Industrial Policy and the Public-Private Economy: An Empircal Analysis

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Abstract

After the post-WWII period many developing countries have implemented industrial policies to catch up with the industrialized countries of the West and Japan. This period was also marked by a strong state-business relationship in many of those countries. This research aims to explore whether industrial policy has caused a separation or blurring of the public and private economy in two countries, namely South Korea and Turkey. The outcome of a time-series observational analysis shows that most of the industrial policies have caused a blurring instead of a separation between the public and private economies in South Korea and Turkey. However, any causal claims can only be made for two out of six hypotheses when the outcomes are tested against the Varieties of Capitalism theory.

Keywords: industrial policy, developmental state; industrial development; political economy; public-private economy; state-business relationship; state intervention

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Foreword

The subject of industrial policy has captured my interest for quite some time now, and in particular the political economy of South Korea and Turkey. The reason I chose these countries is because I have spent some time studying abroad in both and have witnessed their remarkable advancement in economic terms compared to other developing countries in the second half of the 20th century. Moreover, both countries experienced heavy state intervention in the economy in the past, and at the same time are (one of) the most prosperous economies of their respective regions. How does this reflect to the separation of the public and private economy in Turkey and Korea? Many studies have been conducted on the correlation between industrial policy and economic growth, but few have been about the effects of industrial policy on whether it caused a change in the state and private business relationship. This thesis doesn't answer the question whether the change in the public-private economic relationship- due to implemented industrial policies- was beneficial or not. Rather, it tries to find out whether industrial policy has caused a blurring of the public and private economy. In this way, the broader effects of industrial policy will become known instead of just the effects on economic growth rates which might be useful for policymakers in developing countries who consider implementing industrial policies.

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"Coverage of Government-Industry relations (GIR) is still very partial. To an extent there is a problem of levels of analysis, some levels suffering relative to others. For instance, a rudimentary distinction could be made between studies of actors, studies of processes and studies of the overall system. Studies of processes, in the form of policy and sector studies are relatively well developed; similarly there is a generous amount of discussion and analysis of the system as a whole. On the other hand, much of the anchorage for general analysis is absent. The less exciting, equally difficult task of producing authoritative studies of key actors has yet to be thoroughly undertaken."

– Stephen Wilks (1986, 502).

1 Introduction

A historical and empirical account of the role played by government intervention in the form of industrial policies in stimulating development and growth in developing countries in the last 50 years has been the subject of discussion among scholars on industrial policy. However, the effects of industrial policy on the public-private economic relationship has been largely neglected or has taken place within another context. This thesis does not discuss whether industrial policy is necessary to the economic well-being of a nation, nor does it discuss whether it has made the country more competitive vis-à-vis industrialized countries in the global economy. Rather, the main proposition of this thesis is that industrial policy not only has an effect on the growth (or decline in case of failure) of the economy, but has an effect on the relationship between state and business and thus the relation between the public and the private sector as well.

On the one hand, industrial policy can lead to the enlargement of the public sector by establishing state enterprises or taking over private ones. On the other hand, industrial policy can blur the distinction between the public and private economy because the state in some cases gets heavily involved in the day to day business of private companies, and the same companies have to abide to the new rules and regulations of the governments' industrial policy. By mainly focusing on the industrialization process of the second half of the 20th century, specifically the 1960-1990 era, the main research question that will be analyzed is as following: *"Did the industrial policies undertaken by South Korea and Turkey separate the public from the private economy?"*

1.1 Industrialization process

Industrial policy has a long history and the focus of this thesis will be on what is called the 'Third Industrial Revolution'. For this period, what matters is not so much the newness of an industrialization process (as in "newly industrialized country"), as its lateness as compared with others (Wade 1992, 288). To respond to the handicaps and advantages of lateness, late industrializers all tend to construct a similar set of institutions. They namely tend to develop an entrepreneurial state and diversified business groups (Wade 1992, 286). Amsden (1990, 14) argues that:

“the general properties of an industrialization process based on learning, or borrowing, technology are entirely different from those of an industrialization process based on the generation of new products or processes—the hallmark of the First and Second Industrial Revolutions. Thus, the late acquisition of international competitiveness has given rise to certain common tendencies in otherwise diverse countries—Japan, Korea, Taiwan and Turkey.”

These common tendencies concern the roles of institutions and markets. More specifically, it concerns the role of the state, the role of the market, and the structure and competitive strategies of business firms. If there is a symbol that differentiates the difference between the Industrial Revolutions, it is the subsidy (Wade 1992, 288).

“The subsidy serves as a symbol of late industrialization. The First Industrial Revolution was built on laissez-faire, the Second on infant industry protection. In late industrialization, the foundation is the subsidy—which includes both protection and financial incentives. The allocation of subsidies has rendered the government not merely a banker, as Gerschenkon (1962) conceived it, but an entrepreneur, using the subsidy to decide what, when, and how much to produce. The subsidy has also changed the process whereby relative prices are determined.” – Alice Amsden (1990, 143).

1.2 Social and theoretical relevance

Although the neoliberal orthodoxy neglects the role of industrial policy in today’s world and recent past, and states that the efficacy of free markets is established beyond doubt, this thought is being challenged more often (Lall 2003, 3). As Rodrik (2004, 29) notes:

“The reality is that industrial policies have run rampant during the last two decades – and nowhere more so than in those economies that have steadfastly adopted the agenda of orthodox reform. The use of industrial policy in East Asia, India and Brazil is well known. Indeed, there are few examples of successful industrialization where government did not actively promote industry (Chang 2002).”

A state’s decision to implement industrial policy in general has a high degree of societal relevance as it might change the public-private relationship and therefore the way of doing business, whether this is with heavy state involvement in the case of blurring between the sectors or without state interference in the case of a separation of the relationship between the public and private economy. In the case of the former, businessmen have to keep good relations with the state in order to continue and or expand their business activities. In case of the latter, private enterprise don’t have to deal with the state when doing business. When we know whether industrial policy causes a change in the public-private economic relationship, this can be useful for policymakers who consider implementing industrial policies.

Another important aspect of industrial policy is its relevance to developing countries. Developing countries implement industrial policy in order to become more competitive in the world economy. By implementing industrial policy, a state ensures that a number of economic resources are available without the need to import them. This research could provide a road map for policymakers in contemporary developing countries on the effects of IP on the separation or blurring between the public and private economy. No attempts will be done at sorting out doctrinal disputes. The point of departure is also not to judge whether intervention of the state has been correct or not. However, the evidence of the limited or unhealthy effects of industrial policy in the past half a century is important because once such policies had been implemented, governments found them hard to adjust, let alone to abandon. This gives us a good reason to examine whether a change in the public-private economic relationship has taken place, since one would expect that IP would, if not permanently, cause a change in the public-private economic relationship.

The research also has theoretical relevance as there is little research done on the effects of industrial policy on the blurring of the public-private economy. There is no theory which shows what effects industrial policy has on the separation between the public and the private economy, because industrial policies may differ from country to country. This makes the research more difficult, but not impossible. The research question of this thesis can contribute to the specific scientific discourse and to the advancement of the knowledge produced by it. In other words, this research focuses on industrial policy which affect people, and discusses its impact with regard to specific evaluative standards, and increases the analytical leverage over the topic and thus enhances political scientists' ability to describe or explain the political phenomenon (Lehnert et al. 2007, 32).

Before an answer to the research question is sought, a literature review will be given first. Herein, the history of industrial policy is given. This section will be followed by a brief review of the developmentalist state literature, because industrial policy can be seen as a part of the process of a developmentalist state. The theoretical framework provides information and a definition of what import-substitution industrialization and targeted-industrial policy are, which are both varieties of industrial policy that were predominant among developmental states in the mid-twentieth century. As essential is the definition of what constitutes a public economy and what constitutes a private economy. This allows one to categorize the findings in order to see if blurring took place. In the operationalization and measurement chapter, definitions of the concepts will be narrowed down and will be defined more specifically in order to make them measurable. Afterwards, the research design will be discussed for the empirical part of the thesis. Next, an empirical study will be conducted through a time-series observational study in order to empirically test whether industrial policy has caused a blurring of the public and private economy. Thereafter, the results will be weighed against the definitions provided by in the theoretical framework and operationalization. In the last section, a conclusion will be given, where the limitations of the research will be discussed and where ideas for further research will be provided.

3 Literature review

In this chapter, the history of industrial policy will be discussed, followed by a brief discussion about the developmental state and its relationship with industrial policy.

3.1 History of Industrial Policy

The controversy of industrial policy is certainly not new and it goes back decades, and in earlier guises even centuries (Reinert 1995; Chang 2002). Industrial policies for both developed and developing countries were not debated much during the time of the Washington Consensus (Cimoli et. al., 2009, 1). The Washington Consensus on development—which is based on the liberalization of key sectors of the economy such as less government and privatization—was dominant among international policymakers in the last part of the twentieth century (Cimoli et. al., 2009, 1). However, industrial policies are seen as intrinsic fundamental ingredients of successful industrialization and development processes, ranging from Germany and the USA, almost two centuries ago, all the way to Korea, Brazil, China, and India nowadays (Cimoli et. al. 2009, 1). Industrial policy has come to be a central feature of national economic policy in Japan, Canada and many countries in Europe as well (Graham 1992, 23). This literature review shows why industrial policy was important for industrialized countries during their development phase and still is.

The case for industrial policy remains strong, and is in fact becoming stronger with technical change and globalization (Lall 2003, 3). Technologically lagging firms may not survive for long in an increasingly competitive and globalized world. Government intervention becomes necessary when competition alone does not drive business firms to innovate and undertake productivity enhancing investments, not to forget the numerous examples of misguided interventions that diminished enterprises into complacency and hindered industrial development (Ul Haque 2007, 3). Therefore, the kind of interventions needed are changing; globalization, as a structural force, reduces the feasibility of some strategies while increasing that of others (Lall 2003, 3). Industrial success in the developing world – and indeed in the presently developed world in its early phases of industrialization – is thus traceable to how effectively governments have overcome these market and institutional failures through government interventions in the economy (Lall 2013, 15).

Industrial policies have always accompanied the growth process of rich countries (Dosi 1988). Government intervention indeed has a long history when it comes to industrial policy. In fact, historical evidence shows that all the current developed countries have widely adopted targeted government interventions in trade and industry during their catching-up process (Landes, 1970). From the Renaissance period onward, several European kingdoms created, supported, and protected activities characterized by increasing returns and high technology intensity (Di Maio 2009, 107). Historical evidence clearly shows that a state forcing entrepreneurs into specific activities has indeed been a necessary step in the development process of most countries according to Reinart (1994). Moreover, the state itself became an entrepreneur of last resort when, in a number of cases, this was not possible (Reinert 1999). The state in the development process also played a very important role in pushing the technological frontier by being a source of high-quality demand for national production. Infrastructure projects and warfare have been particularly important in this regard (Di Maio 2009, 108).

Even today, an interventionist government can be seen in many parts of the Western world. The US for example, has spent the last few decades using active interventionist policies to drive private sector innovation in pursuit of broad public policy goals (Mazzucato 2013, 83). The US government has supported innovation with the Defense Advanced Research Projects Agency (DARPA), the Small Business Innovation Research (SBR) program and the creation of a market for orphan drugs with the Orphan Drug Act (ODA). In order to illustrate how these programs supported innovation, the first will be explained in more detail. DARPA is a small unit within the U.S. Department of Defense that generated and financed different kind of projects (Pack & Saggi 2006, 273). It is widely credited with and most known for having been the key contributor to the development of the Internet (Pack & Saggi 2006, 273). The founding of the internet addressed a market failure, in that the social benefits of the research were much larger than the expected private benefits (Pack & Saggi 2006, 273). Moreover, DARPA foresaw a potential need that private firms might have missed (Pack & Saggi 2006, 273).

What all three interventionist programs have in common is that no firm gets bound to the government, yet it still picks winners; there are no accusations of lame duck industrial policy (Mazzucato 2013, 83). That is, industrial policy that was not effective due to for example newly elected politicians making U-turns on industrial policy decisions or the channeling of resources into supporting lame duck industries that were in terminal decline. Instead, it is a clever government that rewards innovation and directs resources over a relatively short time horizon to the companies that show promise. Whether this is through supply side policies, (e.d. DARPA's information and brokerage support, strategic programs and vision building) or through demand-side policies and funding for start-up interventions (the SBIR program and orphan drugs) (Mazzucato 2013, 83). Besides creating 'conditions for innovation', the government actively funded the early radical research and created the necessary networks between state agencies and the private sector that facilitate commercial development (Mazzucato 2013, 83). The state has fostered innovation and dynamism in many important modern industries rather than being a drag on the economic system, with the private sector often taking a back seat (Mazzucato 2013, 86).

3.3 Industrial policy and the developmentalist state

Industrial policy can also be seen as a process of the developmentalist state. Spanning the years of the Great Depression to the debt crisis of the 1980s, this was the half-century of developmentalism (Chibber 2009, 144). For despite its somewhat troublesome end, the developmentalist era out-performed its successor on almost every measure (Chibber 2009, 145). Politically, the gloomy record of neoliberalism has meant a steady loss of legitimacy in the South. Thus, it is not altogether surprising to find a revival of the ambition to construct national development. A developmental state governs the process of investment in key economic sectors. It is plan-oriented rather than market-oriented, and therefore tends to enhance large and ambitious development projects (Levi-Faur 1998, 76). Levi-Faur (1998, 76) states that the industrial policy of a developmental state tends to have sectorial rather than functional patterns, a characteristic that reflects its deep involvement in managing and guiding the course of investment. A model of the "capitalist developmental state" was sketched by Chalmers Johnson based on the institutional arrangements common to the high-growth East Asian capitalist countries. These arrangements are characterized according to Johnson (1981, 1982) by the following features:

1. Top priority of state action, consistently maintained, is economic development, defined for policy purposes in terms of competitiveness, growth, and productivity rather than in terms of welfare. The substance of competitiveness/growth goals is derived from comparisons with external reference economies which provide the state managers with models for emulation.
2. The state is committed to the market and private property and limits its interventions to conform with this commitment.
3. The state guides the market with instruments led by an economic general staff or a pilot agency, and formulated by an elite economic bureaucracy.
4. The state is engaged in numerous institutions for coordination and consultation with the private sector, and these consultations are an essential part of the process of policy formulation and implementation.

Kim (1997) has given similar characteristics of a developmental state which he bases on former literature on the subject. According to Kim the developmental state performs the following three major functions:

1. *Provider of long-term goals for the economy*: The state provides comprehensive projections, economic development plans and long-term goals for the entire economy (Johnson 1987; Mason et al. 1980).
2. *Provider of capital and technology*: The state provides capital for investment capital assistance for research and development, technology and technical assistance through regional

and national research facilities, and through foreign and domestic capital loans (Jones & Sakong 1980; Krueger 1979; Mardon 1990; Mason et al. 1980).

3. *Provider of indirect assistance*: The state acts as a mediator with multinational corporations for technology transfers and foreign direct investment, eases regulation, provides tax breaks and tariff exemptions, and establishes trade offices for expertise on imports and exports (Jones & Sakong 1980; Krueger 1979; Mardon 1990).

These services, in particular the last two, are designed to support the private sector in its early stages, when it cannot provide the services itself due to lack of know-how, resources, and information (Kim 1997, 32).

