviewee reported that his potential business partner said: "get me on board and we'll get all the government contracts" (Interview 209 with businessperson 2014).

Networks also play an essential role in building business to business connections, and serve as a key means of finding information as well as potential clients and suppliers. Relationships are vital for business to access informal finance, a significant source of capital but at an average of 3% interest per month, one that is more expensive than bank finance. Some businesses build relationships with wealthy individuals so they can access money when it is not available from the bank (Interview 205 with businessperson 2014). They also facilitate information transmission. One business, a member of an industry body, noted that at first the group was reluctant to give out information but "once you are friends, nothing becomes confidential and they'll tell you everything" (Interview 204 with foreign consultant 2014).

6.6.3: Commodity Trading Associations

Associations of businesses in Myanmar are common and have a variety of forms and functions, as well as a range of different relationships with the state. While some types of associations serve as mechanisms of state control or as quasi-governmental bodies, others exist largely through the responses of private entrepreneurs to the institutional environment. The shortcomings of formal, market-supporting institutions have incentivized businesses to use informal associations to facilitate transacting, leading to a range of organic, commodity trade-facilitating associations that exist independently from the state. In these associations, local merchants, traders, exporters, processors, and producers meet to exchange a range of agricultural commodities, including rice, sugar, and beans and pulses (Interview 101 with business association 2013). These associations perform a host of functions similar to those of state-based market-supporting institutions in Western countries, including information transmission (both reputational and price information), dispute resolution, and rules governing exchange.

Myanmar has a significant number of trading associations, with each focusing on one commodity in a regional economic centre. Associations dealing in a commodity, for example beans and pulses, will often have links with associations that deal in the same commodity in another locations, and often share members and information, especially on prices. However, each association remains organizationally distinct and decentralized. Some of the most well-established exchanges have long histories – the Beans and Pulses Association in Mandalay has been in existence for nearly 80 years (Interview 101 with business association 2013)(Interview 101 with business association 2013). Some exchanges even continued to operate during the Socialist era, when private commodity trading was illegal, though they facilitated exchange on a smaller scale and in private (Interview 101 with business association 2013). Unlike UMFCCI, which has strong links with the state, the commodity trading associations generally have no direct relationship with government at either the Union or the State/Region level (Interview 024 with businessperson 2013). Association representatives noted that their organizations are sometimes registered as religious associations and receive a license to organize from the township administrator (Interview 024 with businessperson 2013, Interview 100 with business association 2013).

The commodity trading associations interviewed are not closed-access but did have some membership criteria, which could serve as a barrier to entry to the sector. One association noted the following prerequisites for membership:

- Must be a property owner in the State/Region;
- Must have a recommendation from the police;
- Must present household list (Interview 024 with businessperson 2013).

Another association noted that they also had barriers to entry, which included:

- Must be a property owner or be able to prove that you have facilities under lease;
- Joining fee of 800,000 kyat plus an annual membership fee of 30,000 kyat (Interview 101 with business association 2013).

Notably, representatives from the second association said that while it was useful for businesses to have a government operating license, it was comparatively less important as a criterion for membership (Interview 101 with business association 2013). While association membership was not a legal requirement in order to trade in a particular commodity, entrepreneurs who did business outside of the association lacked the security that the associations provided (Interview 101 with business association 2013). While barriers to entry can reduce competition, membership in these associations also serves as an information transmission mechanism that tells buyers and sellers that their potential transacting partner is a community member of good standing that has been screened by the association leadership. Membership as a mechanism to transmit reputational information is largely analogous to that employed in medieval trade fairs, as discussed in Milgrom, North and Weingast (1990). This information transmission is essential as trading is based on trust, and if a member acquires a bad reputation, few others will do business with him/her (Interview 100 with business association 2013).

The core purpose of the associations is to facilitate trading and encourage transactions that might not otherwise happen. The physical centre of most of the associations is a large, open space with tables where buyers and sellers meet to trade, referred to as the trading floor (Interview 024 with businessperson 2013, Interview 100 with business association 2013, Interview 101 with business association 2013). Associations commonly collect price information, such as the minimum and maximum price of each type of beans and pulses sold, which are displayed to the membership and transmitted to other trading floors (Interview 101 with business association 2013). The market is "quite open" according to one trader, with another noting that the association has no role in price setting and instead lets buyers and sellers determine prices (Interview 101 with business association 2013, Interview 102 with businessperson 2014). Transactions are agreed and contracts are drawn up, but fulfilled offsite at a date in the future, normally no more than 1 month after the transaction is agreed (Interview 101 with business association 2013, Interview 102 with businessperson 2014). An interviewee who is a member of a beans and pulses exchange and often handles contracting noted that contracts are bilateral between the buyer and seller, and contain basic information such as the product, crop year, quantity, price and delivery terms (Interview 102 with businessperson 2014). Members do not have to file copies of the contracts with the association.

Membership in the association and access to the trading floor requires that members obey a number of rules and regulations that govern transacting. In one association, members were allowed to send only one representative to the floor at a time, to keep larger firms from gaining an overwhelming advantage in the trade (Interview 102 with businessperson 2014). Sellers place offers, which included the type of commodity, price, and quantity, on a public board that is viewed by potential buyers. Once an offer is placed on the board, it is binding and available to all members of the association until either the seller removes the offer (often done because of changes in price) or a buyer agrees to purchase the offered commodity (Interview 102 with businessperson 2014). If a buyer makes a bid on a valid offer on the board, the seller cannot reject it for any reason, including on the basis of price or the identity of the buyer (Interview 102 with businessperson 2014).

The last major role of the associations is dispute resolution. As multiple interviewees noted, the role of the associations is not to adjudicate disputes along Western legal lines, but to act as a mediator in an attempt to help the parties reach an amicable settlement (Interview 102 with businessperson 2014, Interview 100 with business association 2013). One interviewee said that dispute resolution is generally initiated by members who submit the case to the association (Interview 100 with business association 2013). For example, in one dispute a local company defaulted on a contract to deliver 'product A' to a buyer, so the association facilitated a mediation process in which the seller delivered ‘product B’ to the buyer instead, helping the buyer to recoup some of his expenses (Interview 102 with businessperson 2014).

6.6.4: Business Associations and Committees

Businesses sometimes join state-linked or independent associations and committees. These groups have two main functions: to serve as interlocutor between businesses and the state and to provide services that the government does not. Sometimes, associations exhibit characteristics of control as well as service delivery. Some examples of these groups were state-controlled in previous eras, for example the Industrial Zone Management Committees (IZMC) that oversee Myanmar’s 18 Industrial Zones (IZ). Under the previous government, IZMCs were formally a part of the Ministry of Industry and served as the conduit through which businesses in IZs would access government (Interview 028 with businessperson 2013). Under the new regime, the leadership of IZMCs was devolved to entrepreneurs in the IZ, thought the IZMCs continue to play an important, semi-governmental role. For example, some IZMCs “give recommendations so industrial zone members can access services” (Interview 026 with businessperson 2013). Others coordinate between government and businesses to expedite service delivery, such as electricity (Interview 026 with businessperson 2013). They also help facilitate communication between the two parties about infrastructure (Interview 029 with businessperson 2013). Sometimes the IZMCs serve as a communal provider of public good substitutes such as infrastructure. One IZ visited during the course of the research was facing regular power shortage, so the IZMC used membership fees to purchase and install a new transformer (Interview 026 with businessperson 2013).

Another important type of business association is the chambers of commerce and industry, which exist at both the Union and State/Region levels. These incarnations of the chambers trace their history back to the early days of the military government’s rule, when the UMFCCI was started at the behest of the Ministry of Commerce. The leaderships of these organizations are entrepreneurs who previously were appointed by the government, though some of the chambers have begun holding leadership elections since 2011 (Interview 110 with business association 2013). Interviews with two UMFCCI sub-associations at the State/Region level indicate that they also serve as conduits between government and businesses, through services such as helping members get identification cards needed for border trading or providing recommendation letters that help businesses obtain a license to conduct border trading or trade license-free using a special SME trading permit (Interview

103 with business association 2013). One association also noted that they provide other services to members, such as occasional training courses and recommendation letters to help members obtain visas to visit Thailand (Interview 103 with business association 2013).

6.6.5: Changes in Decision-Making

While relationships and bribery help firms manage their interactions with government, the institutional framework still influences their commercial decisions, dissuading firms from investments or transactions that they may find profitable under a different institutional framework. One of the most significant deterrents is the lack of investment security because of the poor state of the judicial system, which increases risk and results in less private sector investment. One interviewee noted that, while they wanted to invest in their business and improve their premises, uncertainty about property rights discouraged them (Interview 209 with businessperson 2014). Another major challenge for firms is investment in public capital substitutes, outlays which divert resources for productive investment and the development of new products while resulting in higher prices (Interview 029 with businessperson 2013). Sometimes businesses opt to knowingly engage in illegal activity because operating in accordance with the laws is either not possible or too costly. For example, traders in Myanmar often partner with armed ethnic groups to trade through illegal border crossings (Interview 001 with businessperson 2013). This creates challenges for businesses that import through the formal government system, who complain that they are at an unfair disadvantage because some of their competitors do not pay the required taxes and duties (Interview 010 with businessperson 2013). Lastly, the challenge of dealing with government officials dissuades some businesses from transacting with the state. One interviewee that works with SMEs noted that when there is some scope for interpretation in a government tender, “SMEs are afraid that government officials will try to pay them a lower price based on some technicality unless they get a bribe” (Interview 210 with foreign consultant 2014). This discourages some businesses from bidding on tenders, resulting in less competition and higher prices for government procurement.

Another way in which institutions change returns to economic activity is through raising the costs of interacting with government while simultaneously increasing risk and uncertainty. This deters investment and reduces the likelihood of businesses taking on new clients. By limiting access to certain markets, formal laws and rules reduce competition, which can result in lower firm-level productivity, oligopoly pricing, and lower levels of economy-wide output.

Lastly, they distort price signals. In more developed market economies, prices better reflect changes in supply and demand in a comparatively more stable institutional environment. In Myanmar prices reflect changes in supply and demand as well as variations in institutional enforcement and their resulting market distortions, e.g. scarcity rents. These distortions exacerbate misallocations of labour and capital and incentivize different organizations to enter the market and engage in economic activity. In sum, Myanmar's unfettered state and its weak and inconsistent economic institutions are a major determinant of economic performance both at the firm and country level.

6.7: Conclusion

While Myanmar's new government has overseen the passage of numerous new laws, the creation of new power centres, and a number of other economic reforms, many of the government institutions and formal laws from the previous era remain in force and continue to shape the economic activities of businesses. Among the most central aspects of Myanmar's economic institutions is the widespread authority of the Union government. The economic authority of the Union is preeminent, while both the individual and the lower levels of government are secondary. The unequal distributions of governing authority have been identified in the academic literature as directly linked to economic outcomes. Specifically, the distribution of authority in a federal system can restrict economic policy by creating limits on the discretion of government to interfere with markets (Tiebout 1956, Weingast 1995). The Union government exercises its unparalleled authority by controlling the economy and its participants in a number of ways, including through the arbitrary and often preferential licensing of businesses, granting of concessions, and permissions to operate.

While the formal rules espouse the principle of Union control, the reality of the institutional framework is inconsistency, unpredictability and the arbitrary application of the law. These characteristics are evidence not of 'weak institutions,' but are integral characteristics of the economic institutional framework in their own right and constitute a key part of the incentive and constraint structure that shape business outcomes and decision making. Businesses respond to these institutions using a variety of tools, including bribery, corruption, relationships, and membership in a range of non-state and state-linked associations. They also alter business decision-making on investment, transactions, trading partners and other commercial areas. The role of the state in the market in Myanmar draws attention to the fundamental viability of the country's quasi-market system and its ability to facilitate growth. State control transforms Myanmar's version of capitalism into one that is decidedly un-Schumpeterian, lacking in the creative destruction characteristic of economic development and structural transformation in many other countries.

Chapter 7: A Quantitative Analysis of Institutions, Businesses, and Performance

7.1: Introduction

Myanmar's institutional framework has a significant effect on market-based exchange, and changes the way that businesses organize and act in the business environment. Previous chapters have reviewed the historical evolution of these institutions, the major institutions in Myanmar's present-day economy, and the way in which these institutions affect the behaviour and performance of businesses. Given the widespread shortage of information about the private sector, much of the analysis to this point has relied on qualitative interviews from entrepreneurs and government officials about their institutional experiences. But what do these experiences say about the broader challenges faced by entrepreneurs in Myanmar? Which institutions are most significant for businesses, and for what types of businesses are different institutions significant? This chapter aims to explore these questions by using primary data collected in a survey of entrepreneurs conducted in 2012.

Single country studies are a minority in the econometric literature. They are generally avoided because of the comparatively small size of data sets. However, the benefit of single country studies is their focus on within-country heterogeneity, which produces results with far more applicability. A finding that electricity is the most statistically significant constraint to growth across a study of 11,000 firms in 141 countries has little policy relevance for any individual firm or country. A finding that electricity is the most statistically significant constraint to growth in Myanmar, and is a greater constraint among small firms and manufacturers, is much more relevant. Another challenge in the cross-country literature, though one that is easily controlled for, is the within-country correlation of firm responses. This is one of the most important sources of bias in this body of literature, though it is not an issue for single country studies (De Rosa, Gooroochurn, and Gorg 2010, 13). However, the econometric models in this study are similar to those in most of the rest of the literature. They use some measure of the firm or its performance (sales, full-time employees, sales growth, or employment growth) as the dependent variable. The main independent variable of interest is one or more institutional perceptions or experience variable. Regressions also include a range of controls variables that are common in the literature, including firm size, export status, managerial experience, firm age, and the sector of the firm's main operations. Some variables often included in the literature, such as firm ownership status, have been omitted not because they lack relevance but because the data was not rich enough to include them. In this data set, 149 of 153 firms were owned by private Myanmar individuals, and therefore the data cannot make any meaningful contribution towards important strands in the literature, such as the relative efficiency of private and public owned firms. (Netter and Megginson 2001, 46). Overall, we find that institutional variables are sometimes though not often associated with firm size and performance. Generally, other characteristics of the firm, especially labour, capital, and firm age are more significant determinants of firm performance.

This chapter is structured as follows. The first section reviews the descriptive statistics from the survey. It starts with an overview of firm characteristics, most of which are employed in the regression analysis in latter sections of the chapter. It then reviews descriptive statistics on the perceptions and experience-based institutional variables, and concludes with a brief review of the descriptive statistics about firm size and performance, which are used as the dependent variables in the regression analysis. The second section explores the econometric strategy in more detail, noting a number of caveats and challenges encountered when working with a relatively noisy, small data set. It also includes detailed tables of all variables used and the correlation tables for the independent variables. The third section details the regression models using measures of firm size as the dependent variables, and reviews the results of these. The fourth section details the regression models using growth figures as the dependent variables and reviews those results. The chapter concludes with a brief summary of the findings from the econometric analysis.

7.2: Summary Statistics

7.2.1: Firm Characteristics

The data set used in this thesis consists of responses from 153 Myanmar firms, 147 of which were from Yangon and 6 from Mandalay. Surveyed firms were relatively young, with the mean length of operation reported at just less than 11 years. A large majority of firms, nearly 95%, were founded after the formal abolition of the socialist economic system and the rise of the military junta in 1988 (see Table 7.1 for details). This is unsurprising, since private enterprise in many sectors was banned during the socialist era. There was little difference between the year a business started operating and the year that it registered. Over 80% of firms registered in the same year their operations started, while one third of the remaining firms registered in the subsequent year.

Table 7.1: Year of Founding of Sampled Firms

Decade Founded	Number	Percentage
1940s	1	0.7%
1950s	0	0%
1960s	0	0%
1970s	2	1.3%
1980s	9	5.9%
1990s	45	29.6%
2000s	71	46.7%
2010s	24	15.8%

Among the surveyed firms, there were a large number of businesses in both the manufacturing and retail & trade sectors. Unlike a World Bank enterprise survey, the sampling methodology did not assign weights to selected sectors, and therefore the distribution of respondent businesses is largely representative of the entire sample frame. However, previously mentioned characteristics of the sample frame limit accurate comparisons with the entire population of businesses in Myanmar. Among the sampled businesses, wholesale trade (ISIC codes 45-46, which includes importers and exporters) was the most common line of business, cited by 61 of 153 firms. When combined with retail (ISIC code 47), these businesses comprised nearly 43% of the total surveyed businesses. Manufacturing accounted for nearly 35% of survey respondents. Construction, primary industries, and service companies were the remaining categories of businesses, and have been grouped together for analytical purposes as the third 'sector' (see Table 7.2 for details). Notably, average turnover at trading firms was three times that of manufacturers, though the later had average employment nearly three times that of traders. The survey shows that there are a plethora of small manufacturers in Myanmar.

Table 7.2: Main Sector of Operations of Sampled Firms

Sectors	ISIC Code	Number of Firms	Percentage	Sector Grouping
Primary Industries	1-9	14	9.2%	3
Manufacturing	10-33	53	34.9%	1
Construction	41-43	11	7.2%	3
Trade & Retail	45-47	65	42.7%	2
Health, Education, and Other Services	59, 79, 82, 85-87	9	5.9%	3

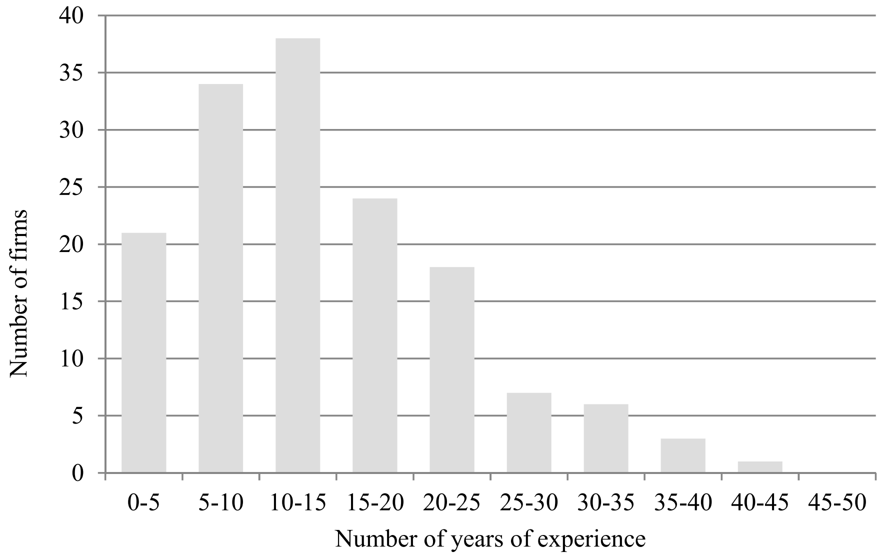
While the origin of ownership (foreign or domestic) is a common area of investigation in firm-level analysis, the vast majority of sampled firms (97%, or 148 of 152) were Myanmar owned. Nearly two thirds of these businesses were sole proprietorships, while the rest were comprised mostly of partnerships and private limited liability companies. Firms were also asked about the competitiveness of their sectors, estimated by the number of competing businesses. Given the lack of available market information, most businesses were not able to provide exact answers though they did make estimates, detailed in Table 7.3.

Table 7.3: Estimated Number of Competitors

Estimated Number of Competitors	Number of Firms	Percentage
0-9	53	36.6%
10-49	47	32.4%
50-99	18	12.4%
100+	27	18.6%

The literature commonly investigates the importance of managerial characteristics for firm performance, with one of the most important measures being the number of years of experience. Among sampled firms, managers had an average of almost 13 years of experience in their industry. However, few respondents – only one in eight – had more than 25 years of experience. The distribution of managerial experience is shown in Chart 7.1.

Chart 7.1: Number of Years of Managerial Experience



Data was collected on a range of other characteristics of the top manager. Prior work experience in the civil service was not uncommon, with 17.7% of managers reporting having worked for the Myanmar government. Women occupied the top management position in 27% of firms surveyed.[30] Notably, these firms were not significantly different from firms managed by men in either total number of employees or total annual sales. The average female-managed firm tended to employ somewhat more workers (87 vs. 62 employees) and have higher sales than those managed by men. However these figures are skewed by a small number of female-managed firms that employ a large numbers of workers. The median female managed firm employed 12 people, whereas the median male managed firm employed 20. Female-managed firms were larger when measured by both the mean and median of sales. Approximately 75% (115 of 153) of managers held a university degree, with the majority of those coming from universities in Myanmar. However, 14% of managers had an overseas university degree. This, however, had little effect on firm performance: sales were 27% lower than the mean, though 10% higher than the median.

Firms were asked about a number of other business attributes in a series of questions that provide useful proxies in the econometric analysis for unobservable firm characteristics. The use of computers in the sales or production process, a proxy for firm sophistication, was not common and adopted in less than two of five interviewed businesses. Just over one in five

[30] Many businesses in Myanmar are family-owned and managed, and therefore often unable to identify whether the primary owner or manager is male or female.

businesses produced a product designed in-house, a proxy for firm-level innovation. Fewer than 10% of businesses held an ISO or some other type of internationally recognized certification.[31] Nearly 40% of businesses used the personal property of the owner for business purposes. Table 7.4 provides the complete list of firm attributes and frequency among surveyed businesses.

Table 7.4: Other Firm Characteristics

Attribute	Number of Firms	Percentage
Use Computers in Sales or Production	58	38.2%
Produces Products of the Company's Own Design	32	21.1%
Has an ISO or other certification	13	9.6%
Part of a conglomerate or larger company	16	10.5%
Privatized in the last 3 years	7	4.6%
Competes with unregistered firms	45	29.6%
Buys from unregistered firms	16	10.6%
Involves the personal property of the business owner	60	39.5%

Trading activity, especially exporting, is regularly cited in the literature as a corollary for firm-level sophistication. Of the firms surveyed in this study, just over 30% exported over the last year. Firms were most likely to export if they operated in primary industries (agriculture and raw materials), though over a third of manufacturers also reported that they exported some or all of their output. Importing was very common among surveyed businesses, with nearly 2/3 reporting some imports over the last year. Table 7.5 shows the total number and percentage of importers and exporters, broken down by sector.

Table 7.5: Importers and Exporters, by sector

	Number of Exporters	Percentage	Number of Importers	Percentage
Primary Industries	7	58.33%	4	30.77%
Manufacturing	19	36.54%	32	61.54%
Construction	0	0.00%	7	63.64%
Trade & Retail	16	25.00%	46	73.02%
Health, Education, and Other Services	2	28.57%	5	71.43%
Total	44	30.14%	94	64.38%

[31] This, however, may be an issue of supply, as according to an expert from IGC Myanmar, there is a lack of firms that certify quality of products.

7.2.2: Institutional and Investment Climate Perceptions

The survey contained two different types of metrics to assess the institutional and investment climate: perceptions-based subjective assessments and information on institutionally linked experiences of firms. Perceptions measures covered 23 different aspects of the investment climate, including institutions, infrastructure, finance, and the macroeconomy (listed in Table 7.6). Many of these are similar to the core questions in a World Bank enterprise survey, though a number were included specifically for the context of Myanmar.

Table 7.6: List of Business Environment Factors

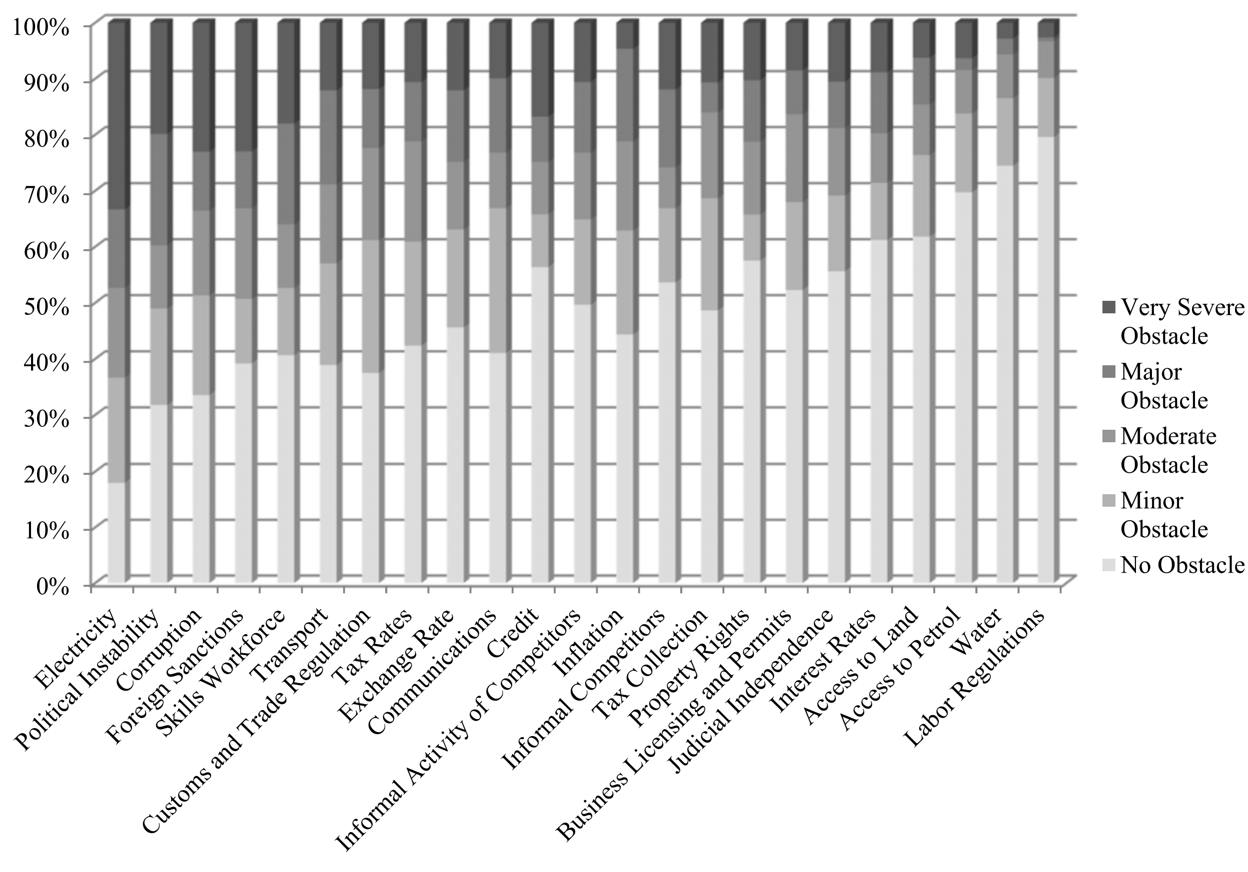
Access to Land	Business Licensing & Permits	Credit
Access to petrol	Customs and Trade Regulation	Exchange Rate
Communications	Judicial Independence	Foreign Sanctions
Electricity	Labour Regulations	Inflation
Transport	Informal Activities of Registered Competitors	Interest Rates
Water	Informal Competitors	Political Instability
Tax Rates	Skills of Workforce	Property Rights
Corruption	Tax Collection Process	

Firms were first asked to rate each factor on a scale from 0 to 4 as an assessment of the significance of each obstacle. The rating scale was as follows:

- No Obstacles: 0
- Minor Obstacle: 1
- Moderate Obstacle: 2
- Major Obstacle: 3
- Very Severe Obstacle: 4

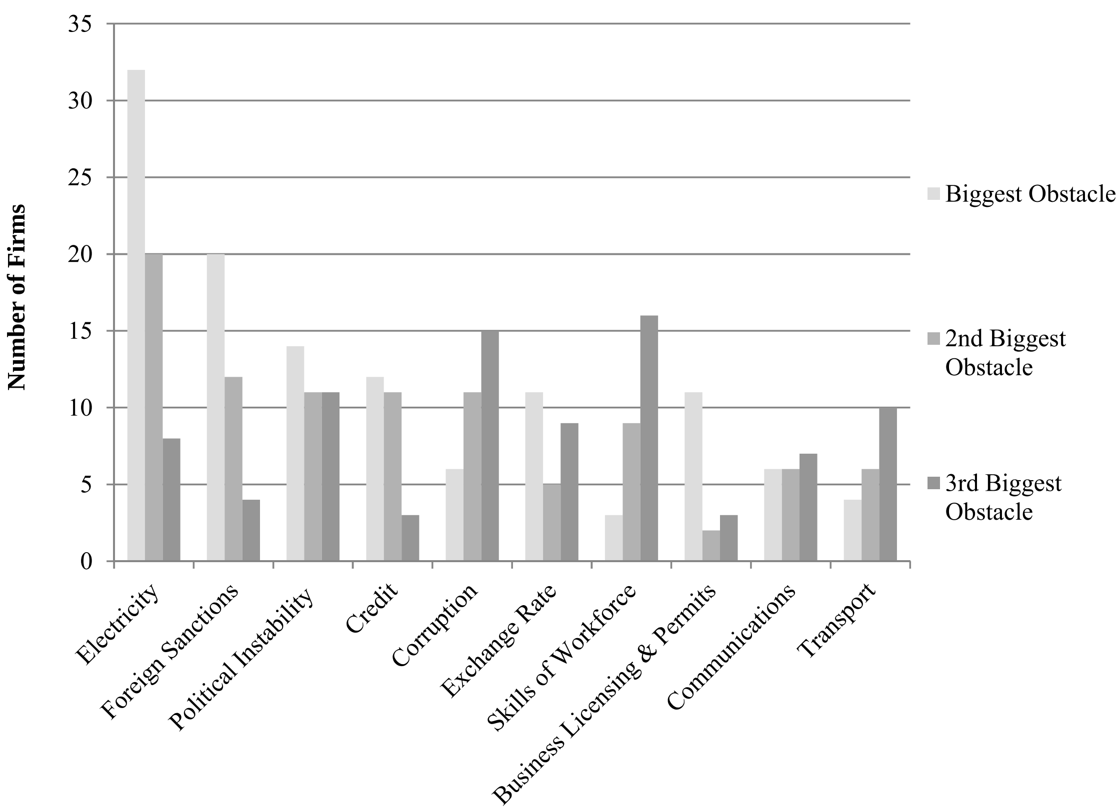
The obstacle that was most frequently cited as a ‘significant’ obstacle for firms was electricity, with over 47% of firms listing it as a major or very severe obstacle. It is noteworthy that the survey happened at a time which may have increased the number of firms citing electricity as a major obstacle. First, the survey commenced in April, the hottest month of the year in Myanmar and in a season when hydroelectric power generation (on which the country is heavily dependent) is at its lowest while demand is at its highest. Further, demand for electricity has increased significantly in recent years because of the increase in home appliance and air conditioner use. Lastly, relatively visible protests occurred in May 2012 in Yangon and other cities in Myanmar, protesting the lack of electricity. The visibility of these protests may have influenced respondents. The next highest rated obstacle was political instability, which just under 40% of firms cited as a major or very severe obstacle. Corruption, foreign sanctions, and skills of the workforce were also among the most cited obstacles. Judicial independence is often cited in anecdotal evidence as a significant obstacle to doing business, however it was not regularly cited as such in the survey. There was, however, a significant cadre of non-respondents, 20 out of 153, which was far larger than any other characteristic. These firms selected 'does not apply,' with some firms elaborated that they would not consider – under any circumstances – attempting to resolve disputes using the courts. This has the potential to significantly skew data on the actual quality of the judiciary. If all non-responses were taken to mean that judicial independence was a 'very severe obstacle' it would have ranked in the upper third of the ranked factors. Labour regulations were least regularly cited as a 'major' or 'very severe obstacle,' noted as such by only 5 of 152 firms. However, these results likely reflect the enforcement characteristics of labour regulations as opposed to the *de jure* regulations. Water, access to land and access to petrol were also among the least severe obstacles. Perceptions assessments are detailed in Chart 7.2.

Chart 7.2: Perceptions-based Firm Assessments of Investment Climate Obstacles



The second set of perceptions-based questions asked firms to rank the top three obstacles to doing business, selecting from the set of investment climate obstacles presented in the prior section. As in the first assessment, electricity was most frequently cited as the greatest and second greatest obstacle to doing business, with 32 and 20 firms respectively. Notably, firms listing electricity as the biggest obstacle did not appear to be significantly different from the overall sample in terms of annual sales. This finding that smaller firms do not perceive a disproportionate disadvantage from poor public goods and services, though based on limited evidence, runs contrary to the literature which finds that smaller firms are harder hit by these shortcomings. However, data on firm experiences may yield different results. Foreign sanctions were cited as the greatest challenge by 20 firms, the second most frequent response after electricity. Political instability was cited by 14 firms as the largest obstacle, with credit cited by 12. Notably, credit appeared far higher on the comparative ranking than it did in the previous assessments, while most other factors, including electricity, foreign sanctions, corruption, and political instability, were among the most challenging obstacles in both metrics (see Chart 7.3).

Chart 7.3: Subjective Firm Rankings of Top 3 Investment Climate Obstacles



7.2.3: Institutional and Investment Climate Experiences

Firms were also asked to provide objective, experience-based assessments of Myanmar's economic institutions and investment climate. This included inquiries about the financial and banking habits of firms. Firms were first asked what type of internal financial records were kept, with over 90% noting that they kept either complete formal balance sheets or some system of simplified accounts (see Table 7.7 for a complete breakdown). Very few firms kept no records at all. It was not possible to assess the quality of records in this survey, though many firms noted in interviews that transactions are sometimes not recorded, for tax or other reasons, with some businesses keeping two sets of records – 'official' and 'unofficial'.

Table 7.7: Type of Financial Records Kept

	Number of Firms	Percentage
Complete Balance Sheet	72	47.1%
Simplified Accounts	68	44.4%
Informal Records	9	5.9%
No Records	3	2.0%

The vast majority of responding firms (127 of 141) used the formal banking system, though about 48% of the 'banked' firms said they used the banking system one time per week or less. On average, firms used the bank 5.65 times per week, though these numbers may not be reflect the entire population of firms in Myanmar because of this survey's high concentration of trading firms (who use the formal financial system to obtain documents needed to conduct their trading activities). Just over 1/3 of surveyed firms (52 out of 152) responded that they had a loan, with the majority (30 of 52) sourced from a private commercial bank. Loans from government placed second, cited by 12 of 52 firms. Family and friends were cited as the third most common source of a loan, cited by 11 of 52 firms. Only 2 firms cited moneylenders as the source of their loan and no business cited an association or other source.[32] Collateral was required for the vast majority of firms (43 of 52) with all but three using land and buildings as collateral. Nine loans were uncollateralized, but these were all sourced informally from family and friends.

[32] Note that a few firms indicated loans from more than one source, with a total of 55 responses from the 52 businesses.

Another metric of the country's economic institutions is the time and financial costs for firms to obtain operating and import licenses and deal with customs. As illustrated in previous chapters, licensing is an important prerequisite for entering many sectors in Myanmar, though the costs of obtaining these licenses vary significantly. The minimum cost reported in the survey to obtain an operating license was 10,000 kyat (approximately US $11), while the maximum cost was 20 million kyat (US $23,500). The most regularly cited amount paid for an operating license was 1 million kyat (US $1,170). The cost of obtaining an import license varied even more significantly, from a low of 10,000 kyat (approximately US $11) to a maximum cost was 50 million kyat (US $58,820). The most commonly cited amount paid for an import license was 1 million kyat (US $1,170). Figures for both types of licenses include agent fees, which are commonly paid in Myanmar to expedite the licensing process. It is important to note that figures obtained for the cost of an import license pertain to the most recent consignment, and that firms importing multiple consignments must pay fees for each license. This means that the total annual cost of import licenses may be significantly higher for frequent imports. Summary statistics for the costs of operating and import licenses are noted in Table 7.8.

