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# Financialization and industrial policies in Japan and Korea: Evolving institutional complementarities and loss of state capabilities


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## Financiarisation et politiques industrielles au Japon et en Corée du Sud :

## Evolution des complémentarités institutionnelles et déclin des capacités de l'Etat


### Résumé

*Le but de cet article est d'analyser le renouveau des politiques industrielles depuis la fin des années 2000 au Japon et en Corée du Sud et ses limites. Notre approche a deux caractéristiques principales. Tout d'abord, nous adoptons la perspective de l'institutionnalisme historique pour nous concentrer sur la relation entre les politiques industrielles et les systèmes financiers en étudiant leur évolution depuis les quarante dernières années. Ensuite, en mobilisant les concepts de complémentarités et de hiérarchie institutionnelles, nous discutons les limites de ce renouveau dans un contexte de libéralisation des systèmes financiers, à laquelle les institutions gouvernementales en charge de la politique industrielle ont contribué. Notre principal résultat est que, dans le contexte de la financiarisation, les complémentarités passées de l'Etat développeur se sont affaiblies et des contradictions sont apparues. Cela a conduit à une restructuration des capacités de l'Etat pour concevoir et mettre en place des politiques industrielles et à l'incapacité de subordonner la finance à leurs objectifs, malgré les discours et les ambitions des gouvernements. Cependant, et c'est notre second résultat, la comparaison entre le Japon et la Corée du Sud nous permet d'identifier des différences significatives dans les arrangements institutionnels initiaux et dans le processus de changement institutionnel, qui sont analysés comme les sources d'une plus grande capacité de l'Etat en Corée qu'au Japon dans la période actuelle.*


**Mots-clés:** complémentarités institutionnelles, hiérarchie institutionnelle, Etat développeur, capacités de l'Etat, financiarisation

## Financialization and industrial policies in Japan and Korea:

## Evolving institutional complementarities and loss of state capabilities


### Abstract

The purpose of this article is to analyze the revival of industrial policies from the late 2000s in Japan and Korea and their limitations. Our approach has two major characteristics. First, we adopt the perspective of historical institutionalism to focus on the relation between IPs and financial systems and study their evolution over the last 40 years. Second, by mobilizing the concepts of institutional complementarities and hierarchy, we discuss the limits of this revival in a context of liberalized financial systems, to which government entities in charge of industrial policies have contributed. Our major result is that, in the context of financialization, past complementarities of the developmental state have weakened and contradictions have arisen. It resulted in a restructuration of state capabilities to design and implement industrial policies, and to its inability to subordinate finance to its goals, despite the discourses and ambitions of governments. However, and this is our second result, comparison between Japan and Korea also allows us to identify some significant differences in the initial institutional arrangements and in the process of institutional change, which are analyzed as sources of greater state capabilities in Korea than in Japan in the current period.


**Keywords:** Institutional complementarities; institutional hierarchy; developmental state; state capabilities; financialization

**JEL:** 025, 053, P110, P16, P51

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## 1. Introduction[1]

Industrial policies (IPs) in OECD countries have undergone a remarkable evolution in their conception, framing and practices during the last four decades (Andreoni, 2014; Chang et al., 2013). In the context of the post-2007 global financial crisis and great stagnation in advanced economies, they have been rehabilitated to some extent. In this paper, based on the Japanese and Korean cases, we argue that the financialization process - defined broadly as the growing impact of financial markets, actors, practices, and representations on social structures and dynamics (see Epstein, 2005) - is a key factor to understand and interpret the evolution of IP and should thus be at the center of pertinent analysis.

Japan and Korea are of particular interest as their experiences are central to the evaluation of the contribution of IPs to development and growth (Johnson, 1982; Dore, 1986; Amsden, 1989; Wade, 1990; Chang, 1993; 1994; Chang et al., 2013). With a strategic angle, they were implemented in a specific developmental state framework, which has been well described in the literature (Debanes & Lechevalier, 2014). The involvement of the state has been criticized and reconsidered in both countries, respectively from the 1980s and the early 1990s, before experiencing a revival in the late 2000s in the double context of global crisis and political change. The nature and the extent of this revival are matters of debate between those who argue that there is a strong continuity in the developmental state framework (Thurbon, 2016), those who think that it corresponds to a specific period which is now over (Chang et Evans, 2005; Pirie 2006; Suzuki, 2013) and those who identify a form of hybridization (Wong, 2004; Suzuki, 2014; Chu, 2014). In any case, IPs in these countries have experienced dramatic changes that do not follow exactly the path of other OECD countries mentioned above in terms of direction and timing (Lechevalier, 2006; Goto and Kodama, 2006; Vogel, 2006; Tiberghien, 2007). Japan and Korea have participated in the renewed interest regarding IPs but this revival is not without contradictions.

This article engages with the literature on IPs in Japan and Korea from the following perspective. Instead of trying to qualify whether the developmental state is still alive or not, we look at the institutional changes that have affected the developmental state framework as it developed in the postwar. Institutional change is not a straightforward process, and past institutional arrangements often coexist with more recent ones. Considering a developmental state framework as a historical institutional arrangement, this analysis discusses institutional changes that have been unfolding for several decades in these two countries. Similarly to what happened in other OECD countries, financialization has been a driving force of change. Japan and Korea have experienced financialization that followed financial liberalization in the 1980s and the 1990s and has taken specific forms in these two countries (Hoshi & Kasyap, 2001; Crotty & Lee, 2005; Doucette & Seo, 2011; Lechevalier, 2014). The increasing role of finance in economic dynamics is widely recognized, but the reach of the financialization process has revealed to be larger than a set of structural changes in the financial sector such as liberalization, privatization, internationalization (van der Zwan, 2014).

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The impact of financialization on the institutional environment of IPs tends to be underestimated, in particular with respect to the State-finance nexus.

The major aim of the article is to analyze the co-evolution of financial systems and IPs in Korea and Japan in order to outline new complementarities and contradictions that have arisen with financialization since the 1990s. We stress the importance of financial structures of the economy for the nature and evolution of IPs. We contribute to the literature by taking into account the embeddedness of IPs in institutional frameworks by considering finance not only as an input (O'Sullivan et al., 2013) but also an output and a vehicle. Moreover, most of the recent theoretical frameworks mobilized in the literature under-conceptualize the state and downplay its active role in shaping financial systems. We contend that the transformations of the State-finance nexus overtime have had important implications for the recent evolution of IPs in these two countries and beyond. On the one hand, the development of the financial sector has been a goal of IP in itself. In this, States are not passive agents or outsiders providing and enforcing regulation, they have been proactive in shaping financial systems through deregulation. On the other hand, we address how financialization has been one of the major sources of change for the developmental state framework regarding the area of IP in Japan and Korea.

Our theoretical background builds upon Regulation theory emphasizing both evolving institutional complementarities and hierarchy between finance and the state (Boyer, 1990, 2005). Moreover, the Regulation theory is helpful to understand how evolving IPs relate to the transformation of the state in a liberalized context and the diversity of trajectories across countries. Based on this approach, we show that while developmental states such as Japan and Korea subordinated the financial sector to industrial needs during industrialization ("financial containment and mobilization"), the financialization of these economies is reshuffling both the hierarchy and complementarities at play ("financial empowerment and disconnection"). Our major result is that even if there might be new institutional complementarities between new forms of IPs and the financialized environment, this is not enough to compensate contradictions and the loss of institutional capabilities. More precisely, we address how the revival of IPs in Japan and Korea is thwarted by the reconfigured articulation of the financial system and the state's economic apparatus.

The concept of state capabilities is at the center of our argument. We are very close to the spirit of Linda Weiss' approach (Weiss, 1998) in emphasizing the capacity of "policy instruments" that we re-interpret in terms of institutional complementarity and hierarchy from the Regulation Theory perspective. From this viewpoint, institutional complementarities can be seen as the synergy between two beneficial constraints. This concept should be distinguished from the one of institutional hierarchy that implies a certain asymmetry between institutions, as we believe it is the case between state and finance. The fit among institutions is always partial and transitory which brings to the forefront the mechanisms of institutional change analyzed by Streeck and Thelen (2005). Among others, layering, drift, and conversion are powerful mechanisms of evolution, and they are used in this article to characterize the institutional change at work in Japan and Korea regarding the state-finance nexus.

The core argument of our paper is not to show that elites were responsible for the decay of the developmental state framework - this issue is left for a companion paper - but to study the co-evolution between financialization and decay of industrial policies. We argue that the changing hierarchy by design between the financial system and the industrial development did correspond to a political will that had partly unintended consequences on (ex-post) institutional complementarities.

The rest of the article is built as follows. In section 2, we introduce our theoretical framework. In section 3, we summarize the major characteristics of IPs in Japan and Korea and their interrelations with the financial structures of the economies during their Golden Ages (respectively from the 1950s to the 1970s in Japan and from the 1960s to the 1980s in Korea). Sections 4 and 5 analyze how IPs in Japan and Korea were not passive *vis-à-vis* financialization, but, quite on the contrary, both indeed contributed to it. They also show how financialization has in turn modified the environment of IPs in these two countries. Section 6 discusses the differences and commonalities of the Japanese and Korean experiences. A final section provides a conclusion.

## 2. Theoretical framework: institutional change in the State-finance nexus.

In this section, we sketch a theoretical framework to apprehend institutional change that has happened in the developmental State framework of Japan and Korea. In our view, the financialization process has been a major driver of change. We combine the analytical tools of the comparative capitalism literature to analyze the evolution of state capabilities in the field of industrial policy.

### 2.1 Comparative historical institutionalism and the State-finance nexus

Our theoretical background builds upon historical institutionalism and is largely inspired by works on comparative capitalism and in particular the Regulation theory (Streeck & Thelen, 2005; Amable, 2003; Morgan et al., 2010; Boyer et al., 2012). In these approaches, national political economies are defined by institutional settings that result from political processes. Each configuration is characterized by the articulation between fundamental institutional domains which codify key social relations and partly determine macro level performances as well as microdiversity. Industrial dynamics then depend on the national institutional settings they are embedded in (Andreoni, 2014). The relationships among these key institutional domains structure the modality of coordination between economic actors (see Hollingswoth & Boyer, 1997; Boyer, 2005). Institutions are generally perceived as constraints that are detrimental to economic performance. By contrast, a branch of the literature proposes that institutional constraints might be beneficial and that complementarity plays an important role in promoting better outcomes. We emphasize here the relation of institutional complementarities and economic performance by focusing on two particular institutional forms, State, and finance, in order to develop a concept of state capabilities that takes into account the role of financial systems. We adopt the usual definition of institutional complementarities, according to which two institutions are complementary, when the presence of one institution is reinforcing the one of another, (Boyer, 2005; Amable, 2003; Streeck & Thelen, 2005). As for the understanding of the concept of institutional hierarchy, we focus on the one that refers to the ripple effect one institution has over others (Crouch et al., 2005)[2]. It means that there is a certain asymmetry between institutions, as we believe it is the case between state and finance[3].