3 Theoretical framework

Two different forms of industrial policy will be discussed. One of them is targeted industrial policy and the other being import-substitution industrialization. Both are selective interventions, because it is an effort by a government to alter the sectoral structure of production towards sectors it believes offer greater prospects for accelerated growth than would be the case in a typical process of industrial evolution according to static comparative advantage (Noland & Pack 2003, 10). Afterwards, the distinction between the problem and private economy is given. Next, the Stolper-Samuleson theory will be discussed which might be useful when measuring the effect of industrial policy on the public-private economic relationship, followed by the Varieties of Capitalism theory that builds on industrial policy. Lastly, the hypotheses for this research will be given.

3.1 Industrial policies: Targeted industrial policy and import-substitution industrialization

The development of industrial policy through time, its relevance for developing and developed countries alike have been discussed in the literature review. This chapter will now focus on one of the main concepts of this research, namely industrial policy, which is also called selective intervention in literature, and the theories that exist to explain this phenomena. Industrial policy (IP) is a government strategy to adjust to the changing structure of the economy and to help important business sectors become more competitive (Krauss 1992, 49). IP is a micro-economic policy because a government must decide which industries (sectors) or even firms it thinks are important enough to help that can contribute to economic growth (Krauss 1992, 49). By contrast, macroeconomic (monetary, fiscal etc.) policy is designed to stimulate the economy in general and thus help all firms and industries equally (Krauss 1992, 49). IP thus stands for a nation’s declared and official, total effort to alter the sectoral structure of production, and hence national industrial portfolio, toward sectors that are expected to offer better prospects for economic growth than would occur in the absence of such intervention (Graham 1992, 3; Pack & Saggi 2006, 2).

This thesis will provide a time-series observational study on this micro-economic, sector (and or firm) specific approach. Industrial policies in a broad sense, come together in processes of ‘institutional engineering’ shaping the very nature of the market mechanisms and rules under which they operate, the boundaries between what is governed by market interactions and what is not, and the economic actors (Cimoli et al. 2009, 2). More specifically, credit directed at specific sectors with below-market interest rates for long-term and working capital, export targets, control of the entry and exit of firms, research and development subsidies, sectorally differentiated profits taxes, subsidized electricity rates, and highly differentiated tariffs and nontariff barriers are all forms of industrial policy of which some will be discussed in more detail below (Noland & Pack 2003, 10).

The traditional rationale for selective industrial policy has been made in terms of market failures that arise when competitive markets either do not exist or are incomplete, which can happen when one or a combination of the following occur: information asymmetries, scale economies, or externalities (Ul Haque 2007, 3). The focus on market failures has helped to target policy on certain critical weaknesses in developing economies, notably, programs for skill improvements as well as public funding of R&D, infrastructure, risk capital and the public provision of education (Ul Haque 2007, 3). As a country approaches the technological frontier, especially in such fields as defense and health, the role of government as a risk partner to support R&D may remain important because of large externalities in basic research (Lim 2012, 70). With improvements in the capacity of the private sector and intellectual property strengthened, the need to rely on government research institutes to perform applied R&D will be reduced (Lim 2012, 70). Thus, even in the dimension of innovation, the value of using extra-market arrangements is likely to decline (Lim 2012, 70).

Targeted industrial policy support measures are also among the most controversial industrial policies (Di Maio 2008, 19). Criticisms are related to the rent-seeking argument (Krueger, 1985) and to purported lack of effectiveness of any ‘picking winner’ strategy (Noland & Pack, 2003). As a matter of fact, governments of both developed and developing countries have made large use of targeted measures during the take-off phase. Historically, discretionary credit lending to specific sectors or firms by development banks has been an important area for targeted intervention (Amsden, 2001).

In many developing countries, governments created national development banks with the objective to facilitate growth of the domestic manufacturing industry through preferential credit at different times after WWII (Di Maio 2009, 120). This was not the first time in economic history. Indeed, during the nineteenth century, state-supported development banks in Europe had a fundamental role in spurring industrialization for late industrializers (Gerschenkron, 1962). The state used the development bank as an agent for financing private and public investment and was a crucial source of long-term lending to industry (Di Maio 2009, 120). Development banks raised capital at home and abroad which they later used to lend to domestic firms at below-market interest rates and sometimes to buy equities in private and public firms (Di Maio 2009, 120).

Another form of selective industrial policy is import-substitution industrialization (ISI). ISI consists of domestic production facilities to manufacture goods which were formerly imported (Baer 1972, 95). The idea was to protect the domestic market in order to make it easier for domestic firms to grow, learn, and innovate (Di Maio 2009, 117). Due to ISI policies, local capitalists were given virtual monopolistic control over their markets once the threat of external competition was extinguished (Vivek 2009, 150). And this in turn meant that, for any such dominant firm the obligation to innovate and invest in best-practice techniques were discouraged – since it had markets handed over to it (Vivek 2009, 150). Thus, under the ISI strategy firms tend to be inefficient due to the lack of competition (Chen & Tang 1968, 277). The subsidies flowing to firms from the state did not need to be reinvested to upgrade existing plant and equipment given the ISI regime. Market dominance made the need to minimize costs unnecessary. Instead, it made better sense to use the resources to start operations in altogether new lines and acquire a ‘first-mover’ advantage there (Vivek 2009, 150).

What made this especially attractive was that industrial firms in the leading late developing countries were typically part of large diversified business groups, maintained diverse investment portfolios and had expertise in numerous sectors (Vivek 2009, 150). Industrialists had to be submitted to a certain measure of accountability in return for subsidies that were being funneled to them by state bureaucrats, and they would have to accept being disciplined (Vivek 2009, 150). For state bureaucrat planners, the need to discipline private firms was a natural feature of import-substitution policy (Vivek 2009, 150). In the absence of government bureaucrats disciplining private firms, rent-seeking activities of private groups could dramatically increase the costs of protection (Grabowski 1994, 538).

Although ISI is today seen by neoliberals as a withdrawal from the world economy, the fact is that its onset generated a further integration into world markets due to an escalation of imports (Vivek 2009, 156). It is true that imports of consumer goods were blocked, but the acceleration of domestic production in turn required a growing inflow of imported capital goods in late developing countries (Vivek 2009, 157). However, in principal, the upward trend in capital imports was to be balanced by proportionate increases in exports (Vivek 2009, 157). The strategy in ISI was to change the composition of exports as part of overseeing the transformation of the industrial structure, from primary to higher-value manufacturers (Vivek 2009, 157; Hirschman 1968; 6).

In point of fact, during the late 1960s a large number of import-substituting countries implemented export promotion programs, and explicitly recognized the importance of exports for further growth (Vivek 2009, 157; ; Levi-Faur 1998, 78; Amsden 1989, 74; Bruton 1998; 903). The basic notion of this outward-oriented export promotion program is to keep the domestic economy open to foreign capital and foreign competition, and to ensure that exports are in no way penalized, if not specifically encouraged (Bruton 1998; 904). The export-based strategy argues that domestic markets are too small to achieve optimal scale. Through production for sale to foreign markets, firms can achieve increasing returns and, eventually, optimal scale (Grabowski 1994, 538). But again, precisely because of their inability to discipline capital in most late developing countries, states failed in this ambition (Vivek 2009, 157).

3.2 The distinction between the public and private economy

In order to examine whether any separation has taken place between the private and public sector, a clarification of what is meant with the public and private economy must be given. This leaves the question for what the definition of the ‘public’ and ‘private’ economy are. This is not an easy task, since the world of bureaucratic actors and activities is so complex and shaded that it is difficult to distinguish the public from the private sector by reference to any single clear set of standards (Stone 1982, 1445). As a start, a distinction can be made along the lines of markets and politics: “public” are those bodies that are constrained and nourished through political act; “private”, through market exchanges (Stone 1982, 1445).

However, a moment of reflection will show that political incentives are too mixed up for us to exactly sort out organizations subject to the one from organizations subject to the other (Stone 1982, 1445). Private interests cannot be equated to market ones, nor do public needs manifest themselves only through political institutions. Hypothetically speaking, the political field can be captured by individuals for private purposes—both economic and non-economic—whilst the private may manifest itself through individual action that is not necessarily profit maximizing (Vieira 2014, 26).

The extensive dependency of private companies on the political trench is also evident. Private companies that rely on market exchanges, not politics, as the predominant source of wealth are responding to signals that are heavily doctored, in size and even in kind, by public action: taxes, tariffs, patents, public subsidies etc. (Stone 1982, 1446). There are private enterprises that are market-oriented in their sales efforts, but whose life in fact depends, as more and more economic life depends, on government licenses and other privileges (Stone 1982, 1446). Not only the hybrid organizational characteristics of the actors blurs the public-private distinction; boundaries between public and private activities are also unclearly marked (Stone 1982, 1447).

Yet, while the distinctions between public and private enterprise have become somewhat blurred, there remains a profound difference between them (Friedmann 1974, 382). Miller and Ferrera identify three criteria as determinative of the question whether an enterprise can be called public and are as following: (1) who owns them? (2) where do they get their financing? and (3) how much control is exercised by government over them? Of all the criteria the authors regard ownership as the least important and therefore hold on the last two as essential criteria (Friedmann 1974, 382).

3.3 Economic theory and industrial policy

Economic theories can shed light on whether industrial policy was the cause that caused the public and private economy to blur or separate, or if this was due to a third, spurious variable. For this purpose, two economic models will be used, namely the Stolper-Samuelson and Rybczynski theories. The Stolper-Samuelson theorem (1948) is one of the principal theories of international trade, and one of the results of the Heckscher-Ohlin (H-O) theory (Neary 2004, 1). It provides a definite answer to a central question in applied economics: what is the effect of changes in the prices of goods, caused for example by changes in tariffs, on the prices of factors of production (often labelled “capital” and “labor”)? In other words, the theory tries to explain how tariffs would affect the incomes of workers and capitalists (i.e., the distribution of income) within a country (Stolper & Samuelson 1948). Samuelson and Stolper were able to show that the factor used intensively in the import-competing sector- in a constant-returns to scale two-sector economy- will gain in real income terms from protection whereas the other factor will lose (Baldwin 1984, 662; Ruffin & Jones 1976, 337). The theorem is further based on perfect factor mobility within a country, and thus its implications is best understood as long-term tendencies (McCulloch 2005, 10).

Baghwati (1959) came up with a statement that embodies the essence of Stolper and Samuelson’s insight and has taken its place in literature as the most cited version:

- An increase in the relative price of a good increases the real wage of the factor used intensively in producing that good, and lowers the real wage of the other factor.

This statement merely gives the effects within a country of a change in prices there and has nothing directly to do with trade or even with more than one country (Deardorff 1997, 13). Feenstra (1980) and Jones’s (2000) research results are consistent with the empirical findings on the Stolper-Samuelson theory. To summarize, the Stolper-Samuelson theory states that if the price of the labor-intensive good decreases (for whatever reason) then the price of labor, the factor used intensively in that industry, will decrease, while the wage rate paid to capital will increase. Thus, if the price of clothing were to fall, and if clothing were labor-intensive, then the wage rate would fall and the rental rate on capital would rise (Suranovich 2006). Similarly, if the price of the capital-intensive good were to fall, then the capital rent rate would decrease and the labor wage rate would increase. Protection thus helps the scarce sector.

The Rybczynski theorem (1955) demonstrates the relationship between changes in the outputs of the final goods and the changes in the national factor endowments within the context of the H-O model (Suranovich 2006). The theorem states that a decrease in a country’s endowment of a factor will cause a decrease in output of the good which uses that factor intensively, and an increase in the output of the other good (Suranovich 2006; Batra 1975, 264; Goldberg & Klein 1999, 4). In other words, if Korea experiences an increase in labor, then that would cause an increase in output of the labor-intensive industry, clothing, and a decrease in the output of the capital intensive good, metal. With both theories, one can check whether the causal effect between industrial policy and the public-private economy is real or if some other spurious variable has caused the blurring between the public-private economic relationship.

3.4 Varieties of Capitalism

Combining the study of comparative capitalisms by political economists with the strategies of firms from the business studies, Peter Hall and David Soskice (2001) came up with the Varieties of Capitalism (VoC) theory. The Voc approach to the political economy is actor-centred, which is to say that Hall and Soskice see the political economy as terrain populated by multiple actors, each of whom acts rational to advance their own interests and engages in strategic interaction with others (Hall & Soskice 2001, 5). These actors can be individuals, firms, producer groups or governments. However, the firm is the central actor in the political economy and the VoC approach regards companies as the central actors in a capitalist economy (Hall & Soskice 2001, 5). Hall and Soskice's emphasis on the firm as key actor in a capitalist economy and the fact that their approach builds on industrial policy, makes the VoC discussion interesting for this research. This approach distinguishes between capitalist economies by reference to the ways firms and other actors coordinate their endeavours (Hall & Gingerich 2009, 450). Hall and Soskice (2001) analyse how companies and organizations solve their coordination problems: either through the market economy or through consultation. They differentiate five areas (spheres) of coordination that are central which are as following:

1. The attitude of companies compared to trade unions and the government in negotiating about wages and working circumstances on group level (*industrial relations*);
2. The degree to which companies invest in *vocational training and education* of the labor force;
3. The way in which companies are governed (*corporate governance*), which is also in congruence with the way how capital is attracted: if the company attracts capital through the stock exchange, shareholders will be able to influence the policy of the company. If financing comes about through long-term bank loans, another, more on continuity aimed policy can be executed.
4. The degree to which networks exist that includes other companies. This concerns the interaction between firms, their suppliers, and their clients, where information exchange, coordination, adjustment or cooperation takes place (*inter-firm relations*);
5. The attitude compared to their own *employees* (on an individual level between the firm and its employees), such as the degree to which employees are involved in the decision-making process and if they are made a part of the sharing of sensitive information

The reciprocal influencing of the separate spheres of coordination are analysed with the help of institutional complementarities concept, in analogy of the complementary goods in the economy that strengthen each other's sales, such as for example bread and margarine (Touwen 2006, 76). Certain institutions exert their influence on the institutions in other areas of the economy (Touwen 2006, 76). Hall and Soskice (2001) emphasize that they have a 'relational view of the firm'. A business has to face all kinds of coordination problems, external as well as internal, which are related to clients, suppliers, employees, trade unions, regulating government institutions, the competition and employers unions. The success of the conduct of business is depended for a large part of finding solutions for these coordination problems (Touwen 2006, 79). In the VoC approach, firms are not seen as autonomous actors capable of taking their fate in their own hands (Bohle 2009, 360). Rather, in the VoC theory strategy follows structure. Existing institutions orient firm behaviour in systematically different directions in two different economies which will be discussed hereafter.

From the principle of institutional complementarities follows the classification of different sorts of capitalist market forms in Liberal Market Economies (LME's) and Coordinated Market Economies (CME's). After all, if the solutions for coordination problems in the thematic clusters influence each other, a certain type of market economy will come into existence on the basis of the chosen solutions, which will choose for either coordination or competition on several terrains. If, generally speaking, the chosen solutions are more tended towards competition, short-term profit, formal judicial contracts and rational market behaviour, then one can clearly recognize a LME. If the chosen solutions are more tended towards coordination, trust, making agreements, serving the public interest and taking collective responsibility, then one can speak of a CME (Touwen 2006, 80). This analytical division is conceived as a bipolar continuum on which countries cluster as following: LMEs comprise of Australia, Canada, Ireland, New Zealand, the UK and the USA. CMEs include Continental Europe, Japan, South Korea and the Scandinavian countries (Hall & Soskice 2001; Touwen 2006, 81). In any advanced (Western) national economy, firms will gravitate toward modes of coordination, either LME or CME, for which there is institutional support there (Hall & Soskice 2001, 8).