Table 7.8: Cost of Licenses, in million kyat

	Mean	Median	Mode	Minimum	Maximum	n
Cost of an Operating License	1.34	1.00	1.00	0.01	20.00	126
Cost of an Import License	2.81	0.70	1.00	0.01	50.00	69

Firms were also asked how many working days were lost due to delays in obtaining an operating license or in dealing with customs. On both measures, the majority of firms reported no delays, however the distributions were very right-skewed. The longest delay for an operating license was one year (365 days), reported by a firm which was unable to obtain an operating license for their activities for the entire FY2011/12. The longest delay in customs reported by a firm was 60 days. Summary statistics are noted in Table 7.9.

Table 7.9: Days Lost Due to Licensing and Customs

	Mean	Minimum	Maximum	Number reporting delays	n
Days Lost Due to Operating License Delays	5.99	0	365	22	147
Days Lost Due to Customs Delays	5.90	0	60	40	120

Labour regulations are another important institutional consideration for firms, and can be proxied by the share of workers at a business that are part time or daily wage workers. One third of firms (51 of 152) reported employing part time or daily wage workers in the most recent fiscal year. Twenty eight of the 152 firms had between one and nineteen part time or daily wage employees, seventeen had 20-99 employees and six had 100 or more. The total number of part time and daily employees at firms ranged from 1 to 1,000. While these workers were often manual labourers, some firms hired highly skilled specialists (for example, accountants) on an as-needed basis. Despite these employment engagements usually having no formal contract or work arrangements, only one firm noted that the average length of employment was only one day. Many casual employees worked the equivalent of full-time hours, however may not be afforded the protections or benefits of full-time staff. Lastly, firms were asked about their tax burden, which they reported as a percentage of their total annual expenses. The tax burden ranged from 0% to 80% of total expenses.[33] The average tax burden for firms was approximately 10.5% of total expenses, while the median burden was 10%, suggesting that tax levels are significant though not outsize.

7.2.4: Firm Size and Performance

Firms were asked a series of questions about different aspects of their performance, including total annual sales, sales three years ago, total number of employees, employees three years ago, total capital and capital three years ago. These metrics serve as the dependent variables in the regression analysis later in the chapter. One of the most useful of these metrics, and also one of the most sensitive, is total annual sales. In the survey, firms were first asked to select one of four categories into which total sales fell, results of which are in Table. 7.10. This was done to attain a useful measurement of sales despite the sensitivity of the question. Among the given categories, the most frequently cited was annual sales between 100 million and 1 billion kyat ($117,750 and $1.175 million).

[33] A firm response that their tax burden was 0% of expenses does not necessarily indicate that the firm was dodging taxes, though this is a possibility. Under the Myanmar Citizen's Investment Law and the Foreign Investment Law, firms can apply for and receive a tax holiday. Until 2012, this tax holiday was three years, but increased to five years with the passage of updated versions of these laws.

Table 7.10: Total Annual Sales in 2012

Amount of sales	Number of Firms	Percentage
Less than 10 million kyat ($11,750)	13	9.4%
From 10 and 100 million kyat ($11,750 to $117,500)	33	23.9%
From 100 million and 1 billion kyat ($117,500 to $1,175,000)	54	39.1%
Over 1 billion kyat (Over $1,175,000)	36	26.1%

Firms were then asked to specify their total annual sales. The average of all firms was 1.02 billion kyat per year ($1.2 million), though this figure was influenced by a small number of firms with very high sales. The median firm reported annual sales of 192 million kyat ($226,000 US). Out of 153 firms, 35 did not respond to the inquiry about total annual sales, likely due to the sensitivity of the question. Firms were also asked about their total annual expenses, including all raw materials purchased for production and finished goods for resale. Expenses varied significantly, from 170,000 kyat to 12 billion kyat per year ($200 to $14.1 million). Data on the distribution of sales and expenses are detailed in Table 7.11.

Table 7.11: Total Annual Sales and Expenses in 2012, in million kyat

	Number of Firms	Mean	Minimum	25%	50%	75%	Maximum
Sales	118	1,020	0	50	192	1,000	13,000
Expenses	125	628	1.7	22	100	648	12,000

Another major metric of firm size was the total number of full time employees. Among the 153 firms surveyed (all of which provided a number of employees), the average number of employees was 68.6, though this figure was influenced by a small number of large firms (5 of which had more than 500 employees and 2 of which had over 1,000). The median firm surveyed had 15 employees. When using the World Bank's definition of micro, small, medium and large enterprises, we find that the majority of firms are clustered at the lower end of the scale. Small firms made up 41% of the total surveyed, and when combined with micro enterprises, we find that over 50% of the firms surveyed had under 20 employees. Medium sized firms represented about a third of the sample and large firms under one sixth. Manufacturing firms had a larger average numbers of employees than trading firms, with a mean of 105 employees and a median of 20 employees. Trading firms had a mean of 38 employees and a median of 14 employees. Notably, there are a large number of relatively small manufacturing firms operating in Myanmar at present, which likely lack economies of scale and modern equipment. The distribution of firms by number of full time employees is included in Table 7.12.

Table 7.12: Firm Size in 2012, by number of full time employees

Classification	Number of Full Time Employees	Number of Firms
Micro Enterprise	1-4	15
Small Enterprise	5-19	63
Medium Enterprise	20-99	50
Large Enterprise	100+	25

The third metric of firm size was the total market value of capital owned by firms, which varied widely across the sample. The median firm had total capital valued at 340 million kyat ($400,000), while the average was 1.59 billion kyat ($1.875 million). The largest firm had capital valued at 51.9 billion kyat ($61.1 million) (see Table 7.13 for these statistics). Nine firms (6%) responded that they did not own any capital. Among all firms interviewed, the majority of capital was invested in land and buildings, followed closely by production or sales machinery/equipment.

Table 7.13: Capital Ownership in 2012, in million kyat

	Number of Firms	Mean	Median	Maximum
Production or Sales Machinery/Equipment	72	633	0	45,900
Land & Buildings	118	928	165	51,500
Vehicles	102	74	24	2,000
IT & Communications Equipment	115	11	0.25	409

Growth in the number of full time permanent employees was one of the key performance measures used in the analysis. To obtain a rate of change in staffing levels, firms were asked how many full time permanent employees worked for the business at the end of FY2008/09 (132 provided an answer, while 21 reported either ‘not applicable’ or having 0 employees). Among firms in existence continually over the last three years, the mean number of employees has decreased marginally, by 3.5%, though the median firm size has dropped from 30 to 15 employees (driven largely by the entrance of a large number of new, small firms into the marketplace). There has been marked employment growth of nearly 23% in the manufacturing sector, a compound annual growth rate of over 7%.[34] Firms in other sectors, notably construction and trading, have both seen a reduction in the average number of employees. The decrease in the number of full-time employees at trading firms is especially notable given the growth in official trade statistics over the time period in question. Of course there are many things that could explain this, including growth in the number of trading firms and growth in the use of day labourers or casual workers. Table 7.14 shows the change in employment among surveyed firms, in total and disaggregated by sector.

Table 7.14: Change in Number of Employees over time

	Number of Firms		FT Employees (FY08-09)		FT Employees (FY11-12)		% Change	
	2009	2012	Mean	Median	Mean	Median	Mean	Median
Manufacturing	50	53	85.5	17.5	105	20	22.8%	14.3%
Construction	10	11	139.3	64	112.6	40	-19.2%	-37.5%
Trading	55	65	50.7	30	37.9	14	-25.3%	-53.3%
Primary	11	14	80.9	60	82.6	41	2.1%	-31.7%
Other	5	9	7.2	6	8.22	6	14.2%	0.0%
Total	131	152	71.1	30	68.64	15	-3.5%	-50.0%

Data on sales and expenses growth was also collected, using questions about total sales and expenses three years ago. On average, firms noted that sales had grown 27.2% over the last three years, a compound annual growth rate of 8.35%.[35] When asked about growth in sales and expenses over the last three years, firms on average noted that their expenses had increased slightly more than their sales, decreasing profit margins. At the firm level, there were large changes for some firms, ranging from a 54% decline in sales to an increase of 800% (see Table 7.15 on the next page for a full breakdown of changes in sales and expenses).

[34] Evidence of growth in the manufacturing sector at face value does seem to contradict the widespread speculation that Myanmar had been suffering from a 'resource curse' over the last few years, evidence of which included a large appreciation of the Myanmar kyat as well as growth in exports of primary commodities including natural gas, jade, timber and others. If the country was suffering from this Dutch Disease, one would expect to find that employment growth was weakest, or even negative, in trade-exposed sectors such as manufacturing while strongest in non-tradable goods such as construction and services. However, there are numerous other factors at play, including sanctions that raise the cost of conducting international trading operations and a segmented market with high transportation costs that encourages growth in local, small scale manufacturing, most of which has been in the food and beverage sector.

[35] Note that over the same three year period, inflation rates were 2.2%, 8.2%, and 2.8% respectively, for a total compounded three year increase of 13.7% (if one is to believe the inflation figures published in the IMF's Article IV reports on Myanmar, which even the IMF doesn't seem to have much faith in).

Table 7.15: Change in Firm Sales and Expenses since 2009

	Number of Firms	Mean	Minimum	50%	Maximum
Sales	135	27.2%	-84%	17.5%	800%
Expenses	136	31.6%	-50%	20.0%	500%

7.3: Econometric Strategies

7.3.1: Overview of Econometric Strategies

Firm-level investment climate analysis faces a number of econometric challenges, which are addressed using a variety of techniques in the existing literature. Generally, the standard approach uses regression analysis to identify which investment climate indicators affect firm performance. Dethier, Hirn and Straub (2008) note that these regressions usually take a generic form:

$$\textit{Firm performance} = \beta_1 + \beta_2(\textit{IC Indicators}) + \beta_3(\textit{Firm Characteristics}) + \beta_4(\textit{Additional Controls}) + \varepsilon \qquad (1)$$

Where β_i (i=1:4) are the coefficients to be estimated, *IC Indicators* are the range of investment climate indicators, *Firm Characteristics* are a range of firm-specific control variables, *Additional Controls* include any other significant control variables, and ε is the error term. However there are numerous limitations and challenges, including multicollinearity, endogeneity of the regressors, and the 'camels and hippos' problem, among others. The issue of multicollinearity is common because regressors are often correlated with one another in investment climate data. This makes it difficult to distinguish whether some variables are actually proxies for other, more important variables (Dethier, Hirn, and Straub 2008, 27). One solution to this in the literature, employed in Bastos and Nasir, is to aggregate variables into broad measures such as 'institutions' and 'infrastructure' (2004). However, in order to aggregate variables, it is best not to simply group together a number of unrelated or marginally related factors. First, it is useful to determine whether the group of variables have a significantly large Cronbach's alpha.[36] Based on the measures available in this thesis, we try to create three aggregated, perceptions variables:

- 'Regulation' – comprised of labour regulation, business licensing and permits, customs and trade regulation
- 'Institutions' – comprised of judicial independence, property rights, corruption
- 'Macro environment' – comprised of credit, taxes, political instability

However, only one of these aggregated perceptions variables had a large enough Cronbach's alpha to be useful, and even then the results were only marginally acceptable. The Cronbach's alpha for an aggregated 'institutions' variable was .707, marginally larger than the 0.7 that is used in the literature as the baseline to acceptably aggregate variables. The 'regulation' and 'macro environment' variables both had Cronbach's alpha scores of less than 0.6. We therefore opt not to employ this strategy in the regression analysis.

The next major issues has been referred to in the literature as the 'hippopotamus vs. camel' dilemma, a way to describe the self-selection of firms based on their operating environment. It is analogous to the way that in dry climate like the Sahara desert, you expect that there are not many animals, and the ones you do find will be camels and not hippos because they are the only animals that can survive in that environment (Hausmann and Velasco 2005, 20). This can lead to a distorted view of the actual environment. Businesses that do not require some aspects of the business environment to function smoothly are less likely to complain about them, just as camels that do not require regular access to water are less likely to note its shortage in the desert. This self-selection issue is acute both in Myanmar, and within the sample frame for this survey, and all results should be interpreted with those caveats in mind.

Another major methodological problem in the literature is the debate over the use of subjective, perceptions-based data or objective, experience-based data. In economics, perceptions data are used less regularly than in other social sciences due to scepticism as to whether they elicit meaningful answers (Bertrand and Mullainathan 2001, 67). Criticisms include the effects of sequencing, framing, wording, and lack of effort by participants, as well as respondent's incentives to give socially desirable answers and their hesitation to admit a lack of opinion about a topic (Bertrand and Mullainathan 2001, 67-69). Instead, most

[36] Cronbach's alpha is a coefficient of internal consistency which determines the degree to which each of the individual variables that contributed to the aggregated investment climate variable measure the same phenomenon.

economists have relied on the use of objective, experienced-based data to serve as a proxy for investment climate obstacles. The benefit of this data is that it allows for more rigorous econometrics, however it is not as useful in understanding firm-level decision making and is more difficult for researchers to accurately interpret. One of the major shortcomings of the objective data is that it transfers the onus of interpretation from the respondent to the researcher, the latter of which is generally far less familiar with the given investment climate than the respondent. The challenge is that researchers often do not know the right questions to ask, and can formulate models that fail to reflect actual experiences because of limited data and knowledge. Examples of questionable interpretations of objective investment climate variables include:

- Carlin, Schaffer and Seabright, who argue that investment climate variables represent public goods that are constant across a country (2006). They argue that firms can provide substitutes for some of these variables (such as a generator to compensate for poor electricity) but not others (such as a new customs regime). However this neglects obvious heterogeneity in the firm-level data, and its obvious manifestations, for example the use of smuggling as a way for individual firms to circumvent challenges in the customs regime. Firms decide to use mechanisms such as smuggling based on a cost-benefit analysis not dissimilar from the decision to purchase a generator. There is little evidence that firms are unable to provide substitutes for almost all aspects of the business environment (though some may not be legal).
- De Rosa, Gooroochurn, and Gorg argue that bribery may serve to weed out inefficient firms who are unable to afford bribes and therefore shut down, a hypothesis that runs counter to most of the literature in which bribery is positively related to firm performance (2010). Further, the authors offer little theoretical support for why self-interested, rent-seeking bureaucrats would force bribe-payers out of businesses, therefore reducing the rents they collect.

In order to benefit from both the rigor of objective data and the insights of perceptions data, this thesis will utilize variables from *both*, to provide analysis that is not only econometrically robust, but more importantly, correctly interpreted.

The final and perhaps most significant methodological challenge in the investment climate literature is endogeneity, which is a correlation between the explanatory variables and the error term. Endogeneity can cause inefficient, biased, and inconsistent estimates, and well as contribute to their misinterpretation (Dethier, Hirn, and Straub 2008, 27). Endogeneity can arise for two main reasons. The first is that one or more relevant variables has been omitted from the right hand side of the equation. The second is that "better subjective and objective investment climate indicators may be associated with better performing firms not because they cause such firms to be more productive, but on the contrary, because an inherently more efficient firm can work within the exogenously given environment to reduce inspections, power losses or days for customs clearance or phone lines" (Dethier, Hirn, and Straub 2008, 28). In the literature there are numerous strategies to help eliminate endogeneity. Two approaches which will be utilized in this thesis are the use of multiple investment climate variables in one regression to limit omitted variable bias, and the use of objective variables (which they argue are less vulnerable to measurement error) (Dethier, Hirn, and Straub 2008, 28). Because the data set contains information from only a single country, and largely from one city within that country, neither the location-industry averages approach nor the country dummies approach are applicable. However, even the adopted econometric strategies are subject to limitations because of the small size and unique nature of the data set.

The main strategy in the literature to address endogeneity is the use of location-sector or location-sector-size averages to instrument for individual firm data. However, stratifying the data by location is not possible given the concentration of surveys from Yangon. Sector-size averages would face significant challenges because of the small sample size. Sector averages are collinear with sector dummy variables and therefore not useful. Location-sector and sector averages are also not valid tools for analysing perceptions data, because the data is ordinal and nonparametric. Therefore, parametric summary statistics including the mean, which would be necessary in finding city-sector or sector averages, are not valid for the ordinal perceptions data.[37] No other paper in the literature has used location-sector, sector, or any other type of instrumentation for perceptions variables.

As traditional instrumenting strategies from the literature are not viable in this study, we adopt a different strategy with a simple theoretical justification. In previous literature location-sector averages were adopted because researchers argued that the investment climate

[37] Using ratings-based perceptions data as continuous variables is not best practice but has nonetheless been used in business environment literature before (see, for example Beck, Demirgüç-Kunt, and Maksimovic 2005, Commander and Svejnar 2007). However, in order to use this data as a continuous variable, one has to assume that the metrics are equidistant, for example the distance from no obstacle to moderate obstacle is the same as the distance from severe obstacle to very severe obstacle.

varied both geographically and across sector. As such, using these instruments would control for endogeneity. We propose that, given the importance of networking and relationships in Myanmar, differences in firm experiences with the investment climate are determined more by their relationships than by their sector or location. To instrument for this, we use a range of managerial and market characteristics. These include the dummy *managerx* if the manager has previous experience working for the government, *managerf* if the manager is female, and *LOGCompetition,* which is the logarithm of the manager's estimate of the number of other businesses in their sector with which the firm competes. For the first, we argue that managers with experience in government would not perceive formal government institutions to be as severe of an obstacle to doing business because they have experience with these institutions and the necessary relationships to navigate them. For the second, we argue that female managers would perceive formal government institutions to be more severe than their male counterparts, because of the country's history of rule by a male-dominated military, which served to exclude women from senior-level opportunities in the public service and business. This would have a negative impact on their ability to form relationships needed to ease business and navigate formal government institutions. The third is an estimate of the number of competitors, which reveals market dynamics as businesses cluster in sectors with low barriers to entry.

The regression analysis proceeds with two separate specifications. In the first, we use sales and employment as the dependent variables, and examine the relationship between these and a range of institutional and control variables. For each dependent variable (DV), we use a range of perceptions-based and objective investment climate variables. The regressions that utilize perceptions-based data are subject to endogeneity, which we do not correct for because of a lack of viable methods to do so. Institutional variables are first regressed together, and then individually, with the obvious note that when the variables are regressed individually, they are subject to omitted variable bias. In the second specification, we employ objective investment climate data for another set of regressions, in which we run both OLS and IV regressions on institutional variables, both together and individually. We test for endogeneity, and find that only some institutional variables are endogenous to the DV. We recommend either the OLS or the IV regression as preferable based on the Durban-Wu-Hausman test. The chapter then conducts another set of regressions using change in sales, employment, and capital as the dependent variables. Both perceptions and experience data are used again, with the same caveats as noted above.

7.3.2: Variables used in Regression Analysis

This chapter employs a large number of variables in the regression analysis, which are outlined in detail in this section. The first group, in Table 7.16, are the firm performance and business characteristic variables, and include all of the dependent, independent and control variables that are not related to the investment climate or institutional environment. The second group is the perceptions-based institutional variables, listed in Table 7.17. The third group is the objective, experience-based institutional variables, listed in Table 7.18. This table also includes explanations underlying the use of these variables.

Table 7.16: Performance and Business Characteristic Variables

Variable name	Variable description
LOGSales12	The logarithm of the value of total sales (in million kyat) in FY2011/12
LOGEmployees12	The logarithm of the number of full time employees at the end of FY2011/12
LOGCapital12	The logarithm of the market value of capital (in million kyat) at the end of FY2011/12
LOGSales09	The logarithm of sales (in million kyat) during FY2008/09
LOGEmployees09	The logarithm of the number of full time employees at the end of FY2008/09
LOGSalesgrowth	The logarithm of the annual rate of sales growth +1 (all variables transformed to prevent negative values in the logarithm transformation)
LOGEmploymentgrowth	The logarithm of the annual rate of employment growth +1 (all variables transformed to prevent negative values in the logarithm transformation)
Exporter	Dummy variable for the export status of the business
LOGFirmage	The logarithm of the age of the firm +1
LOGManagerial experience	The logarithm of the number of years of experience of the top manager +1
LOGCompetition	The logarithm for the number of competitor businesses that survey respondents reported
Manufacturing	Dummy variable for manufacturing businesses
Retailandtrade	Dummy variable for retail and trade businesses
Managerx	Dummy variable for businesses whose manager had previously worked for government
Managerf	Dummy variable for businesses whose manager was female
Salesgrowing	Dummy variable for businesses whose sales grew between the end of FY2008/09 and FY 2011/12

Table 7.17: Perceptions-based Institutional Variables

Variable name	Variable description (perceptions-based rating from 0 to 4)
Licensing	Business Licensing and Permits
Customs	Customs and Trade Regulation
Judicialind	Judicial Independence
JudicialindR	Judicial Independence (replaced)
Labourregs	Labour Regulations
Tax	Tax
Credit	Credit
Politicalins	Political Instability
Propertyrights	Property Rights
Skills	Skills of the Workforce
Corruption	Corruption

Table 7.18: Objective Experience-based Institutional Variables

Perceptions-based variables	Objective Experience-based variables name	Objective variable description	Objective variable explanation and use in the literature
Business licensing and permits	*costoperatinglicense*	Logarithm of the cost of an operating license as a percentage of sales	Measures the total cost (including unofficial payments) of an operating license; proxy for formal institutional obstacles in the licensing regime.
	dayslostoplicense	Logarithm of the days lost to delays in licensing	Measures the number of production/trading days lost while waiting for operating license; proxy for formal institutional obstacles in the licensing regime. (Aterido, Hallward-Driemeier, and Pages 2007)
Customs and Trade regulation	*costimportlicense*[38]	Percentage of total sales spent to obtain import license	Proxy for formal institutional obstacles in the import licensing regime (Ministry of Commerce).

[38] It was also considered to include "% of total sales spent to obtain export license" however the sample size, at n=26, was too small.

	dayslostcustoms	Logarithm of the number of days lost to delays in customs	Proxy for the formal institutional obstacles of the customs regime. (Escribano and Guasch 2005):
Judicial independence	*trustbased*	Dummy for using trust-based exchange facilitation institutions	Trust-based institutions include relational transacting (as measured by trading with informal businesses) and use of informal finance. Proxy for transaction mechanisms that do not rely on the formal judicial system.
Labour Regulation	*fulltimeworkers*	Percentage of employees engaged under part-time or daily wage agreements	Proxy for the challenge presented by labor regulations. More stringent regulations encourage firms to hire more daily and part-time labourers and fewer full time workers (Hallward-Driemeier, Wallsten, and Xu 2006).
Taxes	*taxpctsales*	Logarithm of the percent of sales paid in tax	Proxy for the challenge presented by the formal taxation system (Fisman and Svensson 2007).
Credit	*loan*	Dummy for having a loan	Proxy for the accessibility of the formal financial system (Hallward-Driemeier, Wallsten, and Xu 2006).

Note: Articles in the literature that use the same variable are listed in parenthesis.

7.3.3: Correlation Tables

This chapter utilizes a number of different econometric specifications, which include one or more institutional or investment climate measures and independent variables. First, it is necessary to check for correlation between the IVs and the control variables, as shown in Table 7.19. The strongest correlation is between the two sector dummies, *Manufacturing* and *Retailandtrade,* however this is not a concern since these variables should be negatively related and strongly correlated. The only other relationships of some note are the

LOGEmployees12 and *LOGCapital12*, with a correlation coefficient of 0.478, and *LOGFirmage* and *LOGManagerialexperience*, with a coefficient of 0.428. However, these correlations are theoretically reasonable and display the correct sign, and neither of the correlations are significantly high enough to merit removing a variable from the model.

The institutional variables generally display a high degree of correlation, indicating that some businesses tended to rank institutional measures as a greater obstacle to doing business across the board than other businesses. There are numerous possible explanations for this. However, it is important first to address the general shortcomings with the use of perceptions data in regression analysis. The literature documents numerous challenges in using perceptions data, including whether respondents assess the general environment or their specific experiences, the general optimism or pessimism of the respondent, the lack of a consistent reference point for all respondents, and the potential for firm performance to influence perceptions of the institutional environment (Hallward-Driemeier and Aterido 2009, 7-9). The high correlation could derive from many of these challenges, while it may also result from ways in which different types of businesses experience institutional challenges differently. For example, younger firms may find customs and trade regulations to be a greater obstacle to doing business because they lack the experience and relationships of older firms that help to alleviate these obstacles. However, because the institutional variables are each entered into separate regressions, the high correlation between different variables is not a concern in these specifications. While many of the institutional variables have significant relationships, only two stand out: the relationship between *Tax* and *Customs* and the relationship between *Licensing* and *Customs*, both of which have a Pearson Correlation coefficient of over 0.5. See Tables 7.20 and 7.21 for the full correlation tables.

Table 7.19: Correlation Matrix of Independent and Control Variables

	LOGEmployees12	*LOGCapital12*	*Exporter*	*LOGFirmage*	*LOGManagerialexperience*	*LOGCompetition*	*Manufacturing*	*Retailandtrade*
LOGEmployees12	1							
LOGCapital12	0.478**	1						
Exporter	0.157	0.049	1					
LOGFirmage	0.168*	0.232**	-0.155	1				
LOGManagerialexperience	0.248**	0.240**	0.000	0.428**	1			
LOGCompetition	0.020	0.125	0.070	-0.170*	-0.098	1		
Manufacturing	0.072	-0.048	0.104	0.165*	0.062	-0.063	1	
Retailandtrade	-0.094	0.098	-0.099	-0.054	-0.111	-0.080	-0.632**	1
Pearson Correlation, **significant at the 1% level, *significant at the 5% level								

Table 7.20: Correlation Matrix of Perceptions-based Institutional Variables

	Licensing	*Customs*	*Judicialind*	*JudicialindR*	*Labourregs*	*Tax*	*Credit*	*Politicalins*	*Propertyrights*	*Skills*	*Corruption*
Licensing	1										
Customs	0.443**	1									
Judicialind	0.125	0.179*	1								
JudicialindR	0.025	0.075	*1.000***	1							
Labourregs	0.217**	0.255**	-0.085	-0.039	1						
Tax	0.431**	*0.582***	0.202*	0.062	0.161*	1					
Credit	0.158	0.241**	0.277**	0.241**	0.193*	0.193*	1				
Politicalins	0.039	0.208*	0.204*	0.270**	0.077	0.137	0.272**	1			
Propertyrights	0.281**	0.138	0.359**	0.207*	0.086	0.347**	0.232**	0.330**	1		
Skills	0.298**	0.255**	0.247**	0.297**	0.170*	0.283**	0.381**	0.320**	0.382**	1	
Corruption	0.361**	0.286**	0.285**	0.253**	0.024	0.212**	0.280**	0.344**	0.384**	0.380**	1

Pearson Correlation, **significant at the 1% level, *significant at the 5% level, correlations over 0.5 in italics

Table 7.21: Correlation Matrix of Experience-based Objective Institutional Variables

	costoperating license	*dayslos toplicen se*	*costimportlice nse*	*dayslost customs*	*trustbased*	*fulltime workers*	*taxpctsales*	*loan*
costoperatinglicense	1.000							
dayslostoplicense	*0.574***	1.000						
costimportlicense	0.209	-0.091	1.000					
dayslostcustoms	-0.200	0.118	-0.216	1.000				
trustbased	0.085	0.054	0.147	-0.059	1.000			
fulltimeworkers	-0.135	-0.067	-0.126	-0.057	-0.011	1.000		
taxpctsales	0.236*	0.110	0.100	0.048	0.013	-0.131	1.000	
loan	-0.115	-0.028	-0.220	0.110	0.140	0.133	-0.183*	1.000
Pearson Correlation, **significant at the 1% level, *significant at the 5% level, correlations over 0.5 in italics								

7.4: The Institutional Environment and Firm Size

7.4.1: Perceptions Variables and the Institutional Environment

In the first specification, we explore the relationship between firm size and the institutional environment. For the dependent variable in these regressions, we utilize two different measures: *LOGSales12*, the logarithm of total sales in million kyat in FY2011/12; and *LOGEmployees12*, the LOG of total full time employees in FY2011/12. Through this chapter, we employ more than one dependent variable in all sections, to provide more convincing and robust results given the small sample size. In the original data, both sales and labour are right skewed, with many firms having comparatively low sales and few employees. The logarithmic transformations are used to normalize the distributions.

In the first set of regressions, with *LOGSales12* as the DV, we use an OLS multiple regression similar to that employed in De Rosa, Gooroochurn and Gorg, though without any variables for different countries as this is a single country study (2010, 15). The model is a simple, modified production function of the form:

$$\check{Y}_i = b_1 + b_2 L_i + b_3 K_i + b_4 * (\textit{institutional variables})_i + b_5 Z_i + \alpha s + e_i \qquad (2)$$

where $\check{Y}_i$ = LOG of sales of firm *i*, L_i = LOG of employees of firm *i*, K_i = LOG of capital of firm *i,* Institutional variable represents a range of perceptions based dummies, *Z* is a set of control variables, α*s* is a sector dummy, and e_i is the error term. Institutional variables are based on subjective firm assessments, ranging from 0 for ‘no obstacle’ to 4, which represents ‘very severe obstacle.’ The eleven institutional variables are those listed in Table 7.17. Control variables, *Z,* include *Exporter* (dummy variable, with 1 indicating that firms export), *LOGFirmage*, *LOGManagerialexperience*, and *LOGCompetition* (to indicate market competitiveness).[39]

[39] While firm size is regularly included as a control in the literature and will be used later, it is not in these initial regressions because of the inclusion of LOG Labour. Both are derived from the number of full time employees in 2011-12 and are highly collinear.

In the second set of regressions, we use *LOGEmployees12* as the dependent variable and run a multiple OLS regression to examine the relationship between employment and institutional variables. As the DV is no longer output, the equation is no longer a modified production function, but instead takes the following form:

$$\check{Y}_i = b_1 + b_2 * (Institutional\ variables)_i + b_3 Z_i + \alpha s + e_i \qquad (2)$$

where $\check{Y}_i$ = LOG of employment in FY2011/12, the institutional variable includes the same institutional variables, Z is a set of control variables, αs is a sector dummy, and e_i is the error term. The control variables, *Z,* include *Exporter*, *LOGFirmage*, *LOGManagerialexperience*, *Salesgrowing* (a dummy variable set to '1' if the firm reported sales growth from 2009 to 2012 and '0' if it did not), and *LOGCompetitors*. Sector dummy variables *Manufacturing* and *Retailandtrade* are also included. The focus on employment is selected both for testing purposes but also because of its practical importance, because employment is "more likely to reflect the long-run performance of the firm, and their evolution is of higher concern for policymakers" (Aterido, Hallward-Driemeier, and Pages 2009, 9).

In both sets of regressions, one of the major concerns is omitted variable bias, which is especially likely if the investment climate perceptions data are entered into the regression one at a time. For example, the high correlation between *Customs* and *Tax* means that coefficients derived from a regression that includes only *Customs* would be biased. As such, the first regression in each set includes all of the perceptions ratings, followed by regressions with only one variable at a time (this same methodology was employed in Commander and Svejnar 2007). Also, given the utilization of perceptions data in this section and the inability to instrument for endogeneity which subsequently results in coefficients that are likely biased, this section will not attempt to interpret coefficients in any meaningful way other than the coefficient's sign.

Table 7.22: Sales and Perceptions Assessments of Economic Institutions

DV: *LOGSales12*	OLS											
	(all)	(1)	(2)	(3)	(4)	(4a)	(5)	(6)	(7)	(8)	(9)	(10)
LOGEmployees12	*0.678****	*0.681****	*0.673****	*0.672****	*0.674****	*0.668****	*0.680****	*0.675****	*0.680****	*0.671****	*0.656****	*0.674****
	(0.121)	(0.117)	(0.116)	(0.117)	(0.122)	(0.117)	(0.117)	(0.111)	(0.117)	(0.118)	(0.118)	(0.111)
LOGCapital12	*0.046*	*0.063*	*0.071*	*0.066*	*0.051*	*0.058*	*0.067*	*0.075*	*0.064*	*0.066*	*0.065*	*0.041*
	(0.082)	(0.080)	(0.079)	(0.080)	(0.084)	(0.080)	(0.080)	(0.076)	(0.080)	(0.080)	(0.080)	(0.077)
(1) Licensing	*-0.147*	*0.106*										
	(0.203)	(0.163)										
(2) Customs	*0.126*		*0.241**									
	(0.201)		(0.144)									
(3) Labourregs	*0.218*			*0.310*								
	(0.364)			(0.336)								
(4) Judicialind	*0.134*				*0.277**							
	(0.179)				(0.166)							
(4a) JudicialindR						*0.149*						
						(0.134)						
(5) Tax	*-0.055*						*0.105*					
	(0.200)						(0.147)					
(6) Credit	*0.385***							*0.459****				
	(0.160)							(0.132)				
(7) Politicalins	*-0.133*								*0.060*			
	(0.147)								(0.127)			
(8) Propertyrights	*-0.130*									*0.073*		
	(0.189)									(0.149)		
(9) Skills	*-0.074*										*0.146*	
	(0.157)										(0.129)	
(10) Corruption	*0.405***											*0.041****
	(0.156)											(0.123)
Exporter	*0.277**	*0.286***	*0.296***	*0.294***	*0.273**	*0.279***	*0.282***	*0.273***	*0.279***	*0.293***	*0.298***	*0.280***
	(0.140)	(0.134)	(0.133)	(0.134)	(0.140)	(0.134)	(0.134)	(0.127)	(0.135)	(0.135)	(0.134)	(0.127)

LOGFirmage	*0.339*	*0.358**	*0.318*	*0.376**	*0.327*	*0.380**	*0.334*	*0.346**	*0.372**	*0.357**	*0.402**	*0.373**
	(0.220)	(0.207)	(0.206)	(0.206)	(0.216)	(0.205)	(0.211)	(0.195)	(0.206)	(0.207)	(0.207)	(0.196)
LOGManagerialexperience	*0.319*	*0.346*	*0.367**	*0.326*	*0.326*	*0.317*	*0.357*	*0.299*	*0.326*	*0.342*	*0.341*	*0.394**
	(0.228)	(0.224)	(0.220)	(0.221)	(0.231)	(0.221)	(0.225)	(0.209)	(0.222)	(0.224)	(0.221)	(0.212)
LOGCompetition	*0.173*	*0.198**	*0.198**	*0.203**	*0.183*	*0.195**	*0.200**	*0.190**	*0.193**	*0.195**	*0.194**	*0.160*
	(0.108)	(0.107)	(0.105)	(0.106)	(0.112)	(0.106)	(0.107)	(0.101)	(0.108)	(0.107)	(0.106)	(0.102)
Manufacturing	*-0.185*	*-0.175*	*-0.144*	*-0.192*	*-0.118*	*-0.155*	*-0.175*	*-0.205*	*-0.170*	*-0.169*	*-0.175*	*-0.177*
	(0.173)	(0.166)	(0.164)	(0.166)	(0.176)	(0.166)	(0.165)	(0.156)	(0.166)	(0.166)	(0.165)	(0.157)
Retail & Trade	*0.285**	*0.358***	*0.372***	*0.355***	*0.386***	*0.356***	*0.374***	*0.274**	*0.354***	*0.367***	*0.343***	*0.316***
	(0.168)	(0.160)	(0.158)	(0.160)	(0.167)	(0.159)	(0.160)	(0.153)	(0.162)	(0.160)	(0.160)	(0.153)
Constant	*0.208*	*0.175*	*0.128*	*0.193*	*0.222*	*0.189*	*0.164*	*0.182*	*0.187*	*0.186*	*0.143*	*0.126*
	(0.327)	(0.321)	(0.318)	(0.319)	(0.333)	(0.318)	(0.323)	(0.301)	(0.321)	(0.321)	(0.322)	(0.304)
Observations	93	103	103	103	93	103	103	103	103	103	103	103
R^2	0.614	0.513	0.526	0.515	0.527	0.517	0.514	0.567	0.512	0.512	0.518	0.561
Adjusted R^2	0.521	0.467	0.480	0.469	0.476	0.471	0.467	0.525	0.466	0.466	0.471	0.519
* significant at 10%; ** significant at 5%; ***significant at 1%; Standard errors in parenthesis.												