This systemic approach of national political economies provides a useful analytical framework to understand the financialization process. Defined as a historical transformation of contemporary capitalism, previous literature documented to what extent financialization has put pressure on post-war institutional configurations (Engelen & Konings, 2010) towards the domination of the financial institutional domain. Despite the persistence of diversity across national political economies, institutional change that has occurred in the financial sector from the 1970s has instilled a convergent force towards financialized practices and representations found in Anglo-Saxon countries even in the more coordinated type as Germany, Japan, and Korea (Yamamura & Streeck 2003, 2005). Financial systems tend to be less segmented, corporate financing through markets and financial instruments has increased compared to corporate loans while corporate governance is more and more oriented towards the maximization of the shareholder value (Lazonick & O'Sullivan, 2000). The State, as an institutional domain, has been accompanying the financialization process by constructing markets (Underhill, 1991; MacKenzie & Millo, 2003; MacKenzie, 2009); enacting macroeconomic regulations and economic policies (Crotty, 2005; Krippner, 2011; Palley, 2013) and reproducing the interest of the financial sector (Fligstein, 1996; Orléan, 1999; Epstein & Jayadev, 2005; Duménil & Lévy, 2001).

The joint analysis of finance (including the financial sector, financial intermediation, and corporate governance) and industrial policies (i.e. a component of the State) is crucial, given their similar but also potentially complementary role in allocating the resources. The financial system is supposed to mediate the allocation of resources from the household sector to the corporate sector while industrial policies are designed to allocate resources and capabilities according to a strategic view of the productive structure. Financial systems are then considered as a set of constraints as well as resources to industrial policies. They are resources because financial innovations, market liquidity, and developed capital markets are financial instruments that allow the government to raise money and eventually to support financially industrial policies. They are also constraints that emanate from financial and non-financial actors over firms' strategy to maximize their market value or their profitability based on standard financial evaluations (DiMaggio & Powell, 1983).

We contend that industrial policies are one part of the economic apparatus of the State which has privileged linkages with the financial domain. We refer to a definition of industrial policies that encompasses all government interventions aiming at favoring growth which involves policies implemented in many fundamental institutional domains as education policies, research policy, legal framework protecting intellectual property rights (Cimoli et al., 2009; Warwick, 2013). However, we restrain our analysis to the State's entities that are strategically influencing the allocation of resources across sectors of the economy. Institutional capabilities of the State regarding industrial policies are defined as the capability of the State to channel resources through its apparatus and across other fundamental domains and to allocate them according to their political agenda. Hence, institutional capabilities are related to the institutional complementarities and hierarchy that exist

[2] Moreover, as underlined by Boyer (2005): "A variant of this hypothesis considers that some complementarities derive from the impact of one institution over another and that feature, i.e. institutional hierarchy, may have been a major ingredient in the coherence of economic system."

[3] As in Boyer (2005), please note that in this article, our approach to institutional complementarities is made without reference to any political economy perspective. This is only for analytical purpose, as it is clear that dealing with social compromises, the shift of bargaining power between actors or the related shift in institutional hierarchy requires such perspective. This discussion is left for a companion paper.

between different institutional domains. They depend on the coordination of actors between State actors and private actors but also within the State. In the case of Japan and Korea, agencies in charge of industrial policy used to be at the top of the hierarchy during the Golden Age period, though without being omnipotent. It can be shown how the progressive liberalization and concerns over financial and trade integration shifted the power within the State or give these historical agencies new functions and goals (see section 3), thus affecting the institutional capabilities of the State.

## 2.2 Towards a dynamic concept of institutional capabilities of the state

The concept of state capabilities is at the center of our argument. This is a very popular concept among political scientist, economists or economic historians, who are trying to identify ultimate causes for the diverse prosperity of countries (Acemoglu & Robinson, 2012; Hanson & Sigman, 2013). This has been particularly used to explain the success in term of development of East Asian economies (Acemoglu et al., 2015; Weiss, 2008), as well summarized by Haggard (2015: 60): "Central to these lessons was the observation that growth was not simply the result of market-oriented policy or even appropriate interventions but of underlying state capacity. This observation remains the most simple and enduring of the contributions of the developmental state approach". However, as noted by Hanson & Sigman (2013), the proliferation of theories containing state capacity[4] as an explanatory variable as led to a confusion both in terms of conceptualization and empirical evidence. In the framework of this article, we rather focus on the administrative capacity – to be distinguished from the extractive and coercive capacities (Hanson & Sigman, 2013). More precisely, we are very close to the spirit of Linda Weiss' approach (Weiss, 1998) in emphasizing the capacity of "policy instruments" (by focusing on the contribution of national financial systems) that we re-interpret in terms of institutional complementarity and hierarchy from the Regulation Theory perspective (Boyer, 2005). In so doing, we leave aside the notion of capacity as "embedded autonomy" (Evans, 1995), which is closer to the concept "social and political embeddedness", developed by the New Institutional Economics.

Although the concepts of institutional complementarity and hierarchy have often been criticized for being rather static, our approach puts at its center the transformation of capitalism. It should be underlined that the diverse origins of complementarity matter: while some approaches try to derive institutional complementarity from purely natural or technical constraints, we prefer to emphasize the following two concepts. The first one is complementarity by design, which is the result of choice and a strategy for social control and economic efficiency. In fact, complementarity is a highly complex and uncertain process that cannot be easily forecast. Institutions that are supposed to be complementary by design rarely ends up so[5]. Therefore, complementarity by design is rather a transformational project than a constraint. The second one is ex-post discovered complementarity: this is not an intrinsic property of institutions, it has nothing automatic and is often observed after a long period of trial and errors. It is very close to the notion of "unintended fit" proposed by Aoki (Aoki, et al., 1997). An institutional hierarchy describes a configuration where a particular institutional form imposes its logic on others. Institutional hierarchy by design means that the

[4] In this article, we use indifferently the concepts of state capabilities and state capacity.

[5] In order to detect complementarity, the first step is to select a performance criterion, which is not easy as it varies across all the brands of capitalism (e.g. TFP, profitability, convergence of standards of living). However, this kind of approach misses the fact that complementarity is evolutionary. Most of the institutions that are found complementary today were in fact created for distinct purposes and have become complementary only after a succession of crises, experiments and social innovations.

constraints of a dominant institutional form have a shaping structural constraint over another one. Hence, the transformation of one institutional form guides the development of one or several other institutional forms. The recognition that the fit among institutions is always partial and transitory brings to the forefront the mechanisms of institutional change.

Institutional capabilities evolve over time in resonance with the overall institutional architecture. Hence, institutional change within the State-finance nexus, the evolution of complementarities and asymmetrical relationships will have repercussions on the institutional capabilities of the state. Despite the ambition of governments to implement a given industrial policy, contradictions between the financial system and the capabilities of the State hinge on the ability to modify the allocation of resources within sectors (Chang et al., 2013). Especially, since the global financial crisis, many governments are more concerned with the limitation of their deficit that it undermined their commitment to long-term strategies (Schäfer & Streeck, 2013; Chatelain et al., 2013). Used in a dynamic perspective, the concepts of complementarity and hierarchy are insightful to apprehend the tremendous institutional changes that have occurred from the catching-up period to the current financialization period in Japan and Korea. Studies focusing on Asian political economies stress common features as much as the diversity among them (Amable, 2003, 2015; Boyer et al., 2012; Walter & Zhang, 2012; Storz et al., 2013). In the case of Japan and Korea, the tight relationship between the State, the financial system, and the business sector are often emphasized as the major characteristics of the so-called developmental State framework. Therefore the financialization process, by promoting disintermediation of corporate financing, put pressure on complementarities associated with a centralized financial system (Deeg, 2010). The financial liberalization in these two countries, in part through the pressure on the stakeholder type of corporate governance, led to a de-coordination between banks, conglomerates and the State (see sections 3, 4 and 5).

We propose an analysis of the institutional change that has occurred within the financial sector and the corporate governance as well as within the institutional, economic State apparatus as transformations of complementarities and hierarchy of the developmental State framework towards a more financialized framework. Over time, the post-war institutional arrangements have been transformed in a different fashion in Japan and Korea. The mechanisms of gradual institutional change that have affected institutional capabilities are thought to be part of the explanation of the divergent macro and microeconomic trajectories of the two countries. Streeck & Thelen (2005:p9) show to what extent it is useful to distinguish between the process of change (incremental/abrupt) and the result of the change (continuity - discontinuity). Among others, layering, drift, and conversion are powerful mechanisms of evolution, and they are used in this article to characterize the institutional change at work in Japan and Korea regarding the state-finance nexus. These modes are driven, consciously or not, by actors to make outcomes of institutions compatible with their strategic selectivity. Hence new practices within old institutions can be favored (conversion), new institutions can compete with former ones (layering). Change can also occur through a strategic passivity of agents who prevent institutions to adapt to a changing environment (drift).

On this ground, our aim is to question the “revival” of industrial policy and to understand whether it has been accompanied by subsequent changes that ensure a dominant position of institutions devoted to industrial policy in the Japanese and Korean institutional configurations. Industrial development in Japan and Korea has given birth to an active research program that emphasizes the role of the State in these countries (e.g. Johnson, 1982; Amsden, 1989). These empirical cases are our starting point to question the complementarities, hierarchy and possible contradictions within the State-finance nexus in the financialized era. In arguing that both Japan and Korea have experienced a decay of their state capabilities in the context of financialization, we are not supporting the idea that states would become inevitably powerless in an era of globalization (Weiss, 2010). There is no determinism in this field. The differences we identify between Japan and Korea show that the future evolution of state capabilities in these two countries depends in fact on the emergence of new institutional complementarities and hierarchy within a coherent institutional setting.

## 3. Back to the Golden Age of industrial policies in Japan and Korea: when developmental states put finance at the service of industrial development

In this section, we describe the major characteristics of the financial systems in Japan and Korea, which are mainly the results of state control and regulation. Our purpose is to show how concretely finance has been put at the service of industrial development (institutional hierarchy) and how the complementarities between the financial system and industrial policies have been the basis of state capabilities in this field. From our perspective, the developmental state framework, which describes the active and strategic role of the economic bureaucracy to implement economic policies in a close relationship with the corporate sector (Johnson, 1982; Evans, 1992), differed in these two countries especially regarding the way it favored coordination among actors. While the system was highly decentralized in Japan and that some inter-firm coordination existed, Korea was much more centralized with an exclusive coordination between big businesses and the economic bureaucracy. These features have some implications for the nature of institutional complementarities at work in both countries, which will be specified below.