Hall and Soskice (2001) describe two mechanisms that will give durability to the national type of capitalism. The first was already mentioned above, namely that the five spheres are not distributed random but show coherence. The differences between LME's and CME's are therefore reinforced by institutional complementarities. Second, because firms use the national context for creating advantages, firms in CME's and LME's will behave differently, which means that differently organized economies will specialize in different products. Moreover, flexible capital and labor markets in LME countries, like the United States and United Kingdom, will allow firms to focus on radical innovation, while the long-term relationship in CME countries, like Germany and France, make a focus on incremental innovation more logical (Hall & Soskice 2001, 36). The latter results in continuous but small-scale improvements to existing production processes and product lines, the former results in the development of entirely-new goods or substantial shifts in product lines and ways of producing them (Hall & Soskice 2001, 33).

In later research, Hall and Soskice have calculated that countries with complementary institutions perform better economically than countries without. This means that pure cases of LMEs and CMEs performed better than countries with mixed or hybrid models of capitalism. This can be seen as a warning to policymakers who want to reform certain spheres of the national economy: those reforms will have impact on other spheres and cannot be considered in isolation (Touwen 2006, 84). Hall and Soskice also discuss the role of the state by addressing economic policymaking, which in their view, the principle problem facing policymakers is inducing economic actors to operate more effectively with each other. Policymakers can use the market to secure this coordination, for example, through incentives, which is likely to happen in LME's. Or they can use the existing organizations, including trade unions and business organizations, to encourage coordination, which is the logical choice in CMEs.

The VoC theory is useful because it applies the new economics of organization to the macro-economy. International theory complements the theoretical foundations of the VoC theory as well (Bohle 2009, 368). Furthermore, VoC draws on the Stolper-Samuelson theorem in which factors of production are perfectly mobile (Frieden & Rogowski 1996; Hiscox 2002). The Voc theory is also grounded in a rich set of comparative studies, but efforts to assess it using statistical analysis on larger numbers of cases are still at an early stage (Hall & Gingerich 2009, 450). The VoC approach was designed to be applied for capitalist institutions of advanced economies in the West, in particular Germany and the United States (Nölke 2013, 33). It is rather doubtful that categories developed for these economies can be directly or readily applied in order to enhance the understanding of the mode of capitalism evolving in other parts of the world. However, research inspired by the VoC approach have been extended to other regions that also include emerging economies.

As coordinated market economies encompass continental European countries and liberal market economies mostly Anglo-Saxon ones, it left out Southern European countries like France, Spain, Italy, Greece and Turkey. According to Rhodes (1997) the latter show signs in clustering as well, indicating that they may be classified as another type of capitalism. This type is sometimes referred to as 'Mediterranean', marked by recent histories of extensive state intervention in the sphere of corporate finance but even more so in the sphere of labor relations that have left them with particular kinds of non-market coordination (Hall & Soskice 2001, 17). Furthermore, this type of capitalism is marked by a large agrarian sector. Although the Mediterranean type of capitalism is not worked out by Hall & Soskice, it is examined in later works such as that of Amable (2003, 107), where he distinguished a broad range of capitalist economies based on inductive modelling. According to him, the Mediterranean model differs from the CME model in a few aspects, namely:

- Less social protection and more employment protection;
- Employment protection is made possible by the absence of short-term profit constraints as a result of the centralization of the financial system and by a relatively low level of product-market competition;
- A workforce with limited skills and education level does not allow for the implementation of high wages and high industrial strategy.

Amable (2003) also distinguishes an Asian capitalist model, based on the East Asian economies. The main features of the Asian model can be said to be the following:

1. *"A close relationship between the government and business – government's interventions are made after consultation with business, and such interventions are carried out through a system of 'administrative guidance' rather than through formal legislation;*
2. *A specific financial system, with long-term relationship between banks and firms;*
3. *Cooperative relationships between management and labor in the internal pattern of firms' organization in connection with supporting labor-market 'imperfections';*
4. *A reluctance to consider perfect competition on product markets as more efficient than 'guided competition'; and a strategic pattern of integration within the world economy, leaving finance and science sectors isolated from external competitive pressure."* (Amable 2003, 84).

The Asian model of capitalism hinges on business strategies of the large corporations in collaboration with the state and a centralized financial system, which allows the development of long-term strategies (Amable 2003, 108). A lack of sophisticated financial markets and social protection make risk diversification difficult and contributes to the stability provided by the large corporation crucial to the solidity of the model (Amable 2003, 108). An overview of the four types of capitalisms regarding product-market competition, wage-labor nexus and the financial sector can be found in Table 1 below.

		Four types of capitalism		
Institutional area	**Liberal Market Economies**	**Coordinated Market Economies**	**Asian Capitalism**	**Meditterranean Capitalism**
Product-Market competition	High importance of price competition, non-involvement of the State in product markets, coordination through market (price) signals, openness to foreign competition and investment	Moderate importance of price comeptition, relatively high importance of price comeptition, involvement of public authorities, relatively high non-price 'coordination', low protection against foreign firms and investment	Importance of both price and quality competition, high involvement of the State, high degree of non-price 'coordination', high protection against foreign firms and investment, importance of large corporation	Price- rather than quality-based competition, involvement of the State, little non-price 'coordination', moderate protection against foreign trade or investment, importance of small firms
Wage-labor nexus	Low employment protection, external flexibility: easy resource to temporary work and easy hire and fire, no active employment policy, defensive union strategies, decentralization of wage bargaining	High employment protection, limited external flexibility, job stability, conflicting industrial relations, active employment policy, moderately strong unions, coordination of wage bargaining	Employment protection within the large corporation, limited external flexibility, labor-market dualism, seniority-based wage policy, cooperative industrial relations, no active employment policy, strong firms' unions, decentralization of wage bargaining	High employment protection (large firms) but dualism: a 'flexible' fringe of employment in temporary and part-time work, possible conflicts in industrial relations, no active employment policy, centralization of wage bargaining
Financial sector	High protection of minority shareholders, low ownership concentration, high importance of institutional investors, active market for corporate control (takeovers, mergers and acquisitions), high sophistication of financial markets, development of venture capital	Low protection of external shareholders, high ownership concentration, no active market for corporate control (takeovers, mergers and acquisitions), low sophistication of financial markets, moderate development of venture capital, high banking concentration, importance of banks in firms' investment funding	Low protection of external shareholders, high ownership concentration, involvement of banks in corporate governance, no active market for corporate control (takeovers, mergers and acquisitions), no sophistication of financial markets, limited development of venture capital, high degree of banking concentration	Low protection of external shareholders, high ownership concentration, bank-based corporate governance, no active market for corporate control (takeovers, mergers and acquisitions), low sophistication of financial markets, limited development of venture capital, high banking concentration

Table 1.

Source: Amable, B. (2003). The diversity of modern capitalism. Oxford: Oxford University Press.

As is stated by Hall & Soskice (2001, 32), the institutional structure of the political economy provides firms with advantages for engaging in specific kinds of activities. Firms produce some kinds of goods more efficiently than others because relevant institutions are not distributed evenly across countries, and because of the institutional support they get for their activities (Hall & Soskice 2001, 32). According to the VoC approach, these should give rise to cross-national patterns of specialization. In other words, the national institutional frameworks of each country thus provide nations with comparative advantages in particular products and activities (Hall & Soskice 2001, 33). In the findings of Amable (2003, 205) market-based economies have a strong comparative advantage in biology; Asian economies specialize in electronics and machinery; and Mediterranean economies have a trade specialization towards low-tech industries. Below an overview of the comparative institutional advantage of the five types of capitalism. Table 2 shows a complete overview of his findings for the four types of capitalism.

		The comparative institutional advantage of the four types of capitalism			
		Market-based Capitalism	Coordination-based Capitalism	Asian Capitalism	Mediterranean Capitalism
Technological specialization	+			Computers, electronics	
	–	Instruments		Non-electrical machines, metal products	Non-mineral products, textiles, clothing, and leather
Trade specialization	+			Electronics	
	–				
Industrial specialization	+			Electronics, iron and steel	Non-mineral products, agriculture
	–				
R&D	+			Public R&D (execution and financing)	Public financing of R&D
	–				R&D expenditures per capita, R&D/GDP ratio

Table 2.

Source: Amable, B. (2003). The diversity of modern capitalism. Oxford: Oxford University Press.

If the findings of this research overlap with the outcomes of one of the four types of capitalism of the VoC approach, then the separation or blurring of the public-private economy might not have been directly caused by industrial policy.

3.5 Hypothesis

Johnson's (1981, 1982) last two characterizations of a model of the capitalist developmental state leads to the first two hypotheses of this research. The reason these two are chosen is because they are measurable and are related to the dependent variable. The first hypothesis relates to characteristic that the state guides the market with instruments formulated by an elite economic bureaucracy and is as following:

H1: *The higher the involvement of an elite economic bureaucracy in the market, the more the public-private relationship will be blurred.*

The second hypothesis relates to the fourth characteristic of Johnson's model, namely that the state is engaged in numerous institutions for consultation and coordination with the private sector, and that these consultations are an essential part of the process of policy formulation and implementation. The second hypothesis relates this characteristic of IP to the public-private relationship as following:

H2: *The more consultation and coordination takes place by the state with the private sector, the more the public-private economy will be blurred.*

The third hypothesis relates to selective intervention in the market by the state through the use of subsidies. This encompasses subsidies in the most general sense, including direct and indirect subsidies, but also subsidized credit from state-owned banks to private enterprises. The subsidies may be implemented during ISI and or targeted industrial policy period. The third hypothesis is thus as following:

H3: *The more (direct and indirect) subsidies the state uses, the more the public-private economy will be blurred.*

The fourth hypothesis concerns the involvement of the state in public and private enterprise entrepreneurship and management. This can be in the form of state enterprise, a mixed public-private enterprise or a private enterprise that is managed by state bureaucrats. This leads us to the fourth hypothesis:

H4: *The more state involvement in public enterprise entrepreneurship, mixed public-private enterprise and management of private enterprise, the more the public-private economy will be blurred.*

The fifth hypothesis is about the regulatory public controls the state enacts over private enterprise as a part of industrial policy, which should lead to a more diffused public-private economic relationship. This gives us the following hypothesis:

H5: *The harsher the regulatory public controls of the government over private enterprise, the more the public-private economic relationship will be blurred.*

The sixth hypothesis concerns elite transfer from government and or bureaucracy to the private sector and vice versa. If elite transfer from the public to the private sector and vice versa is frequent, one can expect a blurring of the public-private economy. This gives us the last hypothesis:

H6: *Elite transfers from the public to the private economy and vice versa leads to a blurring of the public-private economy.*

The next chapter will operationalize industrial policy and the public-private economy in order to make these hypotheses measurable.

4 Operationalization and measurement

In order to find a causal relationship between the independent variable (X) and dependent variable (Y)—which means that the independent variable (X) is causing the dependent variable (Y)—the answers to the following four claims should be carefully considered. First, there needs to be a credible causal mechanism that connects X to Y (Kellstedt & Whitten 2007, 51). In other words, what is specifically about having more (or less) of the independent variable (X) that will in all probability lead to more (or less) of the dependent variable (Y)? Second, the claim is made that a change in the independent variable (X) precedes the change in the dependent variable (Johnson et al. 2008, 70). Third, X and Y need to covary—a change in one variable is associated with a change in the other. The fourth and last causal hurdle is that the covariation between X and Y is not simply a coincidence or spurious—that is, due to change in some other variable—but is direct (Johnson et al. 2008, 70). Both the dependent variables, the public and private sector economy, and the various independent variables used in this research, namely different industrial policies, are hard to measure since they are broad concepts. Nonetheless, both the independent and dependent variables can be measured if they are defined more specifically.

4.1 Measurement of the independent variable: industrial policy

Industrial policy is broadly defined as a nation's effort to influence sectoral development and, for that reason, the nation's industry portfolio (Lim 2012, 71). There are several policies that can be implemented under industrial policy. Noland and Pack (2003) describe five such policies which will be used for this thesis as they have an effect on the public-private relationship.

i. One of them is the strategic use of direct subsidies. Export subsidies is an example of a direct subsidy. Indirect subsidies through the tax system and off-budget finance would be another industrial policy that could be implemented (Noland & Pack 2003, 25). A source of indirect subsidies are for example the public financial institutions, such as public banks or state controlled private banks, that offer loans at rates below the prevailing market interest rate (Noland & Pack 2003, 26).

ii. Subsidized credit and R&D policy is another part of industrial policy that might be implemented. A government can promote high-technology sectors through special deductions for R&D costs, reduced interest burdens through the supply of low-interest loans by public financial institutions, and direct subsidies to R&D activity (Noland & Pack 2003, 29). Moreover, private R&D can be subsidized through the supplies of low-interest loans by public financial institutions for financing development of new technology (Noland & Pack 2003, 29). Government-supported institutions can hence provide indirect support to private R&D activities. These include national and public research institutes, private non-profit organizations and special public corporations if there are any (Noland & Pack 2003, 29).

iii. A third policy could be controls on international trade (trade protection), investment, technology imports, price and wage controls, and foreign exchange to create conditions advantageous to the development of domestic industries. With respect to external relations, some have emphasized the government's role as a "doorman," determining under what conditions equipment, manufactured products, and capital technology enter and leave the country, directly allocating foreign exchange to be used for the importation of goods and services (Borrus et al. 1986, 98).

iv. Fourth, tolerance of anticompetitive behavior can also be an industrial policy. The tolerance of anticompetitive behavior by private firms occurred implicitly through lax or absent enforcement of competition policies, or explicitly by the sanctioning of cartels (Noland &

Pack 2003, 32).

v. Fifth, the state can use public-private consultation as an industrial policy instrument to target either emerging industries (infant industries) or declining industries – or anything in between (Lim 2012, 71).

vi. Lastly, the state can make use of elite transfer, where government officials or high official bureaucrats are placed at managerial positions in private or mixed-enterprise.

The first three policies can be found in government statistics and quantitative analysis by scholars, the last three policies are more descriptive than numerical and may be found in qualitative analysis. This makes the first three policies more valid and reliable, since they measure what they purport to measure and will get the same results after repeating the study with the same data. The fourth, fifth and sixth policies are somewhat less reliable because it involves normative concepts. Overall, this research relies mostly on qualitative assessments because comparative statistics that are readily available for advanced industrialized economies are often difficult to obtain for (Asian) developing economies.

4.2 Measurement of the dependent variable: public-private economy

The intermingling of public and private economic activities is also studied by Friedmann (1974). He came up with several principle ways in which public authority in contemporary mixed economies, interfere and intermingle with private enterprise.

1. *State Enterprise*: The state as entrepreneur is the most direct form of state economic activity (Friedmann 1974, 370). Contemporary government enterprises take essentially three forms: (1a) semi-autonomous departmental operations, a survival from an earlier phase of state economic activities; (1b) public corporations, that is statutory corporations—often, though, not always, resulting from nationalization—which are entrusted with a particular function, such as the research in and production of nuclear energy, electricity generation and distribution, or the operation of a national railway system; and (1c) commercial companies controlled by state ownership of shares, either directly or through a state holding company (Friedmann 1974, 370). These functions may provide the necessary resources for private enterprise to survive and or thrive, making them dependent on state enterprises.

2. *Mixed Public-Private Enterprise*: A modification of the state enterprise mentioned above is the mixed public-private company, namely a commercial company via which the state or other public authorities operate a particular enterprise jointly with private interests (Friedmann 1974, 370). This allows for a variety of mixes, namely from (2a) public majority holdings to (2b) a fifty-fifty division between public and private interests, to (2c) a public minority

holding in an enterprise in which private shareholders predominate (Friedmann 1974, 370).