Table 7.23: Employment and Perceptions Assessments of Economic Institutions

DV: *LOGEmployees12*	OLS											
	(all)	(1)	(2)	(3)	(4)	(4a)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Licensing	*-0.189*	*-0.039*										
	(0.180)	(0.140)										
(2) Customs	*0.094*		*0.012*									
	(0.178)		(0.140)									
(3) Labourregs	*0.226*			*0.221*								
	(0.324)			(0.289)								
(4) Judicialind	*0.069*				*0.118*							
	(0.158)				(0.140)							
(4a) JudicialindR						*0.180*						
						(0.114)						
(5) Tax	*-0.142*						*-0.015*					
	(0.179)						(0.128)					
(6) Credit	*-0.112*							*0.010*				
	(0.142)							(0.121)				
(7) Politicalins	*-0.162*								*0-.036*			
	(0.130)								(0.109)			
(8) Propertyrights	*0.195*									*0.177*		
	(0.167)									(0.126)		
(9) Skills	*0.297***										*0.238***	
	(0.137)										(0.107)	
(10) Corruption	*-0.017*											*0.041*
	(0.140)											(0.111)
Exporter	*0.328****	*0.365***	*0.266***	*0.270***	*0.259***	*0.255***	*0.365***	*0.265***	*0.270***	*0.279***	*0.278***	*0.263***
	(0.124)	(0.116)	(0.116)	(0.116)	(0.120)	(0.115)	(0.116)	(0.116)	(0.117)	(0.115)	(0.113)	(0.116)
LOGFirmage	*0.499***	*0.443***	*0.438***	*0.446***	*0.419***	*0.451***	*0.444***	*0.440***	*0.439***	*0.415***	*0.490****	*0.437***
	(0.193)	(0.178)	(0.178)	(0.177)	(0.185)	(0.176)	(0.180)	(0.177)	(0.177)	(0.177)	(0.175)	(0.178)
LOGManagerialexperience	*0.195*	*0.206*	*0.214*	*0.209*	*0.207*	*0.186*	*0.209*	*0.212*	*0.212*	*0.240*	*0.217*	*0.219*
	(0.205)	(0.193)	(0.193)	(0.192)	(0.199)	(0.191)	(0.195)	(0.192)	(0.192)	(0.191)	(0.188)	(0.193)

LOGCompetition	*0.036*	*0.045*	*0.044*	*0.046*	*0.035*	*0.035*	*0.044*	*0.044*	*0.048*	*0.032*	*0.032*	*0.040*
	(0.095)	(0.090)	(0.090)	(0.089)	(0.093)	(0.089)	(0.090)	(0.090)	(0.090)	(0.089)	(0.088)	(0.090)
SalesGrowing	0.391**	0.369**	0.370**	0.375**	0.374**	0.390***	0.368**	0.371**	0.373**	0.381**	0.389***	0.364**
	(0.158)	(0.148)	(0.148)	(0.148)	(0.153)	(0.147)	(0.149)	(0.148)	(0.148)	(0.147)	(0.145)	(0.149)
Manufacturing	*0.038*	*0.010*	*0.010*	*-0.004*	*0.033*	*0.033*	*0.009*	*0.008*	*0.007*	*0.021*	*0.009*	*0.008*
	(0.155)	(0.143)	(0.143)	(0.143)	(0.150)	(0.142)	(0.143)	(0.143)	(0.143)	(0.142)	(0.140)	(0.143)
Retail & Trade	*-0.050*	*-0.071*	*-0.073*	*-0.080*	*-0.066*	*-0.085*	*-0.075*	*-0.076*	*-0.067*	*-0.067*	*-0.106*	*-0.079*
	(0.148)	(0.136)	(0.136)	(0.135)	(0.140)	(0.134)	(0.136)	(0.137)	(0.137)	(0.134)	(0.134)	(0.136)
Constant	*0.157*	*0.278*	*0.265*	*0.259*	*0.271*	*0.228*	*0.275*	*0.268*	*0.272*	*0.221*	*0.141*	*0.265*
	(0.320)	(0.301)	(0.301)	(0.298)	(0.309)	(0.297)	(0.304)	(0.299)	(0.299)	(0.298)	(0.298)	(0.299)
Observations	115	123	123	123	115	123	123	123	123	123	123	123
R^2	0.234	0.162	0.161	0.165	0.167	0.179	0.161	0.161	0.162	0.175	0.196	0.162
Adjusted R^2	0.101	0.103	0.103	0.107	0.104	0.122	0.103	0.103	0.104	0.118	0.140	0.104
* significant at 10%; ** significant at 5%; ***significant at 1%; Standard errors in parenthesis.												

The *LOGSales12* regression was highly robust, with an adjusted R^2 of 0.521, largely due to the inclusion of *LOGEmployees12*. The *LOGEmployees12* regression was much less significant with an adjusted R^2 of 0.101. In the *LOGsales12* regression, two institutional perceptions variables – *Credit* and *Corruption* – were statistically significant when all variables were entered into the equation simultaneously. Both had positive signs, indicating that the firms that perceived credit and corruption to be a severe or very severe obstacle to doing business had larger sales. When *LOGsales12* regressions were run with only one institutional variable, *Judicialind* and *Customs* were also significant at the 10% level and had positive signs, indicating that the firms that reported these institutions as important obstacles were more likely to have higher sales. These results, however, were only barely significant and likely due to omitted variables, so should be treated with extreme caution. In the regression on employment, the only variable of significance was *Skills*, a proxy for the quality of the country's educational institutions. The sign was positive, indicating that firms complaining that *Skills* were a 'severe' or 'very severe' constraint to doing business tended to be firms with larger numbers of full time employees. No other institutional variables were significant in either the joint or individual specifications.

In the *LOGsales12* regression, *LOGemployees12* was highly significant and positively related with sales in all specifications, indicating a close and expected link between the number of employees and firm size. Notably, *LOGCapital12* was not significant in any specifications, potentially due to the distorting effects of unproductive real estate holdings, with market valuations driven by factors other than their contribution as a factor of production.[40] This surprising result may also be connected to the high concentration of trading firms in the survey, whose turnover to capital ratio is significantly greater than manufacturing businesses.

Among the control variables, the dummy variable *Exporter* was significant for all specifications, with the positive sign suggesting that firms that exported some percentage of their goods or output were more likely to have both higher sales and more employees. *LOGFirmage* was significant at the 1% level for the *LOGEmployees12* specification on all institutional perceptions variables, and at the 5% level for each institutional variable when

[40] Most notably, real estate in Myanmar (especially Yangon, where the survey largely took place) serves as the primary long-term domestic store of wealth due to the poor state of the financial system, lack of equity markets, and financial sanctions that prohibited access to the US dollar financial system. These sanctions, though sometimes circumvented, were still in effect at the time of this survey.

regressed separately. This indicates that older firms tend to have higher numbers of employees. *LOGFirmage* was not significant in the regression of sales when all institutional variables were included, but was significant for 8 of 11 variables when they were regressed individually. The number of years of managerial experience was positively related to both higher sales and more employees, but was insignificant in all but two regressions, indicating that it has a weak effect. There was no significant relationship between the number of competitors and employees, nor was there a relationship between sales and the number of competitors when all institutional variables were included. However, it was significant in 9 of 11 regressions which included only one institutional variable, and was positively correlated with *LOGSales12*. This indicates that firms with more competitors (counter intuitively) tended to have higher sales. Lastly, in the specification with employees as the dependent variable, the dummy *Salesgrowing* was significant in all specifications. Notably, the variable entered with a positive sign, indicating that the firms that were growing tended to have larger numbers of employees.

In the *LOGEmployees12* specification, there was no statistically significant difference in number of employees between firms in different sectors. Both the *Manufacturing* and *Tradeandretail* dummies were not significant in any of the specifications. However, in the *LOGSales12* regression, the *Tradeandretail* dummy was statistically significant at the 10% level in the joint regression, and was significant at the 5% level for all but one of the single investment climate variable regressions. As the variable had a positive sign, it shows that all other things equal, trading and retail firms have higher sales than firms in other sectors.

The survey data also contains ranked perceptions data, which were used to construct dummy variables, with '1' signifying that a firm had ranked a particular obstacle as one of the three most challenging and a '0' if it had not. A second set of regressions was run incorporating these variables instead of the measures used above. However, no institutional variables were significantly correlated with firm sales or employment in these specifications. This may be due to the inclusion of other, non-institutional investment climate measures in the ranking, which give firms additional metrics they can select for their 'top 3', thereby reducing the number of firms including institutional variables. Again, *LOGemployees12* was highly significant in all specifications, while the retail and trading sector was significantly correlated with higher sales at the 5% level. Firms that exported were also correlated with higher sales in all specifications.

7.4.2: Objective Experiences in the Institutional Environment

In the second set of regressions, we use the same two dependent variables in similar regressions, except we employ experience-based metrics as opposed to perceptions-based ones. We start with an OLS multiple regression of *LOGSales12* in the same simple, modified production function form:

$$\check{Y}_i = b_1 + b_2 L_i + b_3 K_i + b_4 * (\textit{institutional variables})_i + b_5 Z_i + \alpha s + e_i \qquad (2)$$

where $\check{Y}_i$ = LOG of sales of firm *i*, L_i = LOG of labour of firm *i*, K_i = LOG of capital of firm *i*, Institutional variable represents a range of experience-based proxies, *Z* is a set of control variables, α*s* is a sector dummy, and e_i is the error term. Control variables include *Exporter* (dummy variable), *LOGFirmage*, *LOGManagerialexperience*, and *Salesgrowing*. For the institutional variables, we draw on eight different questions from the survey to proxy different aspects of the institutional environment, as listed previously in Table 7.18.

Omitted variable bias is again a concern. Including all variables in one regression reduced the number of cases to less than 50, due to the high number of missing answers for particular questions such as the cost of an import license or annual sales. As these regressions return very weak results and the investment climate measures used are not too highly correlated, we proceed with the regressions of individual investment climate variables, given the omitted variable bias caveat. The other major caveat is endogenity. For all OLS regressions, we run a Durban-Wu-Hausman test to determine if the investment climate regressors are endogenous, which occurs when the absolute value of the Durban-Wu-Hausman statistic is greater than 1.96. In these regressions, the institutional variables are endogenous and the use of instrumental variables is preferable to OLS, despite their inefficiency.

Table 7.24: Sales and Experiences with Economic Institutions

DV: *LOGSales12*	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	IV	IV	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(7)	(8)
LOGEmployees12	*0.530****	*0.723****	*0.558****	*0.690****	*0.740****	*0.828****	*0.711****	*0.699****	*0.369*	*0.947****	*0.481**
	(0.124)	(0.129)	(0.173)	(0.128)	(0.123)	(0.128)	(0.139)	(0.122)	(0.241)	(0.310)	(0.261)
LOGCapital12	*0.148**	*0.130*	*0.037*	*0.124*	*0.102*	*0.071*	*0.128*	*0.077*	*-0.064*	*0.380*	*-0.142*
	(0.087)	(0.092)	(0.101)	(0.090)	(0.102)	(0.086)	(0.090)	(0.847)	(0.189)	(0.293)	(0.199)
(1) costoperatinglicense	*-6.31****								*-32.019***		
	(1.79)								(16.3)		
(2) dayslostoplicense		*-0.064*									
		(0.589)									
(3) costimportlicense			*-10.6****								
			(3.66)								
(4) dayslostcustoms				*0.096**							
				(0.049)							
(5) trustbased					-0.017						
					(0.141)						
(6) fulltimeworkers						*-0.518***					
						(0.235)					
(7) taxpctsales							-0.138			2.86	
							(0.199)			-2.47	
(8) loan								*0.237**			1.87*
								(0.126)			(1.14)
Exporter	*0.425****	*0.301***	*0.026*	*0.358****	*0.289***	*0.231**	*0.349***	*0.257***	*0.281*	*0.354*	*0.024*
	(0.125)	(0.131)	(0.228)	(0.132)	(0.128)	(0.129)	(0.138)	(0.126)	(0.219)	(0.267)	(0.261)
LOGFirmage	*0.198*	*0.206*	*0.179*	*0.181*	*0.229*	*0.216*	*0.157*	*0.217*	*0.241*	*-0.484*	*0.064*
	(0.191)	(0.208)	(0.255)	(0.203)	(0.201)	(0.202)	(0.229)	(0.197)	(0.303)	(0.693)	(0.336)
LOGManagerialexperience	*0.169*	*0.235*	*0.410*	*0.244*	*0.259*	*0.229*	*0.395*	*0.282*	*0.574*	*-0.075*	*0.547*
	(0.213)	(0.227)	(0.335)	(0.223)	(0.222)	(0.219)	(0.245)	(0.218)	(0.403)	(0.643)	(0.413)
Manufacturing	*-0.312**	*-0.154*	*0.016*	*-0.139*	*-0.118*	*-0.058*	*-0.097*	*-0.135*	*-0.604**	*-0.147*	*-0.277*
	(0.165)	(0.172)	(0.279)	(0.167)	(0.162)	(0.164)	(0.184)	(0.159)	(0.323)	(0.365)	(0.282)

Retail & Trade	*0.369***	*0.453****	*0.307*	*0.369***	*0.489****	*0.518****	*0.503****	*0.493****	*0.144*	*0.631**	*0.557***
	(0.158)	(0.164)	(0.245)	(0.170)	(0.159)	(0.159)	(0.176)	(0.154)	(0.311)	(0.350)	(0.265)
Constant	*0.807***	*0.429*	*0.929**	*0.408*	*0.379*	*0.819***	*0.408*	*0.404*	*1.59***	*-0.230*	*0.548*
	(0.317)	(0.313)	(0.467)	(0.307)	(0.303)	(0.357)	(0.391)	(0.287)	(0.790)	(2.31)	(0.516)
Observations	95	105	53	104	108	106	92	109	89	86	101
R^2	0.564	0.486	0.574	0.500	0.505	0.522	0.515	0.521	0.125	0.0484	0.077
Adjusted R^2	0.523	0.444	0.495	0.458	0.465	0.482	0.468	0.483			
Durban-Wu-Hausman									5.91	5.75	5.31
Endogenous									yes	yes	yes
Strong/weak instruments									weak	weak	weak
* significant at 10%; ** significant at 5%; ***significant at 1%; Standard errors in parenthesis.											

Table 7.25: Employment and Experiences with Economic Institutions

DV: *LOGEmployment12*	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(6)
(1) costoperatinglicense	*-3.784***								
	(1.64)								
(2) dayslostoplicense		*-0.021*							
		(0.044)							
(3) costimportlicense			*-6.200**						
			(3.30)						
(4) dayslostcustoms				*0.040*					
				(0.042)					
(5) trustbased					*-0.149*				
					(0.121)				
(6) fulltimeworkers						*0.506****			*-1.76*
						(0.189)			(1.89)
(7) taxpctsales							*-0.256*		
							(0.160)		
(8) loan								*0.230***	
								(0.102)	
Exporter	*0.267***	*0.245***	*0.328*	*0.257***	*0.229***	*0.268***	*0.189*	*0.210**	*0.056*
	(0.121)	(0.111)	(0.222)	(0.111)	(0.112)	(0.110)	(0.119)	(0.111)	(1.89)
LOGFirmage	*0.332**	*0.274*	*0.506**	*0.264*	*0.319**	*0.445***	*0.326*	*0.287*	*0.318*
	(0.200)	(0.176)	(0.295)	(0.175)	(0.178)	(0.178)	(0.204)	(0.176)	(0.312)
LOGManagerialexperience	*0.071*	*0.224*	*0.198*	*0.229*	*0.286*	*0.228*	*0.172*	*0.253*	*0.220*
	(0.213)	(0.184)	(0.337)	(0.183)	(0.187)	(0.182)	(0.204)	(0.185)	(0.293)
Salesgrowing	*0.408****	*0.342***	*0.668***	*0.351***	*0.251***	*0.346***	*0.330***	*0.318***	*0.373**
	(0.152)	(0.138)	(0.253)	(0.137)	(0.140)	(0.135)	(0.144)	(0.139)	(0.201)
Manufacturing	*-0.164*	*-0.080*	*-0.156*	*-0.070*	*-0.025*	*-0.078*	*-0.212*	*-0.036*	*0.239*
	(0.150)	(0.137)	(0.273)	(0.134)	(0.134)	(0.133)	(0.147)	(0.133)	(0.372)
Retailandtrade	*-0.273**	*-0.196*	*-0.299*	*-0.225**	*-0.177*	*-0.214**	*-0.323***	*-0.151*	*-0.090*
	(0.141)	(0.129)	(0.233)	(0.134)	(0.131)	(0.127)	(0.142)	(0.127)	(0.261)
Constant	*0.762****	*0.640***	*0.293*	*0.602***	*0.523***	*-0.014*	*1.002****	*0.498***	*2.02*
	(0.279)	(0.258)	(0.508)	(0.253)	(0.257)	(0.297)	(0.310)	(0.252)	(1.63)
Observations	89	128	49	128	131	127	107	131	117
R2	0.236	0.150	0.341	0.155	0.164	0.182	0.174	0.187	0.106
Adjusted R2	0.170	0.100	0.234	0.106	0.117	0.134	0.116	0.141	0.031
Durban-Wu-Hausman (endogenous?)	no	no	no	no	no	yes	no	no	3.13
Hansen's J - Instruments ok?									ok
Strong/weak instruments									weak

The *LOGSales12* regressions were once again highly robust, with adjusted R^2 ranging from 0.444 to 0.523. The regressions for *LOGEmployees12* were less so, with adjusted R^2 ranging from 0.100 to 0.234. In the *LOGSales12* OLS regressions, a number of institutional variables were significant. Both *costoperatinglicense* and *costimportlicense* were negative and significant at the 1% level, suggesting that these licenses (or the other barriers that they represent) are less challenging for larger businesses. The cost of the import license variable had a negative coefficient, indicating that corruption is either uncommon in the issuing of licenses (very unlikely), or that business owners did not associate the costs of bribes, agents, and other transaction costs as part of the total cost of acquiring the license (a far more believable explanation). It could also suggest that the costs of more lucrative licenses do not rise proportionally to the benefits that they allow firms to accrue (another highly likely explanation). Similarly, the cost of an operating license had a strong negative correlation with total annual sales, again indicating relatively fixed costs and raising questions about the extent of corruption in the licensing process or the inclusion of these costs in the 'total cost' reported to surveyors.

The proxy for labour regulation, *fulltimeworkers*, was significant at the 5% level with a positive coefficient, suggesting that companies with higher sales tended to have a greater percentage of their workforce employed under full time arrangements. *Dayslostcustoms* and *loan* were both significant at the 10% level and positive, suggesting that firms with more sales were likely to experience greater delays in customs and were more likely to have a loan (and if we use the variable as a proxy for access to credit, better access to credit, which makes theoretical sense and aligns with all qualitative information). With all of these regressions, though, it is important to note that the number of cases often falls below 100 due to missing responses in the surveys and, as such, detracts from the robustness of the results.

In the first specification detailed in Table 7.24, *LOGEmployees12* was highly significant with the expected positive sign in all specifications, as it was in the previous perceptions-based regressions. This indicates the close and expected link between the number of employees and firm size. *LOGCapital12* was only barely significant at the 10% level in one regression, a result which likely comes from omitted cases. The dummy variable *Exporter* was significant across almost all specifications except one, which had a significantly lower number of observations. Similarly, *Retailandtrade* was significant across almost all specifications, often at the 1% level, indicating that firms from the trading and retail sector tended to have higher sales. Three of the institutional variables, *costoperatinglicense*, *taxpctsales*, and *loan*, were found to be endogenous and an instrumental variable strategy was used. The cost of an operating license was significant at the 5% level and the loan variable at the 10% level. Most other variables that were significant in the OLS regressions remained significant, though notably the *LOGEmployees12* was not significant in the IV regression for the cost of an operating license.

In the employment regressions detailed in Table 7.25, three institutional variables were significant. At the 5% level both *costoperatinglicense* and *loan* were significant, with the same signs as in the employment regression. The *costimportlicense* variable was significant at the 10% level with a negative coefficient, suggesting that firms with more employees tend to spend less of their total sales on import licenses (suggesting, again, that the licensing is more of a fixed cost and does not increase proportionately with the value of the consignment). A number of other variables were also significant in most or all specifications. The dummy *exporter* was significant in 6 of 8 OLS regressions, and in the cases when it was not significant, was only such by a small margin. The coefficient was positive, indicating that firms that exported tended to have larger numbers of employees. The dummy variable *Salesgrowing* was significant at either the 5% or 1% level for all regressions, with the positive coefficient indicating that firms it was the larger firms whose sales were more likely to grow over the last three years. Only one of the eight institutional variables, *fulltimeworkers*, was endogenous, though when instrumented by the same strategy used above was still not significant in an IV specification.

7.5: Institutions and Firm Growth

7.5.1: Perceptions Variables and the Institutional Environment

In the second set of specifications, we explore the relationship between firm growth and the institutional environment. In these regressions, we use two different dependent variables: *LOGSalesgrowth* and *LOGEmploymentgrowth* (a similar strategy was employed in a number of works in the literature, including Hallward-Driemeier et al. 2003). The first variable is the logarithm of the simple annual growth rate of total sales, found by using figures for total sales in 2009 and 2012 and dividing by 3. The second variable is the logarithm of the simple annual growth rate in employees, found by using figures of the total number of permanent, full-time employees in 2009 and 2012 and dividing by 3. Logarithmic transformations were used as both variables were right skewed and as such they help to normalize the distributions. The model is specified in a form similar to those in the first set of regressions:

$$\check{Y}_i = b_1 + b_2 * (IC\ indicators)_i + b_3 Z_i + \alpha s + e_i \qquad (3)$$

where $\check{Y}_I$ = LOG of the annual rate of sales growth (+1, to prevent attempts to take the logarithm of negative numbers) or the LOG of the annual rate of employment growth (+1), *IC indicators*$_i$ are the same investment climate / institutional variables for firm *i* as were used in the preceding regressions, Z_i is a set of control variables that includes *LOGSales09*, *LOGEmployees09*, as well as three variables used above: *Exporter*, *LOGFirmage*, and *LOGManagerialexperience*. The model also contains sector dummies *Manufacturing* and *Retailandtrade* (αs) as well as an error term (e_i). In these regressions we use the same specifications for both sales and employees, as we are working with dependent variables that measure growth rates. Results for OLS regressions are contained in Tables 7.26 for the specification containing *LOGSalesgrowth* as the dependent variable, and Table 7.27 for the specification with *LOGEmploymentgrowth* as the dependent variable.

In both regressions of firm level growth, there is little correlation between a firm's recent performance and their current perceptions of the country's investment climate and economic institutions. These variables seem not to be related in any meaningful way, a surprising result that may indicate public perceptions at the time of surveying that the reform process represented a significant break with the past. This may have encouraged firms to place less weight on previous performance and more on the future expectations based on announced reforms. It may also reflect problems with the modelling or weaknesses with the data employed. In the *LOGSalesgrowth* regressions, no institutional variable was significant in any specification. Only two metrics, *tax* and *politicalins*, were significant in the employment specifications, and both were only significant at the 10% level. Both had positive coefficients, however, suggesting that the businesses that ranked these obstacles higher were those that performed better. For tax, this may result from the increased uncertainty associated with the tax collection system.

Table 7.26: Sales Growth and Perceptions Assessments of Economic Institutions

DV: *LOGSalesgrowth*	OLS										
	(all)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LOGSales09	*-0.031**	*-0.029***	*-0.031***	*-0.027***	*-0.029**	*-0.029***	*0.030***	*-0.029***	*-0.028**	*-0.027***	*-0.034***
	(0.107)	(0.013)	(0.013)	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)	(0.014)
LOGEmployees09	*0.069****	*0.049****	*0.054****	*0.048****	*0.053****	*0.048***	*0.048***	*0.049****	*0.049***	*0.055****	*0.049****
	(0.023)	(0.018)	(0.017)	(0.018)	(0.020)	(0.019)	(0.019)	(0.018)	(0.019)	(0.018)	(0.018)
(1) Licensing	*-0.036*	*-0.016*									
	(0.031)	(0.021)									
(2) Customs	*0.001*		*0.001*								
	(0.032)		(0.017)								
(3) Labourregs	*-0.032*			*-0.042*							
	(0.069)			(0.046)							
(4) Judicialind	*-0.017*				*-0.018*						
	(0.028)				(0.022)						
(5) Tax	*0.025*					*-0.004*					
	(0.031)					(0.019)					
(6) Credit	*0.026*						*0.001*				
	(0.026)						(0.019)				
(7) Politicalins	*-0.001*							*0.006*			
	(0.026)							(0.017)			
(8) Propertyrights	*0.009*								*-0.007*		
	(0.031)								(0.021)		
(9) Skills	*-0.046*									*-0.025*	
	(0.029)									(0.017)	
(10) Corruption	*0.021*										*0.021*
	(0.026)										(0.017)
Exporter	*-0.048***	*-0.039***	*-0.043***	*-0.041***	*-0.039***	*-0.038***	*-0.036**	*-0.039***	*-0.038***	*-0.048***	*-0.035**
	(0.024)	(0.018)	(0.017)	(0.018)	(0.019)	(0.018)	(0.019)	(0.018)	(0.019)	(0.019)	(0.018)
LOGFirmage	*-0.103***	*-0.067***	*-0.071***	*-0.065**	*-0.080***	*-0.065**	*-0.072***	*-0.065**	*-0.064**	*-0.080***	*-0.061**
	(0.044)	(0.033)	(0.032)	(0.033)	(0.037)	(0.034)	(0.034)	(0.033)	(0.034)	(0.034)	(0.034)

LOGManagerialexperience	*-0.004*	*0.008*	*-0.004*	*0.009*	*-0.005*	*0.010*	*0.015*	*0.010*	*0.009*	*0.013*	*0.015*
	(0.041)	(0.034)	(0.033)	(0.033)	(0.038)	(0.034)	(0.034)	(0.034)	(0.034)	(0.033)	(0.034)
Manufacturing	*0.021*	*0.008*	*0.016*	*0.009*	*0.016*	*0.007*	*0.001*	*0.001*	*0.004*	*0.011*	*0.006*
	(0.026)	(0.022)	(0.021)	(0.022)	(0.024)	(0.022)	(0.022)	(0.022)	(0.023)	(0.022)	(0.022)
Retailandtrade	*0.026*	*0.004*	*0.003*	*0.004*	*0.009*	*0.001*	*0.001*	*0.002*	*0.001*	*0.007*	*0.002*
	(0.030)	(0.022)	(0.021)	(0.022)	(0.025)	(0.023)	(0.023)	(0.022)	(0.024)	(0.022)	(0.023)
Constant	*0.124***	*0.100***	*0.113***	*0.092***	*0.122*	*0.096***	*0.097***	*0.091***	*0.094***	*0.103***	*0.086***
	(0.050)	(0.042)	(0.040)	(0.041)	(0.044)	(0.042)	(0.042)	(0.042)	(0.043)	(0.043)	(0.042)
Observations	74	93	92	93	79	92	91	93	90	92	92
R^2	0.303	0.169	0.211	0.177	0.215	0.164	0.164	0.164	0.156	0.193	0.178
Adjusted R^2	0.091	0.090	0.135	0.093	0.125	0.083	0.083	0.085	0.072	0.116	0.099

* significant at 10%; ** significant at 5%; ***significant at 1%; Standard errors in parenthesis.

Table 7.27: Employment Growth and Perceptions Assessments of Economic Institutions

DV: *LOGEmploymentgrowth*	OLS										
	(all)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LOGSales09	*0.039***	*0.046****	*0.045****	*0.040***	*0.048****	*0.048****	*0.038***	*0.047****	*0.041***	*0.044***	*0.046***
	(0.017)	(0.017)	(0.017)	(0.015)	(0.017)	(0.017)	(0.015)	(0.017)	(0.018)	(0.017)	(0.018)
LOGEmployees09	*-0.087****	*-0.100****	*-0.096****	*-0.092****	*-0.101****	*-0.109****	*-0.081****	*-0.101****	*-0.098****	*-0.105****	*-0.101****
	(0.023)	(0.023)	(0.023)	(0.021)	(0.023)	(0.023)	(0.021)	(0.023)	(0.023)	(0.024)	(0.024)
(1) Licensing	*-0.005*	*-0.016*									
	(0.031)	(0.026)									
(2) Customs	*-0.016*		*-0.010*								
	(0.032)		(0.023)								
(3) Labourregs	*-0.101*			*0.008*							
	(0.069)			(0.023)							
(4) Judicialind	*-0.002*				*-0.057*						
	(0.028)				(0.059)						
(5) Tax	*0.060**					*0.003*					
	(0.031)					(0.024)					
(6) Credit	*-0.001*						*-0.007*				
	(0.026)						(0.021)				
(7) Politicalins	*-0.006*							*0.039**			
	(0.026)							(0.021)			
(8) Propertyrights	*0.041*								*0.024*		
	(0.031)								(0.026)		
(9) Skills	*-0.023*									*0.016*	
	(0.029)									(0.023)	
(10) Corruption	*-0.015*										*0.003*
	(0.026)										(0.023)
Exporter	*-0.045**	*-0.009*	*-0.013*	*-0.032*	*-0.012*	*-0.015*	*-0.022*	*-0.012*	*-0.008*	*-0.002*	*-0.009*
	(0.024)	(0.023)	(0.023)	(0.021)	(0.023)	(0.023)	(0.020)	(0.023)	(0.023)	(0.024)	(0.023)
LOGFirmage	*-0.152****	*-0.120****	*-0.122****	*-0.113****	*-0.118****	*-0.125****	*-0.098***	*-0.114****	*-0.123****	*-0.109***	*-0.118****
	(0.044)	(0.023)	(0.042)	(0.040)	(0.042)	(0.043)	(0.038)	(0.042)	(0.043)	(0.044)	(0.043)

LOGManagerialexperience	*0.017*	*0.024*	*0.013*	*0.001*	*0.026*	*0.033*	*0.003*	*0.023*	*0.031*	*0.025*	*0.027*
	(0.041)	(0.043)	(0.043)	(0.040)	(0.043)	(0.043)	(0.038)	(0.042)	(0.043)	(0.042)	(0.043)
Manufacturing	*0.044**	*0.041*	*0.046**	*0.030*	*0.043*	*0.035*	*0.030*	*0.048**	*0.051**	*0.038*	*0.041*
	(0.026)	(0.028)	(0.028)	(0.025)	(0.028)	(0.028)	(0.024)	(0.028)	(0.028)	(0.028)	(0.028)
Retailandtrade	*-0.013*	*-0.031*	*-0.032*	*-0.035*	*-0.030*	*-0.035*	*-0.028*	*-0.034*	*-0.025*	*-0.036*	*-0.034*
	(0.030)	(0.029)	(0.028)	(0.026)	(0.029)	(0.029)	(0.025)	(0.028)	(0.030)	(0.029)	(0.029)
Constant	*0.191****	*0.161****	*0.172****	*0.182****	*0.153****	*0.165****	*0.153****	*0.137****	*0.153****	*0.151****	*0.154****
	(0.050)	(0.054)	(0.053)	(0.047)	(0.053)	(0.053)	(0.046)	(0.053)	(0.054)	(0.055)	(0.054)
Observations	74	93	92	79	93	92	91	93	90	92	92
R^2	0.499	0.314	0.327	0.383	0.319	0.335	0.291	0.337	0.362	0.319	0.311
Adjusted R^2	0.347	0.249	0.263	0.312	0.254	0.271	0.222	0.274	0.259	0.254	0.244
* significant at 10%; ** significant at 5%; ***significant at 1%; Standard errors in parenthesis.											

Many of the control variables were significant in both specifications, indicating that while the models were useful for explaining firm performance over the last three years, the institutional perceptions included in these had little relevance for that performance. In the regression *LOGSalesgrowth*, lagged sales was negatively related with sales growth, indicating that firms with higher initial levels of sales grew more slowly. However, the lagged measure of employees was positively correlated with higher growth, indicating that firms with higher levels of workers at the start of the three year period tended to increase their sales more quickly than those with fewer workers. Both *Exporter* and *LOGFirmage* were significant at either the 10% or 5% level for all regressions. The *Exporter* dummy had a negative coefficient, suggesting that exporters grew more slowly than average firms. *LOGFirmage* was also negatively related, indicating that younger firms tended to be expanding their sales at a faster annual rate than older firms, an unsurprising result that aligns with the literature.

In the second regression, *LOGSales09* was found to be positively and significantly related to employment growth, meaning that firms with higher initial sales had greater employment growth over the three year period. However, it was negatively correlated with initial levels of employment – firms with higher numbers of employees in 2009 had lower rates of employment growth. This result is again not surprising, since it is generally easier for smaller firms to achieve higher rates of growth given their low initial position. Again, the *LOGFirmage* variable was highly significant and negatively related to employment growth, as older firms hired fewer workers than their younger counterparts. The dummy variable *Manufacturing* was also significant in a few specifications, with a positive coefficient, meaning that manufacturing firms had higher rates of employment growth than firms in other sectors.

7.5.2: Objective Variables and the Institutional Environment

The same performance-based dependent variables of *LOGSalesgrowth* and *LOGEmploymentgrowth* were also regressed with the same set of objective institutional variables, but again the majority of the variables had little effect on firm performance. Given the low number of cases that had all data points needed for a regression with all institutional variables (under 35), we exclude this regression though note that this could lead to omitted variable bias. Among the institutional variables, only one (*fulltimeworkers,* the percent of full-time employees) was significant in both specifications. Notably, though, the variable had a positive coefficient in the regression on sales growth, suggesting that firms with higher rates of sales growth had a higher percentage of full time employees. In the *LOGEmploymentgrowth* regression, the full time employees variable had a negative coefficient, indicating that firms with higher employment growth rates were businesses that had a lower percentage of full time workers already in their workforce. None of the other institutional variables were significant and none were endogenous after running the Durban-Wu-Hausman test. The control variables had significance that was largely the same as in the perceptions-based regressions. In the regression on sales growth, *LOGSales09*, *Exporter* and *LOGFirmage* were all significant and negatively correlated with the dependent variable, while *LOGEmployees09* was positively correlated. In the regression on employment growth, both *LOGEmployees09* and *LOGFirmage* were significant and negatively related to the dependent variable, while the LOGSales09 variable was significant and had a positive coefficient.

