Learning from Rebellion:
How Workers Made the Developmental State

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Chapter One:
Introduction

Workers in most developing countries must take poorly-paid jobs in apparel factories, the informal sector, or agriculture. Other opportunities are abundant only in countries that have mastered innovation in new technologies that depend on skilled workers. Good jobs depend on technology and high-skilled workers because technology is a scarce commodity that creates high barriers to entry, allowing those who possess it to charge more for it. Unless developing countries master scarce technology, they cannot expect to maintain comparative advantage in manufacturing, or any other sector, as wages rise because workers are abundant, and consumers will simply buy cheaper products made by more poorly paid workers. Thus, countries that are poor and want to become rich must learn to manufacture technology-intensive goods or use labor-saving technology to manufacture simpler commodities with fewer, but more expensive workers.

Technological sophistication requires knowledge or skill, yet most new technologies are developed in rich countries. This is why the only late industrializers that have overcome their disadvantages since World War II, known as the Asian Tigers, have done so through active government intervention in the economy. As a political scientist, I seek to explain the politics behind this achievement with the research question: "Why did some governments adopt policies that promoted mastery of technology more than others?"

My answer is that citizens demanded jobs and the job creation policies of Taiwan, South Korea, and Singapore (the Asian industrial tigers or AITs) had the unintended consequence of

helping workers learn to adopt new technologies more productively than workers in other countries. The tigers adopted very unique policies, compared with countries that had similar levels of economic development in the 1950s because their rulers faced severe threats from unemployed workers and/or foreign states that made them vulnerable to overthrow. Governments in all three countries adopted broad jobs policies because these policies kept workers happy and too busy to organize protests that threatened incumbent rulers.

I. Policies

Before going further, it is necessary to explain what policies made the tigers so successful. The AITs adopted a unique combination of three policies that provided non-excludable public goods to their entire populations: education, export processing zones (EPZs) and policy loans. Most parents in Third World countries wanted their children to obtain the education that they never had the chance to receive under colonial governments. But parents in the AITs could threaten already vulnerable governments and therefore get the investments in education they sought. The second and third policies, the creation of Export Processing Zones and provision of policy loans, created full employment that kept citizens busy and content.

Education policies prioritized universal primary and secondary education because this kept rebellious youths off the streets, helped reduce unemployment by keeping them out of the workforce, and gained support from parents. Governments in the AITs not only provided more educational opportunities than their counterparts, but also provided training in job-relevant skills like science, engineering and math. Pressure from parents prevented dictators from turning their education systems into pure ideological indoctrination.

Governments also wanted to avoid raising expectations for young people with no marketable skills, and their supporters in the business community made it clear that pure

indoctrination was not acceptable. With ideological indoctrination off the table, tiger dictators decided to focus on science, math and engineering because this did not expose students to potentially dangerous ideas about social justice and democracy like "soft" social science and literature subjects. At the same time, subjects like engineering and science not only avoided issues of legitimacy, but also made graduates well-trained, well-salaried elites, and therefore, easier to coopt into ruling coalitions.

A second policy was attraction of foreign investment through creation of export processing zones (EPZs) to create jobs. EPZs are areas with specially built infrastructure where tax incentives are provided and trade restrictions lifted for firms that export the bulk of goods produced there. Creation of EPZs brought an immediate, short-term boost to employment because they require large numbers of construction workers to build. In the longer term, EPZs created jobs for citizens in the AITs. In combination with education that made citizens highly trainable, EPZs also created unforeseeable opportunities for Korean, Taiwanese, and Singaporean workers to learn new skills.

Although dictators in the AITs first established EPZs to create jobs, they were also useful for reducing labor unrest. Foreign multi-national firms that relocate to EPZs hire predominantly young, female workers, provide few non-wage benefits, and absolutely no job security. This ensures that workers in EPZs are not permanent workers and therefore, have no incentives to participate in strikes that will risk getting them fired or arrested in the short term because they will not stay at the same jobs long enough to benefit. Therefore, establishment of EPZs created social and legal conditions that had similar effects on labor protest to rural clientelism. From a dictators' perspective, they were therefore, a way to achieve many of the effects of clientelism where it did not exist. As a result, rulers who experimented with EPZs in the late 1960s found them useful as they narrowed their political coalitions in the 970s, and therefore built more of them.

However, EPZs were necessary but not sufficient to increase the technological content of locally-manufactured goods. Many developing countries have EPZs today, yet most only attract investment in low-tech industries that provide few ladders up the supply chain into more high-skilled production. EPZs in the AITs only led to more high-skilled jobs because they existed alongside other policies.

Although EPZs promoted growth in the AITs, they contributed to a middle-income development trap in most other countries because they not only failed to increase workers' skills, but also undermined citizens' ability to demand education and other broad growth policies. EPZs were created in the AITs *after* significant investments in education, job training, and policy loans had already been made. In contrast, most countries that got stuck in the middle income trap established EPZs first.

To the extent that EPZs created two separate labor markets in the AITs, one skill-intensive, and the other exploitative, and to the extent that they disproportionately hired female workers, EPZs explain much of the purported "contribution" of gender discrimination to growth. Variations among the AITs actually shows that in Singapore, where the entire country was essentially a large EPZ those receiving the benefits of low taxes, cheap workers, and good infrastructure also had incentives to invest in training. As a result, electronics upgrading was more rapid in the city-state than in Korea, where EPZs were merely low-wage enclaves. It was precisely the link between export incentives *and* education policies that led to *sustained* growth in manufacturing, even as wages rose. In contrast, most poor countries that have only established EPZs have seen footloose industries relocate to even poorer ones when wages have risen above a bare subsistence level.

One of the other policies that made the tigers unique was the early adoption of policy of lending – subsidized loans to private industrialists at below market rates, conditional on industrial

investment. These subsidized loans created jobs quickly and kept citizens working in new factories instead of protesting in the streets. Unlike EPZs, they usually came with requirements that firms train workers in new skills to ensure that managerial and technical positions were filled by locals instead of foreign expatriate workers. They also targeted industries that required skilled workers, rather than the low-skilled jobs created in EPZs. Although ostensibly conditioned on success at meeting targets for exports and the quality of production, recent work by Kang, and Haggard and Kang has shown that these targets were rarely enforced, and thus, could not have been the primary motive. However, Korean, Taiwanese, and Singaporean governments rigidly enforced requirements that firms invest in large factories to receive policy loans, which required hiring large numbers of workers.[1]

II. Comparison to ISI Policies

In addition to these three policies, the AITs also adopted a fourth policy, the creation of State-Owned Enterprises (SOEs), but this was typical of late-industrializing countries. It was a common practice among late industrializing countries during the 1950s-1970s, because import-substitution industrialization (ISI) was a widely-accepted policy for achieving the quixotic dreams of third world despots to preside over late industrialization. What made Asian tiger dictators like Lee Kwan Yew and Park Chung Hee different from Brazilian, Nigerian, or Indonesian military dictators of the 1960s is that the AIT rulers needed to keep everyone employed, while their counterparts did not. As a result they invested resources in the EPZs and policy loans, which forced them to subject SOEs to hard budget constraints, eventually. (However, they did not face serious budget constraints until well into the 1970s, and sometimes the 1980s, when the "East

[1] See, for example: David C. Kang, *Crony capitalism: Corruption and development in South Korea and the Philippines*, (New York: Cambridge University Press, 2002).

Asian Miracle" had already begun). This, combined with the fact that they could hire highly educated workers already experienced at managing private firms, meant that some AIT SOEs became globally competitive producers, while their Latin American counterparts became money sponges that subsidized infant industries that never grew up. While tiger SOEs had both the skilled workers and the incentives to compete, their Latin American (and Malaysian, Thai, and Indonesian) counterparts had neither.

The most common similarity of other countries' industrial policies was the narrow concentration of their benefits to labor aristocracies in enclave industrial sectors. This was a viable strategy for maintaining political control over societies where only the small urban working class had strong enough horizontal ties to protest because most citizens were controlled by vertical patron-client ties that kept protests local. This created incentives to support inefficient industries that paid above-market wages to the few, while neglecting basic education and job opportunities in the modern wage economy for the many (voiceless farmers trapped in clientelistic job markets). Manufacturing jobs and education in the Asian Tigers were public goods that sought to benefit everyone, because a huge percentage of their populations participated in destabilizing protests during their transitions to independence.

While Taiwan did not experience mass protest during the 1950s, its leaders had seen their rule collapse on the mainland due to a massive rural uprising. Further, they had also witnessed mass protest in Taiwan when it was first integrated into mainland KMT-ruled China in 1947. This rebellion was only suppressed with the help of soldiers brought in from other parts of China that the KMT no longer controlled after 1949. As a result, a second round of demonstrations on their last island stronghold must have been a nightmare scenario they were anxious to avoid. [2]

[2] Steven Phillips, "Between Assimilation and Independence: Taiwanese Political Aspirations Under Nationalist Rule, 1945-1948", In *Taiwan: A New* History, Ed. Murray A Rubinstein, (New York: East Gate, 2007), 293-297

Further, Taiwan's rulers recognized that their security environment would constrain them from using widespread repression, as they had in 1947, to maintain their hold on the island. They would need to conscript the entire male population if Mao ever launched an invasion across the Strait of Taiwan and therefore would find shooting potential military recruits quite costly. In both Taiwan and South Korea, conscription made repression costly because rulers could not conscript those they killed in a crackdown. Border defense also left fewer soldiers available to quell rebellion and lowered the level of organization citizens needed to threaten regimes.

Rulers in Indonesia, the Philippines, and Mexico had the same development goals as rulers in Taiwan, Singapore, and South Korea but adopted different policies because they faced different political threats. In the absence of mass citizen protest, rulers saw coups or party splits as the greatest threat to their rule, so they made development policies that only satisfied elite ideological preferences or provided rents, without regard for the preferences of their citizens. In contrast, East Asian dictators responded to elite demands for rents and industrial policies, but also responded to demands for public goods that made workers more productive. This is why dictators in Korea provided rents to big business cronies in the form of subsidized loans and protectionist measures similar to those implemented in Latin America, but also educated workers and subsidized worker training.

Having laid out this explanation for the set of policies that caused the extraordinary success of Singapore, South Korea and Taiwan at late industrialization, it is now my task to prove that these countries really did adopt these policies to co-opt citizens who they feared. In order to do this, I will first explain the research design and then outline the existing literature in the rest of this introduction. Then I will analyze an exemplary case (South Korea), and a negative case (Indonesia) in the next two chapters. Chapter Four will analyze a case study of Malaysa, Chapter

Five Singapore, and Chapter Six will present a large-N statistical analysis before the final chapter concludes.

III. Research Design

I will test the hypothesis laid out in this chapter using a combination of qualitative case studies and large-N quantitative analysis. The case studies will demonstrate how the independent variables are actually linked to the dependent variables through a sequence of steps in the causal process. This method, called process-tracing, proves that relationships between independent and dependent variables are not mere correlations, but are in fact causal.

The case studies will also show how the causal process worked in Indonesia, South Korea, Malaysia, and Singapore. These cases are chosen to control for confounding variables through a method of comparison that Przeworski and Teune call the most-similar-most different research design (also called the "Method of Difference" by John Stuart Mill in his *System of Logic*). This method consists of comparing countries with the most similar values of confounding variables, but different values of the independent variable, as well as extremely similar values of the independent variable with cases that have very different confounders. The comparison between Singapore and South Korea compares cases with similar values of the independent variable, but the most different values of other variables. [3]

Comparison of Indonesia and South Korea pairs two countries with very different values of the independent variable, but extremely similar values for most confounding variables, thus replicating a controlled experiment as much as possible. While these two cases have important

[3] Adam Przeworski and Henry Teune, *The logic of Comparative Social Inquiry*, (New York: Wiley, 1970), esp. page 31-35

differences in culture and history, I will show that they were "most similar systems" because they have similar values for the key confounding variables that have been proposed to explain economic policies in rival theories. At the same time, these two cases have very different levels of foreign threat and citizen propensity to protest.

Comparison of Singapore with South Korea and Indonesia will show that Singapore had less experience with industrialization before independence and no legacy of industrial promotion, and thus inherited institutions that made it very unlike South Korea. At the same time, the Singapore chapter will show that the city state had a citizenry that was even more threatening to late colonial (1950s) governments than their Korean counterparts and therefore, forced them to adopt similar policies to contemporary South Korea.

The Malaysia case study allows me to show the full range of the independent variables. Indonesia, Singapore, and Korea are extreme cases because Indonesia takes very low values for the independent variables, while the latter two take very high values. Malaysia, on the other hand, takes a medium value for both the independent variable and important confounding variables.

Malaysia is also a useful case for addressing cultural explanations because the politically dominant Malay majority has a very similar culture to their neighbors in Indonesia. Malay and Indonesian are mutually intelligible dialects of the same language (Malay), and all Malays are by law Muslims, like the majority of Indonesians. At the same time, the economically dominant ethnic Chinese are also more numerous in Malaysia than anywhere outside China, Taiwan, and Singapore (about 35 percent of the population at independence). This allows me to partially control for the influence of Confucianism and other East Asian values that the AITs also shared.

A large-N quantitative analysis tests the causal argument by precisely measuring independent and dependent variables and incorporating cases from all over the world. This helps

to prove that I have not simply chosen qualitative cases that fit my argument. More importantly, generalizing the theory outside Asia ensures that the Asian industrial tigers did not share similar values of an important variable that the theory and cases either omit or fail to control for. (For example, Lee Kwan Yew has famously attributed the development in the Asian tigers to "Asian values" consisting of Confucian belief in hard work and education). This analysis also tests the generalizability of the argument. Quantitative analysis will first measure the effect of protest propensity and foreign threat during the 1950s on education and export promotion policies during the late 1960s and early 1970s using regression techniques. Then, I will test the relationship between these policies and subsequent industrial development in the 1980s.

This large-N analysis is important to this study because it allows me to measure the magnitude of the causal effects with precise estimates of uncertainty that do not exist in small-n, qualitative research. A case study can show a causal relationship, but does not provide any insight into whether or not this relationship is important (whether the purported cause actually has a large effect on the outcome). It also allows me to measure my independent variable more precisely than qualitative descriptions of foreign threat as "high" or "low" and descriptions of citizens as "very rebellious" or not.

Exploiting variation across time as well as space allows large-N research to overcome some of the obstacles to causal inference that develop from purely cross-sectional large-N research. If causal relationships actually exist, then changes in a dependent variable should occur after changes in the independent variable when it is measured within a single case across time.

IV. Contribution to Existing Literature

While many neo-classical economists within a rational-choice framework have emphasized the role of politics in development, these authors tend to focus primarily on the failures

of ISI and ignore important successes. The general argument of economists in the "Public Choice School" like Anne Krueger (1974) is that political processes of competitive rent-seeking become pervasive whenever governments try to pick winners and losers through industrial policy. This leads, they say, to resources being allocated away from productive activities and reallocated to lobbying, corruption, and other activities to curry favor with officials who distribute import licenses and foreign exchange.[4]

Most theories from this school of economics focus too much on the supposed cost of government economic planning and cannot explain the empirical reality that government intervention was relatively successful, even in Latin America. Former ISI countries of Mexico and the Southern Cone are upper-middle income countries today, richer than Indonesia, and much better off than the economies of Central America that did not try ISI. Claims that Singapore, South Korea, and Taiwan left allocative decisions to free markets fits even less well with empirical realities outside the world of formal modeling assumptions.

A related approach within political science that has borrowed heavily from the public choice school of economics has focused on the role of politics in explaining developmental failures. Specifically, Robert Bates argues in *Markets and States in Tropical Africa: the Political Origins of Agricultural Policies*, that states in Africa inherited monopsony institutions which bought crops at below the global market rate to sell on international markets for a revenue-generating profit. These institutions contributed to a set of policies including monopolies granted to domestic manufacturers, subsidies for agricultural producers, and over-valued exchange rates that served to redistribute wealth from farmers to urban workers. Bates argues that these

[4] Anne Krueger,"The political economy of the rent-seeking society", *The American economic review* (1974): 291-303.

institutions persisted in Africa long after they had failed to achieve industrialization because they provided opportunities to reward supporters of political elites and punish opponents.

While I agree with Bates and other rational choice theorists who assert that developmental policies are often chosen with political rather than economic considerations in mind, I disagree that economic policies made this way will necessarily lead to suboptimal economic outcomes. I seek to correct the serious case-selection bias of this approach, which has only tried to explain over-determined cases of failed economic development by providing a rational-choice account of policy-making in the Asian Tigers.

My argument also directly contradicts a body of research that explains the successful industrialization of the Asian Tigers as the product of a top-down process made possible by shared colonial legacies, although scholars within this tradition disagree about what this shared inheritance was. The most common arguments are that Taiwan and South Korea inherited institutions and ideas about development, but some also argue that they shared unusually well-educated populations, or good infrastructure.

The institutionalist colonial legacy argument is best elucidated by Atul Kohli, who argues that that South Korea inherited a strong state from Japanese rule that led postwar rulers to create narrow ruling coalitions. Without strong ties to popular movements, argues Kohli, Park Chung Hee could limit (though not eliminate) corruption and rent-seeking, while coercing citizens to mobilize their savings and labor for industrial transformation. Insulation from popular demands meant that the Korean state could use repression to keep wages low. Kim has a similar argument in *Big Business, Strong State* although she emphasizes the ability of the state to mobilize savings necessary to make policy loans. While both Kohli and Kim explicitly attribute the institutions to Japanese legacies, Peter Evans attributes industrialization policies in South Korea to "embedded

autonomy" without really theorizing about where this came from. However, his argument is similar because it basically claims that South Korea had unique state institutions that made it autonomous from elite interests and therefore, able to avoid excessive rent-seeking.

Each of these arguments faces significant empirical problems. For example, subsequent work by Chen, Haggard, and Kang (1998) and Kang (2002) have shown that South Korea's bureaucrats often took bribes and gave rent-seeking opportunities to the businesses they were supposed to regulate.[5] Indeed the sinking of the Korean ferry, *MV Sewol* due to regulatory capture calls into question how autonomous Korea's bureaucracy is even to this day.[6] This calls into question Evans', Kohli's and Kim's claims that the South Korean state exhibited any of the autonomy they ascribe to it. Kohli's more nuanced argument that the Korean state's autonomy from popular classes (though not from elites) made it possible to suppress wages is also problematic because only some workers' wages were suppressed, suggesting that at least a segment of the working class had some influence on policymaking under the Park regime.[7]

A broader critique of the literature on state autonomy is that state capacity does not explain what governments will do with the bureaucratic institutions and government capabilities at their

[5] Tun-Jen Chen, Stephan Haggard, and David Kang. "Institutions and growth in Korea and Taiwan: the bureaucracy." *The Journal of Development Studies* 34, no. 6 (1998): 87-111.

[6] Choe Sang-Hun, "Korea Confronts Tendency to Overlook Safety as Toll in Ferry Sinking Grows", *The New York Times,* April 22, 2014 available at: http://www.nytimes.com/2014/04/23/world/asia/as-ferry-toll-rises-hand-wringing-over-tendency-to-overlook-safety-in-south-korea.html. Investigations into the sinking of this ferry on April 16, 2014 have shown that it was carrying more than three times the legal tonnage allowed, partly because a regulatory agency allowed the owners to build extra cabins. Regulators did not enforce restrictions on freight tonnage or cabin space because enforcement is the responsibility of a lobby run by ship owners themselves, hardly the autonomous bureaucrats of Evans' imagination.

for more on corruption in South Korea and Taiwan, see: Tun-Jen Chen, Stephan Haggard and David Kang. "Institutions and Growth in Korea and Taiwan: the Bureaucracy" in *Journal of Development Studies*, Vol. 34, no. 6 (1998), 87-111.

see also: David Kang, *Crony Capitalism: Corruption and Development in South Korea and the Philippines,* (New York: Cambridge University Press, 2002).

[7] Atul Kohli, *State-directed development: political power and industrialization in the global periphery*, (New York: Cambridge University Press), 2004.

disposal. Claims that policies developed due to planning capabilities cannot explain outcomes because even the most rational policies have unintended consequences. Indeed, states that adopted ISI were following the consensus recommendations of economists and international financial institutions in the 1950s with the best of intentions.

Although the Asian tigers also inherited bureaucracies with ideas about how to industrialize that were borrowed from pre-war Japan, they deviated in significant ways from these policies. The Japanese did not promote foreign direct investment in EPZs during the 1930s and did not invest in production of electronic devices that were not invented for another 50 years. Further, the extent to which their policies in colonial Korea and Taiwan were similar to postwar policies in these countries depends on a very particular interpretation of pre-war policies. Postwar growth was based on export promotion and it is true that the Japanese turned both Korea and Taiwan into centers of export to Japan. But they promoted primarily agricultural exports until the late 1930s and promoted exports only within the Japanese Empire, an entirely closed economy that was seeking complete autarky. Promoting exports to the entire world was a dramatic departure from pre-war policies.

V. Elite Concessions to Rebellion

Several recent works in comparative politics focus on how threats from workers, especially, mass street protests threaten incumbent regimes and force them to adopt new policies. These works share my dependent variable, but my argument also makes a contribution to the development of the independent variable. While Dan Slater's independent variable in *Ordering Power* is similar to mine, his intervening and dependent variables are state strength and regime durability and he measures the independent variable differently. Slater claims in *Ordering Power: Contentious Politics and Authoritarian Leviathans in Southeast Asia* that simultaneous rural and

urban contentious political movements that articulate both redistributive and sectarian grievances motivated elite unity in support of strong authoritarian states. The greatest strength of this argument is the recognition that elites make sacrifices and build new institutions in response to contentious threats to their economic privileges. However, Slater claims that contentious politics only motivate elites when they also stir up ethnic conflict. This is based on Slater's incorrect reading of the unique role of the ethnic Chinese in Southeast Asian societies. This part of his independent variable limits generalizability, theoretical parsimony, and empirical accuracy of his findings.[8]

I draw on Slater's recognition that popular mass mobilization frightens elites and motivates them to adopt new policies and modify existing institutions. But my independent variable captures

[8] Empirically, Kua Kia Soong has shown that the Malaysian ruling party intensified communal tensions and engineered a race riot in Kuala Lumpur after the 1969 elections to justify a declaration of martial law. In other words, the UMNO used its party apparatus to created communal contentious politics; they did not build a strong ruling party in response to such contentious politics. The intensity of communal conflict also maps poorly onto the distribution of state strength across Southeast Asian states. As Slater shows in his book on page 167, Indonesia, which had less communal and class-based violence, hence less threatening contentious politics than Malaysia in the 1960s, actually had a stronger state. He acknowledges that Singapore's tax/GDP ratio was 19.6 percent, while Malaysia's was 22.7 and Indonesia's was 20.6 percent, which would imply that Indonesia had a stronger state than Singapore, and that Malaysia and Indonesia had states that were about equally strong in the 1980s. Yet, Indonesia's New Order dictatorship came crashing down during the Asian financial crisis, while the other two regimes survived the crisis. (Note that Malaysia had intense, ie violent communal contentious politics due to elite choices rather than popular mobilization from below). His data on page 167 show that Indonesia actually raised a greater share of its revenue in the 1980s from direct taxes than Malaysia. Indonesia experienced very little contentious, sectarian mobilization after gaining full independence. Rather than contentious politics of a sectarian nature -grass-roots mobilization of citizens along ethnic lines- it was the elites from the Indonesian military and their landlord allies who massacred ethnic Chinese, along with suspected communists, leftists, union leaders, and personal rivals in the 1965 mass murders. Thus Slater is confusing elite actions with mass actions and thus confuses elite actions with elite motives.

Slater in fact does not acknowledge the extent to which ethnic Chinese, Eurasians, and Dutch were targets of popular riots during Indonesia's nationalist revolution from 1945-1949, because the regime that followed this revolution, Sukarno's liberal and Guided Democracy periods, were not, according to Slater, authoritarian leviathans. Indeed, Sukarno's rule was not even authoritarian until after 1957. There is no reason why the violence of the revolution would cause Suharto and his political coalition to build a powerful state 16 years after the end of the revolution when they did not have this effect on the immediate post-revolutionary regime, which is why Slater does not correctly code this as a period of intense communal contentious politics. As this dissertation will show, both Sukarno and Suharto presided over relatively strong states, in comparative perspective, because they inherited a highly rational bureaucracy from Dutch rule.

Dan Slater, *Ordering power: Contentious politics and authoritarian leviathans in Southeast Asia*. Cambridge University Press, 2010.

the intensity of contentious mobilization- the ability to threaten existing states- and I do not add the extraneous dimension of sectarianism. I also seek to explain economic policies and development outcomes rather than political institutions and regime durability.

Doner, Ritchie, and Slater (DRS) also provide a similar but less parsimonious explanation for why the AITs adopted different policies from Malaysia, Indonesia, and Thailand (MIT). Like me, they argue that the tigers faced rebellious citizens and severe foreign threats, but DRS also claim that these governments had scarce resources. DRS assert that the Asian Tigers "needed to make side payments [in the form of public goods] to restive popular sectors under conditions of extreme geopolitical insecurity and severe resource constraints.[9]" Thus, they claim that the AITs faced foreign threats and unusually rebellious citizens, but according to these authors, also adopted different policies from countries like Thailand, Malaysia, and Indonesia because the AITs lacked the natural resources to provide public goods without state-building. This, according to DRS motivated them to provide public goods rather than club goods because public goods satisfied more citizens at less cost.

I entirely agree that the constraints rulers faced in the AITs forced them to provide broader public goods than elsewhere, particularly MIT, but scarcity of financial resources was not part of the explanation. Having oil or other rents does not determine economic policy: just as state capacity does not determine what governments will do with their bureaucracies, having resources does not determine how governments will spend them. While most Arab states deposited their oil windfalls in Swiss banks, Indonesia and Malaysia provided new infrastructure, healthcare, and other public services for their citizens.

[9] Richard F. Doner, Bryan K. Ritchie, and Dan Slater, "Systemic Vulnerability and the Origins of Developmental States: Northeast and Southeast Asia in Comparative Perspective", *International Organization* 59 (Spring 2005): 327

Further, the critical juncture when Taiwan and Korea adopted their education policies was a decade before they faced any reduction in US foreign aid, and Sukarno failed to create EZPs or universal education even though he had no access to resource rents.[10] Park actually embarked on a massively expensive push into heavy industry at exactly the time when the US threatened to reduce foreign aid, and thus, adopted the most expensive and narrowest policies only when faced with the greatest resource constraints.

I offer a more parsimonious explanation that does not draw on the rentier state literature and I provide an explanation that fits the timing better than DRS. It is true that the AITs had fewer access to resource rents during the 1970s than Indonesia or Malaysia, but policies diverged before this point, when foreign aid still provided more revenue to the AITs than oil provided Malaysia and Indonesia, on a per capita basis. Further, if resource scarcity drives economic policies, then one would expect Malaysia to be less successful than Indonesia at industrial diversification, although Malaysia has a more diversified industrial base and exports more oil per capita today.

Further, DRS provide no explanation for the substantial variation in economic policies among the less successful late industrializers. They only seek to explain why some states created institutions that led to a developmental state and the levels of industrialization of South Korea and Taiwan, while others did not. This dichotomy ignores wide variations between the policies of

[10] Indonesia's most important primary commodity was rubber until the late 1960s, not oil. Sukarno faced declining terms of trade as the global price of rubber declined throughout his rule. Indonesia also received no foreign aid until after Suharto took power and repudiated Suharto's "Konfrontasi", a mini-war to prevent the unification of East and West Malaysia. Synghman Rhee provided universal education starting in the early 1950s, a decade before there was any talk of US aid to South Korea declining. Park also began to create EPZs between 1960 and 1965 before the US announced in 1972 that it had plans (never implemented due to Korean lobbying) to reduce US troops in the peninsula and US foreign aid. DRS' explanation fits Singapore somewhat better because Lee Kwan Yew created EPZs and began to promote exports in the same year that the British announced plans to close down military bases. Thus, the loss of foreign support and the scarcity it would create was a motivation for part of Singapore's industrial strategy. However, the government actually began to invest heavily in education under the previous Labor Front government, which had to fight to get the British to even reduce their control over Singapore's police force. Under the LF, Britain still saw Singapore as a colony and key strategic asset, which is why they demanded control over its domestic security forces.

partially successful late industrializers like Indonesia, Thailand or Malaysia on the one hand, and complete failures on the other. These differences are very important today because standards of living for citizens of most African states are much lower than those in Thailand or Malaysia, where absolute poverty has been almost eliminated through limited but substantial industrialization. By explaining differences between the policies of middle income Southeast Asian countries and poorer African ones, as well as differences between the middle income countries and the Asian Tigers, I offer a more generalizable theory.

VI. Social-Economic Theories of Labor Control

I also provide a more thorough argument than Slater or DRS because this dissertation theorizes about how social and economic structures affect citizens' capacity and willingness to organize protests against their governments and employers. This theoretical contribution borrows heavily from work by Charles Sable and Frederic Deyo. Sable argues in *Work and Politics* that "peasant workers" -that is factory employees who grew up as farmers and work only for short periods in factories with the intention of returning to agriculture- will be reluctant to strike, because they do not identify with other workers' goals. He noticed that in French and Italian factories, such workers rarely participated when long-term workers with life-long connections to the city attempted to strike. According to Sabel, workers' willingness to participate in strikes or other demonstrations depends on whether or not they intend to stay in industry or return to agricultural work. [11]

Fredric Deyo also argues that employment of temporary or marginal workers with high turnover rates contributes to worker passivity. Deyo argues in *Beneath the Miracle* that one

[11] Charles F Sabel, *Work and Politics: The division of labor in industry,* (New York: Cambridge University Press, 1982),

striking characteristic of the East Asian tiger economies has been their absence of labor protest. According to this argument, labor relations in Hong Kong, Singapore, South Korea and Taiwan were exceptionally peaceful compared to their counterparts in Latin America because industrial growth was dominated by light manufacturing and predominantly employed young, low-skilled, and often female workers with, high turnover. Deyo claims that this made "employment relations based on patriarchal systems of labor control" possible, because workers could not solve collective action problems.[12]

Stephanie Seguino (2000, 2011) also argues that the most successful export-oriented economies of East Asia were characterized by a dual system of labor control where most female workers earned very low wages in the light industries that Deyo associates with passive labor. Seguino argues that this helped make these countries attractive for foreign investors and that high gender wage differentials boosted exports that in turn, funded the importation of new technology which increased overall productivity.

While all three of these theories explain how EPZs helped keep wages low and boost exports, I also explain why the tigers did not get caught in a low-income or middle-income development trap. While it is undoubtedly true that cheap, temporary workers boost exports, they do not necessarily boost exports of high-tech products. Other countries that suppressed female wages through EPZs (ie Indonesia, the Dominican Republic, and Haiti) only attracted footloose, light industries and never increased the technology or skill level used in their manufacturing. Thus, the most important attributes of industrial policies in the AIT's remain unexplained by these approaches because successful export of shirts does not automatically lead to development of a computer chip industry. While I incorporate the insight from Deyo, Seguino, and Sabel that

[12] Frederic C. Deyo, *Beneath the Miracle: Labor Subordination in the New Asian Industrialism,* (Berkely, CA: University of California Press, 1989), esp page 144.

transient (and often young and female) workers are less likely to engage in labor activism than more secure, permanent workers, I provide an explanation for why the Asian Tigers went beyond these policies.

VII. Corporatism

Deyo also noticed that not all workers in the East Asian miracle economies worked in light industries and provides a partial explanation for why some workers also got important benefits from South Korea's development model. He acknowledges that workers in heavier industry complied with the corporatist and paternalistic state and argues that they were co-opted through generous benefits, combined with the threat of heavy repression. I argue that it was not only in heavy industry, but over time, in a variety of high value-added sectors, that workers received the benefits of state patronage in ways which contributed to their accumulation of human capital in the AITs. I further argue that corporatist bargaining institutions made this possible.

The role of corporatism in securing economic benefits from the state borrows from work on the welfare state in advanced industrialized countries as well as from work on developing countries. According to authors like Thelen, Iverson, Soskice, and Estevez-Abe, training will be underprovided unless workers demand training programs from governments. Thelen argues that in Germany in the 19th Century, conservatives established training programs in order to co-opt a restless working class that challenged traditional elites. In western democracies, scholars who focus on the "varieties of capitalism" assert that different forms of welfare states provide incentives to invest in different types of skills. Specifically, Estevez-Abe, Iverson, and Soskice argue that there are three different types of skills workers can obtain: firm-specific, industry-specific, and general. Assuming that workers choose different forms of training based on the expected return,

holding constant the level of risk across different skills, workers will only invest in non-general skills when governments provide protections for employment.

Although these authors mostly explain industrial policies in wealthy countries, and seek to explain only policies, some recent work in comparative politics also seeks to explain how corporatism affects growth and reduces protest. Jennifer Gandhi (2008) and Gandhi and Kim (2010) argue that when dictators need to co-opt the opposition through policy concessions they create legislative institutions because "they allow for an environment of controlled bargaining".[13] Specifically, legislatures lower the transaction costs of bargaining by identifying bargaining partners. She also claims that legislatures allow opposition groups to reveal preferences and allow dictators to compromise and grant concessions based on knowledge of the oppositions' preferences "within a closed forum rather than on the street"[14].

While these authors assert that legislative institutions are the most important, I argue that authoritarian regimes with corporatist labor unions can achieve industrial peace and reduce protests without legislative institutions. Gandhi (2008) and Gandhi and Kim (2010) both assert that closing assemblies entails a greater cost for rulers than other more informal bargaining forums because closure is public and can spark protest. However, closing unions would also be a public act, that would likely lead to worker protests, to the extent that a corporatist union is credited by workers as having obtained concessions they seek. I argue that bargaining through corporatist labor unions will frequently suffice to keep negotiations behind closed doors, grant concessions to co-opt workers, and have the same capacity to induce moderation by extending bargaining to future periods. Compared with legislatures, corporatist unions will have the additional benefit of attracting foreign investment by reducing the probability of strikes.

[13] Gandhi, Jennifer. *Political Institutions Under Dictatorship.* (Cambridge: Cambridge University Press, 1998). 78
[14] Gandhi, *Institutions Under Dictatorship.* 79

Chapter 2:
Colonial Coercion and their Implications for Post-Colonial Protest in Korea and Indonesia

This dissertation argues that the AITs faced a combination of protests, foreign threats, or both, and this forced them to adopt the four policies outlined in the introduction. This chapter will show that South Korea inherited institutions of local government and landlord-tenant relations that made it easier for citizens there to develop horizontal ties with one another, solve collective action problems, and thus, engage in mass protest. I will also show how Java inherited institutions that promoted a rigid social hierarchy at the village level and that village elites, who were also village officials, used their social, economic, and political positions to prevent protests. These differences, in turn, made citizens in newly independent South Korea more likely to protest than their counterparts on Indonesia's main island of Java. Later on, I will show that this led to different policy responses from post-colonial rulers in these two countries, but here I explain the mechanisms for and origins of social control.

I. Colonial Institutions

In this first, section, I will show how mechanisms of social control developed on colonial Java, while they were dismantled in Korea, and I will show how these institutions cause different societies to have different levels of protest. Specifically, I will show that the Japanese colonial

regime in Korea established institutions of mass tenancy that eliminated any close personal ties between rural elites and Korean farmers. At the same time, the Dutch established institutions that promoted personal, clientelistic ties between village elites and Javanese farmers by increasing the power of landlords who were village officials. Next, I will show how the absence of clientelism made Koreans active protestors, even during the colonial era, while the presence of clientelism ties (backed up by colonial military force) made protest rare in colonial Java. This description of local government and land ownership patterns helps trace the causal mechanisms of this dissertation because local institutions are the first step in the causal process, which in turn, explains the level of threat post-colonial governments faced from citizen protest.

This section must also demonstrate that landlords and officials in Korea and Java had different interests. The main reason why village elites prevented protest on Java is that they were not only government officials, but also landlords. As landlords, they wanted obedient workers, and as government officials whose main job was to secure "law and order" (rust un orde in Dutch), village leaders had strong incentives to use their power to prevent protests. In contrast, Korean landlords did not have any real interest in tax collection and did not really care whether or not tenants obeyed colonial laws, as long as they respected the landlords' property rights and paid their rents on time.

This section will also demonstrate that Javanese rural elites maintained a close, personal relationship with villagers that made it possible to monitor their behavior and thus, prevent protests that might otherwise threaten the colonial and post-colonial states. As described in work by Susan Stokes and Beatriz Magaloni, this chapter acknowledges that a relatively high ratio of bosses/landlord/officials to tenant/client/citizens is essential for clientism. Thus, I must show how village officials rented land to small numbers of clients to ensure effective monitoring and control.

(I will often refer to members of the village administration as "village heads", even though several individuals held several different positions within the village administration, indeed, the existence of multiple village officials was crucial for this system of clientelism.) At the same time, I will show how Japanese rural elites and officials lacked such ties to Korean peasants.

Unlike in Indonesia, where local elites had social and political power over peasants as well as control over economic resources, elites in Korea did not control local government. Japanese administrators in colonial Korea were career bureaucrats who were rotated from one area to another. This meant that local landowners did not staff any levels of the Japanese bureaucracy.

Japanese policies also led to absentee landlordism, which precluded Korean landlords from developing personal ties with their tenants. The colonial government imposed a private property rights regime on Korea that led to dramatic concentration of landholdings.[15] As a result, Korean landlords who collaborated with Japanese rule became landlords with thousands of tenants and most lived in urban areas far from their estates.

