

# **Sovereign Wealth Funds to the Rescue**

**A critical political economy analysis of the role of sovereign wealth funds in  
the subprime mortgage crisis**



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## **Abstract**

Sovereign Wealth Funds (SWFs) have emerged as important investors in the global financial markets. Despite a rapid surge in the size and number of SWFs that began in 2000, it was not until late 2007 and early 2008 that SWFs entered the spotlight of governments, media, and academia. The major turning point for SWFs was their role in the early stages of the ongoing global financial crisis. At the time, the United States (US) and European banking industries were badly damaged by losses resulting from the 2007-2008 subprime mortgage crisis, with US banks already reporting sixty-billion dollars in losses as of November 2007. These major financial institutions – facing tremendous liquidity shortages and loaded with so-called ‘toxic assets’ – would eventually be considered ‘too big to fail’ and become the recipients of government bailouts. However, nearly a year before the bailouts were approved in the US, several SWFs provided the first round of relief by investing billions of dollars in desperately needed capital. This thesis focuses on investments made by the SWFs of South Korea and Singapore. These countries are widely cited as examples of ‘developmental states’, a term referring to late industrializing countries that attained relative economic success in part through active state intervention. Developmental states tend to focus on long-term economic growth and gear investments toward national development goals – traits that seem to be at odds with the risky investments made by the SWFs in question. The thesis aims to explain why these investments were made by employing a critical political economy approach and utilizing concepts from Regulation Theory.

## Introduction

At the onset of the current global financial crisis, which began as a subprime mortgage crisis in the United States (US) in the summer of 2007, sovereign wealth funds (SWFs) invested billions of dollars in struggling American and European financial institutions. SWFs – defined as state-owned or state-controlled pools of capital that are invested, at least partly, outside the country of origin - played a stabilizing role in the economic crisis by providing desperately needed liquidity to banks and other financial institutions at a time when no other investors were willing or able to (Helleiner and Lundblad 2008: 63; Farrell et al. 2008: 6). The majority of banks receiving capital from SWFs in 2007-2008 were based in the US, and the majority of SWFs making these investments were owned by East Asian states. The remainder originated from the Arab Gulf region. Specifically, the American banks Citigroup, Merrill Lynch, and Morgan Stanley received investments from China Investment Corporation, Temasek Holdings (Singapore), Government of Singapore Investment Corporation, Korea Investment Corporation, Abu Dhabi Investment Authority (United Arab Emirates), and Kuwait Investment Authority (Bolton et al. 2012: 4-5). The financial institutions were suffering major losses resulting from their participation in ‘subprime’ mortgage lending and the bursting of the US housing bubble, with the US banking industry already reporting sixty-billion dollars in losses as of November 2007 (BBC 2007). These major financial institutions – facing tremendous liquidity shortages and loaded with so-called ‘toxic assets’ – would eventually be considered ‘too big to fail’ and become the recipients of government bailouts. However, nearly a year before the bailouts were approved in the US, SWFs provided the first round of relief by investing billions of dollars in desperately needed capital (Bolton et al. 2012: 4-5). While the banks had little choice but to accept these investments, they raised suspicion from American politicians about the motives of SWFs (Das 2009: 90).

This thesis investigates the SWFs of South Korea and Singapore, namely Korea Investment Corporation, Temasek Holdings, and Government of Singapore Investment Corporation. South Korea and

Singapore are among the so-called 'Four Tigers', a group of East Asian countries that achieved rapid economic development between the 1960s and 1990s (Wan 2008: 30). Both are also widely cited as examples of 'developmental states', referring to late industrializing countries that attained relative economic success in part through active state intervention (Huff 1999: 1421; Leftwich 1995: 400; H-J Chang 1999: 192). According to Chang and Grabel (2004: 280-281, 283), some examples of strategies employed by developmental states include: protecting key industries to ensure long-term growth, making use of foreign direct investment to promote industrial development, and gearing the financial sector toward national development goals. Viewed as developmental states, South Korea and Singapore would be expected to promote long-term economic growth and subordinate their financial sectors to national development needs. Indeed, states in many emerging countries introduced policies to shield their economies from volatile global financial markets before and during the current crisis (Van Apeldoorn et al. 2012: 472). East Asian countries have also historically been net importers of capital, and classical economic theories would expect capital to flow from advanced industrial countries to emerging markets (McCauley 2003: 41; International Monetary Fund 2005: 135). In light of these expected characteristics, it is surprising that SWFs from these countries began to invest in the highly indebted US financial sector. As Harvey (2010: 30) points out, the banking sector was the most indebted of any sector in the country, with the leveraging ratio reaching 30 to 1 by 2005. By early 2007 there was clear evidence of a housing bubble that would put banks at risk, and this evidence was well known to managers of SWFs (Andrews 2005; The Economist 2005; Tancer 2007). In fact, some of the SWFs ultimately lost money from these investments as the severity of the crisis deepened beyond expectations (Bolton et al. 2012: 2). Moreover, while most of the SWFs later on shied away from investing in Western financial institutions, some of the same SWFs recently invested again in risky European banks, such as Temasek's 2015 investment in Dutch bank ING, which adds further complexity (The Straits Times 2014). SWF investments in Western financial institutions seem to be at odds with the traditional developmental strategies of East Asian countries. The aim of the thesis is to make sense of this contradiction by investigating the broader socio-economic conditions in which these investments took place. Specifically, the following central research question is addressed:

*Why did sovereign wealth funds owned by states with a strong developmentalist tradition invest in the risky US financial sector during the 2007-2008 subprime mortgage crisis?*

Much of the existing literature on SWFs deals with the motives and transparency of SWFs (Bremmer 2010; Lyons 2007; Caner and Grennes 2010; Das 2009; Fini and Rethel 2013; Truman 2011; Monk 2009; McVea and Charalambou 2014; Lenihan 2013). Among ‘mainstream’ economics literatures there is widespread agreement that SWFs are rational market actors driven by economic motives (for a literature review see: Alhashel 2014). Several analyses from the global political economy (GPE) literatures, on the other hand, conclude that SWFs are politically motivated and thus pose a threat; either a threat to ‘free market’ principles (Bremmer 2010; Truman 2011; Monk 2009) or to the economic security of states (McVea and Charalambou 2014; Lenihan 2013). The theoretical approaches of these analyses can be labeled as ‘liberal’ and ‘realist’, respectively. The liberal and realist approaches share two important features: first, they are both reductionist, either reducing the economy to state or market interests; and second, analyses from both approaches are temporally and spatially bound and pay little or no attention to the emergence of the current political-economic order.

The *liberal approach* is based on the assumptions of neoclassical economic theory and views SWFs as incompatible with free market principles, seeing (almost) all state involvement in markets as problematic and inferior to private transactions, thus also including SWFs, wherein governments may have (indirect) influence over investment decisions. A representative of this viewpoint is Bremmer (2010: 250), who portrays SWFs as market-distorting instruments of state capitalism and as part of a broader trend toward state control over markets. He identifies SWFs as among the most important tools of state control, along with state-owned enterprises and ‘national champions’. Alongside literatures that are entrenched with ideological ‘free market’ liberalism, there is also literature based on an implicit liberalism and favoring increased transparency of SWFs. Truman (2008: 7, 14), for example, expresses concern about states pursuing ‘economic power objectives’ by using SWFs as a means to strengthen national champions and suggests that the best way to mitigate this possibility is to enforce stringent transparency standards.



Similarly, Monk (2009: 465) argues that SWFs face a ‘crisis of legitimacy’ that poses barriers to international investing and that could be overcome by aligning the governance of SWFs with the norms of recipient countries. The most glaring shortcoming of the liberal perspective is a technical one: this approach overestimates the influence of governments on the investment decisions of SWFs without indicating how and why this influence is exerted. While government agencies are typically the sole shareholders of SWFs, it is not given that governments use their SWFs as tools for political ends. As will be shown later, the governance structures of SWFs are often more complex than assumed in liberal analyses. Moreover, the liberal approach quite narrowly assumes that economic activity is only ‘political’ when it is directly influenced by the government sphere and thus that only private investments are apolitical. To borrow from Lasswell (1977), ‘politics is who gets what, when and how’. Hence, the organization of production and the distribution of economic wealth is inherently political.

In contrast to the market orientation of the liberal approach, the *realist approach* is based on a state-centric ontology. From this perspective SWFs are seen as instruments of state power and the economy is reduced to state interests (Overbeek 2012: 145-146). For example, McVea and Charalambu (2014:66) assume that the decisions of SWFs are determined by states and function to advance states’ political goals. Applying game theory analysis, the actors conclude that it is strategically wise for recipient states (i.e. states in which SWFs invest) to introduce protective policies against foreign SWFs. Lenihan (2013) takes a more nuanced view. While he does not conclude that SWFs are always politically motivated, he suggests that SWFs can nonetheless act in the long-term interests of the state while still behaving as market actors (ibid.: 232). Drawing on Waltz’s (1979) concept of internal balancing – defined as ‘moves to increase economic capability, to increase military strength, [and/or] to develop clever strategies’ with the goal of balancing against the relative power of other states – he suggests that SWFs can be tools of a state’s ‘grand strategy’ by increasing economic power and enhancing either its position of dominance or the dependence of other states on its economic policies (Lenihan 2013: 238). Even more than the liberal approach, realism (broadly conceived) misunderstands the actual relationship between SWFs and states. This is likely a result of the

state-centrism of realist analyses, which poses a limitation to understanding the motives of SWFs because it presupposes two crucial points: that states influence the behavior of SWFs, and that SWFs act in the self-interest of the state. These presuppositions diminish the scope of analyses to power relations between states and brush aside the complex historical and socio-economic contexts in which SWFs are situated.