Table 7.28: Sales Growth and Experiences with Economic Institutions

DV: *LOGSalesGrowth*	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LOGSales09	*-0.036***	*-0.031***	*-0.015*	*-0.028***	*-0.029***	*-0.026**	*-0.020*	*-0.031***
	(0.017)	(0.013)	(0.014)	(0.014)	(0.013)	(0.013)	(0.014)	(0.013)
LOGEmployees09	*0.055****	*0.057****	*0.025*	*0.054****	*0.048****	*0.040***	*0.049***	*0.047***
	(0.020)	(0.019)	(0.015)	(0.019)	(0.018)	(0.018)	(0.015)	(0.018)
(1) costoperatinglicense	*-0.319*							
	(0.297)							
(2) dayslostoplicense		*-0.008*						
		(0.008)						
(3) costimportlicense			*0.112*					
			(0.639)					
(4) dayslostcustoms				*-0.002*				
				(0.007)				
(5) trustbased					*0.023*			
					(0.019)			
(6) fulltimeworkers						*0.036****		
						(0.013)		
(7) taxpctsales							*-0.009*	
							(0.029)	
(8) loan								*0.016*
								(0.017)
Exporter	*-0.041**	*-0.031***	*-0.046***	*-0.044***	*-0.040***	*-0.042***	*-0.044***	*-0.039***
	(0.021)	(0.018)	(0.020)	(0.019)	(0.018)	(0.018)	(0.019)	(0.018)
LOGFirmage	*-0.062**	*-0.057**	*-0.049*	*-0.064**	*-0.066***	*-0.060**	*-0.101****	*-0.066***
	(0.037)	(0.034)	(0.031)	(0.034)	(0.033)	(0.034)	(0.036)	(0.033)
LOGManagerialexperience	*0.003*	*0.005*	*0.032*	*0.009*	*0.013*	*-0.001*	*0.017*	*0.011*
	(0.036)	(0.034)	(0.035)	(0.034)	(0.033)	(0.033)	(0.036)	(0.033)
Manufacturing	*0.009*	*0.006*	*0.033*	*0.011*	*0.008*	*0.017*	*0.023*	*0.006*
	(0.026)	(0.023)	(0.025)	(0.022)	(0.021)	(0.022)	(0.023)	(0.022)
Retail & Trade	*0.000*	*0.001*	*0.031*	*0.006*	*0.004*	*0.002*	*0.004*	*0.004*
	(0.025)	(0.023)	(0.022)	(0.024)	(0.022)	(0.022)	(0.024)	(0.022)
Constant	*0.111***	*0.090***	*0.017*	*0.085***	*0.086***	*0.090***	*0.101***	*0.094*
	(0.049)	(0.042)	(0.046)	(0.043)	(0.041)	(0.042)	(0.051)	(0.041)
Observations	81	91	46	91	93	90	79	93
R^2	0.192	0.185	0.210	0.175	0.177	0.236	0.202	0.172
Adjusted R^2	0.102	0.106	0.042	0.094	0.099	0.160	0.111	0.093
Durban-Wu-Hausman (endogenous?)	no	no	no	no	no	no	no	no

Table 7.29: Employment Growth and Experiences with Economic Institutions

DV: *LOGEmploymentGrowth*	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LOGSales09	*0.043***	*0.046****	*0.043*	*0.042***	*0.045****	*0.043****	*0.043***	*0.045***
	(0.215)	(0.017)	(0.030)	(0.024)	(0.017)	(0.016)	(0.020)	(0.017)
LOGEmployees09	*-0.108****	*-0.101****	*-0.087***	*-0.100****	*-0.100****	*-0.086****	*-0.101****	*-0.101****
	(0.026)	(0.024)	(0.033)	(0.024)	(0.023)	(0.023)	(0.029)	(0.023)
(1) costoperatinglicense	*-0.300*							
	(0.379)							
(2) dayslostoplicense		*-0.002*						
		(0.010)						
(3) costimportlicense			*0.851*					
			(1.44)					
(4) dayslostcustoms				*0.009*				
				(0.009)				
(5) trustbased					-0.013			
					(0.025)			
(6) fulltimeworkers						*-0.052****		
						(0.016)		
(7) taxpctsales							-0.019	
							(0.040)	
(8) loan								*0.009*
								(0.022)
Exporte	*-0.010*	*-0.009*	*-0.025*	*-0.002*	*-0.008*	*-0.003*	*-0.014*	*-0.009*
	(0.027)	(0.024)	(0.045)	(0.025)	(0.023)	(0.022)	(0.026)	(0.023)
LOGFirmage	*-0.126****	*-0.109***	*-0.066*	*-0.107***	*-0.119****	*-0.150****	*-0.143****	*-0.119****
	(0.047)	(0.044)	(0.069)	(0.043)	(0.043)	(0.042)	(0.048)	(0.043)
LOGManagerialexperience	*0.025*	*0.019*	*-0.033*	*0.022*	*0.026*	*0.044*	*0.047*	*0.027*
	(0.046)	(0.044)	(0.078)	(0.044)	(0.043)	(0.040)	(0.050)	(0.043)
Manufacturing	*0.042*	*0.035*	*0.012*	*0.034*	*0.041*	*0.023*	*0.034*	*0.040*
	(0.033)	(0.029)	(0.055)	(0.028)	(0.028)	(0.027)	(0.032)	(0.028)
Retail & Trade	*-0.041*	*-0.034*	*-0.047*	*-0.043*	*-0.034*	*-0.047*	*-0.041*	*-0.032*
	(0.031)	(0.029)	(0.050)	(0.030)	(0.029)	(0.027)	(0.033)	(0.029)
Constant	*0.188****	*0.157****	*0.171*	*0.151****	*0.159****	*0.184****	*0.187****	*0.156****
	(0.063)	(0.055)	(0.104)	(0.054)	(0.053)	(0.051)	(0.070)	(0.053)
Observations	81	91	46	91	93	90	79	93
R^2	0.342	0.290	0.287	0.298	0.314	0.413	0.302	0.313
Adjusted R^2	0.270	0.221	0.133	0.230	0.248	0.355	0.222	0.247
Durban-Wu-Hausman (endogenous?)	no	no	no	no	no	no	no	no

7.6: Conclusion

Despite the small size of the data set and the relatively large degree of noise, we find strong evidence that certain aspects of the institutional environment are strongly related to firm size and performance. In the regressions of total sales in FY2011/12 (*LOGSales12*), we find that credit and corruption are highly significant and have positive coefficients, indicating that larger firms perceived these aspects of the institutional environment to be more challenging. Other variables, including judicial independence and customs and trade regulation, were significant though only in regressions including a single institutional variable. In the regression on total number of employees (*LOGEmployees12*), we find that only workforce skills is strongly significant. When using growth figures for the dependent variables, we find that current institutional perceptions have little relationship with previous employment and sales growth figures. The only institutional constraints with even some significance were taxation and political instability, though they were only significant in one specification each. Among the objective variables, only the proxy for labour regulation (*fulltimeworkers*) was significant, and came up as such in both the sales and employment regressions. In sum, we find limited econometric support for the proposition that Myanmar's economic institutions have a significant impact on the size and performance of businesses. However, with new sources of data coming available in the next year as well as increasing transparency in both the public and the private sectors, there will be many more opportunities to investigate the relationship between institutions and business in the future, which should help provide a clearer picture of the degree of importance of economic institutions. This exercise also suggests that there are shortcomings with the current design of business environment surveys that do not provide meaningful insights into questions of unpredictability, arbitrary application of law, frequency of activities, and the role of relationships in navigating business-government interactions.

Chapter 8: Conclusion

8.1: Summary of Major Arguments

Economic institutions are central to the story of Myanmar's development. Before the colonial era, Burma was a traditional economy in which informal institutions and social networks facilitated economic activity. In the 19th century, the British colonized Burma and brought with them a set of Western market-supporting institutions. While these institutions helped facilitate impressive economic growth, they failed to gain legitimacy with the population, which regarded them as part of the exploitative colonial mechanism. After a tumultuous span from the Great Depression through World War II and a decade of independence, the country's economy underwent its most severe shock when a socialist government came to power in 1962. The socialist economy was to be planned and administered by the state, yet plans rarely materialized and the state lacked administrative capacity. The result was an economy dominated by black markets and governed by the dictates of the military leadership. Most private enterprise was criminalized and the market-supporting institutions of the colonial era were largely abolished, though the facades of some remained. Economic output and welfare suffered, doomed by rampant corruption and a lack of capacity to administer the socialist economy.

In the late 1980s, under pressure from abysmal economic performance, the country's socialist leadership resigned and a military junta was installed. The SLORC officially abandoned socialism, yet kept many of the state-centric characteristics of the socialist economy, including state ownership of all land and natural resources as well as the exclusive right to operate in many key economic sectors. The SLORC afforded itself widespread economic authority yet lacked the ability to exploit these rights to anywhere near their full extent. Instead, the state delegated these rights by fiat through an opaque system of licensing and permissions, furthering the incentives for businesses to build relationships with government and boosting the foundations of the country's crony economy.

The unique evolution of Myanmar's economic institutions is fundamental to the present day institutional framework. That framework is heavily influenced by the primacy of a 'weak but unlimited state,' one with few bounds on its formal authority yet scant ability to implement those prerogatives or build independent market-supporting institutions. The government remains heavily hierarchical, with the vast majority of formal authority concentrated at the Union level and exercised by top-level officials. This state exercises its authority over the private sector by limiting access to economic opportunities and reserving the right to intervene in many markets and transactions. Subnational governments in Myanmar exist but have few formal rights and responsibilities, and sometimes lack the informal authority to exercise their limited powers. Individuals have some economic rights, though they are rarely inalienable. Instead, they are often contingent on a range of burdensome laws that make their legal exercise challenging.

While the primacy of the Union government is evident across the formal legal framework, these laws, rules and regulations are regularly enforced arbitrarily, preferentially or opportunistically. While this inconsistency can sometimes result from weak institutions, it is also a key aspect of the institutional framework and used by the state and by government officials as another mechanism of control. It is an integral part of the incentive and constraint structure that shapes the behaviour and economic outcomes of businesses. The arbitrary enforcement of the law is facilitated by poorly codified laws, processes and procedures, which give civil servants significant discretion in their interactions with businesses. Bureaucrats also face weak monitoring and enforcement from the central government, exacerbating principal-agent problems and allowing government officials to simultaneously craft the rules of the game and be players in that game. Formal market-supporting institutions lack capacity and legitimacy, and are perceived by most businesses as an appendage of the Union government instead of a check on its power. They often fail in their role as market-supporting institutions, and incentivize businesses to rely on informal institutions to facilitate transactions.

Businesses employ a number of mechanisms based on the incentives and constraints presented by Myanmar's economic institutions. Businesses often have little remedy against a civil servant's discretionary authority, and consequently resort to bribery and relationships to navigate the government system. These tools help businesses expedite basic processes, gain access to restricted economic opportunities and sectors, and circumvent restrictive laws. Relationships also play an integral role in facilitating business to business transactions, as firms are forced to rely on personal exchange because of the weakness of institutions that facilitate impersonal transacting. Commodity trading associations are a key example, providing members with information services, dispute mediation, and rules governing exchange. Despite these coping mechanisms, commercial decision-making is still influenced by an institutional framework that can (often unpredictably) alter returns, deter investment and limit a firm's range of potential trading partners.

While collecting data on economic institutions, especially less perceptible and well-defined ones, remains a challenge, the econometric analysis shows some evidence that Myanmar's institutions have an influence on the private sector. Firm performance was significantly related to perceptions of taxation and political instability as well as the proxy for labour regulation. There were stronger links between firm size and institutions. Notably, there was strong evidence that larger firms perceive credit and corruption as significant institutional challenges, as well as limited evidence that they also perceived judicial independence, customs and trade regulation, and workforce skills to be significant obstacles. While these conclusions are only tentative, given the small and preliminary nature of the research, more detailed data and targeted investigations of the institutional framework could help to provide further quantitative analysis of the link between economic institutions and the private sector.

8.2: Context and Implications

While Myanmar's economic institutions and private sector are supremely interesting as a matter of academic analysis, they are also immensely important for the future economic development of one of the poorest countries in Southeast Asia. While Myanmar's recent reforms and the international community's response are without precedent, the country's historical institutional evolution and existing institutional framework evidence the significant reform challenges Myanmar faces. The institutional arrangement has long incentivized relationships over productivity and competition as the key to success for private business in Myanmar. A wide range of vested interests, including businesses, politicians, the military, and others, has formed and benefits from the current institutional arrangement, and it is unclear the degree to these various vested interests support the reform agenda. The depth and breadth of reforms required mean that the country's transition to a more market-based, internationally oriented economy will be a long, arduous process.

There is some prospect that vested interests will continue to support or allow reforms given the strong response of the international community. Myanmar's reforms have led to the normalization of relations with many countries and removal or suspension of most sanctions, which has brought a massive influx in the diplomatic and aid communities as well as the international private sector. Both the former and the latter feed the skyrocketing real estate market, whose primary beneficiaries are high level government officials from the previous regime, military, and their cronies. The foreign private sector, eager to expand into one of the world's last 'untapped' markets, are regularly partnering with local businesses. Foreign businesses generally seek partners with access to land, capital and other key resources (including government officials), partners who are often the same vested interests that dominated the economy under the previous regime. The benefits of reforms that are accruing to these existing vested interests may help to alleviate their concerns and mitigate their resistance to reforms. However, some vested interests, especially those in productive sectors outside of natural resource extraction, may be more resistant to the reform process. These businesses have long survived despite their inefficiencies, by investing in relationships with government officials. As Myanmar opens more to external trade and foreign investment, these industries will become increasingly marginalized.

To date, the reform process has largely proceeded in an ad hoc manner, with government often reacting to pressure from key stakeholders or external events instead of taking a more measured, planned approach. Some reforms have been largely positive and had great benefit for the private sector, most notably the elimination of the multiple exchange rate regime. This arrangement segmented the currency market and raised the time costs needed to complete transactions. Others, notably the reform of land laws in 2012, were ill-advised and present new challenges and complexity for an already difficult reform environment. They entrench unequal provisions for the maintenance of land rights for many of the country's small farmers, and help facilitate land transfers in the context of wholly deficient and inaccurate records of land holdings.

In the first few years of the reform process, from 2012 to 2015, much effort has been spent changing to formal legal regime, including the passage of a wide range of new laws, rules and regulations. Yet these laws did little to govern business in the past, and their reform has had little change on the day-to-day economic interactions of most private-sector actors in Myanmar. The market facilitating institutions of the state remain weak and partial, and economic actors often lack confidence in them. For businesses, new clients are still generally found and verified through networks, and disputes resolved informally. Building market supporting institutions takes decades, so an assessment of the success or failure of the institution-building aspects of the reforms would be premature. The durability of reforms is a major question mark, and given the personalization of the political process in Myanmar, will remain a major risk. Reforms are often driven by key personalities, and can be disrupted or indefinitely shelved if those people lose the political will or power to push them forward. Members of the bureaucracy, who are charged with implementing reforms, also have strong personal loyalties, which can affect their incentives to implement reforms. Despite the challenges, it is highly unlikely that Myanmar will revert to a governance arrangement in which the military plays as large of a role as it did previously. However, it is still too early to know the full trajectory of this transition, and how it will reshape the incentives facing private sector businesses in Myanmar.

8.3: Contributions to the Literature

This thesis makes an important contribution to a number of bodies of literature. In the area studies literature, it is one of the first fieldwork-based studies of Myanmar's economic system in decades. It is also among the first to examine the country's economic institutions and how they influence the development of the country's private sector. For the development economics literature, this thesis aims to highlight the importance of context for econometric analysis, especially when that analysis aims to contribute to policy. To provide both context and rigor, it combines qualitative, quantitative and historical analysis, a relatively rare approach. This combination, as well as the first-hand collection of quantitative data, gives the researcher a far better ability to interpret the quantitative results. This is illustrated by the high ratings for electricity in the survey, which corresponded with seasonal fluctuations in electricity supply and demand as well as visible protests spurred by electricity shortages. The thesis also shows that the enforcement characteristics of institutions are important in explaining the behaviour and economic outcomes of firms. These characteristics are rarely examined because of the nature of the quantitative data, but are more evident through qualitative interviews. Lastly the thesis shows that informal institutions play an essential role in facilitating transactions and need to be further integrated into the qualitative and quantitative analysis by development economists.

8.4: Areas for Future Research

With the dearth of work on Myanmar's economy over the last half-century, the areas for future research on country-specific issues are broad. In 2014, a number of new firm level data sets were collected, including the World Bank Enterprise Survey, which will provide significantly larger data sets from which to investigate similar questions about the links between firms, performance, and institutions. However, these data sets generally fail to provide significant insights about the informal arrangements that facilitate the bulk of transacting in Myanmar, and as such they are a significant area for potential research. Another important area of inquiry is on the effect on private sector enterprises of the government's limitations on economic opportunities. The transition from informal to formal rules governing business is another area of potential, as it is poorly understood yet important for the long-run success of an economy. Lastly, there is much to be learned about the enforcement characteristics of institutions at the local level, yet little research is done here. Given the current emphasis of development practitioners in Myanmar on reforming policies, this thesis raises the question of whether and how these reforms can be effective without addressing the need to align policies with informal institutions or reform the informal institutions themselves.

Bibliography

"Authorities Charge City Mart for Uncertified Alcohol". 2013. *Eleven Media*, December 13.

Acemoglu, Daron. 2004. Understanding Institutions. In *Lionel Robbins Lectures, London School of Economics*.

Acemoglu, Daron, and Simon Johnson. 2005. "Unbundling Institutions." *Journal of Political Economy* no. 113 (5):949-995.

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. An African Success Story: Botswana. In *MIT Department of Economics Working Paper 01-37*.

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2004. Institutions as the Fundamental Cause of Long-run Growth. In *NBER Working Paper*. Cambridge, MA: National Bureau of Economic Research.

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2005. "Institutions as a Fundamental Cause of Long-run Growth." In *Handbook of Economic Growth*, edited by Philippe Aghion and Steven Durlauf, 385-472. Amsterdam: Elsevier.

Acemoglu, Daron, and James Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *The American Economic Review* no. 91 (5):1369-1401.

Acheson, James M. 2002. "Transaction Cost Economics: Accomplishments, Problems, and Possibilities." In *Theory in Economic Anthropology*, edited by Jean Ensminger, 27-58. Walnut Creek, CA: AltaMira Press.

Adas, Michael. 2011. *The Burma Delta: Economic Development and Social Change on an Asian Rice Frontier, 1852–1941*. Madison: University of Wisconsin Press.

Alby, Philippe, Jean-Jacques Dethier, and Stéphane Straub. 2013. "Firms Operating under Electricity Constraints in Developing Countries." *The World Bank Economic Review* no. 27 (1):109-132.

Alchian, Armen A. 1965. "Some Economics of Property Rights." *Il Politico* no. 30 (4):816-829.

Allen, Richard. 1965. "Recent Developments in Burma." *Journal of the Royal Central Asian Society* no. 52 (1):6-19.

Allison, Edward H. 2005. "The Fisheries Sector, Livelihoods, and Poverty Reduction in Eastern and Southern Africa." In *Rural Livelihoods and Poverty Reduction Policies*, edited by Frank Ellis and H. Ade Freeman. Abingdon, UK: Routledge.

Alston, Lee J. 2008. "The “Case” for Case Studies in New Institutional Economics." In *New Institutional Economics: A Guidebook*, edited by Eric Brousseau and Jean-Michel Glachant, 103-121. Cambridge: Cambridge University Press.

Alston, Lee J., Thráinn Eggertsson, and Douglass C. North. 1996. *Empirical Studies in Institutional Change*, *Political Economy of Institutions and Decisions*. Cambridge: Cambridge University Press.

Amin, Mohammad. 2007. Labor Regulation and Employment in India’s Retail Stores. In *World Bank Policy Research Working Paper*. Washington: World Bank.

Anderson, Edward, Paolo de Renzio and Stephanie Levy. 2006. The Role of Public Investment in Poverty Reduction: Theories, Evidence and Methods. In *Working Paper 263*. London: Overseas Development Institute.

Andrus, J. Russell. 1947. *Burmese Economic Life*. Stanford, California: Stanford University Press.

Aron, Janine. 2000. "Growth and Institutions: A Review of the Evidence." *The World Bank Research Observer* no. 15 (1):99-135.

Arrow, Kenneth. 1971. "Political and Economic Evaluations, Social Effects and Externalities." In *Frontiers of Qualitative Economics*, edited by Michael D. Intriligator, 3-25. Amsterdam: North-Holland Press.

Arumugam, Raja Segaran. 1975. "Burma: A Political and Economic Background." *Southeast Asian Affairs*:41-48.

Aschauer, David Alan. 1989. "Is Public Expenditure Productive?" *Journal of Monetary Economics* no. 23 (2):177-200.

Asiedu, Elizabeth, and James Freeman. 2009. "The Effect of Corruption on Investment Growth: Evidence from Firms in Latin America, Sub-Saharan Africa, and Transition Countries." *Review of Development Economics* no. 13 (2):200-214.

Aterido, Reyes, Mary Hallward-Driemeier, and Carmen Pages. 2007. Investment Climate and Employment Growth: The Impact of Access to Finance, Corruption and Regulations Across Firms. In *IZA Discussion Paper Series No. 3138*. Bonn: IZA.

Aterido, Reyes, Mary Hallward-Driemeier, and Carmen Pages. 2009. Big Constraints to Small Firms' Growth? Business Environment and Employment Growth across Firms. In *World Bank Policy Research Working Paper*. Washington: World Bank.

Aung-Thwin, Michael, and Maitrii Aung-Thwin. 2012. *A History of Myanmar Since Ancient Times: Traditions and Transformation*. London: Reaktion Books.

Aung Tun Thet. 1989. *Burmese Entrepreneurship: Creative Responses to the Colonial Economy*. Stuttgart: Steiner Verlag Wiesbaden GMBH.

Ayyagari, Meghana, Asli Demirgüç-Kunt, and Vojislav Maksimovic. 2008. "How Important Are Financing Constraints? The Role of Finance in the Business Environment." *The World Bank Economic Review* no. 22 (3):483-516.

Bandyopadhyaya, Sekhara. 1987. *Burma To-day : Economic Development and Political Control since 1962*. Calcutta: Papyrus.

Baran, Paul. 1957. *The Political Economy of Growth*. London: Penguin.

Bardhan, Pranab. 2005. "Institutions Matter, but Which Ones?" *Economics of Transition* no. 13 (3):499-532.

Bardhan, Pranab. 2010. "Institutional Economics of Development: Some General Reflections." In *Institutional Microeconomics of Development*, edited by Timothy Besley and Rajshri Jayaraman. Cambridge, MA: MIT Press.

Bardhan, Pranab K. 2000. "Understanding Underdevelopment: Challenges for Institutional Economics From the Point of View of Poor Countries." *Journal of Institutional and Theoretical Economics* no. 156 (1):216-235.

Bardhan, Pranab, and Dilip Mookherjee. 2006. "Decentralisation and Accountability in Infrastructure Delivery in Developing Countries." *The Economic Journal* no. 116 (508):101-127.

Barro, Robert J. 1991. "Economic Growth in a Cross Section of Countries." *The Quarterly Journal of Economics* no. 106 (2):407-443.

Bastos, Fabiano, and John Nasir. 2004. Productivity and the Investment Climate: What Matters Most? In *World Bank Policy Research Working Paper No. 3335*. Washington: World Bank.

Bayly, Christopher , and Tim Harper. 2005. *Forgotten Armies: Britain's Asian Empire & The War With Japan*. London: Penguin Books.

Beck, Thorsten, Asli Demirgüç-Kunt, and Vojislav Maksimovic. 2005. "Financial and Legal Constraints to Growth: Does Firm Size Matter?" *The Journal of Finance* no. 60 (1):137-177.

Beck, Thorsten, Asli Demirgüç-Kunt, and Vojislav Maksimovic. 2008. "Financing Patterns Around the World: Are Small Firms Different?" *Journal of Financial Economics* no. 89 (3):467-487.

Bertrand, Marianne, and Sendhil Mullainathan. 2001. "Do people mean what they say? Implications for subjective survey data." *American Economic Review* no. 91 (2):67-72.

Bewley, Truman. 2002. "Interviews as a Valid Empirical Tool in Economics." *The Journal of Socio-Economics* no. 31 (4):343-353.

Bigsten, Arne, and Måns Söderbom. 2006. "What Have We Learned from a Decade of Manufacturing Enterprise Surveys in Africa?" *The World Bank Research Observer* no. 21 (2):241-265.

Bissinger, Jared, and Linn Maung. 2014. *Subnational Governments and Business in Myanmar*. Yangon, Myanmar: MDRI-CESD and The Asia Foundation.

Bougheas, Spiros, Panicos O. Demetriades, and Theofanis P. Mamuneas. 2000. "Infrastructure, Specialization, and Economic Growth." *The Canadian Journal of Economics* no. 33 (2):506-522.

Brown, Ian. 2009. "British Firms and the End of Empire in Burma." *Asian Affairs* no. 40 (1):15-33.

Brown, Ian. 2013. *Burma's Economy in the Twentieth Century*. Cambridge: Cambridge University Press.

Brunetti, Aymo, Gregory Kisunko, and Beatrice Weder. 1997. Institutional Obstacles to Doing Business: Region-by-Region Results from a Worldwide Survey of the Private Sector. In *World Bank Policy Research Working Paper No. 1759*: World Bank.

Burma Socialist Programme Party Central Committee. 1981. *Political Report of the BSPP Central Committee to the IV Party Congress, 1981 and speech of Chariman U Ne Win, August 3 to 8, 1981*. Rangoon: Burma Socialist Programme Party Central Committee.

Burma Socialist Programme Party Central Organising Committee. 1966. Party Seminar 1965. Rangoon.

Calderón, César and Luis Servén 2004. The Effects of Infrastructure on Growth and Income Distribution. In *Central Bank of Chile Working Paper No. 270*. Santiago: Central Bank of Chile.

Callahan, Mary P. 2002. "State Formation in the Shadow of the Raj: Violence, Warfare and Politics in Colonial Burma." *Southeast Asian Studies* no. 39 (4):513-536.

Canning, David, and Esra Bennathan. 2000. The Social Rate of Return on Infrastructure Investments. In *World Bank Policy Research Working Paper No. 2390*. Washington: World Bank.

Carlin, Wendy, Mark Schaffer, and Paul Seabright. 2006. Where are the real bottlenecks? A Lagrangian approach to identifying constraints on growth from subjective survey data. In *CEPR Discussion Paper No. 5719*.

Cass, David. 1965. "Optimum Growth in an Aggregative Model of Capital Accumulation." *The Review of Economic Studies* no. 32 (3):233-240.

Central Department of Small and Medium Enterprises Development. 2013. "Small and Medium Enterprises in Myanmar". Paper read at SME Development Center, Yangon, Myanmar. August 26.

Chang, Ha-Joon. 2006. Understanding the Relationship between Institutions and Economic Development: Some Key Theoretical Issues. In *UNU-WIDER Working Paper Series No. 2006/05*. Helsinki: UNU-WIDER

Chavis, Larry, Leora Klapper, and Inessa Love. 2010. International Differences in Entrepreneurial Finance. In *Enterprise Surveys Enterprise Note Series No. 11*. Washington: World Bank.

Cheesman, Nick. 2014. Personal Communication, May 16, 2014.

Cheng Siok Hwa. 1965. "The Development of the Burmese Rice Industry in the Late Nineteenth Century." *Journal of Southeast Asian History* no. 6 (1):67-80.

Christian, John LeRoy. 1942. *Modern Burma: A Survey of Political and Economic Development*. Oakland: University of California Press.

Clarke, George R.G., and Lixin Colin Xu. 2004. "Privatization, Competition, and Corruption: How Characteristics of Bribe Takers and Payers Affect Bribes to Utilities." *Journal of Public Economics* no. 88 (9-10):2067-2097.

Coase, Ronald. 1937. "The Nature of the Firm." *Economica* no. 4 (16):386-405.

Coase, Ronald. 1959. "The Federal Communications Commission." *Journal of Law and Economics* no. 2:1-40.

Coase, Ronald. 1960. "The Problem of Social Cost." *Journal of Law and Economics* no. 3:1-44.

Coase, Ronald. 2005. "The Institutional Structure of Production." In *Handbook of New Institutional Economics*, edited by Claude Menard and Mary Shirley. Dordrecht, Netherlands: Springer.

Coddington, Alan. 1975. "The Rationale of General Equilibrium Theory." *Economic Inquiry* no. 13 (4):539-558.

Cole, Shawn, and Anh Tran. 2011. "Evidence from the Firm: A New Approach to Understanding Corruption." In *International Handbook on the Economics of Corruption*, edited by Susan Rose-Ackerman, 408. Cheltenham, UK: Edward Elgar.

Collier, Paul, and J.W. Gunning. 1999. "Explaining African Enterprise Performance." *Journal of Economic Literature* no. 37 (1):64-111.

Commander, Simon, and Jan Svejnar. 2007. Do Institutions, Ownership, Exporting and Competition Explain Firm Performance? Evidence from 26 Transition Countries. In *IZA Discussion Paper Series No. 2637*. Bonn: IZA.

Coricelli, Fabrizio, and Igor Masten. 2004. Growth and Volatility in Transition Countries: The Role of Credit. In *Festschrift in Honor of Guillermo A. Calvo*: IMF.

Cull, Robert, and Lixin Colin Xu. 2005. "Institutions, Ownership, and Finance: The Determinants of Investment among Chinese Firms." *Journal of Financial Economics* no. 77 (1):117-146.

Datta, Saugato. 2012. "The Impact of Improved Highways on Indian Firms." *Journal of Development Economics* no. 99 (1):46-57.

David, Paul A. 1985. "Clio and the Economics of QWERTY." *The American Economic Review* no. 75 (2):332-337.

De Haan, Jakob. 2007. "Political Institutions and Economic Growth Reconsidered." *Public Choice* no. 131 (3):281-292.

De Rosa, Donato, Nishaal Gooroochurn, and Holger Gorg. 2010. Corruption and Productivity: Firm-level Evidence from the BEEPS Survey. In *World Bank Policy Research Working Paper No. 5348*. Washington: World Bank.

Demsetz, Harold. 1967. "Toward a Theory of Property Rights." *The American Economic Review* no. 57 (2):347-359.

Demsetz, Harold. 1968. "The Cost of Transacting." *The Quarterly Journal of Economics* no. 82 (1):33-53.

Demsetz, Harold. 2000. "Dogs and Tails in the Economic Development Story." In *Institutions, Contracts and Organizations: Perspectives from New Institutional Economics*, edited by Claude Menard. Cheltenham, UK: Edward Elgar.

Dethier, Jean-Jacques, Maximilian Hirn, and Stephane Straub. 2008. Explaining Enterprise Performance in Developing Countries with Business Climate Survey Data. In *World Bank Policy Research Working Paper No. 4792*. Washington: World Bank.

Directorate of Investment and Company Administration. 2013. Data on Foreign Investment, Local Investment and Company Registration. Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar.

Dollar, David, Mary Hallward-Driemeier, and Taye Mengistae. 2005. "Business Climate and Firm Performance in Developing Economies." *Economic Development and Cultural Change* no. 54 (1):1-31.

Domar, Evsey D. 1946. "Capital Expansion, Rate of Growth, and Employment." *Econometrica* no. 14 (2):137-147.

Donnison, F. S. V. 1970. *Burma*, *(Nations of the Modern World)*. London: Ernest Benn, Ltd.

Dow, Sheila. 2007a. "Introduction: The Methodology of Development Economics." *Journal of Economic Methodology* no. 14 (1):1-4.

Dow, Sheila. 2007b. "Variety of Methodological Approach in Economics." *Journal of Economic Surveys* no. 21 (3):447-465.

Easterly, William, and Ross Levine. 1997. "Africa's Growth Tragedy: Policies and Ethnic Divisions." *The Quarterly Journal of Economics* no. 112 (4):1203-1250.

Easterly, William, and Sergio Rebelo. 1993. "Fiscal Policy and Economic Growth." *Journal of Monetary Economics* no. 32 (3):417-458.

Eggertsson, Thráinn. 1996. "No Experiments, Monumental Disasters: Why It Took a Thousand Years to Develop a Specialized Fishing Industry in Iceland." *Journal of Economic Behavior & Organization* no. 30 (1):1-23.

Eifert, Benn, Alan Gelb, and Vijaya Ramachandran. 2005. Business Environment and Comparative Advantage in Africa: Evidence from the Investment Climate Data. In *Center for Global Development Working Paper No. 56*. Washington: Center for Global Development.

Eifert, Benn, Alan Gelb, and Vijaya Ramachandran. 2008. "The Cost of Doing Business in Africa: Evidence from Enterprise Survey Data." *World Development* no. 36 (9):1531-1546.

Emery, R.F. 1970. *The Financial Institutions of Southeast Asia*. New York: Praeger.

Engerman, Stanley L, and Kenneth L Sokoloff. 2005. "Institutional and Non-institutional Explanations of Economic Differences." In *Handbook of New Institutional Economics*, edited by Claude Menard and Mary Shirley, 639-665. Dordrecht, Netherlands: Springer.

Escribano, Alvaro, and J. Luis Guasch. 2005. Assessing the Impact of the Investment Climate on Productivity Using Firm-Level Data: Methodology and the Cases of Guatemala, Honduras and Nicaragua. In *World Bank Policy Research Working Paper No. 3621*. Washington: World Bank.

Esfahani, Hadi Salehi, and María Teresa Ramírez. 2003. "Institutions, Infrastructure, and Economic Growth." *Journal of Development Economics* no. 70 (2):443-477.

Feld, Lars P., and Gebhard Kirchgässner. 2008. Institutions and Economic Growth: A Survey of the Recent Empirical Evidence. In *SCALA Discussion Paper No. 11/2008*. St. Gallen, Switzerland: University of St. Gallen.

Fenichel, Allen, and Gregg Huff. 1975. "Colonialism and the Economic System of an Independent Burma." *Modern Asian Studies* no. 9 (03):321-335.

Findlay, Ronald. 2013. "Coastal-inland interactions in Burmese history: a long-term perspective." *Asian-Pacific Economic Literature* no. 27 (1):1-26.

Fisman, Raymond, and Jakob Svensson. 2007. "Are Corruption and Taxation Really Harmful to Growth? Firm Level Evidence." *Journal of Development Economics* no. 83 (1):63-75.

Foerch, Thomas, San Thein, and Sophie Waldschmidt. 2013. Myanmar's Financial Sector: A Challenging Environment for Banks. Yangon, Myanmar: GIZ.

Fontana, Andrea, and James H. Frey. 2000. "The Interview: From Structured Questions to Negotiated Text." In *Handbook of Qualitative Research*, edited by Norman K. Denzin and Yvonna S. Lincoln, 645-672. Thousand Oaks, CA: SAGE.

Furnivall, John Sydenham. 1956. *Colonial Policy and Practice: A Comparative Study of Burma and Netherlands India*. New York: New York University Press.

Furnivall, John Sydenham. 1957. *An Introduction to the Political Economy of Burma*. Rangoon: People's Literature Committee and House.

Furnivall, John Sydenham. 1960. *The Governance of Modern Burma*: International Secretariat, Institute of Pacific Relations.

Furubotn, Eirik G., and Svetozar Pejovich. 1972. "Property Rights and Economic Theory: A Survey of Recent Literature." *Journal of Economic Literature* no. 10 (4):1137-1162.

Furubotn, Eirik G., and Svetozar Pejovich. 1974. *The Economics of Property Rights*. Cambridge, MA: Ballinger.

Furubotn, Eirik G., and Rudolf Richter. 1991. "The New Institutional Economics: An Assessment." In *The New Institutional Economics: A Collection of Articles from the Journal of Institutional and Theoretical Economics*, edited by Eirik G. Furubotn and Rudolf Richter. College Station: Texas A&M University Press.

Gallo, Andres A., and Lee J. Alston. 2008. "Argentina's Abandonment of the Rule of Law and its Aftermath." *Washington University Journal of Law & Policy* no. 26:153-182.

Gay, Daniel. 2007. "Modernism, Reflexivity and the Washington Consensus." *The Journal of Economic Methodology* no. 14 (1):83-105.

Glaeser, Edward L., Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2004. "Do Institutions Cause Growth?" *Journal of Economic Growth* no. 9 (3):271-303.

Goedhuys, Micheline, Norbert Janz, and Pierre Mohnen. 2008. "What Drives Productivity in Tanzanian Manufacturing Firms: Technology or Business Environment?" *The European Journal of Development Research* no. 20 (2):199-218.