In contrast, Dutch policies in Indonesia increased the political and administrative role of local elites, especially on Java. Rather than separating economic and political duties, the Dutch gave village officials the right to manage and receive income from a portion of the land that each village owned in common, in lieu of a cash salary. This made the same elites who were responsible for local policing and tax collection de facto landlords over a few peasants who rented or worked the portion of village land these officials controlled (tanah bengkok).

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[15] Jinwung Kim, *A History of Korea: from "Land of the Morning Calm" to States in Conflict*, (Bloomington, Indiana:University of Indiana Press, 2012), 324-325.
These expulsions increased the working class, in the same way that the English enclosure movement did in the 16th and 17th Centuries. But where the process took over a century in England, people were expelled in a few decades in Korea.

One of the most important economic bases for the preservation of personal relationships between patrons and clients was access to land. Most Javanese villagers were not completely landless, but instead, worked subsistence or below subsistence-sized plots. This meant that they relied on the ability to rent land in order to obtain extra cash for tax payments, weddings, and sometimes, subsistence needs. At the same time, most dreamed of becoming self-sufficient farmers, and the rare examples of fellow villagers who managed to profit from the colony's increasingly modern economy, combined with strong family and social ties prevented a mass rural exodus. Since village officials controlled both communal bengkok land and purely alienable private holdings, they were the dominant landlords in most Javanese villages.

While tax collectors assessed landlords in Korea, the landlords were the tax assessors in Dutch-ruled Indonesia, which gave them powerful tools for punishing and rewarding villagers. The Dutch imposed all taxes on villages *as collective units* until the 1920s and village officials decided how much of the village's tax burden individual households had to pay. Until the turn of the 20th Century, many tax obligations were also paid in the form of corvée labor and village heads decided which villagers had to provide labor for their villages.

Javanese elites also gained influence over their tenants by loaning them money. Even after taxes were no longer assessed collectively on villages, individual peasants needed money to pay the annual land tax. During the Twentieth Century, village leaders became labor recruiters for sugar factories that paid officials, who in turn, lent money to landless or near landless peasants to meet tax obligations. As part of the loan, poorer villagers had to work in the factories and harvest the cane crop from fields the village elite leased to the factories.[16]

[16] Adrian Vickers, *A History of Modern Indonesia, Second Edition,* (New York: Cambridge University Press, 2013), 50.

In addition to these economic and political institutions, Javanese elites took advantage of social customs and norms that predated colonial rule to maintain their dominant status and keep tenant farmers subordinate. The Javanese language is replete with indications of status because it has 3 forms -a very high form (krama inggil) a middle form (krama madhya) and an informal form (ngoko). During colonial times, village officials spoke down to ordinary villagers by using low Javanese to refer to the villagers, while expecting villagers to speak up to them. They also provided gifts to tenants during important life events, such as weddings and funerals to instill a sense of gratitude.[17]

When faced with resistance, village officials on Java could call upon the support of their allies and clients and in the last resort, the Dutch colonial police. Local village leaders were responsible for organizing village watchmen and maintaining order on a day-to-day basis. These watchmen could intimidate less favored peasants who refused to cooperate with the colonial state or local officials. Village leaders frequently hired itinerant thugs called jagos (fighting cocks) who were experts in Javanese martial arts, to spy on villagers, and beat up trouble makers.[18] The Dutch also maintained large forces of mobile, well-armed, military police in all rural areas. When peasants resisted, the Dutch colonial police were quick to shoot protestors on the urging of local officials. [19]

This shows that elites had political, economic, and social tools to control villagers in their jurisdictions that,as we will see, South Korean landlords did not have. As a result, it was harder

[17] Vickers, *A History of Modern Indonesia,* 43
[18] Vickers, 49.
[19] Kees Van Dijk, "The Good, the Bad, and the Ugly Explaining the Unimaginable: Amuk Massa in Indonesia" in *the Roots of Violence in Indonesia: Contemporary Violence in Historical Perspective,* (Leiden, the Netherlands: KITLV Press, 2002), eds. Freek Colombijn and J. Thomas Lindblad, 293.
See also: G.R. Knight, "Did 'Dependency' Really Get it Wrong? The Indonesian Sugar Industry, 1880-1942", *Historical Foundations of a National Economy in Indonesia, 1890s-1990s,* (New York: Royal Netherlands Academy of Arts and Sciences, 1996), 169.

for Javanese peasants to organize than their Korean counterparts. Further, the position of Javanese elites was backed up by overwhelming force that could kill any demonstrators who succeeded in overcoming the social and economic systems that controlled their lives.

Javanese village heads had a strong incentive to maintain control over their fellow villagers because they could be removed by the more rational-legal middle bureaucracy. The mobile police force, like most of the middle levels of the Dutch East Indies bureaucracy, was not a patrimonial agency. The Dutch established a rational administration that recruited personnel based on merit to run agencies at the regency and district levels (comparable to an American county). These agents frequently visited villages to ensure that village heads were complying with directives from above, especially the requirement that they maintain order. Village heads therefore, had an additional incentive to maintain control over tenants and other villagers because officials who failed to maintain law and order were removed and lost access to their bengkok land.

This shows that even though clientelism was an important institution in colonial Java, the state was relatively strong. Thus, a legacy of state weakness in Indonesia does not explain why it industrialized less than South Korea. (see: below).

Javanese village heads maintained personal ties to the villagers under their control because villages were relatively small. Most villages in the late colonial and early post-independence period had fewer than 300 people. They also had several officials including the village head, village secretary, and at least one irrigation officer. As a result, village officials were able to maintain very personal ties to the citizens in their jurisdictions. Those with more people also had more officials, so even in villages of 1,000 people, the ratio of citizen to official was not usually more than 100 to one.

In contrast, Korean peasants could organize a coordinated defense of their economic interests because landlords and local officials could not observe, much less respond to acts of defiance until after groups of peasants had already organized protest. The closest equivalent to a Javanese village head in colonial Korea (in the sense that they were numerous relative to the total population and were the most local representatives of the colonial state) were the local police. Every police substation in colonial Korea had responsibility for an average of about 20 hamlets, or about 800 households (several thousand people). This meant that they could not even know all the peasants in their jurisdictions.[20]

Unsurprisingly, large peasant demonstrations against the economic and political system were very rare on colonial Java after the Dutch transformed local government in the 1830s. The few forms of resistance that occurred usually involved individual acts of sabotage against the colonial economy. This included burning sugar cane in regions along the North coast of Java, just before it was ready to harvest. Although this form of protest had a significant impact on the profits of the sugar plantations, only a very small number of peasants participated because there were only 1,383 incidents of cane burning in an entire district in 1911. Compared with the millions of peasants who worked in the cane fields, those responsible for the fires were thus, a very tiny percentage, especially considering that many of these fires could have been started by the same people. Further, this form of protest was limited to a narrow strip along the coast or Northeast Java, and did not require collective action.[21]

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[20] For Japan, see: Ching-Chih Chen, "Police and Community Control Systems in the Empire" In *The Japanese Colonial Empire, 1895-1945,* Eds. Ramon H. Myers and Mark R. Peattie, (Princeton, NJ: Princeton University Press, 1984), 225. For Indonesia, see: Hiroyoshi Kano, *Indonesian Exports, Peasant Agriculture, and the World Economy, 1850-2000: Economic Structures in a Southeast Asian State,* (Athens, Oh: Ohio University Press, 2008), 345,-348; See also: Hans Antlõv, *Exemplary Centre, Administrative Periphery, Rural Leadership and the New Order in Java,* (Richmond, England: Curzon Press, 1995), 4-8

[21] Vickers 47. In the worst year for the sugar planters, 1911, there were 1,383 incidents of cane burning in Pasuruhan district, East Java. However, most regions of Java were not affected by cane burning at all.

During the colonial period, only elites developed broad civil society movements with support in rural areas. Islamic leaders who ran boarding schools called pesantrens joined with merchants to form the first nationalist organization, Serekat Islam (SI), in 1912. This was the first mass political party in the East Indies, but it was led almost entirely by elites. Pesantren leaders (kyais) shared common interests with village elites because over generations, many pesantrens accumulated large amounts of land. The legal status of pesantren land was like village land: kyais did not own the land themselves, but controlled the revenue derived from it. (like waqfs in the Ottoman Empire and its successor states). Most kyais also handed their positions down from father to son, like village heads. As a result, SI sought to promote a vision of Indonesia in which a return to a purer Islamic past would eliminate colonial occupation, but never resisted exploitation of the rural poor.[22]

This shows how poor rural Indonesians could not form civil society groups to represent their interest during the colonial period. As a result, they had none of the institutions that their Korean counterparts had to solve collective action problems after independence. Javanese peasants also had no experience leading the kind of revolts that led to policy concessions in Korea.

In contrast to Javanese peasants, who had very little experience of organized protest until the communist-led land seizures in the 1960s, peasants in South Korea formed unions and engaged in group land disputes starting in the 1920s. By 1925, there were 204 disputes with 4,002 participants. In 1927, peasants formed the Korean General Farmers' Union, a nation-wide organization which mobilized 13,012 tenants in 726 disputes during the course of 1930. By organizing into a broader movement, peasants increased their ability to mobilize and 13,012 tenants took part in 726 disputes during the course of 1930.[23]

[22] Ricklefs, *Polarizing Javanese society*, 226.
[23] Jinwung Kim, *A History of Korea,* 344

Although intensified Japanese repression after 1937 crushed the peasant movement, the disruptions of the period from 1937 to 1948 gave Koreans new perspectives and in the long run, undermined institutions of social control even further. During this period, Japan conscripted millions of Koreans to serve in the Japanese army and work in defense-related industries in Japan, Manchuria, and northern Korea. This increased the number of Koreans working in industry from 38,951 to 1,171,094 between 1923 and 1942, not counting another 300,000 Koreans working in mines and factories in Japan and Manchuria.[24] This meant that there were tens of thousands of Koreans who left the village entirely and thus, developed new perspectives that would facilitate organizing protest after independence.

Meanwhile, on Java, colonial-era mechanisms not only persisted, but intensified during the 1940s. When the Japanese occupied the Dutch East Indies, they actually increased village heads' power over peasants by giving local officials responsibility for recruiting forced laborers (romushas). While official directives required village heads to recruit only peasants whose income was not essential to their families, in practice, the Japanese were primarily concerned with ensuring an adequate supply of labor for their war effort in Burma and elsewhere. As a result, village leaders selected romushas on a largely arbitrary basis.[25] This system was ripe for abuse and gave local elites even more opportunities to punish villagers who were insufficiently deferential. Thus, while clientelism was completely destroyed by Japanese rule in Korea, it persisted through the end of World War II on Java.

II. Postwar Political Developments

[24] Bruce Cumings, *The Origins of the Korean War: Liberation and the Emergence of Separate Regimes, 1945-1947* (Princeton, NJ: Princeton University Press, 1981), 26-28.
[25] Shigeru Sato, *War, Nationalism, and Peasants: Java Under the Japanese Occupation, 1942*-1945, (Sydney: Allen and Unwin, 1994), 164.

So far, I have shown that Dutch rule strengthened systems of clientelism in colonial Java, making organized protest more difficult, while Japanese rule in Korea radicalized the citizenry and broke down clientelistic ties. Next, I will show how these legacies led to very different levels of protest after both countries gained independence in the late 1940s. The thesis is that these protests, which emerged from colonial legacies described above, led to policy concessions that increased worker productivity in South Korea. The absence of such protest in Indonesia, due to the persistence of clientistic ties, led to the creation of policies motivated by elite interests that did not boost worker productivity.

This section will show how protests and rebellion erupted on a massive scale in post-colonial South Korea, threatening postwar regimes, while there were relatively few protests in post-colonial Java that were not organized by elites themselves. I will also show how early acts of protest led to the first significant policy concessions, the expansion of education and creation of worker training programs in Korean SOEs. This will draw the connection between protest, on the one hand, and policy choices, as theorized in Chapter One.

This section will also contrast these developments to the situation in Indonesia, where the first president, Sukarno, expanded education and nationalized Dutch firms for elites and urban citizens, but felt no pressure from mass protests in rural areas. As a result, he had few incentives to provide universal education, EPZs, or efficient management of SOEs with training programs. This will demonstrate how many postwar Third World elites created SOEs, but in the absence of mass protest, did not provide broader public goods.

After World War II, conditions in Korea were favorable for a lower class rebellion. Koreans who had been conscripted to work abroad returned from all over the Japanese Empire. More than 2 million people who had left South Korea returned to their provinces of birth between

1945 and 1947 and even the most moderate of them had no jobs in the South and thus, few opportunity costs to participating in protests, stealing food in riots, and attempting to seize factories. They also had experience organizing and well-established civil society groups from prewar unionization efforts.[26]

As the Japanese prepared to evacuate Korea after World War II, a social revolution took place that had no parallel on Java. Koreans began to attack Korean police officers who had served the colonial regime. [27] There were large demonstrations against landlords and other collaborators throughout the country. Workers and peasants seized Japanese-owned factories and farmland and set up local governments run by union leaders. The evacuation of Japanese managers gave the police no incentive to stop workers from forming their own management committees. Other Koreans established local governing bodies called people's committees in almost every town and village. Outside Seoul, local branches of a Korean militia, the Peace Preservation Corps, and the people's committees recruited peasants and labor leaders to run local government. [28]

In contrast, elites continued to dominate Indonesia in spite of a nationalist revolution. This revolution was led by elites who had collaborated with Japanese rule, and continued to use clientelism to prevent threats to their economic position. Unlike in Korea, local elites were well entrenched in their regional strongholds and capable of defending their own interests. Unlike the Korean landlords, who tended to live in cities, Indonesian rural leaders had more personal relationships with the people in rural communities. As a result, there were only calls for land reform and social revolution in urban areas and a small region along the North coast.

[26] Bruce Cumings, *The Origins of the Korean War*, 60.
[27] Cumings, *Origins of the Korean War*, 75.
[28] Gi-Wook Shin, "The Historical Making of Collective Action: the Korean Peasant Uprisings of 1946", A*merican Journal of Sociology,* 99: 6 (May 1994), 1602-1603.

Elites in Indonesia successfully seized control of the nationalist revolution. Some Indonesian rural elites, like the pesantren heads in West Java, organized their own militias, while others who had served as officers in Japanese paramilitary youth groups formed the officer corps and even whole units of Indonesia's provisional military.[29] These men tended to be tied to village elites because the Japanese preferred to recruit men with some secondary education as leaders, and since the colonial government had spent very little on education, only village officials and other elites could educate their children. [30] Nationalist forces supported and protected landowners and existing class relations. For example, Republican and Islamist forces crushed communist troops in Madiun city,[31] while local landlords and Islamists struck back against communists in the countryside with their own militias and killed around 8,000 communists, with some help from the military.[32]

This shows that rural elites controlled tools of private violence in Indonesia, and could prevent threats to both their social status, and the post-colonial state. At the same time, South Korea emerged from World War II vulnerable to such protests at the end of World War II. This meant that elites in Korea had incentives to meet citizens' demands, while those on Java did not.

After seizing factories and farmland, South Koreans resisted the imposition of a right-wing government by US occupation forces. Resistance took the form of non-compliance, protests, and outright rebellion. Peasants responded to American-backed, former Japanese collaborators'

[29] Merle Calvin Ricklefs, *A History of Modern Indonesia, c. 1300 to the Present,* (Bloomington, Indiana: Indiana University Press, 1981), 194. See also: Richard Edward Elson, *Suharto: A Political Biography,* (New York: Cambridge University Press, 2001), 9-10.
[30] William H. Frederick, "Shadows of an Unseen Hand: Some PAtterns of Vilence in the Indonesian Revolution, 1945-1949" in *Roots of Violence in Indonesia: Contemporary Violence in Historical Perspective,* Freek Colimbijn and Thomas J. Linblad, ed. (Leiden: KITLV Press, 2002), 148-149
see also: Richard Edward Elson, *Suharto: A Political Biography,* (New York: Cambridge University Press, 2001), 9.
[31] Richard Edward Elson, *Suharto: A Political Biography,* (New York: Cambridge University Press, 2001), 25-27.
[32] Jean Gelman Taylor, *Indonesia: Peoples and Histories,*(New Haven: Yale University Press, 2003), 353-354.

management of factories with strikes and attacks that drove the collaborators away.[33] Eventually, a nation-wide, violent protest movement called the "Autumn Harvest Uprising", ensued after railroad workers went on strike in the southern port city of Pusan, and were attacked by the American-backed police, (mostly holdovers from Japanese rule).[34] About 65,000 Koreans participated just in one province, South Cholla. [35] Across southern Korea, roughly 30,000 were arrested and 1,000 people killed, with millions participating in some form of protest or violence. In order to quell the uprising, American occupation forces had to deploy tanks in the streets. [36]

This shows that subsequent governments in South Korea clearly had reasons to fear a mass uprising because even the United States had felt the need to grant concessions to forestall a communist takeover. This military administration, even with all its coercive power, found it easier to grant policy concessions to Koreans than to simply repress them. It is therefore, unsurprising that less well-armed governments would also grant concessions. The timing also clearly demonstrate the connection between protest and policymaking theorized in the first chapter because these policies were only enacted after the Autumn Harvest Uprising.

In 1947, after the uprisings, US Military Government in Korea (USMGIK) redistributed formerly Japanese-owned lands to small farmers in 5 acre plots. This policy redistributed 29.6 percent of tenanted land, and 13.1 percent of all farmland in South Korea.[37] The US also hastily prepared to leave Korea by turning over administration to an elected National Assembly, even though the US-backed party that opposed further land reform won only 29 seats out of 200 seats.[38]

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[33] Nam, *Building Ships,* 28-29.
[34] Cumings, 356-360.
[35] Ibid, 366.
[36] ibid, 379.
[37] Shin Yong-Ha, *Essays in Korean Social History*, 179
[38] Michael Seth, *A Concise History of Modern Korea: from the Late Nineteenth Century to the Present* (Boulder, CO: Rowman and Littlefield Publishers, 2010), 95.

The USMGIK also began the promotion of mass education in South Korea. In response to student protests and pressure from Korean intellectuals, the occupation hired Koreans to publish textbooks using the Korean national alphabet, han'gul, instead of Chinese characters that had been used under the Japanese. This project quantitatively increased the number of books available in Korean classrooms- while qualitatively changing the curriculum and teaching materials- because 13 million new textbooks were printed.[39] The USMGIK also provided increased funding for public education while eliminating restrictions the Japanese had placed on private schools, which led to the construction of 188 new high schools and 28 new institutions of higher learning under American administration. USMGIK further recruited 7,000 teachers and retrained them to fill vacancies created when Japanese teachers left, while increasing enrollment in teacher training colleges (normal schools) by 400 percent. This left the Republic of Korea with at least a core of teachers to expand the public education system.[40] This shows a direct causal link between education policies and protest movements in Korea. USMGIK responded to citizen demands with an expansion of education, along with a rapid transition to Korean independence.

While Koreans rebelled against landlords and police backed by a powerful foreign military, Indonesians maintained social hierarchy even during a total security vacuum. US soldiers occupied South Korea by the end of 1945 and restored existing state institutions quickly. On Java, the Dutch did not return until 1946, and even then concentrated their forces in urban areas. While the US soldiers of USMGIK had tanks, landlord and nationalist militias in Indonesia had small arms, and some had only knives. Had lower classes in Indonesia been able to solve collective action problems, they would have been far more successful at social revolution than their Korean counterparts. However, there was no widespread social revolution on Java. The fact that peasants

[39] Seth, *Education Fever,* 46.
[40] Seth, 45-46

failed to threaten their landlords during this period supports the causal argument made in Chapter One because the thesis argues that the level of clientelism determines citizen's propensity for protest.

IV. Prospects for Revolution in Korea & Indonesia - the 1950s

Here I will show that the first government of independent South Korea faced a serious threat of revolution that motivated its leader, Syngman Rhee, to implement policies that satisfied citizens' demands for jobs and education. I will also show that there were strong incentives to provide broad benefits in the form of universal secondary education and land reform because nearly the entire population was on the verge of rebellion.

This section must also prove that Indonesian president Sukarno faced no threat to his rule, except from a much narrower military elite and to a lesser extent, from urban workers. I must also show that Sukarno was aware of the potential threat the army posed and that he sought to provide private goods to generals instead of public goods for the majority of his citizens because the generals were both threatening and expensive to buy off.

Rhee's South Korea was vulnerable to domestic rebellion. A North Korean-backed union that had chosen Kim Il Sung as its leader, the National Council of Korean Labor Unions, had roughly 250,000 members in 1948.[41] A leftist insurrection broke out on the island of Cheju in May 1948, and it took Rhee's army almost a year to successfully defeat the rebellion in April 1949.[42]

This shows that without pervasive clientelism, citizens can organize to protect their interests even in a pre-industrial and predominantly rural society. It also shows that peasants in

[41] Nam, 31.
[42] Seth, *A Concise History*, 97

South Korea were willing to not only demonstrate peacefully, but to actually rebel against the government when their demands were not met and they became frustrated. As a result, postwar Korean governments understood the need to respond to citizens' demands in order to avert revolution.

The military could not maintain order because it had a mere 65,000 soldiers (compared with millions of dissatisfied urban workers and peasants) and none of the tanks American forces had deployed to quell the Autumn Harvest Uprising less than 2 years before. By the end of 1948, the US drew down its forces to just 500 military advisors with light weapons, leaving South Korea without reliable foreign support. Although South Korea had a large police force inherited from the Japanese period, it was poorly suited to South Korea's political situation. At least 75 percent of senior police officers were former policemen under the Japanese, and had had been trained to use unrestrained force against protestors. [43] Use of excessive force was a risky tactic for policing in post-war Korea because the government lacked the military force to terrorize citizens and crush revolts the way Japanese governments had done. As a result, excessive police brutality often backfired and escalated minor demonstrations into major revolts during Korea's post-independence period.[44] Although the Korean War swelled South Korea's army, Korean troops remained under American command after the war, and could not patrol the armistice line while responding to internal uprisings at the same time.

[43] ibid, 166. For a description of police armaments, see: ibid, 163

[44] Specifically, the 1960 revolution that toppled Rhee; the 1979 uprising that led to Park's assassination; and the 1987-1988 protests that forced Chun Doo Hwan to concede democratization each began as isolated protests against specific government actions that blossomed into national revolts after reports of police brutality infuriated the mass public.

As a result, Rhee continued conciliatory policies even after the Korean War swelled his army because he remained vulnerable to protests.[45] When Rhee sought re-election in 1960, his attempt at wide-spread vote fraud led to massive rebellion. His military and police could not quell the uprising and the US commander of allied forces in Korea (including Korean troops) refused to release Korean units for an internal crackdown. This forced Rhee to resign and flee to Hawai'i.[46] After a turbulent year in which a provisional government tried unsuccessfully to calm the demonstrators, military officers led by Park Chun-Hee seized power in 1961.[47]

This shows that citizens were able to overthrow their government in the late 1950s and early 1960s because even unarmed, or poorly armed citizens organized in such large numbers that the security forces could not crush demonstrations quickly and could barely suppress an isolated rebellion on an outlying island. Korean rulers therefore must have been terrified of rebellion in Seoul. Thus, it was entirely rational for both Rhee and Park to fear that citizens would rebel if their demands were not met. After Park Chung-Hee seized power, he faced a precarious political situation much as his predecessor had, and responded to popular demands, much like Rhee.

At the same time, citizens were demanding broad policies to achieve social justice and upward social mobility. The peasants' union led nation-wide general strikes, and most industrial workers, who had themselves grown up on farms, demanded land reform whenever they protested. Korean demonstrators in the late 1940s and early 1950s also demanded that former collaborators be purged from the bureaucracy and that the government provide job opportunities for the unemployed. Parents saw education as one way to provide new opportunities denied under the

[45] Other work in Comparative Politics has shown that this pattern is common to dictatorships that hold regular multiparty elections (what Beatriz Magaloni calls Hegemonic Party Autocracy, and a particular variant of what Levitsky and Way call "Competitive Authoritarianism").
[46] Oh, *Korean Politics*, 42
[47] Seth, *A Brief History,* 155.

colonial regime, as well as expansion of the bureaucracy, the creation of SOEs, and the purging of collaborators who were taking job opportunities from those deemed loyal to the Korean nation.[48]

Protestors in South Korea also demanded jobs. Unemployed workers destabilized South Korea in these years because dependence on Japan, combined with the sudden closure of Japanese, North Korean, and Manchurian markets plunged South Korea into an economic crisis. Without the other territories of the Japanese Empire that had served as markets for southern Korea's industrial production, there was not enough demand to keep factories running and 50 percent of plants were closed.[49] Workers who felt the government was not doing enough to keep their plants operating at full capacity helped organize unemployed workers for demonstrations against Rhee. For example, workers in Busan led protests against the government in the late 1940s when their hours were cut and there were rumors the plant would join the many others that had closed.[50] Rhee was especially fearful of labor protest because striking workers had started the Autumn Harvest Uprising in 1946.

Rhee therefore responded to citizens' demands exactly as the theory in Chapter one would predict. In January 1950, South Korea implemented a new land reform bill that limited all landholdings to less than 8 acres (3.24 Ha) per farm household, and mandated the redistribution of all land held by absentee landlords who did not work the land themselves.[51] This redistributed 69 percent of the remaining tenanted land to small farmers and effectively eliminated tenancy in South Korea.[52] This shows that the ability of tenant farmers, Korea's most numerous class, to organize protests and create broad civil society groups forced the government to respond to their demands.

[48] Nam, 39-41, see also Seth.
[49] Seth, *A History of Korea*, 96.
[50] Nam, 60
[51] Yong-Ha, 181.
[52] Ibid, 185-187.

Rhee protected his regime from the feared workers by providing jobs and co-opting workers into corporatist institutions that protected them from exploitation. The first step in this strategy was to keep industrial firms from laying off more workers. Rhee accomplished this task by bailing out manufacturing firms, and then nationalized the ones that were still struggling. Next he invested in new equipment and training for these firms while protecting them from foreign imports.[53]

This was a costly strategy, but it prevented political instability from getting worse. Most industrial workers stopped agitating against Rhee's government and instead, focused on obtaining better working conditions through dispute resolution mechanisms enshrined in Korea's 1953 labor law. Rhee's government actively enforced workers' rights provisions of this law to incentivize workers to cooperate with the corporatist labor unions that achieved workers' goals through mediation and lawsuits rather than street demonstrations.[54] His strong desire to co-opt protest and restrict bargaining between the regime and its critics to legislative and corporatist institutions therefore demonstrates his motivation for creating corporatist institutions and actually providing benefits to those who participate in them.

While industrial training was neglected in Sukarno's Indonesia, subsidization of a large state-owned sector contributed to human capital development in Rhee's South Korea. The South Korean government not only kept factories open, but also put Koreans in charge of managerial and technical positions for the first time. Government-run firms worked with American advisors to

[53] ibid, 61-62

[54] Nam, 63-66. The government arrested members of KSEC's union, which was affiliated with the communist National Council of Korean Labor Unions, in 1953. However, Repression alone cannot explain labor peace for the entire period because a new, non-communist union formed in 1953 and there continued to be no strikes until the layoffs in 1957. In 1957, the local police threatened the union not to hold the strike, but they held it anyway, which demonstrates that the threat of state violence by itself was insufficient to prevent demonstrations.

give workers specific training in how to run new equipment procured through American aid.[55] This decisive intervention was crucial later when Hyundai Heavy Industries began building ships in the 1970s, because it hired engineers and other employees who had been trained in nationalized shipyards during the 1950s and thus, did not need to train them from scratch.[56]

To gain popularity, Rhee also implemented one of the most rapid expansions in elementary education in history. The Korean government enrolled 87 percent of students aged seven to twelve by 1959 (an enrollment rate that Indonesia has yet to attain even today). The Rhee government also prioritized expanding access to basic education for all classes, rather than squandering resources on tertiary education for a tiny elite. Thus, Korea devoted almost all of its education budget to kindergarten through 10th grade (including training for elementary school teachers). This contrasts with Indonesia, where over a third of the education budget went to upper secondary or tertiary schooling under Sukarno, even though less than 10 percent of the population had enough education to benefit from such policies.[57]

III. Indonesia in the 1950s.

While rural elites in Korea could not control peasant mobilization and governments therefore faced urban and rural protestors simultaneously, peasants on Java never mobilized in the 1950s.[58] Indonesian agricultural laborers organized on a large scale only in areas outside Java, particularly North Sumatra, where most people worked on plantations whose absentee owners

[55] Nam, 59-61.
[56] Amsden, *Asia's Next Giant*, 275.
[57] Michael Seth, *Education Fever: Society, Politics, and the Pursuit of Schooling in South Korea* (Honolulu: University of Hawai'i Press, 2002), 77.
[58] Indonesian Central Statistics Agency (Badan Pusat Statistik Indonesia), *Statistical Pocketbook of Indonesia,* various years, 1951-1960*,* (Jakarta: BPS, 1956), 53-56.

lived abroad or in cities, like landlords in Korea.[59] This shows how even citizens within the same country with a shared culture and political regime can have vastly different capacities for collective action under different institutions of local government and labor control. Specifically, in areas with significant populations of citizens free from clientelism, they can organize and threaten elite interests.

However, strikes in North Sumatra did not threaten the *central* government because they did not take place on Java. The remoteness from the densely-populated and politically dominant island meant that demonstrations there were at worst a nuisance rather than a serious threat to Sukarno's rule. As a result, they did not create incentives for Sukarno to provide broad policies to shore up his support.

The absence of peasant protest on Java was due to clientelism and peasants' inability to organize large civil society groups, rather than the absence of peasant grievance. By the end of the 1950s, levels of consumption were at an all-time low, and many Javanese peasants were unable to obtain enough income to meet more than the barest subsistence. By 1963, when Indonesia conducted its first agricultural Census, the average farmer across the country owned just over a hectare of land, while the average farmer on Java, owned only 0.71 Ha (1.75 acres). There were 16 million farmers without enough land to feed an entire average household without going hungry.[60]

Without their own civil society groups, peasants could not use elections to hold the government accountable either. Political parties nominated elites to run for most offices and had

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[59] " Pomogokan Buruh K.P. M." in *Harian Rakjat.* May 5, 1955. Pg 2 ; "350.000 Buruh perkebunan asing akan mogok pada 16 & 18 Mei" in *Harian Rakjat.* May 13, 1955. 1.; "Mogok di Lau Tador" in *Harian Rakjat*. (May 16, 1955), 1.

[60] Anne Booth, T*he Indonesian Economy in the Nineteenth and Twentieth Centuries: a History of Missed Opportunities*, (New York: St. Martin's Press, 1998), 124.

few programmatic ties to peasants. This effectively gave peasant voters nothing but a choice between different parties that ignored their interests and nominated as candidates the very same landlords who took peasants' surplus. Even the Communist Party of Indonesia (PKI), which claimed to represent peasants and other lower class groups, made an alliance with some village elites against their rivals who were deemed "traitor landlords" (those who supported other parties). As a result, there was no redistribution of private land holdings or village salary land to landless peasants. Although peasants comprised more than 60 percent of the Indonesian electorate, they did not get land reform or any other concessions during Indonesia's democratic period from 1949 to 1957. [61]

This shows how continuing clientelism shielded Sukarno from the brunt of citizens' dissatisfaction. Rather than face organized protests or even populist parties, his regime could simply rely on local leaders to use paternalistic relations, their own village watchmen, and their social status to keep power. As a result, the central government had no incentive to respond to peasant grievances, and therefore made no effort to redistribute land, provide universal education, or create jobs in EPZs.

During the same period, Indonesian industrial workers never threatened Indonesia's first president, Sukarno, the way Korean workers threatened Rhee because, like their Korean counterparts, they were only a small minority. Although there were protests against low wages and strikes to demand better working conditions in the 1950s, these demonstrations never made threats against Sukarno. In fact, Sukarno and his cabinet urged Indonesian workers to carry out general strikes and seize Dutch-owned firms. These strikes and labor rallies were organized by

[61] Rex Mortimer, *Indonesian Communism Under Sukarno: Ideology and Politics, 1959-1965,* (Singapore: Equinox Publishers, 2006).

Sukarno's party to pressure the Dutch to give Papua to Indonesia.[62] (The Netherlands kept control over this territory until 1963, even after recognizing Indonesian sovereignty over the rest of the Dutch East Indies in 1949). Workers in factories mostly on Java could not coordinate protests with rural workers in remote North Sumatra or the passive peasants just outside the industrial cities of Java.

Even when labor unions disagreed with Sukarno, their influence was limited because there were no more than 500,000 workers in the modern, industrial proletariat in 1955.[63] While labor protests were incredibly threatening in South Korea because they were supported by the even larger peasants' unions, workers in Indonesia had no support from peasants and could only affect policies by allying with Sukarno and his elite party.

Although Sukarno had no incentive to provide universal education and other broad development policies, he implemented policies that benefitted urban workers and middle class citizens who could voice demands. This included an expansion of primary and secondary education in urban areas, which dramatically increased access to education for city dwellers. Rural areas received relatively little investment in education, considering that almost 80 percent of the population still lived there. Investments also went disproportionately to educational opportunities for elites. Thus, Sukarno established Gadjah Mada University (in Yogyakarta), the University Indonesia (in Jakarta), and several teacher training colleges, while many peasants had no junior high schools in their villages. [64]

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[62] J. Thomas Lindblad, *Bridges to New Business: The Economic Decolonization of Indonesia,* (Leiden: KITLV Press, 2008), 181-182.
[63] Vedi R. Hadiz. *Workers and the State in New Order Indonesia,* (New York: Routledge, 1997), 48.
[64] Wardiman Djojonegoro, *Fifty Years Development of Indonesian Education,*
(Jakarta: Office of Educational Research and Development, Ministry of Education of the Republic of Indonesia, 1997), 142.

This shows that citizens with strong civil society institutions are generally more successful at getting desired policies from their government than those who do not. It also shows that in developing countries, which are predominantly rural, broad provision of public goods and industrial growth depends on rural institutions.

In spite of some limited concessions to urban workers and the middle class, Sukarno became more concerned with satisfying the demands of the army than the rest of his citizens. Unlike in South Korea, Indonesia faced no foreign threat. The only military confrontation Indonesia experienced during his rule were conflicts that Sukarno started: his mini-war to stop the formation of Malaysia (konfrontasi), and his attempt to seize Papua from the Dutch through military force. Other than that, he also faced regional rebellions, one of which received a small supply of weapons from the CIA, but there was no chance of imminent US invasion. As a result, his military was not preoccupied with national defense and there were no constraints on his ability to use the army against his own citizens.

While the lower classes were easy to control, the military posed a real threat to Sukarno's rule. In April 1950, soldiers from the island of Ambon who were stationed in Makassar, South Sulawesi, seized power and attempted to prevent other troops (mostly from Java) from garrisoning the city. While the military was busy fighting these rebels, other Ambonese troops declared the independence of the "Republic of the South Moluccas" on Ambon itself.[65] On December 22, 1956, military commanders in control of troops stationed on Sumatra declared themselves in control of the entire island (almost 30 percent of Indonesia's land mass and the source of most of its export products). Officers stationed in Makassar (on the island of Sulawesi) also rebelled on March 2,

[65] Taylor, *Indonesia: Peoples and Histories.* 346-347.

1957. It was only after these rebellions that Sukarno gave the military control over nationalized firms.[66]

As a result, Sukarno's economic policies were geared more towards (elite) nationalist goals of development than to the demands of workers for better employment prospects. In 1957 Sukarno nationalized Dutch firms with the help of labor unions, who locked Dutch managers out of their offices in a massive demonstration of nationalism. But Sukarno evicted union managers and put military officers in charge of the plantations and factories that workers had seized in the name of the Indonesian state. While generals and retired officers were supposed to manage these assets on behalf of the government's development goals, military officers were allowed to invest the profits of military-controlled firms into foundations that paid for soldiers' retirement benefits, housing, and salaries. Soldiers laid off workers and evicted peasants who had come to live on the nationalized lands in order to maximize their own profit.[67] In one plantation, in the East Javanese residency of Kediri, three thousand peasants resisted eviction and were attacked by soldiers of their own government, resulting in 24 deaths.[68]

Sukarno's development policies continued to ignore the plight of landless peasants and rising unemployment among the working class during the late 1950s as his regime became even more insulated from the people. He declared martial law in 1957 and then replaced Indonesia's democratic constitution with the provisional constitution of 1945, which gave him dictatorial powers. Sukarno did not adopt a policy to promote new industries with investments in SOEs with

[66] M.C. Ricklefs, *A History of Modern Indonesia, c. 1300 to the Present,* (Bloomington, Indiana: Indiana University Press, 1981), 242-243.
[67] Lindblad, *Bridges to New Business,* 200-201.
[68] Nathaniel Mehr, *Constructive Bloodbath in Indonesia: the United States, Britain, and the Mass Killings of1965-1966,* (Nottingham, England: Spokesman Books, 2009), 48.

new equipment and training programs, but simply watched the military take over existing Dutch industries.