3. *Regulatory Public Controls over Private Enterprise*: Through a large number of regulatory controls the state participates in economic enterprise, which to a greater or lesser degree interfere with the market economy and the "free enterprise" model of economic activity (Friedmann 1974, 370). The most prominent forms of such government intervention would appear to be the following: (3a) *Price and wage controls: public regulation or supervision of prices, tariffs or wages*. Public regulation of the prices charged by privately-owned public utilities—such as telephone companies, electricity companies, airlines and railways —has been a notable feature of for example the American economy for many years (Friedmann 1947, 370). (3b) *Protection of competition*. The undeniable fact that the protection or restoration of even a small amount of competition requires government intervention and an extremely complex and costly apparatus of public controls (Friedmann 1974, 371). (3c) *Taxation.* Taxation, once a strictly limited way of financing the minimum functions of government (notably defense, administration of justice and police) has long become a major means of regulating the economy in all contemporary countries (Friedmann 1974, 371). As the case may be, taxation may favor or disfavor public or private enterprise in its entirety or selectively. A notable form of privilege for public enterprises is exemption from taxation. (3e) *Government intervention through currency and trading controls.* The allocation of raw materials, spare parts and other materials, import quotas and other government controls are examples of government intervention in the economy. These instruments of control enable the Government to either regulate a nominally predominant private enterprise economy through the use of public controls, or to decisively shift the balance between the public and private sectors of the economy (Friedmann 1974, 374).

4. *Government Assistance to Private Industry:* Another increasingly frequent form of government intervention in the private economic process consists of various forms of government assistance (Noland & Pack 2003, 374). In recent years this has contributed to a blurring of the public and private enterprise, more than any other form of government intervention (Noland & Pack 2003, 374). Public enterprise generally have direct access to financial government help, mainly in the form of Treasury guarantees for their obligations, or of ad hoc subsidies granted directly to them (Noland & Pack 2003, 374). In many cases the Government has come to the assistance of private industry for reasons of public policy (defense, unemployment, etc.) which has blurred the borderlines between public and private enterprise (Noland & Pack 2003, 375). Such government assistance may take various forms. One form, which has accounted for the growth of state participation in a variety of private enterprises—notably France and Italy since the First World War—is the taking over of shares

by the government, and in this case becomes an entrepreneur, in order to save a major private enterprise from bankruptcy (Friedmann 1974, 375). Governments that prefer the preservation of the form of private enterprise do so because they are ideologically prejudiced in favor of private enterprise but cannot escape the social responsibilities that would flow from the collapse of major industries or individual enterprises (Friedmann 1974, 376).

5. *Managerial Participation by Government:* In contrast to the pure government subsidy technique—which conceals the economic reality under the friction of continuing private enterprise, like is the case in Amtrak and Comsat in the USA for example, both of which are described in some detail by Miller and Ferrera—the Government now assumes some responsibility for the management of enterprises (Friedmann 1974, 379).

6. *Coordination of Public and Private Enterprise in Economic Planning:* The differences between public and private enterprise are somewhat diminished where the national economy is guided by an overall economic development plan (Friedmann 1974, 380). Economic plans, usually drawn for five-year periods, are the controlling factor in the selective treatment of foreign investment, and the various types of preferential treatment mentioned above in the great majority of developing countries (Friedmann 1974, 381). Development planning generally means a predominance of public enterprise in economically underdeveloped countries—since there is generally, at this stage of development, not sufficient responsible private venture capital for activities likely to be unprofitable, at least for a long initial period—stimulating private enterprise on purpose, may be a part of a development plan (Friedmann 1974, 381). The concept of economic planning was introduced in the mid-sixties, when economic development and planning bodies—popularly called "neddies" (named after National Economic Development Council)—were created (Friedmann 1974, 381).

It has to be noted that although elite transfer is used as an independent variable that can cause blurring between the public-private economy in hypothesis 4 and in the previous section, it is also a variable that can be used as an operationalization of the relation between the public-private economy itself. Like governments, business giants can also make use of elite transfer from or to the state sector, which is the easiest, most profitable and effective strategy for businesses (Arslan 2004, 6). For business elites, developing good relations and organic ties with the political elite is one of the most advantageous ways to maximize their financial relations with the state and state sector (Arslan 2004, 6). Elite transfer for business giants can occur in two ways; sometimes business firms send their managers or somebody from the family into politics or into the state apparatus. At other times they transfer popular political and bureaucratic members into their own companies (Araslan 2006, 6). These transfers lead to privileges for the holding companies such as primacy over other holdings when it comes to subsidies. The goal is control the political decision- making and taking process, and to improve good relations with the state and bureaucracy (Arslan 2004, 6). Therefore, elite transfer can also be considered a dependent variable when it occurs on the initiative of private enterprise.

The more the government interferes and intermingles with private enterprise, the more the public-private economy gets blurred. The implementation of IP thus has to lead to an increase in any of the indicators mentioned above. The first two Principles of Friedmann, state enterprise and mixed public-private enterprise, can be measured by a ratio scale as there is either 0 percent involvement of the state in a private enterprise, the state is a minority shareholder 49 percent, the state is a majority shareholder with 51 percent of a corporation's shares or the state fully owns the private corporation through e.g. nationalization, which makes it a state enterprise. Principle 3, regulatory public controls over private enterprise, can be measured by looking at how many times the forms of public regulatory controls as described above occurred during the period under examination. This also accounts for Principle 4, government assistance to private industry, where one looks at the amount and intensity of financial help private enterprises get from the government, including private enterprises that are bailed out by it. The last two Principles, managerial participation by government and coordination of public and private enterprise in economic planning, are less straightforward, but only data will be selected that involves the words 'managing' of a private enterprise by the state or 'economic planning' by government bureaucrats. Other data that meets the criteria of the indicators might not have been included in this research, but may be added to the existing data in future research to make it more reliable. It will be obvious that this approach is a work-in-progress, offering answers to some of the questions raised in this research but generating new ones as well.

5 Research design

The time-series observational studies looks at the development of the dependent variable and has at its heart, a comparison over time within a single spatial unit (Kellstedt & Whitten 2007, 92). As such, in this topic the design looks at the public and private sector before and after the implementation of industrial policies. This means that data is gathered throughout the process of implementing industrial policies. Changes in the public-private relationship as a result of these policies can then possibly be linked to the introduction of elements of industrial policy. The cases in this research are South Korea (hereafter called Korea) and Turkey. The treatment of the economies and institutions these countries are subjected to is industrial policy.

The time-series observational study is feasible for this research because, firstly, one looks at the public and private sector before the introduction of industrial policies. Secondly, one does the same research after the implementation of industrial policy. The time-series observational study is feasible and internally valid for this topic. However, the external validity with this research design is limited. The comparison covers only two countries, which is not enough to make a broad generalization about the effects of industrial policy on whether a blurring or separation between the public and private economic sector has taken place. Due to this limitation, only a general remark will be given. A second hurdle in this research design is that one has to focus hard on whether any other variables are related to the varying degrees of industrial policy (X) and the separation of the public and private economy (Y). If one can identify any other possible causes of why the public and private sector have blurred or separated, then those factors will have to be controlled for in future research.

The units of analysis is the entity being studied in the research (Babbie 2007, 98). Units of analysis in a study are usually also the units of observation. The units of analysis for this research are the sectors of the economy that are affected by industrial policy. More specifically, the units of analysis are industries/corporations/individuals in South Korea and Turkey. This means that formal organizations are the main units of analysis. The findings of these units are then aggregated to make generalizations about the public or private sector of the country they belong to. The account will be highly stylized, partly due to lack of space, but mainly due to the fact that this thesis aims to raise new issues for further research, rather than to be a comprehensive and conclusive case study.

5.1 Cases

For this thesis, an outcome-centric small-n research is chosen. An outcome-centric small-n research will provide a within-case, in-depth study of potential factors and causal processes that explain the occurrence of single events as comprehensively as possible (Gschwend & Schimmelfenig 2007, 14). Given the focus on a few cases, generalization is necessarily limited to most similar cases (Blatter & Haverland 2012, 76). The preference for a comparative framework is motivated by the fact that Turkish and Korean authorities are deliberately trying to adapt certain features of the Japanese economic model (Onis 1992, 75). Korea and Turkey share several denominators which will be discussed in further detail below.

An examination of the domestic context of development reveals seven important similar denominators between the selected cases for this research—which have also been used by Levi-Faur in his work *The Developmental State: Israel, South Korea, and Taiwan Compared*— namely Korea and Turkey. First, both countries are poor in natural resources and therefore need to import most of their energy materials (as well as raw materials for Korea). Second, both are the homes of an ancient peoples with a strong national identity. This national feature distinguishes Korea and Turkey from many other developing countries, which often face severe problems of common identity and nation-building. Third, both Korea and Turkey pursued their economic development under the drive for modernization of the economy and ideological necessities of nationalism. The nationalist ideology is evident in Park Chung Hee's manifesto *The Country, The Revolution and I* (and his belief that 'steel is national power'). Park, whose principal hobby was said to be the study of Korean and world history, compared the Korean "revolution" under his leadership in 1963 to the Meiji reform in Japan, and for him, modernization and industrialization mainly meant emulating Japan. Furthermore, he compared the development under his leadership with the modernization of China under Sun Yat-Sen, and Mustafa Kemal Atatürk's development of Turkey (Young 2005, 29).

Fourth, the two countries' economic achievements were exceptional by any criteria. A side note has to be made here. Although golf-state countries like Qatar and the United Arab Emirates achieved remarkable economic growth as well, these small states with rich natural resources are not comparable to a mid-sized country like Turkey. If we compare Turkey with neighboring countries that are of similar size, like Iran, Syria, Saudi Arabia or Egypt, the economic development of Turkey- in a region full of turmoil and without oil- stands out in particular. Fifth, both Korea and Turkey were governed by repressive governments which managed to retain in power through heavy military involvement. During military rule in Korea and Turkey, the state also actively intervened in the market by means of top-down bypassing by finding political solutions to economic problems (Oh & Varcin 2002, 715). Sixth, the basic rights of citizens and that of workers in particular in both countries were not at the same level as their developed counterparts. Lastly, most of the economic growth in Korea and Turkey was achieved under a state-controlled financial system. The next chapter will include an empirical analysis on these two cases.

6 Analysis

6.1 Industrial Policy in Korea

During its rapid industrialization period, state intervention has been pervasive in Korea (Chang 1993, 134). The main reason for state intervention in Korea has been the making of an 'independent economy' (see EPB 1982). In order to establish an independent economy, the Korean government has supported the development of large domestic conglomerates as a part of its industrial policy which will be discussed in this chapter.

When putting the chronology of industrial policy in order, the standard chronologies show Korea beginning with a period of import-substitution industrial policy which lasted until about 1965, followed by a phase of export-oriented industrial policy until the early mid-1970s (Wade 2004, 325). In the 1960s and 1970s, special incentives- tax concessions, access to foreign exchange, and other forms of protection or enhancement- were granted to strategic industries (Kim 1997, 39). The 1960s and 1970s was followed by a period of secondary import substitution lasting until the late 1970s and early 1980's (Wade 2004, 325). During this period, the government had introduced the new Industrial Promotion Act in 1986 which had abolished all industry specific promotion acts. This new Act tied all incentives to special industrial activities such as R&D development (Kim 1997, 39).

In the late 1980s however, the government again designated several high-technology industries, including information technology, for support, but its role in these industries is much more limited than that in labor-intensive industries in the previous two decades (Kim 1997, 39). Finally, the late 1980s was followed by a period of "course correction" or liberalization (Wade 2004, 325). Each import substitution period is associated with more state intervention in the economy, each export promotion period with less state intervention (Wade 2004, 325).

6.2 Separation of the public and private economy in Korea

6.2.1 State Enterprise

To implement key policies in Korea's industrial evolution, private agents have not been exclusively relied upon. Westphal (1990, 49) tells how the first public enterprises were concentrated in the natural resources with the first producers of fertilizer, petrochemicals, and refined petroleum products all being established by the State. Decisions to use public enterprises to launch new industries have been made pragmatically, on a case-by-case basis and appear to have been reached on several grounds, including the absence of private parties willing to undertake the venture; the expectation that a public agent could achieve a far more favorable outcome in negotiations with foreign suppliers of capital and technology; and the desire to exercise control over the start-up and operation of an industry with multiple linkages to other industries (Westphal 1990, 49). These public enterprises have been managed as autonomous profit-seeking entities by the state and have contributed materially to government revenues (Westphal 1990, 49). In general the Korean state did not hesitate to set up public enterprises if private firms could not be made to do something, making the share of public enterprises in GDP almost equal to that of India (Jones & Mason 1982, 22).

An example of a public enterprise (staffed and run by government officials) was the state-owned Korea Oil Corporation which was established in 1962 to help meet the demands of transportation and synthetic fiber manufacturing, and later merged into the SK Group (Kim 2007, 380). Several government-invested public enterprises (with at least 50 percent government ownership) were established following the HCI. Examples are the Korea Chemical Company and the Korea Electric Power Corporation (KEPCO), which represented the core of the new enterprises during Park's reign from 1961 until his assassination in 1979 (Kim 1997, 146).[1] Another example of a public enterprise that was created by the government is the Pohang Iron and Steel Company, Ltd., in 1968; five years later POSCO began production in the southwest city of Pohang (Amsden 1989, 293). The government appointed as POSCO's president a competent retired army general, namely Tae Joon Park, who was a friend of President Park Chung Hee, a man with a track record of having turned around the government-owned Korea Tungsten Corporation (Amsden 1989, 295).

In 1985 the public enterprise sector consisted of about 90 enterprises employing 305,000 workers, or 2.7 percent of total employment in the nonagricultural sector (Country Studies US 1990). State operating enterprises (SOE) were still being established by the state during the 1990s. Dacom for example, which specialized in international calls, was established by the government in order to increase competition in the telecommunications sector. This competition led to an increase in efficiency and quality throughout the 1990s due to the competition between Dacom and the existing dominant telephone state-owned enterprise, Korea Telecom (Chang 2007, 24).

6.2.1a Nationally controlled banks

During the Syngman Rhee government in the 1950s, close ties between state and business were widespread, where government-vested properties were often sold and licenses were granted to friends and relatives (Kim 2011, 4). In this light, the nationalization of commercial banks was possible because the Park government took over the task of dealing with business leaders who were accused of having grown rich through corruption in the 1950s (Lim 2012, 74). Park demanded and received their equity shares in substitute of fines for tax evasion and other illegal practices, virtually gaining all resources vital to business (Lim 2012, 74; Fields 1997, 127). This drastic measure allowed the

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[1] In 1961 the new military junta under Park's leadership merged three smaller electric companies to form the Korea Electric Company (KECO). Seoul invested heavily in KECO, realizing that adequate sources of power were a basic prerequisite to industrialization. In 1982 KECO was reorganized as a public corporation and became known as KEPCO. All shares were owned by the government. In 1988 Seoul decided to sell 30 percent of all shares to the public. KEPCO, one of the largest public corporations in South Korea, with 30,289 employees, serviced about 99.8 percent of the populace in 1988 (Country Studies US 2015).

government to exercise direct control over commercial banks (Lim 2012, 74). By 1970 it controlled 96.4% of the country's financial assets (Minns 2001, 1027). Direct control allowed Economic Planning Board (EPB) planners to distribute resources to areas of industry that were considered essential to industrial development (Minns 2001, 1027). President Park also gave the Ministry of Finance (MOF) direct control over Korea's central bank, the Bank of Korea (BOK). Under the immediate supervision of the president, the MOF effectively determined the reserve ratios, loan and investment volumes, selective allocation of low-interest rate foreign loans and most importantly, the interest rates of all formal banking institutions (Fields 1995; You 2005, 30). Authority within the state thus centered around president Park's own residence and office, the *Blue House*, and the EPB (D'Mello 2004, 835).