### *3.1 The Golden Age of IP in Japan: financial containment and mobilization, decentralization and coordination*

Before introducing the major characteristics of the financial system and IPs during their Golden Age in Japan as well as their relations of institutional complementarities and hierarchy, it is worth describing briefly the overall institutional environment. Two elements matter for our purpose: on the one hand, the fact that it was highly decentralized, more than in the US in a sense, as many of the rules governing it (such as employment and financial relations) were defined at the micro level; on the other hand, the necessity, because of this high degree of decentralization, to have specific forms of coordination, both private, such as *keiretsu*, and public such as IP (Lechevalier, 2014).

A key component of this overall institutional architecture was the financial system, whose regulation has evolved over time (Aoki & Patrick, 1994; Hoshi & Kashyap, 2001). Placed under the dual authority of the Ministry of Finance (MOF) and of the Bank of Japan (BoJ), the classical Japanese financial system had three major characteristics: 1) its isolation and protection from the rest of the world; 2) its high degree of specialization and segmentation; 3) a tight control on interest rates. Although the isolation of the Japanese financial system is certainly the key characteristic - as it allowed some practices that became impossible as soon as it became integrated into the global financial system – we leave it aside here and focus on the two other characteristics that are directly related to "financial containment and mobilization".

The Japanese financial system was highly segmented until the 1980s with numerous and diversified private financial institutions. The scope of the current study does not allow for a detailed description of the private financial institutions. However, it is worth mentioning that, as a whole, this segmentation of the private financial institutions had two effects: it limited their (market and political) power, and it allowed the government to control indirectly the allocation of capital. Besides private financial institutions, the Japanese financial system was also characterized by the important role of the public financial sector. Its major component was the Post,[6] who was in charge of collecting household savings. The "Trust Fund Bureau" of the Ministry of Finance was in charge of intermediating this process. Collecting around 60% of postal savings, this bureau invested a part of it directly in government bonds and a major part in so-called Fiscal investment loan program (FILP) that represented a kind of second budget, whose aim was to finance the "collective" (industrial or social) capital. This public system was completed by two public banks. The role of the Development Bank of Japan (*nihon kaihatsu ginko*) was to invest in fields not yet profitable or no longer profitable (e.g. declining industries of the 1970s such as textile, aluminum or construction naval). As for Eximbank (*Nihon Yushutsu Yunyu ginko*), it was a key component in the system to control exports and imports according to priorities set by the government. This public part of the financial system was complementary of the private one to provide funding for economic development and long-term growth with a clear ascendancy of the state bureaucracy over the path of development of the financial system (Hoshi & Kashyap, 2001).

The tight control over interest rates is the second key characteristic of the Japanese financial system during this Golden Age of IPs.[7] The accumulation of capital was supported by a fiscal policy that promoted saving and through a monetary policy at the service of growth through a double device of low-interest rates and availability of enough volume of credit through the BoJ. It had negative consequences for the profitability of the banking sector, but this was countered by its power and stability. The banking sector was then at the exclusive service of industrial expansion and was the major intermediating institutional device between the abundant savings of households and the enormous needs for financing the growth of industrial investments (Patrick & Park, 1994).

As a result of these two characteristics (segmentation of financial actors and tight control on interest rates), national saving was well directed towards investment in a way that corresponded more or less to the priorities set by the government in terms of industrial development. More precisely, during this Golden Age period, investment was almost entirely financed by national saving (mainly household saving) that more than represented roughly 35% of GNP against 23% on average for OECD countries. This saving was intermediated through the banking system. From the viewpoint of firms, self-funding decreased from 40% in the mid-1950s to 20% in the 1970s. In order to sustain growth at 15% of the investment rate, firms needed external resources, which were basically bank loans, as financial markets played a minor role therein. It is also worth noting the role of fiscal policy: it was advantageous for borrowers, as interests were deductible but not dividends, which were limited in consequence (Hoshi & Kashyap, 2001).

[6] More precisely the Postal saving direction of Ministry of Post and Telecommunication
[7] For Patrick & Park (1994), it is the core of what they called "financial repression."

What did all of this mean for private companies? The importance of the *keiretsu* is well known and, to our view, they exemplify the fact that finance was at the service of (mainly manufacturing) industries.[8] Indeed, this hierarchy was internalized within the *keiretsu* despite the power of the main bank, which was defined less by its capital investment in of the group (which was legally limited to 5%) than by its position as a privileged creditor. What has been particularly emphasized in the literature are the positive outcomes both from the viewpoint of corporate governance (e.g. less attention to short-term profits, protection from hostile takeovers) and from the point of view of innovation capabilities. For example, Suzuki (1993) shows that the *keiretsu* structure favored spillovers among the members of the *keiretsu*, or in other words, the diffusion of innovation.

During its Golden Age, the goal of IPs was clear and corresponded to the core of the agenda of the state: after a period of reconstruction, the goal was to catch-up, first with the European economies and then the US. From the 1950s to the early 1980s, IP gave priority to investment over consumption as the major source of growth. The economic strategy during the high-growth period emphasized the protection of emerging industries and the promotion of exporting industries, which was a necessity for an economy that grew fast but was very poor in natural resources, primary goods, and energy. As explained above, this national goal was achieved through the mobilization of savings, which were channeled to investment through the intermediation of the banking sector. In this context, the responsibility of the ministries in charge of IP – and among them, MITI – was not so much to finance R&D expenditures but to structure and coordinate the expansion of industries. The major contribution of IP was to be a form of coordination, which implied a vision that would be common to various actors and promote different forms of collaboration between them (Lechevalier, 2014). This policy led to the promotion of R&D consortia, which attracted much attention in the rest of the world (Lechevalier, Ikeda & Nishimura, 2010). However, what has been poorly understood is that the coordination was not limited to coordination of the industries by the government but implied coordination between public actors such as ministries and various agencies, which was far from being a given, as interests were highly conflictual. The institutional device that has been used to overcome this latent conflict took the form of what Aoki has called "bureaupluralism," or the representation of the diversity of interests within the bureaucracy and the search for compromises within this framework (Aoki, 1988).

To summarize our argument so far, we can specify the nature of institutional complementarities and hierarchy between the financial system and the state in its allocative capacity during the Golden Age. On the one hand, the institutional hierarchy primarily corresponded to the political will of a developmental state. On the other hand, the institutional complementarities, on which government capacities were built, did rather correspond to what Masahiko Aoki called in a 1997 article an "Unintended Fit". In Aoki's mind, the key issue was the coherence between corporate dynamics and the building of institutions by the government, but this argument can be easily extended to complementarities between the financial system and the role of the government in the allocation of resources.

[8] It is worth recalling that not all the firms belonged to a *keirestu* and the influence of this structure should not be exaggerated even if one adopts a broad definition of 'network capitalism' (Gerlach, 1992).

### *3.2. The Golden Age of IP in Korea: financial containment and mobilization, coordination and centralization*

In a similar way as in Japan, a developmental state framework was implemented in the 1960s after General Park took power. Embedded in a larger institutional framework, it provided the resources and coordination necessary to fulfill the catch-up plan and meet the pro-growth consensus prevailing at the time. Departing from the Japanese case, the Korean system was highly centralized, and the economic bureaucracy fostered a strong coordination with the corporate sector. The government was the main actor that could mobilize capital at home and abroad (especially from the United States and Japan) and effectively channel it to the export sector (Cho, 2009). Selected firms, the top *chaebols*, were not just instrumental to the government's IP, they had a strong interest to support the developmental state to grow and access global markets (Chibber, 1999).

The financial system was a major instrument used by the state to support economic development in the take-off period until the 1980s. The government nationalized commercial banks in 1962 and held full control of specialized banks such as the Korea Development Bank and the Export-Import Bank that were established under the umbrella of the Finance Ministry (Cole and Park, 1983). The government influenced the sectoral allocation of credit through various ways such as the appointment of bank management and credit controls. In turning to export-led industrialization, the financial sector was mobilized towards financing exporting firms. Export financing was granted to firms through export letters of credits at subsidized interest rates by commercial banks thanks to the BoK's rediscounting policy, and it was backed by the approval of state's financial agencies. These financial institutions were under the supervision of the Minister of Finance (MoF), and the Bank of Korea (BoK) itself was put under the control of the MoF. As such, the MoF, a powerful institution under the command of the Blue House, became heavily involved in deciding major monetary policies, such as setting interest rates and discount rates as well as market manipulation. The control over interest rates was a key component of the government's financial policy and IP.

This era of "financial containment and mobilization" consisted of authoritative financial policies from the government to provide capital, directly or indirectly, to targeted firms and/or sectors. The general thrust of the economic policy agenda was an export promotion policy in the 1960s and an infant industry policy in the 1970s towards selecting heavy chemical industries such as steel, nonferrous metal, machinery, petrochemical, shipbuilding, and electronics for development strategy (Woo, 1991). Two main financial instruments were designed to support these policies, the export credit programs and the National Investment Fund (Kim & Lee, 2010). The launch of the heavy and chemical industrialization (HCI) was a solution to concurrently resolve the export ladder and national security concerns (Kim, 2011). The control over interest rates, and more precisely the subsidized interest rates for strategically selected sectors of firms, had a positive impact on the reallocation of resources especially because of the stability it provided (Galbraith & Kim, 1998). Hence, the development of the financial sector was intrinsically related to the needs of industry. The complementarities were then very strong as the state used the financial sector as an intermediary for its developmental strategy. The bank-based system fostered at the time deeply influenced the path of development of the financial sector after the 1980s. The containment of the financial sector for such a long period has been preventing domestic banks from becoming innovators in the financial sector and, consequently, opened a highway for foreign banks to enter the Korean market starting in the 1980s. Contradictions arose from this containment as the under supply of capital led the corporate sector to seek other sources of funding (such as in curb and/or foreign markets).

Meanwhile, the corporate sector started to look for financial investments and, in particular, big businesses started to invest in financial activities as they were forbidden to have shares in banks. The solution taken by the government in the 1980s, revealing the growing influence of pro-markets bureaucrats, was a gradual and timid financial liberalization (Park, 2000).

The centralization of power based on authoritarian military rule made possible the construction of an economic apparatus unified around a pro-growth consensus as well as a nationalist agenda of economic independence (*jarip gyongjé*). This economic apparatus of the state encompassed a powerful economic agency (Economic Planning Board [EPB]), an exclusively public financial system, a large public sector, and a strong coordination with the private sector (e.g. Amsden, 1992, Wade, 1990). The EPB was in charge of the economic policy agenda focused on industrial upgrading (Chang, 1993). Its role was twofold, a direct role of crafting economic policy (especially the 5-years economic plan) and a role of coordinating ministries and state agencies. Headed by the deputy prime minister, the EPB enjoyed a close relationship with the President and a formal dominant position in the hierarchy among ministries. Its favored position in the government influenced the policy-making of other ministries and agencies, creating a more coherent drive towards industrial upgrading. The administration, which was focused on keeping the Korean economy growing continually, faced challenges in four areas: exports (producing more capital-intensive goods), security issues (need for self-defense due to the Nixon Doctrine and a new course of détente with China), financial sector restructuring (easing firms' financial burden due to high interest rates and foreign debt), and revitalization of investment.