The features of liberalism and realism as described above comprise a common shortcoming: that of being *ahistorical in nature*. This thesis challenges these approaches because they fail to take into account the structurally contingent features of the global economy at a particular historical juncture and disregard the effects of uneven economic development and the inherent contradictions of capital accumulation. Granted, scholars who use these approaches would likely argue that these issues are not relevant to the types of questions posed in liberal and realist research. However, since the SWFs under investigation originate from ‘emerging’ (semi-)peripheral economies, it is crucial to analyze the unique development of these economies and their integration into the global economy. To this end, the thesis adopts a *critical political economy* perspective. Critical perspectives call into question the prevailing power relations and institutions and attempt to explain how the present social order came to be (Cox 1981: 128-129). The critical perspective taken by this thesis is one that ‘views political and economic logics as fundamentally intertwined and mutually constitutive’ (Overbeek 2012a: 146). Such a perspective allows the above-mentioned shortcomings to be remedied and historicizes the emergence of SWFs against the backdrop of the ascendancy and prevalence of finance-led accumulation structures. Finance-led accumulation, also referred to as financialization, has served as a temporary outlet for the underlying structural problem of overaccumulation, which has been argued to be the root cause of the current economic crisis (Overbeek 2012b: 31-36; Bello 2006; Clarke 2001). Financialization more generally refers to a broad-based transformation of accumulation patterns in which profits accrue predominantly through financial channels rather than through trade and commodity production (Krippner 2011: 27-8). However, finance-led accumulation structures vary across time and place. This analysis distinguishes between various types of

financialization (e.g. ‘elite’ versus ‘popular’ financialization), and theorizes divergent processes of development and financialization in advanced and emerging economies.

Critical political economy encompasses a broad range of theoretical perspectives and methodological approaches. The ontological foundations of this thesis are based on ‘critical realism’, a position in the philosophy of science that seeks to account for the interplay between agency and structure, the ideational and material – assuming the existence of a partially knowable reality and the possibility of identifying causal mechanisms but rejecting the possibility of unbiased empiricism and of discovering patterns or regularities in the international system (Bhaskar 1978: 249). Critical realism also provides a basis for multi-method research and is ideally suited for explaining the historical contingency of a specific phenomenon such as the one analyzed in this thesis (Wight 2007: 386). On a more concrete level, the thesis uses insights from Regulation Theory. Regulation Theory refers to a research tradition that attempts to explain how global capitalism is stabilized in spite of the conflictual social relations upon which it is based. The primary explanatory mechanism of Regulation Theory is identifying ‘accumulation regimes’ – patterns of production and consumption that are reproducible over a long period’ (Jessop and Sum 2006: 301). By identifying the changing strategies of capital accumulation over time in Singapore and South Korea, it is possible to understand the context in which SWFs from countries typically described as ‘developmental states’ made risky investments in American financial institutions. However, not all aspects of Regulation Theory are helpful in this regard. The ‘accumulation regime’ is only one of several key concepts employed in Regulation Theory research, among others such as the ‘mode of regulation’. ‘Mode of regulation’ refers to the structural forms of intervention that address the contradictions and social tensions of capitalism (Becker et al. 2010: 226). This concept is closely related to the regime of accumulation, but it is not operationalized in this thesis because it does not directly lend support to answering the research question. Instead, the thesis is primarily concerned with broad changes in accumulation patterns that may have changed the orientation of the SWFs of Singapore and South Korea in relation to the global economy.

Empirically, the thesis draws on a wide range of sources. The primary method of data collection is an extensive literature review used to explain development processes in the respective countries. The information gathered from the literature review is supplemented by quantitative economic indicators, yearly reports published by SWFs, and news articles. The thesis contributes to the existing scientific literature by offering a comprehensive and theoretically informed answer to why SWFs have invested in the risky and highly indebted financial sector in the US, a hitherto untackled research question. Moreover, most existing Regulation Theory research has focused on Western economies (exceptions to this include: Lipietz 1982; Becker et al. 2010; Jessop and Sum 2006). The research therefore adds to the scope of Regulation Theory research by investigating East Asian newly industrialized countries. It also contributes to a wider understanding of the current global financial crisis by paying attention to institutions (sovereign wealth funds) and regions (East Asia) that are often excluded from commentary about the crisis.

The thesis is structured as follows. Chapter 1 describes the ontological foundations of the liberal, realist, and critical approaches. This chapter explains why a critical approach is adopted instead of other existing approaches. It is argued that the behavior of the SWFs is best understood in a specific social and historical context, and that the existing approaches tend to disregard these issues. Chapter 2 deals with the epistemologies of the existing theoretical approaches and introduces the philosophy of critical realism as a foundation for critiquing these approaches. This chapter also defends Regulation Theory on epistemological grounds, discusses the operationalization of key analytical concepts, and explains the chosen methods. Chapter 3 includes the empirical analysis. In this chapter, the explanandum is first placed in a historical context by describing important trends in the global political economy since the 1970s. Then, changes in the regimes of accumulation of Singapore and South Korea are investigated and the behavior of these states' SWFs are analyzed on the basis of this information. Finally, Chapter 4 includes a conclusion, discussion of shortcomings, and avenues for future research.

## Chapter 1: Theoretical Considerations – Ontology and Regulation Theory

The theory discussion of this thesis first revolves around ontological questions. As Wight (2007: 385) has suggested, any discussion of epistemology or methodology is more or less arbitrary without first specifying an object of inquiry. Or as Cox (1996: 144), one of the key exponents of a critical political economy approach, has noted, ‘(o)ntology lies at the beginning of any enquiry’. In this chapter, the ontological foundations of liberalism and realism are summarized and then critically assessed, after which an alternative approach is supported. Whereas the critique delivered in the previous chapter focused on specific examples of realist and liberal analyses, the focus here is on ‘critiquing’ their ontologies and meta-theoretical assumptions, as well as the causal mechanisms assumed by these approaches. Critical approaches are always perspectives on other perspectives. As Sayer (2009: 768) observed, the prefix critical is sometimes mistaken as a synonym for criticizing. In academic contexts, the term *critique* seems more accurate than *criticism*: whereas *criticism* can be understood as passing a negative judgment, scientific critique can be understood as an inquiry into how truth claims are reached and legitimized as a naturalized state of affairs, as well as how such truth claims authoritatively inform social practices.

### 1.1 Ontologies of liberalism and realism in GPE

Liberalism in GPE refers to *economic* liberalism, not necessarily to the Enlightenment-era political values of individual liberty upon which liberalism in IR is founded. GPE liberalism is often based on the assumptions of neoclassical economic (NCE) theory, a broad economic theory shared among many contemporary economists. NCE is a meta-theory that defines the ontological assumptions of specific economic theories. Weintraub (1993: 1) defines these assumptions as follows: (1) People have rational preferences among outcomes, (2) Individuals maximize utility and firms maximize profits, (3) People act

independently on the basis of full and relevant information. In summary, the NCE perspective is composed of self-interested economic agents subject to constraints imposed within the market (ibid.). The historical origins of NCE can be traced back to the Marginal Revolution of the 1870s, which marked the beginnings of economics as a single discipline separate from the classical political economy associated with Smith, Ricardo, and Marx, among others (Van der Pijl 2009: 31). In opposition to the classical political economists' focus on production, which is reflected in the labor theory of value, the Marginal Revolution shifted the focus to exchange. In doing so they laid the foundations for an ontology completely within the sphere of market relations that essentially excludes sociological considerations (ibid.: 32). This ontology is evident in the contemporary liberal view that all state involvement in the free market is problematic.

The realist approach in GPE has its intellectual origins in the realist tradition of international relations (IR). IR realism comprises several strands including the classical realism of Carr and Morgenthau, the 'offensive' neorealism of Mearsheimer, and the 'defensive' neorealism of Waltz (Carr 1964 [1939]; Morgenthau 1993 [1948]; Mearsheimer 2001; Waltz 1979). While realism traditionally deals with matters of military security, the general aim of realist GPE is to explain how a state attempts to impose its own interests at the expense of other states' interests in bilateral or multilateral bargaining situations (Watson 2014: 30). As noted by Robinson (2006: 530), realism presumes that the global economy is separated into distinct national economies that interact with one another. The focus is thus placed on inter-state dynamics, in contrast to approaches that focus on transnational social forces and institutions (ibid.). The most important feature of the realist ontology is that it is based on the pre-eminence of the state as the central unit of analysis (Kirshner 2009: 36). That is, realists assume that states pursue their own national interests within an anarchic international system (ibid.: 32). Thus, the world described by GPE realists is one composed exclusively of states, in which every other aspect of that world is derived from the existence and activities of states (ibid.). Transnational actors and civil society are generally not part of realist analyses because states are considered to be unitary actors. Whenever non-state actors are considered at all – transnational corporations, for example – their actions are considered to be subordinate to those of states or

delegated by states (ibid.). Realist approaches also often presume that international politics can be viewed as a 'bounded realm' (that is, temporally static) (Waltz 1979: 116). As noted by Joseph (2007: 347), the ontological consequence of the state-centric and temporally bounded assumptions is that phenomena have no social or historical specificity. This point is clear in the statement that 'The texture of international politics remains highly constant, patterns recur, and events repeat themselves endlessly.... The enduring anarchic character of international politics accounts for the striking sameness in the quality of international life through the millennia' (Waltz 1979: 66 as cited in Joseph 2007: 347).

