Fernando Valdés Benavides[1]

Varieties of industrial policy: follow, lead, or override the market?

SUMMARY: I. Introduction II. Varieties of Industrial Policy: leading, following or overriding the market III. Why do countries choose between different varieties of industrial policy? IV. Varieties of Industrial Policy in South Korea and Taiwan V. Conclusions VI.References

I. INTRODUCTION

Many people outside of South Korea have heard the name Samsung but a lower number outside of Taiwan have heard the name Hon Hai Precision Industry, and yet, at the end of 2018, both companies produced respectively the leading products in the smartphone market: the Samsung Smartphones and Apple's iPhones. The reason why the Hon Hai Precision Industry remains recognized, at best, as a background player is because the government of Taiwan, the country of origin of this company, actively pursued an industrial policy that supported the development of original design and equipment manufacturers (Wu & Hsu, 2001). South Korea, on another hand, focused on expanding economies of scale for a few national champions that branded their finished products. Both Samsung and Hon Hai Precision Industry are currently the dominant exporters in their home countries. Looking back into the history of their industrial policy tells a story of how state-business relations and the economic structures influenced the strategies that governments to achieve international competitiveness and technological supremacy.

After the post-war era, almost every government in the developing world actively sought to speed-up industrialization via industrial policies.[2] However, the strategies used by governments to achieve their policy goals were

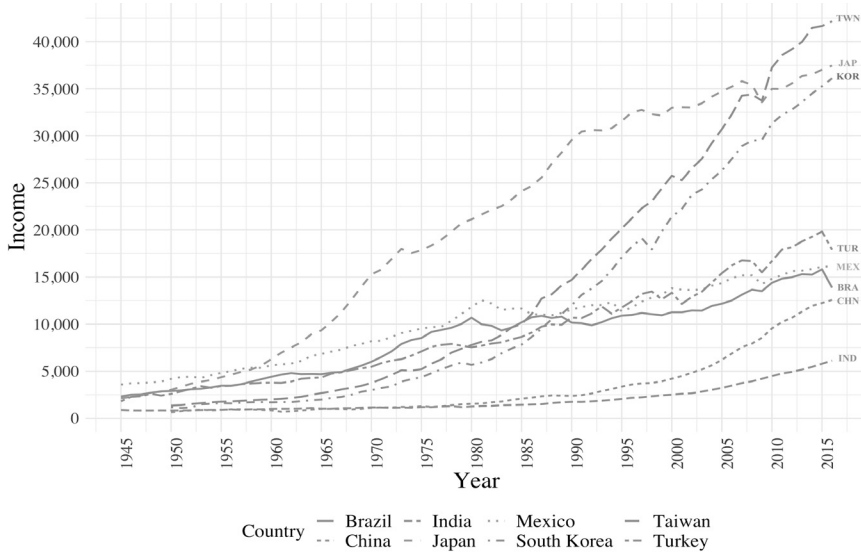
1 Senior Researcher at the Mexican Institute for Competitiveness (IMCO)

2 In this paper I refer to industrial policy as the use of deliberate and selective government intervention with the objective to stimulate specific economic sectors or firms based on the assumption that a better outcomes would not have occurred without it.

highly heterogeneous. Even among the successful late-industrializers,[3] governments sometimes *followed* the market by supporting already existing firms and their particular strategic plans to enter new markets, speed-up technological catch-up, and increase their international competitiveness. Other times, however, governments dismissed static competitive advantages and *led* substantial efforts to change their industrial structures by luring or coercing private firms into new ventures. Sometimes they even *overrode* the market by supplanting the allocation of goods via the price mechanisms or establishing state-owned enterprises (SOEs) in new markets.

South Korea and Taiwan are two prototypical cases of post-war late-industrializers that raised from an abyss of poverty and achieved a structural transformation following parallel paths of income growth (see Graph 1). These postwar economic-miracles of East Asia are usually thought of as similar because of their public-private coordination approach to industrial innovation, their export-oriented industrial policies, or their Weberian bureaucracies. However, a closer look reveals important differences in their industrial policy strategies.

GRAPH 1. Income trayectories of late-industralizars (1945-2016)
Income adjusted by by purchasing power parity (2011 $USD)



Source: Maddison Project Database 2018

3 Amsden (1989) used the term late-industrializers to describe a subset of countries that during the first half of the twentieth century had the potential to transform their productive structures from primary to secondary activities, achieving higher levels of productivity and development. Among those countries where Brazil, India, Japan, South Korea, Mexico, Taiwan, and Turkey.

The dominant narrative in the literature on developmental states[4] is that to overcome or take advantages of externalities governments should play a *leading* role in shaping the strategic decisions and inducing the cooperation of a risk-averse and under-capitalized private sector, via powerful and autonomous bureaucratic agencies that design and implement industrial policies.[5]

In successful developmental states, the visible hand of the state was omnipresent and it did more than merely picking winners. It shaped markets by rewarding entrance to new markets and fine-tuning competition in sectors to prevent excess capacity. It created conditions for public-private coordination with embedded bureaucracies that communicated and coordinated with private firms and associations. It pushed for technological catch-up and bolstered the international competitiveness of their private firms by making a pivotal investment that deliberately *got the prices wrong* by using a variety of industrial policy tools, including subsidized credits; fiscal stimulus; trade protections; assistance for the acquisition of foreign technology; technical assistance and employee training; state-owned enterprises; and public research and development centers to transfer technology to national companies. However, the presence of the visible hand of the state in developmental cases does not always mean that the government was directing the strategic decisions of private firms. In other words, an interventionist or active government does not always translate to a *leading* government.

To address this conceptual and empirical inaccuracy, in the first part of this chapter I build upon Robert Wade (1993/2014) to offer a reformulation of what it means to *lead* or to *follow* the market in a definition that does not

4 The main alternative narrative to the developmental states literature has come mainly from neoclassical economists that have emphasized the role of macroeconomic policies and market reforms on sustained economic growth or the rent seeking effects of trade and industrial policy (Krueger, 1978; Bhagwati & Srinivasan, 1978; Balassa, 1982; Srinivasan, 2001; Panagariya, 2019). It has been a proponent of attracting investment by removing distortions in the markets, by getting the prices right, focus government action in enforcing property rights, lowering barriers of entry to markets, and ensuring fair competition. It has been largely skeptical of industrial policy and has even argued about its negative effects on development (Little, Scitovsky, & Scott, 1970; Balassa, 1971; Krueger & Tuncer, 1982; Yoo, 1990; Krugman, 1994; Noland & Pack, 2003; Pack & Saggi, 2006). This debate has been revised by Edwards (1993) and on substantive and methodological grounds by Rodríguez & Rodrik (2000). Lane (2020) has shown that the many cross-country and cross-industry analyses that where fundamental to the neoclassical approach failed to account for the endogeneity of industrial policies and Wade (1990/2004) and Rodrik (2008) argued that they have failed to correctly identify the counterfactuals.

5 The developmental state literature has argued that the state had a prominent and leading role in the economy, in particular for some countries in East Asia it was a constitutive element of their development (Johnson, 1982; Rueschemeyer, Evans, & Skocpol, 1985; Amsden, 1989; Gereffi & Wyman, 1990; Wade, 1990/2004; Woo & Woo-Cumings, 1991; Chaudhry, 1993; Haggard & Webb, 1993; Haggard, 2018; Chang, 1993, 2002; Evans, 1995; Rodrik, 1995; Campos & Root, 2001). Additionally, a new wave of case studies on the effects of industrial policy has emerged in the last decades (Irwin, 2000; Ohashi, 2005), and empirical studies with quasi-experimental designs (Mattingly, 2017; Kalouptsidi, 2018; Lane, 2019; Kalouptsidi, 2018; Mitrunen, 2019) has tested the relationship between industrial policy and trade protections on a diverse set of economic indicators.

depend on the industrial policy tools used by governments or the degree of intervention. I call this conceptualization a *strategic-decisions approach*.