In this context, firms were strongly influenced to allocate their capital for investment and production into sectors strategically selected by the government. Due to the skewed industrial structure, the large family-run firms –*chaebols*- that emerged after the war were used as the workhorses of IP. There seemed no better choice for them but to follow or respond to the government incentives under the Economic Development Plans. Park's administration took "carrot and stick" and "select and concentrate" approaches by linking government direct financial support with the performance-based evaluation system (Cho and Kim, 1995; Kim et al. 1995). Moreover, the government used huge public procurement deals to strengthen its power and to provide firms with greater incentives. In doing so, the state was acting as a prosecutor and a coordinator for the use of capital resources. Chaebols were the main beneficiaries of the complementarities between IPs and the financial system and they were able to shield themselves from inefficiencies as inflation, credit shortage, excess capacities, and weak demand. In this context, chaebols maintained a contradictory stance towards financial liberalization that explains both their pivotal role in the process as well as the policy choices made by reflecting their interests in part. This privileged coordination between the state and the chaebols during the Golden Age have had tremendous consequences for industrial structure, corporate diversity and corporate governance in Korea.

### *3.3 The specificity of institutional capabilities in Japan and Korea*

The institutional capabilities of the state during the Golden Age were based on complementarities between industrial policies and the financial sector as well as a hierarchy between the former and the latter, in favor of the state. We are now in position to provide a more precise meaning for the expression "Putting finance at the service of industrial expansion," and therefore revisit the notion of the developmental state in its financial dimension. At that time, it corresponded to a domination of the government bodies in charge of IP in a complementary relationship with the financial system that was characterized by containment and mobilization. Both IP and the financial system were oriented toward economic catching-up, while the financial system was complelled to provide below-the market rate funding to strategically selected industries. On top of that, the asymmetry in the State-finance nexus was essential to channel the money to industrial sectors selected by the government.

It is possible to identify many similarities between the Japanese and the Korean configurations. For example, in both countries the role of public financial institutions was important to channel money to the industrial structure and monetary policy was indirectly in the hand of the government. Moreover, in both cases, the institutional capabilities of the state were mainly embodied in three arms: budgetary policy, monetary policy and public financial institutions. However, two major differences can be identified. The first one concerns the type of complementarities in the State-finance nexus. Whereas the financial system in Japan was highly segmented into private and public institutions, the Korean system was concentrated and controlled by the state. This difference, stemming from the initial setting of the developmental state framework in the two countries, led to specific complementarities in the State-finance nexus. In the case of Japan, the government had to build public financial institutions to channel the money according to its goals and it included the private financial sector. In Korea, the government, through nationalization, used the private financial system to convert it to a public one. A few new entities were created but the financial was mainly restructured, and specialized, according to the needs of the economy.

The second major difference between the two countries can be found in the coordination devices used. In these two countries, the leading actors of IP (respectively MITI and EPB) were not omnipotent and had to face jurisdictional conflicts with other ministries. Decentralization of power in Japan entailed that the Prime Minister and its cabinet office were not able to play the role of coordinator and to set priorities based on the pro-growth consensus. They were weak - the Cabinet office did not have its own administration and relied on other ministries - and volatile - Prime Minister terms were characterized by a high turnover. Continuity was ensured by the dominant conservative party, the Liberal-Democratic Party, which beneficiated from a political majority from the mid-1950s until the early 1990s. The “iron triangle” it formed with the administration and the industries was also an important condition. In Korea, the centralization of power allowed a strong coordination around the agenda set by the EPB, which still had to make sure the President would vouch for its orientation (Choi, 1987).

The contradictions that arose within these two developmental states were rooted in these distinct capabilities. The core features of the State-finance nexus were rattled in Japan from the late 1970s-early 1980s. In Korea, the growing macroeconomic imbalances in the 1980s coupled to increasing social demands urge for more redistribution while Korean firms, thirsty to get funding, were by passing the public financial system to find funds abroad. In this context, liberalization was taken as a way to resolve these institutional contradictions. Section 4 for Japan and 5 for Korea will describe how these countries have been coping with the dismantling of this framework by focusing on the evolution of their respective IPs and financial systems.

## 4. Liberalization, financialization and the evolution of industrial policy: the Japanese experience

The purpose of this section is to analyze the joint evolution of the financial system and IP in Japan from the late 1970s. In doing so, we revisit a well-known story in emphasizing two points that have been partly neglected by the literature. First, financial liberalization has led to a drastic change in the environment of IPs. Second, among the various causes that led to this liberalization, the pro-active role of MITI should be underlined in the following sense: liberalization has been less a functional answer to the crisis than the consequence of the evolving goals of IP..

### *4.1 Financial liberalization and changing industrial policy: a co-evolution process and the key role of MITI*

The process of financial liberalization and deregulation in Japan started gradually in the 1970s and transformed the three main characteristics of the financial system (isolation, segmentation, interest rate regulation). It began with the gradual opening of the financial system (1970s), continued with the deregulation of interest rates (1980s) and was ultimately achieved by the process of de-segmentation and consolidation of the sector from the 1990s to the mid-2000s in a context of banking and financial crises that had great consequences on the rhythm of the process (Meyer, 1996; Tiberghien, 2007; Lechevalier, 2014).

The first stage of the deregulation of the financial system in Japan started in the late 1970s. Although the evaluation of this first stage is still controversial, it is possible to consider two points: 1) it has been substantial though incomplete; 2) it was not motivated by a reaction to the crisis that occurred later, and it may even have contributed to it. The second stage of the reform was achieved during Hashimoto and Obuchi's administrations (1996-2000) under the name "Big Bang," encompassing three principles of "free, fair and global" and aiming to rebuild the Japanese financial market into an international market comparable to the New York and London markets, which has become the main goal of economic policy during this period. Although some economists considered that the previous stage of liberalization had contributed to the bubble and its burst, there was no voice to stop the process or to reverse it. On the contrary, the crisis was used as an additional argument to accelerate the process. It has been presented as a necessary attempt to deal with the malfunctioning Japanese financial system. The next stage of the financial reform took place during the term of Prime Minister Koizumi (2001-2005) with formal reform of the FILP and privatization of the Post. There were two goals: to hinder bureaucrats and politicians to use the FILP to promote policy goals; to stop the flow of funds from the private economy to government financial intermediation, programs, and projects. More precisely, Japan's postal services were privatized and divided into four companies under a holding company (Japan Post) in October 2007. Moreover, government financial institutions such as the Development Bank of Japan, the Central Cooperative Bank for Commerce and Industry, or the Japan Bank for International Cooperation were either liberalized or restructured. Finally, Koizumi also cut by half the FILP budget during his term. Hence, along with the process of liberalization, public financial institutions, which were the financial arm of IP, were reformed or privatized, and this hindered on institutional capabilities of IP.[9]

In order to understand this process, few competing explanations have been given, from the international (i.e. the US) pressures to the functional demands of financial and non-financial actors and the key role of the MoF. We leave aside this discussion in order to emphasize our own argument, partly inspired by previous works such as Okazaki (2012), Tiberghien (2007), or Vogel (2006), according to which financialization does not come from heaven (in the sense that it would have been primarily imposed by external pressure) but by the government itself, which has eventually internalized some external influences. MITI/METI has played the key role in this process of liberalization in the context of changing goals of IP between the late 1970s and the late 1980s.[10] In turn, this process has been at the origin of substantial changes in the tools and institutional capabilities of IP. As well phrased by Tiberghien (in Lechevalier, 2014), “The state has become the actor of its own decay”: MITI has been a key player in decreasing its own influence as shown for example by the role of the Industrial Competition Council in the late 1990s (Vogel, 2006; Tiberghien, 2007).

The best symbol of the changes in the IP in Japan is the ambition of the government in the late 1980s, in a context of financial euphoria, to make Tokyo a global financial center. This is a turning point, as IP in Japan had mainly been based on the postulate that economic development was equal to industrialization and other sectors should be at the service of the manufacturing industries. Given the financial wealth of Japanese banks and the net position of Japan towards the rest of the world, the idea emerges in the first half of the 1980s, within MITI and other ministries, that the next stage of Japanese development could be a finance-led growth with the Tokyo Stock Exchange at its center (Okazaki, 2012). The second half of the 1980s and the Bubble (which was not seen as such at that time) seemed to validate this strategy.

Thus, it is essential to understand how the goals of IP have evolved and how they have led to financial liberalization. It is possible to summarize this process as follows. Until the late 1970s, the top priority has been the catching-up of European and US economies. Then, the focus has been on sustained prosperity from the mid-1980s (Maekawa report of 1985) to the second half of the 1990s (that is until the conclusion was reached that the burst of the Bubble had reached an irreversible stage). From the early 1990s, gradually, but with an increasing strength in the 2000s and 2010s, the major goal has been to avoid a decay and the hollowing out of industries by winning the competition with emerging super manufacturing powers such as South Korea and above all China. In fact, in Japan, as in many European countries, one has observed the transformation and decomposition of IP from the 1980s and the early 1990s into competition policy, globalization policy, and innovation policy, whose coherence was emphasized through the use of the catch-all expression “structural reforms,” without specifying the conditions of their articulation. The purpose of the first one has been to promote market mechanisms in the domestic economy on all markets (finance, goods, labor) while the goal of the second one has been first to solve the problems of trade conflicts with Japan’s partners and then to beneficiate from the new global environment through trade, FDI, and financial flows, but without contributing to the building process of the international regulatory framework.

[9] We deliberately put aside the desegmentation of private institutions that has been the result of an intentional policy but also the outcome of industrial dynamics in the financial sector.

[10] As for the MoF, it has been rather conservative in the process, as it has been considered as responsible for the crisis and lost its influence in the mid-1990s.

As mentioned above, a significant number of papers and books has analyzed the history of IP in Japan in order to try to answer the following question: how can we explain that the very actor at the center of the developmental state framework has led the process of liberalization? Our purpose in this paper is not to engage ourselves in this investigation by discussing various types of arguments, from the ones focusing on shifting ideology to the ones emphasizing evolving coalition. In the present paper, we limit ourselves to draw some conclusions from -the ideological shift symbolized by the evolution and the influence of the famous Japanese economist, Masahiko Aoki (Okazaki, 2012). Together with other economists, he has played a key role in the evolution of the mainstream thinking within MITI/METI through his vision of the future of the Japanese economy. His institutional analysis of the Japanese economy led him to the conclusion that major institutions – such as financial systems and labor markets - that had been characterized by important complementarities and played a determinant role in the catching up process, were no more adapted to the new stage of the Japanese economy, after the catching-up process had been achieved. Henceforth, a liberalized environment was required in order to promote decentralized innovation and more diverse corporate organization that could not be dealt with by a centralized and top-down approach (Aoki, 2000, 2001). This vision had a strong influence on the conclusions of various committees (the so-called *shingikai*), and then the policy reports of MITI/METI (the so-called White Papers). It has served as the intellectual background of the evolution of state apparatus in general, as it can be still seen in more recent reports (METI, 2005, 2016).