A third theoretical approach – Statist Political Economy (SPE) – also needs to be mentioned because the widely accepted assumptions about the features of 'developmental states' derive from this tradition. SPE is a common label for 'economic nationalism' and 'mercantilism' – with are often used interchangeably with realism – as well as developmental state theory (Watson 2014: 33; Selwyn 2015: 39-49). Ontologically, SPE is related to realism through its shared emphasis on states as the primary units of analysis. Unlike realism, SPE is heavily influenced by the arguments of Friedrich List, whose *National System of Political Economy* (1841) is widely considered the founding text of SPE (Selwyn 2015: 39). List (1856 [1841]: 440) argued that newly developing countries could only catch up by introducing protective counter-measures against the more competitive exports of advanced countries. He advocated protection of infant industries so that states in 'backward' countries could defend firms against competition and develop a national economy that could ultimately compete in global markets (Selwyn 2015: 41). Contemporary SPE has also been influenced by Gerschenkron (1966), who constructed a theory of late development based on an increasing need for state involvement (Selwyn 2015: 41). The essence of Gerschenkron's argument about late development is that the later a country began to develop, the more state intervention is necessary to successfully industrialize (Gerschenkron 1966; Schwartz 2010:87). Based on these ideas, the concept of the 'developmental state' was popularized in the 1980s by authors who noticed an alternative development model emerging in East Asia (Amsden 1982; Evans 1995; Johnson 1982; Leftwich 1995). While most developing countries experienced negative or low economic growth between 1965 and 1990, several East

Asian countries achieved annual growth rates of 6.5 percent and higher (Leftwich 1995: 400). Developmental state theory points to shared features of East Asian states to explain their relative success.

## **1.2 Shortcomings of Realist and Liberal Ontologies**

As this brief overview of realism and liberalism demonstrates, both approaches are highly reductionist. Realism reduces the economy to state interests and thus severely limits the range of agents and interests available for analysis. Liberalism, on the other hand, excludes political and social aspects from consideration and fails to consider the inherently political nature of economic activity. As Overbeek (2012a: 146) suggests, both approaches also negate the ‘determinative quality of dynamics at the level of the world political economy (state system plus global economy) as a whole’. This presents a limitation for dealing with the research question because the emergence of SWFs and their role in the global economy is contingent on both domestic and system-level factors; in fact, one aim of this thesis is to demonstrate that these considerations cannot be separated. Liberal and realist approaches tend to view the world political economy in terms of relations between ontologically prior units, either autonomous states or self-interested market actors. These prior assumptions restrict the ontological frameworks of the respective approaches to a small part of the social world, thereby excluding important historical and spatial contexts that are necessary to view the actions of SWFs accurately and in depth. In sum, both approaches suffer the common weakness of being ahistorical in nature. That is, their neglect of the historical development of contemporary capitalism leads to a disregard of the inherent contradictions of capital accumulation and thus the structural features and crisis tendencies of the capitalist economy. By taking the existence of the economy as a static given and ignoring the historical development of capitalism, the extant approaches do not take into account the function, role and logics of financial capital vis-à-vis production-oriented capital. These factors are crucial in seeking to explain the emergence and behavior of SWFs and, thus, it is problematic to exclude them from analysis. In contrast, this thesis operates from a critical realist perspective and draws upon specific insights from Regulation Theory, as will be outlined in the next section.



### **1.3 Regulation theory – background and ontology**

Regulation Theory was developed in the 1970s by a group of heterodox French economists who formulated a unique current of Marxist political economy and defined themselves in opposition to the orthodox approaches of most contemporary economists (Becker et al. 2010: 226). While there are several schools of thought under the heading of Regulation Theory, this thesis focuses on a tendency of the Regulation approach associated with Paris-based economists Aglietta (1979), Lipietz (1982), and Boyer (1986) among others (for a discussion see: Van der Pijl 2009: 153; Jessop 1990; Jessop and Sum 2006). This school of thought gained recognition with Aglietta's (1976) influential analysis of the 1970s recession, in which the term 'Fordism' was coined to describe the particular phase of capital accumulation that characterized the US and also the European economies (Jabko 2009: 233). The term 'regulation' can be a source of confusion in the English translation; it does not refer primarily to legal regulation through state intervention, but instead to a wide range of economic and extra-economic mechanisms that interact to normalize or 'regulate' the conflictual course of capital accumulation (Jessop and Sum 2006: 15). From a Regulation Theory perspective, capitalism needs to be regulated because it is pervaded by inherent contradictions – the continuous accumulation of capital is not linear, stable, infinite nor unproblematic (ibid.: 310; Harvey 2014: 1-11). Capitalism's expanded reproduction cannot be secured by markets and market actors alone, but depends on various forms of regulation (Jessop and Sum 2006: 15).

Thus, the starting point for Regulation Theory is a concern with how the continuation and stability of capitalism is possible despite its conflictual nature and inherent contradictions (Van der Pijl 2009: 153). Regulationist research aims to identify inherent mechanisms in the relation between (various fractions of) capital and labor or between individual capitalists, as well as to explain how the capitalist economy can be stabilized over limited periods of time (Jessop and Sum 2006: 301; Becker et al. 2010: 226). The stabilizing mechanisms that are of interest to Regulation Theory can be, for example, institutions, networks, procedures, and norms (Jessop 2000: 154-155). Regulation theorists have focused on the wage relation in an effort to draw attention to the significance of class conflict in shaping the economy and to show how

superficial features of the economy are the effects of underlying social mechanisms (Jessop and Sum 2006: 301). In order to elaborate these relatively abstract concepts relating to the processes of capital accumulation, Regulationists have developed several intermediate concepts that address the structural properties of capitalism in specific historical periods or in specific national contexts. Among these concepts, the most fundamental are the '*regime of accumulation*' and '*mode of regulation*'. A '*regime of accumulation*' can be defined as 'a complementary pattern of production and consumption which is reproducible over a long period', or simply as a historically situated and institutionalized form of capital accumulation (ibid.: 42; Jabko 2009: 233). Transitions from one regime to the next are always convulsive and require many structural changes and adjustments in economic behavior and economic policy (Aglietta and Breton 2001: 438). A '*mode of regulation*' refers to the structural forms of intervention (such as the wage relation, competition policies, monetary restrictions) that address the contradictions and social tensions of capitalism in a historically and spatially specific way (Becker et al. 2010: 226). These two concepts are complementary; the basic Regulation Theory argument is that a specific '*regime of accumulation*' can be stabilized through corresponding '*modes of regulation*'. In this thesis, the mode of regulation is taken into consideration but not operationalized. The reason for this choice is that the primary concern is the interaction between SWFs and the US financial market, and less about the domestic forms of regulation. The analysis starts from an expectation that changes in the regime(s) of accumulation of the economies of Singapore and South Korea led these economies away from a developmentalist focus on national development and towards a more externally-oriented pattern of accumulation. Identifying changes in the mode(s) of regulation are important for explaining the changes in accumulation patterns, but nonetheless they are not the primary focus.

At a lower level of abstraction than the Regulationist concepts introduced above, Becker et al. (2010: 277-331) provide a concrete model for analyzing financialization in emerging economies. They develop a typology of accumulation processes centered on three axes of accumulation: productive versus financialized accumulation, extensive versus intensive accumulation, and introverted versus extroverted

accumulation. Various elements of these three axes of accumulation combine in specific ways to make up a regime of accumulation (ibid.). The first axis of *productive* versus *financialized* accumulation is the most fundamental; it distinguishes between investment that is directed primarily toward production or investment that is channeled into the financial sector (ibid.: 227). With regard to the second axis, *extensive* accumulation is characterized by an increase in the intensity of work, such as by extending of the working day, whereas *intensive* accumulation is characterized by the growth of labor productivity by mechanizing the production of wage goods and encouraging mass consumption (as it has been the in Fordism). Finally, *intraverted* accumulation is centered on domestic markets, while *extraverted* accumulation involves an outward orientation of capital. Moreover, the direction of extraversion is important. Export-oriented ‘active’ extraversion is usually a feature of dominant economies, whereas peripheral economies are usually dependent on imports and characterized by ‘passive’ extraversion (ibid.). However, a mixture of elements of export-orientation and import dependence is also possible. The first axis and the third axis – that is, productive/financialized accumulation and intraverted/extraverted accumulation – are included in the empirical chapter and discussed in the operationalization section. The second axis of extensive versus intensive accumulation is less relevant to the explanandum and therefore excluded. Nonetheless, issues regarding labor relations are discussed in the analysis to help explain changes in accumulation patterns. This point is discussed in more detail in the following chapters.

In contrast to the static and reductive ontological assumptions of realism and liberalism, Regulation Theory explicitly describes a social world that is dynamic and historically dependent. This makes it a particularly useful approach for remedying the shortcomings of the extant approaches that result from their ahistorical nature. First of all, the Regulationist concepts of ‘regime of accumulation’ and ‘mode of regulation’ can be employed to explain how the actions of SWFs are situated within larger accumulation processes and also how these forms of accumulation are linked to underlying social relations and forms of state intervention. One of the major problems with the extant approaches is that they tend to generalize about the motives of SWFs. Regulation Theory, on the other hand, rejects the possibility of atemporal

economic rules or mechanisms and views the stabilization of the capitalist economy as always partial, temporary, and unstable (Jessop 2000: 154-155). Whereas realism and mercantilism make strong assumptions about the interests of economic actors, these features of Regulation Theory allow the actions of SWFs to be understood as reactions to historically specific conditions rather than outcomes of predefined interests. Furthermore, Aglietta (1998: 45 as cited in Van der Pijl 2009: 156) positions Regulation Theory as a challenge to the rational choice assumptions of neoclassical economics by rejecting the paradigm of the 'pure economy'. He argues that economic relations simply cannot exist outside of a social framework (ibid.). Aglietta (1979: 16) also argues that the concept of the economy is nothing more than a practical demarcation within a broader set of social relations. For example, regulation theorists view the state as always involved in constituting capitalist social relations and see any demarcation between state and economy as only theoretical (Jessop and Sum 2006: 309). These insights on the overlapping and mutually reinforcing roles of state, market, and society enable research into SWFs free of preconceived notions about their functions.