Leading is understood, as in the Big Push literature (Rosenstein-Rodan, 1943; Gerschenkron, 1962), as *the deliberate action of the government to change the strategic investment decisions of national private firms, so that they enter new ventures*. Instead, *following* is understood as Wade (1993/2014) did, as the government action to support existing firms in strategies that they were already pursuing or would have pursued without government support. Additionally, I offer a new category that I call *overriding*, which includes instances when governments directly establish SOEs.

Second, I ask, why do countries choose between these different industrialization strategies? I argue that whether governments *follow* or *lead* is crucially shaped by historically rooted state-business relations, and whether governments *override* depends on the economic structure that policymakers use as a platform for their industrial policies. Governments will tend to *follow* the strategic plans of private firms when there is high proximity between economic and political elites at the beginning of a developmental project. On the other hand, governments will tend to *lead*, when the proximity of state-business relations is less intense. And, in another dimension, governments will tend to *override* when the economic structure is more horizontal than vertically integrated.

I argue that policy paths persist when they generate economic returns to private firms and contribute to the political survival of the ruling coalition and change or deviate only under conditions that modify the priorities of the ruling coalition and/or the economic returns of the industrial policy for the targeted sectors.

I analyze the differences in industrial policy strategies in two prototypical developmental states during their takeoff periods: Taiwan from 1949 to 1975, and South Korea from 1953 to 1979.[6]

II. VARIETIES OF INDUSTRIAL POLICY: LEADING, FOLLOWING OR OVERRIDING THE MARKET

Chalmers Johnson (1982) pioneering study of developmental states distinguishes between two kinds of government-business relations: a *market-rational role*, where the government has a regulatory role that procures fair competition and provides some public goods; and a *plan-rational system*, where governments outline specific industrialization objectives and uses different

6 I use the name Taiwan to refer to the country with the official name of Republic of China. And I use South Korea instead of Dehan Mingug (대한민국), the official name of the southern country in the Korean Peninsula.

strategies to achieve those goals via industrial and macroeconomic policy.[7] But Johnson's overall distinction, while it demarcates two broad varieties of capitalism, assumes that under the presence of a plan-rational system the government always *leads* the industrialization drive, neglecting the possibility that governments might be instead of *following* private firms.

The missing distinction of industrial policy strategies is relevant for at least three reasons: we want to understand how incentives and constraints shape the policymaking process; we want to distinguish if the adoption of industrial policy means that the government is actively and effectively pursuing it; and third, we want to distinguish if an industrial policy was guided mainly by governments or private firms since governments might be tempted to window dress the reach of their industrial policies and take the achievements of private entrepreneurs and industrial sectors as their own, even when their support could be negligible.

Wade (1993/2014) addressed these issues directly by offering a typology to distinguish between industrial policy strategies. He used the cases of industrial sectors in South Korea and Taiwan to describe when governments *led* or *followed* the market.[8] The categories in Wade's typology of industrial policy strategies are descriptive and derived from a historical analysis of the inception and development of specific industrial sectors in Taiwan, South Korea, and Hong Kong. In his conclusions *leading* appears to be the natural role of the developmental state. According to Wade, South Korea fits this mold better. While *following* appears to be a sign of dilution of the state capabilities to tame markets. This is, in his line of reasoning, the case of Taiwan.

Building upon Wade (1993/2014), I offer a reformulation of what it means for a government to *lead* or *follow* that does not depend on the industrial policy tools used, the state capacity, or the intensity of the government intervention in the economy, but one based on the desired effect that those industrial policies on the strategic decisions of private firms. I call this conceptualization the *strategic-decisions approach*.

The government *leads* the market when its conscious and targeted interventions (i.e. industrial policy) *seek to change the strategic decisions of national firms* to enter new markets. I partially base this definition on the classic "Big Push" literature inaugurated by Rosenstein-Rodan (1943)[9], which sug-

7 For a more comprehensive analysis of the work of Johnson (1982) see Wade (1998).

8 He concludes, among other things, that the extent of leadership or followership does not appear to be connected to industrial sector types or chronological phases, at least for the cases of South Korea, Taiwan, and Hong Kong, and that what we might observe different modes of leadership or followership among countries. In this chapter, however, I will not consider Singapore or Hong Kong. Both city-states complicate the analysis of industrial policy strategies since their stages of development differ from other countries with the presence of larger territories and rural sectors.

9 An economic formalization was offered by Murphy, Shleifer, & Vishny (1989) where a positive externality

gests that the role of government is to assist the convergence of strategic expectations of firms that depend on the willingness of other firms to invest in a new market.

Instead, the government *follows* the market when it *assists the strategic decisions of private firms to achieve their own private goals*. Governments may do so for several reasons: to help firms expand their market presence, accelerate productive capabilities or technological advancements, increase their competitiveness, or give sunset industries a softer exit. As described by Wade (1993/2014), *following,* in an extreme case, would mean private firms or business associations give government officials a list of industrial, trade or technological projects, and government officials work to support those private goals.

I add an additional category that I call *override* when governments bypass private firms and directly enter a new venture with SOEs. This new category, while not excludable from *leading* and *following*, is useful to understand why public and private cooperation might be complemented or supplanted in response to specific challenges and limitations of the private sector.

Thus, the government *leads* the market when industrial policy pushes private firms to be the first movers into new ventures that were targeted by the government; *follows* when it supports already existing firms in their own particular plans; and *overrides* when the state is the first mover into a *new market*.

III. WHY DO COUNTRIES CHOOSE BETWEEN DIFFERENT VARIETIES OF INDUSTRIAL POLICY?

Industrial policy can be understood as a coordination game situated in a social and historical context. This chapter focuses on policy outcomes from a perspective of organization theory and political economy using a comparative historical analysis framework. With the limitations of a mid-range theory, it recognizes that the context matters since actors respond, not only to fixed incentives from the economic or political structure but also on historically developed organization forms and patterns of authority (Orru, 1991; Biggart & Guillén, 1999; Williamson, 2002) and an ideological context that shapes who are the legitimate actors and their roles in public-private relations (Kuhonta, 2011).[10] For an argument summary see Table 1.

---

is created by the increasing returns and changes in the size of the market.

10 The economic structure of a society is understood in the organization theory lenses, similar to Williamson (2002), who argued that the nature of firms are a result of agents with limited knowledge that adapt, not only spontaneously to market signals (Hayek, 1945), but also purposefully to political and cultural relations. According to Williamson (2002, 176) this two factors shape whether societies "will use the market to supply some transactions and recourse to hierarchy for others."

TABLE 1. Influence of initial conditions of state business-relations and economic organization in the varieties of industrial policy

		STATE BUSINESS-RELATIONS	
		CLOSE	DISTANT
ECONOMIC STRUCTURE	VERTICAL INTEGRATION	More following industrial policies	More leading industrial policies
	HORIZONTAL INTEGRATION	More following and overriding industrial policies	More leading and overriding industrial policies

STATE-BUSINESS RELATIONS: FOLLOWING OR LEADING PRIVATE FIRMS

Typically, political incumbents are going to have an upper hand in the design, implementation, and enforcement of their developmental projects but they will need to cooperate and strengthen weaker actors (private firms or business associations) to achieve better outcomes.[11] Those who are part of the ruling coalition and critical for the development of industrial policy are going to try to include or exclude actors for two reasons: political, they will target actors who are critical for their political survival? and, because of contextual ideological reasons, who are considered legitimate actors to participate in industrial policy?

We can expect private firms and business associations to have more influence on the industrial policy paths when they are critical to the political survival of the ruling elite. Thus, governments will tend to follow private firms or business associations, rather than to lead private firms into new ventures. While governments with a more distant relation with national private firms could approach industrial policy, less in the desired fashion of specific private firms and take a more prominent and leading role in the design and implementation of industrial policy and even in the creation and strengthening of business associations.