### *4.2 Characterizing the evolution of industrial policy in Japan in a liberalized environment: re-coordination as a means to search for new complementarities*

The gradual nature of institutional changes in general and the evolution of IP in Japan since the 1980s makes difficult to identify a clear turning point as, very often, decay has been accompanied by a simultaneous revival through a conversion of instruments and a remodeling of the framework. In conformity with the famous predictions of Karl Polanyi, the great transformation of Japanese capitalism under the influence of neo-liberal policies has endogenously generated a revival of state intervention (Vogel, 2006). However, it has not been without contradictions in an overall liberalized environment. In contrast with various accounts of the recent evolution of IP in Japan (e.g. Nezu, 2007; Fields, 2012; Chang et al., 2013; Akkemik, 2015), we focus here on few examples that are representatives of the efforts of government to rebuilt its capabilities based on institutional complementarities that seemed to have vanished. Two examples can illustrate this revival: the reform to better coordinate government bodies; the more recent attempt of Abenomics in coordinating countercyclical policies and growth strategy, which can be considered as a potential synthesis between structural reforms and IP.

The effort to improve state capabilities has primarily focused on the reform of its underlying administrative structure. Liberalization indeed increased the decentralization and compartmentalization of IP between different ministries, which have been described in section 3, and which had major negative side effects on the coordination within the government. From the second half of the 1990s to the mid-2000s, efforts to coordinate industrial/innovation policies have taken the form of Basic Plans for Science and Technology, whose aim was to set priorities for periods of 5 years after coordination between different ministries by the so-called Council for Science and Technology Policy (CSTP), directly attached to the Prime Minister. Its influence, therefore, depends very much on the leadership of the Prime Minister, but it is possible to consider that it has a bargaining power of its own that is potentially stronger than individual ministries in the process of budget negotiation with the MoF. It may explain why, despite fiscal consolidation, the public budget for R&D has continued to grow along priorities set by the CSTP (Lechevalier, 2006; Harayama, 2001).

More recently, there has been a noticeable effort to coordinate growth strategy and short-term counter-cyclical policies. The best example here is the so-called "Abenomics," the name given to the economic policy package introduced by Prime Minister Abe from December 2012. In rupture with previous practices, the major novelty of Abenomics is the idea that the success of growth strategy is conditioned by fiscal and monetary policies. This is symbolized by the metaphor of three arrows that emphasizes the high degree of complementarity between the different dimensions of economic policy: the conjunction of the first arrow (aggressive monetary policy), the second one (flexible and progressive fiscal consolidation) and the third one (growth strategy) makes their effect stronger than if they were conceived and implemented individually (Lechevalier and Monfort, 2016). Beyond the metaphor, it is possible to draw a comparison with the 1960s and the 1970s, despite the very different macroeconomic context, as fiscal and monetary policies were at the service of growth through financial containment and mobilization. While the first arrow of Abenomics is often presented as the major mean to exit Japan from deflation, which is true, we argue that there is a clear hierarchy between the arrows and that the ultimate goal of Abenomics is included in the third one, which combines structural reforms and a new generation of industrial policies (Ohashi, 2015). From this viewpoint, monetary and fiscal policies can be understood as policies aimed at gaining time before the policy package included in the third arrows boosts the potential growth rate.

What is particularly important for our interpretation in terms of state capabilities is what some observers consider as Abe's attempt to revise the Bank of Japan independence, as a way to put the core of the financial system at the service of his political goals (Lechevalier & Monfort, 2016). During the 2012 campaign, he indeed proposed raising the inflation target from 2 to 3%, revising the Organic Law of the Bank of Japan and allowing direct central bank financing for public investment. These measures would have affected the de facto independence of the central bank. As prime minister, he also put direct pressure on the central bank in the first quarter of 2013. Eventually, this more radical aspect of Abe's economic vision was not implemented since the calendar allowed him to appoint Haruhiko Kuroda as head of the Bank of Japan (BoJ) in April 2013, and as the successor of Mr. Shirakawa. Since gaining independence in 1997, the Bank of Japan has been led by three governors – all career officials from the central bank, contrary to Mr. Kuroda, who is a former official of the Asian Development Bank. Until 2013, the Bank managed to maintain financial stability in a difficult environment marked by multiple economic and financial crises (2001 dot-com bubble, 2008 Lehman shock, 2011 earthquake), but regularly fell short of its inflation objective, in part due to an overly cautious monetary policy, despite the introduction of zero interest rate policy or quantitative easing. Concretely, monetary policy has substantially changed with the arrival of Mr. Kuroda and is clearly at the service of Prime Minister Abe's objectives, which are different from the 1997 mandate of the BoJ. Besides the details of the new monetary policy[11], it shows an effort to increase state financial capabilities. From this viewpoint, it shows that an active monetary policy that sets the cost and volume of credit in relation to the goals of the government in terms of allocation of resources is a

[11] The new policy focused on three main channels of monetary policy implementation: reduced long-term interest rates; increased lending and investment in risky assets; and altered expectations for inflation. They are supposed to lead to increased lending and growth via investment, and thus to contribute to the return to a higher potential level of output.

necessary pre-condition of the effectiveness of the industrial policy. What we will see in section 6 is that this is not a sufficient condition.

## 5. Liberalization, Financialization, and the evolution of industrial policy: the Korean Experience

With the same line of argumentation than the previous section, this section stresses the specificities of the Korean case by discussing the transformation leading to the financialization era and the evolving goals and tools of IP. We outline the active role of governments to liberalize the domestic financial system in parallel to the efforts invested in restructuring IPs towards a more balanced industrial structure. The 1997 crisis was a pivotal point to change the complementarities in the State-finance nexus and induce a switchover of the hierarchy within the State-finance nexus evolved and, more importantly, the hierarchy evolved in favor of finance.

### *5.1. Understanding the process of liberalization and the post-1997 crisis restructuring.*

Although liberalization started in the 1980s, the 1997 crisis was the tipping point in this process, as it facilitated an extensive integration of the Korean economy into the world economy and had important implications for the joint evolution of the financial system and IP (Kim, 2008). From the mid-to-late 1980s, as the idea of political democratization spread into the economic realm, economic democratization was somewhat understood as moving away from centralization to marketization and then financial liberalization (Hundt, 2015). In the early 1990s, the liberalization process took place at a swift pace under the “New Economic Plan” initiated by the YS Kim administration. The plan aimed to revitalize the Korean economy through deregulation (i.e. internationalization), privatization, and liberalization.[12] For example, two policies were initiated: the first being OECD membership as a first step for trade and financial liberalization and the second was financial deregulation, especially allowing “investment finance companies” to enlarge “merchant banks” (i.e. investment banks) that engage in securities business. This liberalization process foreshadowed the end of “financial containment and mobilization” and the beginning of the financialization era.

Following the 1997 crisis, a far-reaching restructuring of the financial system –including corporate governance- and its supervision were operated by the newly elected DJ Kim government. The government restructured the financial sector supervision bodies under a single agency, the Financial Supervisory Commission (FSC), in early 1998 with close oversight from the Blue House. The full opening of financial and non-financial industries to foreign investment took place according to the law entitled “Enforcement Decree of the Foreign Investment Promotion Act” that was designed prior to the 1997 crisis but had failed to be implemented. Under the reform transforming the Korean economy in line with the liberal market, this law was successfully enacted. Restrictions on foreign equity ownership were lifted in the banking sector, which promoted and increased foreign ownership

[12] The new economic team of the YS Kim administration devised the New Economic Plan, which substituted the series of Five-Year-Economic-Development Plans designed by the Economic Planning Board (EPB).

in the largest Korean banks. The IMF specified detailed recommendations on structural adjustments to tackle crony capitalism by detaching the financial system from *chaebols*. The financial market underwent restructuring to be more transparent; insolvent financial institutions controlled by *chaebols* were sold off or liquidated. After the crisis, almost 50% of the commercial banks and more than 40% of Non-Banking Financial Institutes (NBFIs) were closed or merged with others (Chang, 2003). Public institutions played an important role in recapitalizing insolvent financial institutions (Korea Asset Management Corporation and Korea Deposit Insurance Corporation). In addition to adopting consolidated financial statements and prohibiting payments guarantees among affiliates of *chaebols*, corporate restructuring took place; thirty out of the sixty-three largest *chaebols* were forced to undergo some form of financial, structural adjustments, the government mandated *chaebols* to downsize by reducing their debt-to-equity ratio by half, and an attempt to rationalize the top-five *chaebols* was attempted (so-called 'Big Deal').

Regardless of the debates and different narratives over the causes of the 1997 crisis,[13] the state led the structural changes in the financial and corporate sectors during the crisis. From the government perspective, financial reforms and the structural adjustment program were used to reconfigure the *chaebol*-oriented market to become more competitive and diversified under the reform consensus and the IMF imperatives. In this process, the rise of neoliberal bureaucrats in the Blue House and Ministry of Finance (MoF) played an active part (Ji, 2011). To achieve its goal of domestic reform, the government interests converged with those of foreign investors. On the surface, the reforms seemed to be successful in weakening the concentration of economic power by breaking the nexus between the financial sector and *chaebols*, which owned and used financial institutions, NBFIs in particular, at their leisure. However, the series of reforms, in fact, served as an important impetus to weaken *chaebols*' dependence on policy finance and state guidance. This structural change and more liberalized market conditions reduced room for rent-seeking activities of firms. Yet, the reforms provided *chaebols* with greater access to global capital (Stubbs 2009) and decreased financial resources for the state to implement IPs.

The complementarities in the State-finance nexus were completely reshuffled following the crisis. Even though the deleveraging of chaebols was driven by the state, the government lessen the linkages between the state and the financial system by withdrawing from corporate financing. Moreover, by restructuring the financial sector under international standards, the government also made room for a reshuffling of the developmental state framework. Despite the clear policy objective of withdrawal of the state and liberalization, change at the institutional level was not that straightforward.

### *5.2. The evolution of industrial policy: strengthening the financial system and re-balancing the industrial structure*

During the 1997 crisis, more efforts were put into liberalizing and restructuring the economy in accordance with international "good practices." The Korean government did not necessary simply wish to relinquish the "developmental state" (Weiss, 2003). The government, however, changed its roles in and strategies for implementing IPs and where to allocate the budget

[13] The DJ Kim government blamed *chaebols* and their relation with the former administrations and embraced the IMF reforms. Meanwhile, the *chaebols* criticized the state's regulation and over-involvement in the economy and argued that the IMF reforms were biased against their corporate governance (Ji, 2013).