Goldberg, Victor P. 2005. "The Enforcement of Contracts and Private Ordering." In *Handbook of New Institutional Economics*, edited by Claude Ménard and Mary Shirley, 491-511. Dordrecht, Netherlands: Springer.

Government of the Republic of the Union of Myanmar. 2012a. The Export and Import Law. Pyidaungsu Hluttaw Law No. 17/2012, Nay Pyi Taw, Myanmar.

Government of the Republic of the Union of Myanmar. 2012b. Farmland Law. Pyidaungsu Hluttaw Law No. 11/2012, Nay Pyi Taw, Myanmar.

Government of the Republic of the Union of Myanmar. 2012c. The Foreign Investment Law. Pyidaungsu Hluttaw Law No. 21/2012, Nay Pyi Taw, Myanmar.

Government of the Republic of the Union of Myanmar. 2013a. Foreign Investment Rules and Regulations. Unofficial Translation by Kelvin Chia Yangon Ltd., Nay Pyi Taw, Myanmar.

Government of the Republic of the Union of Myanmar. 2013b. President U Thein Sein delivers an address at Small and Medium Enterprises Development Central Committee meeting at Presidential Palace. President Office, Nay Pyi Taw, Myanmar.

Government of the Socialist Republic of the Union of Burma. 1984. Electricity Law. PyiThu Hluttaw Act No. 7, Yangon, Myanmar.

Government of the Union of Burma. 1948a. The Constitution of the Union of Burma. Rangoon: Superintendent of Government Printing.

Government of the Union of Burma. 1948b. The Land Nationalization Act. Rangoon: Superintendent of Government Printing.

Government of the Union of Myanmar. 1988. The Union of Myanmar Foreign Investment Law. Rangoon.

Government of the Union of Myanmar. 1989. State-owned Economic Enterprise Law. The State Law and Order Restoration Council Law No. 9/1989, Yangon, Myanmar.

Government of the Union of Myanmar. 1990a. The Financial Institutions of Myanmar Law. The State Law and Order Restoration Council Law No. 16/1990, Yangon, Myanmar.

Government of the Union of Myanmar. 1990b. The Private Industrial Enterprise Law. State Law and Order Restoration Council Law No. 22/90. Yangon, Myanmar.

Government of the Union Of Myanmar. 1992. The Forest Law. The State Law and Order Restoration Council Law No. 8/1992, Yangon, Myanmar.

Government of the Union of Myanmar. 1994. The Myanmar Mines Law. The State Law and Order Restoration Council Law No. 8/1994, Yangon, Myanmar.

Government of the Union of Myanmar. 2011. The Myanmar Special Economic Zone Law. The State Peace and Development Council Law No. 8/2011, Nay Pyi Taw, Myanmar.

Greif, Avner. 1993. "Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition." *The American Economic Review* no. 83 (3):525-548.

Greif, Avner. 2005. "Commitment, Coercion, and Markets: The Nature and Dynamics of Institutions Supporting Exchange." In *Handbook of New Institutional Economics*, edited by Claude Ménard and Mary Shirley, 727-786. Dordrecht, Netherlands: Springer.

Hall, Robert E., and Charles I. Jones. 1999. "Why Do Some Countries Produce So Much More Output Per Worker Than Others?" *The Quarterly Journal of Economics* no. 114 (1):83-116.

Hallward-Driemeier, Mary, and Reyes Aterido. 2009. Comparing Apples with...Apples: How to Make (More) Sense of Subjective Rankings of Constraints to Business. In *World Bank Policy Research Working Paper No. 5054*. Washington: World Bank.

Hallward-Driemeier, Mary, Scott J. Wallsten, Lixin Colin Xu, and World Bank. 2003. "The investment climate and the firm firm-level evidence from China." In *Policy Research Working Paper 3003*. Washington, D.C.: World Bank,. http://econ.worldbank.org/view.php?type=5&id=24954.

Hallward-Driemeier, Mary, Scott Wallsten, and Lixin Colin Xu. 2006. "Ownership, Investment Climate and Firm Performance: Evidence from Chinese Firms." *Economics of Transition* no. 14 (4):629-647.

Harriss, John, Janet Hunter, and Colin Lewis, eds. 2003. *The New Institutional Economics and Third World Development*. London: Routledge.

Harrod, R. F. 1939. "An Essay in Dynamic Theory." *The Economic Journal* no. 49 (193):14-33.

Harvey, Godfrey Eric. 1946. *British Rule in Burma, 1824-1942*. London: Faber & Faber.

Hausmann, Ricardo, and Andrés Velasco. 2005. "Slow Growth in Latin America: Common Outcomes, Common Causes?" *Kennedy School of Government: Boston MA. Processed*.

Hill, Hal. 1984. "Industrialization in Burma in Historical Perspective." *Journal of Southeast Asian Studies* no. 15 (1):134-149.

Hill, Hal, and Sisira Jayasuriya. 1986. An Inward-Looking Economy in Transition : Economic Development in Burma since the 1960s. In *ISEAS Occasional Paper* Singapore: Institute of Southeast Asian Studies.

Hindson, Doug , and Jorg Meyer-Stamer. 2007. The Local Business Environment and Local Economic Development: Comparing Approaches. In *Mesopartner Working Paper*. Duisburg, Germany: Mesopartner.

Honorati, Maddalena, and Taye Mengistae. 2007. Corruption, Business Environment, and Small Business Fixed Investment in India. In *World Bank Policy Research Working Paper No. 4356*. Washington: World Bank.

Hughes, Thomas Lewis. 1947. "Regent Progress in Burma." *Journal of the Royal Central Asian Society* no. 34 (1):32-50.

Hulme, David. 2007. Integrating Quantitative and Qualitative Research for Country Case Studies of Development. Economic and Social Research Council, Global Poverty Research Group Working Paper No. 63.

IBRD. 1953. The Economy of Burma. Washington.

IBRD. 1958. Current International Position and Prospects for Burma. Washington.

IFC. 2008. Monitoring and Evaluation for Business Environment Reform. Washington.

IFC. *About Us* 2014 [cited May 1, 2014. Available from http://www.enterprisesurveys.org/About-Us.

IMF. 1995a. Myanmar-Recent Economic Developments. Washington: IMF Publication Services.

IMF. 1995b. Myanmar: Policies for Sustaining Economic Reform. International Monetary Fund.

IMF. 1997. Myanmar-Recent Economic Developments. Washington: IMF Publication Services.

IMF. 1999. Myanmar-Recent Economic Developments. Washington: IMF Publication Services.

IMF. 2012a. Myanmar 2011 Article IV Consultation. Washington, DC: International Monetary Fund.

IMF. 2012b. Staff Report for the 2011 Article IV Consultation - Informational Annex. Washington, DC: IMF.

Interview 001 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 7, 2013.

Interview 003 with government official. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 8, 2013.

Interview 004 with government official. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 8, 2013.

Interview 006 with government official. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 8, 2013.

Interview 007 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 9, 2013.

Interview 008 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 9, 2013.

Interview 009 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 9, 2013.

Interview 010 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 9, 2013.

Interview 012 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 10, 2013.

Interview 013 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 10, 2013.

Interview 014 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 10, 2013.

Interview 015 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 11, 2013.

Interview 016 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 12, 2013.

Interview 018 with businessperson. Interview by Jared Bissinger. Mawlamyine, Myanmar, November 13, 2013.

Interview 022 with government official. Interview by Jared Bissinger. Monywa, Myanmar, November 15, 2013.

Interview 024 with businessperson. Interview by Jared Bissinger. Monywa, Myanmar, November 16, 2013.

Interview 025 with businessperson. Interview by Jared Bissinger. Monywa, Myanmar, November 16, 2013.

Interview 026 with businessperson. Interview by Jared Bissinger. Monywa, Myanmar, November 16, 2013.

Interview 027 with businessperson. Interview by Jared Bissinger. Monywa, Myanmar, November 16, 2013.

Interview 028 with businessperson. Interview by Jared Bissinger. Monywa, Myanmar, November 16, 2013.

Interview 029 with businessperson. Interview by Jared Bissinger. Monywa, Myanmar, November 16, 2013.

Interview 100 with business association. Interview by Jared Bissinger. Mandalay, Myanmar, September 18, 2013.

Interview 101 with business association. Interview by Jared Bissinger. Mandalay, Myanmar, September 19, 2013.

Interview 102 with businessperson. Interview by Jared Bissinger. Yangon, Myanmar, July 18, 2014.

Interview 103 with business association. Interview by Jared Bissinger. Mandalay, Myanmar, September 18, 2013.

Interview 104 with businessperson. Interview by Jared Bissinger. Yangon, Myanmar, August 30, 2013.

Interview 105 with financial institution. Interview by Jared Bissinger. Yangon, Myanmar, December 10, 2013.

Interview 106 with financial institution. Interview by Jared Bissinger. Yangon, Myanmar, December 10, 2013.

Interview 107 with financial institution. Interview by Jared Bissinger. Yangon, Myanmar, December 11, 2013.

Interview 108 with businessperson. Interview by Jared Bissinger. Yangon, Myanmar, August 30, 2013.

Interview 110 with business association. Interview by Jared Bissinger. Yangon, Myanmar, September 12, 2013.

Interview 111 with business association. Interview by Jared Bissinger. Yangon, Myanmar, September 2, 2013.

Interview 202 with foreign consultant. Interview by Jared Bissinger. Yangon, Myanmar, January 21, 2014.

Interview 203 with businessperson. Interview by Jared Bissinger. Yangon, Myanmar, January 22, 2014.

Interview 204 with foreign consultant. Interview by Jared Bissinger. Yangon, Myanmar, January 22, 2014.

Interview 205 with businessperson. Interview by Jared Bissinger. Yangon, Myanmar, January 23, 2014.

Interview 207 with foreign consultant. Interview by Jared Bissinger. Yangon, Myanmar, January 29, 2014.

Interview 208 with foreign consultant. Interview by Jared Bissinger. Yangon, Myanmar, January 30, 2014.

Interview 209 with businessperson. Interview by Jared Bissinger. Yangon, Myanmar, January 30, 2014.

Interview 210 with foreign consultant. Interview by Jared Bissinger. Yangon, Myanmar, February 4, 2014.

Johnson, Simon, John McMillan, and Christopher Woodruff. 2002. Property Rights and Finance. In *NBER Working Paper No. 8852*. Cambridge, MA: National Bureau of Economic Research.

Joskow, Paul L. 2008. "New Institutional Economics: A Report Card." In *New Institutional Economics: A Guidebook*, edited by Eric Brousseau and Jean-Michel Glachant. Cambridge: Cambridge University Press.

Jütting, Johannes. 2003. Institutions and Development: A Critical Review. In *OECD Development Centre Working Paper No. 201*: OECD.

Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2009. Governance matters VIII: Aggregate and Individual Governance Indicators, 1996-2008. In *World Bank Policy Research Working Paper No. 4978*. Washington: World Bank.

Khin Maung Kyi. 1994. "Myanmar: Will Forever Flow the Ayeyarwady?" *Southeast Asian Affairs*:209-230.

Khin Maung Kyi, Ronald Findlay, R.M. Sundrum, Mya Maung, Myo Nyunt, and Zaw Oo. 2000. *Economic Development of Burma: A Vision and a Strategy*. Stockholm: Olof Palme International Center.

Khin Than Kywe. 1960. "Financing the Small Manufacturing Establishments of Burma." *Burma Research Society Fiftieth Anniversary Publications* no. 1.

Knack, Stephen, and Philip Keefer. 1997. "Does Social Capital Have an Economic Payoff? A Cross-country Investigation." *The Quarterly Journal of Economics* no. 112 (4):1251-1288.

Koivu, Tuuli. 2002. Do Efficient Banking Sectors Accelerate Economic Growth in Transition Countries. In *BOFIT Discussion Paper 2002 No. 14*. Helsinki: Bank of Finland.

Koopmans, Tjalling. 1965. "On the Concept of Optimal Growth." In *Econometric Approach to Development Planning*, 225-287. Amsterdam: North-Holland.

KTA Report. 1953. Comprehensive Report, Economic and Engineering Development of Burma. Rangoon: Knappen Tippetts Abbett McCarthy, Engineers, in association with Pierce Management, Inc., and Robert R. Nathan Associaties.

Kumar, Krishna B., Raghuram G. Rajan, and Luigi Zingales. 1999. What Determines Firm Size? In *NBER Working Paper No. 7208*. Cambridge, MA: National Bureau of Economic Research.

Kuntchev, Veselin, Rita Ramalho, Jorge Rodríguez-Meza, and Judy S. Yang. *What Have We Learned from the Enterprise Surveys Regarding Access to Credit by SMEs?* World Bank 2013.

Kyaw Hsu Mon. 2013. "As Car Market Expands, Japanese Models Rule." *Irrawaddy*, December 28.

Kyaw Min San. 2012. "Critical Issues for the Rule of Law in Myanmar." In *Myanmar's Transition: Openings, Obstacles and Opportunities*, edited by Nick Cheesman, Monique Skidmore and Trevor Wilson. Singapore: Institute of Southeast Asian Studies.

Kyaw Myint. 1978. *Industrialization in Burma*, Economics, University of Sydney.

Kyaw Yin Hlaing. 2002. "The Politics of Government-Business Relations in Myanmar." *Asian Journal of Political Science* no. 10 (1):77-104.

Lee, Kyu Sik, and Alex Anas. 1989. *Manufacturers' Response to Infrastructure Deficiencies in Nigeria: Private Alternatives and Policy Options*, *World Bank Policy, Planning, and Research Working Papers WPS 325*. Washington: World Bank.

Lee, Kyu Sik, Alex Anas, and Gi-taik Oh. 1996. *Costs of Infrastructure Deficiencies in Manufacturing in Indonesia, Nigeria, and Thailand*, *World Bank Policy Research Working Paper No. 1604*. Washington: World Bank.

Leeson, P. F. 2008. "The Lewis Model and Development Theory." *The Manchester School* no. 47 (3):196-210.

Levine, Ross. 1997. "Financial Development and Economic Growth: Views and Agenda." *Journal of Economic Literature* no. 35 (2):688-726.

Levine, Ross. 2005. "Finance and Growth: Theory and Evidence." In *Handbook of Economic Growth*, edited by Philippe Aghion and Steven Durlauf. Amsterdam: North-Holland.

Levine, Ross, and David Renelt. 1992. "A Sensitivity Analysis of Cross-Country Growth Regressions." *American Economics Review* no. 82 (4):942-63.

Lewis, W. Arthur. 1954. "Economic Development with Unlimited Supplies of Labour." *The Manchester School* no. 22 (2):139-191.

Limao, Nuno, and Anthony Venables. 2001. "Infrastructure, Geographical Disadvantage, Transport Costs, and Trade." *The World Bank Economic Review* no. 15 (3):451-479.

Love, Inessa, and Roberta Gatti. 2006. Does Access to Credit Improve Productivity? Evidence from Bulgarian Firms. In *World Bank Policy Research Working Paper No. 3921*. Washington: World Bank.

Lucas, Robert E., Jr. 1988. "On the Mechanics of Economic Development." *Journal of Monetary Economics* no. 22 (1):3-42.

Marshall, Monty G., Keith Jaggers, and Ted Robert Gurr. 2002. Polity IV Dataset. edited by Political Instability Task Force.

Matthews, R.C.O. 1986. "The Economics of Institutions and the Sources of Growth." *The Economic Journal* no. 96 (384):903-918.

Mauro, Paolo. 1995. "Corruption and Growth." *The Quarterly Journal of Economics* no. 110 (3):681-712.

McMillan, John, and Christopher Woodruff. 1999. "Dispute Prevention Without Courts in Vietnam." *Journal of Law, Economics, and Organization* no. 15 (3):637-658.

McMillan, John, and Christopher Woodruff. 2002. "The Central Role of Entrepreneurs in Transition Economies." *The Journal of Economic Perspectives* no. 16 (3):153-170.

Ménard, Claude, and Mary Shirley. 2014. "The Future of New Institutional Economics: From Early Intuitions to a New Paradigm?" *Journal of Institutional Economics* no. FirstView:1-25.

Milgrom, Paul R., Douglass C. North, and Barry R. Weingast. 1990. "The Role of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champagne Fairs." *Economics & Politics* no. 2 (1):1-23.

Milo, Melanie S. 2007. Integrated Financial Supervision: An Institutional Perspective for the Philippines. In *ADB Institute Discussion Paper No. 81*. Manila: ADB Institute.

Ministry of Commerce. 1997. Myanmar Export/Import Rules and Regulations For Private Business Enterprises. edited by Directorate of Commerce. Rangoon.

Ministry of Finance. 1943. Financial and Economic Annual of Burma. Rangoon: Bureau of State Printing Presses.

Ministry of Industry. *About Us.* 2014. Available from http://www.industry.gov.mm/en/about-us.

Ministry of National Planning. 1961. Second Four Year Plan for the Union of Burma. Rangoon: Government Printing and Stationary.

Ministry of National Planning. 1964. Economic Survey of the Union Burma. Rangoon: Central Press.

Ministry of National Planning and Economic Development. 1998. Review of the Financial, Economic and Social Conditions for 1997/98. Yangon.

Ministry of Planning and Finance. 1972. Report to the People by The Government of the Union of Burma on The Financial Eocnomic and Social Conditions for 1971-72. Rangoon: Central Press.

Ministry of Planning and Finance. 1975. Report to the Pyithu Hluttaw on the Financial, Economic, and Social Conditions of The Socialist Republic of the Union of Burma for 1974-75. Rangoon.

Ministry of Planning and Finance. 1977. Report to the Pyithu Hluttaw on the Financial, Economic, and Social Conditions of The Socialist Republic of the Union of Burma for 1976-77. Rangoon.

Ministry of Planning and Finance. 1978. Report to the Pyithu Hluttaw on The Financial, Economic and Social Condtions of The Socialist Republic of the Union of Burma for 1978-79. Rangoon.

Ministry of Planning and Finance. 1987a. Report to the Pyithu Hluttaw on the Financial, Economic and Social Conditions of The Socialist Republic of the Union of Burma for 1987/88. Rangoon.

Ministry of Planning and Finance. 1987b. Report to the Pyithu Hluttaw on the Financial, Economic, and Social Conditions of The Socialist Republic of the Union of Burma for 1986/87. Rangoon.

Ministry of Planning and Finance. 1989. Review of The Financial, Economic, and Social Conditions for 1989/90. Rangoon.

Moscotti, Albert D. 1977. Burma's Constitution and Elections of 1974. Singapore: Institute of Southeast Asian Studies.

Murrell, Peter. 2005. "Institutions and Firms in Transition Economies." In *Handbook of New Institutional Economics*, edited by Claude Ménard and Mary Shirley, 667-699. Dordrecht, Netherlands: Springer.

Mya Maung. 1964. "Socialism and Economic Development of Burma." *Asian Survey* no. 4 (12):1182-1190.

Mya Maung. 1970. "The Burmese Way to Socialism: Beyond the Welfare State." *Asian Survey* no. 10 (6):533-551.

Mya Maung. 1974. Military Management of the Burmese Economy: Problems and Prospects. In *The Future of Burma in Perspective: A Symposium*, edited by Josef Silverstein. Ohio University Center for International Studies, Athens Ohio.

Mya Maung. 1991. *The Burma Road to Poverty*. New York: Praeger.

Myat Thein. 2004. *Economic Development of Myanmar*. Singapore: Institute of Southeast Asian Studies.

Netter, Jeffry, and William Megginson. 2001. "From state to market: A survey of empirical studies on privatization." *Journal of Economic Literature* no. 39 (2):321-389.

Nixon, Hamish, Cindy Joelene, Kyi Pyar Chit Saw, Thet Aung Lynn, and Matthew Arnold. 2013. *State and Region Governments in Myanmar*. Yangon, Myanmar: MDRI-CESD and The Asia Foundation.

North, Douglass C. 1979. "A Framework for Analyzing the State in Economic History." *Explorations in Economic History* no. 16 (3):249-259.

North, Douglass C. 1981. *Structure and Change in Economic History*. New York: Norton.

North, Douglass C. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

North, Douglass C. 1991. "Institutions." *The Journal of Economic Perspectives* no. 5 (1):97-112.

North, Douglass C. 1993. The New Institutional Economics and Development. In *Economic History No. 9309002.*: EconWPA.

North, Douglass C. 1994a. "Economic Performance Through Time." *The American Economic Review* no. 84 (3):359-368.

North, Douglass C. 1994b. Institutions Matter. In *Economic History No. 9411004*: EconWPA.

North, Douglass C. , John Joseph Wallis, Steven B. Webb, and Barry R. Weingast. 2007. Limited Access Orders In The Developing World: A New Approach To The Problems

Of Development. In *World Bank Policy Research Working Papers No. 4359*. Washington: World Bank.

North, Douglass C., William Summerhill, and Barry R. Weingast. 2000. "Order, Disorder, and Economic Change: Latin America vs. North America." In *Governing for Prosperity*, edited by Bruce Bueno de Mesquita and Hilton R. Root. Binghampton, NY: Vail-Ballou.

North, Douglass C., and Robert P. Thomas. 1973. *The Rise of the Western World: A New Economic History Cambridge University Press*. Cambridge: Cambridge University Press.

North, Douglass C., and Barry R. Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutional Governing Public Choice in Seventeenth-Century England." *The Journal of Economic History* no. 49 (4):803-832.

Nurske, Ragnar. 1953. *Problems of Capital Formation in Underdeveloped Countries*. New York: Oxford University Press.

Nye, John V. C. 2011. "Taking Institutions Seriously: Rethinking the Political Economy of Development in the Philippines." *Asian Development Review* no. 28 (1):1-21.

OECD. 2013. *Multi-Dimensional Review of Myanmar: Initial Assessment*. Geneva: OECD Publishing.

OECD. 2014. *OECD Investment Policy Reviews: Myanmar 2014*. Geneva: OECD Publishing.

Oxbury, H.F. 1943. An Economic Policy for Burma. Simla, India: Government of Burma Reconstruction Department.

Pande, Rohini , and Christopher R. Udry. 2005. Institutions and Development: A View from Below. In *Yale University Economic Growth Center Discussion Paper No. 928*: Yale.

Pearn, Bruce. 1945. "Burma Since the Invasion." *Journal of the Royal Society of Arts* no. 93 (4686):155-164.

Pfanner, David E., and Jasper Ingersoll. 1962. "Theravada Buddhism and Village Economic Behavior: A Burmese and Thai Comparison." *The Journal of Asian Studies* no. 21 (3):341-361.

Pfanner, M. Ruth. 1969. "Burma." In *Underdevelopment and Economic Nationalism in Southeast Asia*, edited by Frank H. Golay, Ralph Anspach, M. Ruth Pfanner and Eliezer B. Ayal. Ithaca, [N.Y.]: Cornell University Press.

Piore, Michael J. 2006. "Qualitative Research: Does It Fit in Economics?" In *Handbook for Social Science: Field Research Essays & Bibliographic Sources on Research Design* *and Methods*, edited by Sara Curren and Ellen Perecman, 143-157. Thousand Oaks, CA: SAGE.

President Office. *Ministries* 2014. Available from http://www.president-office.gov.mm/en/?q=cabinet/ministries.

Pritchett, Lant. 2000. "The Tyranny of Concepts: CUDIE (Cumulated, Depreciated, Investment Effort) Is Not Capital." *Journal of Economic Growth* no. 5 (4):361-384.

Reinikka, Ritva, and Jakob Svensson. 2002. "Coping with Poor Public Capital." *Journal of Development Economics* no. 69:51-69.

Revolutionary Council. 1962. The Burmese Way to Socialism. Rangoon.

Rodrik, Dani. 2002. After Neoliberalism, What? In *Alternatives to Neoliberalism Conference*. Washington.

Rodrik, Dani. 2006. "Goodbye Washington Consensus, Hello Washington confusion? A Review of the World Bank's Economic Growth in the 1990s: Learning from a Decade of Reform." *Journal of Economic Literature* no. 44 (4):973-987.

Rodrik, Dani. 2008. The New Development Economics: We Shall Experiment, but How Shall We Learn? In *Research Working Paper Series 08-055*. Cambridge, MA: John F. Kennedy School of Government, Harvard University.

Romer, Paul M. 1994. "The Origins of Endogenous Growth." *The Journal of Economic Perspectives* no. 8 (1):3-22.

Romer, Paul M. 1987. "Crazy Explanations for the Productivity Slowdown." In *NBER Macroeconomics Annual*, edited by Stanley Fischer, 163-202. Cambridge, MA: MIT Press.

Rosenstein-Rodan, Paul. 1943. "Problems of Industrialisation of Eastern and South-Eastern Europe." *The Economic Journal* no. 53 (210/211):202-211.

Rostow, Walt Whitman. 1960. *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge: Cambridge University Press.

Sala-I-Martin, Xavier X. 1997. "I Just Ran Two Million Regressions." *The American Economic Review* no. 87 (2):178-183.

Schwab, Klaus. 2013. The Global Competitiveness Report 2013-14. Geneva: World Economic Forum.

Shaffer, Paul. 2013. The Great Myanmar Poverty Debate. In *Q Squared Working Paper No. 64*: Trent University.

Shirley, Mary. 2008. *Institutions and Development*. Cheltenham, UK: Edward Elgar.

Shirley, Mary M. 2005. "Institutions and Development." In *Handbook of New Institutional Economics*, edited by Claude Ménard and Mary Shirley, 611-638. Dordrecht Netherlands: Springer.

Shirley, Mary M, and Claude Ménard. 2005. *Handbook of New Institutional Economics*. Dordrecht, Netherlands: Springer.

Silverstein, Josef. 1967. "Problems in Burma: Economic, Political and Diplomatic." *Asian Survey* no. 7 (2):117-125.

Simon, Herbert A. 1957. *Models of Man Social and Rational: Mathematical Essays on Rational Human Behavior in a Social Setting*. New York: Wiley.

Simon, Herbert A. 1962. "Theories of Bounded Rationality." In *Decision and Organization*, edited by C.B. Mcguire and Roy Radner, 161-176. Amsterdam: North-Holland.

Singer, Hans W. 1949. "Economic Progress in Underdeveloped Countries." *Social Research* no. 16 (1):1-11.

Solow, Robert M. 1956. "A Contribution to the Theory of Economic Growth." *The Quarterly Journal of Economics* no. 70 (1):65-94.

Spiller, Pablo T., and Mariano Tommasi. 2005. "The Institutions of Regulation: An Application to Public Utilities." In *Handbook of New Institutional Economics*, edited by Claude Ménard and Mary M Shirley, 515-543. Dordrect, Netherlands: Springer.

Starr, Martha A. 2012. "Qualitative and Mixed-Methods Research in Economics: Surprising Growth, Promising Future." *Journal of Economic Surveys* no. 28 (2):238-264.

Steinberg, David. 1981a. "Burmese Economics: The Conflict of Ideology and Pragmatism." In *Military Rule in Burma Since 1962*, edited by F. K. Lehman. Singapore: Institute of Southeast Asian Studies.

Steinberg, David I. 1981b. *Burma's Road Toward Development: Growth and Ideology under Military Rule*, *Westview Special Studies on South and Southeast Asia*. Boulder, Colo: Westview Press.

Steinberg, David Joel, ed. 1987. *In Search of Southeast Asia: A Modern History*. Honolulu: University of Hawaii Press.

Stephenson, Hugh. 1938. "Some Problems of a Separated Burma." *Journal of the Royal Central Asian Society* no. 25 (3):400-415.

Stern, Nicholas. 2002. *A Strategy for Development*. Washington: World Bank Publications.

Stern, Nicholas, and Francisco Ferreira. 1997. "The World Bank as 'Intellectual Actor'." In *The World Bank: Its First Half Century*, edited by Kapur Devesh, John P. Lewish and Richard Webb, 523-609. Washington: Brookings Institution Press.

Straub, Stephane. 2008a. Infrastructure and Development: A Critical Appraisal of the Macro Level Literature. In *World Bank Policy Research Working Paper No. 4590*. Washington: World Bank.

Straub, Stéphane 2008b. Infrastructure and Growth in Developing Countries: Recent Advances and Research Challenges. In *World Bank Policy Reserach Working Paper No. 4460*. Washington: World Bank.

Straub, Stéphane , and Akiko Terada-Hagiwara. 2011. "Infrastructure and Growth in Developing Asia." *Asian Development Review* no. 28 (1):119-156.

Svensson, Jakob. 1998. "Investment, Property Rights and Political Instability: Theory and Evidence." *European Economic Review* no. 42 (7):1317-1341.

Tadelis, Steven, and Oliver Williamson. 2012. Transaction Cost Economics. Available at SSRN: http://ssrn.com/abstract=2020176

Taylor, Robert. 2009. *The State in Myanmar*. Singapore: NUS Press.

The Republic of the Union of Myanmar. 2008. The Constitution of the Republic of the Union of Myanmar.

Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* no. 64:416-24.

Tin Maung Maung Than. 2007. *State Dominance in Myanmar: The Political Economy of Industrialization*. Singapore: Institute of Southeast Asian Studies.

Todaro, Michael, and Stephen C. Smith. 2009. *Economic Development*. 10th ed. Harlow, UK: Addison Wesley.

Trager, Frank N. 1966. *Burma, from Kingdom to Republic: A Historical and Political Analysis*. New York: Praeger.

Trager, Frank N. 1971. *Burma: Japanese Military Administration, Selected Documents, 1941-1945*. Philadelphia: University of Pennsylvania Press.

Tun Wai. 1962. *Burma's Currency and Credit*: Orient Longmans.

Turnell, Sean. 2009. *Fiery Dragons: Banks, Moneylenders and Microfinance in Burma*. Copenhagen: Nordic Institute of Asian Studies.

Turnell, Sean. 2014. "Banking and Financial Regulation and Reform in Myanmar." *Journal of Southeast Asian Economies* no. 31 (2):225-240.

United Nations Development Programme. 1988. Selected Sectoral Reviews: Burma. Rangoon: UNDP.

United Nations Economic Commission for Latin America. 1950. Economic Development of Latin America and its Principal Problems. edited by Department of Economic Affairs. Lake Success, New York: United Nations.

Van Schendel, Willem. 1987. "Origins of the Burma Rice Boom, 1850–1880." *Journal of Contemporary Asia* no. 17 (4):456-472.

Walinsky, Louis Joseph. 1962. *Economic Development in Burma, 1951-1960*. New York: Twentieth Century Fund.

Weingast, Barry R. 1995. "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *Journal of Law, Economics, and Organization* no. 11 (1):1-31.

Weingast, Barry R. 1993. "Constitutions as Governance Structures: The Political Foundations of Secure Markets." *Journal of Institutional and Theoretical Economics* no. 149 (1):286-311.

Wiesner, Eduardo. 1998. "Transaction Cost Economics and Public Sector Rent-Seeking in Developing Countries: Toward a Theory of Government Failure." In *Evaluation & Development: The Institutional Dimension*, edited by Robert Picciotto and Eduardo Wiesner. Washington: World Bank.

Williamson, John. 1990a. "What Washington Means by Policy Reform." In *Latin American Adjustment: How Much Has Happened?*, edited by John Williamson, 7-20. Washington: Institute for International Economics.

Williamson, Oliver E. 1971. "The Vertical Integration of Production: Market Failure Considerations." *The American Economic Review* no. 61 (2):112-123.

Williamson, Oliver E. 1979. "Transaction-Cost Economics: The Governance of Contractual Relations." *Journal of Law and Economics* no. 22 (2):233-261.

Williamson, Oliver E. 1990b. "A Comparison of Alternative Approaches to Economic Organization." *Journal of Institutional and Theoretical Economics* no. 146 (1):61.

Williamson, Oliver E. 1993. The Economic Analysis of Institutions and Organizations - in General and with Respect to Country Studies. In *Working Papers No. 133*. Paris: OECD.

Williamson, Oliver E. 1997. "Transaction Cost Economics and Public Administration." In *Public Priority Setting: Rules and Costs*, edited by Peter B. Boorsma, Kees Aarts and Albert E. Steenge, 19-37. Dordrecht, Netherlands: Springer.

Williamson, Oliver E. 2000. "The New Institutional Economics: Taking Stock, Looking Ahead." *Journal of Economic Literature* no. 38 (3):595-613.

Williamson, Oliver E. 2009. Transaction Cost Economics: The Natural Progression. Nobel Prize Lecture, Oslo, Norway: Dec. 8, 2009.

Wingfield, Tom. 2000. "Myanmar: Political Stasis and a Precarious Economy." *Southeast Asian Affairs*:203-218.

World Bank. 1994. World Development Report 1994: Infrastructure for Development. Washington: World Bank.

World Bank. 1997. World Development Report 1997 : The State in a Changing World. Washington: World Bank.

World Bank. 2002. World Development Report 2002: Building Institutions for Markets. Washington: World Bank.

World Bank. 2004. World Development Report 2005: A Better Investment Climate for Everyone. Washington: World Bank.

World Bank. 2005. Economic Growth in the 1990s: Learning from a Decade of Reform. Washington: World Bank.

World Bank. 2013a. *Doing Business: Understanding Regulations for Small and Medium-Size Enterprises*. Washington, DC: World Bank Group.

World Bank. 2013. *Enterprise Surveys: Research*. World Bank 2013b [cited Feb. 19, 2014 2013]. Available from http://www.enterprisesurveys.org/Research.

World Bank. *Myanmar (2014): Obstacles for Firms*. World Bank 2014a. Available from http://www.enterprisesurveys.org/Data/ExploreEconomies/2014/myanmar.

World Bank. 2014. *Survey Methodology*. World Bank 2014b [cited June 3 2014]. Available from http://www.enterprisesurveys.org/methodology.

Xu, Lixin Colin. 2011. "The Effects of Business Environments on Development: Surveying New Firm-level Evidence." *The World Bank Research Observer* no. 26 (2):310-340.

Yusuf, Shahid. 2009. *Development Economics Through the Decades: A Critical Look at 30 Years of the World Development Report*. Washington: World Bank.

Zagha, Roberto, and Gobind T. Nankani. 2005. *Economic Growth in the 1990s: Learning from a Decade of Reform*. Washington: World Bank.

Appendix

Appendix 1

Economic Development and Business in Myanmar

Joint Project of Macquarie University and Myanmar Egress

Investigators			
Chief Investigator:	*Sean Turnell*	*Telephone: +61.2.9850.8493*	*Email: sean.turnell@mq.edu.au*
Co-Investigator	*Jared Bissinger*	*Telephone: 09-5179875*	*Email: jared.bissinger@students.mq.edu.au*

You are invited to participate in a study of the business climate in Myanmar. The study will gather data about firms to help understand constraints to economic growth and hiring, as well as the informal economy. The survey should take 60 to 75 minutes to complete.

If you complete the entire survey, your firm will receive a *free market research report* that shows how your business compares to the other 250 firms we survey. The report will allow you to compare your firm to others in metrics as diverse as labor, capital, credit, performance and perceptions of the business environment. Also, your responses, combined with those of other business leaders, will help inform government policy, and could lead to new policies and programs that can improve your establishment's productivity and allow it to grow.

All information gathered in this study is anonymous and all personal details are strictly confidential. As you can see on the survey, there is no identifying information about you or your business. Survey participation is voluntary: you are not obliged to participate and you can withdraw at any time during the interview process without giving a reason and without consequence.

If you decide to participate, you will be asked to answer questions completely and to the best of your knowledge. To help give better answers, please have basic information from fiscal year 2011-12 accessible. If you do not know an exact figure, please give your best guess.

This study is being implemented by Myanmar Egress and Jared Bissinger (telephone: 095179875, email jared.bissinger@students.mq.edu.au) to meet the requirements for the degree of PhD under the supervision of Sean Turnell (telephone +61.2.9850.8493; email sean.turnell@mq.edu.au) of the Department of Economics, Macquarie University, Sydney Australia. It has been approved by UMFCCI.