ECONOMIC STRUCTURE: OVERRIDING

The economic structure is going to play a role as well. Whether firms are more vertically or horizontally integrated in an economy, shapes why some economic activities are more feasible in some countries than in others (Chandler, 1990; Orru, Biggart, & Hamilton, 1997; Toulan & Guillén, 1997) and the collective action capacities of private firms (Noble & Katzenstein, 1998). Thus, the economic structure will mark the advantages and disadvantages

11 An argument that echo's Greif, Milgrom and Weingast (1994), since in the lenses of Weiss (1995) *governed interdependence*, and in Campos and Root (2001), a powerful actor (the government) creates spaces for weaker actors (private firms) to communicate and coordinate, sometimes against its relative power, to achieve superior economic and technological outcomes.

that are going to be taken into account in the design and implementation of industrial policy. Also, it will shape the collective action capabilities of private actors to organize and influence the policymaking process.

We can expect that countries with a more horizontal economic structure, composed of networks of small and medium companies, to have the advantage of having a more adaptive and competitive economic environment (Orru, 1991; Orru, Biggart, & Hamilton, 1997). However, this economic structure will require long-term industrial policies that cope with the coordination and capital limitations of private firms. For example, governments could directly make investments in expensive R&D ventures that could help private firms achieve technological advancements or by *overriding* the market with SOEs in capital intensive industries. Also there is a political economy effect, as sectoral trade associations could gain more prominence since they are going to be more important for individual firms to influence the desire policy outcomes and, on the other side, the government, or specifically economic bureaucracies, will prefer to gather information and coordinate with fewer rather than many actors.

On the other hand, we could expect that countries with a more vertically integrated economic structure, with a few big companies that grow by integrating other firms, to have the advantage of larger economies of scale, lower transaction costs, provide mutual insurance to different branches in face of economic hardships, and the capacity to manage big investment projects in technologies or capital intensive industries. However, we can expect more problems related to corporate governance, excess of competition in markets, and a higher systemic risk of the economy as a whole from a plausible bankruptcy of one firm. These disadvantages would require long-term industrial policies targeted at the shaping competition in specific economic sectors. Additionally, we can expect private firms to communicate and coordinate more easily and directly with the government without fundamentally depend on peak or sectoral business associations, and to have higher leverage to negotiate public bailouts in times of economic hardship.

IV. VARIETIES OF INDUSTRIAL POLICY IN SOUTH KOREA AND TAIWAN

SOUTH KOREA'S ASYMMETRIC PARTNERSHIP: FOLLOWING THE CHAEBOLS

South Korea pushed for the development of large economies of scale via the *chaebol*, large family-owned industrial conglomerates that had roots in the pre-colonial period but mostly developed in the reconstruction period after the Korean War (Kim, 1997). South Korea's government acquired for-

eign loans and implemented a *high-risk high-payoff* strategy[12] by supplying chaebols with cheap credit based on export performance targets.[13] The chaebols enjoyed oligopolistic power domestically and sold diverse consumer products and intermediate goods internationally. Companies were awarded cheap-credits based on export-performance targets and companies were assisted to update their technologies via the creation of joint research and development (R&D) institutes.[14] In both periods, the South Korean government avoided the creation of state-owned enterprises (SOEs) and was reluctant to accept FDI without technological transfers to national firms.

STATE-BUSINESS RELATIONS IN KOREA

South Korea's economic elites have been historically closely tied to the ruling coalition. During the Choson Dynasty, the structure of social relations was framed by a rigid class system that had at the top the *House of Yi*, the royal family, and the *yangbang*, an elite mostly made of landed civil servants and military officials. These two groups acted in some respects as a predatory and patrimonial elite over inferior classes with no clue of a developmental project in mind. According to Cho and Lee (2015), the House of Yi preferred "rule by morals than by laws", they believed in the moral supremacy of agricultural labor, and intervened in fixing prices on markets and regulating international trade but mainly to produce benefits for them and the yangbang. They traded with the Qing Dynasty for diplomatic purposes while they also tried to monopolize trade gains (Cho and Lee 2015, 31).

Even after the signature of the Treaty of Kanghwa Island, the landed elites maintained economic privileges in exchange for cooperation with the Japanese colonial authorities. The Japanese, while they prioritized privileges to Japanese businessman and landowners, they replicated the *zaibatsu* model of close ties between the government and a few rich urban and rural elites.[15]

In South Korea, the post-colonial governments made minor aesthetic changes to the institutions used to linked public and private actors during the colonial period. The governments of Rhee Syngman (1948-60) and his successor, Park Chung-hee (1961-79), were deeply influenced by the eco-

12 Term used by Kim & Park (2011) to describe the massive loans directed to specific *chaebols* during the industrialization take-off period.

13 This has been called an *all-export drive*, where companies were incentivized to export in order for the government to acquire foreign currencies (Romero & Berasaluce, 2018). This was made clear in the second five year development plan (1966-1971) that explicitly established that the acquisition of foreign capital was crucial as a development strategy.

14 Many joint R&D became less relevant as the chaebols grew and became capable of developing their own technology in the second half of the 1970s.

15 The colonial government in Korea established in 1910 the *Chusin*, a council of economic affairs composed of 65 Korean yangbangs, but this council was rarely used (Henderson, 1968).

nomic and social ideas of the Japanese Meiji Restoration Period. As stated by Hart-Landsberg (1993)in South Korea most men of that age were educated under the Japanese system and its military academies. Rhee Syngman founded a central bank and state planning institutions that emulated the Japanese counterparts. In 1952, affiliation to the association to the Korean Chamber of Commerce and Industry (KCCI) and other associations, was made mandatory. The Chamber echoed the Seoul Chamber of Commerce and Industry (SCCI), founded by the Governor-General of Chosen, the chief administrator during the Japanese colonial period (Savada & Shaw, 1992). Rhee also made the first steps to build channels of public-private coordination. These channels came in the form of industrial associations, that served the three main purposes: gather information, monitor performance, and implement industrial policies.[16]

However, the geopolitical and economic context of South Korea did not allow for a direct emulation of the Meiji Model and its particular strong ties with a few private conglomerates, other constraints of the structure of the economy came to play. Japan during the Meiji Restoration could amass its own capital from domestic savings. As shown by Joe Studwell (2013), the South Koreans implemented a variety of mechanisms to promote and coerce savings, but they had to mainly borrow abroad and receive financial aid from the United States in the first stages of their industrialization.[17] In Japan, the *zaibatsu,* the large industrial Japanese conglomerates, could finance their own growth and development of technologies with the use of their own private financial institutions, while in South Korea the government directly owned the banks and financed private firms. The Japanese could test their own industries in their bigger domestic market, while the South Koreans had to use international markets. Finally, a mature labor-intensive industry was already developed in Japan, while in South Korea had to be developed almost from scratch after the Korean War.[18] The Japanese rule in Korea and Taiwan show that colonial legacies matter as they left trails of developmental institutions that are key for public and private coordination.

Tuong Vu (2010) notes that during the government of Rhee Syngman "former colonial elites, including landlords, industrialists, and bureaucrats, were brought into a new alliance with conservative nationalists and protected by the regime". This created a small and compact alliance that during the Rhee Syngman government was highly corrupt and predatory, and they were

16 Other important associations include the Federation of Korean Industries and the Central Association of Small Business Cooperative Associations.

17 Taiwan also relied on the United States financial aid and was more open to FDI.

18 This difference is critical, since it made South Korean companies, with no track record, too risky for foreign investors.

more preoccupied with the reconstruction of the country and their political survival (Haggard, Kang, & Moon, 1997).

An early sign of the radical change in state-business relations came in the aftermath of the military coup of Park Chung-hee when several heads of the chaebol were arrested under charges of illicit wealth accumulation, tax evasion, illegal cash transfers to political campaigns, among other charges. The charges were later dropped, business leaders committed to Park government development goals, and some even signed letters promising to forfeit part of their wealth to the South Korean government.

The founding of the EPB, on a similar vein, marked a radical transformation of the formal institutional channels of coordination between private firms and the government. The EPB founded under the Park Chung-hee regime served as the main coordinator between the chaebol and the government and as a pilot agency that led other ministries, such as the Ministry of Finance and the Ministry of Trade and Industry, and cooperated with peak business associations, especially the Federation of Korean Industries, in the design and implementation of industrial policy. The EPB manipulated resource allocation as it channeled foreign aid and debt for development goals, broke deals to acquire foreign technology, provided state guarantees on private firms loans, controlled licenses, taxes, and audits, among other tools to coerce and incentivize private firms into development projects.