(Hundt, 2014; Jung, 2015). Henceforth, the government avoided direct intervention in the sectoral allocation of corporate investment while continuing to enhance market institutions and favoring competitive behavior (Fields, 2012). We argue that the major features of the evolution of IP are the strengthening the financial system and re-balancing the industrial structure.

The development of the financial sector and the restructuring of the financial system were one of the major goals of IP in the post-crisis period activating new complementarities. President MH Noh promoted the Northeast Asian Hub Strategy, an ambitious policy aimed at attracting foreign financial institutions by deepening financialization of international capital and developing the domestic financial system. Based on this strategy, the MH Noh administration initiated the “Indirect Investment Asset Management Business Act” to vitalize the private equity fund market by expanding investment vehicles from securities to derivatives and tangible assets in 2003. A retirement pension system was introduced in 2004, and pension funds were allowed to invest in the stock market, and the Korea Investment Corporation (KIC) was established in 2005.[14] The plan to enact the Capital Market Consolidation Act (CMCA) in order to develop financial capital was announced the following year. The MB Lee administration introduced the Insurance Business Act, rules on the separation between industrial and financial capital were relaxed, and firms were permitted to increase stakes from 4% to 9%. The CMCA took effect in 2009, permitting new investment products and financial derivatives under the negative list approach. Moreover, the GH Park administration expanded the coverage of CMCA and deepened financialization by making an amendment in 2013 that would reinforce the investment banking sector (FSC, 2013-15). These active policies suggest the government’s goals towards achieving a Korean model for the financial system by promoting the independent growth of the finance sector rather than solely servicing the real economy. Nevertheless, successive governments kept alive the public financial institutions. Those public entities have been especially active to overcome the bumpy growth of the 2000s by redirecting their supports towards SMEs. The MB Lee administration relaxed regulations on various investment funds and the privatization of the Korea Development Bank was even envisioned by MB Lee to create a full fledged investment bank committed to support global expansion of domestic firms (Thurbon, 2016). This financial activism was opposed by the private financial institutions worried about a megabank to emerge (Thurbon, 2016) but also by politicians concerned over the stabilizing role KDB has in the economy and the difficulties to find buyers given the low profit rate of the bank.

Besides the financial industry, the IPs targeted the ICT sector and the SMEs. During the DJ Kim administration, the ICT sector, in which Korea likely had a comparative advantage with a vast number of internet users and technologies to catch up market leaders, was the major target for IPs. Similar to other OECD countries, the Korean government was inspired to become an innovation-driven society. The DJ Kim government promoted the ICT industry through deregulation and giving greater weight to the Ministry of Information and Communication. Various incentives were provided through the liberalized financial system; foreign investments were promoted, and the ICT sector gained access to the securities market. The DJ Kim and MH Noh governments also aimed at promoting SMEs as well as the venture capital industry. This developmental state thought that the “globally competitive SMEs” could be incubated by targeted IPs. For example, venture firms should be certified to benefit from various governmental SME promotion policies (Act on Special Measures for the Promotion of Venture Business since 1997). This type of instrument recalls the HCI drive of the 1970s (Jang, 2003; 2005; Park, 2011). This was continued by the MH Noh government which used

[14] See the Financial investment services and capital markets act enacted in 2007.

selective SME promotion policy, "Inno-biz" model. Firms meeting the criteria set by the government would be selectively financed and supported. This Inno-biz SMEs policy is designed to be pro-competition and MH Noh's globalization strategy. However, even in the conservative administrations (MB Lee and GH Park), this venture capital promotion IP has expanded its budget and tools.

The goal of this IP has not changed much and blended with the "Green Growth" of MB Lee's and Creative Economy in GH Park's administration (Hong & Cho, 2014). Indeed, since the 2008 global financial crisis, in order to complement the growth strategy and business-friendly economic environment, both governments have continued to reiterate a call for IPs of "shared growth" and "youth employment" to address disparities between possible winners (*chaebols*) and losers (SMEs and labor groups). Nevertheless, the term "growth" was bound to be given greater weight than "shared." Indeed, MB Lee's policy loans, accounting for 25% of total bank loans, mostly went to industries such as shipbuilding, plants, construction, chemicals, and steels where *chaebols* or its affiliates play a major role (Thurbon, 2016). The GH Park administration has also been keen on supporting the *chaebols'* globalization strategy and capital market access with greater financial and trade liberalization. Also, one goal of IP has been to drive globalization strategies as well as trade policies, such as the "multi-track simultaneous approach" to free trade agreements to boost the economy after the burst of the IT bubble. Sandwiched between the emergence of China and the partly sustained comparative advantage of the Japanese economy, which was disadvantageous for *chaebols,* the MB Lee and GH Park administrations kept promoting FTAs for an economic breakthrough. The numerous FTAs with stronger regulations on trade have reduced policy space, and prohibit public funds or subsidies for specific firms (Ahn and Shin, 2011; Lee et al. 2015; Shin, 2015).

We have seen in this section to what extent the government used IPs to develop its financial sector and actively triggered the "financial empowerment and disconnection" phase of financialization. In doing so, the government abandoned some institutional capabilities regarding its impact on firms' strategies and long-term investment decisions. Indeed, the business sector beneficiated from liberalization by diversifying their funding as well as their modality of integration to global value chains. Besides, the partial dismantling of the developmental state framework decreased the devices of coordination and the instruments to implement IPs. The transformation of the overall institutional setting in 1997 induced the transformation of complementarities and hierarchy in the State-finance nexus. The case of the venture capital industry and the promotion of new venture is a compelling example of new complementarities that can emerge. Indeed, this new goal of IP promotes at the same time a change of the industrial structure and the promotion of a new segment of the financial sector. If the goals are complementary, the translation into the institutional structure is not guaranteed (or at least not straightforward).

Nevertheless, the state preserved some institutional capabilities through public financial institutions, its role as a negotiator of FTAs and its legitimacy beyond the corporate sector. First, public financial institutions[15], in particular, the Korean Development Bank, still channel a large amount of money to the economy. Over the recent years, most of these institutions have supported SMEs and export firms. The ratio of policy finance from the public institutions is up to 80-85% (600 trillion won) out of total policy finance -including private financing (Sohn, et al. 2013). Second, the ratification of FTAs gave the government some leverage over the corporate sector. In areas where

[15] There are seven public policy financial institutions ; Korea Development Bank: (KDB + Korea Finance Corporation: KoFC), Export-Import Bank of Korea(EXIM), Korea Export Insurance Corporation (K-sure or KEIC), Industrial Bank of Korea(IBK), Small & Medium Business Corporation(SBC), Korea Credit Guarantee Fund(KODIT), Technology Guarantee Fund(KIBO).

harmful consequences and direct losses were expected, *chaebols* urged the government to negotiate with foreign governments in their favor.[16] In return, the *chaebols* seemed to partially support the government's policies on green growth, creative economy, and FTA negotiations, when in need. Finally, governments have coped with its reduced institutional apparatus to implement IP by seeking legitimacy and justification for the government's policy initiatives through mobilizing political resources, such as trade unions and industrial lobbying (Hundt, 2015).[17]

## 6. Contradictions of industrial policy revival in a financialized environment: loss of state capabilities as the result of decayed institutional complementarities and hierarchy

In the two previous sections, we described the financial liberalization and the coincidental institutional changes that have transformed the DS framework described in section 3. We insisted that these transformations and evolutions of IPs and the financial system be far from being incidental or forced exogenously. Liberalization and financialization were then a consistent response to the rising contradictions of the developmental state framework.

As in other OECD countries, the rationale for IPs has been transformed. IPs are now designed to fit with the liberalized environment in order to induce new complementarities between the state and the financial system (Ohashi, 2015). Recent IPs in Japan and Korea are partly characterized by a form of coherence of the policies implemented by reference to the "needs" of the industrial structure. Notwithstanding, contradictions have developed as symbolized by the systematic failures of IPs in some domains. How, then, can we explain the limited success despite the new complementarities –by design – with the financialized institutional environment? At first glance, the very existence of these contradictions conflicts with the new complementarity we outlined. In fact, we contend that these contradictions arise both from the fact that attempts of complementarities by design did not lead to ex-post complementarities and from a loss of institutional capabilities resulting from the mechanisms of institutional change at play in Japan and Korea (Fields, 2012).

### *6.1. Loss of state capabilities and failures of industrial policy*

At this stage, the isolated attempts to re-coordinate the economy (as described in sections 4 & 5) have been showing mixed results in both Japan and Korea. This lack of efficiency of IPs can be interpreted, at least partly, as their difficulty to foster new institutional complementarities. The

[16] For example, together with the competition-law issue, antitrust law has been stipulated according to the request of the US (US Chamber of Commerce). The US has doubted whether competition laws have been applied to *chaebols*. The Korean government has disagreed and argued that additional explicit stipulation in the FTA provision would be inappropriate (Lee at al., 2011).

[17] Directly or indirectly through the Ministries (especially the Ministry of Finance and Ministry of Trade, Industry and, Energy), the Blue House has promoted its IPs and commercial policies by urging support from NGO, such as the Korea International Trade Association (KITA), the Federation of the Korean Industries, the Korea Federation of SMEs, the Korea Chamber of Commerce and Industry (KCCI). Many think tanks are also intrinsically intertwined with each other through government procurement or personnel affairs (CEOs, vice-CEOs, and board members). Business associations have actively published their evaluations and various policy reports on the government's IP and put forward their opinions in presidential election years. For example, the Federation of Korean Industries representing *chaebols* has issued the "policy agenda for the next administration" since 1992 (http://www.fki.or.kr/publication/report/list.aspx).

transformation of the institutional framework after the Golden Age has changed the institutional capabilities of IP, which can be illustrated by doomed IP attempts from the government.

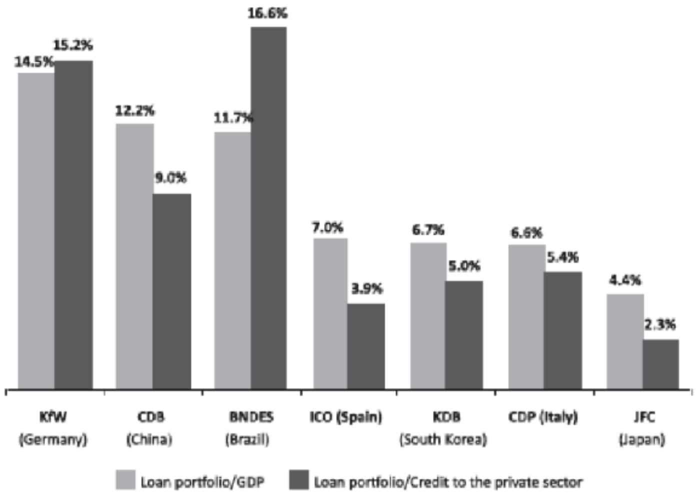
The best example of the failures of IPs in Japan and Korea in the financialization era is certainly the pro-SME and startup policies. It is common to emphasize "cultural" problems (e.g. the lack of an entrepreneurial culture, such as in Anchordoguy, 2000) to explain the poor performance of Japan and Korea in terms of startups creation and development. In what follows, we rather investigate structural reasons on the side of state capabilities.