Without a foreign threat to constrain him from using repression, Sukarno chose not to implement policies that would satisfy the few peasant activists who emerged. In 1958, the Communist party implemented its first grass-roots organization drive in Javanese villages called the "Go Down Movement", which sent party cadres from the cities to rural areas. Cadres helped peasants negotiate to lower rents and increase the duration of leases. By the early 1960's, they even began calling for land reform[69] However, this did little to change the balance of power within Sukarno's coalition. Sukarno passed the Basic Agrarian Law of 1960 which mandated redistribution of private landholdings above a maximum threshold, but thresholds were flexible and determined by rural land reform courts and committees. This flexibility gave local authorities who ran the committees (village elites) the power to simply ignore peasants' demands for land reform in most cases. [70]

The military also blocked land reform, and without any foreign enemies to fight and poor peasant organization, they could easily protect their interest in maintaining control over nationalized plantations. Generals from the Indonesian army, Islamist landowners, segments of the middle class, and village leaders formed an alliance to overthrow Sukarno in 1965. They were unified by their hatred of the communists and by the killing of 16 generals in the night of September 30-October 1 by junior air force officers. The army then supplied weapons and training to help its Islamist and landlord allies form militias that identified suspected communists, organized demonstrations against Sukarno, and murdered alleged communist sympathizers.

[69] Rex Mortimer, *Indonesian Communism Under Sukarno: Ideology and Politics, 1959-1965,* 279-282

[70] Dianto Bachriadi and Gunawan Wiradi, "Land Concentration and Land Reform in Indonesia: Interpreting Agricultural Census Data, 1963-2003", *Land for the People: the State and Agrarian Conflict in Indonesia,* eds. Anton Lucas and Carol Warren (Athens, OH: Ohio University Press, 2013) 41-43.

Estimates of the death toll in these killings vary from 200 thousand to 2 million, with another 1.6 million tortured, imprisoned, and isolated from their communities for the rest of their lives. The primary targets were labor leaders, peasant activists, members of the communist party (and their families), ethnic Chinese Indonesians, and individuals with personal grievances against local landlords and army commanders.[71] Suharto, the general who led the anti-communist killings, gradually took away Sukarno's power until March 11, 1966, when Suharto's soldiers surrounded the presidential palace and forced Sukarno to transfer all governing authority to Suharto at gunpoint. One year later, Suharto formally made himself president.[72]

The support of village elites and the middle class was essential for the military's extermination of the Indonesian left. During the mass killings and gradual military takeover that followed, Sukarno attempted to rally popular support by holding pro-communist demonstrations. Sukarno mobilized youth groups to join an anti-American campaign, which led to attacks on the US embassy. Sukarnoist mobs attacked foreigners and wealthy Indonesians in big cities all across the country. The military's elite allies helped defeat this strategy because college students who had become disillusioned with Sukarno's policies rioted and called for Sukarno's ouster. The military and landlords relied on middle class urban protestors to help control the cities and maintain the appearance of popular support for their actions.

While the students were mobilized to hold urban demonstrations, village elites and Islamists were crucial coalitional partners in securing the much larger and more populous countryside. The army supplied weapons and training to its new allies and landlord/Islamist militias identified suspected communists. The militias organized anti-communist and some anti-

[71] Theodore Friend, *Indonesian Destinies,* (Cambridge, MA: Harvard University Press, 2003), 112-114.
[72] Friend, *Indonesian Destinies,* 123.

Sukarnoist demonstrations in provincial towns. Most of the killings were carried out by these militia groups.

This shows that clientelistic institutions and local systems of private violence run by village elites were important for the military's successful seizure of power. Although the army had guns, it was still factional. Sukarno and the communists were also both popular, especially within the ranks of the military service branches that had not been put in charge of nationalized land. (This explains why air force officers had led the September 30th mutiny.) Thus, without the support of landlord and Islamist militias who controlled rural areas through clientelism and private violence, Sukarno could have had time to rally his supporters and defeat a poorly unified army.

This chapter shows that different levels of clientelism led to different levels of protest in post-war Korea and Indonesia. I have also showed that protests were large enough in Korea to threaten incumbent rulers and that the continuous threat from North Korea worsened Korean ruler's sense of insecurity by making crackdowns more costly. The chapter then shows the next link in the causal chain by demonstrating governments in Korea and Indonesia adopted different education policies.

Chapter Three:
Divergence of Policies and Economic Performance in Indonesia and South Korea

This chapter will show how changes in the level of protest within South Korea over time and its level of foreign threat changed industrial policies. It will also show how different policies compared with Indonesia, led to more rapid industrialization in Korea. In order to show that these two cases adopted different policies and thus, different economic outcomes due to the mechanisms explained above rather than alternative theories, I will first demonstrate that Java and South Korea had incredibly similar possibilities for industrialization. Then, I will process trace the causal links between the level of protest and policy from the late 1950s to the 1990s in both cases. Finally, I will show that policies were causally linked to economic outcomes.

To prove that South Korea and Indonesia shared similar values for variables considered important in rival theories, I must demonstrate that they had similar experiences of pre-war industrial policy, similarly strong states, similar levels of infrastructure, and similar political regimes. While this is not a controlled experiment that randomizes treatment assignment, this study matches the two most similar cases that have different values of the independent variable.

I. Java and Korea: Most Similar Systems

Both Indonesia and South Korea had the potential to industrialize because both had well-developed infrastructure at independence. Starting around 1900, the Dutch colonial government

adopted what came to be known as the "ethical policy," a plan to improve the economic well-being of their colonial subjects through more direct state investment. This included infrastructure such as the laying of 4526 kilometers of railroad track, canals and terraces to irrigate 1.25 million of Java's 3.4 million hectares of rice fields, and development of hydroelectric power plants. At the same time, the Japanese also built an extensive railroad network and new hydro-electric power plants in their Korean colony. In spite of assertions that this made Korea unique, at independence, Java had 33 kilometers of railroad per 1,000 square kilometers, while Korea had only 28.[73]

Although Japan had invested heavily in railroads, factories, and electricity generation, much of the infrastructure and a disproportionate share of the industry the Japanese built in Korea was located in the North. For example most electricity in the peninsula in 1945 came from hydroelectric stations on the Yalu River, in today's North Korea. By the time the Republic of Korea became independent in 1948, the North had cut off electricity to the South, and frequent blackouts followed. [74] Rhee built new power plants in South Korea to make his country independent from North Korea's power grid, and took similar steps in other sectors.

What little physical capital Korea inherited from Japan was devastated by the Korean War. Half of all infrastructure in South Korea was destroyed in the conflict.[75] Industrial plants were disproportionately affected because most industry was concentrated near Seoul, where 80 percent of buildings were destroyed. [76] Only two steel mills were left in South Korea after this conflict, and one of the remaining plants was damaged.[77]

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[73] Booth, 149-152; for the length of railways in Korea, see: Palgrave MacMillan, *International Historical Statistics,* (New York: Palgrave Macmillan, 2013), Table F1. Available at: http://www.palgraveconnect.com/pc/doifinder/10.1057/9781137305688.

[74] Michael J. Seth, *A Concise History of Modern Korea: from the Late Nineteenth Century to the Present*, (New York: Rowman and Littlefield: 2010), 95.

[75] Byung Nak-Song, *The Rise of the Korean Economy* (New York: Oxford University Press, 1990), 3

[76] Nak-Song, *The Rise of the Korean Economy*, 42

[77] Woo, *Race to the Swift,* 133.

This demonstrates that Korea did not adopt different policies and end up becoming more successful at late industrialization than Indonesia as a result of inherited infrastructure. If anything, Java was in a better position to become a center of global industry than South Korea. Thus, policies in the post-independence period explain differences in their success at industrialization more than colonial policies.

Indonesia and South Korea also had similar levels of state capacity, disproving arguments that state strength explains Korea's success. In both countries, governments ran railroads, power plants, and waterworks as state-owned enterprises during the colonial period. Although clientelism was an important tool of social control for the East Indies state, the village officials who kept order in the countryside were part of an otherwise, highly legal-rational administration, and were answerable to higher level officials. At the same time the Japanese imposed an examination-based system for bureaucratic recruitment in Korea, Dutch colonial ministries also began recruiting through competitive examination. These officials collected detailed census data and large amounts of tax revenue for the state, such as the annual reports of the Java Bank, the East Indies' monetary authority. By 1930, the Indies government spent more on infrastructure and government administration per capita than any other polity in Asia, except Japan. [78]

In spite of competitive recruitment, relatively few Indonesians or Koreans gained experience in decision-making roles. The highest ranks of the civil service were closed to all but a tiny handful of Indonesians or Koreans because they required levels of education that the colonial powers did not provide their subjects. Although both invested in primary education, and the Japanese even provided junior high-level schooling to a large number of Koreans, positions in the

[78] Booth, 149-154, see also: Vickers, 15; see also: The Java Bank, *Annual Reports* (Various years). These reports contain detailed accounts of the number of strikes and labor disputes, the cost of goods and services, tax revenues, government spending, agricultural production, and credit availability for every province of Java from the 1930s onwards.

senior bureaucracy required tertiary and upper secondary education that only elites could obtain. While Indonesians only filled 8 percent of the jobs that required tertiary education, Koreans also comprised less than 10 percent of senior positions.[79] This proves that Koreans did not have more experience making decisions about resource allocation and long-term planning than Indonesians.

Colonial Indonesia adopted industrial policies similar to the Japanese governments of Korea. The Dutch began promoting the textile industry by developing a new mechanical loom and promoting its adoption starting in 1919.[80] Starting in 1921, the central government monopolized rice imports to ensure price stability, and it attempted to reduce production of rubber, coffee, and sugar after global demand collapsed during the Depression. In 1933, the Dutch imposed heavy tariffs and quotas to protect the domestic manufacturing sector, and by 1937, the colonial regime began regulating entry into manufacturing to reduce competition and promote efficient-scale firms.[81] These policies were very similar to Japanese policies of protecting their investments in Korea behind high tariff walls and regulating investment in manufacturing to favor large firms.

As a result, Korea and Java achieved similar levels of industrialization during the late colonial period. Under Japanese rule, over two thirds of Korea's exports by volume consisted of food until the 1930s. As late as 1940, agriculture accounted for 77 percent of employment in colonial Korea, while only 7.2 percent of the Korean labor force was employed in manufacturing. This compares with Indonesia, where the best estimates put manufacturing employment at about

[79] J. Thomas Lindblad, *Bridges to New Business: The Economic Decolonization of Indonesia,* (Leiden, the Netherlands, KLTIV, 2008) 36. For figures from Korea, see: Hong Soohn-Ho, "A Historical Study of Bureaucracy in Korea", *Korean Politics: Striving for Democracy and Unification* (Elizabeth, NJ: Hollym International Corporation, 2002), edited by the Korean National Commission for UNESCO, 125-127.
[80] Howard W. Dick, S*urabaya: City of Work, a Socioeconomic History, 1900-2000,* (Athens, OH: Ohio University Press, 2002), 275-277.
[81] Booth, 156-157.

12.5 percent of the Indonesian workforce in 1940. It was only during World War II, that the share of workers in Korea employed in manufacturing substantially differed from that of Indonesia, increasing from 7.2 to 23 percent of the workforce.[82]

This shows that Koreans did not have more extensive technical or managerial experience than Indonesians. It also shows that Indonesia had substantial numbers of workers trained in factory discipline. Government officials in both countries had similar levels of experience running the economy, and similar models of industrialization to adopt.

Even South Korea's human capital inheritance from the Japanese period does not explain why it was more successful than Indonesia at late industrialization. Although far more Koreans than Indonesians had attended elementary school in 1945, most Koreans had not had the opportunity to study beyond 5th grade, and more than half of Korea's adult population was illiterate. In 1946, only 5 percent of adults in Korea had completed high school, which was about the same percentage as in Indonesia at independence.

The only indicator on which Korea scored much better than most Third World countries was its elementary school enrollment rate: over 50 percent of Korean children under 12 were enrolled in primary schools in 1945, compared with less than a quarter of Indonesians.[83] But elementary school kids of the 1940s and 1950s were not actively participating in the economy until the 1960s, after Korea's industrial takeoff had begun. Further, an elementary education is barely sufficient to perform the tasks of a production worker, and is not sufficient for semi-skilled jobs in

[82] Mizoguchi Toshiyuki and Yamamoto Yuzo, "Capital Formation in Taiwan and Korea" In *The Japanese Colonial Empire, 1895-1945,* Eds. Ramon H. Myers and Mark Peattie, (Princeton, NJ: Princteon University Press, 1984), 417 (Table 7); For Indonesia, see: Booth, *The Indonesian Economy in the Nineteenth and Twentieth Centuries,* 42. The numbers for Korea are a bit understated because many Koreans worked in manufacturing in Manchuria and Japan. However, the figures for Indonesia are also much lower than those for Java, because the denominator includes the entire Indonesian population, while over 90 percent of Indonesia's industrial workers lived on Java.

[83] Seth, *A Concise History*, 176. For Indonesian statistics, see: Anne Booth, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities* (New York: St. Martin's Press, 1998), 275

the industries like shipbuilding, car manufacturing and electronics that later drove the South Korean economy.

This shows that although South Korea and Indonesia are not identical cases, Java is probably one of the most similar cases to South Korea on a whole range of confounding variables. Since history provides few natural experiments, comparison between Indonesia and South Korea probably provides the best available control for confounding variables while still allowing the independent variables to vary. Since Korea and Java had similar levels of infrastructure, state capacity, previous manufacturing experience, and even education, these conditions cannot explain why the former was so much more successful than Indonesia at postwar industrialization.

II. Politics and The Origins of Industrial Policies

Here, I will show that South Korea also adopted not only provision of universal education, but also high quality education, and other industrial policies to satisfy the demands of citizens who would otherwise threaten incumbent regimes. I will also show that Suharto's industrial policies were designed to satisfy military officers and other elites, rather than broader constituencies. To prove this, I must demonstrate that even in the late Park era, South Korea remained vulnerable to a combined threat of popular revolution and foreign invasion, while Suharto's Indonesia was not. I will also show that his led to less provision of education, and fewer worker training/jobs policies in Indonesia than in Korea, and thus, different levels of success at industrialization.

When Park took power, unions continued to demand the implementation of existing labor laws, while the middle class, working class, and small farmers all demonstrated against the emergence of the Chaebols (large, monopolistic, family-owned and highly diversified companies) and corruption inherited from the Rhee period. Labor disputes and strikes continued throughout the early Park years, in contrast to the situation in Suharto's Indonesia.

In response to these pressures, Park implemented policies to satisfy popular demands. His first act was to investigate bureaucratic corruption, which resulted in the firing of 36,000 civil servants (10 percent of the entire bureaucracy at this time) within his first two years in office.[84] Just twelve days after taking power, Park arrested almost all the leaders of the chaebols and charged them with bribery, tax evasion, illegal acquisition of government property and other corruption charges.

At the very least, this demonstrates a responsiveness to public opinion that Kohli and Evans have never attributed to the Park regime. Although many businessmen were later released after paying large fines, these prosecutions were popular and responded to protests against corruption in 1960.[85] It is no coincidence that Park implemented these policies after seeing his predecessor deposed in a popular revolution. He knew perfectly well that he was as expendable to the US as Rhee had been, and must have been at least uncertain if the US would let him crush a citizens' revolt. Further, recent experience of the Korean War and continued border clashes at the 38th Parallel were constant reminders that repression was costly because it would kill potential soldiers and workers who would need to be mobilized if another invasion occurred.

As in Indonesia, Park attempted to reduce the amount of time devoted to teaching English in Korean schools in the mid 1960s and allocate more time to military training and anti-communist indoctrination, but unlike Suharto, faced resistance from teachers, parents, and business leaders. While Park successfully increased the focus on anti-communism in history textbooks, his plan to reduce opportunities to study English was eventually scrapped after parents protested. The Ministry of Education also responded to criticism of its plan to increase military training for high

[84] Oh, 54

[85] Eun Mee Kim, *Big Business, Strong State: Collusion and Conflict in South Korean Development, 1960*-1990 (Albany: State University of New York Press, 1997), 114-115.

school students to 700 hours per year by allocating only 180 hours during summer breaks to military drills.[86]

The timing of critical shifts in education policy in South Korea correspond to electoral pressures, demonstrating that these policies were motivated at least in part, by Park's need to satisfy the demands of the citizenry. His foreign backers forced the dictator to legitimize his rule through elections within 2 years of the coup and election results were not reassuring for the regime. Park won only 46.6 percent of the vote, compared with his closest rival, Yun Po-sŏn, who won 45.1 percent. This close outcome demonstrated that the regime was not particularly popular and that in order to stay in power, Park would need to satisfy demands for good governance, investment in education, and broad improvements in people's standard of living. The decision to back down on military training took place just before a subsequent election. [87]

South Korean citizens successfully pressured their government to expand access to education and improve quality. From 1960 to 1980, the junior high school enrollment rate increased from 33 to 95 percent. High school enrollment rates also improved dramatically from roughly 20 percent in 1961 to over 65 percent in 1980.[88] In 1973, the curriculum in Korean vocational schools was revised so that students spent as much as a third of their final year of high school training on the job and at least two months on the job in their first two, in contrast to Indonesian vocational schools that only taught in classrooms. [89]

It is clear that popular pressure persuaded Park to expand education because his preference was to reduce, rather than expand access to education. In 1961, Park had planned to cut the

[86] Seth, 205-208
[87] Kim, *a History of Korea,* 435
[88] Michael J. Seth, *Education Fever: Society, Politics, and the Pursuit of Schooling in South Korea* (Honolulu: University of Hawai'i Press, 2002) 83.
[89] Seth, 126

number of students enrolled in universities from 125,000 to less than 65,000 over several years. This would occur by reducing the number of students admitted from 26,000 to 16,000 in the next school year. However, the Ministry of Education responded to criticism from parents by returning the number of accepted students for the 1962-1963 academic year to 26,000. Again, it is no coincidence that this concession was announced just months before Park's first election. [90]

Park then opted for his second choice, increasing emphasis on science and math, rather than social sciences, because he did not want students exposed to liberal ideas that would only radicalize them. Park therefore cut funding for social sciences and increased funding for science and math departments.[91] His government also established the Korean Institute for Science and Technology in 1968 to train scientists and engineers.[92] Since Protests in South Korea were disproportionately led by students during this time, it made sense to implement a very competitive system of university entrance exams based on science and math skills. This ensured that those who were admitted would have good job prospects and could eventually be co-opted into the ruling coalition after graduation. [93]

III. Implications of decline in Protest for South Korea

While the turbulent period from 1949 to 1967 led to many concessions that drove economic policymaking in South Korea, a decline in protests during the late 1960s led to reduced responsiveness and concessions to only the most threatening groups. As domestic protest declined, Park become concerned with appeasing only those citizens whose support he needed to deter foreign invasion: male workers. The Park regime continued to adopt policies aimed at preventing

[90] Seth, 131-132
[91] Seth, *Education Fever,* 120.
[92] Oh, 55
[93] Alice Amsden, *Asia's Next Giant: South Korea and Late Industrialization* (New York: Oxford University Press, 1989), 218.

rebellion, but targeted them more narrowly towards workers in heavy industries (predominantly men).

In addition to education, Park also created EPZs to promote job growth. His government opened the country's first EPZ in 1968 to attract foreign investment. This created construction jobs in the mid-1960s while they were being built, but also created many new jobs after the factories opened and there were 120,000 Koreans working in these zones by the late 1970s, five percent of the industrial workforce.[94]

However, EPZs also reduced the power of labor unions, and thus, contributed to a narrowing of Park's coalition. Most workers in EPZ were only temporary workers, which meant that they were less willing to participate in demonstrations to secure workers' rights. In Korean EPZs surveyed during the mid-1970s, over 80 percent of workers were under 30, most had never held any other job before, and 75 percent of them were women.[95] In a traditional and still predominantly rural society, most of these young women expected to leave factory employment and get married after only a few years.

Further, Park's government was trying to reduce unrest, and therefore promoted strategies of labor recruitment that would keep EPZ workers temporary. High turnover was encouraged in EPZs by policies of hiring workers as "apprentices" who could be paid less than other workers and then firing them at the end of apprenticeships. An ILO study that sampled EPZs from all over Asia found that over 55 percent of workers in the Korean EPZ of Masan were hired and fired in this manner, a higher rate than in any other EPZ in the sample.[96] This suggests that there was a deliberate strategy within South Korean EPZs to promote short-term employment.

[94] Rudy Maex, "Employment and Multinationals in Asian Export Processing Zones" (Geneva: ILO, 1983), 72-74.
[95] Maex, "Asian Export Processing Zones, 49-50
[96] Maex, 56

The adoption of this new strategy for labor control, combined with declining unemployment, led to fewer demonstrations against the government and a growing sense of security for Park's regime. The number of strikes declined from 256 in 1950 to just 12 in 1965 and by 1973, there were no strikes in the entire country.[97] This, combined with Park's ability to get himself re-elected in 1967, demonstrated that his regime was gaining support. Military rule was accepted by a growing number of Koreans because the government had met their demands for jobs and education: the unemployment rate had fallen from around 20 percent in 1960 to around 5 percent in 1970.[98]

As a result, Park provided policies that benefitted fewer people. First, he excluded the young women who worked in the EPZs by not providing subsidies to increase the value of electronics production, and hence, their wages. Out of 1.192 billion USD Park's economic technocrats recommended he invest in the electronic sector, Park disbursed only $421 million (less than one fourth the recommended amount) over the course of the 1970s. [99]

This shows that Park chose not to provide policies that would create better jobs for women, and thus shows that his coalition was narrowing in the 1970s. It also proves that Park did not always listen to the advice he received from technocrats, undermining arguments that South Korean industrial policies were unique because of the expertise of the country's bureaucracy. Although bureaucrats had the training to come up with good advice, actual policy implementation depended on whether or not the dictator had political motivations to follow their advice.

Park was less interested in electronics than the heavier industries because most production workers in electronics at this time were women. Park saw female workers (and women in general)

[97] Deyos, 60-61.
[98] Amsden, 48. See also: op. cit. chapter 8.
[99] Sung Gul Hong, *The Political Economy of Industrial Policy in East Asia : the Semiconductor Industry in Taiwan and South Korea* (Northampton, MA: Edward Elgar Publishing, 1997), 92-93.

as expendable because he did not need them for his army, and could therefore unleash repression if they challenged his rule. As an authoritarian dictator and conservative former collaborator with the Japanese military occupation of his country, he cared little about the well-being of his citizens. This meant that he saw no need to pre-empt labor unrest in the electronics industry with policies that would increase employment, wages, and autonomy of work unless it would somehow increase the stability of his regime.

As a result, the expansion of EPZs primarily contributed to exports, foreign exchange earnings and aggregate economic growth, but did not lead to new skills. Most EPZ workers did not perform tasks that took more than a few weeks to learn and were paid lower wages, on average, than other workers outside the zones. [100] When Park established the Masan Free Trade Zone in 1970 and the Kumi Electronics Manufacturing Zone in 1971, he allowed foreign firms to own 100 percent of subsidiaries within these zones and import upstream components duty-free, as long as they exported what they produced. Since Korean electronics were primarily produced in these zones, there were no incentives to develop a domestic Korean electronic parts industry. Thus, the creation of EPZs did nothing to promote a domestic electronics parts industry and effectively encouraged import of foreign components because these were cheaper than those produced domestically. [101] This led to prolonged dependence on foreign technology and the Korean electronics industry's import dependence only decreased from 61.8 percent to 61.2 percent between 1970 and 1977.[102]

[100] Maex, 57

[101] Sung Gul Hong, *The Political Economy of Industrial Policy in East Asia : The Semi-Conductor Industry in Taiwan and South Korea*, (New York: Edward Elgar, 1997), 92-93. See also: Rhee, *The State and Industry in Korea: The Limits of the Authoritarian State* (New York: Routledge, 2002), 76.

[102] Woo, 146

This shows how variation in the level of protest over time leads to different policies, even between time periods within the same country. As protest declined and Park gained new tools of repression, he provided fewer broad policy benefits to Korean citizens. Further, the slow development of high-skilled electronics manufacturing in Korea, compared with Singapore, shows how Park's increasing security from mass protests due to his promotion of EPZs undermined industrial upgrading. Thus, there is a clear link between the independent and dependent variables.

IV. Persistent Foreign Threat & Survival of Four Policies in Korea

Although Park felt more secure from domestic protest in the 1970s, he was never completely secure as long as North Korea remained a threat. The North Koreans carried out 628 guerilla attacks in South Korea over the course of 1968, including an assault on the South Korean presidential palace by North Korean commandoes that killed 100 and almost killed Park himself. To make matters worse for Park's regime, the United States withdrew 20,000 troops from South Korea between 1968 and the end of 1971 and announced plans to withdraw the rest within five years.

As a result Park needed to maintain the ability to conscript large numbers of men on short notice. This made even an increasingly remote possibility of rebellion in less female-dominated industries outside the EPZs vey threatening. Park therefore, continued to provide some benefits to a narrowed subset of the working class: male workers. The North increased its infiltration of guerillas into the South at the very same time that domestic political stability began to emerge in post-war South Korea, thus preventing Park from completely ignoring citizens' demands. Park saw North Korean raids in the context of rising insurgency in South Vietnam, based on similar infiltration, and thus had a rational motive to shore up his support among male workers.

He achieved this by targeting policy benefits to a privileged labor aristocracy of male workers through promotion of heavy and chemical industries (HCI) called "the Big Push". This program consisted of protection for HCI with tariffs and other trade barriers, the creation of new SOEs like the Pohang Iron and Steel Company (POSCO) to produced key inputs for the private sector, and policy loans. [103] Park targeted his development strategy towards promoting industries with the most male-dominated workforces: shipbuilding, machinery car production, metallurgy and chemicals. In contrast, Park largely neglected the electronics industry even though the technocrats suggested that he support growth in this industry. Park was less interested in electronics than the heavier industries because most production workers in electronics at this time were women, so Park could violently suppress their strikes because he did not need them for his army.

Park's goal of keeping male workers in line explains how policy loans were disbursed n South Korea throughout the 1970s. Policy loans were conditional on firms' willingness to invest in HCI sectors, make large scale investments, and eventually, meet export targets. While this conformed to an economic logic that pleased the Ministry of Trade and Industry, it also increased demand for male labor. By requiring large investments and imposing quantitative export quotas as a condition for receiving policy loans, they pressured firms to continually expand production, increasing demand for labor. Funding for SOEs also generated employment in the HCI sector. As a result, average real wages in manufacturing rose rapidly during the 1960s and actually accelerated between 1968 and 1978 to outpace any other industrializing country.[104]

However, reliance on EPZs led to a darker side to this story: trends in the *average* manufacturing wage for all Korean workers conceal extreme variation, and thus, minimize the

[103] Amsden, 278
[104] Amsden, 195-199.

exploitation of female workers. Korea had the highest wage difference between light and heavy industries as well as the highest ratio of average male to average female wages in the world. Thus, wage gains for female workers, who disproportionately worked in the textile and apparel sectors, were very minimal even in inflation-adjusted terms, because the wage gains for male workers were even more impressive than average wage statistics indicate.[105]

This shows both the narrowing of Park's coalition, and his responsiveness to a small group of workers. The rapid increase in wages these workers received demonstrates that Park clearly responded to the demands of workers in the HCI sector. The fact that they were disproportionately men, suggests that part of the motive for targeting industrial promotion in these particular industries was to prevent male workers from rebelling. The timing also shows that this was motivated by military concerns, because it took place after renewed North Korean aggression. The fact that Park did not provide similar support to increase wages in electronics assembly suggests that he chose to ignore interest groups that he could repress without shooting potential military conscripts.

While advocates of the state autonomy approach contend that the Korean state withdrew subsidies and opportunities to sell in the protected Korean market from firms that failed to meet performance targets, bribery and political connections were crucial considerations. Almost all chaebols failed to meet targets for some of their investments because the new manufacturing activities promoted under the Big Push were very complicated and took years to master. Subsidized loans and domestic protection were only withdrawn from the subset of firms that failed to meet performance targets a*nd* failed bribe the right people. It was revealed in court proceedings that Yonhap Steel Company, Shinjin Automobile Company, and Koryo Shipbuilding Company,

[105] Stephanie Seguino "Gender inequality and economic growth: A cross-country analysis", *World Development* 28, 7: (2000), 1220-1223; see also: Amsden, 203

which were cut off from state support, had failed to meet performance targets for years, but were only punished after they refused to fund Park's re-election campaign. In contrast, Hyundai raked in subsidies for decades even after its cars were initially banned from the US for failing crash safety tests because its owners contributed generously to Park's re-election.[106]

This proves that performance and output were not the motivations behind the Big Push. Since Park was willing to support inefficient firms as long as their owners supported his campaigns, politics clearly motivated allocative decisions under his regime. This, combined with the distributive implications (male workers got increased wages but women did not), and the timing (after increased North Korean aggression), shows that Park's desire to placate the male workforce due to his fears of invasion explains his policy choices.

III. Narrow Interests, Narrow-Minded Policies: Suharto's Indonesia

While an attenuated form of broad policy provision survived in South Korea during the 1970s, it was stillborn under Suharto's regime because unlike, Park he did not even face a residual threat of rebellion, or any foreign threat. Lower class groups posed no threat whatsoever because even the most moderate and anti-communist peasant and labor leaders were massacred in the 1965 killings. As a giant country surrounded by smaller states, Indonesia faced no foreign threat, and could threaten its neighbors during Suharto's rule. The best example of Indonesia's regional dominance and the ability of its military to carry out repression on a massive scale occurred in 1975, when Suharto invaded East Timor and oversaw a genocide that killed one in six Timorese.[107]

While previous regimes had relied on a rational civilian bureaucracy down to the village level, with patrimonial village leaders monitoring citizens, Suharto added a layer of military

[106] Kang, *Crony Capitalism,* 104-106.
[107] Robert Dayley and Clark D. Neher, *Southeast Asia in the New International Era, Sixth Edition,* (Boulder, CO: Westview Press, 2013), 261.

surveillance that made popular expression of discontent even more difficult. He appointed retired army sergeants who had served in military posts in their home regions to most villages, which meant that there was another official to monitor both village heads and local citizens. While the village officials monitored the sergeants' compliance with higher directives and could report them to civilian officials, the sergeants could report village civilians to their former commanding officers. Both used a combination of violence and control over access to state resources to punish citizens who did not comply.

These officials were officially required to prevent the emergence of civil society institutions that were autonomous from the state. Political parties, unions, and other groups were forbidden from organizing below the district level, and thus, could not build ties with individual citizens. It was the job of both village military and civilian men to identify anyone trying to build alternative organizations. At the same time, both officials were expected to stuff ballots with votes for candidates from Suharto's regime party, Golkar, and to require citizens to attend Golkar rallies. The government also sponsored numerous para-military and parastatal groups, many of which recruited their first members from the landlord gangs who had murdered alleged "communists" in the 1965-1967 mass killings.[108]

This shows that in the 1970s, Suharto governed a population that lived under constant surveillance and thus, had no opportunity to threaten his regime, no matter how incompetent or corrupt it became. It also shows that in spite of clientelism, he did not choose development policies due to a lack of state capacity because duplication of civilian positions with military ones meant

[108] David Jenkins, *Suharto and His Generals: Indonesian Military Politics, 1975-1983,* (Ithaca, Nerw York: Cornell University Press, 1984), 37-44. See also : Hans Antlov, 24-30. For more details on the role that paramilitary groups play in Indonesia during the early 2000s, see: Verena Beittinger-Lee, *(Un) civil society and political change in Indonesia: a contested arena*. Vol. 2. Routledge, 2009. For the continued role of these groups today, see: Joshua Oppenheimer's, "the Act of Killing".

that local agents were also monitored intensely. (Above the village level, there was a parallel duplication of civilian provincial and district administrations called regional commands, and both the military and civilian bureaucrats were rotated between regions to prevent them from developing local ties, so this was a highly bureaucratic state.)

At the same time, it was reasonable for Suharto to fear a coup from his fellow generals. The Indonesian army was still ridden with factionalism, including factions that resented his seizure of power. Many of the most senior generals wanted a more ideal-typical military junta, with the presidency alternating among them. These included a former Army Chief of Staff, and several other lieutenant generals in command of more than enough troops to seize Jakarta, if given the opportunity. Considering that the far more popular and charismatic Sukarno had faced several rebellions and attempted coups from the Indonesian military, Suharto must have known that he needed to maintain the generals' support.[109]

During the early period of his rule, Suharto also wanted to maintain the support of village elites because they were useful for vote-buying. He needed to ensure a huge win for his regime party to show potential coup plotters that he could mobilize popular support just as much as Sukarno had. However, Suharto's own patronage network had few ties to the village level. Village leaders' cooperation was therefore useful for not only ensuring rigged election victories, but for winning by huge margins. These leaders still controlled vast armies of clients whose votes they could deliver to Golkar (or potentially withhold) through their control over access to land. Islamists were also valuable allies because they could teach pesantren students how Allah favored loyalty to the regime, and could help the government identify potential militants.

[109] Michael R. J. Vatikiotis, *Indonesian Politics Under Suharto: The Rise and Fall of the New Order, Third Edition,* (New York: Routledge, 1993), 68-70.

In order to keep generals in line, Suharto needed to sacrifice broad developmental goals to reward a small coterie of army officers. This took the form of creating highly inefficient state-run companies that often spent more on executive salaries and perks than on any form of production, especially worker training programs. While investments in state-run enterprises served as jobs programs and provided worker training in South Korea and Taiwan, their counterparts in Indonesia were designed to enrich generals and were completely unsuccessful at promoting structural change or human capital formation. For example, Suharto's regime provided funding for a government-run steel mill in 1968, but the plant did not actually begin production until 1977 because it was built in a rural area far from the nearest port and from any sources of raw materials or abundant labor. Starting in 1970 Pertamina, the state-run oil company ran the project and invested more in building golf courses for executives than in building the plant itself.[110]

After the steel mill, called Krakatau Steel, finally began production, it was a disastrous money-loser. It allowed its contractors to charge as much as 3 times the market price for their services, which made it impossible for Krakatau to produce steel that was the same price as similar-quality imported steel, and limited workers' chance to gain experience making marketable steel.[111] While the bankruptcy of Pertamina took away this source of funding, Krakatau continued to receive money from the government's development budget and benefited from high tariffs on imported steel.[112] This allowed managers at the company to buy inferior quality inputs at above-market cost in exchange for kickbacks from suppliers.[113]

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[110] Suzanne Moon, "Justice, Geography and Steel: Technology and Identity in Indonesian Industrialization", *Osiris*, 24, n. 9 (2009), 267-269. http://www.jstor.org/stable/10.1086/605978

[111] William Liddle, "Indonesia 1976: Challenges to Suharto's Authority", *Asian Survey* 17:2 (February, 1977), 97.

[112] Daromir Rudnycky, "Spiritual Economies: Islam and Neoliberalism in Contemporary Southeast Asia", *Cultural Anthropology* 24:1 (Jan 2009), 106.

[113] Rudnycky, "Spiritual Economies", 127

This shows how the inability of Indonesia's population to threaten Suharto created incentives for him to abuse industrial policy. Since he did not need to buy the support of citizens, but still feared rival generals, there were strong incentives for Suharto to appoint them in charge of SOEs in order to ensure that they stayed loyal, in exchange for opportunities for enrichment. Since Suharto did not fear strikes by unemployed workers, he had no incentive to ensure that firms maximized employment.

Since parents had absolutely no way to hold Suharto accountable, he had no incentives to provide adequate schooling either. Although spending on education reached a reasonable 3 percent of GDP at the height of the oil boom in 1979, education was one of the first budget items Suharto cut when oil prices fell in the 1980s. As a result, high school enrollments never exceeded 30 percent of high school-aged children, and high schools were still somewhat concentrated in the cities.[114] Schooling was also poor quality because the curriculum did not prioritize the teaching of marketable skills. Suharto reduced time spent on English classes, while requiring the study of the official state ideology (pancasila) and religious education classes in junior high and high schools. [115]

These curriculum changes were clearly motivated by politics. As the minister of education put it in a surprisingly candid reflection in 1997, "the [new 1967 curriculum] started to be introduced at the beginning of the 1968 school year. *The changes in the curriculum were related more to political reasons than other factors*. [emphasis added]"[116] For Muslim leaders, an increased emphasis on religious instruction was an important policy concession. Similarly,

[114] Anne Booth, *The Indonesian Economy During the Nineteenth and Twentieth Centuries: a History of Missed Opportunities,* (London: Macmillan, 1998). 276-278.
[115] Wardiman, *Fifty Years of Indonesian Education,* (Jakarta: Ministry of Education and Culture, 1995), 133 (table 2.11) compared with table 2.10 (page 129).
[116] *Ibid*, 130

military leaders appreciated the increased emphasis on nationalism and conservative values in the educational curriculum. This shows how Suharto's alliance with a narrow, conservative group of elites, combined with their control over ordinary citizens prevented the provision of high quality, universal education in Indonesia.

In addition to under-funding the education system and promoting ideological indoctrination over the teaching of marketable skills shown above, Suharto also used the Ministry of Education to provide patronage jobs to middle class Indonesians, rather than train qualified teachers. In 1987, a survey the Ministry of Education found that only 45 percent of teachers trained by the Ministry could actually pass the science test for students in last year of elementary school (the equivalent of fifth grade in the US).[117] This clearly shows that with the ability to prevent citizen protests, Suharto's government simply ignored parents' desire for good-quality education.

In order to maintain the support of generals who ran nationalized plantations and to provide village elites with new tools of clientelism, Suharto also adopted a rural development policy focused on providing them with control over agricultural inputs. Suharto also allocated money to village leaders through presidential decree starting in 1969. [118] He initiated programs to promote adoption of new farming technologies extending credit to Javanese farmers through the state-owned Bank Rakyat Indonesia (Indonesian People's Bank), and subsidized fertilizer, pesticide, and seeds. Suharto provided mass quantities of new fertilizers, pesticides, and high-yield rice varieties to farmers at subsidized prices through programs called Bimas and Inmas. These programs genuinely improved the lives of some farmers especially on Java by increasing their productivity.