The state-business relation in South Korea under Park Chung-hee has been described ranging from *Korea Inc*, a mutually penetrated relation between high bureaucracy and chaebol families (Amsden, 1989) but also as a crony capitalist relation, where private firms captured different state institutions.[19] The uncontroversial fact is that a few players that worked closely with the government managed to expand their capabilities and transformed their medium and large firms into multi-sectoral industrial conglomerates under a system that provided oligopolistic entry privileges and access to subsidized credit but also ask for kickbacks and political campaign contributions. The authoritarian leadership of Park Chung-hee (1961-1979) used more discretionary power and relied less on multinational companies (MNCs) than in Taiwan and continuously worked with chaebols towards risky ventures. Park personally gathered information of the *chaebols* through

19 In the literature of developmental states there is an ongoing debate on how politically passive where economic elites, according to Moon & Prasad (1994) "the state is seen as benign, interventionist and economically sophisticated […] Private enterprises is characterized as highly successful, entrepreneurial, but politically passive and even subservient" (142). Marxist have long argued that the state was captured by business (Chang D.-o., 2009) and others have argued a more interdependent nature of both government and business (Evans, 1995; Weiss, 1995). According to Kim and Park (2011) the chaebols where both cronies and entrepreneurs (267). As I will discuss below this relation changed over time and, as Wade (1990/2014) points out, business where not passive, and as they gained power became more relevant for politics and policy.

their bureaucratic agencies, the Korean Central Intelligence Agency, and met directly with the *chaebols* for monthly meetings or in one-on-one with business leaders to strike deals (Perkins, 2013; Studwell, 2013), and while it held significant discretionary power over them[20] it also allowed the CEOs implement industrial policies with great autonomy and discretion (Kim & Park, 2011), and allow them to communicate their complaints and needs (Perkins, 2013).[21]

The South Korean industrial policy strategy became *locked-in* as the government achieved high-rates of economic growth and the *chaebol* gain several benefits: increasing international competitiveness, external economies of scale, a helping hand to acquire foreign debt, and subsidized credit, and privileged access to new domestic markets.

While the characteristics of the relationship remain controversial, the relation between government and business was more close, repressive, and discretionary than that of Taiwan. In this asymmetric partnership, the government *followed* for the most part the strategic decisions of specific firms and supported their expansion and diversification. The government assisted private firms to enter new ventures by granting them oligopolistic power and cheap credits. And in industrial associations, according to (Weiss, 1995), "as subsidies nurtured the growth of large groups in the 1960s", "took an increasingly passive role, especially from the 1970s onwards" (602).

ECONOMIC STRUCTURE IN SOUTH KOREA

The first modern retailers and industries appeared in Korea after the 1930s when the Japanese conducted major industrial investments in the Korean Peninsula. The *zaibatsu* Japanese model of close cooperation between top family-owned firms and the government was replicated in the Korean peninsula during the colonial rule.[22]

Some chaebol were founded during the Japanese colonial rule. For example, SSangyong (1930), Samsung (1938), Daelim Group (1939),[23] Hyundai

20 According to Kim (2011) Park sought policy feedback from the chaebols and the state bureaucracy, "but only as advice on how to achieve his goals". In order to achieve his high-risk high-payoff plans, "the EPB worked "backward from Park's directives" (p. 201). Evans (1995) described the relation as "continuous negotiation" in which Park had the last word.

21 The Korean Central Intelligence Agency (KCIA) maintained the state-business alliance but it also helped business suppress labor unions and labor activism. This has been a major topic in Marxists interpretations of the developmental experiences in East Asia (see Chang 2009).

22 Even the word, chaebol (재벌) is written with the same Chinese characters (財閥) as zaibatsu in Japan (chae means "wealth or property", and beol means "faction or clan"). Also, Iit is important to note that the Japanese discriminated against Korean entrepreneurs and limit their access to top government positions.

23 Founded as Burim Corporation.

(1940).[24] However, other chaebol were founded after the end of the colonial rule as wealthy Koreans bought Japanese factories that came from the seizure and privatization of Japanese property after the liberation and, in close collusion with the government of Rhee Syngman, gained privileged access to markets, construction and transport contracts, trade protections, foreign currency, and subsidized credit. For example, Lak Hui Chemical Industrial Corp (1947),[25] Tongyang Confectionery Manufacturing Company (1956).

After the Korean War, the chaebol expanded rapidly into new sectors as they benefited from the influx of technical and financial foreign aid.[26] For example, Kim Sung Kon, founder of SSangyong, built jeeps for the United States army; Chung Ju Yung, the founder of Hyundai, managed to won construction contracts with the United States military and later became a personal favorite of Park Chung-hee for domestic and foreign construction projects; Lee Yang-gu (nicknamed "the Sugar King"), owner of the Tongyang Confectionery Manufacturing Company,[27] entered the construction material industry when he pushed a factory that was built in 1942 by the Onda corporation.[28]

Thus, the liberation of Korea from the Japanese rule and the Korean War (1950-1953) deeply disrupted the Korean economy, but it did not change his modern economic structure. Biggart and Guillén (1999) described this persistence of close cooperation with top economic elites in Korea as historically rooted in a patrimonial form of organization that "tends to develop unequal, vertically integrated units under the command of centralized authority" and "does not promote connections between groups for synergy or innovation" (733).

IDEOLOGY AND LEGITIMATE ACTORS IN STATE-BUSINESS RELATIONS: AVERSION TO SOES AND FDI

Rhee Syngman's government anti-Japanese sentiments, nationalistic and anti-communist ideologies, the need to keep the country unified before and after the Korean War, and the United States pressures, shaped who was a

24 For example, Lee Byung Chull, founder of Samsung (1938), was the son of wealthy Korean landowners. He assisted Waseda University in Tokyo during the colonial occupation and upon his return, after a first failure in the rice business, he managed to transforme Samsung Trading Company in one of the most important companies in the peninsula during the Japanese rule.

25 Later know as Lucky Goldstar, and now known by the name LG.

26 During the Korean War around two million, mostly civilians, perished. Half of the industrial capacity, a third of its housing, and much of the public infrastructure of the southern part of the peninsula was destroyed (Lee, Eckert, & Lew, 1990).

27 Now known as the Tong Yang Group a conglomerate that is famous for his securities and insurance branches.

28 The factory was established in Samcheok, an eastern city in South Korea and the the Onda corporation is now known as Taiheiyo Cement Corporation.

legitimate actor in the Korean economy. The anti-communist rhetoric played in favor of supporting the already existing authoritarian political structure and the economic structure of vertical integration by supporting the development of large economies of scale and against SOEs. And the nationalistic sentiments, rooted in the turbulent colonial period, also influenced the government in favor of working national private firms rather than with MNCs.[29]

Rhee's government had a hard time delivering an industrial policy that created long-term development. Its government developed grand national plans and an import-substitution industrial policy but it appears to serve its government to channel funds and ask for kickbacks from economic elites and it did not have any effective tools to push firms towards riskier ventures, firms in this period relied more on rent-seeking from US aid rather than on increments of productivity (Jones & Sakong, 1980). Exports were almost non-existing and of little diversity and imports were paid with support from the United Nations and US aid (Perkins, 2013).

While the economic elites and nationalist and anti-communist ideology remained practically unchanged after the Park Chung-hee coup d'état of 1961, the anti-Japanese sentiments and power asymmetry of the state-business relation changed substantially in comparison with his predecessor. In 1965, Park's government tried to heal the anti-Japanese sentiments that lacerated diplomatic and trade ties with Japan since 1945. With the signature of the Treaty of Basic Relations, diplomatic and trade relations were normalized, Japan recognized South Korea as the sole legitimate government of the Korean Peninsula and agreed to pay substantial reparations from abuses of the colonial period in the form of loans, grants, and technical assistance to South Korea.