In an attempt to facilitate the emergence of a new generation of entrepreneurs and to mimic the process observed in Silicon Valley, the focus has been on the liberalization of the labor market in order to favor human resource mobility and even more importantly on a new stage of liberalization of financial market through the promotion of venture capital. Perhaps more than ever, the complementarity between the innovation strategy and the institutional environment –especially labor and finance institutions – can be ascertained here. However, it is yet far from being enough, as can be shown through the low rate of new firm creation, the difficulties of venture capitalism and the poor development of SMEs, despite a few successes such as the ones of Rakuten or Softbank in Japan (Sako & Kotosaka, 2012) or Naver and Kakao in Korea (Kim, 2015). To us, besides any form of path-dependent complementarities that cannot be easily reversed (Hwang, 2012), the major explanation of this failure is as follows. Although the promotion of SMEs and startups is really at the center of government's agenda, it lacks means if one compares the (e.g. fiscal) advantages, from which well-established large firms benefit, with their market power and political ties. There have been few examples in Japan such as the Livedoor case (Dore, 2009) in the late 1990s when incumbent firms resisted newcomers and finally, *de facto* received government support. The backing of pro-market policy by large established firms encounters its own limits when there is a risk of increasing competition and reducing margins. In Korea, similar contradictions can be observed in pro-SME and startup policies and how the effect of the government's IP has not been realized as expected. The Livedoor case in Japan vividly echoes to the recent Elliot-Samsung case in Korea where the US hedge fund Elliot Associates tried to prevent a merger by two Samsung affiliates. Backed by the government, who happened to be the second largest shareholder of Samsung C&T involved in the merger through the National Pension Service, the merger proceeded (Shin, 2015).

Another example of the decay of financial capabilities of the state in Japan and Korea can be found in the case of development banks. Although they have been praised for having contributed to the finance for development and growth during the Golden Age of the DS, they have been dismantled or reformed during the period of liberalization, as shown previously. In Japan and in Korea, as well as in most of the countries in the world, they have experienced a revival after the 2007-2008 global crisis in an attempt by the governments to alleviate the financial constraints of firms. In those public organizations, devoted to provide long-term finance, a strong commitment to the industry is still very much alive and constitutes a bastion of resistance as illustrated by their opposition to privatization plans. The complexity of the semi-privatization of the Japan Post, initiated in 2005 and still unfinished after ten years is a compelling example. There is then a growing consensus according to which the private financial system on its own cannot perform well to support the real economy, especially as for innovation and structural transformation. This can be done better by development bank (Griffith-Jones et aL, 2016). More precisely, the two major missions of these development banks are: 1) to enhance financial inclusion in providing access to credit for SMEs; 2) to finance infrastructure through long-term financing and at relatively low cost. These two mission converge as means to assist the implementation of national development and growth strategies

However, paradoxically, the relative importance of development bank in the economy is much less in Japan and in Korea, by comparison to other comparable economies, if one considers indicators such as their loan portfolio relative to the GDP or total credit to the private sector. The Japan Finance Corporation and the Korean Development Bank are at the bottom of the hierarchy, especially if one compares them with their German, Chinese, Brazilian counterparts, and even Spanish or Italian depending on the indicators (Figure 1).

***Figure 1: Relative importance of loan portfolio of development banks in a selected number of countries***




*Source: Griffith – Jones et al. (2016)*

Even more important that these quantitative indicators, the history of these two institutions may explain why the JFC is much less powerful in the Japanese context than the KDB in the Korean context. To put it simply, there has been much more discontinuity in the history of the former than in the case of the later, and it has acted as an impediment to its development. The Japan Finance Corporation (*Nihon Seisaku Kin'yū Kōko K.K.* (株式会社日本政策金融行庫), is a public corporation (wholly owned by the Japanese government) that provides financial services, mainly provision of business loans to SMEs and business start-ups; and educational loans to individuals for school entrance fees and related expenses. In rupture with the reforms introduced by Prime Ministers Koizumi and Abe that led to the dismantlement of most of public financial institutions (see section 4.1), it was founded in 2008 after the merger of four policy-based financing institutions, including The Japan Finance Corporation for Small and Medium Enterprise (JASME) and The International Financial Operations of the Japan Bank for International Cooperation (JBIC). Four years later, a new reform has led to the independence of JBIC (source: JFC and JBIC websites).

As for the Korea Development Bank (KDB, 한국산업은행), it is a wholly state-owned policy bank that was founded in 1954 in accordance with The Korea Development Bank Act to finance and manage major industrial projects to expedite industrial development and enhance the national economy[18]. KDB has been also historically known to help non-financial companies in troubled situation or about the fail. As the JFC, its role and mandate has evolved in relation with the changes in the priorities of IP but also in the more general context. For example, it has been affected by the process of liberalization that led to the narrowing of its mandate. However, there is much more continuity in its history and we argue that it may explain why its role is more important in the economy after the 2007-2008 crisis than for its Japanese counterpart. Having said this, similar hesitations than in the Japanese case can be observed regarding the evolution of the status of Korea Development Bank, as exemplified by the withdrawal by President GH Park in 2014 of the privatization of the KDB announced by President MB Lee in 2008 or the postponing of the privatization of the Industrial Bank of Korea since 2006. The privatization of KDB was opposed by the private financial institutions worried about a megabank to emerge (Thurbon, 2016) but also by politicians concerned over the stabilizing role KDB has in the economy. This processes was even reversed, and the private spin-off of KDB, the Korea Finance Corporation created in 2009 was merged back to KDB in 2015. While the MB Lee administration demonstrated what Thurbon (2016) calls a financial activism, it also demonstrates, in our view, the increasing financialization of the state with an attempt to re-orient public financial institutions to the standards of the private sector. Hence, the abandonment of the privatization plan shows that this process has a stop-and-go dynamic. As a result, it is worth underlining that the newly established Korean investment banks provided less than 13% of total corporate credits and financing to businesses (including SMEs) as of the end of 2014, a rather insignificant amount.[19]

A final example of the difficulty of reviving industrial policies in a financialized environment is more specific to Japan and concerns the Abenomics. This case needs to be assessed and qualified carefully, as it is not straightforward. We have seen above (section 4.3) how Abenomics can be interpreted as an effort to rebuild state capabilities in order to reach goals of economic revitalization, which includes classical goals of IP but also of structural reforms. The key component is the first arrow, namely monetary policy, which acts through a massive injection of liquidities into the economy (quantitative and qualitative easing) while keeping interest rates at their lower bound. Despite this rather extreme policy, which can be seen as a pre-condition of IP, no rebound of the investment has been observed overall between 2013 and 2017. Moreover, so far, Abenomics has not been able to reverse the trend of a corporate sector being in an excess saving position. Not only, companies have deleveraged in reimbursing their debts, but they have dramatically increased their liquidities (from about 150 trillion yen in the early 1990s to about 250 trillion yen nowadays). Thus, the parallel between the present policy conducted under the umbrella of Abenomics and the package of monetary and industrial policies in the 1960s-1970s has its own limitations.

The major effect of the aggressive monetary policy under Abenomics has been to increase the stock markets indexes (e.g. increase of the Nikkei index of 30% in 2013), but it did not lead to a revival of growth. In a sense, Abe's administration is experiencing again finance-led stagnation (not finance-led growth) and the vanity of Japanese IP to transform the Tokyo stock exchange in an Asian

[18] Source: https://www.kdb.co.kr/

[19] FSC's Report on corporate financing of five Korean investment banks (Samsung, Hyundai, Daewoo, Woori, and Korea Investment & Securities Co., Ltd) for 2014 parliamentary inspection of the administration (in Korean).

equivalent of London or New York. From this viewpoint, we agree with Lechevalier & Monfort (2016) statement regarding the major causeof the disappointing results of Abenomics in terms of growth: this is neither because of the lack of structural reform, nor because increasing wages rather than profit should have been the target, nor because the growth objectives of Abenomics are unreachable in a context of secular stagnation. This is because substantial financial development (i.e. financialization) is presently unable to contribute to the proper financing of the economy (as exemplified by the accumulation of liquidities by large companies) and to the rise of productivity in prioritized domains.

Generally speaking, these examples show the limits of the relationship between the productive sector and the financial system under financialization, which we characterized as“financial empowerment and disconnection.” The financial sector is no more subordinated to the need of the industry, it develops itself according to its own logic and, in the meantime, its development has an important impact on the industrial dynamics (Ertürk & Solari, 2007; Orhangazi, 2011). It means that the government has no more the capacity in influencing the allocation of resources, even it engages itself in an extreme type of monetary policy.

### *6.2. Layering and conversion vs. layering and drift of the developmental state framework causing a loss of institutional capabilities: two different cases of gradual institutional change*

Based on our previous description of institutional changes having affected the developmental state framework, we emphasize mechanisms of gradual but substantial institutional change in Japan and Korea. In doing so, we apply Streeck and Thelen’s (2005) framework to our case study. The Table 1 summarizes our analysis. In both countries we observe a *layering* mechanism, which refers to the case when a new set of rules, policies and practices are superposed on existing ones without replacing them. Different logics are then at play at the same time with the new ones tending to overcome the past ones. This mechanism is particularly interesting to understand why a debate still exists about the persistence of the developmental state framework in these two countries. Indeed, some organizations and practices have survived since the Golden Age period and can potentially be mobilized by policy makers and political elites. In addition, new organizations were created, mostly related to market regulation and liberalization (e.g. Financial Service Supervision, Financial Service Commission, FTA in Korea; Financial Services Agency and Japan Fair Trade Commission in Japan) without frontally jeopardizing the existence of past institutions. Thus, some public organizations devoted to industrial upgrading during the Golden Age (Korea Development Bank, Korea Export-Import Bank in Korea; Japan Bank for International Cooperation or JBIC and Nippon Export and Investment Insurance or NEXI in Japan) are still used nowadays to support IP.

In combination with this layering process, a *conversion* mechanism took place in Japan while *drift* seems to have dominated in Korea.[20] Conversion involves a gradual replacement within the same structure of representation and practices. In Japan, some institutions like the METI have been progressively converted towards supporting markets liberalization and integration and were the main actors of liberalization. More generally, DS institutions have not been so much amended or allowed to decay as they have redirected to new goals, functions or purposes*;* existing institutions have been adapted to serve new goals or fit the interests of new actors (Vogel, 2005). Though it was

[20] See Hacker et al, 2013 on the distinction between conversion and drift and its implication.

gradual, the conversion started in the 1990s and was close to achievement in the mid-2000s. As a result of this specific form of change, we argue that the DS in Japan has experienced a great transformation but has not disappeared. In this context, the concept of "remodeling" used by S. Vogel (2006) is appropriate, under the condition that it is interpreted as a combination of stability and change (see also Fields, 2012).