Although the core concepts of Regulation Theory are helpful for addressing the research question, some weaknesses of this approach need to be remedied. First of all, Regulation Theory is firmly rooted in economics and pays relatively little attention to the role of the state. The thesis aims to overcome this by including the roles of domestic and foreign governments as well as international institutions such as the International Monetary Fund. Additionally, Jessop and Sum (2005: 157) argue that early Regulationist research dealing with emerging economies was excessively structural and Eurocentric. This refers to Liepietz (1984, 1987), who analyzed the dynamics of East Asian economies in terms of how they were affected by 'global Fordism' and characterized the accumulation regimes in these countries as variations of 'peripheral Fordism'. These analyses failed to consider the unique processes of development occurring *within* these countries. The thesis avoids this pitfall by analyzing developments within Singapore and South Korea and identifying accumulation regimes unique to these countries. Finally, Regulation Theory has been accused of being functionalist and paying insufficient attention to agency (Clarke 1988: 67-70). The basis

of this accusation is that Regulation Theory seeks to explain how capitalism is maintained but does not give enough attention to the social processes that underlie the reproduction of capitalism and resistance to it. While this weakness is taken into consideration in the thesis, it is not entirely overcome. The issue of agents influencing changes in accumulation patterns - and thus in the behavior of SWFs – remains a shortcoming of the analysis. However, the thesis aims to demonstrate how this shortcoming can be addressed by including a discussion about social contestation to changes in the regime of accumulation. For example, as shown in the empirical chapter, changes in the accumulation regimes of both Singapore and South Korea were accompanied by economic liberalization programs and reduced cooperation between organized labor and businesses. By paying attention to contestation to these liberalization programs, it is demonstrated that changes in accumulation patterns involve the agency of ‘ordinary people’ and not only policymakers and elites. Moreover, social contestation can constrain policymakers by forcing them to repeal or modify new economic and social policies, at least in the short term. Introducing the issue of agency helps to differentiate the Regulation approach from other, more structuralist approaches. Regulation Theory has been categorized by Van der Pijl (2009: 150) as a ‘weak systems theory’. Systems theory runs through many structuralist approaches and is a means of analyzing society as a self-sustaining, complex entity (ibid.: 143). Compared to ‘strong systems theories’ such as World Systems Theory, which assumes that agency is highly limited by systemic constraints, the ‘weak’ variants allow for a greater degree of subjective rationality and (political) agency. In the view of Regulation Theory, freedom of action is only constrained when agents voluntarily enter into a systemic relationship and their actions become a part of that system (ibid.: 151)

## Chapter 2: Epistemology, Methods and Operationalization

### 2.1 Critical Realist Epistemology

Epistemology is the branch of philosophy concerned with how knowledge can be acquired. The epistemology of Regulation Theory is based on the assumptions of critical realism, a meta-theoretical position in the philosophy of science that can apply to both the social and natural sciences (Bhaskar 1978; Archer 1995). While critical realism is also an ontology of science, it is discussed in this section because its primary contribution to the thesis is its critique of positivism and empiricism. Critical realism can be labeled as post-positivist, while Jessop and Sum (2006: 299) go as far as to say that it is an anti-positivist, anti-empiricist paradigm. This marks a major departure from realism and liberalism because positivism and empiricism are fundamental to the epistemologies of these approaches. *Positivism* asserts that there is a general set of rules, procedures, and axioms that constitute the ‘scientific method’ and is associated with a belief that social science methods should be derived from the natural sciences (Wight 2007: 384; Dean et al. 2006: 5). It claims that empirical science produces tested knowledge that allows us to order and make sense of the natural and social world. For example, the positivist assumptions underpinning realism are evident in Waltz’s (1979: 116) argument that ‘first, one must conceive of international politics as a bounded realm or domain; second, one must discover some law-like regularities within it; and third, one must develop a way of explaining the observed regularities’. In Joseph’s (2007: 345-346) view, approaches that draw on positivism admit the existence of an observable reality but do not believe that we can speak of unobservable structures and generative mechanisms (ibid.). Positivism’s denial of underlying mechanisms and structures weakens the basis for making causal claims (ibid.). Because this thesis seeks to explain a historically specific phenomenon, critical realism offers a helpful philosophical position for making a causal claim.

Another tendency in positivist approaches is *instrumentalism* – the position that theoretical assumptions should not be treated realistically, but rather ‘as if’ they were true, as long as they facilitate prediction (Wight 2007: 379-380). Instrumentalism is implicit in most rationalist approaches to IR and GPE, including the broad theoretical paradigms of realism and liberalism. Critical realists reject the positivist-empiricist program of explaining human activity as predictable chains of cause and effect that can be studied through detached observation (Dean et al. 2006: 6). Instead, critical realism insists that social science is about understanding meaningful, specific social activity that cannot be removed from its historical and social context (ibid.). The epistemological claims of Regulation Theory are also partly derived from its Weak Systems Theory ontology, which assumes that there is an objective, systemic logic at work in the global political economy but still sees actors as maintaining a substantial amount of autonomy (Van der Pijl 2009: 27). The epistemology of Regulation Theory suggests the necessity of a ‘critical empiricism’ as a means of interpreting the underlying workings of the system by which agents are constrained (ibid.).

A helpful way to summarize critical realism is to break it down into its constituent parts. It is *realist* because it presupposes the existence of the real world independent of our theories and cognition (Wight 2007: 382, 384). It is *critical* because it critiques the claim that this reality can be directly accessed without bias, as other versions of realism assume. It is also critical in the sense of developing an explanatory critique of the prevailing social order (Dean et al. 2006: 2). For Robinson (2006: 530), a critical realist philosophy enables us to see ‘historically situated social forces as agents whose agency is exercised through institutions that they themselves have created and constantly recreate’. A distinct feature of critical realist epistemology is that it does not rely on a fixed methodology of science. That is, there is no way to move directly from critical realism as a philosophy to a particular methodology (Dean et al. 2006: 33-34). This is because critical realism prioritizes ontology over epistemology, unlike many political science traditions which tend to ignore questions of ontology altogether (Wight 2007: 388). Approaches associated with positivism and empiricism often depart from a particular epistemological conception of how social science should be done,

and then make the social ontology fit with that conception. Critical research seeks to break with these rigid epistemological tendencies.

From a critical perspective, there can be no ‘specification of methods in an ontological vacuum’ (Dean et al. 2006: 33-34). The content and form of scientific investigation depend on the object being considered, with different questions requiring different methodologies (ibid.). Wight (2007: 385) suggests that critical realism’s rejection of a generalized scientific method can be seen as an endorsement of the methodological claim that ‘anything goes’, which is to say that a method should be embraced if it helps increase our overall knowledge. Critical realists also seek to account for the non-observable mechanisms in the social world. As Marx (1984: 804) argued, ‘...all science would be superfluous if the outward appearance and the essence of things directly coincided’. Whereas the positivist solution to this problem is to employ instrumentalism, critical realism instead attempts to develop knowledge about real (even if non-observable) causal mechanisms by asking questions about the necessary and sufficient conditions of a given explanandum (Wight 2007: 271; Jessop and Sum 2006: 303). One way this is achieved in Regulation Theory is through a ‘movement from abstract to concrete’, wherein a phenomenon of interest is explained in increasingly specific terms (Jessop and Sum 2006: 303). At the same time, the explanation moves from simple to complex; that is, further dimensions of the phenomenon are gradually added. The dual movement from abstract to concrete and from simple to complex has also been referred to as ‘articulation’ (ibid.). Articulation is a way of investigating concrete processes that are not readily identifiable by moving from knowledge of empirical phenomena to knowledge of the underlying causal mechanisms and structures that produce these phenomena (ibid.: 307). In contrast, critical realism emphasizes ‘the identification of the naturally necessary properties and causal mechanisms ... as well as the conditions in which they will be actualized’ (Jessop and Sum 2005: 296). Thus, critical realism provides philosophical grounds for approaching the research question based on the conditions necessary for the explanandum to occur.



## 2.2 Methodology

The thesis makes use of methodological triangulation, which refers to combining together multiple methods with the purpose of increasing the validity of findings (Downward and Mearman 2006: 80; Modell 2009: 209). An extensive literature search of academic articles and books is performed to collect historical evidence on key political and economic developments in the respective countries from the period of independence (1960s) until the present. Empirical support from these secondary sources forms the basis of the qualitative evidence used in the analysis. The qualitative evidence is combined with quantitative economic data collected from World Bank and United Nations online databases. Additionally, empirical information about the behavior and motives of SWFs is collected from yearly reports published by the SWFs and also from news articles. SWFs are notoriously intransparent and collecting data about their investment activities involves a number of challenges. It is generally not possible to obtain detailed information about the portfolios and investments of these funds. However, the SWFs of Singapore and South Korea have earned a reputation for relatively high transparency, in particular because they regularly publish extensive (typically 50 to 100 pages) reports including information about portfolio composition, investments and divestments of the past fiscal year, management and board member profiles, and corporate governance. These reports also include statements from executives, giving reflections on the past year and outlooks for future activities. By incorporating a wide range of sources, qualitative and quantitative data is combined into an explanatory narrative demonstrating how accumulation patterns have changed over time toward a highly financialized model. A strength of the method of explanatory narrative is that it can help to formulate an argument for a specific phenomenon in international politics. Suganami (2008: 346) summarizes this strength: ‘IR scholars may of course focus their attention on why certain standard outcomes tend to be reproduced, as Waltz suggests *theorists* of international politics should do; but IR scholars may, with equal propriety, also ask how something, a specific event, came to happen’.