On the other hand, according to (Perkins, 2013), urban industrialists, that were not part of Park's coalition that brought him to power, started to gain relevance for the developmental project. Two events mark a critical juncture for state-business relations in Korea. The first, the famous arrest of many of the *chaebol* leaders that were close to the Rhee's government and, second, the founding of the EPB.

EXTERNAL THREATS: THE EXTERNAL SHOCK OF THE NIXON DOCTRINE

Only after 1969, in the face of an exogenous shock of a possible withdrawal of United States troops under the Nixon Doctrine, the Korean government was pushed to make radical changes to ensure the military supremacy of South Korea and the political survival of the ruling coalition.[30] Park Chung-

29 Additionally, Rhee's government eliminated most of the trade with Japan, a policy that lasted until 1965.

30 Targeted industrial sectors included non-ferrous metals, petrochemicals, electronics, machinery, and shipbuilding.

hee temporally dissolved the National Assembly, curtailed civil liberties, and gave himself dictatorial powers by proclaiming the *Yushin Constitution*. This also carried a radical change in the industrial objectives with the establishment of the Defense Industry Bureau and other institutions that worked intensely with the private sector to develop industries that were key to military objectives (Kim & Park, 2011).

The Korean government *override* the market in the upstream industries of iron and steel and took a more *leading* role to lure selected private companies into petrochemicals, heavy machinery, automobiles, and electronics. But even this deviation from the original policy path required crucial participation of the private sector in the implementation. Selected companies that were taught that could handle the endeavor were given generous financial support, foreign loan guarantees, and infrastructural support by the government (Wade, 1993/2014), however, the private sector was left on his own to accomplish the desired production and export targets of the industrial policy.

GRADUAL LIBERALIZATION AND THE NEW FOLLOWING STRATEGY

The South Korean state-business relations and many of the industrial policies that were key to the economic transformation ended after the assassination of Park Chung-hee in 1979. His political successor, Chun Doo-hwan, did not continue the Heavy and Chemical Industrial Drive and started a process of gradual trade liberalization, control of inflation, privatization of banks, early reforms to corporate governance, and laid the first antitrust regulation agencies to improve the competition in the domestic market. This marked a significant transformation from the controlled business environment and an industrial policy that worked with few firms to an industrial policy that had a *following* strategy with a more sectoral approach in a more open and competitive domestic and international environment.[31] The chaebol remain a fundamental actor of the Korean economy and export, however, the government industrial policy focus has drifted form a firm focused approach to the promotion of research and development of technologically advanced sectors and the support of projects to integrate SMEs to the digital economy.

TAIWAN'S SECTORAL PATERNALISM: LEADING AND OVERRIDING CLUSTERS OF FIRMS

The Taiwanese government served mainly SMEs as a business consultor that *led* networks of companies to get international deals to manufacture intermediate products and acquire foreign technology from MNCs; and as a

31 The EPB was eventually disbanded in 1994 (Kim, 2017) and, in the face of the Asian Financial crisis of 1997, the government actively worked to change the corporate structure of the chaebols seeking greater transparency and dynamism.

power-broker that gave special privileges to well-connected families and to party-owned enterprises. To a larger degree than in South Korea, the Taiwanese government relied on public R&D centers that transferred technology to national firms and *overrode* the market via SOEs in sectors with high internal returns of scale that functioned as backward linkages for private exporters. The state-controlled banks and rapidly started to create a parallel economic structure via upstream SOEs. Bureaucrats sought appointments in SOEs, which were controlled by the KMT. According to Wade (1993/2014) and Mins (2006) during the 1950s and the first half of the 1960s, SOEs accounted for 50 percent of industrial production (183) and, according to Perkins (2013), around 90,000 SMEs functioned as the backbone of Taiwan manufactured exports (87).[32] This *overriding* strategy deepens the industrial structure and catalyzed the creation of diverse downstream small-industries run by native Taiwanese that transformed the inputs (petrochemicals, processed metals, and plastics) into products that served as inputs for foreign MNCs.

The government also *led* many companies at the same time into new sectors. It did so in three ways: first, it directly guided technological agreements and joint ventures between business networks and foreign firms; similarly, during the 1960s, it began establishing R&D institutes and organizations that promoted sectorial "technological and managerial upgrading" of private firms in the industrial sectors of chemicals, electronics, glass, textiles, and many others (Wade, 1990/2004); and third, in close collaboration with the United States, attracted foreign firms of finished consumer goods to Taiwan so that networks of local firms could act as their first and second-tier suppliers. This allowed, for example, Taiwanese firms to become leaders in the production of synthetic fibers and by-products, "Taiwan by 1981 was the fourth biggest producer of synthetic fibers in the world" (91). Or in the electronics sectors during the 1980s and 1990s.

The Taiwanese industrialization strategy was similar in the development challenges faced by South Korea in the early industrialization era but different both in the relationship between government and business and its approach to tackling those challenges have significant differences.

STATE BUSINESS-RELATIONS IN TAIWAN

The relationship of the government with the business community was mostly hierarchical and indirect. This relationship has historical and ethical roots. During the Chinese Civil War (1927-1949), the Nationalist Party eventually was pursued and kicked-out from mainland China by the Chinese Communist Party. Around two million soldiers, top bureaucrats, and civilians arrived

32 During the early 1950s, it also directly override the market by supplying raw cotton to spinning mills outside of a market structure.

at Taiwan during 1949, on an island of six million inhabitants. The mere size, military power, and economic wealth of this group face no relevant resistance from the first residents of the island of Taiwan. Where in South Korea rules had been educated in the Japanese colonial system, the members of the KMT, did not.

Taiwan became a one-party system that in the later forty years was ruled by three persons from the same authoritarian coalition: Chiang Kai-shek, from 1948 until his death 1975; then succeeded by Yen Chia-kan, as interim president until 1978; and followed by the election of Chiang Ching-kuo, son of Chiang Kai-shek, who ruled until 1988.[33]

For decades native Taiwanese were excluded for top government jobs, SOEs, and military. During the era of Chiang Kai-shek, Taiwan was an established autocracy that had legislative power, but prohibited competition and dissent outside the nationalist party. Across the 1960s more indigenous Taiwanese started to affiliate to the KMT, who had been almost exclusively represented by mainlanders, and the electoral competition was relaxed at the municipal level by allowing independent candidates to run for office without political affiliation. Until 1975, with the creation of the political group *tang wai* (outside party), more active space for political dissent was created, which eventually led to the creation of the Democratic Progressive Party in 1986 (Copper, 1989). The authoritarian KMT in Taiwan actively kept business groups at bay by forbidding any collective action outside official channels. As noted by Chu (1989), the governments demobilized different sectors by a mixture of control of mass-media, use of secret police, and state corporatism that incorporated business groups, labor unions, intellectuals, artists, and professional associations to the party and government positions. These ethnic divisions were ameliorated with the political reforms that increased electoral competition and the advent of democracy around the year 2000.

In Taiwan, the line between the state and business was clear because of the ethnic divide, but the line between the party and the state was blurred. Bureaucratic, SOEs, legislative, judicial, and executive appointments were delegated to the central decision-making body of the KMT with the authoritarian leader maintaining the top position of the political structure. The Taiwanese government served both as a sectoral business consultor, that helped business groups of SMEs get international deals for intermediate products and acquire foreign technology, and as a power-broker, that gave special privileges to few well connected-families and to the multiple party-owned enterprises. More often than South Korea, the Taiwanese government established SOEs in services and industrial sectors with high internal returns of scale.

33 And, using Svolik (2012) terminology, Taiwan remained under this *authoritarian spell* until 2000, when the KMT loss the Presidential elections

Chiang Kai-shek did not meet regularly with industrialists (Perkins, 2013), as in South Korea. The KMT government in Taiwan preferred a sectoral approach by working with business clusters and to a lesser degree with peak business associations, such as the Chinese Federation of Industries (Kondoh, 2002). Following the example of Japan, they made substantial efforts to in the early stages of the developmental project to strengthen business associations (Weiss, 1995). The government-mandated the creation of trade associations such as the Taiwan Textile Federation (TTF) and the Taiwan Electrical Appliances Manufacturer Association (TEAMA) (603).