However, these programs benefitted larger landowners at the expense of small farmers and landless peasants. Many small farmers were denied loans offered on generous terms after the 1973

[117] 394
[118] Elson, *Suharto*, 173.

oil shock.[119] While independent producers benefitted from increased productivity on their small plots as a result of Bimas and Inmas, these programs also facilitated and accelerated increased mechanization of agriculture, reducing demand for agricultural labor. Wealthy landlords used their increased surplus production to buy mechanical harvesters and new equipment for preparing their fields. This increased the power of landowners who could offer increasingly scarce jobs on their lands to political supporters and it thus enhanced existing tools of social, economic, and political control over the poorest peasants. Village leaders also controlled access to state credit and subsidies, which gave them important new tools of patronage.

IV. Politics and Policies of the 1980s and 1990s

After the end of the oil boom, both countries adjusted their development strategies. In Korea, the oil shocks caused a brief economic crisis that prompted resumed protests and broadened concessions. In Indonesia, Suharto promoted final stage assembly and exports in footloose, light industries, but ignored citizens' demands for more education, greater protection for workers, and less corruption until the Asian financial crisis caused widespread revolt that overthrew his regime in 1998.

The middle class and female workers who did not benefit from Park's policies began to resist his rule during the late 1970s. There were about 50 strikes per year from 1974 to 1977, most in predominantly female light industries. Starting in 1978, there were over 100 strikes per year. Student demonstrations also increased in frequency and size and when the 1979 oil shock hit, inflation soared while growth declined, leading to economic dissatisfaction that swelled both student and labor protests.[120] In August 1979, when security forces killed and beat female workers

[119] Gillian Hart, *Power, Labor, and Livelihood: the Process of Change in Rural Java*. (Berkeley, California: University of California Press, 1986), 44-45
[120] Deyos 78-79

protesting inflation and their lack of job protection at Park's party headquarters, a massive general strike and student protests spread to every major city within days. After Park tried to suppress the protests, his intelligence chief assassinated the dictator. [121]

After Park's assassination, Chun Doo-Hwan, another general, seized power but faced massive demonstrations in Seoul and elsewhere calling for the elimination of the Park's authoritarian Yushin Constitution. The military and police violently suppressed the protests, but only after deploying large numbers of troops and fighting a 10-day battle for control of the city of Kwangju, where protestors initially repelled attacking soldiers during the first 3 days.[122] Although Chun managed to restore order and then made himself president for a 7-year term, in 1981, he never enjoyed popularity or stability. When Chun held elections for the National Assembly in 1981, his Democratic Justice Party only won 35 percent of the vote[123] and the number of strikes increased starting in 1982. By 1986, South Korea experienced more than 105 strikes, a higher number than during the political and economic crises of 1979.[124]

This shows that Chun was threatened by ordinary citizens much more than Park. Since his military had difficulty defeating unarmed protestors in Kwangju, these citizens were clearly capable of very extraordinary levels of rebellion. We would therefore expect Chun to provide policy benefits to a broader segment of the population than Park.

In response to the protests, Chun extricated the military from Korean politics, and changed economic policies. In the political sphere, Chun relaxed restrictions on the press, added presidential term limits to the constitution, and endorsed former general Roh Tae Woo instead of

[121] Kim, 472-473.
[122] ibid, 475-476.
[123] Young Wahn Kihl, *Transforming Korean Politics: Democracy, Reform, and Culture* (New York: M.E. Sharpe, 2005), 78.
[124] Deyos, 60-61

seeking re-election in 1988. Chun's economic policies included increased welfare spending, less targeting of government investment towards HCI, and increased support for electronics. [125] This included $68 million for research and development in the semiconductor industry in 1983 and new restrictions on import of foreign electronics parts.[126] Finally, he stopped requiring chaebols to invest exclusively in the HCI sector favored during the Big Push, freeing up money for investment in the electronics industry.

As a result, Samsung used its accumulated capital to invest in the manufacture of DRAMs in 1983, and also invested in a computer chip design research center in 1984. These new investments allowed Samsung to become a global leader in the production and development of integrated circuits by the late 1980s. Previous investments in human capital also helped make South Korea's electronics firms competitive because an abundant and hence relatively cheap supply of engineers made it easy for Samsung to learn how to produce computer chips and integrated circuits.[127] This was an impressive breakthrough because as recently as 1982, final assembly of color TVs had comprised more than 50 percent of Samsung's exports.[128]

The Korean electronics industry rapidly increased its technological sophistication as Korean firms obtained foreign technology transfers and invested in domestic technology development. The share of electronic exports comprised of locally produced components increased from 28.9 percent in 1980 to 46.6 percent in 1994.[129] By 1991, electronics became the

[125] Chong Kee Park, "The Health Insurance Scheme", *Economic Development in the republic of Korea* (Honolulu, Hawai'i: University of Hawai'i Press, 1991), eds. Lee-Jay Cho and Yoon Hyung Kim, 341
[126] Amsden, 83.
[127] Youngsoo Kim, "Technological Capabilities and the Samsung Electronics Network", *International Production Networks in Asia: Rivalry or Riches?,* eds. Michael Borrus, Dieter Ernst, and Stephan Haggard, (New York: Routledge, 2000), 149
[128] Kim, "Technological Capabilities and the Samsung Electronics Network", 148
[129] Paol Guerrieri, "International Competitiveness, Regional Integration, and Corporate Strategies in the East Asian Electronics Industry" *International Production Networks in Asia: Rivalry or Riches?* (New York: Routledge, 2000), eds. Michael BorrusDieter Ernst, and Stephen Haggard,51

largest manufacturing sector in South Korea and semiconductors became the single largest export by 1994.

The relaxation of controls on labor and a more favorable policy environment for the electronics industry combined with the legacy of the Big Push to transform the Korean economy in the 1980s and early 1990s. Wages rose rapidly: in 1987 they were among the lowest among the Asian newly-industrialized countries, but were the highest by 1990. Unionized workers in South Korea contributed to this progress by pressuring governments to forcefully implement the new labor laws (at the ballot box) and pressuring employers to increase wages through protests and street demonstrations.[130] Nonetheless, the productivity gains that had been achieved through human capital investments during the Big Push resulted in a rapid recovery and growth to new levels of export in the HCI and electronics sectors after oil prices fell in 1986.

This shows that Chung broadened industrial policy considerably, compared with Park. It also shows that industrial policies in Korea were successful overall at creating a workforce that could compete with workers from developed countries in high-skilled jobs, and thus, maintain full employment as wages rose.

In Indonesia, Suharto cut the education budget dramatically in the 1980s, which caused a drop in junior high school enrollment. Although some of these cuts were a result of decreasing oil revenues, education spending decreased *as a percentage of GDP* (which accounts for reduced oil revenues in the denominator) from 3 percent in 1979 to 1.8 percent in 1992.[131]

Suharto's earlier economic policies had indirectly promoted manufacturing. For example, the agricultural policies described above increased unemployment among landless farmers. This

[130] Hong, 104.
[131] Booth, *Indonesian Economy*, 276-279.

made labor cheap. His support for inefficient firms while spending money from the oil boom on increased bureaucrats salaries also helped promote demand for manufactured goods.

After the oil boom, Suharto also suppressed wages to make Indonesia a competitive place to produce textiles and apparel. First he devalued the Rupiah in 1983, (which undermined the purchasing power of citizens with incomes in Rupiah). Then Suharto reduced regulations and taxes on exports, and in 1985 reduced regulations covering the import of upstream parts for firms that planned to export the output of their final assembly operations. In 1986, he devalued the Rupiah much more dramatically, reducing the cost of Indonesian manufactured goods in export markets, but further reducing real wages.[132]

This shows both Suharto's complete disregard for the preferences of his citizens, but also shows how this led to some industrialization. By reducing their purchasing power, he directly worsened Indonesian's economic well-being. This clearly, is not something one would do to make citizens happy. Liberalizing trade regulations also hurt domestic parts producers. However, Suharto did not care if this led to increased unemployment because his regime was insulated from popular pressures.

Although Indonesia became an attractive site for foreign direct investment in low-wage, low-skill manufacturing, its people have never developed the capacity to innovate new technologies due to Suharto's neglect of human capital. As late as the 1990, over 70 percent of Indonesian men and 80 percent of women had no schooling above the elementary level. There were no research centers to develop new technologies, and high-tech firms had received no support from the government to transfer technology to Indonesian firms. ISI had not provided Indonesian

[132] Booth, *The Indonesian Economy in the Nineteenth and Twentieth Centuries,* 196-198

workers with opportunities to get hands on experience in new manufacturing skills because elites embezzled from these firms instead of subsidizing them to train workers.

While Indonesia's low-end manufacturing exports grew and some jobs were created in the 1990s, the limitations of Indonesia's partial industrialization in labor-intensive and low skilled industries made the country particularly vulnerable to currency volatility. Since Indonesian factories only assembled parts from abroad, their profits were highly dependent on a stable currency that would allow them to buy parts affordably. When the Rupiah lost 90 percent of its value against the US dollar in just 6 months in 1998, protests spread to every major city. Currency devaluation no longer helped Indonesia's exporters because the devaluation was so sharp that imported parts became unaffordable for many Indonesian firms. Indonesian banks saw their default rates skyrocket, while their own payments to foreign lenders (denominated in dollars) increased exponentially in Rupiah terms. These problems led to mass bankruptcies as firms that had borrowed abroad defaulted on their US dollar-denominated loans and had to lay off millions of workers.[133] High unemployment exacerbated the political crisis and eventually, protests turned into widespread riots in Jakarta while Suharto was out of the country. Upon his return, the dictator resigned, beginning Indonesia's transition to democracy.[134]

This shows that even though Suharto's policies led to industrialization, it was very incomplete. Therefore, governments cannot achieve sustained growth through pro-market policies alone without also taking steps to increase human capital and the skill intensity of their manufacturing sectors.

V. Conclusion

[133] Kano, *Indonesian Exports, Peasant agriculture, and the World Economy 1850-2000,* 21-22.
[134] Elson, *Suharto,* 290-293.

Throughout the postwar period, demands from restive citizens guided the economic policy choices of South Korea's rulers. As a result, they invested in polices that promoted a workforce with specific manufacturing skills and general education, much more than Third World rulers who were insulated from citizens' demands. The policies Korea chose led to a dramatic economic transformation that has improved living standards and job prospects for all South Koreans beyond anything imaginable for most citizens of late industrializing countries.

Today, while South Korea's reliance on capital and human-capital intensive industries protects its economy from competition from low-skill, low-wage countries, Indonesia is caught in a lower middle-income development trap. As wages rise in Indonesia, foreign firms simply seek new low-wage production centers like China and Vietnam.[135] While Indonesia runs a trade deficit with other developing countries like Malaysia, South Korea runs a large annual trade surplus with most industrializing Asian countries because it makes components that other late industrializing countries cannot.[136] The critical role of citizen protest in the development of South Korea's economic structure and its absence in Indonesia's development therefore demonstrates the importance of responsive (although not necessarily democratic) government in development policymaking.

[135] Fadli. "Wage, Labor Issues Annoy Investors in Batam" in *The Jakarta Post.* (September 5, 2013), available at http://www.thejakartapost.com/news/2013/09/05/wage-labor-issues-annoy-investors-batam.html

[136] World Trade Organization, "Republic of Korea Trade Profile" available at: http://state.wto.org/CountryProfile/WSDBCountryPFView.aspx?Country=KR&Language=F

Chapter Four:
Moderate-Level Protest in Malaysia

Chapter One argues that the absence of clientelism creates possibilities for citizens to build civil society institutions while foreign threats constrain repression against contentious manifestations of civil society. These constraints compel governments that want to stay in power to respond to citizens' demands through broad public policies that in turn, lead to industrial transformation. In this chapter, I will show how variation in the level of both foreign threat and protest intensity led to different policies and hence, different outcomes. Malaysia is thus, an important case for testing this argument because it takes medium values of protest intensity and very low values of foreign threat. This chapter will show how this led to provision of universal secondary education from an early date, as well as the creation of EPZs and SOEs. However, I will also show that because there was no foreign threat in Malaysia, its rulers faced few constraints on repression and could therefore crush protests. This gave them few incentives to provide high quality education.

This case is also important because it controls for ethnic and religious characteristics better than other cases. Malaysia is a predominantly Muslim country, like Indonesia, and its people share a common history, language, and culture with their neighbors. Before the late 19th Century, the traditional sultanates of the Malay Archipelago ruled the territory of both modern states. These sultanates formed a single cultural zone linked through trade, the Malay language, and Islam. Since Malaysia was more successful than Indonesia at late industrialization, these attributes cannot

explain Indonesia's relatively modest industrialization. [137] Like Singapore, Malaysia is also a multi-ethnic society with a shared British colonial history, and a large ethnic Chinese population. Thus, Korea's culturally homogenous society does not explain its more successful industrialization, compared with Malaysia. [138]

I. The Breakdown of Clientelism in Colonial Malaya

Here I will show that institutions of clientelism were much weaker in Malaysia than in Indonesia. It is necessary to prove that Malaysian citizens had more capacity to organize protest and even rebellion during the post-World War II period than their contemporaries in Indonesia, and thus, were more threatening elites. However, this section must also show that colonial institutions did not break down clientelistic relations as much as in South Korea. As a result, post-war threats to elite dominance were limited, and so were the broad public policies provided as concessions.

While the Dutch strengthened systems of local patron-client rule to mobilize Javanese labor for agricultural exploitation, the British undermined village-level patrons by bringing in new workers with no ties to villages in Malaya. Unlike colonial Java, where the government profited from the production of crops on small-scale plots, the British also encouraged large scale production of crops on plantations (estates) with impersonal relations between managers and employees. [139]

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[137] See: Leonard Andaya and Barbara Andaya, *A History of Malaysia, Second Edition,* (Honolulu, HI: University of Hawai'i Press, 2001) chapters 1-3, especially 52-57.

[138] Robert Dayley and Cark D Neher, *Southeast Asian in the New International Era, Sixth Edition,* (New York: Westview Press, 2013), 277.
This comparison is not perfect: Singapore is over 60 percent ethnic Chinese, while the population of Malaysia is 25 percent Chinese today. However, Malaysia is the best available control that takes different values for the independent variables.

[139] Barbara Andaya and Leonard Andaya, *A History of Malaysia, Second Edition*, (Honolulu, HI: University of Hawai'i Press, 2001), 178-179. Most British plantations were run by investors who had previously owned plantations in Ceylon and South India in ethnically Tamil-speaking areas. As a result, British rubber plantation owners already

In addition to plantation agriculture, the British also promoted mining in Malaya, which created a much larger non-agricultural working class than on Dutch-ruled Java. Starting in the mid-19th Century, Chinese (and later European) capitalists developed large, industrial-scale tin mines.[140] Each mine typically employed thousands of predominantly Chinese workers and by the 1870s, many mining camps had grown into permanent towns with thousands of inhabitants. Limited housing and blatant exploitation encouraged workers to seek help from mutual aid societies that eventually fostered a sense of class consciousness.[141]

This shows that a large share of the rural population in colonial Malaya by the 1950s did not depend on local elites for benefits from the state, while local government officials were not landlords with an interest in preventing protest. Unlike in Indonesia, government officials who controlled access to state resources did not control access to jobs and land. Employers also had no capacity to monitor Malaysian rural workers because they did not have personal ties with them, like village elites on Java had with their constituents.

Even in the Malay community, local institutions of patron-client control were never as strong as on Java. Different institutions in Malaya also deprived local elites of control over village salary land, which was a major source of patronage for village elites on Java. The British deliberately made officials down to the village level salaried bureaucrats rather than holders of

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had managers who could speak Tamil, but not Malay, and already had access to workers accustomed to the routines of rubber plantation agriculture. These factors made the use of Tamil labor much more attractive than Malay labor for these planters. The Chinese largely developed the tin mining industry in Malaya because they had experience digging large underground mines in China and because Chinese entrepreneurs had larger amounts of capital than Malay elites. Eventually, the British came to believe in stereotypes of the three ethnic groups that portrayed Malays as uninterested in year-long, paid employment, but economic considerations, rather than racial ideology/stereotyping seem to have been the original motivation for British immigration policies in Malaya. Another motive was that the British controlled trade in many goods consumed by Indian and Chinese workers, such as tea, and opium, which made them easier to tax than Malays. By 1890, Chinese contributed 89 percent of the tax revenue in the State of Selangor. see: Andaya and Andaya 178.

[140] ibid, 214-215.

[141] ibid, 141.

patrimonial land grants because local officials had previously undermined tax collection and disrupted trade.[142]

Malay local elites (penghulus) had far less personal relations with their constituents than Javanese village heads because they administered a mukim, an area with several villages and hamlets scattered over a larger area than a typical Javanese village. Although mukims had a comparable population to Javanese villages, a penghulu could not observe day-to-day life as closely as a Javanese village head because people in mukims were more dispersed. Further, there was one penghulu per mukim in Malaya, while there were numerous officials per village in Java. This shows that rural administrators could not engage in the kind of clientelistic systems of social control that existed in Indonesia.[143]

II. The Rise of Malayan Unions

This section will illustrate how the rise of unionization directly contributed to the provision of education even under colonial rule. This shows the causal link between the rise of civil society groups capable of organizing visible public demonstrations and the provision of broad public goods. The timing also shows that this relationship is actually causal and not just correlational, because organization of civil society institutions (unions) took place first, then they protested and picketed, threatening the social and economic order of the colonial system, and this preceded the provision of public services.

Indian workers in urban areas formed unions very early. Immigrants from the sub-continent comprised most of the workers in railroad construction, and later, railroad operation.

[142] Andaya and Andaya, 163. See also: 168-169. Local officials had participated in wars between triads that had shut down mines. They had also helped escalate succession disputes between Malay princes, backed by rival triads. As a result, the British saw local officials as major contributors to their problems with these secret societies and a source of political instability.
[143] ibid, 176.

Indian railroad workers not only unionized early, but initiated one of the first strikes in Malaysian history in 1924.[144] Following the Depression, unionization and political party formation also took off among the ethnic Chinese community in Malaya. They founded the Malayan Communist Party (MCP), which actively sought to promote unionization and recruited most Chinese workers into unions by the early 1930s.[145]

After creating these new unions, Chinese miners in the state of Selangor carried out a strike in 1936 that shut down the coal mine at Batu Arang until the mining company agreed to increase wages. 20,000 Chinese plantation workers then began a strike on plantations in Selangor and Negeri Sembilan states demanding increased pay and improved working conditions. This prompted the Malayan government to mediate the strike, forcing all members of the rubber planters' trade group, the United Planting Association of Malaya, to increase wages in order to pre-empt more unrest.[146]

The rise of labor militancy led by the MCP directly led to the emergence of government-funded, mass education in Malaya under colonial rule. The MCP helped raise money for Chinese schools and many of its cadres became teachers who introduced children to communist and class-based understandings of history. The MCP's support for Chinese schools also increased the popularity of the institution and increased its membership. As a result, teachers encouraged students to participate in demonstrations supporting the labor movement. In response, the colonial government established teacher training schools and directly paid for teacher salaries and other

[144] Amarjit Kaur, "Working on the Railway: Indian Workers in Malaya, 1880-1957"in *The Underside of Malaysian History: Pullers, Prostitutes, Plantation Workers,* (Singapore, Singapore University Press, 1990), eds. Peter J. Rimmer and Lisa M. Allen, 115-117.
[145] Andaya and Andaya, 230.
[146] Jomo and Todd, *Trade Unions and the State,* 61.

expenses in Chinese schools to reduce the influence of the MCP on the curriculum and teaching staff.[147]

The causal sequence here clearly shows that after lower class groups formed civil society groups, they organized larger and more effective protests. These protests led to concessions from government, just as Chapter One would suggest. The fact that Chinese workers supported the MCP because its cadres ran schools also proves that they wanted to educate their children, and thus, provision of education was not simply a benevolent plan from a paternalistic colonial state, but a concession to buy support.

Groups that were not influenced by the communist movement in the pre-World War II era did not receive much funding from the colonial government to educate their children. While the British opened English-language schools to educate the children of Malay aristocrats and sultans, education for the bulk of the Malay population was very minimal before World War I. The only schools available taught only in Malay, which meant that their graduates could not continue beyond the elementary level because high schools in the peninsula taught in English. Even the quality of primary education was generally poor because it received almost no funding, although more Malay kids had access to schooling than their counterparts in Dutch-ruled Java. By 1938, 48 percent of the education budget went to English language schools, which primarily enrolled Chinese students, and another 6 percent on Chinese language schools. Malay schools received 42 percent of government education spending, even though there were far more Malay children than Chinese Malayan Children.[148]

While the relatively low level of support for Malay education in colonial Malaya proves that stronger civil society and more potential to protest causes citizens to get more benefits from

[147] Andaya and Andaya, 231
[148] Drabble, *An Economic History of Malaysia*, 146.

the state, the fact that the British provided education at all shows how the absence of clientelism leads to greater public goods provision. While the Dutch did not create schools in Java until the 1920s, and only provided three years of schooling, the British established schools earlier and provided five to six years of schooling for Malays.

One reason why the British felt compelled to provide education is that Malays organized protests against British treaty violations that deprived the Malay sultans of political powers guaranteed them under these treaties. The British knew that if these local protests became large, they could not govern the country without Malay support. As we have seen, there were almost no organized protests in rural areas of Java, and therefore incredibly late development of schooling. Early Malay nationalist leaders were disproportionately teachers who protested the low quality of Malay schools, particularly in comparison with Chinese school. Malay citizens joined protests organized by these teachers and showed at least some potential to threaten the colonial regime. The british provided schooling for Malays only after these protests began. Thus, the weakness of clientelism in Malaya led to protests that in turn, led to greater provision of broad public services, even in traditional farming areas. This proves that traditional cultural values cannot explain differences in the level of protest between these two countries or different policies.

III. The Leftist Threat in Post-War Malaya

When the British returned to Malaya in 1945, they found that the workforce was radicalized and this prompted the colonial government to adopt new concessions while empowering local elites to assume control. This shows that by the late 1940s, the level of lower class threat was comparable to South Korea and Singapore.

When the Japanese occupied Malaya in early 1942, their policies prompted resistance that provided communists with experience at outright revolution. The allies actively supported an

insurgency led by Chinese communists (although including members from all ethnic groups) called the Malayan Peoples' Anti-Japanese Army (MPAJA). With guns and ammunition stolen from the Japanese and airlifted by the allies, the MPAJA eventually became a fighting force with 10,000 men, led by members of the Malayan Communist Party. This proves that leftist groups gained experience during the war that made them very threatening to postwar colonial governments.

Leftists in Malaya organized among lower class groups on a massive scale. When the British legalized the Malayan Communist Party, it incorporated almost all the unions of Malaya into a national labor federation, the Pan-Malaysian Federation of Trade Unions (PMFTU). This union launched a wave of strike in 946 and 1947 including at least 300 strikes and costing 696,036 man-days. [149] In 1948, labor activism became increasingly violent as MCP cells assassinated 17 plantation managers in May and June. The colonial authorities then declared a state of emergency, which gave them the power to detain suspects without trial, and arrested 1,000 MCP leaders. This demonstrates that colonial rule was truly threatened by Malayan workers.

Starting in late 1948, the communists organized an insurgency that challenged both local elites and the colonial government. 3,000 veterans of the MPAJA supported by an estimated 8,000 communist sympathizers who lived in rural villages, attacked government forces throughout the Peninsula. Against this rebellion, the colonial government had 6,000 Malay police and 10 military battalions (about 9,000 men) in Malaya. [150] This shows that the communists in Malaya were a genuine and objective threat to colonial rule and that it was therefore rational for the colonial government to respond to the uprising by providing policies that would coopt workers.

[149] Andaya and Andaya, *A History of Malaysia,* 270.
[150] Richard Clutterbuck, *Conflict and Violence in Singapore and Malaysia, 1945-183,* (Boulder, CO: Westview Press, 1985). 167-170.

As one would expect based on Chapter One, the British combined repression with concessions to the labor movement. The main economic response was to put as many unemployed workers back to work as quickly as possible. The colonial government thus implemented two five-year development plans between 1950 and 1960. These plans stimulated employment through a massive road-building and electrification program, as well as grants to the rubber industry to replant plantations damaged or left untended during the Japanese Occupation.

The colonial government and its immediate post-colonial successor also increased investment in education. Between 1947 and 1962, government education expenditure increased from $16 million to $224 million.[151] As a result, the elementary school enrollment rate increased rapidly from 58 percent in 1955 (under the British) to 86 percent in 1960 (after independence). This proves that the government of British Malaya was genuinely fearful of the communist insurgency and made some broad policy concessions, to buy support, just as the theory in Chapter One says they would.

IV. Early Post-Independence Politics, 1957-1969

After independence, the government of newly-independent Malaya remained accountable to its citizens because elections were fair and the ruling Alliance Party had to contend with a viable opposition. Opposition gains were particularly threatening because the main opposition parties were leftist and opposed the elites who dominated the Alliance, although a Malay far right (dominated by Islamists) also secured seats in parliament. All the new parties demanded a more active industrial policy to create jobs in urban areas and reduce the country's economic ties to its former colonial ruler.[152]

[151] Drabble, *An Economic History of Malaysia,* 162-163
[152] T.E. Smith, "The Malayan Elections of 1959", *Pacific Affairs* 33, no. 1 (March 1960): 44-46.

Non-electoral pressures also encouraged the new regime to adopt industrialization. Although the communist insurgency was thoroughly defeated and the state of Emergency was lifted in 1960, the government faced renewed labor unrest after independence.[153] Beginning in 1957, there were 113 strikes involving 14,000 workers and costing 219,000 man-days. The Alliance tried to restrict union activities by passing the Trade Union Ordinance of 1959, which did successfully reduce the number of strikes for a few years, but by 1962, there were 95 strikes involving 232,912 workers costing 458,720 man-days.[154]

This shows that unlike their Indonesian contemporaries, the rulers of newly independent Malaya had strong incentives to respond to their citizens' demands. Since these demands came from the most popular socio-economic classes, the ruling party had incentives to provide broad public goods, including universal education, because construction of new schools for elites and urban middle classes would not reach those citizens that were most threatening. The next section will show how the Malaysian government actually provided universal education in the 1950s while in 1950s Indonesia, Sukarno could placate the small groups of citizens that threatened his regime with a much more elite-oriented education policy.

In response to electoral and contentious political pressures, the government also adopted an import-substitution policy in large measure to provide jobs for the unemployed, and thereby obtain political support from workers. In 1958, the first parliament of independent Malaya imposed a 15 percent tariff on imported consumer goods, and passed a series of incentives to attract foreign investment in the manufacturing sector. Incentives included a 5 year tax holiday, and the right to remit profits back to foreign countries. Two years later, the Malayan government

[153] Andaya and Andaya, 275-277.
[154] Hua Wu Yin, *Class and Communalism in Malaysia: Politics in a Dependent Capitalist State,* (London: Zed Books, 1983), 163-164.

established the Malayan Industrial Finance Corporation, a state-owned development bank that provided subsidized loans to firms investing in new manufacturing plants with large capital requirements and long gestation periods. In the same year, the ruling Alliance Party provided funding for the construction of industrial estates, where manufacturers could build factories on rent-free land with specially-built roads, power lines, and electricity provided by the state.[155]

Another policy concession the Alliance offered Malayan voters was educational expansion. The Malaysian government abolished its junior high entrance exam requirement in 1965, and the numbers of students enrolling in lower secondary schools almost doubled from 51,271 in 1965 to 99,863 in 1967. However, the Malaysian government did not have enough money in its budget to increase high school enrollment so that all of these students could continue. [156]

V. State Coercion and the Absence of Foreign Threat

While this shows that the Malayan (after 1963, the Malaysian) government was far more responsive to its citizens than Sukarno's government, they were also less threatened than their South Korean counterpart, Syngman Rhee. Although the Malayan/Malaysian government tolerated an electoral opposition, it also used coercion to crack down on labor protest. With a military not occupied with defending state sovereignty, threats of repression were more intimidating and this made it easier to prevent large protests from challenging the government's policy. As a result, the Malaysian authorities actually killed and incarcerated far fewer opponents than the Korean military rulers because the Malaysians never experienced an outbreak of rebellion comparable to the Korean uprisings in 1960 or 1979.

[155] Drabble, 175

[156] Robert W. McMeekin, Jr., *Educational Planning and Expenditure Decisions in Developing Countries with a Malaysian Case Study,* (New York: Praeger Publishers, 1975), 75-76.

For example, when the opposition staged a general strike in November 1967 in Penang and then tried to extend this strike to Kuala Lumpur, the government responded by sending troops into the capital and declaring a curfew throughout the Peninsula. They had enough soldiers at their disposal to station them along every major street in the city at ten foot intervals. The government also declared the strike illegal and threatened to arrest anyone demonstrating illegally. This action successfully prevented the general strike in the Malaysian capital and is a dramatic contrast with the situation in Korea, where security forces reacted to popular unrest only after it had spread as in the Autumn Harvest Uprising, the 1960 revolution, and the 1979 unrest.[157]

This repression was largely successful because Malaysia had never faced a foreign threat comparable to South Korea, and there were therefore, fewer constraints on the government's use of force in Malaysia. The only foreign threat Malaysia ever faced was when Indonesia briefly initiated a small-scale conflict (known in Indonesian as "the confrontation" (konfrontasi) in order to block the political unification of Malaya with Singapore and the British-ruled territories of North Borneo. Indonesia never sought to annex the entirety of Malaysia as Kim Jong-Il sought to eliminate South Korea, and Indonesia was so militarily and economically weak in the late Sukarno period (see chapter 3) that throughout four years of this conflict, Commonwealth forces only lost 114 men killed. This was in the words of one British official, "comparable with that on the British roads in a single Bank Holiday weekend [sic]".[158] After Suharto took power in Indonesia in 1965, the country accepted the merger of East and West Malaysia in 1966 and the two countries subsequently had peaceful relations.

[157] Nancy L. Snider, "What Happened in Penang?", *Asian survey* 8, no. 12 (Dec. 1968): 964-965.
[158] Karl Hack, *Defence and Decolonisation in Southeast Asia: Britain, Malaya and Singapore, 1941-1968,*(Richmond, England: Curzon Press, 2001), 280. [sic ie "Defence" and decolonisation (with an s) here is written as spelled in the title].

This shows that pressures on the Malayan government were less severe than in South Korea. As a result there were fewer incentives to provide both education and industrial policies that would have created jobs and promoted greater industrial diversification. The next section will explain how and why the Malayan government's limited industrial policy compared with Singapore or South Korea led to much less upgrading or diversification than the two tigers.

The policy concessions the government made during the period from independence in 1957 until 1969 were quite limited compared with their counterparts in Korea. While Rhee and Park promoted domestic firms through import substitution and Park encouraged domestic firms to export, the Malaysian government during this period encouraged foreign (still predominantly British) firms to build new factories for the domestic market and encouraged neither domestic nor foreign firms in Malaysia to export until the late 1960s.

What little industrial promotion there was in Malaysia lacked important features of Korea's and Singapore's policies because lower class groups were much less threatening. While the tigers were terrified that unemployed workers would rebel, and thus adopted policies to keep them employed, their Malaysian counterparts did not face these challenges. Attempts at repression in the AITs were only successful at dispersing large crowds *after* they had already organized, destroyed property, and demonstrated the power of citizens to rally for policies they wanted. In contrast, the repression that followed the Penang strike on 1967 demonstrates that Malaya's government could *prevent* citizens from staging demonstrations simply through a massive show of police and military force in the streets. This was possible because they did not face a foreign threat like Korea, and the entire population was not urban like in Singapore.

As a result, the Malaysian government's industrial policies were not single-mindedly focused on keeping workers employed. Rather than create SOEs that undertook new forms of

production to employ workers, the Malaysians simply nationalized British plantations in the 1960s and 1970s. Instead of creating jobs, this simply meant that plantation workers became state employees.

During the late 1960s and early 1970s, the Malaysian government continued to prevent mass protests and crackdown on the small demonstrations that occurred while using race to reduce the limited electoral accountability they had faced. When white collar public sector employees launched strikes between 1962 and 1965, the government simply passed a new law banning public employees from striking in 1965, as part of its anti-labor campaign that culminated with the 1967 crackdown described above.[159]

After its successful crackdowns on the labor movement, the Alliance responded to an electoral defeat in 1969 state elections and a dramatic decline in their seats in parliament by using repression to reduce the competitiveness of future elections. First, members of the Alliance's dominant faction, the United Malays National Organization (UMNO), organized a rally of armed Malay supporters in Kuala Lumpur. Then, party activists incited them to violence with rumors that Chinese were attacking Malay neighborhoods. After the Malays began looting Chinese homes and businesses, the security forces let the rioting continue for several hours before declaring a curfew on May 14, 1969, when the ruling party used the violence as a pretext to declare a state of emergency. [160] During the state of emergency declared after the riots, the Alliance arrested leaders of opposition parties and forced these parties to join an expanded governing coalition called the National Front (Barisan Nasional or BN).[161]

[159] K. S. Jomo and Patricia Todd, *Trade Unions and the State*, 116-117.
[160]Kua Kia Song, "Racial Conflict in Malaysia: against the Official History", *Race and Class*, 49, no. 33 (2008): 44-43.
[161] Anne Munro-Kua, *Authoritarian Populism in Malaysia,* (New York: St. Martin's Press, 1996), 57-61.

The ruling elites also used the emergency to increase repression of organized labor. The government made it illegal for unions to make demands concerning promotion, work duties, employee transfers, or layoffs in contract negotiations with employers. New laws also gave the government the power to dissolve any union or branch of any union at the sole discretion of the Registrar of Trade Unions for any reason whatsoever. Existing laws also forbid creating unions that represented workers in multiple industries were enforced more vigorously and often interpreted to ban forming unions in multiple firms within the same sector. [162]

This not only shows that Malaysian lower class groups were not as threatening as their counterparts in Korea or Singapore, but also shows that communal conflict combined with class conflict does not create strong states, and hence, development, as Slater and DRS claim. Malaysia clearly had a strong state *before* the 1969 race riots because it successfully prevented protests it did not want in 1967. Only in 1969, when the ruling party found riots a convenient pretext for emergency rule did they allow the situation to get out of hand.

VI. The New Economic Policy

Due to increased repression during the 1969-1971 period, the BN adopted narrow education and industrial policies that garnered support with conservative Malay elites and rural Malay voters who had defected to the opposition in the 1969 election. The program the UMNO implemented to win back rural Malay voters was called the New Economic Policy (NEP). NEP consisted of affirmative action programs for Malays and other indigenous groups (bumiputeras), industrial policies, agricultural policies, and changes to the education system.

The government adopted new education policies to satisfy the preferences of rural Malays through symbolic, cultural policies that undermined upgrading. This consisted primarily of a

[162] Jomo and Todd, 125.

policy to reduce the role of English in the education system, even though this made Malaysia less competitive internationally. First, the government implemented a program to phase out high schools that taught in English, allowing English to be taught only in high school language classes. The government also required universities (which had previously taught in English) to phase out English-language instruction and replace it with Malay. This policy not only reduced the role of English, but encouraged faculty to replace substantive, original research with simple translation work. Professors in some universities were allowed to translate textbooks into Malay and then publish these translations in fulfillment of their publication quotas for tenure.[163]

The policy of promoting Malay at the expense of English in the education system also increased the provision of humanities education at the expense of science and technology. Since the four institutions of higher education in Malaysia in 1969 all taught in English, the government founded two Malay-language universities in the 1970s that offered predominantly humanities courses with few selections in science and math. Among other subjects, this university also taught Islamic studies and Malay literature at the tertiary level. This spread funding for higher education more thinly, essentially reducing funding for the existing universities that taught predominantly math, science and technical subjects. Further, the English-language policy undermined the ability of researchers and students to learn the most cutting-edge scientific knowledge because English was (and still is) the dominant language of international scientific research.[164]

This clearly shows that the UMNO's narrow coalition led to education policies that were not economically rational. Thus education policies are not made based on economic criteria by benevolent and rational planners, but by politicians with incentives to favor their core supporters.

[163]Augustine H.S Ong and Su Eng Loke, *Science and Technology Education in Malaysian Universities,* (Singapore: Regional Institute of Higher Education development, 1983), 11.
[164] Robert W. McMeekin, Jr., *Educational Planning and Expenditure Decisions in Developing Countries with a Malaysian Case Study,* New York: Praeger Publishers, 1975), 145-148.

With the freedom to use repression unconstrained by foreign threat, the government provided education that was motivated by elite interests and the preferences of a narrow constituency of rural Malays who were the UMNO's base.

Although the BN undermined the quality of education in Malaysia through the policies described above, they nonetheless continued to fund education because their supporters wanted education for their children. By 1970, Malaysia achieved an 88 percent elementary school enrollment rate and a 52 percent junior high enrollment rate. This made workers in Malaysia relatively easy to train compared with their counterparts in Indonesia, who often lacked any education whatsoever and thus, could not even read simple instruction manuals.

The government also wanted to increase jobs in manufacturing to buy electoral support. It particularly wanted to win back some votes for the ethnic Chinese member of the BN coalition, the Malaysian Chinese Association. As a result, Malaysia established Export Processing Zones in 1971. By 1980, there were 53 EPZs in the country, producing 70 percent of the export sales in manufacturing and employing 9 percent of the industrial workforce.[165]

As in South Korea and Singapore, Malaysian EPZs also weakened the vulnerable and isolated labor movement in ways that were politically convenient. Although they create jobs, EPZs ensured that Malaysian workers were primarily temporary and thus, would have few incentives to strike or organize unions. Further, the government explicitly banned strikes in EPZs. This shows how they also provided the BN with political benefits and were not just a rational economic strategy.