***Table 1: Complementarities and contradictions between the revival of IP and the liberalization of the financial system in Japan and Korea***

| | Japan | Korea |
|---|---|---|
| **Overall evolution** | - Gradual liberalization<br>- Layering and conversion of the developmental state framework<br>- Absence of political equilibrium<br>- Loss of institutions capabilities hinges on the ambition of industrial revival. | - Fast but uneven liberalization<br>- Layering and drift of the developmental state framework<br>- Relatively stable political equilibrium<br>- External constraints are strong, but institutional capabilities of IP remain relatively important to avoid deindustrialization |
| **Complementarities** | - Increasing public budget for IP and development of R&D consortia & cluster<br>- Effort to coordinate public entities in charge of IP<br>- Effort to coordinate countercyclical policies and growth strategies (Abenomics) | - Strong support to firm-based R&D<br>- IP for the development of the financial industry as an engine of growth<br>- Ease of financial constraints by large policy loans directed to SMEs |
| **Contradictions** | - Increasing discrete corporate diversity<br>- Failure of the promotion of startups<br>- Unachieved reform of the Post and implication for capital channeling<br>- Problematic articulation of competition, globalization and innovation policies | - Increasing dualism between chaebols and the rest of the economy<br>- Venture promotion while the capital market is still under-developed.<br>- Anti-*chaebols* policies slow down their financial activities in insurance. |

In Korea, the concept of drift better captures how organizations devoted to the industry were partly replaced by ones implementing pro-financial sector policies. Change through drift occurs when institutions adhere to past logics (due to active or passive political processes) despite the need for adaptation to the new environment. This gap between institutions and the environment they are embedded in leads to a change of outcomes. Before 1997, some part of the industrial policy setting and the financial system were left unchanged despite the financial liberalization undertaken and the change of economic environment. For example, the existing financial supervision body was underdeveloped and unable to regulate the chaebol debt-led bubble in the 1990s that eventually burst in 1997. These entities were left to drift by political elites so as to become obsolete. This drift ended in 1997, which created the political space for the newly established socio-political coalition to make the changes needed (Heo, 2014) and add a new institutional layer. The same happened, under the appearance of stability, with past key organizations of IP setting. If we take the EPB case, it progressively lost power during the YS Kim administration as bureaucrats from the Ministry of Finance claimed more prerogatives (Kim, 1999). Eventually, the EPB was absorbed in 1994 by the newly created and powerful Ministry of Finance and Economy. The drift of former developmental agencies, their absorption by a newly formed one, while others remain active reveals the contradictions among political actors as well as asymmetrical transformations of the institutional setting with some part of the State apparatus committed to preserving the legacy of the developmental state and others being shaped by the widespread liberalization (Haggard & Mo, 2000; Jung, 2011).

These mechanisms of institutional change in Japan and Korea, yet different, have contributed to a loss of institutional capabilities regarding IP. Even though some key government-related bodies, especially long-term finance agencies, have remained active, on the one hand, past institutions have been converted towards new objectives or have drifted and became marginalized. The layering mechanism associates old and new organizations, hence it does not hinge on institutional capabilities *per se,* yet it introduces – at least implicitly - a hierarchy between the latter and the former, but without coherence (i.e. complementarities). To a certain extent, Japan and Korea are still able to mobilize long-term finance to support their industrial goals, but they are becoming singled out. Conversion and drift mechanisms involve more significant changes in terms of capabilities as practices and representation of institutions are changing. The conversion within the MITI/METI in Japan or the absorption of the EPB within the MOFE had profound effects, as they were major coordination devices of IPs. The coordination capabilities to allocate resources among sectors were partly lost in this process while the new organizations created were focused on enabling market-based coordination devices. The differences between these two mechanisms have consequences on the coordination of actors. With the conversion, formal rules remained, which prevent a clear and straightforward re-coordination of actors according to new logics. By contrast, in the case of drift we described, formal rules ended up changing.

Finally, the difference between conversion and drift mechanisms seems to have led to remaining institutional capabilities that are stronger in Korea than in Japan. To support our argument, we stress the analogy between the types of institutional change, the type of crisis faced by these two countries and the remaining legacies of IPs. The long stagnation in the 1990s in Japan has led to the process of conversion of the IP apparatus, but the latent-type of crisis has produced a slow but unresolved miscoordination of economic agents (Lechevalier, 2014). Because successive governments failed to alter the downward macroeconomic spiral, the dismantlement of the IP apparatus did not lead to a coherent alternative. Thus, Japan still seems in the middle of the river. In Korea, even though the 1997 crisis was largely endogenous and had grown for more than a decade (Chang H.-J. et al., 1998), the shock was abrupt and motivated radical measures to end pre-crisis behavior. In a short period, market stability, as well as foreign investors' trust, was restored, illustrative of a prompt re-coordination of agents, even if it is not yet fully achieved. This quick recovery allowed the government to engage with major structural reforms that fixed some contradictions and to a certain extent helped preserve some institutional capabilities.

## 7. Conclusion

In this paper, we have analyzed the revival of IPs from the late 2000s in Japan and Korea. Our approach has two major characteristics. First, we have adopted the perspective of historical institutionalism to focus on the relation of institutions to financial systems and to study their evolution over the last 40 years. Second, by mobilizing the concepts of institutional complementarities and hierarchy, we have discussed the limits of this revival in a context of a liberalized financial system, to which IPs have contributed, by discussing the notion of state capabilities.

Based on this crossed history of institutional hierarchy and complementarities between finance and the state in Japan and South Korea, our conclusion is the following. In order to reach their developmental goals and to have the mean of their ambition, the Japanese and Korean governments have tried their best to contain and mobilize finance at the service of industrial development, by introducing a certain number of rules and regulation. However, it is very much exaggerated to consider that both governments have built and designed from nothing institutional complementarities between finance and the state in its allocative dimension. These complementarities rather resulted from an unintended fit. This conclusion is confirmed for the most recent period. We identified a political will to change the institutional hierarchy between finance and the state. Without entering into the debate about the causes of this change in the political will, we gave several examples that support this idea. For example, in the case of Japan, the effort to downscale the FILP program and the semi-privatization of the post under Koizumi's administration are certainly the best examples of this powerful will. In both cases, but to a different extent, the successful change in the institutional hierarchy did not lead to a rebuilding of institutional complementarities. The major reasons we identified are twofold. One is related to the fact that the decay of state capabilities did not allow the two governments to reach their goal to make the financial sector competitive. Government policy did lead to financial empowerment, but the disconnection between finance and the real economy did not lead to any substantial improvement of the financing of the economy, especially as for new firms and risky businesses. The second type of reason refers to the very form of institutional change: layering is detrimental to the emergence of institutional complementarities because it may create conflict between "old" and "new" institutions while conversion is even more detrimental than drift in reinforcing the potentially of conflict between different types and generations of institutions.

To put it differently, our major finding is that, in the context of financialization, past complementarities of the developmental state have weakened and contradictions have arisen. Complementarities between IPs and the financial system (characterized by "financial containment and mobilization") allowed Japan and Korea to catch-up with most of the European economies and, at the sectoral level, with the US. However, they were gradually exhausted and induced contradictions that resulted in growing macroeconomic imbalances. Moreover, the financialization process, by reversing the hierarchy between the state and the financial system, has put pressure on the state-business nexus prevalent during the Golden Age and led to a decoupling of the IP agenda with corporate strategy of leading firms. Moreover, the rise of the financial sector and its impact on corporate governance has also transformed the finance-business nexus (Jung, 2015; Dore, 2000). The loss of government control over the financial system freed the strategy of leading firms from government concerns and undermined the overall coordination between firms and the state.

Hence, this has led to a restructuring of state capabilities to design and implement IPs and to its inability to subordinate finance to its goals, despite the discourses and ambitions of governments. We have shown to what extent evolving IPs have contributed to financialization through the empowerment of the financial sector to overtake the role of intermediation it was limited to during the Golden Age of IP in Japan and Korea (respectively post-war to the 1980s and 1960s-1980s). We have also addressed how the rise of finance - and the transformations associated with it - has been one of the major sources of change for the developmental state framework in the area of IP. Indeed, there have been mutual transformations of financial systems and the forms of IPs over time. The empowerment and disconnection of the financial system decoupled the allocation of resources from the strategic policy agenda of the state. Liberated from the public supply of credit, the corporate sector was able to allocate resources based on its strategy mainly oriented to maximize its position in global value chains. The gradual institutional change in the state-finance nexus has resulted in weaker complementarities between the economic apparatus of the state and the financial system and a de-coordination of the state's policy agenda and the corporate strategy of leading firms, which have important implications for our understanding of the recent revival of IPs in these two countries.

Our second result concerns the comparison between Japan and Korea that allowed us to identify various commonalities and differences between Japan and Korea in the revival of IP in a financialized environment. The loss of institutional capabilities has been deeper in Japan, which can be explained by two elements. First, The Golden Age of complementarities was based on different institutional features in Japan and Korea, respectively decentralization and centralization of the state economic apparatuses. Second, the process itself has also been different: although both can be qualified as gradual institutional change and incorporate a layering dimension, conversion has been the second dominant form of change in Japan whereas it has been a drift in Korea. This does not mean that the developmental state is much alive in Korea but that institutional capabilities regarding IP remain.

Broader implications can be drawn from our results, especially from a policy-making perspective. If the revival of IPs in OECD countries can be a powerful basis for a strong and durable recovery, attention should be given to the institutional environment of this revival. We can here give a precise meaning to the over-used expression "Institutions matter." They are both constraints and resources from the viewpoint of IP. In the case of strong institutional complementarities and well-established institutional hierarchy, the environment of IP can be mobilized at the service of the goals of the government; however, in the reverse case, contradictions may emerge and drastically reduce the effects of a given policy, whatever its merits are in an abstract context. In brief, in considering institutional changes associated with financialization and, in particular, the evolving environment that conditions the implementation of IPs, we argued that analyzing the joint evolution of finance and IPs is insightful to understand their contrasted forms and performance across countries.

Finally, let us mention two major limits of the present paper. The first one is quite general as it concerns almost all the literature engaged in the empirics of institutional complementarities and hierarchy. To put it simply, there is still an important gap between the theoretical predictions of this literature and its empirical investigation, and it is still difficult to disentangle between different hypotheses (see for example Boyer, 2005). From a methodological viewpoint, the contribution of this paper is in line with the current stage of the literature. The second limit concerns the fact that our approach to state capabilities through institutional complementarities and hierarchy is made without reference to any political economy perspective. However, it is clear from the Japanese and Korean cases that evolving social compromises and shift of bargaining power between actors are key factors of the dynamic we are studying and thus require such perspective to be understood. We have left it aside for analytical purpose, and it should be dealt with in a companion paper.

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