The industrial policy strategy that Taiwan followed started in the early 1950s when the government made substantial efforts to devalue the exchange rate, create export processing zones, deepen the structure light industries by a mix of *leading* business networks and *overriding* with SOEs in upstream industries to fill gaps in the industrial structure and lower costs for private small downstream industries (Lin, 1973; Scott, 1979; Gold, 1981).

The use of SOEs was significantly more intense and diverse than in South Korea. The government controlled, mostly as a monopolist, industrial sectors with high internal economies of scale such as energy, petrochemicals, steel, shipbuilding, and machinery (Kirby, 1994), as well as other industries such as fertilizers, sugar refining, tobacco, and wine. Its reach extended to service sectors such as insurance and financial (Wade, 1994/2004). As reported by Cheng and Haggard (1987), the SOEs served both economic and political purposes, and according to Chu (1994), they were used as a training ground for technocrats to develop managerial and planning expertise.

The Taiwanese government relied on two economic agencies to design and implement economic policies: the Council for Economic Planning and Development (CEPD) and the Industrial Development Bureau (IDB). The CEPD served as an advisory body headed by cabinet members and the head of the central bank. The staff informed them of the status of the national economy, reviewed economic policy proposals, and evaluated large-scale public enterprise projects. The IDB was the central bureaucratic agency for shaping and implementing economic outlines and industrial policy devised by the CEPD. It did so by establishing the fiscal, trade, and financial incentives and of giving consultancy for mergers and long-term contracts. It was the main point of coordination between government and business in different sectors.

As documented by Robert Wade (1990/2004) the members of the IDB had to go out several days a month to visit facilities and firms with two tasks: they brought information on what was happening in world markets to companies and gathered information on the challenges faced by firms. This flow of information resulted in industrialization plans that mostly *led* the market, as they focused on a more predominant role of the state in speeding up the

technological change for SMEs, finding new markets for the products of Taiwanese firms, and building partnerships with foreign firms so that Taiwanese intermediate industries could become suppliers of major MNCs.

ECONOMIC STRUCTURE IN TAIWAN

In Taiwan, patrilineal institutional logics and partible inheritance from their Chinese cultural inheritance favored the creation of horizontally integrated networks of sector-specific SMEs (Wong, 1985; Biggart & Guillén, 1999).

The early stages of the developmental project in Taiwan illuminate how policymakers adapt to the particular limitations and advantages of the economic structures. They developed a method of creating positive conditions for SMEs to jump into new industrial sectors that can be traced to the first economic plans.

The Plan for Economic Rehabilitation (1953-56) was the first economic plan in Taiwan and it targeted agriculture, fertilizers, and textiles for selective intervention. According to Wade (1990/2004), the first textile industrialist where relocated mainlanders. With the help of United States aid, the KMT created an environment of market-distorting conditions for its development. Among these conditions was the direct control of the government in the allocation of upstream supplies (in cotton and yarn), and also helping firms cover all working capital advancements and establishing infant industrial protection tariffs (Chang D. W., 1965; Gold, 1981).[34]

By 1954 the government targeted diversification of cotton textile industries into synthetic fibers. The domestic chemical industries could provide most of the inputs to make rayon, but there were significant capital and technological limitations to build a rayon-making plant. The government, with help from the United States advisors and a United States company, von Kohom, established a government-controlled industry, the China Man-Made Fiber Corporation, that by 1957 started to supply rayon to textile factories (Gold, 1981).

This method of intervention in upstream industries, via *overriding* with SOEs or by supporting the creation of private firms in capital-intensive industries by supplying cheap credits and coordinating training and technological transfers by foreign firms, created positive conditions for SMEs to leap into new sectors in the following decades. Other examples are found in plastics, automobile parts, electronics.

The failure of Taiwan to export assembled automobiles is particularly illuminating on how the economic structure marks the capabilities and limits of policymakers to promote specific industries. Biggart and Guillén (1999) ex-

34 The Second Four-Year Plan (1958-65) was the first to set production targets and to reformulate the strategy to attract investment by overseas Chinese and other foreign countries.

plored this phenomenon and argued that the success in generating external economies of scale in automobile parts in Taiwan and the failure to establish competitive automobile assemblers can be found in historically developed patterns of social organization.

IDEOLOGY AND LEGITIMATE ACTORS IN STATE-BUSINESS RELATIONS: USE OF SOES AND FDI

According to the argument presented the presence of *overriding* should respond to the economic structure, whether firms are more horizontal or vertically integrated, but as in the case of South Korea, ideology derived by particular historical events could have influenced a more statist-oriented approach to industrialization in Taiwan.

Some authors have argued that the ideological influence in KMT political leaders came from two historical events: first, the influence of interwar Russia and Germany (1914-1939) on the KMT; and second, the defeat of the KMT and its refugee in Taiwan, during the Chinese Civil War (1927-1949).

Before the end of the Second World War, mainland China under the KMT was already experimenting with SOEs. Studwell (2013) noted that Chiang Kai-shek and its allies saw with suspicion the role of the private industry since they were influenced by Russian industrialization under Lenin and Stalin, as well as by interwar fascist Germany.[35] Orrú, Biggart, and Hamilton (1997), when further back in history and argued that public-private relations of Taiwan where rooted in Chinese imperial statecraft, with a general distrust of creating powerful economic elites that could capture state institutions. Wade (1993/2014) reported a "tenacious suspicion of big Chinese capitalists among Taiwan industrial policymakers" and the "ethnic tensions" between the mainlander-government and the native Taiwanese business elites resulted in a "greater conflict of interest".

However, this plausible ideological influence of Chinese imperial statecraft or interwar Germany and Russia on who were the legitimate actors in the Taiwanese developmental project did not mean that they could directly emulate the economic projects of foreign countries or replicate the ones carried out in mainland China. Taiwan is an island with scarce natural resources, and at the end of the 1940s had mostly a poor and uneducated society. The defeated KMT in Taiwan had to adapt and plan according to this restrains, as my theory suggests, that could explain why contrary to nationalist ideology, the Taiwanese government had to rely more on FDI to the island as a tool to promote SMEs as international competitive suppliers.

35 According to Studwell (2013), the Germans became their main foreign advisors on industrial and military modernization of China's KMT.

EXTERNAL THREATS AND VARIETIES OF INDUSTRIAL POLICY

As in South Korea, an external shock pushed political elites to speed up and industrial structure that could serve a war economy. In 1971 Taiwan was kicked out of the United Nations as a representative of all China, and in 1972 President Nixon made his famous trip to Beijing. And, in 1979 the US withdraw formal diplomatic recognition of Taiwan in 1979. The Taiwanese government began to adapt to these changing geopolitical circumstances and pushed further the development of a heavy industrial sector in sectors such as steel, shipbuilding, and petrochemicals. Compared to South Korea, the HCI-push had a more statist approach, following the strategy of *leading* and *overriding*, and was implemented in a slower pace. The early stages of the heavy industrial drive between 1971 and 1978 was conducted with SOEs like China Petroleum, Chung-tai Chemicals, and the China Steel Corporation.

GRADUAL LIBERALIZATION AND THE PREVALENCE OF TAIWANESE SECTORIAL PATERNALISM

During the 1980s the Taiwanese implemented an incubator strategy for their electronic industry push. The mission was to support the inception and growth of private companies with the support of quasi-public corporations and institutes, such as the United Microelectronics Corporation, the Taiwan semiconductor company, and various universities and R&D centers.

The Taiwanese economy further liberalized with the bid to enter the General Agreement on Tariffs and Trade (GATT) but the underlying strategy until today has not changed: the governments support the development of many sector-specific firms with its coordinating abilities to link universities, research centers and offer partial or complete financial backup.

SIMILARITIES BETWEEN TAIWAN AND SOUTH KOREA

Both countries had broad similarities in their macroeconomic and industrial policy tools probably plausibly because they faced similar challenges of internal threats of rebellion, a weak domestic capital market, and scarce foreign currencies.