The explanatory logic of the analysis is that changes in accumulation patterns leading up to the period of 2007-2008 established the necessary conditions for SWFs to invest in the unstable US financial

markets. However, identifying these changes would not be sufficient to answer the research question. Therefore, some prior expectations about the cause of the explanandum or also investigated. Although the thesis does not include a hypothesis in the traditional sense, it is useful to clearly state the expectations up front:

*It is expected that the regimes of accumulation in both Singapore and South Korea have moved from productive and intraverted regimes of accumulation towards financialized and extraverted regimes.*

Based on these expectations, there is a focus on processes of financialization in the respective countries. Furthermore, a common argument in the critical political economy literatures is that financialization is often linked to the structural problem of ‘overaccumulation’ (e.g. Harvey 2010, 2014; Overbeek 2012b). Overaccumulation refers to a dilemma for continued capital accumulation that occurs when there is a surplus of labor and capital side-by-side in a given geographic area (Harvey 2004: 64). Surplus capital cannot be turned into profit because it cannot be absorbed by domestic consumption (ibid.). Harvey (2010: 30) argues that the turn to financialization in advanced economies occurred out of necessity of dealing with this contradiction. Based on this insight, the empirical section investigates whether or not overaccumulation played a role in the investment decisions of SWFs.

## **2.3 Operationalization**

The empirical chapter describes the historical context of the investments and investigates how the regimes of accumulation have changed over time in Singapore and South Korea. The accumulation regimes are defined using two out of the three typological axes developed by Becker et al. (2010: 227) and introduced in the previous chapter: productive versus financialized accumulation and intraverted versus extraverted accumulation. The empirical evidence for determining these accumulation patterns is primarily

derived from economic indicators that serve as proxies. Justification for using these indicators is given below for both of the axes.

(1) *Productive versus financialized* accumulation is recognized by changes in the size and strength of financial markets in the respective countries. In general, liberalization of financial markets indicates a shift toward financialized accumulation. This is indicated by qualitative data describing economic liberalization policies. In general, policies that open up national markets to regional and global competition, as well as policies that reduce government regulation of financial markets, indicate a shift toward a financialized regime of accumulation.

However, the strongest empirical evidence is given by quantitative indicators. Two different economic indicators are used as quantitative empirical support for analyzing the degree of financialization. The first indicator is called ‘Value added by financial and insurance activities as percent of GDP’, which is obtained from the United Nations (UN) data set ‘Value added by industries at current prices’. This indicator is described as follows: “The value added of an industry, also referred to as gross domestic product (GDP)-by-industry, is the contribution of a private industry or government sector to overall GDP” (Bureau of Economic Analysis 2006). The UN database for this indicator includes data for multiple industries, which can be selected individually for analysis. There is no option to select the financial industry alone; the financial and insurance industries are combined. This is a limitation of using this data, as it is not clear what percentage of the added value is from financial activities. However, this data can lend support to the analysis in combination with other quantitative and qualitative support. The data is provided in current prices of the national currency. In order to be able to compare the results for South Korea and Singapore, the yearly figures are divided by the national GDP in current prices for each year. The data is only available from 1980 to 2013. Because the data for some of the other indicators used in the analysis are not available past 2010, all of the quantitative data is measured for the period 1980-2010 to stay consistent. All of the quantitative data is entered in Excel and displayed in line graphs.

The other economic indicator used as empirical support for investigated financialization is ‘Gross capital formation as a percent of GDP’, which is obtained from a World Bank data set. According to the World Bank (2015): “Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories.” Pettinger (2012: 1) explains that domestic investment (measured as gross capital formation) is often highly cyclical. Developing countries tend to devote a higher percentage of GDP to investment to enable rapid economic growth. Thus, it is expected that gross capital formation would be higher in the earlier periods of economic development. The data on gross capital formation was obtained from the World Bank online database and entered into Excel to be displayed as graphs.

Taken together, data from the two indicators can lend support to determining whether the countries of interest have moved toward a financialized regime of accumulation. If value added from the financial industry increases over time and domestic investment (gross capital formation) decreases, this supports the expectation that financial markets have become more central to capital accumulation than production. Following the method of triangulation, these quantitative trends are supplemented by qualitative evidence regarding changes in policy over time. Specifically, liberalization of financial markets through deregulation and opening up ‘national’ markets to global competition indicate a shift toward financialization.

This triangulation of data can also help confirm or reject the expectation that the root cause of the explanandum was the problem of overaccumulation. According to Overbeek (2012b: 31), overaccumulation occurs when firms can no longer ‘...invest their profits in the expansion of their primary activities in production and distribution at the prevailing rate of profit, and are forced to search for alternative outlets where profits are higher, such as in financial speculation’. The consequence is that the accumulation of productive capital slows down. If the accumulation regimes have moved toward a more extraverted (i.e. outward- or globally-oriented) and financialized model, and less investment has been made in the expansion of domestic production, then there will be greater support for the overaccumulation argument. To investigate whether overaccumulation was occurring, it is also helpful to look at the national

reserves of the countries analyzed. This is possible because much of the capital invested by the SWFs is drawn from reserves. If national reserves have grown leading up to the years 2007-2008, in combination with an increase in profits from the financial industry and declining investments in production, there will be strong support for both a transition to a financialized accumulation regime and an overaccumulation problem. Therefore, national reserves are also included in this part of the analysis even though they are not directly related to the axis of productive versus financialized accumulation. The data is collected from the World Bank data set ‘Total reserves (includes gold, total US\$)’. According to the World Bank (2015): “Total reserves comprise holdings of monetary gold, special drawing rights, reserves of IMF members held by the IMF, and holdings of foreign exchange under the control of monetary authorities”.

(2) The second axis – *extraverted versus intraverted* accumulation – is determined by qualitative historical evidence in the form of an explanatory narrative, in combination with quantitative data from economic indicators. In general, a regime of accumulation is extraverted when it is open to global competition and investment, and intraverted when investments are primarily geared to the local economy. The first indicator used to measure extraversion versus intraversion is called ‘Foreign direct investment, net inflows (BoP, current US\$)’ and is obtained from a World Bank data set. According to the World Bank (2015): “Foreign direct investment [FDI] are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments”. High levels of FDI – either positive or negative – indicate extraversion. Becker et al. (2010: 277) also distinguish between *passive* and *active* extraversion, where ‘passive’ describes import-dependent economies while ‘active’ refers to export-oriented economies.

The second indicator used for this axis is called ‘Total current account (in current US\$)’. Investopedia (2015) describes the current account as the difference between a nation’s savings and its investment. “A positive current account balance indicates that the nation is a net lender to the rest of the world, while a negative current account balance indicates that it is a net borrower from the rest of the world”

(ibid.). This data for this indicator is obtained from a 2015 UN data set and entered into Excel to be displayed as a graph.

The two axes of accumulation are analyzed for Singapore and South Korea separately. Following these analyses, a section is included for each country about the involvement of organized labor (or workers more generally) in the changing accumulation patterns. These sections are included to lend empirical support by not only demonstrating that accumulation regimes changed over time, but also indicating a group of actors that influenced these changes. Finally, the SWFs of each country are described and primary documents about the SWFs (reports and news articles) are analyzed to add additional empirical support. This is a way to connect the changes in accumulation to the actual empirical phenomenon addressed in the research question. In this manner, the analysis follows the method of articulation by moving from abstract to concrete. The analysis begins in the next chapter with a recapitulation of the explanandum and research question.

## Chapter 3: Empirical Analysis

### 3.1 Background information and historical context

The subprime mortgage crisis started in the US in the summer of 2007. Private banks had dramatically increased their participation in the mortgage bond market. They specialized in ‘subprime’ lending to borrowers with poor credit histories and low incomes – creditors who had been denied loans by government-sponsored agencies like Freddie Mac (BBC 2007). When the housing bubble burst, the banks took a major hit as these subprime mortgages fell sharply in value. Also starting in the summer of 2007, several SWFs took equity stakes in highly indebted American and European financial institutions. The thesis focuses on the SWFs from South Korea and Singapore – Korea Investment Corporation (KIC), Temasek Holdings, and Government of Singapore Investment Corporation (GIC). These three SWFs made a series of investments in financial institutions between July 2007 and July 2008. It was not until October, 2008 that the US government enacted the Emergency Economic Stabilization Act authorizing the government bailouts (Bolton, et al. 2012.: 4-5). The aim of the empirical analysis is to explain why these SWFs made these risky investments despite the tendency of the countries in which they are based to focus on long-term local development. The investments being investigated are displayed in Table 1.

Table 1: S. Korea and Singapore SWF investments, 2007-2008

Date	Foreign Bank	SWF	Value (US\$ billion)	Stake (%)
7/2007	Barclays (UK)	Temasek		2.6
8/2007	Standard Charter (UK)	Temasek		11
12/2007	UBS Switzerland	GIC		
12/2007	Merrill Lynch (US)	Temasek	4.4	9.4
1/2008	Citigroup (US)	GIC	6.88	
1/2008	Merrill Lynch (US)	KIC	2.0	3.3
2/2008	Merrill Lynch (US)	Temasek	0.6	1.23
7/2008	Merrill Lynch (US)	Temasek	0.9	
<i>10/2008: U.S. Government Emergency Economic Stabilization Act</i>				

Source: Own table; Data from Pistor 2009: 554

For some observers, these investments revealed a new role that SWFs could play as providers of liquidity and stability in times of financial market turbulence (Bolton et al. 2012: 2). For others, especially US and European politicians, these ‘strategic’ investments fueled suspicions of threatening or politically motivated behavior from SWFs. For example, in 2008 both the European Commission (EC) and the US House of Representatives released statements of concern about the intentions of SWFs and the potential security threats they might pose (Cohen 2009:720). The US went as far as creating a bipartisan task force to investigate the threats of SWFs to American national security (ibid.). In a separate statement in January 2008, Hillary Clinton said: “We need to have a lot more control over what they [sovereign-wealth funds] do and how they do it” (The Economist 2008). These concerns led the US and other Western governments to discuss codes of conduct to be followed by SWFs in order to participate in Western financial markets (Helleiner and Lundblad 2008: 71). Ultimately, this discussion resulted in the ‘Santiago Principles’, a set of non-binding principles drafted by the International Monetary Fund (IMF) to guide the investment behavior of SWFs (ibid.). As shown in the first chapter, similar concerns can be found in academic literature on SWFs.