Next to commercial banks, the state established special purpose banks. One of them was the Korean Development Bank (KDB, established in 1954) which provided channels for loans to new corporations (Kim 2007, 381). The KDB did not accept deposits as did normal commercial banks due to its specialized purpose (Kim 2007, 381). Other special purpose banks were also established to support farmers, fishing industries, small- and medium-sized firms, and housing developers such as the National Agricultural Cooperative Federation (NACF), Medium Industry Bank (MIB), Central Federation of Fisheries Cooperatives (CFFC), and Citizen's National Bank (Kim 2007, 381). In order to finance housing for low-income families the Korea Housing Bank was established in 1967 (Kim 2007, 382). The Korea Development Finance Corporation (KDFC) was launched in the same year to facilitate the creation of private enterprises by providing medium- and long term financing (Kim 2007, 382). Another special bank which was introduced in the same year was the Korea Exchange Bank, which dealt with foreign exchange (Kim 2007, 382). Other special banks included the Bank for Median and Small Firms and the Ex-Im Bank, which were set up over a period of time, resulting in full state control over investment loans (Kim 2007, 382; Chang 1993, 151).

The KDB and other special purpose banks provided a major proportion of loans in the 1960s and during this period, the KDB issued 73% of loans in South Korea; commercial banks issued the remaining 37% (Kim 2007, 382). The loan allocation scheme between the 1960s and early 1990s was effective in mobilizing domestic savings and implementing industrial policy (Kim 2007, 407). The role of commercial banks as financial intermediaries was absent during this period, which was dominated instead by government industrial policy. The government retained complete control over the KDB and extended its role, allowing it to borrow loans from abroad and to guarantee foreign loans provided to domestic firms (Kim 2007, 382). Cole and Park (1983, 61) described this financial situation as follows:

"*The banks basically issued the guarantees on instruction from the government and took little responsibility for evaluating either the economic or financial feasibility of the project*."

Industrial groups in the 70s were highly leveraged with loan guarantees through these banks that were owned by the government. This had literally made the government a partner responsible for the failure of these industrial conglomerates as well as success. (Park 1990, 119). Not only did the Korean state bailout weak companies, it also rewarded political relationships, not necessarily economic success (Kang 2002, 190). Whether the former or latter mattered more, will be analyzed later. Moreover, the bailout of companies by government controlled banks is a characteristic of central bank dependence on government which will be discussed hereafter (Lijphart 1999).

The discussion on central banking is not that far from what Lijphart (1999) also finds in his research on majoritarian democracies. Lijphart's (1999, 232) tenth feature of democracy deals with the central bank and the degree of its independence vis-à-vis other state players, in particular the parliament and government. A central bank that is influenced to a considerable degree by the executive follows the principle of concentration of power in a majoritarian democracy, while an issuing bank that acts autonomously corresponds to the power sharing logic of a consensus democracy (Vatter 2008, 24). In this light, Korea would be categorized as a majoritarian democracy, having a central bank that is heavily influenced by the executive. The question arises then whether central banking in Korea is particular to industrial policy or is an outcome of the system of government. As Korea has experienced seven rounds of five year economic planning practices during 1962-1997, the state-led central bank can thus be seen as a result of industrial policy (Kim 2010, 193).

6.2.2 Regulatory Public Controls over Private Enterprise

After the nationalization of commercial banks under president Park, the regime started to tightly control foreign loans, foreign direct investments, and foreign exchange as well (Chang 1993, 138). Furthermore, the government legally implemented direct price control over all marketed products up to 1973, and even after 1973 the state reserved the right to impose a price ceiling when necessary (Chang 1993, 138). No price change is possible without formal and or informal state permission, except in some unimportant markets (Chang 1993, 138).

The most important Korean industries also had restrictions on entry capacity on the expense of competition (Lee & Han 2006, 322). Financial authorities also protected domestic financial institutions from external competition (Chang 1993, 138; Lee & Han 2006; 322). Moreover, financial authorities had always pursued policies to keep interest rates relatively low in order to ensure that bank credit was allocated to targeted industries and firms (Lee & Han 2006, 322). Lastly, the government implemented extensive tax incentives for the targeted industries (Di Maio 2009, 121).

6.2.2a Selective intervention

Another occurrence where the Korean state has made use of regulatory public controls over private firms was when it chose several industries at a time as the 'priority' sectors and provided massive support to them (Chang 1993, 141). Most of Korea's major industries were designated as priority sectors at some stage and were developed through a combination of heavy controls and massive support from the state (Chang 1993, 141). The 'designated' industries had priority in preferential tax treatments, state investment funds, acquiring rationed (and often subsidized) credits and foreign exchange, and other supportive measures such as entry restrictions and import protection (Chang 1993, 141). Private firms of the priority sectors were subject to state controls on technology (e.g. production methods, products), entry, capacity expansion and prices in return for these supportive policies (Chang 1993, 141).

On the moment that President Park delivered his State of the Nation Message in 1973, the government's policy shift from light to heavy equipment and chemical industries (HCI) became official (Kim 2011, 7). As a result, the industries selected for special emphasis in the Heavy and Chemical Industry Plan were largely defense-related and built the foundation for many of Korea's leading industries: steel and petrochemicals, non-ferrous metals, machinery, electronics and shipbuilding (Minns 2001, 1027). It made more sense to invest in capital-intensive industries such as heavy equipment and chemicals for the future than textiles and sneakers (Kim 2011, 7). The state did not allow private firms to invest in less risky and more profitable consumer goods industries if they did not invest in heavy and chemical industries in the 1970s (Chang 1993, 137).

The Korean government also exercised a strong hand in shaping the automobile industry from the very beginning (Wade 2004, 309). In the HCI plan autos were identified as one of the priority industries. In 1974 an industry-specific plan for automobiles was introduced which covered the next ten years (Wade 2004, 310). The government decided to opt for the three primary producers (Hyundai, Kia, and GM Korea—later called Saehan and Daewoo), each a part of one of the big conglomerates (Wade 2004, 310). The government further decided on conditions such as the minimum size of each producer and the maximum size of car engines; and the private companies had to approve their plans (Wade 2004,310). After their initial start the three producers were required to set export targets; they were allowed to import a limited number of top-of-the-line models in kit form for lucrative domestic elite sale; they received heavy direct and indirect export subsidies (especially credit); and they were encouraged to set their export price below cost of production, the number tied to their export performance (Wade 2004, 310).

The Industrial Development Law was authorized in 1986 by the then government Chun Doo Hwan. Although the IDL emphasized a 'functional' rather than sectoral approach to industrial policy, it had arrangements for sectoral realization programs (with a limited time duration), and thus allowed for a selective industrial policy if the government wanted (Chang et al. 1998, 740). The IDL made textiles, naval diesel engines, heavy construction machinery, heavy electrical equipment, fertilizers, ferro-alloys, dyeing, coal-mining, and cars undergo rationalization programs (Chang 1993, 144). The rationalization programs were custom-designed for the different needs of different industries. For industries which needed technical upgrading involving large sunk investments (such as naval diesel engines, heavy electrical machinery, heavy construction machinery, and cars), the emphasis was on creating a more stable environment for major new investments and R&D activities, supported by state-led arrangements for market-sharing along subsidies to investment and R&D, product line (among existing producers), and entry restrictions (Chang 1993, 144).

6.2.3 Government Assistance to Private Industry

6.2.3a Industrialization in Korea – the Chaebol

State officials did not want to risk the utilization of scarce resources to small- and medium enterprises or state enterprises and preferred to choose experienced private actors, the *chaebol* (Suh 2008, 228; Amsden 1989, 14). A chaebol literally means a group or party of wealth: *chae* means wealth or fortune, and *bol* means a group or party (Murillo & Sung 2013, 2). A chaebol is a business conglomerate which consists of various enterprises engaged in diversified business areas and typically owned and managed by one or two interrelated family groups (Kim 1997, 27). The state chose this option because private actors are more likely to succeed in state-led policies because they have a comparative advantage over public enterprises. Especially in Korea at that time, they had a comparative advantage in mobilizing and utilizing resources (Suh 2008, 228). The creation of the chaebol started with president Park's economic strategy where he emphasized state control of the economy and promotion of chaebols. The chaebol was not only founded by the state, but was also supported and controlled by it during his reign (You 2005, 30). Thus, Park's chaebol-centered industrialization strategy was not a result of the chaebol's own lobbying, but was based on his own desire to imitate Japan's industrialization (You 2005, 31).

The first chaebol appeared when Samsung added a sugar refinery factory to its trading company (Oh & Varcin 2002, 716). Most known examples of cheabol are Daewoo, Hyundae and other extremely large conglomerate groups whose activities span all sectors but are concentrated in mainly manufacturing and construction (Westphal 1990, 48). One could argue how 'private' these chaebol really were as state planning directives would be followed by the chaebol just as if they were managers of publicly owned enterprises (Minns 2001, 1031). Military and civilian political leaders and technocrats in Korea therefore supported a relationship of quasi-internal collaboration with a handful of rapidly expanding industrial chaebol (Fields 1997, 124). For example, military projects accounted for 26% of Hyundai's total construction revenue but for almost 77% of its total profits between 1963 and 1966 (Amsden 1989, 266). Chung Lee (1992) states that the Korean state and the chaebol form a quasi-internal organization with an internal capital market that has reduced uncertainty, opportunism and communication costs, allowing the government to efficiently implement industrial policies.

The Korean government has from time to time aggressively directed the activities of "private" firms in many industries, whether this was in automobiles, semiconductors, telecommunications, or petrochemicals (Wade 2004, 320). Sometimes it has directly ordered private firms to do certain things and not do others. The state governed not only the financial systems and international trade but also the process of investment (Levi-Faur 1998, 80). Jones and Sakong (1980, 141) note that as a minor paradox of Korean development that an appearantly private-enterprise economy has made use of the intervention mechanism of public ownership to an extent which parallels that of many countries advocating a socialist pattern of society.

6.2.3b Growth of chaebol

The military coup of General Park in 1961 placed economic modernization at the top of its agenda, which changed Korea's political economy and helped to establish a strong yet responsive developmental state (Lim 2012, 74). In the beginning Park was not dependent on support from either the landed capitalist classes, as his predecessor has been but was answerable only to the military (Jones & Sakong 1980, 261-269). The chaebol's share of the national economy was small when Park seized power because of the land reform and destruction of private properties during the Korean War (Jones & Sakong 1980, 261-269; Kim 2011, 1). In comparison with other countries like India and Pakistan, the level of economic concentration was thus still relatively low, even though business concentration was rapidly growing in Korea during the 1970s (Jones & Sakong 1980, 261-269).

Until the military coup in 1961, chaebols had been market monopolies with holding companies. Unlike the post-coup chaebol or the Turkish holdings, they did not pursue diversification as they mostly concentrated resources in specialized markets. However, military dictators in Korea, in part in belief that concentration is required to achieve international competitiveness, have made corporate concentration an explicit goal of industrial policy (Haggard et al. 1997, 46). Their industrial policy seemed to have worked as in less than three decades, around 30 chaebols have come to produce more than 80% of the total South Korean GDP (Hamilton & Biggart, 1992). The growing power of the chaebol was affirmed by the fact that after each president's five-year term, the chaebol ended up with increasing their size and power during this period (You 2005, 33). This mainly took place under Park Chung-hee and Chun Doo-whan, and to a lesser degree under subsequent Presidents as well (You 2005, 30).

6.2.3c Non-monetary government aid

Government aid also took regulatory, non-monetary forms. Assistance to the shipbuilding company, Hyundai Heavy Industries (HHI) is one such example (Minns 2001, 1028). Then president Park Chung Hee personally commanded the establishment of the Korean shipbuilding industry, which was against the will of the Hyundai group, who are known to be the boldest of the Korean business groups (Jones & Sakong 1980, 119). HHI began building its first ship in March 1973, but due to orders getting cancelled it experienced difficulties (Minns 2001, 1028). The government reacted by demanding that all deliveries of crude be in Korean-owned vessels as it owned the only oil refinery in South Korea

(Minns 2001, 1028). These vessels were produced by the Hyundai Merchant Marine Company whose ships on its turn were supplied by HHI (Minns 2001, 1028).

The reasons behind HHI's relative success are complex. According to the Korea Advanced Institute of Science (KAIS), the Korean government supported the establishment of POSCO through various measures, as was legislated in the Iron and Steel Industry Promotion Law of January 1, 1970 (Amsden 1989, 297). The government's supportive role in the establishment of HHI however is not entirely clear, but its influence is generally recognized as having been decisive (Amsden 1989, 276). First, the government raised overseas credit for HHI directly and indirectly. The government raised overseas credit indirectly by guaranteeing the HHI's own foreign loans (Amsden 1989, 276). Second, the government provided far-reaching subsidies for infrastructure, like it has done in the case of POSCO. The government had provided POSCO with access to long-term low interest foreign capital for the purchase of equipment and for the erection of a railroad line, an electricity generated station, water supply facilities and a port building (Amsden 1989, 297). Furthermore, POSCO's profitability was helped through government subsidization of costs and capital, the company remained an SOE until 2000 (Chang H. 2007, 11). Third, the government provided far-reaching financial guarantees to help HHI with its first order. Fourth, the government provided HHI (and other shipbuilders) with continuous support extending beyond start-up, as the example above of the crude vessel case shows (Amsden 1989, 276). One decade later, the HHI was the world's largest shipbuilder (Amsden 1989, 73; Jones & Sakong 1980, 119).

6.2.3d State-enforced mergers and liquidations of conglomerates

The fact that the chaebols as conglomerates are potentially able to move into any line of business (on the basis of their activities in related lines) makes it difficult for a chaebol to keep a particular industry at its fiefdom. Unless it remains reasonably efficient, other chaebols can easily persuade the state that they can do a better job and get state support in the next round of capacity expansion in that industry (Chang 1993, 149). Therefore, the chaebols had a powerful incentive to remain efficient since the loss of state support can mean a sharp downturn in business in a few years' time, given the high leverage of Korean firms and state control of credit (Chang 1993, 150).

Frequently, the Korean state 'reorganizes' industries through state-led mergers and market-sharing arrangements in which it thinks have 'too many' firms (Chang 1993, 138). This shows that firms have little freedom in deciding what and how much to produce at what price. One such situation in where the Korean state stepped in to reorganize businesses was with the Reorganization of the Heavy and Chemical Industries program after the investment boom of the late 1970s, which led to temporary excess capacity in some major industries (Chang 1993, 148).

What is remarkable in the handling of such 'reorganization' is that even the economically and politically powerful cheabols, as individual conglomerates, were not immune to state discipline, even though they were certainly privileged in their access to various rents as a group (Chang 1993, 149). Hence, many chaebols which lost state favor went into oblivion or were disbanded and their carcasses were distributed to other chaebols, as exemplified by the fact that only two of the then biggest chaebols in 1966 were among the top ten in 1974; only five out of the 1974 top ten were in the 1980 top ten; only six of the 1980 top ten were in the 1985 top ten (Chang 1993, 150).

In conclusion one could state that for Korean policy-makers, it seems to matter less who runs a business than that it is run efficiently, in contrary to what is stated before. Chaebols who have good relationships with the political and bureaucratic elite might get favorable treatment, but it appears that this only occurs if they remain efficient in the eyes of the government. If a particular chaebol runs a business well, it is safe; otherwise, the ownership has to be transferred to another chaebol or even to the public sector as had happened with the nationalization of the KHIC (Chang 1993, 149).