Both countries started their paths towards development with extensive land reforms that reduce the initial inequality. They also had a tight control on capital allocation. Through direct ownership of the financial sector and tight control over foreign exchange the governments directed capital for purchasing equipment, technology upgrading, and they even gave working capital loans in the early stages of their industrialization. However, the countries differed on who received the loans. Taiwan mainly targeted SOEs (Johnson, 1982), while South Korea channeled credit to private conglomerates based on export performance targets. Finally, they both avoided getting

stuck subsidizing inefficient companies using two tools: updating and adapting industrial policy towards new objectives; and using direct interventions to shape industrial sectors, for example by merging companies, force-selling parts of one company to its competitors, and letting companies go bust when companies were financially unsustainable. According to Chang (1993), this created a business environment that dynamically changed the top players in the game.

Both countries experienced a gradual liberalization period during the late 1970s and 1980s that somewhat deviated from what we can call a developmental state, however, while South Korea tried to drift from the *following* the chaebol to *leading* Korean SMEs, Taiwan reinforced the strategy of *leading* in the computer and microchips markets with the guidance of public R&D institutes, such as the Industrial Technology Research Institute and the Electronics Research and Service Organization.

V. CONCLUSIONS

This chapter has tackled two aspects of the literature of developmental states: first, an unclear conceptualization of what it means *to lead* or *to follow* the market; and second, it explored plausible explanations for the observed variation in industrialization strategies across countries.

First, based on Wade (1993/2014), I offered a typology to understand what we mean when we say that governments *lead*, *follow,* or *override* the markets. I based this typology on the explicit effect that the industrial policy has on the strategic decisions of firms: if it changes them, the government *leads*, if assists them, the government *follows,* if the government changes the allocation mechanisms and/or establishes a SOEs in new markets it *overrides* it.

Second, I explored different factors that could explain the variance in industrialization strategies. This chapter emphasized the role of state-business relations as a central factor to understand variance in industrial policy strategies across countries. I found suggestive historical evidence to support this argument.

The vertical integration of firms in South Korea was used to create large economies of scale by supporting the creation of multisectoral companies that could have more managerial power over grand investment and research projects. The more close and intense relationship of the South Korean *chaebol* was consequential to an industrial policy that mostly *followed* private firms. This evolved into a symbiotic relationship where the line between the public and private objectives became blurred. On the other hand, the more horizontal economic structure of Taiwan had the advantage of having an adaptive and competitive economic environment that requires less intervention of the government in shaping markets but it required a more active role

in areas such as R&D and the creation of SOEs that functioned as backward linkages. The distant relations between the government in exile of the Republic of China (Taiwan) and the Taiwanese native population produce an indirect and sectoral approach to industrialization that required a more *leading* industrial policy to coordinate large numbers of actors.

The initial state-business relations shaped the functioning of their economic bureaucracies which in turn supported the persistence of the particular business environment of each country promoting vertical integration in South Korea and facilitating network cooperation between SMEs in Taiwan.

I showed that Japanese colonialism, while controversial, set the bedrock of their bureaucratic and fiscal capabilities, however I also argued that it did not had a differentiated effect on the industrialization strategies between Taiwan and South Korea. I argued that state-business relations can be traced back intro de pre-colonial era for South Korea, and for the particular role of the KMT after the Chinese civil war in Taiwan.

I argued that political institutions might influence the closeness of political and economic elites. In particular, I argued that authoritarian regime type act as an antecedent variable to state and business relations, since the relative closeness is in direct relation to how critical are firms and business groups to the survival of the political elites. I also explored sources of external influences on industrial policy.

I found, contrary to my main hypothesis, that external threat can increase the level of government *overriding,* since economic targets are adjusted to military objectives. In particular, the Nixon Doctrine pushed South Korea and Taiwan towards *overriding* the market to develop industries that could be used for military purposes. But both countries maintained the particular characteristics of their prior industrialization strategies: South Korea relied more on the *chaebol* for his HCI Drive while Taiwan developed many more SOEs in sectors that could serve a war economy.

I also showed that the financial, technical, and military aid of the United States was used to influence military and economic policies but had no significant differences in both countries as to explain their dissimilar industrialization strategies.

VI. REFERENCES

Amsden, A. H. (1989). *Asia's next giant: South Korea and late industrialization*. Oxford University Press.

Balassa, B. (1971). *The structure of protection in developing countries*. World Bank.

Balassa, B. (1982). Structural adjustment policies in developing economies. *World Development*, 23-38.

Bhagwati, J. N., & Srinivasan, T. N. (1978). *Trade policy and development*. World Bank.

Biggart, N. W., & Guillén, M. F. (1999). Developing difference: Social organization and the rise of the auto industries of South Korea, Taiwan, Spain, and Argentina. *American Sociological Review*, 722-747.

Campos, J. E., & Root, H. L. (2001). The key to the Asian miracle: Making shared growth credible. *Brookings Institution Press*.

Campos, J. E., & Root, H. L. (2001). *The key to the Asian miracle: Making shared growth credible*. Brookings Institution Press.

Chandler, A. D. (1990). *Strategy and structure: Chapters in the history of the industrial enterprise* (Vol. 120). MIT Press.

Chang, D. W. (1965). U.S. Aid and Economic Progress in Taiwan. *Asian Survey, 5*(3), 152-60.

Chang, D.-o. (2009). *Capitalist development in Korea: Labour, capital and the myth of the developmental state* (Vol. 16). Routledge.

Chang, H.-J. (1993). The political economy of industrial policy in Korea. *Cambridge Journal of Economics*, 131-157.

Chang, H.-J. (2002). Kicking away the ladder: development strategy in historical perspective. *Anthem Press*.

Chaudhry, K. A. (1993). The myths of the market and the common history of late developers. *Politics & Society*, 245-274.

Cheng, T.-j., & Haggard, S. (1987). *Newly industrializing Asia in transition: policy reform and american response*. IIS (Institute of International Studies).

Chu, Y.-h. (1989). State structure and economic adjustment of the East Asian newly industrializing countries.". *International Organization*, 647-672.

Chu, Y.-h. (1994). The realignment of business-government relations and regime transition in Taiwan. *Business and government in industrializing Asia*, 113-141.

Copper, J. F. (1989). The Evolution of Political Parties in Taiwan. *Asian Affairs, 16*(1), 3-21.

Edwards, S. (1993). Openness, trade liberalization, and growth in developing countries. *Journal of Economic Literature*, 1358-1393.

Evans, P. B. (1995). *Embedded autonomy: States and industrial transformation.* Princeton University Press.

Gereffi, G., & Wyman, D. (1990). *Manufacturing miracles: paths of industrialization in Latin America and East Asia.* Princeton University Press.

Gerschenkron, A. (1962). *Economic backwardness in historical perspective: a book of essays.* Cambridge, MA: Harvard University Press.

Gold, T. B. (1981). Dependent Development in Taiwan. *Ph.D. dissertation, Harvard University.*

Greif, A., Milgrom, P., & Weingast, B. R. (1994). Coordination, Commitment, and Enforcement: The Case of the Merchant Guild. *Journal of Political Economy*, 745-776.

Haggard, S. (2018). *Developmental states.* Cambridge University Press.

Haggard, S., & Webb, S. B. (1993). What do we know about the political economy of economic policy reform? *The World Bank Research Observer,* 143-168.

Haggard, S., Kang, D., & Moon, C.-I. (1997). Japanese colonialism and Korean development: A critique. *World Development,* 25(6), 867-881.

Hart-Landsberg, M. (1993). *The rush to development: Economic change and political struggle in South Korea.* Monthly Review Pr.

Hayek, F. (1945). The Use of Knowledge in Society. *The American Economic Review,* 35(4), 519-30.

Henderson, G. (1968). *Korea, the Politics of the Vortex.* Harvard University Press.

Hun-Chang, C. Y.-J. (2015). Seoul Merchant Communities in Late Chosŏn Korea. In M. Zelin, *". In Merchant Communities in Asia, 1600–1980.* Routledge.

Irwin, D. A. (2000). Did late-nineteenth-century US tariffs promote infant industries? Evidence from the tinplate industry. *The Journal of Economic History,* 335-360.