### **3.1.1 The Rise of Sovereign Wealth Funds**

Within the last decade, SWFs have expanded rapidly in number, size and influence. However, they are not altogether new. The first was formed in 1953 by Kuwait, followed by a slow increase in number throughout the following decades (Alhashel 2014: 2-3). It was only in 2000 that the proliferation of SWFs took hold. Between 2000 and 2014, forty-six new SWFs were created, and from 2007-2014 the total assets under management by SWFs doubled (Sovereign Wealth Fund Institute 2014). There are currently 71 SWFs managing assets that total around \$6.65 trillion and holding shares in one out of five firms worldwide (Alhashel 2014:2). For comparison, the assets under management by SWFs are greater than those of private equity firms and hedge funds combined (ibid). Despite sharing a common label, SWFs are quite heterogeneous and vary widely in size. Moreover, the total assets held by SWFs are highly concentrated in



a small number of funds, with the top ten SWFs holding almost 80% (ibid). In 2007, GIC was the third largest in the world at an estimated \$215 billion; Temasek was the seventh largest at \$108 billion; and KIC was the fourteenth largest at \$20 billion (Lyons 2007: 25). Most SWFs were created by resource-rich and export-oriented countries and a distinction is often made between ‘oil and gas’ SWFs and ‘non-commodity’ SWFs – that is, funds with origins in revenues from oil and gas production and export, and funds with other primary funding schemes. Temasek, GIC, and KIC belong to the ‘non-commodity’ category of SWFs from export-oriented countries.

### **3.1.2 The emergence of post-Fordist accumulation regimes in Western countries**

Prior to analyzing the specific patterns of accumulation in which the SWFs are situated, it is necessary to locate the economies in the context of the development of global capitalism. Although the economic development processes of Singapore and South Korea followed a different trajectory than the ‘advanced’ Western economies, they did not occur in isolation. Beginning in the late 1970s, the ‘Fordist’ accumulation regime in the advanced Western political economies began to give way to the current era of neoliberalism and various forms of post-Fordism. Fordism refers to the post-World War II form of political-economic organization in industrialized countries characterized by active state intervention in social and industrial policy and a ‘class compromise’ between business and organized labor (Buch-Hansen and Wigger 2010: 33-34; Bello 2006: 1346). A key element in the mode(s) of regulation that stabilized Fordist accumulation was the intervention of Keynesian-inspired welfare states (ibid.: 31). The economic crisis of the late 1970s and early 1980s can be interpreted as a crisis of Fordism, in which the post-war industrial boom drew to a close, economic growth and wages fell, and unemployment rose (Bryson and Henry: 325). The spatial division of labor that had occurred throughout the Fordist period thus reorganized at the international scale; industrial production was reorganized from high-cost to low-cost locations as companies expanded into foreign markets, also referred to as the transnationalization of production (Bryson

and Henry: 325; Lipietz, 1992: 12). A consequence of this crisis was the decline in the industrial manufacturing base of the advanced economies (ibid.).

Since the early 1980s, an increasingly dominant feature of neoliberalism has been financialization, a pattern of accumulation defined by a sharp rise in the share of corporate profits from financial activities relative to profits from production (Krippner 2011: 27-8). This went hand in hand with a decline in manufacturing, as less and less capital was accumulated from production. Epstein (2005: 1) gives another definition of financialization as ‘the increasing importance of financial markets, financial motives, financial institutions, and financial elites in the operation of the economy and its governing institutions, both at the national and international levels’. This broad definition highlights the deeply penetrating logic and influence of finance globally (such as the expansion of financial markets into emerging economies) and at multiple layers of society (for example the inclusion of wage workers into financial markets through pension plans or personal debt). Financialization is a crucial part of the transition from a Fordist accumulation regime to a regime of what Harvey (1989: 147) calls ‘flexible accumulation’. In addition to increased flexibility in labor and consumption, flexible accumulation involves “the emergence of entirely new sectors of production, new ways of providing financial services, new markets, and, above all, greatly intensified rates of commercial, technological, and organizational innovation” (ibid.). Becker et al. (2007: 228) argue that financialization (in developing as well as advanced economies) requires far-reaching changes in the mode(s) of regulation that are often socially and politically contested. As will be shown in the empirical analysis, financialization in Singapore and South Korea involved changes such as reforming competition policies and overhauling labor relations.

### **3.1.3 Uneven Development and the Global Reach of Neoliberalism**

Analyses of the neoliberal turn and the emergence of post-Fordist regimes largely focus on the ‘Western’ advanced economies of Europe and North America. The SWFs analyzed in this thesis, however,

are based in countries that have followed entirely different – yet interconnected – development trajectories. This distinct yet complementary process is captured by the notion of ‘uneven and combined’ development, which refers to ‘...the manner in which nation-states experience varying tempos of development both internally and when compared with other nation-state formations’ as they are inserted into capitalist social relations at different points in time (Sandbeck and Schneider 2014: 859; Trotsky 1969). As Ruggie (1982: 413) points out, the compromise of embedded liberalism was never fully extended to developing countries. These countries were integrated into the global capitalist economy from highly disadvantageous positions, affected by decades of colonial rule and subject to the demands of international trade and financial institutions such as the IMF and the General Agreement on Tariffs and Trade (GATT). In the words of Frank (1966: 27), we cannot explain the development challenges of the world’s majority ‘...without first learning how their past economic and social history gave rise to their present underdevelopment’. A different terminology is thus needed to adequately describe the accumulation regimes and modes of regulation in East Asia and the Gulf Arab region. While processes of development and financialization in the (semi-)periphery can only be fully understood in relation to external changes at the level of the world political economy, this does not negate the agency of local actors and the importance of domestic social conflicts upon which the features of national economies are contingent. Peripheral countries have responded to the neoliberal turn and its extension into foreign markets by adopting various accumulation strategies – specific economic growth models, including the extra-economic preconditions for achieving this growth despite constraints and pressures from the dominant accumulation regime (Jessop 1983: 91). These constraints are described by Schwartz (2010: 58) as ‘peripheralizing pressures’ that have caused uneven patterns of development throughout the world ever since a global market has expanded from its early European origins. But the specific strategies taken in different countries have also been contingent on unique characteristics of the national political economies, state intervention, and social struggles.

Carroll and Jarvis (2014: 535) argue that the label ‘emerging economies’ as applied to East Asian states is a reflection of a shifting elite view of these states from ‘underdeveloped’ or ‘backward’ to being

suitable locations for capital penetration, financialization, and market development. These changes are the results of many states adopting neoliberal norms encouraged by multilateral organizations such as the International Monetary Fund (IMF) and the World Bank. Since the post-World War II period, these Western-led organizations have held tremendous influence over developing countries; when these countries faced capital shortages, international lending organizations could impose strict conditions such as fiscal austerity, marketization, and the removal of trade and investment barriers (ibid.: 536). As these transformations have progressed, many of these previously ‘underdeveloped’ economies have become net capital exporters and have opened up important financial markets (ibid.). The next section traces these progressions in South Korea and Singapore from the period of post-independence until the present, focusing on the axes of productive versus financialized and intraverted versus extraverted accumulation.

## **3.2 Analysis: Singapore development strategies, accumulation regimes and SWF behavior**

### **3.2.1 Background information on Singapore**

Singapore has transformed from a British colonial trading post to a modern city-state of roughly 5.5 million people with a burgeoning international financial sector. The country gained independence from Malaysia (itself previously part of the British Empire) in 1965, co-founded ASEAN in 1967, and joined the Non-Aligned Movement (NAM) in 1970 (Wan 2008: 30-31). Lee Kuan Yew of the PAP became Prime Minister in 1959, prior to full independence, and from the beginning emphasized rapid economic growth and job creation through a basic strategy of nurturing private enterprise. His government also faced and repressed strong left-wing resistance (ibid.).

### **3.2.2 Productive versus financialized accumulation in Singapore**

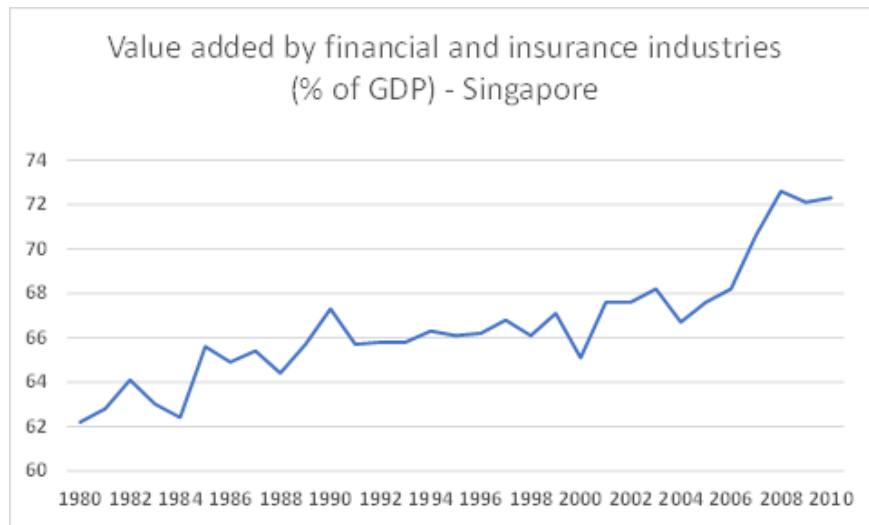
Since its beginning in the 1960s, Singapore has become one of the major financial centers in East Asia, along with Tokyo and Hong Kong (Wan 2008: 287). Since Singapore gained independence, the state has aimed at building up high savings. In 1955, the Central Provident Fund was established as a pension scheme to force private savings. Employees' retirement savings were collected in this fund and the government borrowed from it at low interest rates to finance infrastructure, which in turn served to attract foreign investment (ibid.: 294). In this way, wage workers were directly drawn into the process of 'popular financialization' (Becker et al. 2010: 230). That is to say, whereas financialization was previously a process driven by and benefitting social elites, wage workers have been increasingly involved, though not voluntarily (ibid.). Singapore's public sector savings increased from 22.8 percent of gross national savings in 1974 to 66.8 percent in 1985, and were used as loans to finance investment projects for industrialization and economic growth (ibid.).