6.2.4 Managerial Participation by Government

According to Parvez (1976, 29),

"*the government's role in Korea is considerably more direct than that of merely setting the broad rules of the game and in influencing the economy indirectly through market forces. In fact, the government seems to be a participant and often the determining influence in nearly all business decisions*".

Mason and associates (1980, 254) come to a similar conclusion in their study of business-government relations:

"*The hand of government reaches down rather far into activities of individual firms with its manipulation of incentives and disincentives*".

For example, state control over credit, which has been the most effective means of controlling private firms, given their high leverage, continued, although some of the state-owned banks (the so-called 'city banks') were partially privatized in 1982. Despite privatization, the independence of these banks is almost nil, given their over-exposure to highly-borrowed firms and their consequent dependence on the central bank, which is under full control of the state (Chang 1992, 152; Chang 1988, 55). Throughout the 80s the government continued to appoint top bank management (Kim 2007, 393). Even until the late 1980s, the economy had not liberalized to the extent that was necessary for the financial market to perform intermediary functions instead of the government (Kim 2007, 392). Thus, even after denationalization, Korean Banks have continue to be under close government control and are still used for industrial targeting (Wade 2004, 307).

Data shows that after the privatization, the share of policy loans has actually increased, from 56,0 % (1962-1981) to 67,7% (1982-1985), making it very difficult to argue that state control over the banking sector has loosened (Chang 1992, 152). The banks' freedom to set interest rates has also been drastically limited in addition to their freedom to make loan decisions (Chang 1993, 152). Despite the legal deregulation of rates on loans and long-term deposits in December 1988, it is still reported in 1991 that interest rates are still strictly controlled by guidance from the BOK and the MOF, despite the legal deregulation.[2] This trend continued during the first half of the 1990s despite growing liberalization, the government-chaebol nexus remained firm, guided by the government's steadfast guarantee of chaebol loans, and the government's continuing direct and indirect appointment of bank management personnel (Kim 2007, 394).

Moreover, while many public enterprises were created during the 1962-1984 period, the need for centralized and consistent management arose. In order to effectively carry out such policy, the Budget and Accounting Act for Government Invested Institutions (1973) were enacted. In other words, there were two kinds of control mechanisms; budget and management (Lee 2014, 2). Overall, the Korean government can be seen as having achieved integrated decision-making by forcing and facilitating information exchange and insuring the implementation of decisions reached, acting as a central agent mediating among market agents, often intervening to reward cooperative players and punish uncooperative ones through budget and management control mechanisms, and weighing costs and benefits from a collective standpoint (Lee 1996, 99).

6.2.5 Coordination of Public and Private Enterprise in Economic Planning

Throughout most of the period, during which the high-performing East Asian economies grew at remarkable rates as was never seen before, strong and collaborative public-private sector relationships thrived and were actively promoted (Staab 2003, 20). Close cooperation between them places the development and planning agencies in a prominent position and gives rise to intimate institutional links between state agencies and the private sector; and these arrangements, in turn, enhance the willingness and the capacity of the state elite to support the efforts of private domestic capitalists to pursue investment partners in advanced sectors (Chu 1989, 660).

For example, the monthly export promotion meetings were held, where industry representatives, bureaucrats and Park himself monitored firms' progress on export targets (D'Mello 2004, 835). More importantly, these export promotion meetings were attended by high-ranking government officials and business representatives, which provided a forum to monitor progress and come up with institutional innovations and solutions to emerging problems (Lim 2012, 76). In order for the government to enforce compliance, an efficient system of monitoring and the gathering of information was set up (D'Mello 2004, 835). Korean government orders forced firms to reach its goals. If a firm did not respond as expected to particular incentives, goals, or programs, its outstanding bank loans were not

[2] *Far Eastern Economic Review* (May 30 1991), Vol. 151(2): p. 52.

renewed, its application for bank credit was studiously ignored, or its tax returns were subject to careful examination (Kim 1997, 30).

Public-private coordination in economic planning also manifested itself through public institutions. In 1976 the government established the Korea Institute of Electronics Technology (KIET), a new public research institution to enhance Korea's own technological capacity. Its charter gave responsibility for undertaking market research, providing technical assistance to Korean firms, planning and coordinating semiconductor R&D, importing, assimilating, and distributing foreign technologies (Park 1987). However, its governance arrangements were designed to operate in close consultation with private firms (Wade 2004, 313). The board of directors included one from the Electronics Industry Association, one from universities, one from KIET, four from government ministries, and five from firms (Wade 2004, 313). Moreover, KIET has played an important role in the country's mastery of the semiconductor and computer technologies, which is publicly owned and has elaborative consultative arrangements with industry (Wade 2004, 321).

The government also installed the National Backbone Information System (NBIS) as a way of creating demand for obtaining IT products and services while essential information on personal identity and property were computerized (Lim 2012, 80). The programs of the NBIS helped to build the foundation of Korea's IT industry (Lim 2012, 80). Through public-private consultation Korea's industrial policy in the IT sector, under the objective to secure international competitiveness from the beginning, systematically reinforced weak segments of the domestic value chain (Lim 2012, 80). Much like during the HCI drive, Korea wanted to target the global market next to only targeting the domestic market (Lim 2012, 80). The government and the private sector proactively searched for solutions to the weak links in the value chain that runs from securing demand, assembling the parts, producing parts and components, strengthening R&D, developing human resources, to marketing and branding (Lim 2012, 80). In the process, the government played a critical role in addressing coordination and innovation externalities by investing in R&D and education, and creating demand for its procurement projects (Lim 2012, 80). Last but not least, the government tried to make merit-based appointments, and stand for the principle of performance-based rewards in order to minimize the downside of government intervention (Lim 2012, 80).

In general, the government made the so-called 5-year Economic Development Plans, provided the necessary resources to Korean business entrepreneurs, and later evaluated their performance who executed the plan (Jones & Sakong 1980, 97). Through the obligatory reporting system, the Korean state kept close track of priority industries (Jones & Sakong 1980, 97). The state may even be better informed than the private sector in some regards, as demonstrated by the important role played by the information collected by Korean state agencies, including the diplomatic service (Jones & Sakong

1980, 97). In this respect, the Korean Trade Promotion Corporation (KOTRA) is an important actor in the penetration of export markets by Korean firms (Jones & Sakong 1980, 97).

6.2.5a Cheabol recruitment from Government

Since the government and political leaders can create or destroy a chaebol almost overnight, businessmen must contain good relationships with the government and influential political leaders for their enterprise to remain successful (Chang 1988, 54). One of the strategies to achieve this is to recruit from the government, military and financial sectors (Chang 1988, 54). As early as 1964, 38 percent of total bank loans were given to only nine chaebol, all of which had family members in powerful positions in the bureaucracy or in the ruling party (see Table 2; Park 1982, 210). Table 3 shows how many executives from these sectors were recruited by the chaebol groups (Chang 1988, 54). It indicates that chaebol groups maintain close ties with the government and recruit extensively among ex-public officials to fill high positions (Chang 1988, 54). Chaebol founders and managers are required to constantly interact with government officials in order to get state support or be on good grounds with the government. The most important institutions are The Blue House, the National Assembly ,the ruling party, the Ministries of Finance and Commerce and Industry, and the Economic Planning Board (Chang 1988, 54). Most of the former government employees who were recruited by chaebol groups have a background from these government offices (Chang 1988, 54).

Occupations before joining Chaebol

Chaebol	*Politicians*	*Bureaucrats*	*Military*	*Financiers*
Samsung	-	1	2	1
Hyundai	-	2	3	2
Lucky-Goldstar	2	4	2	2
Daewoo	-	5	6	12
Sungyung	-	1	-	1
Ssangyong	-	4	2	1
Hankuk Hwayak	-	7	3	1
Total	**2**	**24**	**18**	**20**

Note: All of them have a position of executive vice-president and above in chaebol corporations.

Source: Sin-Dong-A (1986). Ex-Bureaucrats and Ex-Military Men in the Financial World, In Joon Bae: p. 403.

Table 3.

6.3 Industrial Policy in Turkey

The turn to planned industrial policy was rather rapid in Turkey, it was implemented less than five years after it was first proposed at the end of the 1950s (Chibber 2004, 7). At the time, domestic capitalists were in favor of both ISI and central coordination of economic policy (Chibber 2004, 8). The new military junta, which intervened as arbiters of the country's political future in May 27, 1960, had considerable autonomy to design the institutions for industrial policy and restructure the state around them (Chibber 2004, 8) However, the military did not hold the government for a long term and turned it over to a civilian regime a short while later, but the coup did left a very close relationship between the military and the industrialists. The Turkish military itself made a number of direct investments in industry by using the assets of its pension and social security funds that were owned by them (Karasapan 1989, 30). The military became one of the most important economic forces in the country through such ventures as OYAK, a holding company which manufactures Renault cars and other products (Karasapan 1989, 30).

The 1960s and 1970s were the decades where five-year plans were implemented, which represents a shift to national developmentalism (Onis 2010, 48). A wide range of protectionist policies inspired by an import substitution industrialization (ISI) strategy were prominent instruments of Turkish industrial policy during the 1970's, which resulted in the institutionalization of the domestic market (Onis 2010, 48). Due to a gradually liberalizing trade regime from the 1980s onward, the selective use of incentives and subsidies has played an increasingly important role (Biddle & Milor 1997, 277). The Demirel government decided to implement a major long-term restructuring program designed to end the import substitution policy and to transform the inward-oriented political economy into an export-driven one, and hence the economic strategy would be outward-oriented and market-based from that moment on (Bayar 1996, 778; Celasun & Arslan 2001, 227).

After the military coup of September 1980 the government's participation in the economy changed as well. Public investment shifted from manufacturing towards infrastructural activities, especially in transportation, communications and energy (Bayar 1996, 784). The 1980s and 1990s were the decades when Turkey had encountered with neoliberal policies and the logic of the Washington consensus (Onis 2010, 48). One striking feature of the above mentioned phases of industrial policy is that they correspond to different stages in the transformation of domestic capital (as Turkish big business was transformed over time) (Onis 2010, 48). In the early 1950s Turkish big business was transformed from an agrarian or commercial orientation to a domestic market based industrial capital in the 1960s and the 1970s (Onis 2010, 48). In the 1980s and 1990s this was followed by a shift towards export-orientation and the growing transnationalization of Turkish big businesses (Onis 2010, 48).

6.4 Separation of the public and private economy in Turkey

6.4.1 State Enterprise

The government of Atatürk decided to adopt a system of partial state planning, and in 1933 Turkey launched a five-year plan of industrialization, especially in industry, under a policy of *etatism* – direct state participation in economic activity (Kerwin 1951, 22). Precedent for state participation in industry was also found in Ottoman history when the government of that time had established military factories. These plants remained in operation under the Republic and formed a basis for future state enterprise (Kerwin 1951, 22).

In the 1980s the state enterprise sector was made up of some 39 firms, run on a commercial basis but not registered under the commercial code, and another 47 establishments that are either monopolies or companies registered under the commercial code in which the state owns part of the equity (Waterbury 1992, 136). Then Prime Minister Özal set privatization as the most important economic task facing his government in 1987 (Waterbury 1992, 136). However, since the structural adjustment programs in 1980, three failing private sector enterprises (a steel plant, a textile plant, and a bank) have been taken over by the state, while only four significant privatizations had been attempted by the end of 1989 (Waterbury 1992, 136). One could state that the ANAP government has treated the public enterprise sector as a holding operation in terms of investment and expenditure, one that in a growing economy cedes its role as the lead sector (Waterbury 1992, 136).

Petkim, an SOE which founded Petlas (a tire company utilizing obsolete Czech technology) is an example of a large state holding company in the petroleum sector (Waterbury 1992, 233). It entered into competition with joint ventures with Goodyear, Pirelli and Uniroyal. Its main plant was located in Central Anatolia for political reasons, where it was able to oligopolize the regional market for truck tires. Petlas was able to use Petkim's far-reaching storage network and enjoyed preferential purchasing accords for raw materials (Waterbury 1993, 223). Overall, Turkey is a good example in changing from a primitive economy to a more advanced economy through public economic enterprises and state investments (Ansay 1974, 156).

6.4.2 Mixed Public-Private Enterprise

When state capital and private capital work together, they can create mixed enterprises. Many mixed enterprises in which the State or the SOEs had less than 50 percent capital existed until Law No. 440 was introduced (Ansay 1974, 146). However, this law changed the system by categorizing SOE as enterprises in which more than 50 percent of the capital is held by the State or SOE. This was done because enterprises of private capital owners with their minority capital had practically no possibility of gaining representation on the administrative and controlling bodies. The yearly meetings of the shareholders were generally considered as expensive procedures (Ansay 1974, 146).

The legal status of an SOE had to be adopted within a specified period of time by many organizations that operated before 1964 as mixed corporate enterprises and had more than 50 percent public capital, which was not accomplished until the late 1960s (Ansay 1974, 146). Between 1974 and 1990 the share of public enterprise was more than 50% in power production and banking (Zaim & Taskin 1997, 130). It is possible to say that half of the Turkish economy is government-owned or controlled when various forms of government participation are taken into account (Zamin & Taskin 1997, 130).

These mixed enterprises were created because they provided benefits to both the public and private sector. With the expectation of receiving additional prestige and other advantages, such as the privileges or quicker grants of permissions, the private sector co-operates with the public sector (Ansay 1974, 146). Furthermore, private investors expect the support of the public sector in their business activities as well (Ansay 1947, 147). The government hopes that private initiative may decrease the effect of the bureaucracy in the public enterprises and provide a better business energy (Ansay 1974, 147). The State can invest its resources in other and necessary fields of activity because it does not need to supply the whole capital (Ansay 1974, 147). Mixed enterprises in Turkey have especially served to create a new group of private entrepreneurs and to encourage private capital to invest in business activities (Ansay 1974, 147).

Another thing that should be addressed is that in some cases, investors prefer to establish mixed enterprises with the public sector, which have worked with considerable success until now (Ansay 1974, 147). A good example is the Mannesmann- Sümerbank Boru Endustrisi T.A.S., which is a corporation formed under Turkish private law (Ansay 1947, 147).

6.4.3 Regulatory Public Controls over Private Enterprise

6.4.3a Tax policy

The State Monopolies Administration is not subject to Corporate Tax and some State enterprises are exempt from certain taxes and duties (Ansay 1974, 167). Although the private sector could receive foreign capital as a partner, there was only one bank that functioned as an intermediary in financing the private sector with foreign credits (Ansay 1974, 173). Consortium funds and other foreign aids are not distributed equally among the public and private sectors, and the capital available to the private sector is more expensive (Ansay 1974, 173). Certain social insurance organizations or state pension funds are obliged to participate in the public enterprises and invest capital in them (Ansay 1974, 173). Moreover, from time to time the taxes to be paid by the public enterprises delayed, and this postponement creates a new type of credit for them (Ansay 1974, 173).

6.4.3b Government control of prices

The state in Turkey has always shown an interest in fixing prices of goods, especially of basic goods such as foods (Ansay 1974, 183). Municipalities too, fixed prices of some basic goods under the Law of Municipalities (Ansay 1974, 183). There are still price fixing practices since the validity of these laws has not been contested under the Constitution of 1961 (Ansay 1974, 183). This is also the case under the subsequent Constitution of 1982, which is the Constitution that is still being used today. The "public interest" rule stated in the Constitution seems to give the State the right to make such restrictions (Ansay 1974, 183).

State enterprises have been able to pass on their large price increases to final consumers in the 1970s and 1980s, and among them are private sector firms producing for export (Waterbury 1992, 138). They in turn raise their prices, while the private sector trading companies that handle the bulk of the exports are partially compensated for the price increases through export subsidies, credit subsidies, and tax rebates (Waterbury 1992, 138). As long as the state has no desire to abolish the private enterprise price and as long as the controls do not distinguish between public and the private sectors, price controls cannot be considered to cause unfair competition (Ansay 1974, 183).