Like Brazil, Indonesia, and many other countries, Malaysia adopted ISI to satisfy elite, nationalist interests and therefore created SOEs without providing the training (and job promotion

[165] Lim Pao Li and Anna Ong Cheng Imm, "Performance Requirements in Malaysia" in *Malaysian Industrial Policy* ed. K.S Jomo, (Singapore: National University of Singapore Press, 2007), 83

opportunities) provided in South Korea. Unlike in Korea, there was no incentive for the Malaysian government to promote large scale production because the government could provide full employment in relatively small enterprises for Malays.

SOEs in Malaysia were thus small and inefficient, and did not provide worker training programs like their counterparts in South Korea and Singapore. For example, when Malaysia decided to develop an SOE car producer that would increase domestic content in 1982, the program was not very successful. This firm called Proton, sold its vehicles predominantly in the domestic market, where it received tariff production: by 1994, only 23 percent of the company's sales were in foreign markets. [166] This firm relied heavily on imported parts and never tried to train Malaysians to make them. [167]

This shows that the Alliance/BN in Malaysia only had incentives to reward a relatively narrow coalition of supports, and thus provided much more limited education and worker training programs than governments in Korea and Singapore. However, previous periods of greater electoral competitiveness and continuing reliance on an ethnic base of support led to the provision of much more education than in Indonesia.

VII. From Policies to Outcomes

So far I have shown that the government of Malaysia remained more electorally accountable than the government of Indonesia, but still had far greater capacity to crack down than governments in Singapore and South Korea. As a result, the government provided neither the

[166] Kamaruding Abdulsomad, "Promoting Industrial and Technological Development Under Contrasting Industrial Policies: The Automobile Industries in Malaysia and Thailand" in *Industrial Technology Development in Malaysia: Industry and Firm Studies,* (New York: Routledge, 1999), eds K.S. Jomo, Greg Felker, and Rajah Rasiah, 278-279.
[167] Hasli Hasan and K.S. Jomo, "Rent-Seeking and Industrial Policy in Malaysia", in *Malaysian Industrial Policy,* ed. K.S. Jomo, (Singapore: National University of Singapore Press, 2007), 170.

broad employment-generating policies of the AITs nor the completely rent-seeking policies of Suharto's Indonesia. I have thus, traced the causal connection between levels of domestic and foreign threat on the one hand and policies, on the other. However, I will show how these policies led to an intermediate level of industrialization in this section.

EPZs contributed to greater industrial transformation than in Indonesia, because of previous investments in education. In contrast to Indonesia, where very few workers had received any education beyond elementary school in the 1970s, multi-national companies (MNCs) found an abundant supply of workers with some secondary education in Malaysia to employ in their export operations. As a result, the incentives the Malaysian government provided to new firms through the EPZs, labor repression, an educated workforce, and infrastructure attracted a completely different set of firms from those that relocated to Java. While foreign firms on Java consisted primarily of apparel manufacturers that relied on labor that already knew how to sew, firms relocating to Malaysia were more willing to train workers in new tasks, especially clean room protocols for electronics assembly.

The availability of cheap, trainable labor, good infrastructure, and EPZs where normal restrictions on foreign workers and imported parts were waved, made Malaysia a global hub for electronics assembly. The timing of NEP was fortunate because labor costs in the Asian tigers had begun to rise in the 1970s, which helped Malaysia catch up to them in electronics manufacturing. By 1981, Malaysia was (by value of exports) the largest exporter of integrated circuits to the US market, exporting 800 million USD worth to the United States. This created jobs for over 20,000 workers in Malaysia in the early 1980s.[168]

[168] Goh Pek Chen, " The Semiconductor Industry in Malaysia" in *Industrial Technology Development in Malaysia: Industry and Firm Studies,* (New York: Routlegdge, 1999), eds K.S. Jomo, Greg Felker, and Rajah Rasiah , 127

While EPZs and education made Malaysia successful at achieving growth in its manufacturing sector, it was far less successful at attracting high skilled jobs than Singapore or South Korea due to its more limited provision of education. In spite of education expansion overall, enrollment in upper secondary education was still only 20 percent in 1970, increasing to 40 percent in 1980, and 49.1 percent in 1990. As a result, the firms that relocated to the EPZs primarily moved production stages that were footloose and at best, semi-skilled, mostly in assembly of integrated circuits.

Since these workers could not pressure the government to improve their job opportunities, there was no incentive for the government to promote any backward linkages in the electronics sector. As late as 1981, only 1 percent of the value of inputs needed to assemble ICs were produced in Malaysia.[169] Fabricated silicon wafers with circuit patterns etched into the surface are the most expensive part of the ICs assembled in Malaysia. Rather than producing these wafers in Malaysia, the MNCs that relocated there simply imported the prepared wafers and assembled them onto circuit boards in Penang and Kuala Lumpur.[170]

Malaysia's feeble attempts at heavy industrialization were hampered by a severe lack of technical and scientific manpower. In 1988, only 2 Malaysians had received engineering Ph.D.'s and another 9 had received MA's from Malaysian universities. Funding limits and the inadequacy of lower levels of education simply did not generate a supply of engineers capable of doing research, although some Malaysians had also obtained MAs and PhDs in engineering from universities abroad. In comparison, South Korea produced 142 MAs in engineering in 1978.

At the undergraduate level, 528 Malaysian engineers received BAs in 1986 and this figure increased throughout the late 1980s to 606, 735, and 779 in 1987, 1988, and 1989, respectively.

[169] Chen, 131.
[170] Chen, " The Semiconductor Industry in Malaysia" , 129-130

As a result, Malaysia had a total of 20,166 engineers in 1990 (1,120 per million people) compared with Singapore's 14,300 engineers per million people in 1980 and Hong Kong's 26,500 engineers per million people in 1986. [171]

Qualitatively, these comparatively poor numbers actually overstate the capacity of Malaysia's pool of trained engineers to promote upgrading in manufacturing (especially its rapidly-growing electronics sector) because 209 of the 528 graduates in 1986 specialized in civil engineering. Until 1989, the country's education system did not produce a single engineer specializing in industrial technology or computer engineering.[172] Due to a shortage of engineers in the country, very few foreign firms transferred their product R & D activities to Malaysia, while conducting extensive product R & D in neighboring Singapore. Firms trying to conduct R & D in Malaysia had to offer engineers prohibitively high salaries and still could not find workers to fill R&D labs.[173]

This shows how the political choices that Malaysia's BN made promoted greater industrialization than in neighboring Indonesia, but far less technology transfer and skilled manufacturing than in the AITs. Thus, there is a clear connection between the education, worker training, and industrial promotion policies of the Malaysian government, the independent variable, and Malaysia's level of industrial diversification, the dependent variable.

VIII. Conclusion

[171] Mei Ling Young and Ng Siew Kiat, "Skills Training" in *Malaysia's Economic Development: Policy and Reform*, (Selangor, Malaysia: Pelanduk Publications, 1996), eds K.S. Jomo and Ng Siew Kiat, 230-232.
[172]Young and Kiat, "Skills Training" , 229-230.
[173] Mohd Nazari Ismail, "Foreign Firms and National Technological Upgrading: The electronics Industry in Malaysia" in *Industrial Technology Development in Malaysia: Industry and Firm Studies,* (New York: Routlegdge, 1999), eds K.S. Jomo, Greg Felker, and Rajah Rasiah, 30.

This chapter has shown how the absence of a viable foreign threat allowed the governments of both late colonial and postcolonial Malaysia to repress the labor movement, first in the late 1940s and then from the 1970s through the 1990s. Without foreign threats to constrain them, Malaysia's rulers faced little pressure to adopt the policies of large-scale industrial promotion, education based on science and math, or efficiently run SOEs that characterized the AITs. Malaysian industrial policies combined Indonesian rent-seeking with broad policies that sought to buy support from a smaller subset of the population (rural Malays) than in the tigers. As I have shown, this led to export-oriented manufacturing, but less success with domestic technology development than in Korea or Singapore.

In spite of these weaknesses I have shown that electoral accountability created incentives to provide far greater education than in Indonesia, which made Malaysian workers far more trainable than their Javanese cousins. Thus, Malaysia's industrialization succeeded at diversifying beyond apparel, food processing and the processing of primary products and is more technology intensive than Indonesia's. Economic policies in Malaysia were therefore more of a qualified success than an abject failure because Malaysian electoral politics created incentives for the government to at least invest adequately in education, allowing Malaysian EPZs to attract electronics manufacturing that required a trainable workforce unavailable in Indonesia.

While Malaysia is still a middle income country almost two decades after South Korea crossed the threshold between developing and developed country, Malaysia is growing rapidly, especially in international tourism. Malaysia's economy is still growing rapidly in spite of its limited is on track to augment its limited industrialization due to a skill-based service sector that has emerged due to its highly educated workforce. Thus, the country's history of large protests have led to education policies that could still make Malaysia a high-income country by 2020, if

current trends persist. In conclusion, while Malaysia demonstrates how limits on government accountability have delayed its development, its citizen's ability to threaten their government in earlier periods may yet have a legacy of delayed rather than stalled development.

Chapter Five:

Protest, Public Goods, and the People's Action Party-State in Singapore

This dissertation argues that industrial policies in the Asian Tigers resulted from bargaining through a bottom-up process as much as from government bureaucrats' desire to remake their economies through top-down planning. Singapore is a useful case for testing this assertion because it takes an extremely high value for my independent variable, strike and protest propensity among the population at independence. At the same time, Singapore lacked Taiwan's and Korea's colonial experience of Japanese state-led industrialization, and is therefore an excellent case for showing how government planning did not emerge from a legacy of top-down planning under Japanese rule.

However, a case study of Singapore faces its own confounding attributes. One of the most important is that as a world-recognized international port, Singapore's economic growth was substantially overdetermined. Singapore's strategic location in the Straits of Malacca, the accumulated capital and export experience of its people, and its established infrastructure predisposed the city state to economic development. However, I will show that its history made *industrial* deepening unlikely in Singapore because its established comparative advantage was in re-export and shipping services, rather than in the manufacture of skills-intensive parts. This

chapter will therefore solve the puzzle of this case, namely: "why did Singapore's economy develop through skills-intensive industry and heavy industrialization, rather than a purely service-oriented path?"

I. Predisposition Towards a Service Economy

Given its history as a trading post with established comparative advantage in services such as shipping and banking, the policy choice to promote industrialization was a dramatic shift. In 1947, the service sector already employed 40 percent of the workforce, with 23.2 percent of Singaporeans working in commerce and another 18.7 percent in other services, while manufacturing accounted for just 16 percent of employment. This shows that industrialization was not an obvious policy choice for Singapore's post-war governments, or one that they would have been likely to make had political pressures from citizens been less severe.

During the colonial era, Singapore only developed manufacturing industries where its location gave it a substantial advantage. What little manufacturing existed in Singapore consisted of processing tropical products that would either spoil or be too expensive to ship back to Europe without local processing. Industries that developed thus included pineapple-canning, biscuit production, and other forms of food processing, as well as tin smelting and rubber milling. The city also had a domestically-oriented industry that manufactured building materials that were too heavy to import.[174] There was therefore, no previous experience in Singapore's history that would inspire its post-independence governments to believe that their city could become a global center of export-oriented manufacturing or a bureaucracy experienced at economic planning.

[174] W.G. Huff, *The Economic Growth of Singapore,* (New York: Cambridge University Press, 1994), 210-214.

Singapore's level of industrialization before World War II was at best, about the same as Indonesia's, and by some indicators, much lower. There were far more large manufacturing firms in the Dutch East Indies and they produced a greater range of goods. In 1929, there were only two factories in Singapore with more than 1,000 workers while there were half a dozen factories with over 1,000 workers in Surabaya alone (a city with half the population of Singapore in 1930). Singapore imported almost all consumer goods, even cigarettes and textiles, while colonial Indonesia could meet over 90 percent of domestic demand for cigarettes and frying pans as well as over 70 percent of demand for paint, beer, leather goods, and perfume. Car assembly, tire, battery, bicycle, margarine, and light bulb production also existed in 1930s Indonesia, while the most technologically advanced industries in Singapore were rubber milling and textile manufacture. In fact, Indonesia's first car plant was actually opened when Ford relocated its small plant in Singapore producing 100 cars per month to Batavia in 1926 and increased production with a much larger facility.[175]

II. Colonial Institutions: No Legacy of Economic Planning

Singapore lacked not only Korea's prior experience with pre-war industrialization, but also lacked institutions of economic planning at independence. The British promoted free trade in Singapore to keep the colony a dependent market for British exports. What bureaucratic agencies existed were run by British officials rather than Singaporeans, and therefore, did not train locals to run an administration, nor did these agencies have much experience running state-owned enterprise (SOEs) or industrial promotion.

Singapore was not industrialized before World War II because the colonial government never promoted manufacturing and openly discouraged it at times. As a result, Singapore's

[175] Huff, 212-214; see also:H.W Dick,*Surabaya, City of Work,*274-280

bureaucracy lacked experience planning industrialization and in fact, had less experience picking winners and losers than Indonesians, much less Koreans, at independence. This directly refutes Atul Kohli's claims that colonial-era industrial promotion was a necessary inspiration for subsequent policies or that bureaucracies needed practice directing this kind of state-led industrialization to manage it effectively. Although this experience may have been a model for the government and bureaucracy in South Korea, its total absence in Singapore suggests that political considerations played a larger role in the choice of development strategy.

Throughout the colonial period, Singapore was governed as a "free port", essentially a laissez-faire, free trade zone where British merchants could buy Chinese goods to re-sell in Europe. When the British founded Singapore, they did so to undercut Dutch-ruled Malacca, where Chinese traders were already well-established. The British sought to make Singapore more attractive for Chinese merchants by allowing traders from all over the world to buy and sell their goods duty free.[176]

At independence, Singapore's government had no experience running the economy because its colonial predecessor had relied on private actors to provide public goods such as infrastructure, education, and public safety. Until 1905, all piers, storage facilities, and transport infrastructure for the port of Singapore were privately owned by the New Harbour Dock Company. At this point, revenue sources and planning capacities were so limited that it took the colony 8 years to implement the takeover of port facilities mandated in 1905.[177] The police force was so severely understaffed that the government could not control Chinese secret societies (triads), and

[176] Garry Rodan, *The Political Economy of Singapore's Industrialization: Nation State and International Capital*, (New York:St. Martin's Press, 1989), 32-36.
[177] Baker, *A Popular History*, 201-202

these organizations ran protection rackets that essentially provided day-to-day security for most Chinese-owned businesses until the end of the Colonial Era.

The police force was not only small, but also consisted almost entirely of Europeans, few of whom could speak Tamil, Malay, or any Chinese dialect until Britain allowed the police and other agencies to recruit non-English speaking Singaporeans in the mid-1950s. Compared with Korea or Indonesia, Singaporeans therefore, had little experience running the country's bureaucracy at independence. As a result, most Singaporean bureaucrats had only a few years of experience when the country gained self-rule in 1959 and certainly had no experience that could have prepared for the role they ended up taking as economic planners.

Agencies for collecting economic data, taxing and regulating economic activities, and planning long-term development were especially under-developed in late colonial Singapore. While the Dutch conducted regular censuses, and conducted surveys yielding meticulous records of population, housing conditions, and economic output by the 1930s, Singapore barely had a tax collection agency. The colonial government in the city-state relied on an opium monopoly to generate between 5 and 20 percent of its annual revenue until 1920, and afterwards, had limited tax collection capabilities because of limited government spending. While Dutch surveys and industrial censuses from the inter-war period provide a wide range of statistics on industrial output, their Singaporean equivalents are far less detailed.[178]

[178] This is one reason why I use import dependence, rather than volume of output to measure industrial production above. The Java Bank, the Central Bank of the Dutch East Indies, now Bank Indonesia, provided annual reports on the volume of industrial production, employment levels disaggregated by gender and type of manufacturing (ie cigarette production versus textiles), published every year in at least two languages. (This was usually English and Dutch, and in some years, English and Indonesian, which is fortunate for this project because I do not read Dutch) starting in the interwar period. See: *The Java Bank: Report for the Financial Year,* various years 1936-1953. These reports also include detailed data on labor laws, strikes, industrial disputes, inflation, and lending by state-run financial institutions throughout this period. Further, the detail and precision of data does not markedly decline in the years after 1957, when Dutch advisors were expelled from the country. This indicates that the Indonesian staff had the skills to continue this data collection on their own around independence in the supposedly "weak" Indonesian state.

III. The Permanent Working Class in Colonial Singapore

Singapore and South Korea had "most different systems" of economic planning at independence, but capitalists and the state interacted with workers in both countries through similar systems of labor control based on impersonal, economic exchange. Like South Koreans who migrated to cities and other parts of Korea, most Singaporeans had also left their ancestral homes in rural China to make urban Singapore their permanent home by the end of colonial rule. As a result, workers in both had experience building bottom-up civil society organizations with a national scope and could threaten elite interests in ways that the mostly temporary Indonesian workforce could not. Here, I will show how systems of labor control and the development of leftist civil society in postwar Singapore were similar to South Korea. I will also show how this resulted in a similar level of labor militancy in these two cases, and that this key explanatory variable was very different in Singapore than in Indonesia.

Unlike in Indonesia, where most workers were seasonal migrants to the city, and were recruited through patron-client ties, workers in late colonial Singapore were permanent urban workers recruited impersonally. By the end of World War II, most Singaporeans must have been native born because the proportion of ethnic Chinese (who comprised 75 percent of the population) was already high. 38 percent of Chinese Singaporeans were native born in 1930 and 65 percent

In comparison, the supposedly strong Singaporean colonial state could only collect estimates of the share of permanent, male workers in industry and data on manufactured imports during the interwar period. While economic historians of Indonesia generally consider the data obtained by Dutch agencies and their immediate post-colonial successors reliable, economic historians of Singapore think that colonial-era figures are very inaccurate. For Indonesia, see: Anne Booth, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportnities.* See also: J. Thomas Lindblad, *Bridges to New Business: The Economic Decolonization of Indonesia,* see also:Hiroyoshi Kano, *Indoensian Exports, Peasant Agriculture, and the World Economy, 1850-2000*. For Singapore, see: W,G Huff, *The Economic Growth of Singapore: Trade and Development in the Twentieth Century*, esp. pages 112-119.

were Singapore-born by 1947.[179] Laborers in Singapore therefore had no desire to leave the city-state and had a long-term stake in improved wages and working conditions.

As Singapore's population became less transient, its population also became more willing to engage in strikes and other protests, which demonstrates the causal mechanism that permanent workers are more likely to participate in labor activism than temporary works. While strikes were unheard of in Singapore around the turn of the 20th Century, when most Singaporeans were still temporary migrants, this changed with the growth of permanent settlers in the first decades of the 20th century. The proportion of native-born Chinese increased to around 40 percent, by 1930 and the first major strike occurred in 1928.[180] By 1936, the Malayan Communist Party (MCP) led simultaneous, industry-wide strikes in the pineapple-canning and construction industries involving at least 5,500 workers, larger than any strike in Indonesia or Malaya at that time, but similar to the size of strikes in Korea in the 1920s. Since Singapore's population was only one tenth the size of Korea's, such large strikes were much more threatening to its government than similar-sized strikes in Korea.[181]

Throughout the rest of the pre-war era, the Malayan Communist Party (MCP) founded in 1930, attempted to recruit members and organize. The Singaporean communists faced repression, like their counterparts in other countries, but they managed to infiltrate every major economic sector, especially the critical port workers' unions by the outbreak of World War II. [182] By 1941,

[179] Jim Baker, *Crossroads: A Popular History of Malaysia and Singapore,* (Singapore: Marshall Cavendish International, 2008), 204
[180] K.S. Jomo and Patricia Todd, *unions and the State in Peninsular Malaysia,* (Honolulu, HI: University of Hawai'i Press, 1994), 58
[181] Jomo and Todd, 60.
[182] Kwei-Chang, "Political Attitudes and Organizations", 81.

the MCP's General Labor Union had 70 member unions and there were another 51 independent, but legally registered unions.[183]

IV. Postwar Political Conditions for Labor Militancy

This section will show that postwar conditions in Singapore were as conducive to bottom-up, mass mobilization for leftist goals as in South Korea, much more favorable than in Indonesia, and somewhat more favorable than in Malaya during the first postwar decade. I will also show how this rising labor militancy made postwar Singapore impossible to govern without significant policy concessions to buy labor peace.

The postwar political situation demonstrates that Singaporeans were as prone to protest as their counterparts in Korea and the communist movement was just as strong in both places. Singapore's established labor movement identified strongly with communism and followed MCP leadership during the postwar years. Like in Korea, communists led the resistance to Japanese occupation during World War II. Unlike in Malaya, where many ethnic Malays had few grievances against Japanese rule, the Japanese oppressed the predominantly Chinese population of Singapore because of their pre-war opposition to the Japanese invasion of China. The Japanese executed thousands of Chinese Singaporeans and forced them to pay high taxes to cross the causeway to the peninsula. The Japanese also extorted a forced loan from Chinese businessmen throughout the peninsula, and their rule caused massive inflation, with the cost of 500 grams of rice increasing from Straits $0.6 in 1941 to $75 in 1945. As a result, most Singaporeans

[183] Rodan, 51-52

sympathized with the ethnic Chinese and communist-led Malayan People's Anti-Japanese Army during the war and supported the goals of communist leaders after the war.[184]

During the late 1940s, those opposed to rule by local elites and the British expressed their opposition through contentious politics that threatened the government with revolution. The MCP organized many new organizations, the largest of which was their labor confederation, the Singapore Federation of Trade Unions (SFTU). By 1947, the SFTU had at least 51,000 members (out of a population of less than one million people) and included a majority of unions in Singapore.

Alarmingly, in the eyes of colonial authorities and local elites, the MCP increased its popularity further by providing real and material improvements in the working conditions of Singaporeans. Between 1945 and 1947, 85 percent of the strikes led by SFTU resulted in concessions from employers. The broad network of unions controlled by the MCP through the SFTU greatly enhanced the bargaining power of labor because they could pool resources for strike funds. The threat this posed not only to employers, but to the government itself, was apparent when the party organized a two day general strike with 52,000 workers participating in 1948. [185]

This growing labor unrest terrified the conservative, colonial government of Singapore, the British colonial office, and local Singaporean elites. As a result, the government stepped up repression by passing a new Trade Union Ordinance in 1948. This law required all unions to register with the government and allowed the Registrar of trade unions to revoke unions' registration, essentially banning those deemed subversive.[186] This shows that they were genuinely

[184]Baker, *Crossroads,* 221-224. See also: Ronald H. Spector, *In the ruins of Empire: The Japanese Surrender and The Battle for Postwar Asia,* (New York: Random House: 2007), 77-80

[185] Richard Clutterbuck, *Conflict and Violence in Singapore and Malaysia, 1945-1983,* (Boulder, CO: Westview Press, 1985), 55.

[186] Clutterbuck, 168

fearful of a communist takeover because the ideology of liberalism among British colonial officials made them reluctant to take such measures except in situations they saw as out of control.

Repression was only effective for a short time, and was actually counter-productive in the long-run. Although the authorities declared a state of emergency in 1948, and arrested most union leaders, new and more radical unions formed. While most of those arrested were English educated, those who replaced them were educated in Chinese-language schools that used textbooks from KMT-ruled China, where the history curriculum was extremely anti-Western, and especially anti-British. Further, many nominal KMT members who ran schools in Singapore were in fact, members of the Chinese Communist Party, and they promoted anti-colonial struggle through violence and labor activism.[187]

The development of a more radically anti-colonial Chinese labor movement left the British without a bargaining partner that could contain the grass roots of civil society. Unlike in Malaya, where the British-supported UMNO and Malayan Chinese Association had strong enough ties to civil society to convince their supporters to accept gradual independence, no one who worked with the British could gain the trust of Singaporeans. The first autonomous government, run by the Labor Front (LF) Party could not stop a massive wave of over 300 strikes in 1955, because the party's leaders only understood what the voters wanted in general terms. They had no ties to labor unions, and their leaders did not even speak Chinese, the language of most working-class Singaporeans. Since they literally did not speak the same language as the new labor movement of the mid-1950s, the LF failed to understand the nuances of their demands.

[187] Jim Baker, *Crossroads: A Popular History of Singapore and Malaysia,* (Singapore, Cavendish International, 2008), 264.
The Kuomintang, or KMT promoted hostility towards Britain in its textbooks because of resentment at the semi-colonization of their country during the Opium Wars.

The LF failed to win support or acquiescence through its reformist economic policies because it failed to understand the preferences of most citizens in one crucial area: education. While the LF understood that many students and teachers' unions had led protests and strikes because they were dissatisfied with the level of funding for the education system, they did not understand how these groups wanted to change the curriculum. Most parents wanted multi-lingual education to replace the 4 mono-lingual education streams. They wanted their children to learn English because this provided many job opportunities, and most secondary and all public tertiary schools taught in English. But Singaporeans from all ethnic groups who did not have an English-language education feared that if English became the only language of instruction, they would soon become unemployable in a monolingual, English-speaking society.

This is central to the argument of this dissertation because I claim that workers' demands, rather than the vision of bureaucrats, created development policies including education and worker training programs. Specifically, I argue that demands from workers prompted governments to provide not only universal education, but also high quality education that included science, math and English. The demands of Singaporeans during the short-lived LF administration clearly demonstrate that ordinary Singaporeans, even blue-collar workers, wanted opportunities for their kids to learn the language of international trade.

The LF responded to demands for English-language instruction, but did not fully respond to demands for multilingualism. Although the LF increased allocation of public resources to Chinese schools from 16.1 percent of the education budget in 1955 to 24.1 percent in 1957, to provide money for English instruction in Chinese schools, they did not require Chinese in English-language schools. They understood that protestors wanted more funding, and increased the total education budget by 45 percent, but did not recognize the anger felt by those who had already

graduated from Chinese-language schools who had few opportunities to find jobs. The LF's 1957 education bill did not create more opportunities for those who had completed monolingual Tamil, or Malay primary education to attend high school in Chinese or learn English, the language of most secondary schools. They also failed to increase the number of jobs available in the bureaucracy for those who spoke "vernacular" languages, which caused the LF to be completely routed in the 1957 municipal elections against a PAP candidate who ran on a platform to hire more non-English speakers.[188]

This directly fueled protests because many parents feared that the government was trying to eliminate Asian languages and ignore their demands for better job opportunities. For example, there were two strikes by communist unions at the Lee Hock Bus Company on April 16 and April 28, and a larger protest on May 12, 1955 after the workers participating in the earlier strikes were fired. The May 12 protest blockaded the bus company, cutting off bus service to many parts of the city, and involved around 4000 participants, 2000 of whom were students from Chinese middle schools. These protests made demands that the workers be reinstated, but also that the government provide more job opportunities for those educated in Chinese. The protestors also beat a policeman and a journalist to death.[189] Afterwards, students involved occupied school buildings, and effectively shut down over a dozen middle schools to protest the police's use of force to disperse the May 12 protest. This shows how protestors tried to communicate their desire for multilingual education rather than English education.

However, the LF resorted to substantial repression after 1957 rather than heed protestors' demands. They suspended and banned unions believed responsible for political strikes in 1959

[188] H.E. Wilson, *Social Engineering in Singapore,*

[189] S.R. joey Long, *Safe for Decolonization: The Eisenhower Administration, Britain, and Singapore,* (Kent, Ohio: Kent University Press, 2011), 30-32.

and also arrested many popular leaders of the main opposition People's Action Party (PAP). While this improved the Labor Front's bargaining position with the British by showing that the government could maintain law and order and protect British interests, it allowed the PAP's leader Lee Kwan Yew to accuse the LF's leader of collaborating with the British. As a result, the Labor Front lost the 1959 elections badly to the PAP, which won 43 out of 51 elected seats in the new parliament.[190]

V. The Emergence of Singapore's Developmental State

Upon taking power in 1959, the PAP sought to provide generous state benefits to Singaporean workers. These included the establishment of publicly-funded, free nurseries to care for infants of working parents in 1961, and daycare centers for children under 6 (kindergarten age) in 1962.[191] The government also responded to workers' demands by providing housing. Beginning in 1960, the government began building high-rise apartment buildings that were leased at subsidized rates to citizens living in squatter areas or over-crowded neighborhoods. Starting in 1964, citizens were allowed to lease their apartments for 99-year terms, essentially buying their own homes from the government.[192] Apartments were leased at well below the market rate, based on a tiered pricing system that ensured affordability. Singaporeans with higher incomes were banned from buying or renting low-cost units and were required to instead buy more expensive ones that helped to subsidize housing costs for working class Singaporeans.[193] By 1963, the PAP

[190] Yeo Kim Wah and Albert Lau, 136-138
[191] Tan, "Health and Welfare", 354
[192] Chua Beng-Huat, *Political Legitimacy and Housing: Stakeholding in Singapore,* (New York: Routledge, 1997), 12
[193] Beng-Huat, *Political Legitimacy and Housing,* 21.

had built 22,336 new housing units and provided subsidized housing for 100,000 of Singapore's one million people.[194]

Unlike the LF, the PAP clearly understood the demands of their constituents. The leaders of the party included both English and Chinese-educated individuals with ties to the labor movement. Its leader, Lee Kwan Yew, had actually represented the leaders of the 1955 Lee Hock Bus strikes in court after they were charged with sedition. Other leaders like Devon Nair, were active union members.

As a result, the PAP provided the qualitative changes to the curriculum that Singaporeans wanted, in addition to a further quantitative increase in spending. They made bilingual instruction mandatory in all schools, including English-language ones. They also integrated the Chinese-language schools with the rest of school system to ensure that students who graduated from Chinese elementary and middle schools could study at English-language high schools and universities.

The PAP also provided public funding for Nanyang University, a Chinese-language, private institution, which provided more opportunities for those already educated in Chinese to further their studies. At the same time, they required this university to gradually phase in the teaching of science courses in English so that its graduates would still have marketable skills. Finally, they opened up the bureaucracy to those educated in Chinese, Malay, and Tamil to immediately create jobs that those educated in these languages wanted.

This shows that labor unions had real policy input from the very beginning of PAP rule. It also show that the leaders valued the policy recommendations of labor leaders and therefore, enacted policies that they demanded. The PAP's sensitivity to labor shows how the strength of

[194] Gary Rodan, *The Political Economy of Singapore's Industrialization*, 73

Singaporean workers, including their ability to organize large and highly disruptive strikes, created substantial incentives to give them what they wanted.

The government also created short-term jobs in construction and longer-term jobs in manufacturing by building dozens of new industrial zones with infrastructure to attract investment in manufacturing. Like Park Chung Hee and Syngman Rhee, Lee also invested massively in state-owned enterprises, creating 11 industrial SOEs by 1963. In the first four years of PAP rule, the government also built new infrastructure throughout the island to improve both residents' access to electricity, water, and transportation, and attract investment. The 1959-1963 budget increased public sector investment by 120 percent.[195]

This not only shows that the PAP government responded to voters' demands, but also that it actively intervened in the economy from the very beginning. Contrary to claims that Singapore's subsequent economic miracle was built on free trade, pro-market policies, the PAP party-state was interventionist from its very founding. Specifically, this shows that the government adopted industrialization through the creation of EPZs as a jobs program because it feared unemployed workers the most.

Although the PAP established SOEs to provide immediate employment, its firms also trained workers in the use of new technologies, like their South Korean counterparts. While their Korean analogues received large subsidies from the state, allowing them to incur short-term losses, most Singaporean SOEs and state-linked corporations (private-public joint ventures) had to become profitable almost immediately. However, they used factories built by the Economic Development Board (EDB), on land owned by the EDB and leased at below-market rates, and received money to train workers. The EDB also provided these subsidies for foreign and domestic

[195] Rodan, 76-77

private corporations. Thus, the Singaporean policies provided subsidies, but simply used a different mechanism than their Korean counterparts.

The Singaporeans also provided subsidized credit that fulfilled a similar function to the protectionist policies provided by the Park government. While Singapore's domestic market was too small to give chaebol-like large domestic firms tariff protection, the Singaporeans provided even more access to policy loans to firms investing in high skilled manufacturing. In the 1960s, the PAP loaned firms an average of about 100 million USD per year, or about 10 percent of Singapore's 1965 GDP, while in Korea, Park lent the chaebols an average of USD 150 million per year, or about 5 percent of GDP.[196]

As a result, employment in manufacturing rose by more than 60 percent, which helped to stem the rise in unemployment and reduce reliance on informal sector employment. The new jobs were disproportionately in labor-intensive manufacturing industries that created new opportunities for the Chinese and Malay educated because they did not require the ability to speak English. Jobs created in construction to build all the new infrastructure projects and new housing units further increased job opportunities for those Chinese-speaking Singaporeans who could not get formal sector work in English-Speaking occupations.

The first four years of PAP rule saw a dramatic expansion in the manufacturing sector. Industrial output grew from $398.9 million to $829.9 million and manufacturing value-added

[196] For estimates of total lending to the Chaebols in the early 1960s, see: David Kang, Bad Loans to Good Friends: Money Politics and the Developmental State in South Korea", *International Organization* 56:1 (Winter, 2002), 189 (Table 2).
For average policy loans in Singapore, see: Ian Patrick Austin, *Pragmatism and Public Policy in East Asia: Origins, Adaptations, and Developments,* (Singapore: Fairmont International Limited, 2001), 268
For GDP at current prices, see: World Bank, "Global Development Indicators" http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx#s_g

increased form $142.8 million to $245.4 million. Manufacturing employment also grew rapidly from 25,607 workers to 41,220 over this time. [197]

The PAP responded to voters because, unlike in later periods, the electoral system was still highly competitive in the first decade of PAP rule and they needed to keep voters happy to win elections. Lee Kwan Yew faced an electoral challenge from the Barisan Sosialis, a left-wing party comprised predominantly of dissatisfied members from the left wing of the PAP. These PAP leftists defected in 1961 because the agreement Lee Kwan Yew negotiated to unify Singapore with Malaysia under-represented Singapore in the Malaysian Parliament. This gave the elite-led, collaborationist Alliance government in Kuala Lumpur substantial control over the city-state. As a result, thirteen PAP MPs defected to found the Barisan Sosialis (BS), other opposition parties won two by-elections in 1961, and it appeared that the rump PAP would badly lose the 1963 elections.

Although the PAP increased its repression of the opposition during this period, repression alone cannot explain its electoral success. The LF had used similar repressive measures from 1957 to 1959, yet still lost the 1959 election in a landslide. Thus, the PAP's 1963 re-election was at least partly due to legitimate popularity that resulted from the policies just described. It won 37 out of 51 seats in the parliament, compared with 13 for the BS and 1 for a former mayor from a small party. Like in the early days of Park Chung Hee's rule, the vote margins suggest that this result was not achieved through simple coercion or vote fraud. The PAP only garnered 47.4 percent of the vote, compared with 32.1 percent for the BS and over 30 percent for a number of smaller parties, including the Singapore branch of Malaysia's Alliance. Just like his Korean

[197]Rodan, 74-75

counterpart in the same year, who also won a bare plurality, and utterly unlike Indonesia's Sukarno, Lee Kwan Yew won in 1963 by appeasing voters with policies and jobs.[198]

In addition to electoral success, the PAP succeeded at reducing protests. Although the government passed a series of repressive anti-labor laws in 1966, the most dramatic decline in the number of demonstrations and trikes took place before this law was passed. From an average of more than 200,000 man-days lost per year in the late 1950s and the first two years of the 1960s, the average number of man-days lost to strikes had already declined to an average of about 41,000 in the three years preceding the passage of the Trades Union Ordinance of 1967, after the PAP's new social policies began to take effect.[199]

VI. Political and Economic Pressures of the Late 1960s

Here I will show that Lee Kwan Yew chose to adopt a combination of EOI and government economic planning not because they knew it would work, but because they were desperate to avoid a sudden spike in unemployment during the late 1960s. Although the PAP had won re-election and managed to reduce the intensity of contentious challenges to its rule, the party's leaders understood that their gains were unlikely to last without further economic policies to provide voters with jobs.

Lee's government faced the prospect of double-digit unemployment in the late 1960s and based on past experience, they knew that this would result in mass demonstrations. First, Singapore was expelled from the Federation of Malaysia, in 1965 which cut Singapore off from its primary export market. At the same time, Sukarno's mini-war with the Federation of Malaysia (including Singapore) had also hurt the Singaporean economy because Indonesian attacks on

[198] Wah and Lau, "From Colonialism to Independence", 138-143.
[199] Huff, 295

Malaysian ships had reduced the number calling at Singapore, and a bombing in a shopping center had driven away tourists.

The British also dealt a further blow to the Singaporean economy when they announced plans to close their military bases in Singapore by 1967. These bases created 100,000 jobs (in a country with fewer than 1.5 million people and less than a million in the workforce) and brought in at least USD 250 million, out of a total GDP of less than USD one billion. This threatened to undo all of the progress the PAP had made and create double-digit unemployment. Based on previous experience, Lee and the other PAP leaders must have doubted that they could maintain control in the event of such a catastrophic shock to the country's economy.