Prior to the Asian financial crisis, the financial sector in Singapore was still firmly controlled by the Monetary Authority of Singapore (MAS), the country's central bank (Yeung 2005: 96). Major liberalization programs were initiated in the aftermath of the crisis, which Yeung (2005: 96) interprets as the government taking advantage of the 'impending influx of global capital'. In other words, after the crisis Singapore liberalized its financial sector to increase competitiveness in the global markets. In May 1999, the state introduced the most sweeping liberalization measures to date in a program that effectively forced local banks to face global competition, resulting in many mergers and acquisitions among Singapore's banks (ibid.).

Although Singapore's financial markets have become open and globalized, the state still plays an important role in managing them (ibid.: 95). The close relationship between financial institutions and state regulatory authorities has been characterized as 'interlocking networks of financial power and regulation' (Mitchell 1991: 90). Yeung (2005: 95) describes the close relationship between the Singapore state bureaucracy and the financial sector as 'institutional embeddedness' and points to close links and revolving doors between high ranking political figures and banks. On the other hand, Singapore's financial sector has undergone substantial liberalization in recent decades through formal state policies before and after the Asian economic crisis (ibid.). Singapore has attracted many foreign financial institutions by creating a highly favorable environment, including low taxes, a skilled labor force, low regulations, and no barriers to capital inflows and outflows (Wan 2008: 287). Financial activities in Singapore have continued to expand – it has created the first derivatives market in Asia, is part of the global futures markets, has the world's fourth largest foreign exchange trading center, and is in the process of creating a major asset and wealth management industry similar to Switzerland's (ibid.).

The growing importance of financial markets in Singapore can be seen in figure 1. Between 1980 and 2010, value added by the financial and insurance industries increased by approximately 10% as a percentage of GDP. This trend has accelerated since 2004.

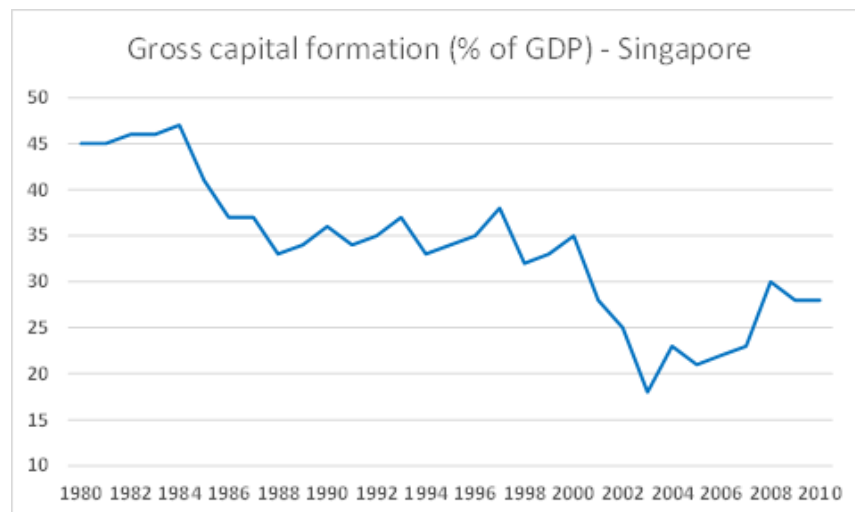
Figure 1: Value added by financial and insurance industries - Singapore



Source: own graph; data from UN 2015

At the same time, gross capital formation fell sharply since the early 1980s, reaching a low of 18% of GDP in 2003 (figure 2). After 2003 gross capital formation increased but remained low relative to previous decades.

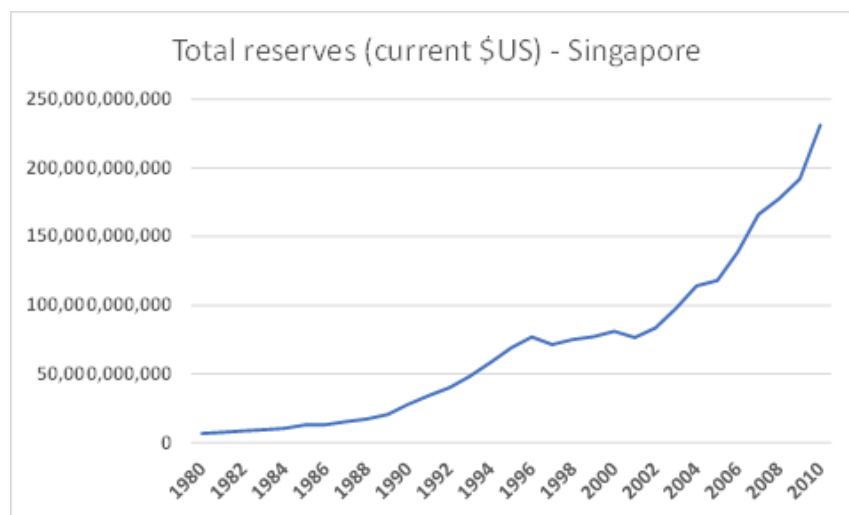
Figure 2: Gross capital formation - Singapore



Source: own graph; data from World Bank 2015

Taken together, the data from these indicators show that profits from the financial markets increased while domestic investments decreased. This is consistent with a financialized regime of accumulation. Moreover, figure 3 show that reserves have increased sharply since 1980. This insight lends support to the argument that financialization may have functioned as an outlet for the structural problem of overaccumulation. As opportunities for capital accumulation decreased locally, massive reserves were increasingly invested in foreign markets. SWFs may have provided a channel for these investments.

Figure 3: Total reserves - Singapore



Source: own graph; data from World Bank 2015

In summary: *Increasing importance of the financial sector at the expense of investments in real production indicate a transition to a **financialized accumulation** regime in Singapore.*

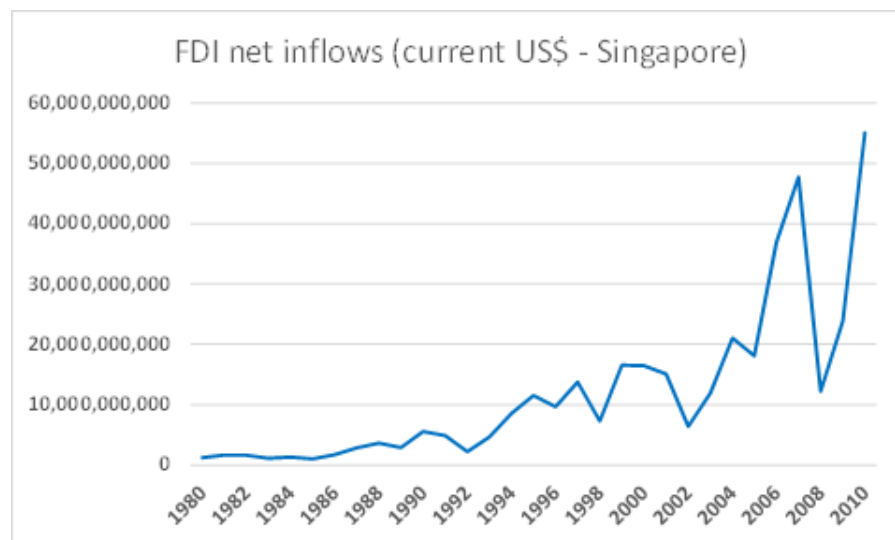
### 3.2.3 Intraverted versus extraverted accumulation in Singapore

In the post-independence period, the Singapore state attracted high levels of foreign investment with its export-oriented industrialization policies (Yeung 2005: 88). The government relied heavily on FDI



from the US and Europe (and later from Japan) in the post-independence period (Jessop and Sum 2005: 172). Foreign direct investment (FDI) in Singapore was actively encouraged by the PAP from the 1960s onward as part of a development strategy that relied heavily on attracting capital inflows (Wan 2008: 31). Beginning in 1967 FDI roughly doubled every decade until the late 1990s (Huff 1999: 222). In the 1980s Singapore received a larger *absolute* level of FDI than any other developing country, and from 1985-1995 drew in more FDI *per capita* than any country in the world (with twice as high FDI as the country ranking second) (ibid.: 223-224). Singapore also had the world's highest investment ratio from the 1960s through the end of the century; the investment ratio increased until the 1990s and then decreased slightly (Huff 1999: 224). The investment ratio reflects large inflows of foreign capital and the presence of foreign multinational enterprises, including Singapore's international financial sector, which is dominated by foreign banks (ibid.). Changes in FDI inflows to Singapore can be seen in figure 4. The changes in yearly FDI flows are cyclical but follow a positive trend. This trend indicates that Singapore's economy became increasingly open to foreign investment over time, which is consistent with an *extraverted* accumulation retime.