Ethics Statement and Verification of Consent					
The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone +61.2.9850.7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.					
Do you understand the scope, purpose, and ethical considerations of this survey and agree to continue?					
	Consent Given?	*Yes*	*No*	*Signature*	

Visit Description	***Date***	***City***	***Township***	***Time Started***	***Time Ended***	***Status:***	
1st Visit						*Complete*	*Incomplete*
2nd Visit (if needed)						*Complete*	*Incomplete*

Surveyor name	***Signature***

Survey Code	*M / P / Y*	

A	General Information

This section asks for basic information and characteristics of your firm. Please answer the questions to the best of your knowledge, even if you are not sure of the precise answer.

A1	Firm Registration

A1A	In what year did this firm begin operations?		
	Year:		*Don't Know*

A1B	In what year did this firm register its operations with government?				
	Year of registration:		*Not yet registered*	*Don't Know*	

A2	Firm Ownership

A2A	What is the firms' current legal status?				
	Sole Proprieter		State Owned Enterprise		
	Partnership		Joint Venture Company		
	Private Limited Liability Company		Representative Office		
	Public Limited Liability Company		Personal		
	Co-operative				

A2B	What percentage of the firm is owned by:	
	Private Myanmar individuals	
	Private foreign individuals	
	Public (government) officials	
	Government or state	

A3	Firm Management

A3A	How many years of experience does the top manager of this firm have in this industry?	
	Years:	

A3B	Is the top manager of this firm:			
	Female?		A university degree holder?	
	A former government employee?		Have overseas educational experience?	

A4	Firm Location & Activities

PRESENT SECTOR CLASSIFICATION CODES (DOCUMENT 1) TO RESPONDENTS

A4A	Which category from the list in front of you most accurately describes the primary activity of your business?					
		Primary Activity Classification Code:				

RETRIEVE SECTOR CLASSIFICATION CODES (DOCUMENT 1)

A4B	Where do you primarily conduct this business activity?		
		At home	
		Fixed business location (not the home)	
		Home or workplace of the client	
		No fixed location	
		Other	

A5	Firm Characteristics

A5A	In the market for your most important good or service, would you classify your firm as a market leader, mid-sized firm, or small player?				
	Market Leader	*Mid-sized firm*	*Small player*	*Don't Know*	

A5B	How many firms do you compete against in your primary line of business?			
	Number of competitors:		*Don't Know*	

A5C	Which of the following are true about your business?		
		It uses computers in the production or sales process	
		It produces items your firm designed	
		It has an ISO or other certfication	
		It is part of a larger company or conglomerate	
		It was privatized by the government in the last three years	
		It competes against unregistered firms	
		It buys inputs, stock, or labor from unregistered firms	
		It involves the personal property of the business owner	

C	Business Climate

This section asks a few questions about your perceptions of the business environment in Myanmar. To complete this section, please rate these different characteristics using the scale in front of you, from no obstacle (0) to very severe obstacle (4). Remember, there are no right or wrong answers. These measures are subjective, and should reflect your individual experience doing business in Myanmar.

C1	Challenges in the Business Climate

C1A	To what degree do each of the following basic services present an obstacle to the current operation of this firm?					
	No obstacle	*Minor obstacle*	*Moderate obstacle*	*Major obstacle*	*Very Severe Obstacle*	*Doesn't Apply*

1	Access to Land	0	1	2	3	4	
2	Access to petrol	0	1	2	3	4	
3	Communications	0	1	2	3	4	
4	Electricity	0	1	2	3	4	
5	Transport	0	1	2	3	4	
6	Water	0	1	2	3	4	

C1B	To what degree do each of the following government-business interactions present an obstacle to the current operation of this firm?						
10	Business Licensing & Permits	0	1	2	3	4	
11	Customs and Trade Regulation	0	1	2	3	4	
12	Judicial Independence	0	1	2	3	4	
13	Labor Regulations	0	1	2	3	4	
14	Tax Collection Process	0	1	2	3	4	
15	Tax Rates	0	1	2	3	4	

C1C	To what degree do each of the following macroeconomic factors present an obstacle to the current operation of this firm?						
20	Credit	0	1	2	3	4	
21	Exchange Rate	0	1	2	3	4	
22	Foreign Sanctions	0	1	2	3	4	
23	Inflation	0	1	2	3	4	
24	Interest Rates	0	1	2	3	4	
25	Political Instability	0	1	2	3	4	
26	Property Rights	0	1	2	3	4	
27	Skills of Workforce	0	1	2	3	4	

C1D	To what degree do each of the following informal activities present an obstacle to the current operation of this firm?						
30	Corruption	0	1	2	3	4	
31	Informal Competitors	0	1	2	3	4	
32	Informal Activities of Registered Competitors	0	1	2	3	4	

RETRIEVE RATING SCALE FROM RESPONDENTS (DOCUMENT 2)

C2	Challenges in the Business Climate

PRESENT VARIABLE LIST TO RESPONDENTS (DOCUMENT 3)

C2A	Of the factors we just rated, which are also listed on the card in front of you, what do you think are the three biggest obstacles to doing business in Myanmar faced by this firm?		
	1st		
	2nd		
	3rd		

C2B	If the biggest obstacle you just mentioned was resolved, by what percent do you estimate your firm's profits could improve?		
	Percent:		*Don't Know*

RETRIEVE VARIABLE LIST FROM RESPONDENTS (DOCUMENT 3)

D Labor and Employment

Improved and new employment opportunities are essential for reducing poverty in countries such as Myanmar. This section asks a few questions about the numbers and types of employees at your firm. Please answer each to the best of your ability, even if exact figures aren't available.

D1	Permanent, full-time employees	
D1A	How many permanent, full-time employees including yourself were employed by your firm in FY2011-12?	
	Employees:	

D1B	Of the permanent, full-time employees working for this firm in FY2011-12, how many were:	
	Managers	
	Skilled Production Workers	
	Unskilled Production Workers	
	Other non-production workers (e.g. administration, sales, professionals)	

D1C	In FY2011-12, what was the monthly wage, in kyats, for an average permanent, full-time:	
	Managers	
	Skilled Production Workers	
	Unskilled Production Workers	
	Other non-production workers (e.g. administration, sales, professionals)	

D1D	How many hours per week did the average permanent, full-time employee at your firm work in FY2011-12?	
	Hours	

D1E	How many weeks per year did the average permanent, full-time employee at your firm work in FY2011-12?	
	Weeks	

D1F	What was the total MONTHLY cost, in kyats, of all non-wage employer-paid benefits, such as meals, commission or paid leave, received by the average permanent full-time employee in FY2011-12?				
		Cost of benefits:			
D2	Other employees				
D2A	How many day laborers or part-time employees worked for this firm in FY2011-12?				
		Temporary employees		*Don't Know*	*IF 0, SKIP TO D3*
D2B	For an average month in FY2011-12, how many full days were worked by an average day laborer or part time employee?				
		Full days		*Don't Know*	
D2C	In FY2011-12, what was the average daily wage, in kyats, for day laborers or part time employees (how much they would make if they worked all day)?				
		Daily wage		*kyat*	
D3	Employment History and Outlook				
D3A	How many employees did your firm employ three years ago?				
		Number of employees:		Don't Know	
D3B	How many new employees does your firm plan on hiring during FY2012-13?				
		Number of employees:		Don't Know	

PRESENT HIRING REASONS (DOCUMENT 4)

D3C	Which of the following best describes why your company plans to change the size of its workforce during FY2012-13? (Please select only one)		
		Changes in domestic demand	
		Changes in international demand	
		Changes in the macroeconomic environment (higher exchange rate, inflation, etc.)	
		Changes in the supply of qualified labor	
		Changes in labor regulations and/or their enforcement	
		Perceptions of future change in the economy	
		Other	

REMOVE HIRING REASONS (DOCUMENT 4)

E Capital and Investment

Capital accumulation is a key step to raising the productivity and output of businesses in Myanmar. This section asks a few questions about your firm's current capital stock and recent capital investments.

E1	Current Capital/Assets			

E1A	At the end of FY2011-12, what was the market value of each of the following types of fixed assets owned by your business?			
	Production machinery and equipment			
	Land & Buildings			
	Vehicles			
	Information technologies			

E1B	In FY2011-12, at what capacity did this firm produce? Please give this answer in percentage terms.			
	Percentage		*IF 100%, SKIP TO E1D*	
	Don't Know			

PRESENT CAPACITY SHORTAGE REASONS (DOCUMENT 5)

E1C	Which of the choices on the card in front of you explain why your capacity was not utilized fully in FY2011-12? Check all that apply.			
	Shortage of local inputs		*Skilled labor shortage*	
	Shortage of international inputs		*Unskilled labor shortage*	
	Lack of working capital		*Structural over-supply*	
	Low demand		*Other*	

REMOVE (CAPACITY SHORTAGE REASONS) DOCUMENT 5

E1D	What is the market value of the rented capital that this firm used in the production process in FY2011-12?	
	Market value:	

E2	Recent Investments

E2A	Did your firm invest in any new fixed/capital assets in the last three years?		
	Yes		
	No		*SKIP TO F*
	Don't Know		

E2B	Since the beginning of FY2009-10, how much did your firm invest in each of the following types of new fixed/capital assets:	
	Production Machinery and Equipment	
	Land & Buildings	
	Vehicles	
	Information technologies	

F	Finance, Banking and Credit

A sound and functioning financial sector is key to economic growth and development. This section asks a few questions about your experiences in Myanmar's financial environment. Please answer them as accurately as possible even if precise figures aren't available.

F1 Record Keeping and Banking

F1A Which choice from the list that I will read best describes this firm's records or accounts?

Complete balance sheet	
Simplified written accounts	
Informal written records	
No written records are kept	

F1B In FY2011-12, how many times in an average week did you use a bank account for business transactions?

Number of times:		*Don't Know*

F1C Do any owners of this firm currently have a bank account or personal loan that is used for this business's activities?

Yes	*No*	*Don't Know*

F2 Bank and Informal Credit

F2A Does your firm currently have a loan or line of credit from a financial institution or informal source?

Yes		
No		*SKIP TO F2G*
Don't Know		*SKIP TO G*

F2B For the firm's most recent loan or line of credit, what kind of collateral was required to get the loan?

Vehicle		Other personal property	
Land or building		None	

F2C What was the source of this firm's most recent loan or line of credit?

Private commercial bank	
Government owned bank or department	
Friend or family	
Informal moneylender	
Association	
Other source	

PRESENT LOAN MOTIVATIONS (DOCUMENT 6)

F2D Which of the following reasons listed on the card in front of you best describes why this firm got a loan from this source?

Most favorable collateral requirements	

Best interest rates	
Lender that I trusted the most	
Only source of credit the business could obtain	
Most convenient lender for me	
Best lending conditions/service	

REMOVE LOAN MOTIVATIONS (DOCUMENT 6)

F2E	What was the major purpose of this loan or line of credit?

Invest in new capital	
Cover operating expanses	
Repay another loan or outstanding debt	
Personal reasons	
Other	

F2F	For the most recent loan or line of credit, what was its value at the time of approval?

Value:		
Don't Know		*SKIP TO F3*
Refused		

PRESENT NO LOAN REASONS (DOCUMENT 7)

F2G	Of the reasons listed on the card in front of you, what was the main reason why this firm did not have a loan or line of credit?

No need for a loan	
Application procedures were complex	
Interest rates were not favorable	
Collateral requirements were too high	
Size of loan and maturity were insufficient	
Did not think it would be approved	
Did not have the proper business documentation	
Inflation is too high to make a loan worthwhile	
Other	

REMOVE NO LOAN REASONS (DOCUMENT 7)

G Firm Performance

Growth by formal businesses from Myanmar in both domestic and international markets will be a cornerstone of Myanmar's economic development. This section asks a few questions about your firms' sales and clients to better understand what affects firm output in Myanmar. finding greater efficiencies for businesses in Myanmar.

G1	Total (gross) annual expenditure				

G1A	Which of these four ranges best describes your firm's total annual expenditure in FY2011-12?				
		Under 10 million kyat	10 million - 100 million kyat	100 million - 1 billion kyat	Over 1 billion kyat

G1B	In FY2011-12, what was this firm's total annual expenditure, in kyat?				
		Expenditure:		*Don't Know*	*Refused*

PRESENT EXPENDITURE CATEGORIES (DOCUMENT 8)

G1C	For FY2011-12, what percentage of total annual expenditure was attributable to each of the following costs, listed on the card in front of you.		
		Labor, including wages, bonuses, and benefits	
		Raw materials and intermediate goods used in production	
		Fuel & electricity	
		Rental costs of machinery, equipment, and vehicles	
		Rental costs of land and buildings	
		Transportation and logistics	
		Government taxes, licenses fees, duties, and other fees	
		Other expenses	

REMOVE EXPENDITURE CATEGORIES (DOCUMENT 8)

G1D	In FY2011-12, what percentage of the raw materials and intermediate goods used by this firm were:			
		Direct imports		
		Indirect imports (purchased through a local distributor)		
		Domestically Produced		*IF 0%, SKIP TO G2*

G2	Total (gross) annual sales

G2A	Which of these four ranges best describes your firm's total annual sales in FY2011-12?				
		Under 10 million kyat	10 million - 100 million kyat	100 million - 1 billion kyat	Over 1 billion kyat

G2B	In FY2011-12, what were this firm's total annual sales?				
		Total sales:		Don't Know	Refused

G2C	In FY2011-12, what percentage of this firm's sales were:			
		Direct Exports		
		Indirect Exports (exported through a distributor)		
		Domestic Sales		*IF 100%, SKIP TO G2E*

G2D	At what kyat/USD exchange rate do you estimate your firm can effectively compete on international markets?

Exchange rate:	________	kyat / USD	*Don't Know*

G2E	In FY2011-12, what percentage of this firm's total annual domestic sales were:	
	to unregistered businesses	
	to the government	

G3	Operating Environment

G3A	What was the total cost (including official costs, unofficial costs and agent fees) to complete each of the following in FY2011-12?		
	Obtaining an operating license		N/A
	Electrical connection or service		N/A
	Telecommunications connection or service		N/A
	Water connection or service		N/A
	Obtaining an import license		N/A
	Obtaining an export license		N/A

G3B	In FY2011-12, did you lose any days of production/sales due to problems, such as service interruptions or delays, with:	
	Customs	
	Electricity	
	Government licenses	
	Telecommunications	
	Transportation	

G4	Firm Performance History and Expectations

G4A	By what percentage have your firm's sales grown over the last three years?			
	Percentage:		*Don't Know*	*Refused*
G4B	By what percent have your firm's expenses grown over the last three years?			
	Percentage:		*Don't Know*	*Refused*
G4C	Compared to FY2011-12, how much do you expect sales to increase in FY2012-13?			
	Percentage:		*Don't Know*	*Refused*
G4D	Compared to FY2011-12, how much do you expect expenses to increase in FY2012-13?			
	Percentage:		*Don't Know*	*Refused*

Y	Follow Up Questions

That concludes the survey. Thank you very much for your cooperation. Before I go, can I ask you two questions about our follow-up for this survey?

Y1	To show our appreciation for the time you have taken to complete our survey, we would like to provide you a custom report showing how your business compares with the 225 others that we will interview. Can you please provide an email or postal address for us to send you this report?
Y2	In order to ensure the accuracy of our work, the survey directors often follow up with interviewees to thank them personally and get their feedback about the survey process. Would it be ok if the survey directors visited you sometime in the next week for about 5 to 10 minutes to do this?

Yes	*No*

Thank you once again for your assistance.

FACE-TO-FACE INTERVIEW ENDS.

Z Surveyor Feedback

Surveyors, please complete the following section immediately after leaving the interview, answering questions to the best of your ability.

Z1 *It is my perception that the responses to the questions regarding opinons and perceptions were:*

Truthful	
Somewhat truthful	
Not truthful	

Z2 *The respones to questions regarding figures (income, expenditure, capital and employment numbers):*

Were taken directly from establishment records	
Were estimates computed with some precision	
Were arbitrary and unreliable	

Z3 *Interviewer Comments:*

End of Survey Form

Appendix 2

မြန်မာနိုင်ငံ၏ စီးပွားရေးဖွံ့ဖြိုးတိုးတက်မှုနှင့် စီးပွားရေးလုပ်ငန်းများစစ်တမ်း

Macquarie University and Myanmar Egress ပူးပေါင်းသုတေသန

ကုန်ထုတ်လုပ်မှု၊ ဝန်ဆောင်မှုနှင့် အခြားကဏ္ဍများဆိုင်ရာ သုတေသနမေးခွန်းများ

သုတေသနပညာရှင်များ			
ဦးဆောင်သုတေသီ	*Sean Turnell*	*ဖုန်း- +၆၁-၂-၉၈၅၀-၈၄၉၃*	*Email: sean.turnell@mq.edu.au*
တွဲဘက်သုတေသီ	*Jared Bissinger*	*ဖုန်း- ၀၉-၅၁၇၉၈၈၅*	*Email: jared.bissinger@students.mq.edu.au*

ယခုစစ်တမ်းသည် မြန်မာနိုင်ငံ၏ လက်ရှိစီးပွားရေးဝန်းကျင်နှင့် ပတ်သက်သောအခြေအနေများကို မေးမြန်းရန်ဖိတ်ခေါ်ခြင်းဖြစ်ပါသည်။ ယခုစစ်တမ်းမှ မြန်မာနိုင်ငံ၏ စီးပွားရေးဖွံ့ဖြိုးတိုးတက်မှုအတွက် အတားအဆီးဖြစ်နေသော ကိစ္စရပ်များနှင့် ပုံမှန်မဟုတ်သော(တရားဝင်မဟုတ်သော)စီးပွားရေးလုပ်ငန်းများ နှင့်ပတ်သက်သော အချက်အလက်များကောက်ယူခြင်းဖြစ်ပါသည်။ ယခုစစ်တမ်းကို ဖြေဆိုရန် အချိန် (၄၅မိနစ်) ကြာမြင့်မည်ဖြစ်ပါသဖြင့် စိတ်ရှည်သည်းခံ၍ ဖြေကြားပေးပါရန် မေတ္တာရပ်ခံပါသည်။

ယခုစစ်တမ်းကို ပြီးပြည့်စုံစွာဖြေကြားပေးသော စီးပွားရေးလုပ်ငန်း များကိုကျေးဇူးတုံ့ပြန်သောအားဖြင့် စစ်တမ်းမှရရှိမည့် အခြားပြီးပြည့်စုံစွာဖြေကြားပေးသော စီးပွားရေးလုပ်ငန်း ၂၂၅ခုနှင့် သင်၏စီးပွားရေးလုပ်ငန်းနှိုင်းယှဉ်ချက်ပါဝင်သော အစီရင်ခံစာအကျဉ်းချုပ်ကို အခမဲ့ ပြန်လည်ပေးပို့ပေးမည်ဖြစ်ပါသည်။ ယင်းအစီရင်ခံစာအကျဉ်းချုပ်တွင် သင်၏စီးပွားရေးဝန်းကျင်နှင့်ပတ်သက်သည့် လုပ်သား အင်အား အခြေအနေ၊ ဈေး ငွေရရှိ နိုင်မှုလုပ်ဆောင်ချက်များကိုဖော်ပြပေးမည်။ ယခုစစ်တမ်းတွင်ပါရှိမည့်အချက်အလက်များကိုမည်သည့်အကြောင်းပြချက်နှင့်မှုမည်သူကိုမဆို ထုတ်ဖော်မည်မဟုတ်ပါ။ သင်နှင့်သင့်စီပွားရေးလုပ်ငန်းဆိုင်ရာအချက်အလက်များကို ယခုစစ်တမ်းတွင် တိကျထင်ရှားစွာဖော်ပြထားခြင်းမရှိပါ။ယခုစစ်တမ်းတွင်ပါဝင်လုပ်ဆောင်မည့်ဆုံးဖြတ်ချက်သည်သင်တဦးတည်းဆုံးဖြတ်သာဖြစ်ပါသည်။ မည်သည့်အကြောင်းမျိုးကြောင့်ဖြစ်စေအချိန်မရွေးသင့်ပါဝင်လုပ်ဆောင်ချက်ကိုရပ်နိုင်သည်။ ပါဝင်လုပ်ဆောင်မည်ဟုဆုံးဖြတ်ပါက အကောင်းဆုံးဖြေဆိုပေးရန် မေတ္တာရပ်ခံပါသည်။ ယခုစစ်တမ်းကိုဖြေဆိုရန်သဘောတူညီမည်ဆိုပါက ၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်၏ အခြေခံအချက်အလက်များကို အသုံးပြု၍ အနီးစပ်ဆုံးဖြေကြားပေးပါရန် မေတ္တာရပ်ခံပါသည်။ မေးမြန်းထားသည့် အချက်အလက်ကိန်းဂဏန်းများကို အတိအကျ မသိရှိပါက ခန့်မှန်းခြေဖြေဆိုပေးပါရန်ပန်ကြားပါသည်။

ယခုစစ်တမ်းကို Myanmar Egress နှင့် Jared Bissinger (ဖုန်း ၀၉၅၁၇၉၈၈၅, email jared.bissinger@students.mq.edu.au) တို့မှ Sean Turnell (ဖုန်း +၀၆၁.၂.၉၈၅၀.၈၄၉၃၊ email sean.turnell@mq.edu.au, Department of Economics, Macquarie University, Sydney Australia)၏ကြီးကြပ်မှုဖြင့် ပါရဂူစာတမ်းအဖြစ်ပြုစုနေခြင်းဖြစ်ပါသည်။ ယခုစာတမ်းသည်သည်မြန်မာနိုင်ငံစက်မှုလက်မှုလုပ်ငန်းရှင်များအသင်းချုပ် (UMFCCI)၏သဘောတူညီမှုရရှိထားသည်။

သုတေသနကျင့်ဝတ်များနှင့် သဘောတူညီချက်ရယူခြင်း
ယခုစစ်တမ်းအတွက် သုတေသနပြုလုပ်သူများအနေဖြင့် ထိန်းသိမ်းရမည့် ကျင့်ဝတ်များကို the Macquarie University Human Research Ethics Committee မှ ထောက်ခံချက်ရယူထားပြီးဖြစ်ပါသည်။သင့်အနေဖြင့် စစ်တမ်းကို ဖြေဆိုရာတွင် ကျင့်ဝတ်ချိုးဖောက်ခြင်းခံရပါက အောက်ပါလိပ်စာကို ဆက်သွယ်တိုင်ကြားနိုင်ပါသည်။ တိုင်ကြားမှုများအားလုံးကို လျှို့ဝှက်ထားမည်ဖြစ်ပြီး စစ်ဆေးအရေးယူပေးသွားမည်ဖြစ်ပါသည်။ စစ်ဆေးမှုရလဒ်ကိုလည်း ပြန်လည်အကြောင်းကြားမည်ဖြစ်ပါသည်။ Director, Research Ethics (ဖုန်း +၆၁.၂.၉၈၅၀.၇၈၅၄၊ email- ethics@mq.edu.au)
ယခုသုတေသနစစ်တမ်း၏ ရည်ရွယ်ချက်၊ မေးမြန်းမည့် အကြောင်းအရာများနှင့် ကျင့်ဝတ်စည်းကမ်းများကို သိရှိပြီဆိုပါက သင့်အနေဖြင့် စစ်တမ်းအားဖြေဆိုရန် သဘောတူညီပါသလား။

သဘောတူညီ ပါသလား	*သဘောတူ ပါသည်*	*သဘောမတူပါ*	*လက်မှတ်*
မေးမြန်းသူ		***လက်မှတ်***	

အင်တာဗျူးအခြေအနေ							
အကြိမ်	**နေ့စွဲ**	**မြို့**	**မြို့နယ်**	**စတင်ချိန်**	**ပြီးဆုံးချိန်**	**အခြေအနေ**	
ပထမအကြိမ်တွေ့ဆုံခြင်း						*ပြီးဆုံးသည်*	*မပြီးဆုံးပါ*
ဒုတိယအကြိမ်တွေ့ဆုံခြင်း (လိုအပ်ပါက)						*ပြီးဆုံးသည်*	*မပြီးဆုံးပါ*

စက်မှုလုပ်ငန်းအမျိုးအစား(United Nations မှထုတ်ပြန်ထားသည် နိုင်ငံတကာစက်မှုလုပ်ငန်း စံနှုန်းအဆင့်အတန်းသတ်မှတ်မှု (၄)ကို ကိုးကား၍ ဖြေဆိုပါရန်)	
Industry Classification (Primary)	

စစ်တမ်းအမှတ်	*M / Y*	

A အထွေထွေအချက်အလက်များ

ဤအပိုင်းတွင် သင့်စီးပွားရေးလုပ်ငန်း၏ အခြေခံအချက်အလက်များနှင့် သဘောသဘာဝများကို မေးမြန်းထားပါသည်။ မေးခွန်းများအတွက် တိကျသော အဖြေများမရှိသည့်တိုင် မိမိသိရှိထားသော အချက်အလက်များကို အခြေခံ၍ အနီးစပ်ဆုံး ဖြေကြားပေးပါရန် ပန်ကြားပါသည်။

A1 မှတ်ပုံတင်ခြင်း

A1A မည်သည့်နှစ်တွင် ကုမ္ပဏီကို စတင်တည်ထောင်လည်ပတ်ခဲ့သနည်း။

ခုနှစ်		*မသိပါ*

A1B မည်သည့်နှစ်တွင် သက်ဆိုင်ရာအစိုးရအဖွဲ့အစည်းများနှင့် မှတ်ပုံတင်ခြင်းကို ပြုလုပ်ခဲ့သနည်း။

မှတ်ပုံတင်သည့်နှစ်		*မှတ်ပုံမတင်ရသေးပါ*	*မသိပါ*

A2 ပိုင်ဆိုင်မှု

A2A လက်ရှိကုမ္ပဏီ၏ တရားဝင်အခြေအနေ

တစ်ဦးတည်းပိုင်		အစိုးရ(သို့) နိုင်ငံပိုင်	
ပါတနာအဖွဲ့အစည်း		အစိုးရ-ပုဂ္ဂလိက ဖက်စပ်	
ပုဂ္ဂလိကလီမိတက်ကုမ္ပဏီ		ကိုယ်စားလှယ်ရုံး	
အများပိုင်ကုမ္ပဏီ		ကိုယ်ရေးကိုယ်တာ (Personal)	
ကုမ္ပဏီအစု			

A2B ပိုင်ဆိုင်မှု (ရာခိုင်နှုန်း)

ပုဂ္ဂလိကမြန်မာနိုင်ငံသား ပိုင်ဆိုင်မှု ရာခိုင်နှုန်း	
ပုဂ္ဂလိက နိုင်ငံခြားသား ပိုင်ဆိုင်မှု ရာခိုင်နှုန်း	
အစိုးရအရာရှိ(သို့)အစိုးရဝန်ထမ်း ပိုင်ဆိုင်မှု ရာခိုင်နှုန်း	
အစိုးရပိုင် (သို့)နိုင်ငံပိုင် ရခိုင်နှုန်း	

A3	စီးပွားရေးလုပ်ငန်းစီမံခန့်ခွဲမှု

A3A	သင့်ကုမ္ပဏီ(သို့) စီးပွားရေးလုပ်ငန်း၏ မန်နေဂျာချုပ်တွင် ယခုသင်တို့လုပ်ဆောင်နေသော စီးပွားရေးလုပ်ငန်းနှင့်ပတ်သက်၍ စုစုပေါင်းလုပ်ငန်းအတွေ့အကြုံမည်မျှရှိသနည်း။

နှစ်ပေါင်း	

A3B	သင့်ကုမ္ပဏီ(သို့) စီးပွားရေးလုပ်ငန်း၏မန်နေဂျာချုပ်သည်

အမျိုးသမီးဖြစ်ပါသလား		ဘွဲ့ရဖြစ်ပါသလား	
အစိုးရဝန်ထမ်းဟောင်းဖြစ်ပါသလား		နိုင်ငံခြားတွင်ပညာသင်ကြားဖူးပါသလား	

A4	စီးပွားရေးလုပ်ငန်းတည်နေရာနှင့် လုပ်ဆောင်မှုများ

ကိုးကားစာရွက် (၁) -စီးပွားရေးလုပ်ငန်းအမျိုးအစားခွဲခြားမှုပုံစံစာရွက်ကို ဖြေဆိုသူအား ကိုးကားအဖြစ်ပေးရန်။ (DOCUMENT 1)

A4A	သင့်စီးပွားရေးလုပ်ငန်း၏ မူလလုပ်ငန်းသည် မည်သည့်လုပ်ငန်းဖြစ်သည်ကို စီးပွားရေးလုပ်ငန်းအမျိုးအစားခွဲခြားမှုပုံစံ(ကိုးကားစာရွက်)အပေါ် မူတည်၍ ဖြေဆိုပေးပါ။

မူလလုပ်ငန်း	

ကိုးကားစာရွက် (၁)အားပြန်သိမ်းရန်။ (DOCUMENT 1)

A4B	မည်သည့်နေရာများတွင် လုပ်ငန်းများလုပ်ဆောင်ပါသနည်း။

နေအိမ်	
စီးပွားရေးလုပ်ငန်းတည်နေရာအတည်တကျရှိသည်(နေအိမ်မဟုတ်)	
ဖောက်သည်များ၏ နေအိမ်(သို့)လုပ်ငန်းနေရာ	
နေရာအတည်တကျမရှိ	
အခြား	

A5	သင့်လုပ်ငန်းအခြေခံအချက်အလက်များ။

A5A	သင်အဓိကထုတ်လုပ်သည့် ကုန်ပစ္စည်း (သို့) ဝန်ဆောင်မှုဈေးကွက်၌ သင့်လုပ်ငန်းအား ဈေးကွက်ဦးဆောင်သူ၊ အလတ်စားလုပ်ငန်း၊ အသေးစားလုပ်ငန်း သုံးမျိုးအနက် မည်သို့သတ်မှတ်လိုပါသနည်း။

ဈေးကွက်ဦးဆောင်သူ	*အလတ်စားလုပ်ငန်း*	*အသေးစားလုပ်ငန်း*	*မသိပါ*

A5B	သင်လုပ်ကိုင်နေသည့် စီးပွားရေးလုပ်ငန်းအမျိုးအစားလောက၌ ပြိုင်ဘက်အရေအတွက်မည်မျှနှင့် သင် ယှဉ်ပြိုင်နေရပါသနည်း။

ပြိုင်ဘက်အရေအတွက်		*မသိပါ*

A5C	အောက်ပါလုပ်ငန်းအချက်အလက်များသည်သင့်စီးပွားရေးလုပ်ငန်းများနှင့်အကြုံဝင်သည်ဟုပြောနိုင်ပါသလား။

ကွန်ပျူတာစနစ်ဖြင့် ကုန်ထုတ်လုပ်ငန်း (သို့) ရောင်းချရေးလုပ်ငန်းများပြုလုပ်ခြင်း။	
မိမိကိုယ်တိုင်ပုံစံတုတ်လုပ်သည့် ကုန်ထုတ်လုပ်မှုလုပ်ငန်း။	
နိုင်ငံတကာအဆင့်သတ်မှတ်ချက်အဖွဲ့ ISO ၏ အသိအမှတ်ပြုလက်မှတ်များရှိမှု ရှိခြင်း။	
သင့်လုပ်ငန်းသည်အခြားကုမ္ပဏီကြီးတခုအစိတ်အပိုင်းဖြစ်နေခြင်း။	
လွန်ခဲ့သည့်သုံးနှစ်လောက်က အစိုးပုဂ္ဂလိကပိုင်အစီအစဉ်များမှာရရှိမှု။	
အခြားမှတ်ပုံတင်ထားခြင်းမရှိသည့်လုပ်ငန်းစုများနှင့်ယှဉ်ပြိုင်နေရခြင်း။	
မှတ်ပုံမတင်ထားသည့်လုပ်ငန်းစုများမှာ သွင်းအားစုများ၊ကုန်စည်များနှင့် အလုပ်သမားများ ဝယ်ယူငှားရမ်းရခြင်း။	
ကိုယ်ပိုင်ပစ္စည်းများကိုလုပ်ငန်းတွင်အသုံးပြုခြင်း။	

C စီးပွားရေးဝန်းကျင်

ဤအပိုင်းတွင် မြန်မာနိုင်ငံ၏ စီးပွားရေးဝန်းကျင်အပေါ် သင်၏ထင်မြင်ယူဆချက်ကို မေးမြန်းထားပါသည်။ ယခုအပိုင်းကိုဖြေဆိုပေးရာတွင် အောက်ပါအညွှန်းများကို ကိုးကား၍ ၀ မှ ၄ အထိ ပြင်းထန်မှုအဆင့်ကို ရွေးချယ်ဖြေဆိုပေးပါရန်။ (၀=အတားအဆီးအခက်အခဲလုံးဝမရှိပါ မှ ၄=အလွန့်အလွန်ခက်ခဲပါသည်) အဖြေများကို ဖြေဆိုရာတွင် မှားသည်မှန်သည်မရှိဘဲ မိမိတွေ့ကြုံနေရသော ပကတိအခြေအနေများအပေါ် မူတည်၍ စိတ်ကြိုက်ဖြေဆိုပေးပါရန်။ စီးပွားရေးဆိုင်ရာကိန်းဂဏန်းများကို အတိအကျမသိပါက အကောင်းဆုံးခန့်မှန်းချေပေးပါ။

C1 စီးပွားရေးဝန်းကျင်တွင်ကြုံတွေ့ရသော စိန်ခေါ်မှုများ

C1A အောက်ပါအခြေခံဝန်ဆောင်မှုလုပ်ငန်းများနှင့်ပတ်သက်၍ သင်၏စီးပွားရေးကို အတားအဆီးဖြစ်စေသည့် ပြင်းထန်မှုအဆင့်သတ်မှတ်ပေးပါရန်။

		အတားအဆီးလုံးဝ မရှိပါ	*အတားအဆီး အနည်းငယ် ဖြစ်ပါသည်*	*အတားအဆီး အသင့်အတင့်ဖြစ်ပါသည်*	*အရေးကြီးသည့် အတားအဆီး ဖြစ်ပါသည်*	*အဓိကအတားအဆီး ဖြစ်ပါသည်*	*လုပ်ငန်းနှင့် သက်ဆိုင်မှု မရှိပါ*
1	မြေယာရရှိနိုင်မှု	၀	၁	၂	၃	၄	
2	လောင်စာဆီရရှိမှု	၀	၁	၂	၃	၄	
3	ဆက်သွယ်ရေး	၀	၁	၂	၃	၄	
4	လျှပ်စစ်	၀	၁	၂	၃	၄	
5	ပို့ဆောင်ဆက်သွယ်ရေး	၀	၁	၂	၃	၄	
6	ရေ	၀	၁	၂	၃	၄	

C1B စီးပွားရေးလုပ်ကိုင်နိုင်ရန်အတွက် အစိုးရနှင့် ပတ်သက်ဆက်နွယ်ရသော အောက်ဖော်ပြပါကိစ္စများသည် သင့်စီးပွားရေးလုပ်ငန်းကို မည်မျှအထိ အတားအဆီးဖြစ်စေသနည်း။

10	လုပ်ငန်းလိုင်စင်နှင့် ပါမစ်များ	၀	၁	၂	၃	၄	
11	ကုန်သွယ်ရေးစည်းမျဉ်းများ နှင့် အခွန်စည်းမျဉ်းများ	၀	၁	၂	၃	၄	
12	တရားစီးရင်ရေးအာဏာ၏ လွတ်လပ်မှု	၀	၁	၂	၃	၄	