In response, the government implemented a package of polices to attract any kind of investment that would boost employment. While most policies up to this period had aimed at attracting investment for a protected home market, the Singapore government actively sought to promote exports, driven by foreign investment. They announced that profits on manufactured exports would be taxed at one tenth of the normal corporate tax rate, and lowered taxes on exports to 4 percent. They also implemented a tax credit for the depreciation of capital goods and allowed all industrial equipment to be imported tax free. The PAP established a new government-owned investment bank, with $100 million of government funds to provide additional loans to industrial firms in 1968.[200]

The Lee government also re-wrote the labor laws both to increase employment and their control over unions. To increase employment opportunities for those entering the workforce, the government made retirement mandatory for all workers over the age of 55 and capped allowable overtime to 48 hours per month.[201] To increase control over the unions, the PAP passed a new

[200] Rodan, 87-88
[201] Hwa, 205

Trade Union law in 1966 that made strikes in essential services illegal. This law also outlawed sympathy strikes and required a majority of union members to vote for a strike.[202] Another law in 1968 banned collective bargaining over non-wage issues such as promotion standards, maternity leave, and other fringe benefits.[203]

Lee also promoted a formal corporatist system to eliminate the last unions affiliated with the BS during the late 1960s and early 1970s. First, the government actively intervened in labor disputes by creating an Industrial Arbitration Court that made many rulings in favor of unions belonging to the PAP's union federation, the National Trade Unions Congress (NTUC). At the same time, the government provided no arbitration for opposition-affiliated unions and used broad interpretations of colonial-era sedition and security laws to arrest their leaders. The PAP then created a formal tripartite bargaining system that brought leaders of the NTUC, business associations, and the government together to set wages through closed door negotiations by a National Wage Council (NWC). Although the NWC's wage increases were theoretically optional, the government made it clear that it would not interfere if employers faced strikes after refusing these wage increases and would then impose them through arbitration.[204]

Lee's government also responded to the loss of British bases by creating new vocational, technical, and worker training institutions to retrain laid off base employees. This included the creation of Ngee Ann Technical College in 1968 and Singapore Technical Institute in 1969. The government also provided subsidies for apprenticeship programs coordinated with high schools and created new subsidies for training already employed workers. As a result, the number of students in vocational training programs increased from 1,409 in 1966 to 11,751 in 1976.[205]

[202] Rodan, 92
[203] Deyos, 129-130
[204] Rodan, 106-107; see also: Deyo, 83-86.
[205] Hwa, 204-205.

Another strategy the Lee government adopted to adjust to the loss of British bases was nationalization. In 1968, the government made a partnership with private investors to run the British naval shipyard as a "private" shipbuilding enterprise- with 75 percent government ownership. The government also created a fully government-owned shipyard, and formed two other public-private joint shipbuilding firms with over 20 percent government equity. The PAP established an SOE called the Singapore Electronic and Engineering Pte Limited, that kept the workers at the radio repair works employed, but also boosted Singapore's capacity to innovate by undertaking R&D in the electronics sector. By the end of 1968 alone, the PAP also established 13 new SOEs in the manufacturing sector to keep Singaporeans in the British naval bases employed.[206]

This proves that the dire need to replace jobs at British bases compelled the government of Singapore to undertake new investments in manufacturing. These examples also show a direct link between past worker militancy and programs that that led to substantial upgrading of workers' skills through investments in training and R&D. The prominent role of SOEs in this process also proves that the government was actively interventionist, contrary to interpretations of Singapore's growth that claim it was free-market.

VII. The late 1970s through the 1980s – the Small Push

Unlike in South Korea, where Park needed to prioritize employment of male workers to avoid rebellion among men he needed for his army, his Singaporean counterpart faced no foreign threat. Lee therefore invested more widely, in broad industrial promotion that amounted to substantial state intervention in the economy, but less picking of winners and losers than in Korea.

[206] Rodan, 95-96.

This led to the earlier discovery of a comparative advantage in high-end electronics in Singapore, during the 1970s, compared with the late 1980s in Korea.

Here I will show that industrial promotion was less targeted towards predominantly male heavy industries in Singapore than in Korea. Since the PAP faced no foreign threat, but nonetheless had strong recent memory of militant labor, they worked hard to keep their citizens satisfied with industrial relations within a corporatist framework. This motivated the party to provide broad benefits, in the form of worker training programs and policy loans to firms relocating production to the city state.

Since past growth had already created full employment in the small country, the government decided to implement rapid wage gains because this would allow it to offer voters job opportunities in high-tech industry rather than unskilled routine jobs. Although the government also realized that market forces would lead to rapid wage gains anyways and make Singapore uncompetitive as a labor-intensive manufacturing hub, its ties to the NTUC motivated the government to actually accelerate this process instead of holding down wages.

Although the PAP regime became increasingly repressive throughout the 1970s and 1980s, when no opposition candidates even managed to win a single seat in parliament, the government's ties to the labor movement allowed the party to pre-empt worker demands. NTUC leaders communicated with the members of their constituent unions and locals, and conveyed workers' demands to leaders of the PAP. The frequent appointment of NTUC leaders to cabinet positions in the PAP government shows that the union confederation maintained influence within the party during this time. Although the PAP thoroughly controlled and coopted the NTUC, it also took the interests and desires of its membership very seriously. For example, Lee Kwan Yew replaced Lim Chee Onn as Secretary General of the union confederation and appointed him to a cabinet position

because he felt that Lim was not adequately conveying the demands of union leaders to the party or responding to their demands. Lee said this explicitly in a letter to Lim stating:

> In September of last year I [Lee] informed you that, after the preparatory work for the 1983 NWC negotiations had been completed, you would leave the NTUC to take charge of a government ministry […] I arrived at this decision after closely following your relationship with union leaders since 1981. […] I have sensed increasing disquiet among some of the older union leaders at the way in which affairs at the NTUC were being conducted […] They began to feel that important decisions were being made without adequate consultations with them.[207]

This quote clearly reveals that Lee truly cared what rank and file union leaders thought about his policies and sought meaningful consultation with them. The PAP maintained the NTUC to coopt labor to prevent the expression of demands outside regulated institutional channels such as closed door NWC negotiations, parliamentary debates, and meetings of NTUC locals. If negotiations within these channels were meaningless, then workers would not participate in them, and would leave the union. This would in turn, eliminate a useful and highly effective tool for monitoring the labor movement, communicating government ideology to workers, and obtaining their compliance with government policies through an implicit rather than explicit threat of repression.

Lee wanted to achieve compliance with as little cost as possible and repression was indeed costly because the victims of repression would not be able to work and repay the government for its human capital investments. Witnesses of an overt crackdown might be more inclined to use their exit option and simply leave, while foreign investors would lose confidence in Singapore's vaunted stability and do the same. With only 2.7 million people, who constituted a sunk cost in

[207] Quoted in Michael D Barr, "Trade Unions in an Elitist Society: The Singapore Story", *Australian Journal of Politics and History* 46, no. 4 (2000), 483.

human capital development, the PAP simply could not afford a Tiananmen-style crackdown, and needed to prevent such explicit displays of dissent.

The government saw the value of NTUC cooperation during the 1980s recession when it attempted to reduce costs for employers by cutting their CPF contributions from 25 to 15 percent and imposing a wage freeze for two years.[208] By promising to return the country to full employment and to increase wages later, they achieved the acquiescence of the labor movement, which did not protest or organize a single strike in 1980 and organized only one strikes in 1986, which was approved by the government.[209] This showed the government that the NTUC's corporatist framework could be extremely helpful for policy implementation. As a result, they had strong incentives to take seriously demands expressed privately by NTUC leaders in order to maintain workers' cooperation.

Further, the party lost a 1981 by-election that was a particularly good indication of their need for NTUC support to win over the working class. In the heavily working class district of Ansom, that had been previously represented by NTUC leader Devon Nair, the new PAP candidate -who was not even a member of NTUC- lost by more than 20 percent. This showed the importance of NTUC support because as long as Nair had run as the PAP standard-bearer in this constituency, the voters had given him and by extension the PAP, their overwhelming support. Further, this election was a shock because the PAP candidate lost to an opponent from the Workers' Party, which showed that voters there wanted someone who represented labor. [210]

This shows that Singaporean citizens actually supported the NTUC rather than the PAP. This example therefore shows why Jennifer Gandhi's understanding of institutions needs serious

[208] Rodan, 194.
[209] For the number of strikes in Singapore, per year, see: Frederic Deyo, *Beneath the Miracle,* 63. For the role of the government in sanctioning the 1986 strike, see: Barr, "Trade Unions in an Elitist Society", 492.
[210] 157

revision because workers do not cooperate with governments that have parties and legislatures, just because of these institutions. Corporatist labor relations were critical to achieving support for the PAP's policies in the workplace, and the PAP's candidates in the voting booth.

Another reason why the PAP continued to heed citizens' demands is that even though the PAP became increasingly hegemonic in the 1970s and remained so during the early 1980s, Singaporeans could still vote with their feet. Unlike South Korea, where both skilled and unskilled workers were replaceable, Singapore faced an acute labor shortage starting in the late 1970s. Its population of mostly ethnic Malay, Chinese, and Indian workers could adapt to moving to India, Malaysia, Indonesia, Taiwan, or Hong Kong far more easily than ethnic Koreans, and could more easily obtain visas to temporarily work or even resettle in these countries than Koreans. This was not just a hypothetical possibility, but a real problem for the Singapore government as applications for Good Conduct Certificates (GCCCs), a document required by many countries for permanent visas, increased from a negligible number in the 1960s to 4,707 in 1988.[211]

Although this is a small number in absolute terms, applicants recorded were almost all of working age because children under 16 cannot obtain GCCCs, and few applicants over age 59 apply for them. Further, of those who applied for GCCCs in 1989, 39 percent had a tertiary degree, compared with just 4 percent of Singapore's population in 1990 and 59 percent had completed high school or some post-secondary education, compared with 36 percent of the general population.[212] An outflow of almost 5,000 people was also a significant brain drain for a country

[211] Yap Mui Teng, "Brain Drain or Links to the World: Views on Emigrants from Singapore", *Asian and Pacific Migration Journal,* 3, no. 2-3 (1994): 413
[212] Teng, "Brain Drain or Links"418

with a total population of just 2.7 million people in 1990 and a fertility rate of just 1.006 children per woman (and falling) since 1975, well below replacement.[213]

Even if these figures would not alarm demographers and economists with a relatively "objective" view, what mattered for government policy was the PAP's perception, and this was explicitly alarmist. Even before the numbers of emigrants had risen substantially and before the birthrate declined, Lee Kwan Yew said in 1973 that the country faced a "brain drain". [214] Lee again stated publicly at a National Day rally in 1984 that the much lower birthrate among college graduates than unskilled workers was a crisis because as he put it "Our economy will falter, the administration will suffer […]"[215] His government adopted explicit natalist policies for educated workers, such as giving priority slots in government daycare center and primary schools to children of educated parents who had multiple children. Further, this view was not limited to Lee alone, but was held by many PAP members including the junior finance Minister who in 1989 said that "Every Singaporean, *especially a skilled and a talented person*, who decides to leave permanently is a loss to Singapore [emphasis mine]." At the same 1989 rally, the deputy Prime Minister said that "Those who leave are a loss to us […] We especially need to have a hard core of capable, resolute individuals, including enough of the well-qualified […]" [216] This shows that the party was genuinely concerned by the prospect of high-skilled emigration.

Further, PAP popularity began to slip noticeably in the mid-1980s. Their vote share declined from 75 percent in the 1980 general election to less than 64 percent in 1984, when they

[213] Teng, 420. For data on Singapore's fertility rate, see: Saw Swee-Hock, "population Growth and Control" in *A History of Singapore* (New York: Oxford University Pres, 1991), eds. Ernest T. Chew and Edwin Lee, 239-240
[214] Quoted in Christopher Tremewan, *The Political Economy of Social Control in Singapore,* (New York: St. Martin's press, 1994), 131.
[215] Quoted in Rodan, 185
[216] Teng, 422

lost two seats to the opposition.[217] The PAP vote share declined further to 61.76 percent in 1988 and then to just 59.3 percent in 1991.[218] Although the PAP was in no immediate danger of losing, the dramatic 16 percent reduction in popularity in just 11 years boded poorly for the party's rule in the long-term. Their declining popularity also suggested growing dissatisfaction with PAP rule among the population, and this was obviously contributing to the emigration of educated dissidents.

The government responded to workers' demands by increasing wages through a program called the "corrective wage policy" implemented by the NWC in 1979. This policy told firms to increase wages by S$32 per month (about USD 6.50 in 1979 USD) and then increase wages by an additional 7 percent per year for the next three years. For a worker earning the average wage in the apparel industry of between S$250 and S$350 per month at that time, this was an 18 to 20 percent pay increase. Employers were also expected to increase contributions to the CPF by 4 percent, and to pay a new payroll tax of 4 percent of wages for each worker earning less than S$750 per month to support a Skills Development Fund (SDF). The SDF gave subsidies to firms that provided in-plant training opportunities to offset the costs associated with training. This demonstrates that the government gave very tangible material benefits to working-class Singaporeans and therefore, sought their support for both the PAP and the government's development programs.

While it is impossible to know whether this policy was motivated primarily by a desire to buy support from workers or by the ideology of PAP elites because NWC negotiations are very secretive, workers clearly derived the most immediate benefits from these policies. NTUC

[217] Rodan, 183

[218] Robert Dayley and Clark D Neher, *Southeast Asia in the New International Era, Sixth Edition* (Boulder, CO: Westview Press, 2103),306-307

participation in the NWC therefore must have contributed to the adoption of this strategy to make low-skill, low-wage manufacturers subsidize Singapore's progression into higher skilled industry.[219]

The Singaporean government also responded to the 1970s recession by promoting increased investment in high-value economic activities. To attract private investment, the PAP offered five year tax holidays to firms with high capital-labor ratios and high ratios of skilled to unskilled workers. The government also created an advanced training center jointly run by the state and private companies to train highly skilled workers. State investment in new, high-value economic activities also played a role in this new strategy by jointly funding many new companies in exchange for equity stake. The Singaporean government (including its development bank and other subsidiaries) fully owned 33 SOEs and had shares in 88 more by the mid-1970s. Including new infrastructure and increased policy lending, state development spending increased 232 percent between 1970 and 1973.[220]

As a result of these policies, Singapore's electronics industry developed rapidly in the 1970s, then took off in the 1980s. While electronics manufacturing accounted for 11.3 percent of employment in Singapore in 1970, over a quarter of Singaporean workers made their living from electronics in 1980, and 34.9 percent worked in electronics by 1990. This specialty sustained employment growth in spite of rising wages because productivity per worker increased on average by 5 percent per year, as measured by value-added per worker.

The source of growth changed during the 1980s due to government investments in worker training and infrastructure. While most of the growth in Singapore's electronics output came from increasing labor inputs during the 1970s, before the "corrective wage" and worker training fund

[219] Rodan, 144-145.
[220] Rodan, 108-109.

policies were implemented, growth was driven by faster through-put times and hence, more output per worker during the 1980s. The best evidence for this is that growth in output only exceeded growth in labor inputs during the 1980s. Output increased more slowly than employment during the 1970s, which means increased output was the result of more labor inputs. In contrast, labor inputs only increased by about 85 percent between 1980 and 1990, while output increased more than 500 percent over this decade.[221]

Statistics on the growth of the Singaporean electronics industry also indicate that much of this productivity growth resulted from production of new, more technology-intensive production. While 100 percent of Singaporean electronics consisted of consumer goods and were generally labor intensive in 1970, this figure had dropped to just 38.8 percent by 1980, with 54.4 percent of output consisting of electronics parts and substantial declines in final assembly operations.

The role of interventionist government policy for the creation of a high-skilled electronics manufacturing sector in Singapore is evident by comparison with laissez-faire Hong Kong. While the British colony had a slightly higher volume of electronics goods than the independent city-state around 1970, Hong Kong's output was only 85 percent of Singapore's in 1985, and only 25 percent in 1995. This disparity is accounted for because Singapore's electronics manufacturing sector continued to grow as Hong Kong de-industrialized between 1980 and the mid-1990s.[222]

This shows that the broad industrial promotion package of policy loans, worker training subsidies, provision of education, and managed corporatist labor relations made it possible for Singapore to develop a skills based manufacturing sector. Thus, it is possible for a country to deepen industrialization even as wages rise, if governments are willing to provide the right

[221] Poh-Kam Wong, "Riding the Waves: Technological Change, Competing US-Japan Production Networks, and the Growth of Singapore's Electronics Industry" in *International Production Networks in Asia: Rivalry or Riches?,* Eds. Michael Borris, Dieter Ernst, and Stephen Haggard, (Surrey, England: Curzon Press, 2000), 176.
[222] Wong, 177

incentives. At the same time, the broad range of policies also shows that governments do not necessarily need to pick winners and losers to promote industrial jobs for their citizens.

VIII. Conclusion

In response to the threat of popular protest, the Singaporean government intervened actively in the economy to boost employment and increase the skill profile of their workers. These actions provided abundant high-skilled labor and guaranteed Singaporeans access to jobs, which achieved political stability. Although the ideologies and technocratic expertise of bureaucrats and PAP party leaders contributed to the continuation of these policies during the 1970s and 1980s, political pressures from citizens led to their initial creation.

Continued bargaining between the state and its corporatist labor union also explain many specific features of these policies. Comparison with Hong Kong demonstrates that the existence of corporatism in Singapore had meaningful implications for policy because it motivated much greater promotion of skilled manufacturing in the Lion City. Thus Singapore's continued preeminence as a global manufacturing center today demonstrates how responsive, but not necessarily accountable government shapes the structure of the welfare state and economy.

Chapter 6:
Quantitative Analysis

I. Goals of Quantitative Analysis

This statistical analysis allows me to measure my independent and dependent variables more objectively than qualitative analysis. It also tests the generalizability of my qualitative findings by testing whether or not they apply to countries outside East Asia. For this dissertation, external validity strengthens the internal validity of my study by demonstrating that the cases analyzed in the qualitative chapters are not simply chosen to fit the argument, and that there is not some omitted variable shared by Asian countries that predetermined development outcomes. Finally, large-N quantitative analysis allows me to assess whether or not there is a statistical relationship between the key independent and dependent variables of interest, controlling for important confounding variables, using precise and objective criteria for statistical significance.

II. Two Different Models

The theory described in Chapter One argues that the more governments face severe foreign and domestic threats to their rule, the more they will invest in human capital and these investments will in turn, lead to greater success at industrialization. Since this dissertation seeks to explain two separate outcomes: (1) policies and (2) growth of manufacturing, this chapter will run two separate

sets of regressions with indicators of policy as the first dependent variable and indicators of manufacturing growth as the response variable in the second model.

There will also be two different sets of independent variables. In the analyses where policies are the dependent variable, indicators of protest and foreign threat are the key independent variables. For the second model, where an indicator of manufacturing diversification and upgrading are the dependent variables, indicators of policies are the independent variables.

III. Time Range and Universe of Cases

I analyze a dataset that includes all non-communist countries independent by 1965 that were not highly industrialized before World War II. The data cover a 40 year period from 1951 to 1990, and include 80 countries from every major region of the world except the formerly communist areas of Eastern Europe and central Asia.

I chose this time range in order to measure the independent variables from before 1970. This is important because I expect that there will be a different relationship between mass domestic opposition and foreign threat on the one hand, and provision of education policies after this year. I argued in Chapter One that governments provided the education and jobs programs that sustained industrialization in order to co-opt their citizens and convince them to express demands through corporatist labor unions and other institutionalized forums rather than through street demonstrations. If this policy was successful, one would expect few protests after the implementation of universal education programs because relatively satisfied citizens would be less likely to protest than citizens in countries where these policies were not provided. Indeed, the case studies show that protest levels fell dramatically after the implementation of universal public education the creation of EPZs, support for SOEs and worker training programs in the AITs during the late 1960s. Thus over time, protest becomes endogenous to the policy and countries that still

had high levels of protest in most years after the AITs implemented these policies are countries that did not coopt their citizens at earlier periods. This made it necessary to include only countries that were independent in the late 1960s, because there would be no observations of protest for the correct period for countries that became independent later.

Since data on enrollment are not available before 1965 and are not available in continuous time series until 1970 for most countries, I used a 20 year lag to measure indicators of protest and foreign threat. This ensures that the coefficients estimate the effect of protests in the 1950s, 1960s and 1970s on enrollment rates twenty years later when enrollment data are actually available. I also tried using a 25 year lag that includes more years of data on protest from the early 1950s, and this did not change the results, nor does a fifteen year lag that only measures enrollment until 1985.

Measuring indicators of foreign threat and domestic opposition before 1970 restricts the geographic coverage of this study. I do not include countries that were not independent by 1965 because they have too few years of data on protest from the critical juncture period. Further, each country appears in the dataset only for years after independence because it is impossible to code foreign threat for countries that are already ruled by a foreign state. The country panels are therefore unbalanced because many African countries only gained independence around 1960. This means that while there are 40 years of data for most countries in Latin America, there are fewer yearly observations for most African cases that became independent in 1957 (Ghana) or later.

Since this analysis seeks to generalize the findings from the qualitative chapters outside Asia, I have nonetheless included as many cases as possible. This dataset therefore include countries from every continent and major region of the world, except Eastern Europe and Central Asia. Communist countries are excluded for both theoretical and empirical reasons. The

theoretical reason for excluding such countries is that at least in the 1960s, left-wing demands from workers were less threatening to communist leaders than to the leaders of non-communist countries.[223] My argument in Chapter One asserts that governments adopted education and training policies to forestall working class demands that threaten to overthrow existing governments and that such demands were particularly threatening when made while governments faced communist invasion or overthrow. Since communist states do not face this condition, the mechanisms would at least work very differently in a communist state. Empirically, it is not possible to compare countries with communist economic policies to non-communist ones because measures of GDP or the value of manufacturing output in countries with planned economies cannot be compared with equivalent indicators from countries where prices are determined by markets.

Maximizing geographic coverage required including many dissimilar countries. This includes democracies as well as dictatorships, small states and large ones, former colonies and never colonized countries. Including a wide range of countries is justified because the qualitative case studies cover countries that are themselves quite diverse: they range in size from tiny Singapore to massive Indonesia, and every country covered in the qualitative section had both democratic and autocratic periods. Thus, it makes sense to assume that the findings would generalize to countries regardless of size or regime type. While the case studies do not include

[223] Gandhi and Kim correctly point out that authoritarian regimes that claim to rule in the name of the working class do not necessarily represent the interests of workers. Indeed, the role of the Polish union Solidarity in opposing the communist regime is a great example of this. However, communism was seen throughout the developing and post-colonial world as a viable alternative to capitalist development that would truly represent the interests of the economically marginalized at least until knowledge of the famines and abuses of the early Soviet period became widespread in the later 1950s. Thus, anti-communist regimes truly faced a greater threat from the lower classes than communist ones until the Soviet system was discredited, something which occurred gradually.

any countries that were never colonized, none of the variables in the theory depend entirely on colonialism.[224]

I include all countries in Africa that were independent by 1965, because this is the best test of the generalizability of the theory. No countries in Africa experienced colonization as intensively as Korea or Indonesia, and many African states have much drier climates than the Asian countries covered in the case studies. Cases from the semi-arid Sahel region like Senegal, Mauritania, and Mali are thus a particularly hard test for my argument because their agriculture is radically different from that of the rice-producing Asian countries in the case studies. These countries also lacked the Confucian-Buddhist culture and ties to Japan that have been proposed as explanations for the successful industrialization of the AITs.

Two potential drawbacks to including them is that many African countries had relatively weak states, and these cases have many years of missing data. The weakness of these states might at first blush, seem like an omitted variable. However, most of the weakest states also have the most missing data. In particular, the Democratic Republic of the Congo, Burundi, Equatorial Guinea, Guinea, Ethiopia, and Mauritania are missing data for one or more variables for over a decade between independence and 1990. In practice, state weakness is therefore addressed through list-wise deletion.

IV. Indicators for the Dependent Variable

Manufacturing value-added per capita (MVA) is used as the dependent variable in the second set of regressions. MVA captures the ability of countries to develop both a wide range of manufactured goods and use technology in production because increasing value-added usually

[224] The Korean and Indonesia cases show that institutions of local governance and land ownership vary with different colonial regimes. I have no theoretical reason to assume that all never-colonized countries would create the same institutions any more than all colonial powers.

requires more technology. MVA is measured in per capita terms because even very technology advanced countries like Singapore, will not produce as much value-added in all their factories combined as a very large, but less high-tech manufacturer like Indonesia. MVA (measured per capita terms) ranges from .41 to 451, with a mean of 31.8 and a standard deviation of 44.51 (see Table 1 on page 167 for summary statistics of all variables used in the analysis).

The dependent variable in the first set of regressions is the gross secondary enrollment rate. This indicator measures the availability of schooling and the extent to which governments invest in making education universal. Secondary enrollment rates are used rather than primary enrollment rates because there is not much variation in the primary enrollment rate by the late 1970s, as all but the poorest countries had achieved primary enrollment rates over 60 percent by then. The gross secondary enrollment rate is used rather than the net secondary enrollment rate because gross secondary enrollment is available for more countries and years. The lowest enrollment rate in the dataset is 7 percent, while the highest is 105 percent and the standard deviation is 31 and the mean is 38 percent (see: Table 1 on page 167). The maximum is greater than 100 because gross secondary enrollment measures the number of kids in high school and junior high, divided by the number of kids of secondary school age, but includes older students who have failed to graduate.

While an even more direct indicator of a government's commitment to spend money on education might seem to be the share of GDP it spends on education, this does not capture important qualitative differences in spending. As shown in the Indonesia chapter, governments that spend much on education may concentrate resources in urban areas and allocate their education budgets disproportionately to relatively expensive higher education. As that chapter showed, Sukarno radically increased spending on education, but spent far more money building

universities that only a tiny elite had the previous education to attend, while neglecting to build high schools for millions of under-served rural children. To the extent that education becomes more expensive at higher levels, education spending might in fact indicate a very elite-driven allocation of resources that does not create the broad manufacturing workforce needed to attract manufacturing.

Another potential disadvantage to using enrollment rates as the indicator of government investment in education is that it captures not only the availability of schooling for ordinary citizens but also parents' willingness to keep their kids in school. While this might appear at first blush to be a problem with this indicator, it in fact captures parents' expectations of returns to education and thus, also captures the existence of industrial policies that increase employment in sectors that require at least basic education. If parents know their children have poor job prospects because government has done nothing to attract foreign investment in manufacturing or to reallocate domestic resources, the only jobs available will be jobs in agriculture or the informal sector that do not require education. Parents would therefore, be less likely to invest scarce household resources in educating their children. This indictor is both the independent variable in the second regressions that take MVA as the response and the dependent variable in the first set of regressions.

Although a more direct indicator of industrial promotion and worker training would be ideal, even the AITs adopted industrial policies with different levels of targeting and different roles for the public sector. The only policies they shared in common besides education were early creation of EPZs and policy loans. Data on policy lending across a broad sample of developing countries that would measure how much money they provided to promote manufacturing is not available, and data on EPZs is very sparse before the mid-1980s. Although I have data on the

number of workers in countries with large manufacturing sectors in EPZs by the mid-1980s, there is obvious selection in this data source because only countries that succeeded in attracting large firms are included. Since this data is not comprehensive, it does not measure attempts to provide these policies in cases that tried but failed to promote industry.

V. Indicator of Citizens' Ability to Protest

I use two indicators of domestic threat: the number of general strikes and the total number of large demonstrations per capita in a given country-year. Both come from Arthur Banks' Cross-National Time Series data archive. The indicator "General Strikes" (S17F2) is defined as the number of strikes with more than 1000 participants in at least 2 different firms per country-year. The total number of large demonstrations is the sum of Banks' "Anti-Government Demonstrations" (S18F1), and "Riot" (S17F6) variables. I sum both indicators of mass political expression because Banks' dataset is based on news reports, so what appeared to journalists as a riot rather than a peaceful protest is probably due more to the political views of the reporter writing the story on which the coding is based than on any "objective" social reality. Since my dataset includes developing countries, most of which were dictatorships where strikes and peaceful protests were banned at least some of the time, it is very unlikely that many peaceful protests would have remained so. The Lee Hock Bus Riot described in the Singapore chapter is an excellent example of how police violence against peacefully demonstrating citizens often led to a cycle of escalating violence between protestors and the police in authoritarian countries. Even in democratic countries, protests led by suspected or alleged communists would have been deemed subversive and resulted in repression that most likely would have resulted in rioting. The demonstrations variable measures the number of protests with more than 100 participants, and riots with more than 100 participants in a single year.

I divide both indicators of domestic unrest by population because one protest in a small country like Singapore is much more threatening than one in a huge country like India. Since only a small minority of citizens participate in most strikes or protests, I assume that it takes many citizens to get a single protest or strike above the participation thresholds necessary for inclusion in the Banks dataset. Governments in larger countries also have far more people to recruit for counter-demonstrations or security force personnel than in smaller countries, and thus, would be far less threatened by a single protest with 100 participants than a very small country. Measuring protest this way allows me to compare the number of protests in large countries with smaller countries and still make a meaningful comparison.

Although a more ideal indicator would be the number of citizens participating in strikes or protests per country-year, divided by population, these data simply are not available. Although this indicator counts protests with only 100 citizens the same as protests with thousands of participants, more precise data simply do not exist. Counting the number of protestors is difficult, even in ideal circumstances. Since many of the country-years in my dataset come from authoritarian countries, where governments wanted to portray themselves as popular and also censored the press, it is simply not possible to obtain a precise count of the number of protestors per year.[225] The number of protests (or riots) with 100 participants per 100 thousand people ranges from 0 to 63.7 with a standard deviation of 4.9 and a mean of 1.7. The number of general strikes

[225] I have spent over a year trying to construct a dataset with this indicator using national statistics sources, the *International Historical Statistics* datasets on labor relations, and the Social Political Economic Events Data from the University of Illinois. The problem is that there are no more than 10 countries that have the same indicator of protests because some measure the number of labor disputes, some measure the number of strikes, other statistical sources measure the number of protests, still other countries have data on the number of man-days lost per year, and others have data on the number of workers involved in strikes in major cities. Further, all of these sources have missing data. This makes it absolutely impossible to analyze any dataset constructed from these sources. The International Labor Organization has data on the number of participants in strikes and the number of man-days lost, but only from the late 1970s onwards, and their statistics also have many missing data points.

with 1000 participants per million people has a minimum of 0, a maximum of 2.7 and a standard deviation of 1.49.

VI. Indicator of Foreign Threat

In the first model, I measure foreign threat with a binary indicator that takes one if a given country in the dataset has fought a war with a neighboring state since 1945. This indicator helps measure foreign threat to test the hypothesis from the first chapter that governments faced with invasion will be reluctant to shoot large demonstrations because this reduces the pool of able-bodied men available to fight. If a country fought a war with a neighbor, it takes 1, if it did not, it takes a 0.

While this does not measure military capabilities of the two states, existing datasets provide no better indicator of foreign threat. Although security studies scholars attempt to measure relative national power through a score that combines population, the number of soldiers in the army, the urbanization rate, and iron and steel production, labeled the CINC score by the Correlates of War Dataset, this does not account for the relationship between countries. A state with a strong military is not necessarily a threat to a weaker neighbor if they have friendly relations. In the post-world War II era, states do not attack one another out of the blue, but usually attack neighbors when a state of hostility already exists. Having fought a previous war with a neighbor proves that there is a potential for future invasion, even for the country that won, because countries that lose territory will be eager to get it back.

VII. Control Variables

In addition to the variables described above, I have also included other variables that are likely to affect the outcomes of interest based on existing theories. These include indicators of

colonial legacies, past industrialization, geographic conditions favorable to development, male-to female wage differences, and cultural values.

Many authors, including Kohli, have asserted that Korea and Taiwan inherited unusually good infrastructure after Japanese rule. In particular, these authors cite the unusually extensive rail network that the Japanese built as evidence that the country had a clear advantage over other developing countries when it began to industrialize. I am skeptical of this claim because in 1949, there were approximately 26 kilometers of rail in South Korea for every thousand square kilometers of area, compared with 31 kilometers of rail per thousand square kilometers of area on Java. However, I empirically test the relationship between rail density in 1950 and manufacturing value-added to address this alternative hypothesis. I created this indicator by dividing data on the length of the rail network from *International Historical Statistics* by data from Jeffrey Sachs on the land area of a given country. This indicator is available from the Center for International Development, under "Geography Datasets".[226]

This indicator measures not only the quality of transportation networks, but also captures the extent of previous investment in Third World economies because railroads were a very common form of foreign direct investment during the early 20th Century in colonies and never-colonized countries alike. Much of the core countries' direct foreign investment in the rest of the world during the Nineteenth and early Twentieth Century took the form of railroad construction, and they generally built railroads only where doing so would give them access to economic resources that made such an investment worthwhile. Thus, this indicator also measures the extent of each country's head start at economic development.

[226] Jeffrey Sachs, "Geography Datasets – General Measures of Geography", http://www.cid.harvard.edu/ciddata/ciddata.html

I include this variable as a control in both the second set of regressions that take MVA as the dependent variable, and in the some of the regressions where enrollment rates are the dependent variable to control for endogeneity between development and protest. This is clear potential threat to my causal argument because more industrialized countries would have more workers living in cities and their citizens would have more social and human capital. Thus, countries that were more industrialized to begin might have more protests than very under-developed countries. The case studies partly help to address the direction of causality, but including the railroad density from 1950 (before the first year when protest is measured in my dataset) also helps to prove the direction of causality in the statistical analysis.

I also include a measure of GDP per capita from 1950 in some models because countries with greater wealth have more resources for investment in manufacturing, education, and worker training programs. To the extent that strikes result from prior industrialization, this indicator also helps address concerns about the endogeneity of my independent variable. Indeed, Carles Boix argues in *Democracy and Redistribution* that citizens with more economic resources at their disposal can invest more in human and social capital and thus, are more able to overthrow their governments than poorer citizens.[227]

I measure GDP in 1950 because this is the first year for which data for developing countries are widely available from Angus Madison's dataset. 1950 is just before or just after the independence of most countries in Asia, Africa, and the Middle East, so it is largely exogenous to post-independence development policy. Even most Latin American countries that had been independent since the early 1800s experienced significant regime changes around this time, like

[227] CarlesBoix, *Democracy and redistribution*, (New York: Cambridge University Press, 2003).

Brazil which democratized briefly after the overthrow of Getulio Vargas' Estado Novo in 1947.[228] Thus, 1950 GDP per capita (along with density of rail network) measures the head start that more developed countries had before the implementation of postwar industrial and education policies. It ranges from $343 to $7424 with a standard deviation of $1242.37 and a mean of $1577.17 (see page 167 for a full list of summary statistics). As a further robustness check, I also tried using a 30 year lagged indicator of GDP per capita in some models.

It is also likely that regime type affects subsequent industrialization and policy choices. As a result, I include polity scores for every country-year to measure the level of democracy on policy choices in the 1960s. This indicator takes integer values from -10 to 10, with higher scores indicating more democratic regimes, and lower scores, more autocratic ones. This is useful because it captures important differences in the level of political contestation and individual rights among dictatorships. It is undeniable that citizens have far more freedom and there is much greater contestation in Malaysia than in North Korea, although both countries are dictatorships.

However, polity also includes an intermediate regime category called "anocracy" that is neither democracy nor dictatorship and this has been questioned by many scholars of comparative politics, most notably Adam Przeworski Antonio Cheibub, and colleagues. Critics of the polity score indicator assert that democracy and dictatorship are opposite and mutually exclusive, and there is no middle state. This assertion has been somewhat questioned by recent work on what Levitsky and Way call "competitive authoritarian regimes" that by definition, have attributes of both democracies and dictatorships.[229]

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[228] See: Ruth Berins Collier and David Collier, *Shaping the Political Arena: Critical Junctures, the Labor Movement, and Regime Dynamics in Latin America,* (Notre Dame, IN: University of Notre Dame Press, 2002), 364

[229] For the dataset, see: Adam Przeworski, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi, "Democracy and Development" (2000), available at: https://sites.google.com/site/joseantoniocheibub/datasets/democracy-and-development-aclp

However, he POLITY score is intended to measure *consolidated* democracy, and thus, measures both the level of consolidation and how democratic a country is, even though ACPL argue that these are separate constructs. A clear example of where ACLP disagree with the POLITY indicator is Thailand's classification as an anocracies because of frequent changes back and forth between democracy and dictatorship. ACLP would argue that his is simply a miscoding because Thailand has never had regimes that share both democratic and autocratic traits, but is simply unstable. Thus, it should be classified as a democracy when civilian, elected governments are in power, and classified as a dictatorship under military rule, according to these authors. I have also re-run the analysis using Przeworski and colleagues' binary regime variable.