6.4.3c Regulatory measures for non-favored businesses

Irrespective of party affiliation, the political elite deeply distrusted a spontaneous and pluralistic development of interest-group associations in the country (Bianci 1984). Professional associations were considered appendages of the state rather than autonomous bodies expressing the preferences of members, and only limited legitimacy was given to pluralistic forms of interest representation because of it (Bianchi 1984). These particularistic relations were aspired, because they turned businesspeople into individuals and hence made them more vulnerable to government discretionism from the point of view of the political elite (Biddle & Milor 1997, 294). That is, businesspersons could be punished by selective measures aimed at them if they wandered from their predetermined role of carrying out activities as dictated by the government (Herper 1991). Indeed, the government acted on this threat by not honoring a contract concluded with a businessperson who fell out of favor, by lowering the tariff for goods produced by non-favored business groups, or passing retroactive laws that had a devastating effect on a particular business activity (Bugra 1994).

6.4.4 Government Assistance to Private Industry

Ever since the establishment of the Republic, the Turkish Government has sought to encourage the industrial development of the country in order to reach the economic level of developed and industrialized Western countries. In order to achieve this modernization of the economy to make it internationally competitive, the State established and supported in what is today is known as the Turkish holdings.

6.4.4a The Holdings

Like many other industrializing countries, Republican Turkey has followed a development strategy which is different from the American free-market economy and the European bargained economy model in its much heavier interventionism and protectionism (Bugra 1998, 523). More than in Western developed countries, the role of the state in the Turkish economy has been much more significant, but it also has been more crucial than in many other late industrializing countries as far as its impact on private-sector development is concerned (Bugra 1998, 523). In this regard, the Turkish business community shares many characteristics common to private-sector actors in some East Asian countries such as South Korea and Taiwan, where the partnership between a state-created bourgeoisie and the political authority appears as a very important aspect of economic development (Bugra 1998, 523).

This partnership however manifests a notable difference from its counterpart in Turkey. Business enterprises developed on the basis of largely particularistic and informal relations with political authorities and by taking advantage of the opportunities presented by frequently changing economic-policy choices (Bugra 1998, 523). These enterprises were encouraged by politicians which made enterprises grow very big through a strategy of horizontal and vertical integration. Politicians also had a distinct distaste for small enterprises which they considered to be inefficient and inappropriate for the objective of modernization, the latter remaining a major policy goal (Bugra 1998, 523). As a result, the economically important businesses have been institutionalized around the organizational structure of big and diversified holding companies, and the development of small and medium-sized enterprises has been disregarded (Bugra 1998, 523). The first holding emerged in 1955 when Deva Holding and Sinai and Mali Yatirim Holding were established, but the most powerful and important holdings emerged during the military states, beginning with the 1963 inauguration of the Koc Holding (Bugra 1998, 523). By 1969 Turkey had 33 holdings, and in less than three decades the number grew to 640 (Oh & Varcin 2002, 718).

Unlike South Korea however, the military regime of the 1960's did not sell protection to former DP-aligned holdings (the Democrat Party, or DP, was the first civilian government that came into power in the 1950's and which made privatization of the public corporation possible). To the contrary, the state bred and protected new holdings. Interviews with managers of major holdings showed that the military government extracted illegal fees from businesses in exchange for protection (Oh & Varcin 2002, 719). For example, Enka Holding owner Tarik Saka pointed out that one has to pay illegal fees to the state in order to survive in the market and made it clear that these illegal extracts were much more than ordinary bribes:

"*Legal extracts are the amount of money that one has to pay to the state to do legal business in the market. The bribery is the amount of money that one pays the state to do illegal business* (Oh & Varcin 2002, 719)".

The large holdings that were a member of the Turkish Industrialists' and Businessmen Association (TUSIAD) continued to pay illegal extracts as protection fees while they simultaneously sought new markets for investment. Again, this was necessary because most banks were in the hands of the state. Despite the emergence of large and diversified holding companies from the 1960s to the beginning of the 1990s, the overall economic growth of Turkey has not been as dramatic and successful as that of Korea (Oh & Varcin 2002, 720). This is due to the Turkish state not being as stable as its Korean counterpart, and because it did not aggressively intervene in the market as a protector as the South Korean military did (Oh & Varcin 2002, 720). The Turkish military itself participated in the economy in the form of holdings, which resulted in the obliteration of opportunities for organizational reform (Oh & Varcin 2002, 720). Moreover, frequent military coups limited the military’s grip on the economy, while the holdings could cash in on political instability by continuing to expand through co-opting each new set of military leaders (Oh & Varcin 2002, 721). Turkey was thus not able to transform the Turkish industrial structure as in Korea (Oh & Varcin 2002, 721).

6.4.4b Holdings and subsidies

Businessmen were able to divert funds away from targeted sectors and into their own preferred lines. To give an example, a survey of Turkish planning from 1968 to 1980 revealed that, of the total subsidies received by firms, less than 20 percent was invested in accordance with plan directives (Chibber 2004, 11). Businessmen could thus comfortably hide in a protected and highly subsidized environment, and could take the money and divert it to the sectors that they favored. Not only was the state expected to continue its commitment to subsidies and transfers to private firms, but as the latter ignored plan signals and changed investment elsewhere, the slack had to be taken up by state enterprises. These state enterprises increasingly became to embody a safety net for the private sector: moving into lines capitalists considered unattractive, providing cheap inputs, and purchasing private sector products at inflated prices (Chibber 2004, 11).

6.4.5 Managerial Participation by Government

The government is involved in countless day-by-day operations of private enterprise. An example of this is the mass housing and the public participation fund (MHPPF). The objective of the MHPPF is that the agency will prepare state enterprises for privatization by identifying potential buyers, restructuring management and debt, and possibly losing loss-making units and activities (Waterbury 1992, 139). Even if the political circumstances allow it, the process has become lengthy, and in the meantime the MHPPF has become a large public sector holding company under the supervision of the minister of state for the economy (Waterbury, 1992, 139). As long as privatization policies are implemented, the MHPPF will preserve the so called “golden share” in all privatized companies, which will give it effective veto power over the management and board of directors (Waterbury 1992, 139). The MHPPF can be seen as yet another large public holding company, whose management with time may be reluctant to give up control over its assets (Waterbury 1992, 139). At the same time, it is also a holding company over which the prime minister and the minister of state for the economy can exercise direct control (Waterbury 1992, 139).

6.4.6 Coordination of Public and Private Enterprise in Economic Planning

The Turkish economy is a mixed economy where private and public sectors operate side by side (Ansay 1974, 156). Public and private sectors work together in a great variety of activities: the banking businesses, construction, cement industry, ceramics and the textile industries are among the significant cases (Ansay 1974, 161). The Turkish economic development plan give an important role to state instrumentalities and envisage public and private as cooperating in fulfilment of economic goals (Friedmann 1974, 385).

An elaborate description of a mixed economy is given in Turkey's Second Five-year Plan, as described by Ansay:

"In the mixed economy system, State activities and the public sector will assist and support the people in their efforts to attain prosperity and welfare through their own initiative. With this concept, public and private enterprise will not be rivals to hamper each other, but will be complementary forces (Friedmann 1974, 360). In the Second Five-year Plan, the rules of a mixed economy will be set forth so as to provide decisive guidance to these two sectors" (Friedmann 1974, 360). The Turkish Plan also stipulates a postulate of "equality of opportunity and treatment" where public and private sectors "carry out productive activities side by side" (Friedmann 1974, 361).

In order for appropriate decisions to be made to achieve development in accordance with plan targets, the second Five Year Plan states for example that communication between the public and private sectors will be improved (Ansay 1974, 157). The Plan also states that it hopes that the private sector will be saved "from making mistakes in reaching farsighted decisions on investments and production" and thus that the effective utilization and distribution of resources in the effort to achieve plan targets will be guaranteed (Ansay 1974, 157). The public sector will ensure the transmission of the necessary information to the private sector and will take the lead in preparing project ideas (Ansay 1974, 158). If projects in the private sector that are in overload of a certain level of investment are found to be in accordance with development targets after having been reviewed by the State Planning Organization, they will benefit from various incentives (Ansay 1974, 158).

6.4.6a Business and bureaucratic elite transfer

One legacy of the Ottoman Empire was to form a well-paid and esteemed status group by leaving the new republic behind with a competent and bureaucratic corps (Biddle & Milor 1997, 285). However, civil servants began to lose their privileged status after the transition toward a multiparty democracy and an inwardly oriented development strategy (Biddle & Milor 1997, 285). Nevertheless, chronic elitist attitudes, independence, and generalist background of top bureaucrats brought them into a long-term conflict with the political elite (Biddle & Milor 1997, 293). As a consequence, various governments with different degrees of success, attempted to transform bureaucrats into more loyal civil servants of politicians from 1950 onward (from the transition of a multiparty democracy until 1980) (Bugra 1994; Herper 1989). Increasing balkanization and fragmentation of the economic policy apparatus and high turnover among top personnel caused them to opt for private industry (Biddle & Milor 1997, 286).

If Turkish bureaucrats were to monitor the use of subsidies more aggressively, let alone attempt to discipline corrupt corporations, they'd fear the political wrath of big business according to Biddle and Milor (Haggard et al. 1997, 46). Generally, they also found out that the bureaucrats in the Treasury and the Directorate of Incentives and Implementation's (TUD) do not attempt to monitor the performance of the vast majority of firms in receipt of incentive or export certificates (1997, 292). A high-level official in the TUD stated that attempts by the bureaucracy to monitor business performance is like playing Russian roulette:

"If I tell my people to collect data on the actualization of the investments, then what do I do with the data? Once I have the documentation on the implementation of incentives, then I have to do something with it. But this will pose a true dilemma for me. If I don't do anything about the situation, then I am violating the legal system which stipulates that I should punish the violators. But if I take steps to punish the violators, then this is like playing with fire. They are powerful individuals who have access to top politicians and they will find a way, sooner or later, to unseat me. So I would rather not collect data in order not to disturb anybody" (Biddle & Milor 1997, 297).

When asked to rank the most frequent level of contact with business, 80 percent of the high-ranking bureaucrats that were interviewed by Biddle & Milor (1997, 299) selected the "firm level" option first as opposed to other options representing more institutionalized levels of contact like business associations.

The most powerful members of TUSIAD often find it convenient to bypass their own association in favor of personal contacts with top bureaucrats and politicians in order to find solutions to economic problems that concern them, even though they are well represented in the Executive Committee (Biddle & Milor 1997, 287). Some of them being the Turkish business giants Sabanci and Koc Holdings (who are each other's competitors), which used these transfer methods very efficiently and gained a lot of privileges when they were creating their empires (Arslan 2004, 6). The Sabanci family have established good relations with bureaucratic elites, especially the directors of banks and military commanders, whereas the Koc family have good relations with the political elites (Arslan 2004, 6). Table 4 shows the dimensions of business-political relations. Although some large holding companies have traditionally had good relations with specific political parties, such as the Sabanci family with conservative and liberal rightist parties, and the Koc family with the social democratic parties, they have always supported more than one political party as an insurance policy to achieve their long term economic plans (Arslan 2004, 8).

	Business-State Relations in Turkey	
Name	**The Position in the State**	**The Company**
Turgut Özal	Former Prime Minister and	Sabanci Holding
	the President of the State	
Naim Talu	Former Prime Minister	Akbank, Akcimento, Olmuksa, YKB
Fahir Ilkel	Former Minister of Power	Koc Holding
Sahap Kocatopcu	Former Minister for Industry	Koc Holding, Metas, Sise-Cam
Memduh Yasa	Member of the Parliament (DYP)	Akbank, AEH, Enka, Veb Holding
Nimet Özdes	Former Secretary of State	Ercan Holding
Faruk Sukan	Former State Secretary, Minister for Health,	Ercan Holding
	Minister for Internal Affairs	
Agah Oktay Güner	Former Minister for Trade, Minister of Culture	Bagfas
Kemal Kurdas	Former Minister of Finance	AEH, STFA, Celik Halat
Vefa Poyraz	Former Governor	Ercan Holding
Yildirim Aktürk	Former Councillor, Member of Parliament	Enka, Uluslararasi Bankasi
Sebati Ataman	Former Minister for Industry	Koc Yatirim
Mustafa Aysan	Former Minister of Communication and Transport	Koc Yatirim, Yapi Kredi
Erhan Isil	Former Minister for Power	Profilo Holding
Serbülent Bingöl	Former Minister of Public Works,	Rabak, Akin Grubu, Tekstilbank
	Minister for Power	
Ihsan Soyak	Former Minister for Power	Akbank, Rabak
Zeki Baloglu	Former Minister for Youth and Sport	Demirdokum
Ferruh Bozbeyli	Former Deputy Prime Minister	Is Bankasi
Ismail Rustu Aksal	Former Minister of Finance	Is Bankasi
Ferit Melen	Former Minister of Finance, Former Prime Minister	Is Bankasi
Münir Güney	Former Minister of Agriculture	Is Bankasi
Mesut Erez	Former Minister of Finance	Esbank
Hayrettin Erkmen	Former Minister of Foreign Affairs	Titibank
Kemal Satir	Former Deputy Prime Minister	Yapi Kredi
Zeyyat Baykara	Former Minister of Justice	Basak Sigorta
Ilhan Evliyaoglu	Former Minister of Agriculture	Ist. Um. Sig., Garanti Bankasi
Dogan Özgöçmen	Former Commander	Yapi Kredi
Mustak Kaçmaz	Retired General	Turk Ticaret Bank
Namik Kemal Senturk	Former Governor, Member of Parliament	Akbank
Yusuf Bozkurt Özal	Former Councillor, Member of Parliament	Ercan Holding
Korkut Özal	Former Minister for Internal Affairs	Akabe, Akoz, Oztrans
Sadi Pehlivanoglu	Member of Parliament	Turk Ticaret Bankasi
Selahattin Çetinel	Former Minister for Internal Affairs	Garanti Bankasi
Sefa Giray	Former Minister of Public Works	Akardan
Vehbi Dinçerler	Former Secretary of State, Minister of Education	Pilsa
Kazim Oskay	Former Secretary of State	Soytas Holding
Zeki Yavuztürk	Former Minister of Defence	Keban Holding
Vural Arikan	Former Minister of Finance, Member of Parliament	Enka Holding
Adnan Baser Kafaoglu	Former Minister of Finance, Member of Parliament	Dogus Holding
Namik Kemal Ersun	Former Commander of Land Forces	Kutlutas Holding
Danis Koper	Former Minsiter of Public Works	STFA
Cavit Oral	Former Minister of Agriculture	Pamukbank
Source: Arslan, D. A. (2004). Emergence of the Turkish Bourgeoisie and Business-Political Relations in Turkey,		
In International Journal of Human Sciences, Vol.1(1): p. 7-8.		

Table 4.

6.4.6b Corporate intervention in policy-making

The state intervened indirectly in the market via generous investment subsidies, price controls, heavy tariffs and quotas, and an overvalued exchange rate (Biddle & Milor 1997, 285). However, firms routinely attempt to intervene in politics on two levels as well. First, they attempt to influence the subsidies and amount of incentives to which their certificate will provide access (Biddle & Milor 1997, 291). This is especially the case for those who aspire export or investment activities on a great scale (Biddle & Milor, 1997, 291). Second, and more significant of the two levels, firms exert influence during the immediate stage following the TUD's approval of a certificate, when various certificate holders compete with access to subsidized credits or cash grants (Biddle & Milor, 1997, 291).