13	အလုပ်သမားစည်းမျဉ်းများ	၀	၁	၂	၃	၄	
14	အခွန်ကောက်ခံမှုပုံစံ	၀	၁	၂	၃	၄	
15	အခွန်နှုန်းထား	၀	၁	၂	၃	၄	

C1C	သင့်စီးပွားရေးလုပ်ငန်းချောမွေ့စွာလည်ပတ်နိုင်ရန် အောက်ဖော်ပြပါ မက်ခရိုစီးပွားရေးအချက်အလက်များက မည်မျှအထိ အတားအဆီးဖြစ်စေသနည်း။						
20	ချေးငွေရရှိနိုင်မှု	၀	၁	၂	၃	၄	
21	ငွေလဲနှုန်း	၀	၁	၂	၃	၄	
22	နိုင်ငံတကာပိတ်ဆို့မှုများ	၀	၁	၂	၃	၄	
23	ငွေကြေးဖောင်းပွမှု	၀	၁	၂	၃	၄	
24	အတိုးနှုန်း	၀	၁	၂	၃	၄	
25	နိုင်ငံရေးတည်ငြိမ်မှု	၀	၁	၂	၃	၄	
26	(အိမ်ခြံမြေ၊ အရင်းအနှီး) ပစ္စည်းပိုင်ဆိုင်ခွင့်	၀	၁	၂	၃	၄	
27	အလုပ်သမားများ၏ လုပ်ငန်းကျွမ်းကျင်မှု	၀	၁	၂	၃	၄	

C1D	အောက်ပါဥပဒေပြင်ပကိစ္စရပ်များသည် သင့်စီးပွားရေးအတွက် မည်မျှအထိ အတားအဆီးဖြစ်စေပါသနည်း။						
30	လာဘ်ပေးလာဘ်ယူ၊ချစားခြင်း	၀	၁	၂	၃	၄	
31	အစိုးရထံ မှတ်ပုံ မတင်ထားသည့် တရားမဝင် (မှုမှန်မဟုတ်) ပြိုင်ဘက်များ	၀	၁	၂	၃	၄	
32	တရားဝင် (မှုမှန်) ပြိုင်ဘက်များ၏ တရားမဝင်သည့် အပြုအမူများ	၀	၁	၂	၃	၄	

ကိုးကားစာရွက်(၂)အားပြန်သိမ်းရန်။ (DOCUMENT 2)

C2	စီးပွားရေးဝန်းကျင်တွင် ကြုံတွေ့ရသောစိန်ခေါ် မှုများ

ကိုးကားစာရွက်(၃)- စီးပွားရေးလုပ်ငန်းအတွက် စိန်ခေါ် မှုများစာရင်းကို ဖြေဆိုသူအားကိုးကားအဖြစ်ပေးရန်။ (DOCUMENT 3)

C2A	စာရွက်တွင်ဖော်ပြထားသော လုပ်ငန်းအတွက် စိန်ခေါ် မှုများအနက် သင့်စီးပွားရေးလုပ်ငန်းအတွက် အကြီးမားဆုံးသော အတားအဆီးဖြစ်စေသည့် ကိစ္စသုံးရပ်ကို ဖြေဆိုပေးပါ။

ပထမဦးစားပေးကိစ္စ	
ဒုတိယဦးစားပေးကိစ္စ	
တတိယဦးစားပေးကိစ္စ	

C2B	သင်၏ အကြီးများဆုံးသော အတားအဆီးကို ဖြေရှင်းနိုင်မည်ဆိုပါက သင်၏ စီးပွားရေးလုပ်ငန်းအတွက် အမြတ်ရာခိုင်နှုန်းခန့်မှန်းချေမည်မျှတိုးတက်လာမည်ဟု ထင်ပါသနည်း။

ရာခိုင်နှုန်း		*မသိပါ*

ကိုးကားစာရွက် (၃)အားပြန်သိမ်းရန်။ (DOCUMENT 3)

D လုပ်သားအင်အားစုနှင့် အလုပ်အကိုင်အခွင့်အလမ်း

မြန်မာနိုင်ငံကဲ့သို့သော နိုင်ငံများတွင် ဆင်းရဲမွဲတေမှုလျော့ချနိုင်ရန်အတွက် အလုပ်အကိုင်အခွင့်အလမ်းသစ်များကို တိုးမြှင့်ဖန်တီးပေးနိုင်ရေးမှာ မရှိမဖြစ်လိုအပ်သော ကိစ္စရပ်ဖြစ်ပါသည်။ ဤအပိုင်းတွင် သင့်စီးပွားရေးလုပ်ငန်းတွင်ရှိသော အလုပ်အကိုင်အမျိုးအစားများနှင့် လုပ်သားအင်အားစုနှင့် ပတ်သက်သော မေးခွန်းများကို မေးမြန်းထားပါသည်။ တိကျသော ကိန်းဂဏန်းများမသိရှိလျှင်ပင် မိမိသိရှိသော အချက်အလက်များအပေါ်အခြေခံ၍ အနီးစပ်ဆုံးအဖြေများကို ဖြေကြားပေးပါရန် မေတ္တာရပ်ခံပါသည်။ စီးပွားရေးဆိုင်ရာကိန်းဂဏန်းများကို အတိအကျမသိပါက အကောင်းဆုံးခန့်မှန်းချေပေးပါ။

D1 အမြဲတမ်း၊ အချိန်ပြည့်ဝန်ထမ်း

D1A	၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်တွင် သင့်လုပ်ငန်း၌ အမြဲတမ်း၊အချိန်ပြည့်ဝန်ထမ်း(သင်အပါအဝင်)မည်မျှရှိပါသနည်း။

ဝန်ထမ်းအရေအတွက်	

D1B	သင့်လုပ်ငန်းတွင် ခန့်အပ်ထားသော အမြဲတမ်း၊ အချိန်ပြည့်ဝန်ထမ်းများအနက်

မန်နေဂျာအရေအတွက်မည်မျှရှိသနည်း။	
ကျွမ်းကျင်ကုန်ထုတ်လုပ်သားမည်မျှရှိသနည်း။	
လုပ်ငန်းကျွမ်းကျင်မှုမရှိသော ကုန်ထုတ်လုပ်သားမည်မျှရှိသနည်း။	
ကုန်ထုတ်လုပ်မှု(သို့)ပင်မလုပ်ငန်းနှင့် ပတ်သတ်ခြင်းမရှိသော အခြားဝန်ထမ်းများ (စီမံအုပ်ချုပ်ရေးအရောင်းဝန်ထမ်း၊ ပညာရှင်များ) အရေအတွက်	

D1C	သင့်လုပ်ငန်းတွင် ၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်အတွက် အမြဲတမ်း၊ အချိန်ပြည့်ဝန်ထမ်းများ၏ ပျမ်းမျှလစာကို ဖော်ပြပါ။

မန်နေဂျာများ၏ ပျမ်းမျှလစာ(ကျပ်)	
ကျွမ်းကျင်ကုန်ထုတ်လုပ်သားများ၏ ပျမ်းမျှလစာ(ကျပ်)	
လုပ်ငန်းကျွမ်းကျင်မှုမရှိသော ကုန်ထုတ်လုပ်သားများ၏ ပျမ်းမျှလစာ(ကျပ်)	
ကုန်ထုတ်လုပ်မှု(သို့)ပင်မလုပ်ငန်းနှင့် ပတ်သတ်ခြင်းမရှိသော အခြားဝန်ထမ်းများ (စီမံအုပ်ချုပ်ရေးအရောင်းဝန်ထမ်း၊ ပညာရှင်များ)၏ ပျမ်းမျှလစာ(ကျပ်)	

D1D	သင့်လုပ်ငန်းတွင် ၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်အတွက် အမြဲတမ်း၊ အချိန်ပြည့်ဝန်ထမ်းတစ်ဦး၏ သီတင်းတစ်ပတ်စာ ပျမ်းမျှအလုပ်ချိန်ကို ဖော်ပြပါ။

တစ်ပတ်စာပျမ်းမျှအလုပ်ချိန်	

D1E	သင့်လုပ်ငန်းတွင် ၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်အတွက် အမြဲတမ်း၊ အချိန်ပြည့်ဝန်ထမ်းတစ်ဦး၏ တစ်နှစ်လျှင် ပျမ်းမျှသီတင်းပတ်ပေါင်းမည်မျှ အလုပ်လုပ်သနည်း။

ပျမ်းမျှသီတင်းပတ် ပေါင်း	

D1F	သင့်လုပ်ငန်းတွင် ၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်အတွက် အမြဲတမ်း၊ အချိန်ပြည့်ဝန်ထမ်းအတွက် အလုပ်သမားခံစားခွင့် (ဥပမာ- ကော်မရှင်၊ လစာဖြင့်ခွင့်ပေးခြင်းအစားအသောက်များစသည်)များအတွက် တစ်လစာအသုံးစရိတ်(ကျပ်ငွေ)စုစုပေါင်း မည်မျှအသုံးပြုခဲ့ရသနည်း။

အလုပ်သမားခံစားခွင့်စာရိတ်	

D2	ယာယီဝန်ထမ်းထားခြင်း

D2A	၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်၌ သင့်လုပ်ငန်းတွင် အချိန်ပိုင်းနှင့် ယာယီထားခဲ့သည့်ဝန်ထမ်းမည်မျှရှိပါသနည်း။

အချိန်ပိုင်းနှင့်ယာယီဝန်ထမ်းပေါင်း		*မသိပါ*	*မသိပါကို ရွေးချယ်လျှင် D3ကို ဖြေပါ*

D2B	သင့်လုပ်ငန်းတွင် ၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်အတွက်ခန့်အပ်ထားသော အချိန်ပိုင်းနှင့်ယာယီဝန်ထမ်းတစ်ဦးအနေဖြင့် ပျမ်းမျှအချိန်ပြည့်အလုပ်လုပ်သော ရက်ပေါင်းမည်မျှရှိသနည်း။

အချိန်ပြည့်အလုပ်လုပ်သောရက်ပေါင်း		*မသိပါ*

D2C	သင့်လုပ်ငန်း၌ ၂၀၁၁-၂၀၁၂ ဘဏ္ဍာရေးနှစ်တွင် အချိန်ပိုင်းနှင့်ယာယီဝန်ထမ်းများ၏ ပျမ်းမျှနေ့တွက်လုပ်ခ မည်မျှရှိခဲ့ပါသနည်း။

နေ့တွက်လုပ်ခ(ကျပ်)		*ကျပ်*

D3	အလုပ်အကိုင်ခန့်ထားခြင်းနှင့်

D3A	သင့်လုပ်ငန်းတွင် လွန်ခဲ့သည့် သုံးနှစ်က ဝန်ထမ်းစုစုပေါင်း (အချိန်ပိုင်းနှင့်အချိန်ပြည့်) မည်မျှရှိခဲ့ပါသနည်း။

ဝန်ထမ်းအရေအတွက်	

D3B	သင့်လုပ်ငန်းတွင် ၂၀၁၂-၂၀၁၃ ဘဏ္ဍာရေးနှစ်အတွက် ဝန်ထမ်းအသစ်မည်မျှ ငှားရမ်းရန်စီစဉ်ထားသနည်း။

ဝန်ထမ်းအရေအတွက်	

ကိုးကားစာရွက်(၄)- ဝန်ထမ်းများအရေအတွက်တိုး၍ ခန့်ထားရန် ဖြစ်နိုင်ချေရှိသည့် အကြောင်းအရင်းများ။ (DOCUMENT 4)

D3C	သင့်အနေဖြင့် ယခုလက်ရှိကုမ္ပဏီဝန်ထမ်းအရေအတွက်ကို ဘဏ္ဍာရေးနှစ် ၂၀၁၂-၂၀၁၃အတွက် အတိုးအလျှော့ပြုလုပ်မည်ဆိုပါက အောက်ပါအချက်များအနက် မည်သည့်အကြောင်းအရင်း ကြောင့် အဓိကဖြစ်မည်ဟု ထင်ပါသနည်း။ (တစ်ခုသာရွေးပါ)

ပြည်တွင်းဝယ်လိုအားပြောင်းလဲမှု	
နိုင်ငံတကာဝယ်လိုအားပြောင်းလဲမှု	
မက်ခရိုစီးပွားရေးအနေအထားပြောင်းလဲမှုများ(ငွေလဲနှုန်းမြင့်တက်ခြင်း၊ ငွေကြေးဖောင်းပွမှုစသည်)	
ကျွမ်းကျင်လုပ်သားရရှိနိုင်ခြင်း အခြေအနေပြောင်းလဲမှုများ	
အလုပ်သမားဥပဒေများ၊ စည်းမျဉ်းစည်းကမ်းများ ပြောင်းလဲမှုများ	
အနာဂတ်တွင် စီးပွားရေးပြောင်းလဲလာနိုင်မှုအခြေအနေများကို ခန့်မှန်း၍	
အခြား	

ကိုးကားစာရွက်(၄)ကို ပြန်သိမ်းရန်။ (DOCUMENT 4)

E ကုန်ထုတ်စွမ်းအားစု အရင်းအနှီးနှင့် ရင်းနှီးမြှုပ်နှံမှု

အရင်းအနှီးများကို စုစည်းထားနိုင်ခြင်းသည် မြန်မာနိုင်ငံတွင်းရှိ စီးပွားရေးလုပ်ငန်းများ၏ ကုန်ထုတ်စွမ်းအားနှင့် စီးပွားရေးထုတ်ကုန်များကို မြှင့်တင်ရေးအတွက် အခရာပင်ဖြစ်ပါသည်။ ဤအပိုင်းတွင် သင့်လုပ်ငန်း၏ လက်ရှိ စုစုပေါင်းအရင်းအနှီးပမာဏနှင့် လတ်တလောပြုလုပ်ခဲ့သည့် ရင်းနှီးမှုဆိုင်ရာ မေးခွန်းအချို့ကို မေးမြန်းသွား မည်ဖြစ်ပါသည်။ စီးပွားရေးဆိုင်ရာကိန်းဂဏန်းများကို အတိအကျမသိပါက အကောင်းဆုံးခန့်မှန်းချေမေးပါ။

E1 လက်တလော(ငွေကြေးမပာတ်) ရင်းနှီးမြှုပ်နှံမှုနှင့် ပိုင်ဆိုင်မှုတန်ဖိုး

E1A ရင်းနှီးမြှုပ်နှံမှု-ပိုင်ဆိုင်မှု၊ ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂မှာ သင့်စီးပွားရေး၏ မရွှေ့မပြောင်းနိုင် သော ပိုင်ဆိုင်မှုများ၏ ဈေးကွက်တန်ဖိုးကို ဖော်ပြပါ။

ကုန်ထုတ်လုပ်မှု စက်ပစ္စည်းများနှင့် ကရိယာ တန်ဆာပလာများ၊	
မြေယာနှင့် အဆောက်အဦများ	
ယာဉ်အမျိုးမျိုး	
သတင်းဆက်သွယ်ရေး ဆိုင်ရာ နည်းပညာများ၊	

E1B နှင့် E1C သည်ကုန်ထုတ်လုပ်မှုလုပ်ငန်းများအတွက်သာ (ရောင်းဝယ်ဖောက်ကားရေးမပါ)

E1B ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် သင့်လုပ်ငန်း၏ လက်တွေ့ထုတ်လုပ်ခဲ့မှုကို စုစုပေါင်းအမှန်တကယ်ထုတ်လုပ်နိုင်စွမ်း၏ ရာခိုင်နှုန်းဖြင့် ဖော်ပြပေး ပါ။

ရာခိုင်နှုန်း	
မသိပါ	

အဖြေ၁၀၀%ဖြစ်ပါက E1D သို့သွားပါ။

ကိုးကားစာရွက်(၅) - ကုန်ထုတ်လုပ်မှုစွမ်းရည်ကျဆင်းရသည့် အကြောင်းအရင်းများ ကို ကိုးကားအဖြစ်ပေးရန် (DOCUMENT 5)

E1C အောက်ဖော်ပြပါ ကိစ္စရပ်များအနက် မည်သည့်အကြောင်းအခြင်းအရာများကြောင့် ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် သင့်စီးပွားရေးလုပ်ငန်း ကုန်ထုတ်လုပ်မှုကို အလုံးစုံ အသုံးမချနိုင်ခဲ့ရခြင်းဖြစ်သနည်း။

ပြည်တွင်း သွင်းအားစုများ ပြတ်လပ်မှု၊		*ကျွမ်းကျင်လုပ်သား ပြတ်လပ်မှု*	
နိုင်ငံတကာမှ သွင်းအားစုများ ပြတ်လပ်မှု		*ကျွမ်းကျင်မှုမရှိသေးသော လုပ်သားပြတ်လပ်မှု၊*	
အလုပ်လုပ်နိုင်သော အရင်းအနှီး လျော့နည်းမှု၊		*ဈေးကွက်အတွင်း ရောင်းလိုအားမြင့်မားမှု*	
ဝယ်လိုအားလျော့နည်းမှု၊		*အခြား*	

ကိုးကားစာရွက်(၅)ကို သိမ်းရန် (DOCUMENT 5)

E1D ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် သင့်ကုန်ထုတ်လုပ်ရောင်းချမှုအဆင့်များတွင်အသုံးပြုရန်အလို့ငှာ သင့်ကုမ္ပဏီက ငှားယူခဲ့သည့် အရင်းအနှီး (မြေ၊ အဆောက်အအုံ၊ ငွေကြေး၊ စက်ကိရိယာ စသည်) ၏ လက်ရှိဈေးကွက်

လက်ရှိဈေးကွက်ပေါက်ဈေး	

E2	လတ်တလောရင်းနှီးမြှုပ်နှံမှုများ

E2A	လွန်ခဲ့သည့်ဘဏ္ဍာရေးနှစ်သုံးနှစ်အတွင်း သင့်ကုမ္ပဏီအနေဖြင့် မရွှေ့မပြောင်းနိုင်သောပိုင်ဆိုင်မှု /အရင်းအနှီး ပိုင်ဆိုင်မှု တို့၌ ရင်းနှီးမြှုပ်နှံမှု ပြုလုပ်ခဲ့ပါသလား။

ပြုလုပ်ခဲ့ပါသည်။	
မပြုလုပ်ခဲ့ပါ။	
မသိပါ။	

အပိုင်း F သို့သွားပါ

E2B	ဘဏ္ဍာရေးနှစ် ၂၀၀၉-၂၀၁၀ မှစပြီးသင့်လုပ်ငန်းတွင် အောက်ဖော်ပြပါ များတွင် မည်မျှရင်းနှီးမြှုပ်နှံခဲ့ပါသနည်း။

ကုန်ထုတ်လုပ်မှု စက်ကရိယာများနှင့် ကရိယာတန်ဆာပလာများ၊	
မြေယာနှင့်အဆောက်အဦများ	
ယာဉ်အမျိုးမျိုး	
သတင်းဆက်သွယ်ရေး ဆိုင်ရာ နည်းပညာများ၊	

F	ဘဏ္ဍာရေး၊ ဘဏ်လုပ်ငန်းနှင့် အကြွေး

စိတ်ချယုံကြည်ရသော၊ ကောင်းမွန်စွာလည်ပတ်သော ဘဏ္ဍာရေးကဏ္ဍသည် စီးပွားရေး ဖွံ့ဖြိုးတိုးတက်မှုအတွက် အခရာဖြစ်သည်။ ဤကဏ္ဍတွင် သင်၏ မြန်မာ့ဘဏ္ဍာရေး ဆိုင်ရာ နှင့် ပတ်သက်သော အတွေ့အကြုံများကို မေးမြန်းမည်ဖြစ်ပါသည်။ အတိအကျ ဖော်ပြရန် ကိန်းဂဏန်းများ မရှိပါကလည်း တတ်နိုင်သမျှ အနီးစပ်ဆုံး ဖြေပေးနိုင်ရန် မေတ္တာရပ်ခံပါသည်။

F1	မှတ်တမ်းမှတ်ရာများ ထိန်းသိမ်းခြင်းနှင့် ဘဏ်လုပ်ငန်းများ

F1A	အောက်ဖော်ပြပါတို့အနက် မည်သည့်ပုံစံသည် သင့်လုပ်ငန်း၏ မှတ်တမ်းမှတ်ရာ (သို့) စာရင်းအင်းများကို အကောင်းဆုံး ဖော်ပြနိုင်ပါသနည်း။

ပြီးပြည့်စုံသော လက်ကျန်စာရင်း	
ရိုးရှင်းလွယ်ကူစွာ ရေးသားထားသည့် စာရင်းအင်းများ	
အဆင်ပြေသလို သိမ်းဆည်းထားသည့် မှတ်တမ်းမှတ်ရာများ၊	
ရေးသားမှတ်တမ်းတင် သိမ်းဆည်းလေ့မရှိပါ။	

F1B	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် လုပ်ငန်းကိစ္စဆိုင်ရာ ငွေပေးငွေယူကိစ္စရပ်များဆောင်ရွက်ရန်အတွက် တစ်ပတ်လျှင် ပျမ်းမျှ သင်၏ ဘဏ်စာရင်းကို အကြိမ်မည်မျှ အသုံးပြုပါသနည်း။

အသုံးပြုခဲ့သော အကြိမ်အရေအတွက်		*မသိပါ။*

F1C	ဤစီးပွားရေးလုပ်ငန်း၏ ပိုင်ရှင် တစ်ဦးဦးထံ၌ ဤကုမ္ပဏီ၏လုပ်ငန်းများတွင် အသုံးပြုနေသည့် ၎င်း၏ကိုယ်ပိုင်ဘဏ်စာရင်းရှိပါသလား (သို့)၎င်း၏ကိုယ်ရေးကိုယ်တာအတွက် တခြားမှချေးယူထားသည့်ငွေကို လုပ်ငန်းအလို့ငှာ အသုံးပြုခြင်းရှိပါသလား။

ရှိပါသည်	*မရှိပါ။*	*မသိပါ။*

F2	ဘဏ်နှင့် တခြားငွေချေးအရင်းအမြစ်

F2A	သင့်ကုမ္ပဏီသည် လက်ရှိတွင် ချေးငွေ၊ အကြွေးထားငွေတို့အတွက် ဘဏ္ဍာရေးဆိုင်ရာ အဖွဲ့အစည်း (ဘဏ်)များ၊ သို့မဟုတ် တခြား ငွေချေးစားသူ/ငွေချေးလုပ်ငန်းတို့ထံမှ ငွေချေးယူထားပါသလား။

ရှိပါသည်။		
မရှိပါ။		*F2G သို့သွားပါ*
မသိပါ။		*F3 သို့သွားပါ*

F2B	လက်တလော ချေးငွေ(သို့) အကြွေးထားငွေတို့အတွက် မည်ကဲ့သို့သော ပိုင်ဆိုင်မှုကို အပေါင်ပစ္စည်း အဖြစ်အသုံးပြုခဲ့ရပါသနည်း။

စက်တပ်ယာဉ်		အခြားပုဂ္ဂလိက ပိုင်ဆိုင်မှု	
မြေယာနှင့်အဆောက်အဦ		မပေးရပါ။	

F2C	အောက်ဖော်ပြပါ အရင်းအမြစ်များအနက် သင့်လုပ်ငန်းအတွက် နောက်ဆုံးချေးငွေထုတ်ပေးခဲ့သည်မှာ ...

ပုဂ္ဂလိကပိုင် ကူးသန်းရောင်းဝယ်ရေးဘဏ်	
အစိုးရဘဏ်နှင့် အစိုးရအဖွဲ့အစည်းတစ်ခုခု	
မိသားစု(သို့) မိတ်ဆွေများ	
(ပုံမှန်မဟုတ်) ငွေတိုးချေးစားသူ/သည့် လုပ်ငန်းများ	
အသင်းအဖွဲ့များ	
အခြားသောရင်းမြစ်များ	

ကိုးကားစာရွက်(၆)- လက်ရှိပေးထားသော ချေးငွေမက်လုံးများ ကို ကိုးကားအဖြစ်ပေးရန်။ (DOCUMENT 6)

F2D	အောက်ပါတို့အနက် မည်သည့်အချက်ကြောင့် သင့်လုပ်ငန်းအတွက် ချေးငွေကို သက်ဆိုင်ရာ အရင်းအမြစ်မှ ချေးယူခဲ့ပါသနည်း။

အပေါင်ပစ္စည်းလိုအပ်ချက်နှင့် ကိုက်ညီမှုအရှိဆုံးဖြစ်သောကြောင့်	
အသင့်လျော်ဆုံး အတိုးနှုန်းများကြောင့်	
ငွေချေးသူအား အယုံကြည်ဆုံးဖြစ်သောကြောင့်	
ကျွန်ုပ်အတွက် ချေးငွေရရှိစရာ တစ်ခုတည်းသော အရင်းအမြစ်ဖြစ်သောကြောင့်	
ငွေချေးရအဆင်အပြေဆုံး ငွေကြေးအရင်းအမြစ်ဖြစ်ခြင်းကြောင့်	
အခြေအနေဖန်တီးပေးနိုင်မှုနှင့် အကောင်းဆုံးဝန်ဆောင်မှုပေးနိုင်သောကြောင့်	

ကိုးကားစာရွက်(၆)ကို သိမ်းရန်။ (DOCUMENT 6)

F2E	ဤချေးငွေ သို့မဟုတ် ပေးရန်ရှိသည့် စာရင်းကို ချေးယူရသည့် အဓိက အကြောင်းအရင်းကိုဖော်ပြပါ။

အရင်းအနှီးအသစ်တွင် ရင်းနှီးမြှုပ်နှံရန်	
လုပ်ငန်းလည်ပတ်မှု အသုံးစရိတ်ကာမိရန်	
အခြားသော ချေးငွေ (သို့) ကြွေးပုကိုပေးဆပ်ရန်	
ပုဂ္ဂိုလ်ရေး ကိစ္စများတွင် အသုံးပြုရန်	
အခြားကိစ္စရပ်များအတွက် အသုံးပြုရန်	

F2F	နောက်ဆုံးရယူခဲ့သည့် ချေးငွေ၊ သို့မဟုတ် အကြွေးထားငွေကို (ရင်းမြစ်က) ထုတ်ချေးရန်သဘောတူချိန်က တန်ဖိုးမည်မျှထုတ်ချေးရန် သဘောတူခဲ့သနည်း။

တန်ဖိုး	
မသိပါ	
ဖြေကြားလိုခြင်းမရှိပါ။	

F3သို့သွားပါ

ကိုးကားစာရွက်(၇)- လက်ရှိလုပ်ငန်းအတွက် ချေးငွေရယူခြင်းမရှိသည့် အကြောင်းအရင်း များကို ကိုးကားအဖြစ်ပေးရန်။ (DOCUMENT 7)

F2G	အောက်ပါတို့အနက် မည်သည့် အဓိကအကြောင်းအချက်ကြောင့် သင့်လုပ်ငန်းအနေဖြင့် ချေးငွေ သို့မဟုတ် အကြွေးထားငွေများ မရခဲ့ပါသနည်း။

ချေးငွေမလိုအပ်မှုကြောင့်	
ချေးငွေရယူရန် လျှောက်ထားရသည့် လုပ်ထုံးလုပ်နည်းများ၏ ရှုပ်ထွေးနက်နဲမှုကြောင့်	
လျော်ကန်သင့်မြတ်မှုမရှိသော အတိုးနှုန်းကြောင့်	
အပေါင်ပစ္စည်းလိုအပ်ချက် အလွန်မြင့်မားမှုကြောင့်	
ချေးငွေပမာဏနှင့်ယှဉ်လျှင် ပြန်ဆပ်ရမည့် အချိန်မလုံလောက်မှု	
ချေးငွေရရှိမည်ဟု မထင်သောကြောင့်	
စီးပွားရေးနှင့် ပတ်သက်သော အထောက်အထားမခိုင်လုံမှုကြောင့်	
ငွေကြေးဖောင်းပွမှုနှုန်းအလွန်မြင့်မားနေ၍ ပြန်လည်ပေးဆပ်ရန် ထိုက်တန်ခြင်းမရှိ၍	
အခြား	

ကိုးကားစာရွက် (၇) ကို သိမ်းရန်။ (DOCUMENT 7)

G စီးပွားရေးလုပ်ငန်း၏ လုပ်ဆောင်မှုစွမ်းရည်

ပြည်တွင်းနှင့် နိုင်ငံတကာဈေးကွက်များ၌ မြန်မာနိုင်ငံမှ တရားဝင်မှတ်ပုံတင်ထားသည့် စီးပွားရေးလုပ်ငန်းများ၏ ဖွံ့ဖြိုးမှုသည် မြန်မာ့စီးပွားရေး တိုးတက်မှု၏ အခြေခံအုတ်မြစ်ပင်ဖြစ်သည်။ ဤကဏ္ဍတွင် မည်သည့် အကြောင်းအရာ အချက်လက်များက သင့်လုပ်ငန်း၏နိုင်ငံတွင်း ကုန်ထွက်ပမာဏအပေါ် အကျိုးသက်ရောက်မှုရှိသလဲဆိုသည်ကို သိရှိနိုင်ရန် သင့်စီးပွားရေးလုပ်ငန်း၏ အရောင်း၊ သုံးစွဲမှု၊ အလုပ်အပ်သူများ၊ သွင်းအားစုသွင်းသူများနှင့် ပတ်သက်သော မေးခွန်းများကို မေးမြန်းမည်ဖြစ်ပါသည်။ စီးပွားရေးဆိုင်ရာကိန်းဂဏန်းများကို အတိအကျမသိပါက အကောင်းဆုံးခန့်မှန်းချေပေးပါ။

G1 တစ်နှစ်တာ စုစုပေါင်းအသုံးစရိတ်

G1A	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် သင့်လုပ်ငန်း၏စုစုပေါင်းနှစ်စဉ်အသုံးစရိတ်များကို အောက်ပါအချက်အလက်အရ မည်သို့ဖော်ပြနိုင်သနည်း။

ကျပ်ငွေ၁၀ မီလီယံအောက် (သိန်း၁၀၀ အောက်)		ကျပ်ငွေ၁၀၀ မီလီယံ-၁ ဘီလီယံကြား(သိန်း၁၀၀၀နှင့်သိန်းတစ်သောင်းကြား)	
ကျပ်ငွေ၁၀-၁၀၀ မီလီယံကြား (သိန်း၁၀၀ နှင့်သိန်း၁၀၀၀ကြား)		၁ ဘီလီယံအကျော် (သိန်းတစ်သောင်းကျော်)	

G1B	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် သင့် စီးပွားရေးလုပ်ငန်း၏ စုစုပေါင်း အသုံးစရိတ်ကို ကျပ်ငွေဖြင့်ဖော်ပြပါ။

အသုံးစားရိတ်		*မသိပါ*	*ဖြေကြားလိုခြင်းမရှိပါ။*

ကိုးကားစာရွက်(၈)- လက်ရှိအသုံးစရိတ်အမျိုးအစားများကို ကိုးကားအဖြစ်ပေးရန်။ (DOCUMENT 8)

G1C	တစ်နှစ်တာ စုစုပေါင်းအသုံးစရိတ်၏ မည်မျှရာခိုင်နှုန်းကို အောက်ပါ အသုံးစရိတ်များအတွက် သုံးစွဲခဲ့သနည်း။		
		လစာ၊ ဆုကြေးငွေ၊ အကျိုးခံစားခွင့်များ အပါအဝင် အလုပ်သမားရေးရာအသုံးစရိတ်များ	
		ကုန်ကြမ်းပစ္စည်းများ၊ကြားခံကုန်ထုတ်ပစ္စည်းများနှင့်လိုအပ်သည့်ကုန်ချောပစ္စည်းများ၏အသုံးစရိတ်	
		လောင်စာဆီနှင့် လျှပ်စစ်အသုံးစရိတ်	
		စက်ပစ္စည်းများ၊ ကိရိယာ တန်ဆာပလာဆာများနှင့် ယာဉ်ယန္တ ရားများ ငှားရမ်းခ	
		မြေနှင့် အဆောက်အအုံများ ငှားရမ်းခ	
		ထောက်ပံ့နှင့် သယ်ယူပို့ဆောင်ရေးစရိတ်	
		အစိုးရအခွန်၊ လိုင်စင်ခ၊ အကောက်ခွန်နှင့် အစိုးရနှင့် ပတ်သက်သော အခြားကုန်ကျစရိတ်များ	
		အခြားသောအသုံးစရိတ်များ	

ကိုးကားစာရွက်(၈) ကိုသိမ်းရန်။ ((DOCUMENT 8)

G1D	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် မိမိလုပ်ငန်းက အသုံးပြုခဲ့သည့် ကုန်ကြမ်း၊ ကြားခံကုန်ထုတ်ပစ္စည်းများနှင့်လိုအပ်သည့်ကုန်ချောပစ္စည်းများမှာ အောက်ပါနှစ်ခုအနက် မည်သည်နှင့်စပ်ဆိုင်သည်။ ရာခိုင်နှုန်းမည်မျှရှိသည်တို့ကို ဖော်ပြပါ။		
		တိုက်ရိုက်တင်သွင်းထားသောသွင်းကုန်များ	
		တိုက်ရိုက်တင်သွင်းသူထံမှ ပြန်ဝယ်ထားသည့် သွင်းကုန်များ	
		ပြည်တွင်းထုတ်ကုန်များ	

G2	တစ်နှစ်တာစုစုပေါင်းရောင်းချရမှုနှင့်ဝင်ငွေ

G2A	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် သင့်လုပ်ငန်း၏စုစုပေါင်းနှစ်စဉ်ရောင်းချငွေ အောက်ပါအချက်အလက်အရ မည်သို့ဖော်ပြနိုင်သနည်း၊					
		ကျပ်ငွေ၁၀ မီလီယံအောက် (သိန်း၁၀၀ အောက်)		ကျပ်ငွေ၁၀၀ မီလီယံ-၁ ဘီလီယံကြား(သိန်း၁၀၀၀နှင့်သိန်းတစ်သောင်းကြား)	
		ကျပ်ငွေ၁၀-၁၀၀ မီလီယံကြား (သိန်း၁၀၀ နှင့်သိန်း၁၀၀၀ကြား)		၁ ဘီလီယံအကျော် (သိန်းတစ်သောင်းကျော်)	

G2B	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် စီးပွားရေးလုပ်ငန်းများ၏ တစ်နှစ်တာ စုစုပေါင်းရောင်းချရမှု				
		စုစုပေါင်းရောင်းချရငွေ		မသိပါ	ဖြေကြားလိုခြင်းမရှိပါ။

G2C	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် သင့်စီးပွားရေး လုပ်ငန်း၏ ရောင်းချရမှုအနက် ရာခိုင်နှုန်းမည်မျှက			
		ပြည်ပသို့တိုက်ရိုက်တင်ပို့သည့်ပစ္စည်းဖြစ်သနည်း		
		ပြည်တွင်းဖြန့်ချိသူမှတဆင့် ကြားခံတင်ပို့ခြင်း ဖြစ်သနည်း		
		ပြည်တွင်းရောင်းချမှုဖြစ်သနည်း		*အဖြေ ၀%ဖြစ်ပါက G2Eသို့သွားပါ*

G2D	မည်သည့် ဒေါ်လာ/ကျပ် ငွေလဲလှယ်နှုန်းတွင် သင့်စီးပွားရေးလုပ်ငန်းသည် အောက်ပါ ကိစ္စရပ်များ၌ ထိရောက်စွာ ဆောင်ရွက်နိုင်မည်ဟုထင်ပါသနည်း။			
		နိုင်ငံတကာဈေးကွက်တွင် ယှဉ်ပြိုင်နိုင်ခြင်းအတွက်		*မသိပါ*