Beyond whether or not countries are democratic, there are important regime differences within dictatorships (the overwhelming majority of cases in my dataset) that might affect development. Indeed, Gandhi (2008) explicitly claims that dictatorships with elected legislatures and political parties will provide better economic performance than those without such institutions. She uses an indicator called "legselec" that measures whether or not countries have legislatures, and whether or not they are chosen through popular elections. Countries with no legislatures take a value of zero, those with appointed legislatures take a two, and those with full elected legislatures take a value pf two. In her analyses, this variable has a highly robust, positive, and statistically significant relationship with both social spending and economic growth. [230] She also finds that legislatures and parties are negatively related to the number of strikes per year. I thus, have

For the article where they criticize polity and other measures, see: Przeworski, Adam. "2 Minimalist conception of democracy: a defense1." *Democracy's Values* (1999): 23

[230] See: Jennifer Gandhi, *Political Institutions Under Dictatorship,* (Cambridge University Press, 2008) esp. 132-137 on social spending and 150-160 on economic growth

included her measure of the effective number of parties in the legislatures of countries, a dummy for monarchies, and her indicator for elected legislatures.[231]

An alternative explanation for the successful industrialization of the Asian tigers is that they shared a common Confucian culture or "Asian values" that emphasized hard work, savings, the nuclear family, respect for the authority of the state, and education. Thus, one argument for why East Asian countries provided more education is that their citizens and rulers valued it more than other societies. Lee Kwan Yew, the long-ruling dictator of Singapore, is well-known for making this argument.[232]

Since Confucianism originated in China, and all countries with supposedly Asian values have substantial Chinese influence, I measure the presence of this culture with a measure of the percentage of a country's population that is Buddhist but not Theravada Buddhist. Most forms of Buddhism in the Mahayana tradition originated in China or in countries like Korea and Japan, where Chinese cultural influence was important. Thus, this variable essentially measures the sinicization of society and takes high values in places like Taiwan, Singapore, Vietnam (although it is not included in my analyses), and South Korea.[233]

As an additional robustness check, I also obtained data from the World Bank on the number of Chinese immigrants in countries in my sample for the first year in every decade since 1960. I divided this by the total population to get an estimate of the percentage of the population that are

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[231] For analyses of the effect of institutions on strikes, see: Wonik Kim and Jennifer Gandhi. "Coopting workers under dictatorship." *The Journal of Politics* 72, no. 03 (2010): 646-658. I tried to conduct my analysis using the exact same indicators they used in this paper, but both authors assert that they have lost the data used for this analysis. I thus, had to conduct this analysis using similar indicators of institutions from Gandhi's 2008 book with the indicator of strikes from the Banks dataset.

[232] See: Robert Dayley and Clark D. Neher, *Southeast Asia in the New international Era, Sixth Edition,* (Boulder, CO. Westview Press, 2013), 311-316.

[233] *Zeev Maoz and Errol A. Henderson. 2013. "The World Religion Dataset, 1945-2010: Logic, Estimates, and Trends." International Interactions, 39: 265-291.* For the dataset: http://www.correlatesofwar.org/data-sets/world-religion-data

recent Chinese immigrants. This control variable is included on both regressions because there are good reasons to think that ethnic Chinese might have cultural values conducive to both enrolment rates and economic development. It is also plausible that recent Chinese immigrants, because they tend to be traders (especially in Southeast Asia) might have entrepreneurial skills that would help industrialization. Further, immigration is not a random choice, but a pre-planned and very risky investment. Those who are willing to leave their homeland to find job opportunities in another country are very likely to be risk takers and therefore, might be more willing than others to invest in their children's education or create industrial firms than other people. The indicator of the percentage of the population who are first-generation Chinese immigrants therefore captures many attributes that explain social demand for education as well as success at industrialization.

As a third indicator of this cultural explanation, I created a variable that captures the percentage of the population that is ethnic Chinese or Korean in 1955 (this does not vary much over time in the period I am studying and varies only cross-sectionally in the dataset). This variable is different from the indicator for Chinese immigrants, because it includes long-established Chinese populations, as well as recent arrivals.[234]

Another important control variable is the percentage of a country's land area that is within 100 kilometers of a coast. This is included in regressions that take MVA as the response variable because most manufactured goods are transported by sea to global markets. Having more territory that is far from the coast would put such a landlocked country at a disadvantage compared with more coastal countries because transportation costs would make its manufactured exports more expensive. Since developing countries' exports gain market share by competing primarily on price, at least in the early stages of industrialization, one would expect any characteristic that

[234] Dudley L. Poston, Jr. and Mei-Yu Yu, "The Distribution of the Overseas Chinese in the Contemporary World", *International Migration Review,* 24:3 (Autumn 1990), 480-508. See esp. page: Table 4, pages 496-498.

makes the cost of their manufactured goods more expensive would seriously impede attraction of foreign investment. Indeed Jeffrey Sachs (1997) finds that one of the most important reasons why African countries are poor is that Africa has more landlocked countries than any other continent. Empirically, most EPZs are built near ports to facilitate easy transportation of manufactured goods, and countries without a coastline or only a very small one, would be disadvantaged.[235]

Like the indicator of area within 100 kilometers of coastline, Stephenie Seguino's gender wage gap variable also measures costs of production. She argues that countries with exceptionally high male-female wage gaps had an advantage promoting industrial growth because producers of light-weight, footloose industrial goods relocated to countries with the cheapest female workers. Cheap female labor was more important than the average wage for all workers because many of the industries that first relocate to developing countries, like apparel and textile production require workers with skills (like sewing) that are often gendered. Thus, having unusually low female wages should promote exports of such products, allowing countries to gain money for investments in industrial deepening and education. One would therefore expect a higher wage gap to affect early stage industrialization.

Since I argue in Chapter One that most dictators facing foreign threats needed to conscript men into their militaries, they would have a greater incentive to coopt male workers than female workers through jobs and training programs. This would therefore, increase male wages, while there would be fewer incentives for dictators to repress female wages, creating a gender wage gap. While I can explain this gap, it still needs to be controlled for in regressions that take MVA as the

[235] John Gallup and Jeffrey Sachs "Geography Dataset" http://www.cid.harvard.edu/ciddata/ciddata.html

dependent variable because it is possible, as Seguino (2000) asserts, that there is a direct causal relationship between the gender wage gap and growth in manufacturing.[236]

I have also included a lagged indicator of GDP per capita. To the extent that it captures previous industrialization, it also controls for the head start that countries with long periods of development before the 1940s (like Brazil and Turkey) had over countries just starting to industrialize at that time. This indicator is superior to the indicator of GDP per capita in 1950 in regressions that take MVA as the response because MVA is measured later than secondary enrollment rates, so GDP per capita in 1950 would only affect MVA if the effect lasts for a very long time. By measuring GDP per capita for multiple years for each country, I take into account variation across time as well as space. I have also included various lags of GDP per capita in models that take secondary enrollment as the response variable as a robustness check.

Data for this indicator come from Angus Maddison's dataset and are measured in constant 1990 USD. The maximum GDP per capita is $10929 and the minimum is $340.75, with a standard deviation of $2022. GDP per capita is measured in repeated years for every country in the dataset, and there are observations for countries even before they become independent. Data are available from 1950 even for most countries that did not gain independence until 1950, which allowed me to construct a lagged indicator of GDP per capita that includes pre-independence observations.

One reason why GDP per capita does not measure previous manufacturing experience perfectly is that many developing countries derive a substantial portion of their GDPs from natural resource production, especially oil. I therefore have also included a lagged indicator measure of the value of oil production in constant 2009 US dollars per capita in some robustness checks. This

[236] Stephanie Seguino, "Gender inequality and economic growth: A cross-country analysis." *World Development* 28, no. 7 (2000): 1211-1230. See esp. page 1218.

variable is important because many oil producing countries have no incentive to invest in manufacturing. Further, it is well-known that oil wealth makes wages uncompetitive in major oil exporting countries.[237]

To control for other unmeasured regional spillover effects or regional characteristics, I have also included dummy variables for different regions in some regressions. The regions assigned their own dummies include sub-Saharan Africa, the Middle East and North Africa, Central America and the Caribbean, South Asia, and East Asia (including Southeast Asia). In regressions with all these dummies, South America is the omitted baseline category for comparison.

This indicator is important because policies were chosen partly based on ideas about development as well as political strategies for governments to remain in office. One would therefore, expect governments to learn from their neighbors and adopt similar development policies. Regions also share important characteristics that might affect development including culture, natural resources, soil conditions, and climate. Other unique attributes of regions that might affect the level of threat (assignment to the treatment condition) because wars between states have been far more common in East Asia and the Middle East than elsewhere in the post-World War II era.

One final control variable is a set of dummy variables for colonial legacies. Much has already been said in other chapters about the purported effects of Japanese colonialism on subsequent industrialization, so I have created a dummy variable to capture this. I also created an indicator for French, Belgian, British, and American colonization. Because many dependent territories changed hands many times, these dummies are based on countries' colonial status after 1900. Most Latin American former Spanish colonies are thus, included with Thailand and Turkey

[237] For the dataset, see: Ross, Michael L, 2013, "Oil and Gas Data, 1932-2011", http://hdl.handle.net/1902.1/20369 UNF:5:dc22RlDasveOTAJvwljBTA== V2

in the never-colonized, baseline category, except for Haiti and the Dominican Republic, which take a one for the American dummy. Other colonial legacies, such as Portuguese colonization are not included because all Portuguese colonies either gained independence early enough to be considered "never colonized" or too late to be included in this analysis. [238]

VIII. Estimation and Results: Enrollment as the Dependent Variable

First, I regressed the gross secondary enrollment rate on indicators of protest, foreign threat, and many different combinations of control variables to test the hypothesis that governments provide education to satisfy citizens' demands, especially when constrained from repression by foreign threat. Since the dependent variable, the gross secondary enrollment rate, is continuous, an ordinary least squares (OLS) model is the appropriate method for estimation.

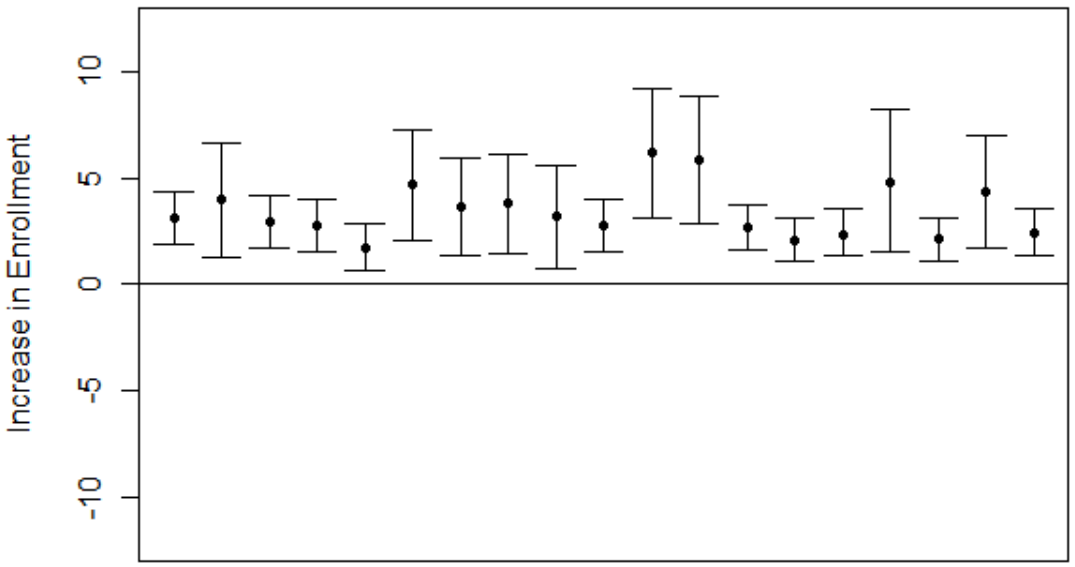
These analyses overwhelmingly confirm the hypothesis that protest leads to greater provision of education, controlling for other confounding variables. Figure 1 shows the effect of the number of lagged protests (both peaceful anti-government demonstrations and riots) per 100 thousand citizens on subsequent gross secondary enrollment rates controlling for foreign threat and several combinations of other variables. The dots represent the coefficients (the estimated size of the effects), while the lines with whiskers represent the upper and lower bounds of the 95 percent confidence intervals. It is clear that the coefficients remain positive in all models and that the lower bound of the 95 percent confidence interval never crosses the 0 line. This means that we can reject the null hypothesis that there is no effect of demonstrations on gross secondary enrollment at the 95 percent level.

[238] See: James Fearon and David Laitin "Additional Tables for Ethnicity, Insurgency, and Civil War" February 6, 2003. Available at: *web.stanford.edu/group/ethnic/.../addtabs.pdf*

However, the coefficients vary quite a bit from one model to another, ranging from just 2, to as high as 6. Thus, the smallest estimate of the effect that any of these models give us is that one additional protest per capita increases secondary enrollment by only 2 percent, while the largest estimate is that one additional protest per capita increases enrollment by 6 percent.

A coefficient of 2 means that for every additional protest with 100 participants per 100 thousand citizens, enrollment rates increase by 2 percent. The standard deviation of the independent variable is 4.9 (roughly 5) and it ranges from 0 to 63.7 protests per 100 thousand citizens. A one standard deviation increase in the protest rate (5 additional protests per capita) leads to a 10 percent increase in secondary enrollment even in the model with the smallest coefficient. A coefficient of 6 means that every additional protest per capita increases enrollment by 6 percent and a standard deviation increase in the protest rate increases enrollment by 30 percent or more than one standard deviation. This is a substantial increase because enrollment ranges from 7 percent to 104 percent with a standard deviation of 24.5 percent. Thus, a one standard deviation increase in the rate of protest leads to a half standard deviation increase in enrollment rate in the models with the largest coefficients.

Figure 1



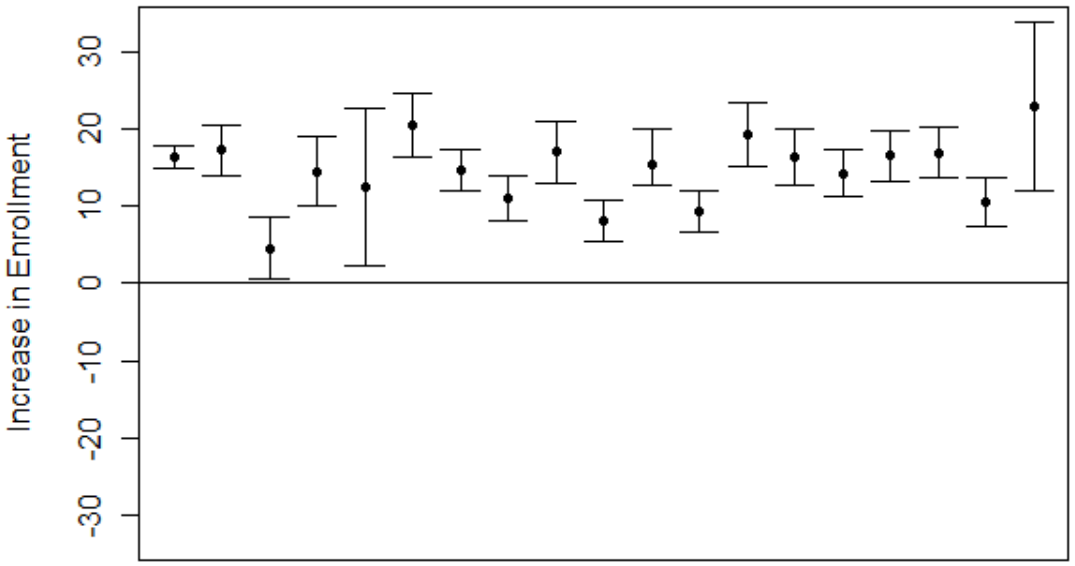
Effect of Demonstrations on Enrollment

Figure 2 shows the effect of foreign threat on secondary enrollment rates in models with the protest variable included, with dots representing coefficients and the vertical lines representing the 95 percent confidence intervals. The relationship is statistically significant in all models because the lower bound of the confidence intervals never crosses the horizontal line at 0.

Substantively, this figure shows that the effect of having had a war in the post-World War II era on secondary enrollment is quite important in most models, although the estimated effect varies a bit from one model to another. The smallest estimate of the effect is that having a foreign threat increases secondary enrollment by about 8 percent, while the largest estimated effect is that threatened governments enroll 30 percent more of their countries' children in high school than governments that don't. However, the overwhelming majority of these coefficients seem to be

around 12, meaning that the best estimate is that governments facing foreign threats have 12 percent higher high school enrollment rates than countries that don't.

Figure 2



Effect of Foreign Threat on Enrollment

Figure 3 shows the effect of strikes with 1,000 participants divided by population in millions (or one participant per thousand citizens) on enrollment rates. The coefficients are positive and statistically significant at the 95 percent level in all 20 model shown here. This means that we can be highly confident that the lagged rate of strikes increases subsequent secondary enrollment rates.

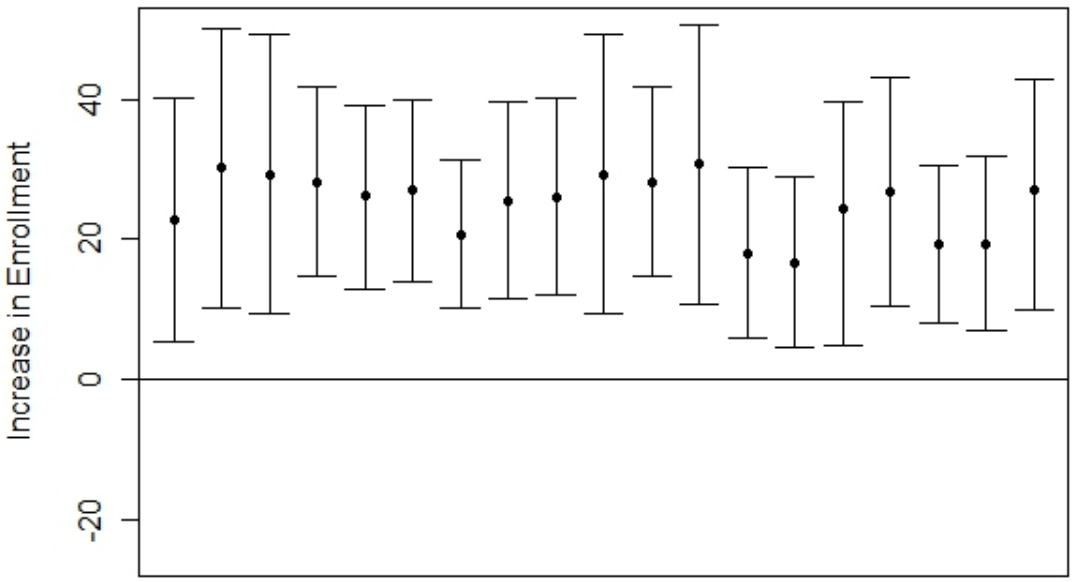
The coefficients range from 18 to roughly 35, which means that a one unit increase in the rate of strikes per million people in a given year increases secondary enrollment by between 18 and 35 percent in these models. This is a very large effect because the rate of strikes ranges from 0 to 2.7 per every million citizens, with a standard deviation of 1.5. A standard deviation increase

in the rate of strikes per million people thus increases secondary enrollment by 24 to 52 percent, depending on the model.

These findings support the argument in Chapter One and the qualitative evidence from the case studies. As the Singapore and Korea case studies showed most vividly, increasing strike rates seem to have a large impact on government policy. Since the indicator of strikes here only captures events with over 1,000 participants and have explicitly political goals, these are exactly the kinds of events that took place in Singapore during the mid-1950s, just before the Labor Front government expanded access to secondary education. This indicator also captures the massive, communist-led strikes that threatened Rhee's government during the early years, just before he increased government investments in education.

The much greater magnitude of the coefficient on strikes, compared with the estimated effect for other protests shown in Figure 1 also fits the qualitative evidence. One would expect strikes to be more threatening because urban industrial workers tend to have existing civil society institutions (unions) and thus, have greater potential to revolt than other citizens. This explains why even Sukarno's government in Indonesia responded to labor organizations with increased provision of public schooling in urban areas although education in rural areas were largely neglected under his administration. To the extent that the indicator of strikes measures protest by urban, industrial workers, one would thus, expect it to have a more significant impact on policy than more general protests.

Figure 3

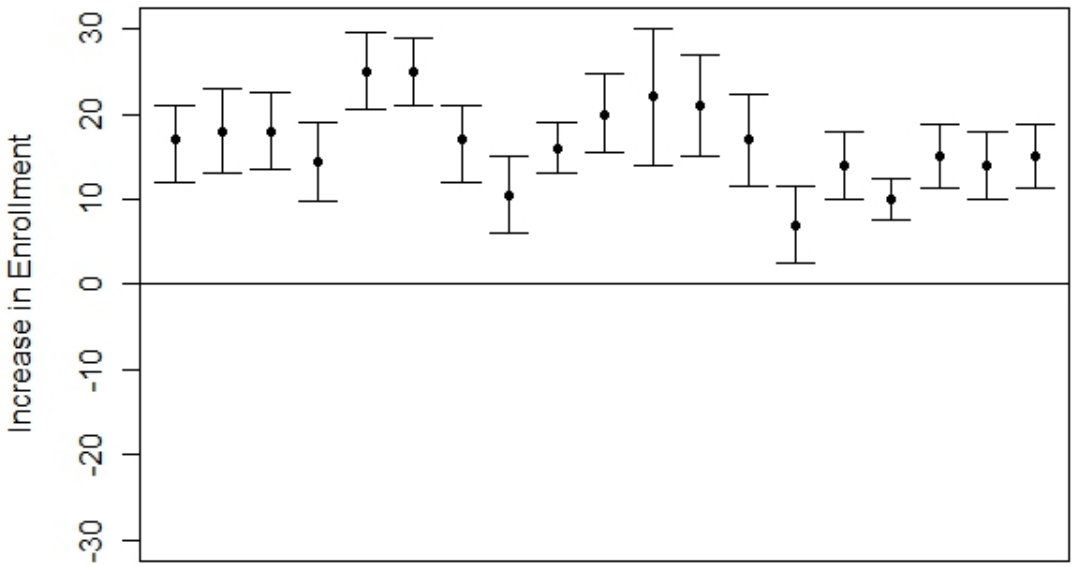


Effect of Strikes on Enrollment

Figure 4 shows the effect of foreign threat on enrollment when strikes are included in the model as the indicator of domestic threats. Like all the previous models, the independent variable of interest here, foreign threat, is positive and statistically significant. Thus, the relationship is robust and we can reject the null hypothesis that there is no relationship between these variables with 95 percent certainty.

Substantively, the coefficients range from 6 to 25, meaning that states that have fought wars with their neighbors have between 6 and 25 percent higher enrollment rates than those that don't. This effect is quite similar to the effect of foreign threat on enrollment when protests are included instead of strikes, as shown in Figure 2. The effects shown in Figure 4 support the argument in previous chapters.

Figure 4



Effect of Foreign Threat on Enrollment

As predicted in Chapter One, and shown in the case studies, governments that face foreign threats and thus, may need to recruit soldiers seem to adopt policies that coopt workers instead of cracking down on them. The coefficients for the foreign threat indicator are usually larger in the models that include the strike measure, compared with the models that include broader indicators of protest. This means that foreign threats increase investments in education the most when urban industrial workers are also potentially rebellious. Since these coefficients represent government response to demands from urban industrial workers, they also show that governments actually offer more concessions when they are constrained from using repression.

IX. Results from the Second Model

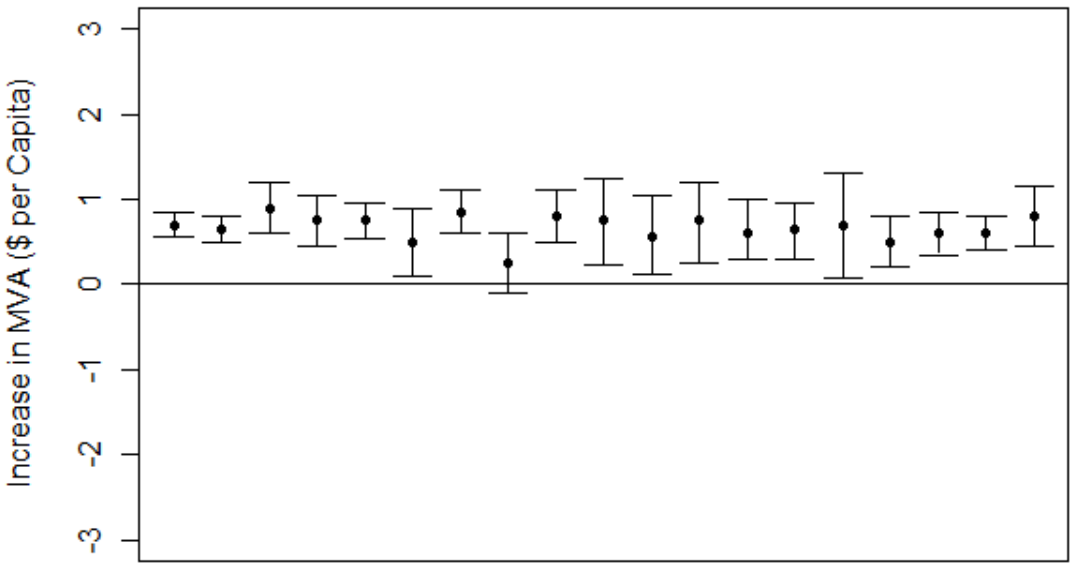
This dissertation is ultimately concerned with the effect of policies on economic outcomes. To test the argument that investments in education that result from government concessions in the

face of foreign threat and mass demonstrations lead to increased manufacturing value added, I run a series of regressions where manufacturing value-added, per capita (MVA) is the response. Gross secondary enrollment is the main independent variable of interest. If the argument in Chapter One is correct, the relationship between these two variables should be positive and statistically significant.

Figure 5 shows the effect of gross secondary enrollment rates on manufacturing value-added, per capita, with the points representing the coefficients, and the vertical lines showing the 95 percent confidence intervals. The coefficients are consistently positive across all the different models used and the lower bound of the confidence interval is above the zero line in all but one. This means that the estimates are statistically significant at the conventional 95 percent level in most models. Even in the sole regression where the lower bound of the confidence interval crosses 0, the estimate had a p-value of .09, and is thus statistically significant at the 90 percent level.

Figure 3 shows that the coefficient estimates for the effect of a one percent increase in lagged enrollment on manufacturing value-added vary quite a bit across different models. The smallest coefficient is only 0.18 while the largest is 1 in these models. The most common coefficient is about .7, which means that the best estimate is that a 10 percent increase in secondary enrollment rates, leads to a $7.00 increase in MVA. A one standard deviation increase in the lagged secondary enrollment rate therefore increases manufacturing value-added per capita by $21. MVA varies from $.48 per person to $459.47, with a standard deviation of $44. A standard deviation increase in the secondary enrollment rate therefore increases MVA by half a standard deviation.

Figure 5



Effect of Enrollment on MVA

This effect is quite substantial because it measures the effect of education on worker productivity in the manufacturing sector. These results confirm the findings from the qualitative chapters that human capital is important for increased productivity even when controlling for geographic conditions, lagged GDP per capita, and a host of other variables.

The contrasts between Singapore and Korea on the one hand and Indonesia on the other, illustrate the mechanism through which enrollment affects industrialization and helps make sense of these quantitative findings. The AITs were attractive sites for outsourcing production from the late 1960s onwards because they had workers with enough secondary education to be trainable. For example, Singapore experienced a 60 percent increase in manufacturing employment in the years after the Labor Front and then the PAP expanded access to education. The textile, apparel, and electronics firms that relocated their production to Singapore during this period could just as

easily have chosen Malaysia, which offered similar tax incentives and EPZ infrastructure. Instead, they chose to invest in the city-state because its workers were more highly educated than Malaysians.

Since MVA is only measured after 1970, much of the effect is clearly due to the ability of countries with higher enrollment rates to sustain industrialization, even as wages rose due to their educated and thus, more productive workers. As shown in the Singapore chapter, the government actively promoted wage gains during this period that made Singapore lose its competitiveness in low-skilled footloose industries like apparel. This policy was combined with generous subsidies for firms that trained workers, but would not have been effective at replacing jobs in apparel with new ones in electronics had Singaporeans lacked the education and skills to learn quickly. This explains why electronics output per worker grew faster than the cost of labor during the 1980s in Singapore. [239]

One limitation of this analysis is that measuring enrollment does not take into account qualitative differences between different countries. As the case studies showed, South Korea and Singapore placed much greater emphasis on math and science in their curricula than Malaysia, while Suharto's Indonesia placed even less emphasis on these job-relevant skills. Since the enrollment rate does not measure these differences, countries with relatively high enrollment but poor quality education have the same values as countries with the best education systems in the developing world. Thus the effect of education on MVA would almost certainly be larger if indicators of quality in the education system were available because countries like Malaysia with high enrollment rates but mediocre quality were only partially successful at industrialization.

[239] Wong, 177

X. Conclusion

I have estimated the statistical relationship between indicators of foreign and domestic threats to the security of incumbent regimes on the one hand, and secondary enrollment on the other. These regressions show that there is a statistically significant relationship between these indicators. This supports the explanation for policies from the first chapter of this dissertation because it shows that even outside Asia, government invest more in human capital when they face challenges to their rule from their own citizens or from foreign states.

I also found that there is a statistically significant relationship between high school enrollment and manufacturing value-added. This proves that secondary enrolment has an important effect on subsequent industrialization. The relationship between foreign threat and domestic opposition shown in the first set of regressions therefore explains a policy that in turn, explains economic outcomes. These analyses demonstrate that the argument in Chapter One based on East Asian cases also applies outside this region. In conclusion, regression analysis therefore supports the findings of the qualitative chapters and proves that these findings generalize to a wider universe of cases.

XI. List of Cases

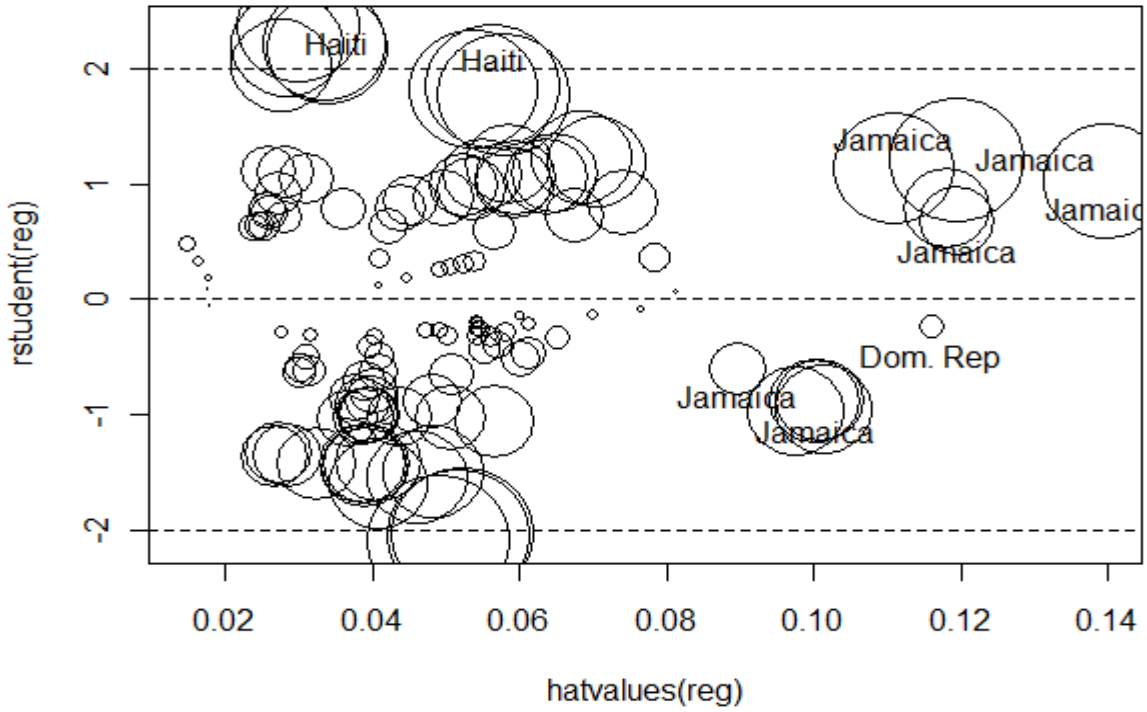
Algeria
Argentina
Benin
Bolivia
Brazil
Burkina-Faso
Burundi
Cameroon
Central African Republican republic
Colombia
Congo
Costa Rica

Cote d'Ivoire
Chad
Chile
Democratic Republic of the Congo
Dominican Republic
Ecuador
Egypt
El Salvador
Ethiopia
Equatorial Guinea
Gabon
Ghana
Greece
Guatemala
Guinea
Haiti
Honduras
India
Indonesia
Iran
Iraq
Ireland
Israel
Jamaica
Jordan
Kenya
Korea (South)
Kuwait
Lebanon
Liberia
Libya
Nepal
Niger
Madagascar
Malawi
Mali
Malaysia
Mauritania
Mexico
Morocco
Nicaragua
Pakistan
Panama
Paraguay
Peru
Philippines

Portugal
Rwanda
Saudi Arabia
Singapore
South Africa
Somalia
Spain
Sri Lanka
Sudan
Syria
Taiwan
Tanzania
Thailand
Tunisia
Turkey
Uganda
Uruguay
Venezuela
Zambia
Zimbabwe

XII. Statistical Appendix – Diagnostic Plots and Other Graphs

I examined several diagnostic graphs to ensure that the results obtained above were not the result of some unusual observations. This included examination of plots of studentized residuals against predicted values of the response variable to check for outliers. I found that Haiti, Jamaica, and the Dominican Republic were extremely influential observations in several analyses. This plot shows that these cases were outliers that drew the regression surface towards them more than most other cases in the dataset.



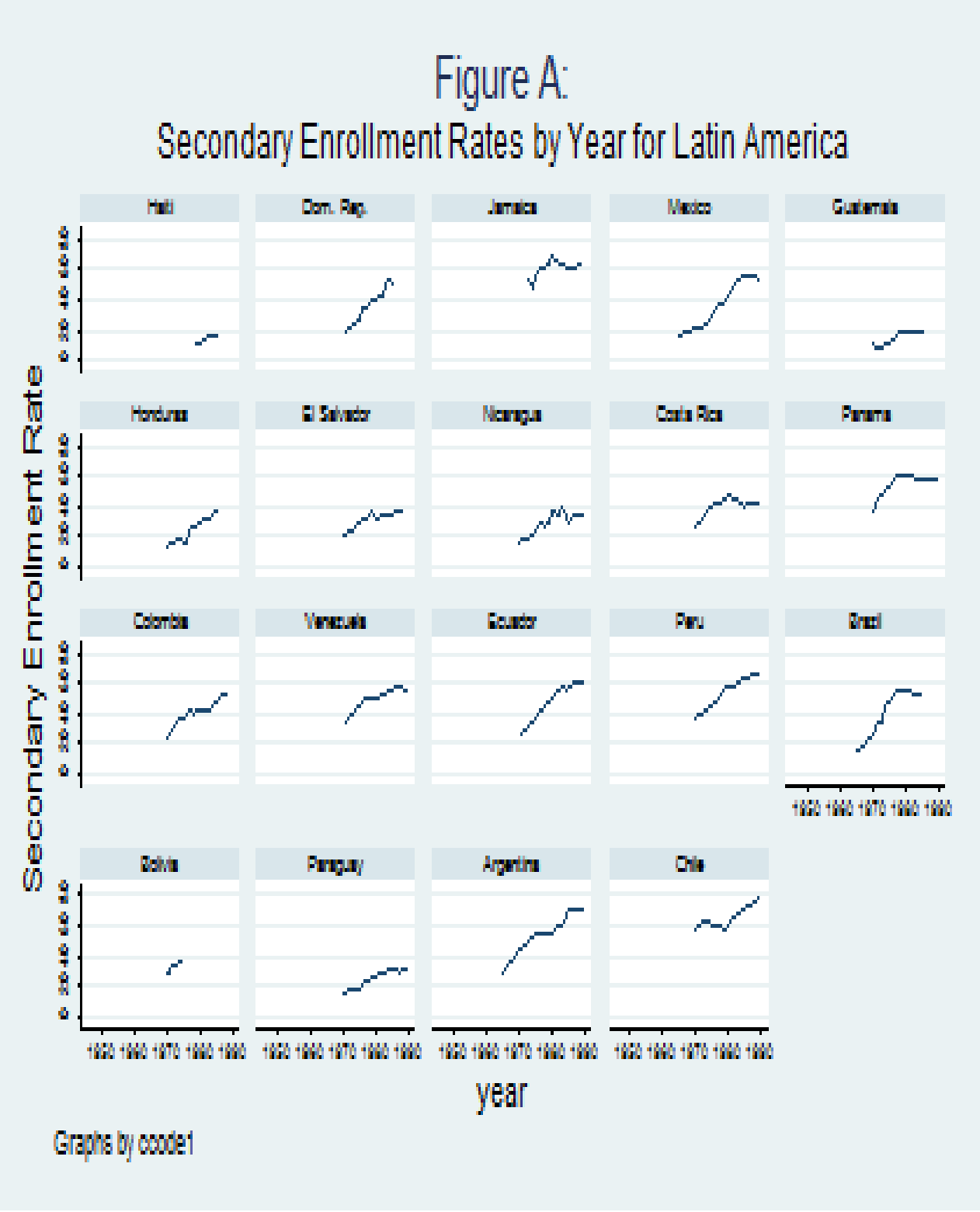
Based on this plot (and similar ones from other regressions), I re-ran the regressions without these cases, but the results were the same. I also tried the regressions without the cases that were used in the qualitative chapters, by first deleting them one-by-one, and then deleting all of them. This did not change the signs or statistical significance of protest, foreign threat, or the strike indicators either. I also tried the regressions that include the value of oil production per capita without Saudi Arabia, which produced $37,225 of oil per capita in 1980, vastly more than any other country. This did not change the sign or statistical significance of the coefficients. I also tried dropping Venezuela, Kuwait, Iraq, and Iran, which did not change the signs or levels of statistical significance for threat or indicators of domestic threat to incumbent regimes either. However, oil production per capita is no longer statistically significant when all four of these

countries are dropped. I also tried dropping the cases used in the qualitative case studies, first one-by-one, and then all of them together. This did not change the results.