This is a result of the fact that at various times some of the subsidies and incentives may not be enough to cover all existing claims on them, as was frequently the case with the Resource Utilization Fund (Biddle & Milor 1997, 291). This politicization of the incentive regime means that the costs of lobbying and information collection required to manipulate the incentive regime gives advantages to large conglomerate holdings as opposed to small and medium-sized firms, which cannot afford to hire personnel to lobby for them in Ankara (Biddle & Milor 1997, 291). Moreover, the process of the politicization of the incentive regime undermines the overall coherency of industrial policy because business lobbying efforts do not contribute to the conceptualization of a long-term strategic vision for Turkish industrial development (Biddle & Milor 1997, 291). Rather, lobbying remains fixed on the pursuit of particular and narrow benefits at the disbursement and implementation of the industrial policy process (Biddle & Milor 1997, 291).

Individual firms can manipulate these latter stages of the industrial policy process for extremely narrow favors as is illustrated by Bugra (1994, 151-153) in the following example:

"One of these cases had to do with the decrease from twenty-five to fifteen cents of the payments made to a particular fund by the exporters of dried figs. The decision for this change was taken at the end of the export season for this commodity, and the only person likely to benefit from it was a particular exporter who still had a certain amount of this export commodity to be shipped abroad. This exporter happened to be a close friend of the Minister of Finance, the future father-in-law of Turgut Özal's son."

Moreover, In the 1980s the initiative by Turgut Özal to establish Islamic banks made their appearance in Turkey. These banks do not charge interest but operate on the basis of profit-sharing, an initiative that has contributed significantly to the wealth and fortune of his brother Korkut Özal (Bugra 1998, 532).

7 Results

Direct economic power of the state in Korea and Turkey was substantial through industrial policies that were implemented, with the government controlling strategic inputs, banks, and industries (e.g. through state-owned enterprises), and keeping a grip on firms' behavior. Policies happened to involve state ownership, selective credit allocation, favorable tax treatment to selective industries, restrictions on foreign investment, local context requirements, government procurement, public-private cooperation, promotion of large domestic firms and elite transfer from government to business and vice versa.

The first hypothesis expected a blurring of the public-private relationship if the involvement of an elite economic bureaucracy in the market is high. For Korea, the close cooperation between the economic bureaucrats and businessmen placed the development and planning agencies in a prominent position and gave rise to intimidate institutional links between stage agencies and the private sector. This was less the case in Turkey, because the bureaucracy lost its prestige and power after the introduction of a multi-party system in the 1950s. Not the involvement of economic bureaucrats in the market, but the direct relationship between politicians and businessmen mattered. Thus, the involvement of economic bureaucrats in the market in Korea did seem to lead to an intensification of the blurring between the public-private economic relationship, while for Turkey this was not the case.

The findings for Korea are in congruence with the first feature of the Asian capitalist state of Amable, namely that government interventions are made after consultation with business, and such interventions are carried out through a system of 'administrative guidance' rather than through formal legislation. Furthermore, the findings for Korea are also harmonious with Jonhnson's third characteristic of an East Asian capitalist state, namely that the state guides the market with instruments formulated by an elite economic bureaucracy, led by a pilot agency or economic general staff. This could show that chaebols in Korea, in order to solve external coordination problems for their businesses to be successful, cooperated with the bureaucratic elite and is thus consistent with Hall and Sokice's relational view of the firm. The existing institutions in Korea may have oriented firm behavior into one direction in the economy. Industrial policy might not have directly caused the public-private relationship to blur in this case.

The second hypothesis expected that the more consultation and coordination by the state with the private sector would occur, the more the public-private economy will be blurred. In Korea, monthly export promotion meetings were not only meant as a talking hour, but it was a place where the state could keep the private sector in check and intervene if necessary. Through the consultation between chaebol and public research institutions like KIET, ETRI and NBIS, the public and the private sector proactively searched for solutions for weak links in the value chain. Therefore, the results seem to show that consultation and coordination between the public and private sector did result in a blurring of the public and private economy in Korea.

In contrary to Korea, the consultation and coordination between the public and private sector in Turkey was less cooperative and did not take place through public research institutions. The politicization of the incentive regime resulted in lobbying, remaining fixed on the pursuit of particular and, sometimes extremely, narrow benefits at the disbursement and implementation of the industrial policy process. Nevertheless, consultation and coordination between the public and private sector, albeit having occurred in a different setting then in the Korean case, did seem to have resulted in a blurring of public and private economic interests, and therefore the public-private economic relationship.

For both countries, the state is engaged with the private sector for coordination and consultation, and these consultations are an essential part of the process of policy formulation and implementation. Kim's first characteristic of a capitalist state also seem to apply to Korea and Turkey: (1) the state provides comprehensive projects and long term-goals for the entire economy through 5 Year Economic Development Plans, with the second characteristic also being applicable to Korea; (2) the state provides capital for investment capital assistance for research and development, technology and technical assistance through regional and national research facilities, and through foreign and domestic capital loans. However, since industrial policy can be a process of a developmental state, it still seems likely that industrial policy of coordination and consultation with the private sector has contributed to a blurring of the public and private economy.

The third hypothesis expects that direct (export subsidies) and indirect subsidies (public financial institutions providing loans below the prevailing market interest rate) increases the blurring of the public-private economy. The data in this research seems to confirm this hypothesis at first sight. The establishment of the chaebol in the 1960s and rapid growth and economic concentration in the subsequent decades, due to export subsidies during the targeted industrial policy era and below market rate loans by state run banks, confirms the hypothesis that direct and indirect subsidies contributed to a blurring of the public and private enterprise. Private firms were also heavily depended on the state-run banking sector for their investment funds. State-enforced mergers and bailouts also occurred on a large scale during the period under examination, which was part of Korea's industrial policy plan to establish large conglomerates that were competitive in the international market.

The third hypothesis also seems valid for Turkey at first sight, where business enterprises were encouraged by politicians which made enterprises grow very big through a strategy of horizontal and vertical integration. Turkish politicians too, like their Korean counterparts, were in favor of large enterprises, which became the holdings, instead of small and medium enterprise. These holdings were able to divert funds away from targeted sectors into their own preferred lines. Even though subsidies were not used adequately in state planned sectors due to rent-seeking behavior by businessmen, the subsidies did seem to result in a close relationship between private and public enterprise.

However, even though the third hypothesis seems to be confirmed for both cases, there is a crucial shortcoming with government assistance to private industry as an independent variable that causes a blurring between the public-private economy. The issue is that direct and indirect subsidies, as part of government assistance to private industry, can be both seen as an operationalization of industrial policy and as an operationalization of the public-private relationship itself. It therefore remains unclear whether direct and indirect subsidies have blurred the public-private economy in both Korea and Turkey. A causal relationship cannot be established.

Both cases also seem to overlap with Amable's first characteristic of the Asian capitalist model, which states that such a state has a specific financial system, with a long-term relationship between banks and firms. Moreover, Korea and Turkey could also fit the financial sector description of three of the four capitalist types, namely: the CME, Asian capitalism and Mediterranean capitalism model. This is the case, because both countries show high ownership concentration, no active market for corporate control (in the case of Korea), low sophistication of financial markets and a high degree of banking concentration. A small note has to be made here which is that Turkey does not fit the Mediterranean capitalist economy characteristic when it comes to its preference for large corporations, because the Mediterranean type of capitalism prefers small firms over large ones. Hall and Sokice's relational view of the firm also seem applicable to the third hypothesis. The existing institutions in Korea and Turkey may have oriented firm behavior into accepting direct and indirect subsidies in order to grow and diversify their businesses. Industrial policy might not have directly caused the public-private relationship to blur. Therefore, one cannot state that direct and indirect subsidies have blurred the public-private relationship, but the hypothesis was already rejected.

The fourth hypothesis expects that more state involvement in public enterprise entrepreneurship, mixed-public private enterprise and management of private enterprise increases the blurring of the public-private economy. This seems to be the case in Korea and Turkey. The Korean governments did not hesitate in setting up public enterprises if private firms could not be made to do something. The Turkish case shows similar findings to that of Korea. Between 1974 and 1990 the share of public enterprise was more than 50% in power production and banking, and more than half of the Turkish economy was government-owned or controlled until the early 2000s when various forms of government participation are taken into account.

The Turkish case shows more state involvement in private enterprise through mixed enterprises, while the Korean state was indirectly heavily involved in the day to day business of private enterprise. Even though these private businesses in Korea were privately owned, it does fit the last two most important criteria for public enterprise of Miller and Ferrera, namely that: (2) private firms in Korea get their finances mainly from the government and that; (2) the government exercised considerable control over them. In both cases, the hypothesis seems plausible.

Nevertheless, the causal relationship in this hypothesis has a serious shortcoming. Like was the case in hypothesis three with the government assistance to private industry dependent variable, management of private enterprise by the government can be an operationalization of industrial policy as well as the operationalization of the public-private relationship. Thus, the causal relationship between management of private enterprise by the government and the public-private relationship cannot be established. The hypothesis only holds for state involvement in public entrepreneurship and mixed public-private enterprise in Korea and Turkey.

The fifth hypothesis expects that harsher regulatory public controls of the government over private enterprise will cause a blurring of the public-private economic relationship. Regulatory public controls of the government over private enterprise seem to have been significant in Korea. Starting with the Park regime, governments in Korea tightly controlled foreign loans, foreign direct investments, price controls, protection of domestic financial institutions from external competition, tax incentives, entry restrictions and import protection for targeted industries during the 1960-1990 period.

Regulatory public controls in Turkey seems to be somewhat less extensive than in Korea, which might be because of a less competent bureaucracy, but were present nevertheless. When businesspersons did not carry out the activities dictated by the government, it lowered the tariff for goods produced by non-favored business groups, did not honor a contract concluded with a businessperson or passed retroactive laws that had a devastating effect on a particular business activity. What both countries have in common is the interest of the state in fixing prices of goods. Furthermore, Kim's third characteristic of a developmental state, namely the state as a provider of indirect assistance through tax breaks, easing regulations and tariff exemptions seems to be the case for both Korea and Turkey. The available sources in this research show that regulatory public controls over private enterprise did blur the public-private economy.

Unfortunately, the Stolper-Samuelson theory cannot be applied to this hypothesis, because the data includes a general fixing of the prices of goods and not the price of goods in one industry. If that was the case, then one could examine whether the increase or decrease of the price of a labor-intensive good for example, has caused the price of labor in that industry to decrease, while the wage rate paid to capital would have increased. The wage rate paid to capital would have to be examined in this case as well. However, it is clear that protection has helped the scarce sector. Therefore, further analysis should include the price-wage relationship in the analysis in order to make a causal statement.

Nonetheless, the Rybczynski theory seems plausible to the fifth hypothesis. The theory states that a decrease in a country's endowment of a factor will cause a decrease in output of the good which uses that factor intensively, and an increase in the output of the other good. For example, with the promotion of the heavy and chemical industries in Korea, the output of the capital-intensive heavy and chemical goods increased, and this most likely caused a decrease in the output of the labor-intensive industry of clothing. Due to the plausibility of the Rybczynski theory, the statement for the hypothesis needs to be revised. Not all, but some (excluding price fixing of goods) regulatory public controls over private enterprise did seem to blur the public-private economy.

The last hypothesis expects that elite transfers from the public to the private economy and vice versa leads to a blurring of the public-private economy. At first sight, this seems most definitely the case in both Korea and Turkey. The chaebol in Korea recruited extensively among ex-public officials to fill high positions and maintained close ties with the government. Chaebol founders and managers constantly interacted with government officials in order to get state support or be on good grounds with the government.

In Turkey, increased balkanization and fragmentation of the economic policy apparatus and high turnover among top personal caused bureaucrats to opt for the private sector. Usually, elite transfers for businesses occurred in two ways; sometimes business firms send their managers or somebody from the family into the state apparatus or into politics; at other times they transferred popular bureaucratic and political elites or members of the elite who occupied strategic positions in the state bureaucracy and politics to their own companies. Through these elite transfers, holdings could improve relations with politicians and state bureaucrats, and control the decision- making and taking process.

An important note has to be made here. As elite transfer mostly happened from the private to the public sector, it becomes an operationalization of the relation between the public-private economy itself as well. Not through industrial policy, but by initiative of large enterprises did political and bureaucratic elites got recruited into the private sector. And as much as the political and bureaucratic elite wanted to maintain close relations with business elites through elite transfer among others, the same was true for business elites. They as well wanted to maintain close relations with the political and bureaucratic elite in order to maximize their profit, as was stated before. Therefore, one can’t state whether elite transfer leads to a blurring of the public-private economy in Korea and Turkey, hence the hypothesis has to be rejected.

Five of the six hypotheses seem to be plausible at first sight. However , one cannot state that industrial policy in hypotheses 3, 4 and 6 caused a blurring of the public-private economy due to the fact that these dependent variables could have been an operationalization of industrial policy as well. Furthermore, the probability that hypothesis 1 might be caused by a third spurious variable exists when one compares the findings to the Varieties of Capitalism approach. More specifically, the Asian and Mediterranean capitalist economies of the VoC approach such be applied to Korea and Turkey respectively in order to analyze whether something else has caused the blurring of the public-private economy or if it was caused directly by industrial policy. This leaves only hypotheses 2 and 5 to be confirmed, industrial policy does seem to lead to a blurring of the public-private economy in these cases, which suggests that the research question "Did the industrial policies undertaken by South Korea and Turkey separate the public from the private economy" cannot be answered with certainty.

Nevertheless, the findings in this research do seem to suggest that industrial policies undertaken by Korea and Turkey within the context of a developmental state, have not separated, but blurred the public and private economy. In both countries, the state was heavily involved in managing the economy and private businesses, either voluntarily or by having no other choice, and conglomerates and holdings had to cooperate closely with the government in power in order to survive. In order to make strong statement that industrial policy blurred the public and private economy in Korea and Turkey, quantitative analysis should be carried out next to filtering out indicators that could be both independent and dependent variables, and spurious variables have to be controlled for in further research. The next chapter will briefly describe the recommendations and limitations of this research.

8 Recommendations and Limitations

The main contribution of this research is to shed new light on the effects of industrial policy on the relationship between the public-private economy. In doing this, we departed from the standard approach of assuming that industrial policy only has an effect on economic growth while neglecting the effects on the economic system. Historical data found in literature were used that allowed us to observe how the implementation of industrial policy caused a potential blurring of the public and private economy. This thesis can be seen as the first step towards the understanding of the effects of IP on the economic system. Naturally, many questions are open for future research.

First of all, it would be interesting to see if the findings about blurring of the public-private economy are particular to large holdings and conglomerates who have strong ties to their respective governments or if they extend to small and medium enterprises as well. For that purpose, the indicators that are derived in the thesis (such as *regulatory public controls over private enterprise, government assistance to private industry* and *coordination of public and private enterprise in economic planning*) can be easily applied to other data. To facilitate the implementation of these measures, indicators are provided that can be used to identify industrial policy.

Second, the case studies only involves countries that underwent relative growth compared to neighboring developing countries. It would be interesting to see if the same results hold true for developing countries where industrial policy was implemented, but that did not experience economic growth as a result (or after the time of its implementation). Moreover, the case study only involved two countries in Asia and in order to generalize the findings of this research, a larger N study should be considered, including countries from other continents as well as small sized and larger countries.

Last, but not least, future studies focusing on more recent years may also be useful for local and foreign private companies, as they know whether they have to deal with a state or not when doing business in the present day. All of the above mentioned suggestions could be analyzed in further research.

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