G2E	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် သင့်စီးပွားရေးလုပ်ငန်း၏ တစ်နှစ်တာအတွင်းစုစုပေါင်း ပြည်တွင်းရောင်းချမှု၏ ရာခိုင်နှုန်းမည်မျှသည်			
	နည်းကျကျမှတ်ပုံတင်မထားသော (သို့) တစ်ပိုင်တစ်နိုင်လုပ်ငန်းများထံသို့			
	အစိုးရအဖွဲ့ထံသို့ ရောင်းချရမှု ဖြစ်သနည်း			

G3	လုပ်ငန်းလည်ပတ်မှုဝန်ကျင်ဆိုင်ရာအချက်အလက်များ။

G3A	၂၀၁၁-၁၂ ဘဏ္ဍာနှစ်တွင် အောက်ပါတို့အနက် တစ်ခုချင်းစီကို ပြီးစီးအောင်ဆောင်ရွက်ရန် စုစုပေါင်းကုန်ကျစရိတ် (တရားဝင်ကုန်ကျစရိတ်၊ စာရင်းမဝင် ကုန်ကျစရိတ်များနှင့် ပွဲစားခများအပါအဝင်) မည်မျှရှိသနည်း။		
		စုစုပေါင်းကုန်ကျငွေ	လုပ်ငန်းနှင့် သက်ဆိုင်မှု မရှိပါ
	လုပ်ငန်းလုပ်ကိုင်လည်ပတ်ခွင့်အတွက် လိုင်စင်ရရှိမှု		
	လျှပ်စစ်မီးသွယ်တန်းရရှိမှု (သို့) ဝန်ဆောင်မှု		
	တယ်လီဖုန်းဆက်သွယ်ရေးတပ်ဆင်ရရှိမှု (သို့) ဝန်ဆောင်မှု		
	ရေပိုက်သွယ်တန်းရရှိမှုနှင့်ဝန်ဆောင်မှု		
	သွင်းကုန်လိုင်စင်ရရှိမှု		
	ပို့ကုန်လိုင်စင်ရရှိမှု		

G3B	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂တွင် အောက်ဖော်ပြပါ ကိစ္စရပ်များ (ဥပမာ ဝန်ဆောင်မှုပျက်ပြားခြင်း၊ နှောင့်နှေးခြင်း စသည်) ကြောင့် ကုန်ထုတ်လုပ်သည့် (သို့) ကုန်ပစ္စည်းရောင်းချသည့် ရက်မည်မျှ လေလွင့်ဆုံးရှုံးခဲ့ရသနည်း။	
	အကောက်ခွန်ဆိုင်ရာကိစ္စရပ်များ	
	လျှပ်စစ်မီးကိစ္စရပ်များ	
	အစိုးရလိုင်စင်များ	
	တယ်လီဖုန်း၊ အင်တာနက်ဆက်သွယ်မှုများ	
	သယ်ယူပို့ဆောင်ရေးကိစ္စရပ်များ	

G4	မိမိစီးပွားရေး စွမ်းဆောင်ရည် အစဉ်အလာနှင့် မျှော်မှန်းချက်များ

G4A	လွန်ခဲ့သည့် သုံးနှစ်အတွင်းတွင် သင့်စီးပွားရေးလုပ်ငန်း၏ စုစုပေါင်းရောင်းချရမှုပမာဏမှာ ရာခိုင်နှုန်းမည်မျှ တိုးတက်ခဲ့ပါသနည်း။			
	သင်၏ စုစုပေါင်းရောင်းချရမှု		*မသိပါ*	*ဖြေကြားလိုခြင်းမရှိပါ။*

G4B	လွန်ခဲ့သည့် သုံးနှစ်အတွင်း သင့်စီးပွားရေးလုပ်ငန်း၏ အသုံးစရိတ် မည်မျှ တိုးတက်ခဲ့ပါသနည်း။			
	ရာခိုင်နှုန်း		*မသိပါ*	*ဖြေကြားလိုခြင်းမရှိပါ။*

G4C	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂နှင့် နှိုင်းယှဉ်၍ လာမည့်ဘဏ္ဍာရေးနှစ် ၂၀၁၂-၁၃တွင် စုစုပေါင်းရောင်းချရမှု ရာခိုင်နှုန်း မည်မျှတိုးတက်လာမည် မျှော်လင့်ထားသနည်း။		
	တိုးတက်လာမည်	*ရာခိုင်နှုန်း*	

G4D	ဘဏ္ဍာရေးနှစ် ၂၀၁၁-၁၂နှင့် နှိုင်းယှဉ်၍ လာမည့်ဘဏ္ဍာရေးနှစ် ၂၀၁၂-၁၃တွင် စုစုပေါင်းအသုံးစရိတ် ရာခိုင်နှုန်းမည်မျှတိုးတက်လာမည်ဟုမျှော်လင့်ထားသနည်း။		
	တိုးတက်လာမည်	*ရာခိုင်နှုန်း*	

Y နောက်ဆက်တွဲမေးခွန်းများ

ဤနေရာတွင် ကျွန်ုပ်တို့၏ စစ်တမ်းကောက်ယူမှု ပြီးဆုံးပါပြီ။ သင်၏ ပူးပေါင်းပါဝင်မှုကို များစွာကျေးဇူးတင်ပါသည်။ ကျွန်ုပ်တို့ မပြန်မီ ထပ်မံလိုအပ်လာသော အချက်နစ်ခုအတွက် သင့်အား မေတ္တာ ရပ်ခံလိုပါသည်။

Y1 ပထမအချက်မှာ သင်၏ တန်ဖိုးရှိလှစွာသော အချိန်ကို ဤစစ်တမ်းအတွက် အသုံးပြုခွင့်ပေးခဲ့သည့် အနေဖြင့် ကျွန်ုပ်တို့မှ ပြန်လည်ကျေးဇူးဆပ်သည့်အနေဖြင့် သင့်အတွက် အထူးတလည်စီမံထားသော အစီရင်ခံစာအကျဉ်းချုပ်ကို ပြန်လည်ပေးပို့ပေးမည်ဖြစ်ပါသည်။ သင်၏ အီးမေးလိပ်စာ(သို့မဟုတ်) စာတိုက်သေတ္တာအမှတ်တို့အား ရေးသားပေးပါရန် မေတ္တာရပ်ခံပါသည်။

Y2 စစ်တမ်းကောက်ယူရန် ညွှန်ကြားသူများသည် ကျွန်ုပ်တို့မေးမြန်းခဲ့သူများအား ၎င်းတို့ကိုယ်တိုင် ကျေးဇူးတင်စကားပြောကြားလိုပြီး ကျွန်ုပ်တို့၏ စစ်တမ်းကောက်ယူမှုနှင့် ပတ်သက်၍ သဘောထားမှတ်ချက် များတောင်းခံရန်အတွက် ရှေ့တစ်ပတ်တွင် သင်၏ အချိန် ငါးမိနစ်၊ ဆယ်မိနစ်ခန့် ခွင့်ပြုနိုင်ပါမည်လား။

ခွင့်ပြုနိုင်ပါသည်။	*ခွင့်မပြုနိုင်ပါ။*

သင်၏ ကူညီမှုအတွက် ကျေးဇူးတင်ကြောင်း ထပ်မံပြောကြားလိုပါသည်။

Z *စစ်တမ်းကောက်သူ၏ သဘောထားမှတ်ချက်*

ယခုစစ်တမ်းကို ဖြေကြားပြီးပြီးချင်း စစ်တမ်းကောက်သူများအနေဖြင့် အောက်တွင်ဖော်ပြထားသော သဘောထားမှတ်ချက်နှင့် ပတ်သက်သည့်မေးခွန်းများကို အတတ်နိုင်ဆုံးဖြေကြားပေးပါရန်။

Z1 *မေးခွန်းများကို ဖြေဆိုရာတွင် ဖြေဆိုသူအပေါ် ကျွန်ုပ်၏ သဘောထားမှာ*

မှန်ကန်စွာဖြေဆိုသည်	
အတော်အသင့် မှန်ကန်စွာဖြေဆိုသည်	
မှန်ကန်စွာဖြေဆိုခြင်းမရှိပါ	

Z2 *စီးပွားရေးလုပ်ငန်း၏ ဝင်ငွေ၊ထွက်ငွေ၊ အရင်းအနှီးနှင့် လုပ်သားအင်အားစု အရေအတွက် စသည်တို့နှင့်ပတ်သက်သော မေးခွန်းများကို ဖြေဆိုရာတွင်*

စာရင်းဇယားများကို ကိုးကားဖြေဆိုခြင်းဖြစ်သည်	
စာရင်းဇယားများဖြင့်မဟုတ်ဘဲ ခန့်မှန်းတွက်ချက်ဖြေဆိုခြင်းသာဖြစ်ပါသည်	
လက်တမ်းပြောနေခြင်းဖြစ်ရာ ယုံကြည်နိုင်ဖွယ်ရမရှိပါ	

Z3 *မေးမြန်းသူ၏ သဘောထားများ*

End of Survey Form

Appendix 3.

Economic Development and Business in Myanmar

Joint Project of Macquarie University and Myanmar Egress

အကြိုတယ်လီဖုန်း အင်တာဗျူး

မေးမြန်းသူ၏ အမည်နှင့် လက်မှတ်		
စစ်တမ်းအမှတ်	*M / Y*	
ဖုန်းကိုင်လာလျှင်		

A1 မင်္ဂလာပါ။ ကျွန်မ/ကျွန်တော်က Myanmar Egress ကပါ။ Myanmar Egress က ပြည်တွင်း လူမှုအဖွဲ့အစည်းတစ်ခုဖြစ်ပါတယ်။ ကုမ္ပဏီရဲ့ ပြောရေးဆိုခွင့်ရှိသူ (ဒါမှမဟုတ်) ပိုင်ရှင်နဲ့ စကားပြောချင်ပါတယ်။

ခေါ်ပေးလျှင်	B1 ကိုသွားပါ
ခေါ်ပေးခြင်းမရှိလျှင်	B8 ကိုသွားပါ
အကြောင်းအရင်းကိုမေးလျှင်	A2 ကိုသွားပါ
ဖုန်းပြောရန် မအားလျှင်	A3 ကိုသွားပါ

A2 Myanmar Egress အနေနဲ့ ဩစတြေးလျ တက္ကသိုလ်တစ်ခုဖြစ်တဲ့ Macquarie တက္ကသိုလ်မှ ပညာရှင် အချို့နဲ့ ပူးပေါင်းပြီး မြန်မာနိုင်ငံရဲ့ စီးပွားရေးဖွံ့ဖြိုးတိုးတက်မှုကို ရှုထောင့်အမျိုးမျိုးကနေ သိရှိနိုင်အောင် သုတေသနပြုလုပ်နေပါတယ်။ ဒီသုတေသနအတွက် စီးပွားရေးလုပ်ငန်းပိုင်ရှင် (သို့မဟုတ်) အတွေ့အကြုံ ကြွယ်ဝတဲ့ မန်နေဂျာများရဲ့ အကူအညီလိုအပ်ပါတယ်. အခု မေးမြန်းမဲ့ စီးပွားရေးလုပ်ငန်းမှာ လူကြီးမင်း တို့ရဲ့ စီးပွားရေးလုပ်ငန်း ပါဝင်တဲ့အတွက် ဆက်သွယ်ရခြင်းဖြစ်ပါတယ်။ ဒီစစ်တမ်းဖြေဆိုသူများရဲ့ အမည် ကို ဖော်ထုတ်မှာ မဟုတ်ပါဘူး။ ဒါကြောင့် ကုမ္ပဏီရဲ့ ပိုင်ရှင်(သို့) ပြောရေးဆိုခွင့် ရှိသူ တစ်ယောက်ယောက်နဲ့ စကားပြောချင်ပါတယ်။

ခေါ်ပေးလျှင်	B1 ကိုသွားပါ
ခေါ်ပေးခြင်းမရှိလျှင်	B8 ကိုသွားပါ
ဖုန်းပြောရန် မအားလျှင်	A3 ကိုသွားပါ

A3 အဲဒါဆိုရင် သူ့ကို ဘယ်လိုဆက်သွယ်လို့ရနိုင်မလဲ။ ဘယ်အချိန်ပြန်ခေါ်ရမလဲ။ ကျေးဇူးတင်ပါတယ်။

နေ့ရက်	လ	အချိန်

B8 ကိုသွားပါ

ဖုန်းခေါ်ပေးပါက

B1	မင်္ဂလာပါ။ ကျွန်မ/ကျွန်တော်က Myanmar Egress ကပါ။ နာမည်က -------ဖြစ်ပါတယ်။ Myanmar Egress က ပြည်တွင်း လူမှုအဖွဲ့အစည်းတစ်ခုဖြစ်ပြီး အခု ဩစတြေး တက္ကသိုလ်တစ်ခုဖြစ်တဲ့ Macquarie တက္ကသိုလ်မှ ပညာရှင် အချို့နဲ့ ပူးပေါင်းပြီး မြန်မာနိုင်ငံရဲ့ လက်ရှိစီးပွားရေးလုပ်ငန်းများ ရဲ့အခြေအနေအပေါ် လူကြီးမင်းတို့လို စီးပွားရေးလုပ်ငန်းရှင်များရဲ့ အမြင်တွေကို မေးမြန်းသုတေသန ပြုလုပ်နေပါတယ်။			
B2	ဒီသုတေသနစစ်တမ်းမှာ ပါဝင်ဖြေဆိုသူများနဲ့ စီးပွားရေးလုပ်ငန်းများနဲ့ ပတ်သက်တဲ့ အချက်အလက်များကို လျှို့ဝှက်ထားမှာဖြစ်ပါတယ်။ စစ်တမ်းကို အစအဆုံးဖြေဆိုပေးမယ်ဆိုရင် စစ်တမ်းက ထွက်လာတဲ့အဖြေတွေကို ကျေးဇူးဆပ်တဲ့အနေနဲ့ ပြန်လည်ပေးပို့ပေးမှာဖြစ်ပါတယ်။ သုတေသန စာတမ်းမှာ လူကြီးမင်းတို့ရဲ့ စီးပွားရေးလုပ်ငန်းနဲ့ အခြား ၂၂၅ခုသော စီးပွားရေးလုပ်ငန်းများကို နှိုင်းယှဉ်ဖော်ပြပေးမှာဖြစ်ပါတယ်။ လူကြီးမင်းဆီစစ်တမ်းယူလာပေးရင် လူကြီးမင်း အနေနဲ့ အချိန်ယူဖြေပေးနိုင်မလားမသိဘူး။			
		ဖြေပေးမည်ဆိုပါက		B3 ကိုသွားပါ
		မဖြေပေးနိုင်ဟု ဆိုပါက		B8 ကိုသွားပါ
B3	လူကြီးမင်းရဲ့အဓိက စီးပွားရေးလုပ်ငန်းက ဘယ်လိုလုပ်ငန်းအမျိုးအစားပါလဲ။ ကုန်ထုတ်လုပ်မှုလား (သို့) ဝန်ဆောင်မှု လုပ်ငန်းလား။			
		Good or service:		B4 ကို သွားပါ။
		Classification Code:		အပြည့်အစုံမဖြေပါ
B4	ရန်ကုန်မှာ အခြေစိုက်တာပါလား။			
		ဟုတ်သည်		B5 ကိုသွားပါ
		မဟုတ်ပါ		B9 ကိုသွားပါ
B5	ယခုမတ်လအထိ စီးပွားရေးလုပ်ငန်းမှာ အလုပ်လုပ်နေတဲ့ ဝန်ထမ်းပေါင်း ဘယ်လောက်ရှိပါသလဲ။			
		အရေအတွက်		B6 ကိုသွားပါ။
B6	(ယခုစစ်တမ်းတွင် ပူပေါင်းလုပ်ဆောင်နေသော Myanmar Egress ၏ဝန်ထမ်း (သို့) အခြားသက်ဆိုင်သူတဦးဦးနှင့်ပက်သက်နေသော်ကြောင့် (ပက်သက်နေလျှင်)			
		ရှိပါသည်		B9 ကိုသွားပါ။
		မရှိပါ		B7 ကိုသွားပါ။
B7	စီးပွားရေးလုပ်ငန်းရဲ့ ပိုင်ရှင်က အသက်၁၈နှစ်ကျော်ပြီလား။			
		ကျော်ပြီ		B10 ကိုသွားပါ။
		မကျော်သေးပါ		B9 ကိုသွားပါ။
B8	ကျေးဇူးတင်ပါတယ်။			

B9			
	အချိန်ပေးဖြေကြားပေးတဲ့အတွက် ကျေးဇူးတင်ပါတယ်။ ဒါပေမယ့် လူကြီးမင်းရဲ့ စီးပွားရေးလုပ်ငန်းနဲ့ ပတ်သက်တဲ့ အချို့အချက်အလက်တွေက သုတေသနနဲ့ ကိုက်ညီမှုမရှိတဲ့အတွက် မိနစ်ဖြဂစာ သုတေသနမေးခွန်းတွေကို ဖြေကြားပေးဖို့မလိုတော့ပါဘူး။ အခုလိုစိတ်ဝင်တစားဖြေကြားပေးတာကို အရမ်းကျေးဇူးတင်ပါတယ်။		
B10	သုတေသနက ဧပြီလ ၃၊၄ရက် ကောက်ယူမှာဖြစ်ပါတယ်။ သုတေသနစစ်တမ်းကို ဖြေပေးဖို့ ဘယ်နေ့လောက်အဆင်ပြေမလဲ။ ဘယ်အချိန်လောက်လာခဲ့ရမလဲ။		
	အင်တာဗျူးနေ့		
B11	အင်တာဗျူးအတွက် ဘယ်အချိန်အဆင်ပြေဆုံးဖြစ်မလဲ။		
	အင်တာဗျူးအချိန်		B13 ကိုသွားပါ
	အင်တာဗျူးရန် နောက်အချိန်တစ်ခုကိုတောင်းဆိုပါက B12 ကိုသွားပါ။		
B12	အဆင်ပြေမယ့်အချိန်ကိုပြောပါ။		
	အင်တာဗျူးအချိန်		
B13	အင်တာဗျူးအတွက်လာရင် ဘယ်သူ့နဲ့ ချိန်းထားတယ်လို့ပြောရမလဲ။ မေးခွန်းဖြေပေးမယ့်သူရဲ့ နာမည်ကို သိပါရစေ။		
	ဖြေဆိုမည့်သူ		
B14	ဘယ်နေရာကိုလာတွေ့ရမလဲ။		
	တွေ့ရမည့်နေရာ		
B15	ဆက်သွယ်လို့ရနိုင်မည့် ဖုန်းနံပါတ်ရှိရင်ပေးပါ။		
	ဖုန်းနံပါတ်		
B16	အခုနောက်ဆုံးအနေနဲ့ ပြောချင်တာလေးရှိပါတယ်။ ဒီသုတေသနမှာ ပါဝင်သူများရဲ့ ကိုယ်ရေးအချက်အလက် တွေကို လုံးဝလျှို့ဝှက်ထားမှာဖြစ်ပါတယ်။ သုတေသနကို အနီးစပ်ဆုံးအဖြေတွေ ဖြေကြားပေးနိုင်ဖို့ လူကြီးမင်းရဲ့ စီးပွားရေးလုပ်ငန်းနဲ့ ပတ်သက်တဲ့ ဝန်ထမ်းခန့်ထားမှု၊ ပိုင်ဆိုင်မှု၊ စွမ်းဆောင်နိုင်မှု၊ ချေးငွေ စတဲ့ အခြေခံအချက်အလက်များကို ကြိုတင်ပြင်ဆင်ထားဖို့လိုပါလိမ့်မယ်။ သုတေသနဖြေဆိုရာမှာ မိနစ်ဖြဂကနေ၇၅မိနစ်အထိ အချိန်ကြာမြင့်မှာဖြစ်ပါတယ်။ စာတမ်းထွက်လာရင်တော့ လူကြီးမင်းဆီကို ပို့ပေးမှာ ဖြစ်ပါတယ်။ ဒီသုတေသနနဲ့ ပတ်သက်ပြီး မေးမြန်းစရာရှိရင် (ဖုန်းနံပါတ်--------) ကို ဆက်သွယ်မေးမြန်းနိုင်ပါတယ်။ ထပ်ပြီးမေးစရာရှိပါသေးလား။ မရှိရင် လူကြီးမင်းကို ---ဧပြီ (၃၊၄) .... နာရီမှာ ....နေရာမှာ လာတွေ့ပါမယ်။ အခုလို သုတေသနဖြေဆိုဖို့ လက်ခံတဲ့အတွက် အရမ်းပဲကျေးဇူးတင်ပါတယ်။		

Appendix 4.

Business and Association Questionnaire

Note: Form is a guide and meant to help guide interviews, which may or may not include all questions.

A	Profile of Business/Association

Profile of business/association:
- Sector of Main Business:
- Other major lines of business:
- Age of Current Business:
- Number of employees:
- Primary Market:
- Location:
- Type of shop:
- Number of shops/outlets:
- Owner /Managers gender:
- Years of Owner/Managers Experience in business:

B	The Business Environment

What are the biggest obstacles for that your business faces? (do not read list)

Access to land	Business Licensing	Credit
Communications	Customs and	Exchange Rate
Electricity	Judicial System	Crime
Transportation	Labor Regulations	Inflation
Water	Tax Collection	Interest Rates
Corruption	Tax Rates	Political Instability
Property Rights	Skills of Workforce	Other?

What does your business do to help mitigate the effect of these largest obstacles?

C	Interactions with Government - general

What types of regular interactions does your business have with government offices?
What major government laws, rules, or regulations are the biggest problem for your business?
In an average week, how much of your time do you spend dealing with government officials?
Has your business ever been visited or inspected by a government official?
- If so, who and why (tax related, health related, labor standards, other)?
- If so, were bribes solicited?

What government offices in this city are designed to provide services to and regulate businesses?
How important are relationships in accessing permissions and getting things done?

D	Levels of Government

Which level of government official do you interact with most: local, state/region or national?
- For what do you interact with local government officials, such as the township administrator?
- For what do you interact with state/region government officials?
- For what do you interact with national government officials?

Are there clear distinctions in the roles and responsibilities of local, state/region, and national level

Have you ever had to get permission from more than one level of government for something?

Have you encountered challenges in the distance, time and cost to travel to obtain

If yes, please discuss.

Are there business services you would like delivered through local or state/regional government?

E	Interactions with Government - specific

	License to do business

Does your company have a license to do business?

From who (type of registration)?

How many procedures did you have to do to get the license?

How long did it take?

How much did it cost?

Do you ever need to re-register?

With who?

How much does it cost?

How long does it take?

What office do you need to visit to register your business?

What documentation and other materials do you need to register?

	Taxation

Does your business pay tax?

If so, what types of tax (commercial tax, profits tax, etc)?

If so, to who - local township, state/region government, union government?

If not, why not?

How long does it take you to prepare/negotiate your taxes and related materials?

How important is negotiation and networks when paying tax?

	Dispute Resolution

Have you ever used the courts for a business-related case?

If so, how long did it take?

If so, how much did it cost?

If no, why not?

Have you ever had disputes mediated by government official at township, state/region, national level?

If so, describe.

If not, why not?

	Finance and Credit

Have you ever taken out a loan from a bank? Was it owned by the government?

If so, how long did it take?

If so, how much did it cost?

If no, why not?

Are you familiar with the new government loans for SMEs delivered by SMIDB and the SME Development

If so, did you apply?

If not, why not?

Do you think it is more difficult for SMEs in smaller cities in Myanmar to get bank loans? If so, why?

	Other government services

Has your business ever gone to the government for any of the following services?
- Licensing Trade
  - Construction
  - Other
- Land Registration
- Registrar of Contracts
- Learn about Laws or Rules
- Get connected to infrastructure
  - Electricity (SOE?)
  - Telecoms (SOE?)
- Any other support services (trade fairs, business matching services, etc.)

How long did these services take?
How much did these services cost?
- Did you have to pay any facilitation fees to obtain or expedite this service?

Do you have any other comments on the experience?
In general, in which area do poor government services hurt your business the most?

F	Influencing Government Policy and Process

Have you ever tried to influence policies and procedures of the government? If so, how?
- Formal channels?
- Informal channels?

Can an SME provide feedback on the services renderer by the government body?
- If so, how?

Do local/regional business associations play an active role in influencing policies processes and decisions

G	Changes and Expectations

Have you noticed significant changes in governance of private businesses since 2011?
- If so, how?

Do you anticipate changes in the way that government oversees the private sector in the future?

End of questionnaire

Appendix 5.

Government Questionnaire

A | Profile of Government Department

Profile of government body
- What is the government body?
- Brief history? (esp. transition since 2011)
- What is the responsibility of this government body?
- Is it local, state/region, or national?

Local presence of government body
- What types of government offices are in the city?
- What staff are there?
- What are the main duties and outputs of the local office/staff?

Funding and staffing
- How is this office staffed?
    - Locally? From NPT/civil service board?
- Where does funding come from to support the activities of the body?
    - If taxes:
        - What taxes are important?
        - How do you collect them?

B | Interactions with SMEs

Briefly profile the local private sector in this state/region:
- Major sectors:
- Approximate numbers of businesses and employees (and source of info):
- Location:
- Recent and anticipated changes:
- % female ownership:

What do you think are the biggest obstacles for private businesses?

How does this government office regularly interact with businesses?

Does this office have any regulatory responsibilities?
- If so, what are they (environmental, labor, food safety, etc.)?

Does this office carry out business inspections?
- If so, for what (tax, licensing, etc?)

Does this office have to enforce any laws over business?

Does this office collect any revenue from businesses?
- If so, for what?
- If so, how?

Service Provision

What types of services does this government organization provide to businesses?
- Licensing
    - Operating
    - Trade
    - Other
- Land Registration
- Registrar of Contracts
- Dispute Resolution

Dissemination of Laws and Rules
Vocational training
Infrastructure provision (electricity, telecoms, etc.)
Any other support services (trade fairs, business matching services, etc.)
On average, how long do these services take?
On average how much do these services cost?
How many people in your department can sign off on this service?
What are the main challenges you face in delivering services to private businesses?
Does this office do any inspections of businesses?
If so, for what?
How frequently are these inspections conducted?
How much do they cost and how long do they take?

C	Interactions with other parts of government

Do you sometimes need to work with another level of government to provide services or get things done
Get approvals (from who)? Seek inputs? Borrow human resources? Etc...
Are there clear distinctions in the roles and responsibilities of local, state/region, and national level
Do you have to get approval from other departments when providing services, licenses, etc. to SMEs?
If so, who must approve it?
If so, how long does it take?

D	Feedback from SMEs to Government

How do/can local SMEs influence policies and procedures of this department?
Formal channels?
Informal channels?
Are SMEs active in advocating for policy changes?
Why or why not?
Are local/regional business associations active in advocating for policy changes?
Why or why not?

E	Future Plans

Any future plans to extend, enhance or restructure services offered to private firms?

How can local, state/region and national government support SME dev't better?

Appendix 6.

Qualitative Interviews of Government-Business Processes in Myanmar

You are invited to participate in a study of the business climate in Myanmar. The study will gather information about businesses to help understand constraints to economic growth and private sector development. The interview should take 60 to 75 minutes to complete.

All information gathered in this study is anonymous and all personal details are strictly confidential. As you can see on the interview, there is no identifying information about you or your business. Interview participation is voluntary: you are not obliged to participate and you can withdraw at any time during the interview process without giving a reason and without consequence.

If you decide to participate, you will be asked to answer questions completely and to the best of your knowledge. To help give better answers, please have basic information from fiscal year 2011-12 accessible. If you do not know an exact figure, please give your best guess.

This study is being implemented by Jared Bissinger (telephone: 09.3113.1738, email jared.bissinger@students.mq.edu.au) to meet the requirements for the degree of PhD under the supervision of Sean Turnell (telephone +61.2.9850.8493; email sean.turnell@mq.edu.au) of the Department of Economics, Macquarie University, Sydney Australia.

Ethics Statement and Verification of Consent

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone +61.2.9850.7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Do you understand the scope, purpose, and ethical considerations of this survey and agree to continue?

Cons	Yes	No	*Signature*	

Business Profile

Business

Sector of Major operations:
Sector of Seconary operations (if any):
Age of current business:
Number of employees
Location of headquarters:
Number of shops/outlets:
Ownership: domestic/foreign?

Manager

Gender:

Years of experience:

University Degree Holder:

Dealing with Government

Access to government and government Information

What government officials and ministries do you engage with most regularly?

Can you describe your engagements with them (frequency, reason, etc.)?

What process do you have to go through to meet with government officials?

How do you obtain information about government processes and procedures?

Licensing

Who issued the operating license for this business?

Why did you obtain that type of operating license?

What was the total time and total cost of the license? Is it easy to get?

Can you describe the process needed to obtain this license?

Can you describe the process required to renew the license (if you have had to renew it)?

Does your business require any other licenses in order to operate?

In your opinion, what are the major problems in business licensing?

Construction Permits

Has your business even had to obtain a construction permit? From the municipal?

What was the total time and total cost to obtain the permit?

Can you describe the process needed to obtain this construction permit?

In your opinion, what are the major problems in obtaining a construction permit?

Land Acquisitions and Sales

Has your business ever purchased or sold land or buildings?

Can you describe the process needed to transfer the land and buildings (including recording the transaction, paying tax, etc.)?

Did you need to obtain recommendations or permissions to buy or sell land and buildings? If so, from who?

In your opinion, what are the major problems in buying and selling land?

Exports

Does your business directly export?

On average, how long did it take for your goods to:

Get from your production facility to the point of exit?

Clear customs?

Did you need a license or any other form of approval or permission for your exports?

If so can you describe the process needed to obtain that license or approval?

What is the most important factor that constitutes an obstacle or completely inhibits you from exporting?

1. Shipping and transport costs

2. Costs of obtaining visas for immigration of temporary and permanent employees
3. Cost of meeting foreign legal and product standards

4. Inability to produce to potential clients' standards, specifications, and schedule
5. Cannot match prices of domestic competitors who export
6. Cannot match prices of foreign competitors

7. Foreign clients demand upgrades and changes in specifications too frequently
8. Recovering payments from abroad is difficult
9. Supplying the domestic market is relatively more profitable
10. Costs of establishing a foreign distribution network (and where applicable after sales service)
11. Domestic content requirements
12. Other

Can you describe this obstacle/barrier, and discuss what makes it such a problem for your business?

Imports

Did you directly import materials or equipment?
On average, how long did it take for your goods to:
Clear customs?
Get from the port of entry to your production facility or other location?
Did you need a license or any other form of approval or permission for your imports?
If so can you describe the process needed to obtain that license or approval?
What is the most important reason why you import instead of sourcing locally?
In your opinion, what are the major problems with importing into Myanmar?

Inspections

Has your business ever had an inspection?
If so, can you describe the experience?
If so, who did the inspection and what did it verify?
What was the total time and monetary cost of the inspection?

Judicial System

Have you ever had to go to court for a business-related dispute?
If so can you describe the process?

What was the total time and monetary cost of the dispute resolution through the courts?
How does uncertainty about the judicial system affect the day-to-day and long term decisions your business makes?

Taxation

Do you pay tax for this business?

If so, can you please describe the tax payment process? (where, how much, etc.)
What do you think are the major problems in the tax system in Myanmar?
What improvements would you like to see in the tax system?
What do you do to mitigate uncertainty about Myammar's tax system?

Infrastructure

Transportation

What means of transportation are used to ship inputs and goods for final sale to your location?
(road, rail,air, water, other)
Why do you choose this transportation means? (cost, time, only available, etc)
What means of transportation are used to ship your goods to customers?
(road, rail,air, water, other)
Why do you choose this transportation means? (cost, time, only available, etc)
How do challenges with transportation infrastructure affect your business?

What do you do to mitigate the challenges that poor transportation infrastructure present?

Electricity

What is the total cost to your business of problems with the electricity supply, including lost productivity, additional cost of running a generator, etc.?
What does your business do to mitigate negative effects from Myanmar's electricity system?
How much does a unit of electricity cost:
From public utility
From your own generator

Communications

How do you most reguraly communicate with clients? (email, phone, in person, etc.)
Have poor communications negatively affected your business? If so, how?

What do you do to mitigate the negative affects of poor communications infrastructure?

Macroeconomics and Politics

Political Risk

What types of political risk or uncertainty affect your business?
How does this political risk affect the day-to-day operations of your business?
How does political risk affect the investment decisions your business makes?
What do you do to mitigate the political risks that your business faces?

Property Rights

Do you perceive any uncertainty over property rights? If so, what and how?
How does uncertainty over property rights affect the day-to-day operations of your business?
How does uncertainty over property rights affect the investment decisions your business makes?

What do you do to mitigate the uncertainty over property rights that your business faces?

Monetary System

Do macrooeconomic issues like inflation and exchange rate volitility affect your business? If so, how?

What do you do to mitigate the uncertainty over these macroeconoic issues that your business faces?

Market Dynamics

Competition

In the sector of your most important product line, are you a small, medium, or large player?

Does your sector have lots of competition? Why or why not?

How big of a problem is competition from imports?

Do you compete with a firm owned by the Union government, State government, military, or retired or current government officials?

Do these firms have any advantages that you do not have?

Clients

Is your firm a supplier or client of a foreign investor in Myanmar?

If so, did you learn any new technology from that company?

How far away is your main client?

- Domestic/Foreign
- Distance

Do you think competition among clients for one of your key products is restricted?

- Does this have an effect on you (increased costs, decreased service, etc.)?
- Why is there a lack of competition among clients?

Suppliers

Do you buy part or all your raw materials outside this region?

What are the reasons you buy part or all your raw materials outside this region?

How far away is your main supplier?

- Domestic/Foreign
- Distance

Do you think competition among suppliers of one of your key inputs is restricted?

- Does this have an effect on you (increased costs, decreased service, etc.)?
- Why is there a lack of competition among suppliers?

Finance

Banking

Do you have a bank account?

- If so, what is the major business-related use of that account?

Do you have a bank loan?

- If so, what is the business-related use of the loan?

What did you need in order to get the bank loan?

If you do not have a bank account or a loan, would you like one? Why don't you have one?
In your opinion what are the major problems in Myanmar's formal financial system?
When someone buys a good or service from you, can they:

- Pay before delivery?
- Pay on delivery?
- Purchase on credit?

Appendix 7.

MACQUARIE University

Ethics Secretariat <ethics.secretariat@mq.edu.au>

Ethics application ref: 5201100879 - Final Approval

Ethics Secretariat <ethics.secretariat@mq.edu.au> 25 November 2011 at 16:29
To: A/Prof Sean Turnell <sean.turnell@mq.edu.au>
Cc: Mr Jared Bissinger <jared.bissinger@mq.edu.au>

Dear A/Prof Turnell

Re: "Globalization and the non-observed economy in Myanmar" (Ethics Ref: 5201100879)

The above application was reviewed by the Human Research Ethics Committee at its meeting on 25/11/2011 . Final Approval of the above application is granted, effective 25th November 2011, and you may now commence your research.

The following personnel are authorised to conduct this research:

A/Prof Sean Turnell
Mr Jared Bissinger

NB. STUDENTS: IT IS YOUR RESPONSIBILITY TO KEEP A COPY OF THIS APPROVAL EMAIL TO SUBMIT WITH YOUR THESIS.

Please note the following standard requirements of approval:

1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).

2. Approval will be for a period of five (5) years subject to the provision of annual reports. Your first progress report is due on 25 November 2012.

If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).

4. All amendments to the project must be reviewed and approved by the Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

5. Please notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the

continued ethical acceptability of the project.

6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

http://www.mq.edu.au/policy/

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have final approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of Final Approval to an external organisation as evidence that you have Final Approval, please do not hesitate to contact the Ethics Secretariat at the address below.

Please retain a copy of this email as this is your official notification of final ethics approval.

Yours sincerely
Dr Karolyn White
Director of Research Ethics
Chair, Human Research Ethics Committee