Johnson, C. (1982). *MITI and the Japanese miracle: the growth of industrial policy: 1925-1975.* Stanford University Press.

Jones, L. P., & Sakong, I. (1980). *Government, Business and Entrepreneurship in Economic Development: The Korean Case.* Harvard University Press.

Juhász, R. ". (2018). Temporary protection and technology adoption: Evidence from the napoleonic blockade. *American Economic Review, 108*(11), 3339-76.

Kalouptsidi, M. ". (2018). *Detection and impact of industrial subsidies: The case of Chinese shipbuilding.* 85(2), 1111-1158.

306 Kim, E. M. (1997). *Big Business, Strong State: Collusion and Conflict in South Korean Development, 1960-1990 (SUNY Series in Korean Studies).* State University of New York Press.

Kim, E. M. (2017). Korea's Evolving Business–Government Relationship. In J. Page, & F. Tarp, *The Practice of Industrial Policy: Government-Business Coordination in Africa and East Asia* (p. 103). Oxford University Press.

Kim, E. M., & Park, G.-S. (2011). The Chaebol. In B.-K. Kim, & E. F. Vogel, *The Park Chung-hee Era: The transformation of South Korea* (pp. 265-294). Harvard University Press.

Kirby, W. C. (1994). Continuity and change in modern China: economic planning on the Mainland and on Taiwan, 1943-1958. *The Australian Journal of Chinese Affairs, 24*, 121-141.

Kondoh, H. (2002). Policy networks in South Korea and Taiwan during the democratic era. *The Pacific Review, 15*(2), 225-244.

Krueger, A. O. (1978). *Liberalization attempts and consequences.* NBER.

Krueger, A. O., & Tuncer, B. (1982). An empirical test of the infant industry argument. *The American Economic Review*, 1142–1152.

Krugman, P. (1994, November). The myth of Asia's miracle. *Foreign Affairs*.

Kuhonta, E. (2011). *The institutional imperative: The politics of equitable development in Southeast Asia.* Stanford University Press.

Lal, D. (2005). The poverty of "development economics". *IEA Hobart*, Paper No. 144.

Lane, N. (2019). Manufacturing revolutions-industrial policy and industrialization in South Korea. *Working Paper*.

Lane, N. (2020). The New Empirics of Industrial Policy. *Journal of Industry, Competition and Trade*, 209–234.

Lee, K. B., Eckert, C. J., & Lew, Y. I. (1990). *Korea Old and New: A History.* Ilchokak, Publishers.

Lin, C.-y. (1973). *Industrialization in Taiwan, 1946-72: trade and import-substitution policies for developing countries.* Praeger.

Little, I., Scitovsky, T., & Scott, M. (1970). *Industry and Trade in Some Developing Countries. A Comparative Study.* Development Centre of the Organization for Economic Co-operation and Development and Oxford University Press.

Mattingly, D. C. (2017). Colonial legacies and state institutions in China: Evidence from a natural experiment. *Comparative Political Studies*, 434-463.

Minns, J. (2006). *The Politics of Developmentalism in Mexico, Taiwan and South Korea: The Midas States of Mexico, South Korea and Taiwan*. Springer.

Mitrunen, M. (2019). War reparations, structural change, and intergenerational mobility. *Working Paper*.

Moon, C.□i., & Prasad, R. (1994). Beyond the developmental state: networks, politics, and institutions. *Governance,* 7(4), 360-386.

Murphy, K. M., Shleifer, A., & Vishny, R. W. (1989). Industrialization and the big push." *Journal of Political Economy,* 97(5), 1003-1026.

Noble, G. W., & Katzenstein, P. J. (1998). *Collective Action in East Asia: how ruling parties shape industrial policy.* Cornell University Press.

Noland, M., & Pack, H. (2003). *Industrial policy in an era of globalization: Lessons from Asia.* Peterson Institute for International Economics.

Ohashi, H. (2005). Learning by doing, export subsidies, and industry growth: Japanese steel in the 1950s and 1960s. *Journal of International Economics*, 297-323.

Orru, M. (1991). The institutional logic of small-firm economies in Italy and Taiwan. *Studies in Comparative International Development,* 26(1), 3-28.

Orru, M., Biggart, N. W., & Hamilton, G. (1997). *The economic organization of East Asian capitalism.* Sage.

Pack, H., & Saggi, K. (2006). *The case for industrial policy: a critical survey.* World Bank.

Panagariya, A. (2019). *Free Trade and Prosperity: How Openness Helps the Developing Countries Grow Richer and Combat Poverty.* Oxford University Press.

Perkins, D. H. (2013). *East Asian Development.* Harvard University Press.

Rodriguez, F., & Rodrik, D. (2000). Trade policy and economic growth: a skeptic's guide to the cross-national evidence. *NBER macroeconomics annual,* 261-325.

Rodrik, D. (1995). Getting interventions right: how South Korea and Taiwan grew rich. *Economic Policy*, 53-107.

Rodrik, D. (2008). *Normalizing Industrial Policy. International Bank for Reconstruction and Development.* World Bank.

Romero, J. A., & Berasaluce, J. (2018). *Corea y México: Dos estrategias de crecimiento con resultados dispares.* El Colegio de México AC.

Rosenstein-Rodan, P. N. (1943). Problems of industrialisation of eastern and south-eastern Europe. *The Economic Journal,* 53, 202-211.

Rueschemeyer, D., Evans, P., & Skocpol, T. (1985). *Bringing the state back in.* Cambridge University Press.

Savada, A. M., & Shaw, W. (1992). *South Korea: A Country Study.* Washington, D.C.: US Government Printing Office.

Scott, M. (1979). Foreign Trade. In W. Galenson, *Economic Growth and Structural Change in Taiwan.* Cornell University Press.

Srinivasan, T. N. (2001). Outward-Orientation and Development: Are Revisionists Right? In T. N. Srinivasan, & J. Bhagwati, *Trade, Development and Political Economy* (pp. 3-26). Palgrave Macmillan.

Studwell, J. (2013). *How Asia works: Success and failure in the world's most dynamic region.* Open Road Grove/Atlantic.

Svolik, M. W. (2012). *The politics of authoritarian rule.* Cambridge University Press.

Toulan, O. N., & Guillén, M. F. (1997). Beneath the surface: The impact of radical economic reforms on the outward orientation of Argentine and Mendozan firms, 1989-1995. *Journal of Latin American Studies*, 395-418.

Vu, T. (2010). *Paths to Development in Asia: South Korea, Vietnam, China, and Indonesia.* Cambridge University Press, 2010.

Wade, R. (1990/2004). *Governing the market: Economic theory and the role of government in East Asian industrialization.* Princeton University Press.

Wade, R. (1993/2014). Robert Wade Industrial Policy in East Asia: Does It Lead or Follow the Market? In G. Gereffi, & D. L. Wyman, *Manufacturing Miracles: Paths of Industrialization in Latin America and East Asia* (pp. 231-266). Princeton University Press.

Wade, R. (1998). From 'miracle' to 'cronyism': explaining the Great Asian Slump. *Cambridge Journal of Economics, 22*(6), 693-706.

Weiss, L. (1995). Governed interdependence: Rethinking the government-business relationship in East Asia. *The Pacific Review, 8*(4), 589-616.

Williamson, O. E. (2002). The theory of the firm as governance structure: from choice to contract." *Journal of Economic Perspectives, 16*(3), 171-195.

Wong, S.-l. (1985). The Chinese Family Firm: A Model. *The British Journal of Sociology, 36*(1), 58-72.

Woo, J.-e., & Woo-Cumings, M. (1991). *Race to the swift: State and finance in Korean industrialization.* Columbia University Press.

Wu, S.-H., & Hsu, F. B. (2001). Towards a knowledge-based view of OEM relationship building: sharing of industrial experiences in Taiwan. *International Journal of Technology Management*, 503-524.

Yoo, J.-h. (1990). *The Industrial Policy of the 1970s and the Evolution of the Manufacturing Sector in Korea.* Korea Development Institute.