The models with results shown in figures 1-5 estimate results with the equation $\hat{Y} = \alpha + \beta_1 X_1 + \cdots \beta_k X_n + \varepsilon$ for n independent variables *X* and *k* regression coefficients β. This estimates a single slope β for each variable and a single intercept α for the regression. However, many of the observed values of *X* in this dataset are actually repeated measures from different years within the same countries and there is substantial variation across countries.

The data used in this analysis consist of repeated yearly observations from multiple countries (cross-section time series data). Thus, one might suspect that year observations for the same country are correlated with previous year observations. Since both MVA and secondary enrollment increase over time, the regression surface might systematically under-predict values for later years. This would cause the residual, the observed value of the dependent variable Y for each observation minus the predicted value estimated by the regression, to increase over time. Figure A shows the relationship between time and Secondary Enrollment for Latin American

countries and there is a clear upwards trend.



I therefore also tried the analysis including year as a predictor. This did not change the signs or statistical significance of the secondary enrollment indicator in regressions that take MVA as the response variable nor does inclusion of time change the sign or significance of the protest, strike, or foreign threat indicators. I also re-ran the analysis with standard errors clustered by country, and the coefficients remained statistically significant with the same signs as in the figures shows above.

Table 1 shows summary statistics for all variables used in the analysis.

Table 1: Summary Statistics for Variables Used in the Analysis

Variable	Min.	Max.	Mean	σ
Railroad Density (Km/km^2)	0	0.032	0.007	0.008
GDP Per Capita 1950	343	7424	1577.17	1242.37
Polity Score	-10	10	-2	6.53
ACLP Dichotomous Regime	0	1	0.027	0.449
Percent Mahayana Buddhist	0	92	6.1	20.8
Percent Chinese Immigrant	0	1.5	0.2	1.4
Percent Ethnic Chinese/Korean	0	100	2.7	14.84
Land area 100 Km from Coast	0	100	37.68	35.08
Female Wages, % Male Wages	48.2	87	68.32	6.67
GDP Per Capita	323	10057	2123	1589.39
Oil production Per Capita, $	0	37225	287.18	1885.25
MVA (2nd Dependent Var.)	0.41	459.47	31.81	44.51
Gross Secondary Enrollment	7.04	104.79	38.21	30.89
Strikes per 1,000,000 People	0	2.72	0.24	1.49
Protests per 100,000 People	0	63.73	1.73	4.91
Foreign Threat (dummy)	0	1	0.09	0.28

Table 2 shows the regression results from the models presented in Figures 1 and 2, with the signs, coefficients, standard errors, R^2, and the number of observations for all variables. The standard errors are shown in parentheses.

Table 2: Regression Results, DV is Secondary Enrollment

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
N	603	603	277	280	280	612	615
R^2	0.18	0.3	0.33	0.35	0.54	0.46	0.21
Protest	5.74*	2.82*	4.69*	4.69*	3.82*	3.21*	5.92*
per 1000	(1.49	(1.42)	(1.90)	(1.89)	(1.63)	(1.23)	(1.47)
Foreign	15.31*	23.26*	14.67*	14.73*	17.15*	15.06*	15.50*
Threat	(1.61)	(2.83)	(2.43)	(2.37)	(2.92)	(1.58)	(1.89)
Democracy	-	3.84*	1.50	1.02	3.76	-	-
(dummy)		(1.58)	(2.09)	(2.14)	(1.88)		
legselec	-	-	-	2.98	3.30*	-	-
				(1.79)	(1.57)		
GDP per	-	-	0.005*	0.005*	0.004*	-	-
Capita			(0.001)	(0.001)	(0.001)		
Polity	-	-	-	-	-	-	0.54*
							(0.11)
railroad	499.04*	499.50*	115.86	-	-	135.31*	414.88*
density	(116.99)	(112.11)	(165.06)			(95.90)	(118.32)
No. of	2.75*	-0.27	1.04	0.57	-4.26*	0.82	1.40
Parties	(1.12)	(1.23)	(1.50)	(1.66)	(1.60)	(0.92)	(1.15)
GDP 1950	-	-	-	-	-	-	-
oil $ per	-	0.006*	-	-	-	-	0.005*
capita		(0.002)					(0.001)
Pct. Chinese	-8.13*	-1.53*	-	-	-	-	-
Buddhist	(4.50)	(5.18)					
% Chinese	-	-	6.65*	-	-	969.62*	2.45*
immigrant			(10.63)			(446.98)	(5.35)
% ethnic	-	-	-	-	-	-	-
Chinese							
American	-	10.75*	-	-	-	-	-
colony		(2.34)					
British	-	-9.40*	-	-	-	-	-
Colony		(3.05)					
French	-	-14.65*	-	-	-	-	-
Colony		(2.20)					
Japanese	-	-	-	-	-	-	-
Colony							

E. Asia (dummy)	-	-	-	-	7.65* (2.86)	-	-
S. Asia (dummy)	-	-	-	-	-24.88* (3.98)	-	-
MENA (dummy)	-	-	-	-	5.31* (2.98)	-	-
Africa (dummy)	-	-	-	-	-12.16* (4.36)	-	-
Europe (dummy)	-	-	-	-	-	-	-
Intercept	26.89* (2.09)	33.20* (2.45)	28.18* (3.13)	24.04* (3.74)	33.91* (3.69)	18.79* (1.73)	30.22* (2.26)

*P<.05

Table 2: Regression Results, DV is Secondary Enrollment (continued)

	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
N	615	639	615	280	280	869	869
R^2	0.19	0.18	0.19	0.34	0.52	0.39	0.43
Protest per 1000	5.94* (1.49)	6.17* (1.52)	5.85* (1.49)	4.74* (1.89)	4.10* (1.65)	4.73* (1.22)	4.11* (1.18)
Foreign Threat	15.91* (1.90)	17.01* (1.93)	14.57* (1.89)	14.3* (2.32)	15.69* (2.91)	4.50* (2.00)	4.36* (2.09)
Democracy (dummy)	-	-	-	2.43) (1.97)	3.29* (1.76)	11.51* (1.46)	11.29* (1.46)
legselec	-0.75* (1.00)	-	-	-	-	0.95* (0.84)	-
GDP per Capita	-	-	-	0.005* (0.001)	0.004* (0.001)	-	-
Polity	-	-	-	-	-	-	-
railroad density	520.47* (116.50)	-	336.99* (114.52)	-	-	-	-
No. of Parties	-	-	-	-	-	-	2.01* (0.92)

GDP 1950	-	-	-	-	-	-	-
oil $ per capita	0.007* (0.001)	0.006* (0.001)	-	-	-	-	-
Pct. Chinese Buddhist	-	-	-	-	-	-	-
% Chinese immigrant	-	-	126.48 (541.11)	-	-	-	-
% ethnic Chinese	-	-	-	-	-	-	-
American colony	-	-	-	-	-	-	-
British colony	-	-	-	-	-	-	-
French colony	-	-	-	-	-	-	-
Japanese colony	-	-	-	-	-	-	44.13* (4.22)
E. Asia (dummy)	-	-	-	-	8.2* (2.88)	18.15* (2.25)	-
S. Asia (dummy)	-	-	-	-	-19.7* (3.56)	-	-
MENA (dummy)	-	-	-	-	7.94* (2.87)	18.7* (1.79)	18.17* (1.73)
Africa (dummy)	-	-	-	-	-12.71* (4.39)	-	-
Europe (dummy)	-	-	-	-	-	39.33* (2.60)	38.32* (2.52)
Intercept	26.42* (2.32)	24.13* (1.93)	34.43* (1.23)	30.21* (1.77)	31.65* (2.080	26.8* (1.45)	26.11* (1.52)

*P<.05

Table 2: Regression Results, DV is Secondary Enrollment (continued)

	Model 15	Model 16	Model 17	Model 18	Model 19	Model 20
N	277	279	634	622	619	615
R^2	0.64	0.59	0.44	0.56	0.47	0.3

Protest	4.53*	2.98*	3.02*	5.01*	3.25*	2.96*
per 1000	(1.44)	(1.54)	(1.28)	(1.46)	(1.24)	(1.43)
Foreign	17.41*	15.57*	9.43*	6.39*	15.26*	22.85*
Threat	(2.54)	(2.76)	(1.99)	(2.25)	(1.58)	(5.41)
Democracy	-	-	3.79*	9.83*	15.27*	-
(dummy)			(1.41)	(1.57)	(1.58)	
Elected	-	-	-	-	-	0.38
legislature						(0.96)
GDP per	0.003*	0.005*	-	-	0.006*	-
Capita	(0.001)	(0.001)			(0.000)	
Polity	0.88*	0.70*	-	-	-	-
	(0.12)	(0.13)				
railroad	3.44	-	-	-	-	460.84*
density	(122.65)					(112.97)
No. of	-5.47*	-4.84*	0.07*	-	1.85*	0.92
Parties	(1.37)	(1.43)	(0.96)		(0.91)	(1.21)
GDP 1950			0.007*	-	-	-
			(0.001)			
oil $ per	-	-0.007*	-0.005*	-	-	0.006*
capita		(0.001)	(0.001)			(0.001)
Pct. Chinese	-	-	-	-11.62*	-2.05	-
Buddhist				(4.42)	(3.75)	
% Chinese	-	13.13	-	-	-	-3.17
immigrant		(8.76)				(5.31)
% ethnic	-18.1*	-	-	-	-	-
Chinese	(2.48)					
American	-	-	-	-	-	10.72*
colony						(2.38)
British	-	-	-	-	-	-8.44*
Colony						(2.40)
French	-	-	-	-	-	-16.01*
Colony						(2.16)
Japanese	-	-	-	-	-	-
Colony						
E. Asia	60.9*	-	-	-	-	-
(dummy)	(7.44)					
S. Asia	-27.72*	-25.03*	-	-	-	-
(dummy)	(3.49)	(3.78)				
MENA	7.00*	7.16*	13.41*	14.57*	-	-
(dummy)	(2.57)	(2.79)	(1.87)	(2.11)		
Africa	-9.41*	-12.25*	-10.95*	-	-	-

(dummy)	(4.31)	(4.22)	(1.98)			
Europe (dummy)	-	-	-	-	-	-
Intercept	45.05*	41.76*	22.07*	25.72*	17.67*	31.97*
	(3.22)	(3.43)	(2.07)	(1.91)	(1.68)	(2.57)

*p<.05

Table 3 shows the results from the models that included the indicator of strikes per capita, shown above in Figure 3 and Figure 4.

Table 3: Regression Results, DV is Secondary Enrollment

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
N	277	612	869	637	631	277	615	279
R^2	0.34	0.46	.015	0.47	0.48	0.34	0.19	0.4
strikes	29.40*	15.90*	22.01*	17.92*	16.95*	30.06*	27.67*	20.76*
	(10.15)	(4.83)	(6.95)	(5.37)	(5.35)	(10.12)	(6.48)	(9.85)
Foreign Threat	13.60*	14.58*	10.24*	15.75*	15.14*	13.77*	15.83*	14.44*
	(2.30)	(6.73)	(2.23)	(1.57)	(1.56)	(2.31)	(1.89)	(2.30)
democracy (dummy)	1.90	-	15.96*	-	-	-	-	-
	(1.90)		(1.54)					
Leg. Elected		-0.41	-	0.232	-	2.97	-	-
		(1.35)		(0.78)		(1.73)		
GDP per Capita	0.05*	0.005*	-	0.05*	0.006*	0.005*	-	0.008*
	(0.005)	(0.002)		(0.002)	(0.001)	(0.001)		(0.001)
Polity	-	-	-	-	0.15*	-	-	-
					(0.09)			
Railroad density	-	117.2	-	-	-	128.29	460.67*	-
		(340.04)				(158.67)	(116.56)	
No. of Parties	-	-	-	2.18*	-	-	3.34*	0.63
				0.90			(1.12)	(1.45)
GDP per Cap.1950	-	-	-	-	-	-	-	-
Oil $ per Capita	-	-	-	-	-	-	0.006*	0.008*
							(0.001)	(0.002)
Pct Chinese Buddhist	-	-	-	-	-	-	-8.60	-
							(4.47)	

Pct Chinese immigrant	-	-	6.05 (10.43)	-	10.49* (4.43)	-	-	-
% ethnic Chinese	-	-	-	-	-	-	-	-
Intercept	31.12* (1.96)	21.78* (4.44)	30.58* (2.17)	16.65* (1.75)	20.58* (1.11)	26.00* (3.81)	25.12* (2.30)	26.20* (2.90)

*P<.05

Table 3: Regression Results (continued)

	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15
N	2794	280	869	279	277	277	615
R ^2	0.35	0.33	0.21	0.56	0.52	0.39	0.31
strikes	29.72* (10.10)	29.64* (10.18)	23.8* (6.69)	26.87* (8.40)	27.28* (8.73)	23.17* (9.89)	17.17* (6.15)
Foreign Threat	14.76* (2.41)	14.31* (2.38)	11.85* (2.14)	15.98* (2.78)	16.01* (2.91)	19.01* (3.33)	23.44* (2.30)
Democracy (dummy)	-	2.28 (1.96)	15.15* (1.62)	-	2.37 (1.86)	0.15 (2.24)	3.68* (1.66)
Leg. Elected	-	-	-	-	1.88 (1.59)	3.62 (1.92)	-0.316 (1.01)
GDP per Capita	.005* (0.001)	0.005* (0.001)	-	0.004* (0.001)	0.004* (0.001)	0.005* (0.001)	-
Polity	-	-	-	0.59 (0.12)	-	-	-
Railroad density	-	-	-	-	42.19 (140.02)	186.86 (162.93)	418.85* (112.45)
No. of Parties	0.914 (1.57)	-	2.49* (1.07)	-	-	-0.69 (1.83)	0.63 (1.23)
GDP per Cap 1950	-	-	-	-	-	-	-
oil $ per capita	-	-	-	-	-	-	0.006* (0.001)
Pct. Chinese Buddhist	-	-	-	-	-	-	
Chinese Immig.%	7.42 (10.37	6.66 (10.25)	-	-	-	-	-2.79 (5.29)
Pct ethnic Chinese American	-	-	-	-	-	11.23*	10.46*

colony						(3.13)	(2.36)
British	-	-	-	-	-	-4.02	-8.99*
Colony						(3.52)	(2.32)
French	-	-	-	-	-	-9.68*	-14.61*
Colony						(3.93)	(2.26)
Japanese	-	-	39.45*	-	-	-	-
Colony			(4.93)				
E. Asia	-	-	-	8.54*	7.26*	-	-
(dummy)				(2.75)	(2.86)		
S. Asia	-	-	-	-21.63*	-20.59*	-	-
(dummy)				(3.37)	(3.54)		
MENA	-	-	-	8.69*	7.06*	-	-
(dummy)				(2.72)	(2.86		
Africa	-	-	-	-11.71*	-10.69*	-	-
(dummy)				(4.31)	(4.00)		
Europe	-	-	-	-	-	-	-
(dummy)							
Intercept	30.39*	30.33*	29.62*	34.74*	29.34*	24.84*	32.67*
	(3.17)	(1.89)	(1.76)	(1.81)	(3.54)	(4.24)	(2.59)

*P<.05

Table 3: Regression Results (continued)

	Model 16	Model 17	Model 18	Model 19	Model 20
N	615	277	615	869	869
R^2	0.32	0.57	0.53	0.51	0.43
strikes	16.91*	25.87*	14.34*	22.91*	27.43*
	(6.08)	(8.29)	(5.06)	(5.34)	(5.7)
Foreign	23.81*	17.36*	18.86*	8.08*	46.08*
Threat	(2.37)	(2.77)	(2.08)	(2.16)	(4.08)
Democracy	-	-	-	7.31*	12.45*
(dummy)				(1.35)	(1.42)
legselec	-	-	-	-	0.56
					(0.82)
GDP per	-	0.004*	-	-	-
Capita		(0.001)			
Polity	0.45*	-	0.73*	-	-
	(0.11)		(0.09)		
railroad	355.82*	-16.7	-10.17	-	-

density	(112.38)	(133.58)	(95.66)		
No. of	-0.27	-4.91*	-4.62*	-	-
Parties	(1.20)	(1.49)	(0.98)		
GDP	-	-	0.005*	-	-
1950			(0.001)		
oil $ per	0.005*	-	-0.005*	-	-
capita	(0.001)		(0.001)		
Chinese	-1.71	-	-	-	-
Immig.	(5.22)				
% ethnic	-	-	-	-	-
Chinese					
American	11.05*	-	-	-	-
colony	(2.34)				
British	-9.79*	-	-	-	-
Colony	(2.38)				
French	-13.99*	-	-	-	-
Colony	(2.14)				
Japanese	-	-	-	38.18*	45.22*
Colony				(3.96	(4.2)
E. Asia	-	8.97*	9.21*	-	-
(dummy)		(2.75)	(2.09)		
S. Asia	-	-27.59*	-25.11*	-13.34*	-
(dummy)		(3.77)	2.75)	(2.45)	
MENA	-	6.17*	6.50*	9.99*	18.69*
(dummy)		(2.78)	(2.00)	(1.84)	(1.73)
Africa	-	-10.4*	-1.85	-16.87*	-
(dummy)		(4.68)	(2.00)	(1.57)	
Europe	-	-	-	34.85*	38.35*
(dummy)				(2.4)	(2.51)
Intercept	-171.97	44.59*	37.34*	37.19*	28.16*
	(522.47)	(3.47)	(2.41)	(1.07)	(1.39)

*P <.05

Table 4 presents the results from the second set of regressions, where manufacturing value-added per capita is the response variable, shown in Figure 5 above.

Table 4: DV is Manufacturing Value-Added Per Capita

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
N	321	182	243	182	187	187	182
R^2	0.36	0.52	0.43	0.44	0.33	0.33	0.52
Enrollment	0.77*	0.75*	0.71*	0.75*	0.89*	0.90*	0.53*
	(0.09)	(0.14)	(0.15)	(0.16)	(0.17)	(0.17)	(0.14)
Railroad	1448.9*	1564.37*	-	-	-	-	-
Density	(209.72)	(285.48)					
GDP per Capita	-	-	-	-	-	-	-
land 100 km coast	-9.61	-0.42	-	-	-	-	-
	(4.66)	(5.95)					
Democracy	-	7.07	-	-	-2.43	-7.33	-3.06
		(4.24)			(5.37)	(5.07)	(5.03)
Polity	-	-	-	-	-	-	-
Elected Legislature	-	-	-1.97	-6.92	-	-	-
			(3.61)	(5.07)			
No. of Parties	-	-	7.31	9.52*	-	-	-
			(3.62)	(3.97)			
Pct Chinese Immigrant	-	-	-	-	-	-	-
% Chinese or Korean	-	-	-	-	-	-	-
Wage gap	-	-	-	-	-	-	-
E. Asia (dummy)	-	-	2.67	0.32	-0.85	0.005*	-
			(6.47)	(6.93)	(7.34)	(0.002)	
S. Asia (dummy)	-	-	-43.42*	-	-	-	-44.09*
			(7.66)				(6.85)
MENA (dummy)	-	-	-24.16*	-	-	-	-26.85*
			(6.13)				(6.04)
Africa (dummy)	-	-	-26.74*	-	-	-	-34.46*
			(6.57)				(6.09)
American colony	-	-	-	-15.49*	-23.67*	-8.51	-
				(7.80)	(8.13)	(8.10)	
British colony	-	-	-	-18.39*	-27.1	-22.04*	-
				(5.35)	(-20.98)	(5.51)	
French	-	-	-	-10.37	7.73	-15.51*	-

colony				(6.86)	(5.52)	(7.51)	
Japanese colony	-	-	-	-	-	-	79.03* (11.20)
Intercept	2.34 (2.73)	3.00 (3.91)	22.35 (11.41)	11.16 (12.06)	27.38* (6.75)	15.63* (6.67)	37.70* (6.24)

*P<.05

Table 4: DV is MVA (Continued)

	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
N	187	187	187	187	182	182	182
R^2	0.45	0.48	0.45	0.44	0.45	0.44	0.69
Enrollment	0.42* (0.17)	0.29* (0.14)	0.46* (0.16)	0.45* (0.16)	0.66* (0.16)	0.63* (0.17)	0.54* (0.13)
Railroad Density	-	-	-	-	2501.87* (392.67)	2436.01* (403.73)	2039.48* (304.82)
GDP per Capita	0.01* (0.002)	0.01* (0.002)	0.01* (0.002)	0.01* (0.001)	-	-	-
land 100 km coast	-	21.69* (6.56)	-	-	-27.22* (10.13)	-27.45* (10.26)	-45.02* (7.85)
Democracy	0.32 (4.80)	-3.97 (4.85)	-0.34 (4.85)	-7.22 (5.00)	-9.79 (5.07)	-	-
Polity	-	-	-	-	-	-0.27 (0.39)	-0.35 (0.32)
Elected Legislature	-	-	-	-	-	-	-
No. of Parties	-	-	-	-	-	-	-
Pct. Chinese Immigrant	-	-	4.2E-06 (6.1E-06)	-1.0E-06 (6.1E-06)	-	-	-
% Chinese or Korean	-	-	-	-	-	-	3.36* (0.30)
Wage gap	-	-	-	0.02* (0.01)	0.02* (0.01)	0.02* (0.01)	0.02* (0.01)
E. Asia (dummy)	4.11 (6.70)	-1.93 (6.77)	-	-	-	-	-
S. Asia (dummy)	-16.37* (8.00)	-9.04 (8.10)	-17.54* (7.96)	-7.73 (8.04)	-	-	-

MENA (dummy)	-5.25 (5.90)	-3.94 (5.76)	-6.88 (5.84)	-4.72 (5.65)	-	-	-
Africa (dummy)	-	-	-	-	-	-	-
American colony	-	-	-	-	10.71 (10.86)	-	16.06 (8.23)
British colony	-	-	-	-	-28.15* (5.53)	-	-32.53* (4.35)
French colony	-	-	-	-	-18.45* (7.24)	-	-18.20* (5.50)
Japanese colony	-	-	-	-	-	-	-
Intercept	4.75 (4.17)	-0.33 (4.34)	6.05 (4.22)	0.34 (4.33)	24.1 (6.72)	19.77* (6.48)	14.23 (7.43)

*P<.05

Table 4: DV is MVA (Continued)

	Model 16	Model 17	Model 18	Model 19	Model 20
N	187	182	182	182	182
R^2	0.52	0.57	0.59	0.69	0.48
Enrollment	0.85* (0.12)	0.74* (0.12)	0.92* (0.12)	0.54* (0.12)	0.49* (0.17)
Railroad Density	-	1197.53* (265.40)	1436.29* (268.21)	1929.58* (298.57)	1947.56* (322.28)
GDP per Capita	-	-	-	-	-
land 100 km coast	-	-	-19.34* (5.87)	-42.63* (7.78)	-27.18* (7.68)
Democracy	-	-	-	-	-
Polity	-	-	-	-	-0.53 (0.45)
Elected Legislature	-4.85 (3.78)	-5.63 (4.32)	-5.12 (4.20)	-6.41 (3.77)	-
No. of Parties	15.96* (2.99)	12.38* (3.14)	15.60* (3.21)	9.37* (2.92)	-
Pct Chinese Immigrant	-	-	-	-	-

% Chinese	3.08*	2.79*	2.89*	3.42*	-
or Korean	(0.35)	(0.34)	(0.34)	(0.30)	
Wage gap	0.02*	0.02*	0.02*	-	-
	(0.01)	(0.01)	(0.01)		
E. Asia	-	-	-	-	-4.88
(dummy)					(7.60)
S. Asia	-	-	-	-	-
(dummy)					
MENA	-	-	-	-	-
(dummy)					
Africa	-	-	-	-	-
(dummy)					
American	-	-		14.32	-
colony				(8.26)	
British	-	-		-32.16*	-
colony				(4.27)	
French	-	-		-14.88*	-
colony				(5.16)	
Japanese	-	-	-	-	-
colony					
Intercept	-7.42	5.79	-8.70	27.15*	34.89*
	(7.42)	(8.90)	(8.70)	(9.01)	(7.62)

*P<.05

Chapter Seven:
Conclusion

This dissertation argues that governments adopted the distinctive set of policies associated with the spectacular industrialization of the Asian Tigers as a strategy to coopt citizens when governments felt threatened by foreign states, citizens' protests, or both. I have tested and proven the validity of this argument using qualitative methods of case selection and process-tracing, as well as large-N statistical analysis. These analyses consistently support the thesis of this dissertation.

I. Recapitulation of the Causal Argument

In the first chapter, I argued that governments in different countries faced different levels of protest depending on the level of clientelism. In places where clientelism was absent, citizens organized larger and more frequent protests against their governments. This, in turn, motivated governments to implement four policies to coopt their citizens: (1) early, universal secondary education; (2) government worker training programs; (3) creation of state-owned enterprises that adopted new technology *and trained workers* to use these technologies; (4) early creation of export processing zones. Threat of foreign invasion also scared rulers into adopting these policies because they made the potential for future protests more threating. When governments were afraid that neighboring countries would invade and remove them from power, they protected themselves by drafting citizens into their militaries. This made crackdowns more costly because citizens shot by

their own governments could not be mobilized to fight. Therefore, governments could not disperse protests when they faced severe foreign threats and instead adopted the four policies to preempt protest.

II. Four Critical Policies

Each of these four policies was complementary because they each contributed to sustainable accumulation of human capital in different ways. Secondary education gave workers the basic knowledge and skills to work in modern factories and the foundational knowledge and discipline for some of them to receive more specialized training. Worker training subsidies directly provided opportunities for workers to learn the skills needed to use new equipment and become productive workers in modern factories. SOEs promoted industrialization by bringing new technologies to developing countries that private investors were unwilling to try. However, workers only benefited from exposure to such technologies when they were already easy to train because of secondary education, and benefitted the most when state-owned firms invested additional resources in training. Export processing zones made these investments sustainable by earning foreign exchange and attracting firms whose taxes provided revenues to governments. EPZs also gave managers experience producing goods for export.

While some of these policies were adopted to achieve development goals, they were adopted earlier and more comprehensively when governments faced severe threats from protestors or when foreign threats constrained governments from cracking down on protestors. Each of these policies reduced protests in different ways. EPZs increased employment, which not only kept workers quiescent, but also kept them busy. Further, EPZs relied disproportionately on short-term, disproportionately female workers. By increasing the percentage of the workforce that expected to leave their jobs soon, EPZs therefore reduced incentives to organize strikes in particular because

short-term workers have few incentives to risk getting fired or arrested in the short term to win long-term wage gains.

Secondary education kept high school age youths busy, so that they would have less time to participate in protests. Education also satisfied parents who wanted education for their children. SOEs and worker training programs gave workers better jobs when they trained them in new skills, and thus, bought support.

III. Empirical Strategy Recap

After explaining the causal argument in the first chapter, I tested this theory using a mixed method approach that combines qualitative analysis with a large-N quantitative analysis. This mixed method allowed me to trace causal mechanisms, control for important confounding variables, address issues of selection bias, and establish external validity.

Qualitative analysis of case studies allowed me to trace causal mechanisms through process-tracing. This entails explaining the sequence of steps that link independent variables, intervening variables, and dependent variables to show that there is a causal process linking these variables, rather than just correlation.

The qualitative case studies also allow me to control for important confounding variables, while still measuring variables in a way that captures important qualitative differences between cases. This was achieved by comparing cases with similar values of potential confounding variables but different values of one or both independent variables (most-similar systems design). I also compared two countries with very different values of confounding variables but similar levels of protest (a most different systems design).

The large-N statistical analysis in this dissertation allows me to ensure that the inferences drawn from the case studies are not due to biased case selection. This is important because the

cases for qualitative analysis were chosen based on their values of key independent and confounding variables. Large-N analysis also allows me to test the generalizability of inferences from the case studies to regions outside East and Southeast Asia.

Chapters Two and Three compare Java and South Korea because these are two most similar systems with respect to their levels of prewar industrialization, state strength, political regimes in the 1950s, and levels of infrastructure in the immediate postwar period. This allows me to control for these attributes while still comparing two cases that had different levels of protest and foreign threat. Thus, these two cases help isolate the effect that these variables had on policies, and then the effect that policies had on levels of industrialization.

The two chapters comparing Korea and Indonesia also allow me to show the causal mechanisms. The second chapter explains how clientelism reduces large protests by comparing Java with South Korea from the early 20th Century to the late 1950s. This chapter not only compares these cases but also shows the causal links between the dismantlement of clientelism in South Korea under Japanese rule and the emergence of a large, national, peasant labor union, and smaller urban, industrial unions. At the same time, the chapter shows that elites monitored citizens much more closely in Indonesia than in Korea and had interests in preventing protest. They therefore, used their social, economic, and political resources to punish potential protestors and to keep protest from becoming large. The chapter also shows that Javanese elites dominated civil society groups, preventing non-elites from creating their own autonomous organizations like the unions that existed in Korea.

The second chapter also showed the link between protest (or its absence) and government policies. I illustrate this mechanism by contrasting different regions of Indonesia, while also contrasting Java with South Korea. I show that in urban Indonesia, the government was more

willing to invest in education because citizens formed unions that could aggregate their demands and this created incentives for Indonesia's first independent government to educate the children of those citizens. In contrast, rural areas did not receive much investment in education. The chapter also shows that well-organized Korean workers and farmers also got far more policy concessions than their Indonesian counterparts.

Chapter Three shows the next step in the causal process: the link between policies and industrialization in Indonesia and South Korea. This chapter explains how Suharto increased surveillance of ordinary citizens throughout Indonesia and made it almost impossible for them to organize civil society groups that could challenge his rule. After doing this, the dictator had few incentives to invest in worker training or secondary education, and instead used SOEs as a tool to buy off dissatisfied generals through corruption and mismanagement. Although Suharto attracted some foreign investment in apparel and textile sweatshops, these did not lead to continual upgrading of Indonesia's manufacturing sector.

This chapter contrasts this outcome in Indonesia to the politics, policies, and industrial transformation of South Korea under Park. It shows that after the overthrow of his predecessor, Rhee, Park must have been aware of his citizens' capacity to protest and potentially threaten his hold on power. This, combined with North Korean aggression and his need to maintain conscription, forced Park to expand all levels of education, even when he did not want to do so. The need to keep male workers from striking incentivized the Big Push into heavy industries and the investments in worker training and SOEs that comprised this program. These policies allowed Koreans to increase their skills and thus, become more productive workers. This in turn, sustained industrial growth.

Chapter Three also shows that Park attempted to provide jobs by creating EPZs. It also explains how reliance on temporary workers in these zones reduced protest and undermined incentives to invest in the Korean electronics industry. I exploit variation over time and show that after protests intensified in the 1980s, Park's successor responded by providing broader benefits including greater investment in electronics.

The fourth chapter explains how Malaysian rulers faced intermediate levels of protest but no foreign threat, and thus adopted some of the four crucial policies, but did not promote as much human capital formation as Singapore or South Korea. This allows me to show the full range of variation in the level of protest. The Malaysia case study also allows me to control for the role of culture and natural resources by comparing Malaysia to Indonesia, which both have a similar culture (they speak the same language and have the same majority religion) and have similar natural resources.

In the Malaysia chapter, I also trace the steps in the causal process by showing that due to colonial institutions that undermined clientelism, there were far more protests in postwar peninsular Malaysia than on Java. I then show that leaders of Malaysia's governing UMNO party provided universal secondary education and created EPZs to promote employment and gain support from their more rebellious citizens. However, this chapter shows that Malaysian rulers had fewer constraints on repression than their Korean counterparts and thus, did not create SOEs that trained workers in new technologies until the 1980s. This case therefore shows that variation in the independent variables explains Malaysia's industrial policies and it intermediate level of industrialization.

Chapter Five shows how protests alone motivated Singaporean governments to adopt the four policies described above, because Singapore has never faced a serious threat of invasion. I

illustrate the causal mechanisms between protest and education by showing that students led many of the largest and most violent protests in Singapore's post-colonial history and that they demanded better schools. I then show that governments from the 1950s onwards tried to meet these demands first through increased funding, and then with even more money, and particular support for the bilingual educational curriculum that protestors demanded. The chapter shows that these policies were critical for reducing protests through within-case analysis that shows that repression only reduced the frequency and size of demonstrations significantly when combined with these concessions.

This chapter also compares Singapore with other cases to show that many variables that cause industrialization according to existing works took much lower values in Singapore than in Korea, yet the two countries ended up with similar policies and hence similar levels of industrialization. The chapter contrasts Singapore with Java to show that the latter was actually more industrialized and had a bureaucracy with more experience managing the economy than Singapore in the 1950s. Thus, Indonesia should have been the great economic success story of Southeast Asia, rather than Singapore, if theories like Kohli's and Evans' are correct. The chapter shows that Singapore also had much lower levels of state capacity, colonial-era industrialization, and experience managing the economy than Korea, yet both were successful at guiding postwar industrialization. At the same time, both countries had similar levels of protest. This demonstrates that the level of protest determines economic policies and motivated Singapore to adopt the four crucial policies I identified in Chapter One.

IV. Implications for Existing Work

This dissertation has important implications for existing works because it shows that populism and protest are not always bad for development. I show that although governments in

Korea and Singapore were repressive, they also needed to coopt citizens because repression alone was inadequate to achieve stability. I also show that governments in these countries adopted different education policies than they wanted in order to satisfy protesting groups. Although protesting groups, especially corporatist unions, also modified their demands to seek more education and training for workers and their children and fewer immediate wage gains, they resumed protests when governments failed to deliver on their promises. Thus, works like Huntington (1968), Kohli (2004), and Kim (1997) that attribute development to repression of excessive populism fail to recognize that many policies of the developmental states of East Asia originated from popular demands and were sustained by threats to resume protest. [240]

The insight that popular protests promote industrialization allows the field to achieve some theoretical synthesis between views of the state as rent-seeking and studies that see the state as the engine driving late industrialization. States implement policies that rulers design to keep themselves in power. Policies that benefit society therefore, require citizens with the capacity to punish rulers who break their agreements with social actors, and this, in turn requires institutions that free citizens to organize and protest. Without such institutions, rulers have every incentive to behave exactly as theories of rent-seeking predict.

This dissertation also explains why different countries were more successful than others at creating the human capital that Amsden (1989) identifies as critical, and thus situates this economic literature within a political and social context. Although previous works showed that human

[240] Atul Kohli, *State-Directed Development: Political Power and Industrialization in the Global Periphery,* (New York: Cambridge University Press, 2004). See also: Eun Mee Kim, *Big business, Strong State: Collusion and Conflict in South Korean Development, 1960-1990*, (Albany, New York: SUNY Press, 1997).

capital is crucial for development, I explain the politics behind human capital policies and thus, explain why some countries invested more in human capital than others.[241]

V. Policy Implications

In addition to causal analysis, the case studies and theory presented in this project provide many useful lessons about government accountability, public goods provision, and economic policy. The entire project suggests that elections are neither necessary nor sufficient for governments to respond to citizens' demands. Instead, this dissertation shows that citizens with strong civil society institutions will pressure their governments to provide better and broader public services than citizens without such institutions, regardless of whether or not they live under electoral democracy. Strong labor unions, including unions in rural areas are particularly important because they help non-elites to solve collective action problems, articulate demands, and pressure governments into responding to these demands. However, the Singapore case shows that such unions need not be entirely independent from the government, and do not always need to adopt confrontational tactics to have their demands met.

Since the Indonesia chapter has shown that clientelism was a severe impediment to the creation of bottom-up civil society groups, and this clientelism was perpetuated by inequalities of land ownership, one policy implication is that land reform is key to promoting good governance. The policy implications of this study are that many countries in developing areas from Sub-Saharan Africa to Latin America and the Philippines would have more accountable governments, and better prospects for achieving consolidated democracies if they implemented thorough land reform.

[241] Alice Amsden, *Asia's Next Giant: South Korea and Late Industrialization,* (New York: Oxford University Press, 1989). See esp. chapters 7 and 9.

The Singapore chapter further shows that if the concept of "land reform" is applied more broadly to include secure access to housing in urban areas as well as agricultural land in rural villages, the lessons from Indonesia in the 1960s still apply in today's rapidly urbanizing world. Indeed recent work by John Sidel (2004) has shown that insecurity of tenure among slum dwellers is a major tool of coercive clientelism in urban areas. Where elites can use the threat of slum clearance to intimidate poor urban voters without formal titles to the lots where they have built makeshift homes, elites have formidable tools of social control that prevent the poor from holding their governments accountable.[242]

This dissertation also has important policy implications for how to promote economic growth through manufacturing. Firstly, attracting Foreign Direct Investment through provision of good infrastructure, free trade, and cheap labor may be necessary, but they is not sufficient for developing countries to achieve sustainable industrialization. In order to avoid getting caught in a middle income development trap, developing countries must actively intervene in the economy through investments in human capital that include on-the-job training incentives, and incentives for foreign firms to transfer technology, as well as formal education.

This dissertation even provides lessons for policymakers in industrialized economies because South Korea's and Singapore's success at maintaining global competitiveness in manufacturing in spite of high wages suggests that deindustrialization is not inevitable. Since high-skilled manufacturing jobs provide far more employment than the relatively scarce jobs created in software companies like Google, EBay or Facebook, the policies that led to the Asian

[242] John T Sidel, "Bossism and democracy in the Philippines, Thailand and Indonesia: towards an alternative framework for the study of "local strongmen"." *Politicising democracy: The new local politics of democratisation* (2004): 51-74.

Tigers' success are of great importance to governments in many industrialized countries. In conclusion, the causal mechanisms linking clientelism to the absence of protest, protest to broad provision of public goods, and industrial policies to late industrialization provide insights into many of the most important policy challenges of today's world.

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