Figure 4: FDI net inflows - Singapore

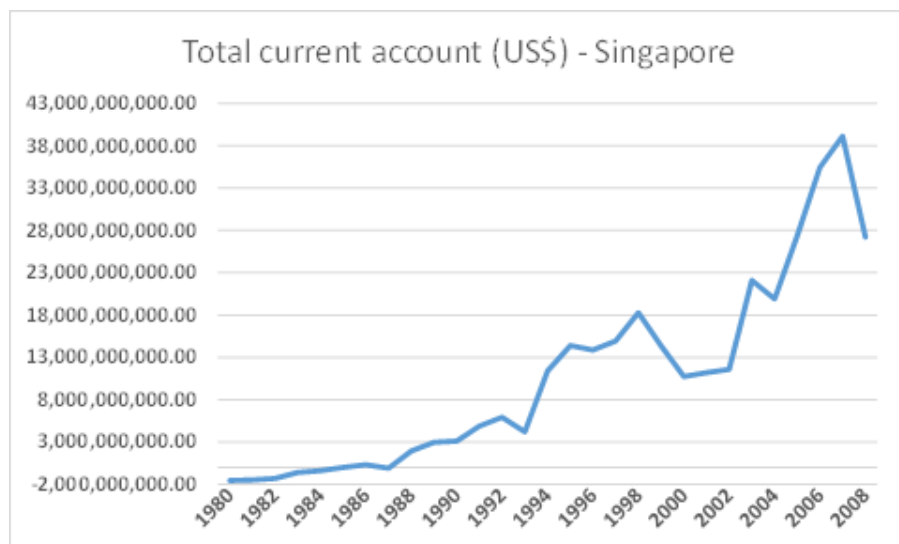


Source: own graph; data from World Bank 2015

By the late 1980s, global competition for investment significantly increasing as nearby countries offered more favorable investment locations. (ibid.). According to Yeung (2005: 89) the Singapore state recognized this competition and the limits of capital accumulation with the country and began to search globally for new means of accumulation. In 1993, the state began a regionalization effort – both state-owned and private firms were encouraged to invest in the Asian region and globally (ibid.). By the early 2000s, Singapore’s foreign equity investments increased substantially, with China as the largest host country with 13 percent of Singapore’s FDI (ibid.).

Since 1978, nearly all forms of capital controls and restrictions on foreign exchange have been removed in Singapore (Chow 2008: 4). Since 1990, the country’s balance of payments (BOP) has remained positive (with the exception of 2001) and grew in the early 2000s, reflecting an increasing current account surplus (ibid.). One aspect of the BOP – the total current account – is displayed in figure 5. The current account rose sharply in the period leading up to 2007 when the investments were made.

Figure 5: Total current account - Singapore



Source: own graph; data from UN 2015

In summary: *Given Singapore's early reliance on FDI, the accumulation regime of the country has consistently been **extraverted**. However, a shift from consistently being a net capital importer to a net exporter since 1990s indicates that the accumulation regime has shifted from **passive** to **active** extraversion.* Since the 1960s, capital accumulation in Singapore has moved in the direction of a highly financialized, extensive, and actively extraverted accumulation regime. This change is shown in Table 2:

Table 2: Changing accumulation patterns in Singapore, 1960s to present

	<b>1960s – 1990s</b>	<b>late 1990s – present</b>
<b>Productive vs. Financialized</b>	<b>Productive, moving toward financialized; finance becomes increasingly global</b>	<b>Highly financialized accumulation</b>
<b>Intraverted vs. Extraverted</b>	<b>Passive extraversion moving toward active extraversion</b>	<b>Active extraversion</b>

Source: own table

### 3.2.4 Changes in labor relations in Singapore

From independence through the early 1980s, state subsidies to the private sector in Singapore tied investment incentives to technological advances and labor force education and training. This was in part to avoid a potential problem of foreign multinationals coming to Singapore, benefiting from subsidies, and leaving (Huff 1999: 225). However, the state did not need to actively encourage productive use of these subsidies because the foreign multinationals came to Singapore with the intention of exporting competitively (ibid.). Real wages increased from the 1970s onward; they doubled from 1978 (first available figures) to 1990, and increased another two-thirds in the 1990s (Huff 1999: 225). This could in part be attributed to policies attracting higher technology operations (ibid.).

For workers in Singapore and throughout East Asia, the Asian financial crisis was devastating in many ways. One of the most damaging aspects in the wake of the crisis was corporate restructuring (Yun and Jin 2011: 394). Redundancy (lay-offs) reached near-record highs in Singapore from the late 1990s through the first half of 2000 (ibid.). Restructuring involved participation by the state, companies, and labor

representatives (ibid.). This cooperation – which can be understood as an aspect of Singapore’s mode of regulation in this period – was crucial for stabilizing the economy and society at a time when Singapore was recovering from crisis and when workers’ demands were threatening stability. As the previous sections demonstrate, the most radical measures of financial liberalization came in the period following the Asian financial crisis. This brief discussion on labor relations demonstrates that these changes deeply affected workers in Singapore and were based on substantial changes in labor relations.

### **3.2.5 The Sovereign Wealth Funds of Singapore – Temasek Holdings**

#### *Formation and descriptive information*

Temasek Holdings is one of two SWFs based in Singapore, the other being Government of Singapore Investment Corporation. Temasek was incorporated in 1974 under the Singapore Companies Act to hold and manage assets that were previously held by the government (Temasek 2015). According to Temasek, the objective of transferring these assets was to ‘free the Ministry of Finance to focus on its core role of policymaking and regulations’ (ibid.). After Singapore’s independence in 1965, the government owned or jointly owned several companies, including an airline and a telecommunications firm, and the state Economic Development Board also bought minority stakes in several other companies (Sovereign Wealth Fund Institute 2015a). Over the next decade the government bought or set up several companies, such as a weapons manufacturer, a shipping company, and a shipyard (ibid.). These firms became Government Linked Companies (GLCs) and the government’s stakes in them were held directly by the Ministry of Finance (ibid.). It was also the Ministry of Finance that established Temasek Holdings, and the Ministry is also the sole shareholder.

According to the website of Temasek, its portfolio covers financial services, telecommunications, media and technology, transportation and industrials, life sciences, consumer and real estate, as well as energy and resources (Temasek 2015). Temasek is designated as a Fifth Schedule entity under the

Singapore Constitution, which means that the President of Singapore is required to approve certain governance matters including appointment and removal of board members and the CEO, and the decision to draw upon ‘past reserves – that is, reserves that were not accumulated by the government during its current term of office (ibid.). In other words, any transaction likely to result in a draw of Temasek’s past reserves must be approved by the President of Singapore. The protection of reserves is very important for Singapore; the government calls them a ‘vital strategic resource’ (National Library Board Singapore 2015). The Chairman and CEO of Temasek are also required to report to the President of Singapore on the state of the reserves at regular intervals (Temasek 2015). Beyond this role, Temasek insists that the President is not involved in any of the fund’s investment, divestment, or corporate decisions.

*Temasek’s investments at the start of the current financial crisis*

Temasek publishes a yearly report called *Temasek Review* containing statements about events of the previous year, details about its portfolio, and outlooks for coming year. The 2007 *Temasek Review* discusses the instability of the global financial markets, stating: ‘Looking ahead, we remain cautious in the light of medium-term geo-economic risks and signs of bubbly market conditions’ (Temasek Holdings 2007: 17). As of March 31, 2007, 38 percent of Temasek’s portfolio was in financial services (the highest percentage), with Telecommunications and Media in second place with 23 percent. At this time, all of the investments in Temasek’s financial services portfolio were in institutions based in Asia, with the exception of Standard chartered (ibid.: 2007: 89).

As of March 31<sup>st</sup>, 2008, 40 percent of the portfolio was in financial services – an increase of 2 percent from the previous year (Temasek Holdings 2008: 13). The 2008 *Temasek Review* mentions the US housing bubble and ensuing credit crisis extensively (ibid.: 21-24). It states that for the previous two years, ‘...Temasek was concerned over the prospects of a major correction, but did not anticipate the speed and depth of the dislocation’ (ibid.: 21). Statements about the investments in Merrill Lynch give insight into these investment decisions:

In December 2007, we anchored Merrill Lynch in its capital raising exercise with an investment of about US\$4.9 billion for approximately 9% of Wall Street's third largest broker-dealer. In July 2008, we invested a further US\$3.4 billion in the company, of which US\$2.5 billion was from a reset payment from Merrill and US\$900 million was new capital. With well-established franchises in wealth management and global markets, Merrill presents strong growth potential for the longer term, though near-term strains in the economy remain (Temasek Holdings 2008: 22).

The report also states that Temasek planned to focus on Asia in the coming years for its 'long-term trend of growth and development in the next decade or two' (ibid.: 23). By 2009, Temasek had divested from all US and European financial institutions except for Standard Chartered (Temasek Holdings 2009: 72).

### **3.2.5 The Sovereign Wealth Funds of Singapore – Government of Singapore Investment Corporation**

#### *Formation and descriptive information*

Government of Singapore Investment Corporation (GIC 2015) was established in 1981 'to preserve and enhance Singapore's foreign reserves for the future' (ibid.). Singapore's reserves grew rapidly in the 1970s due to the country's high savings rate, and the government decided that these reserves should be invested in long-term and high-yielding assets (Sovereign Wealth Fund Institute 2015b). GIC was established to manage these assets (ibid.). There are three agencies that manage Singapore's reserves: MAS (the central bank), GIC, and Temasek. The main difference between the three agencies is their place on the risk spectrum, with MAS and Temasek on opposite ends (GIC 2015). MAS is the most conservative, while Temasek aims to maximize shareholder value over the long term with more risk-taking (ibid.). The GIC website describes GIC as a fairly conservative investor, with a globally diversified portfolio in a variety of asset classes.

In the 1990s, GIC began shifting its attention away for the US and Europe towards the emerging markets of Asia, which now make up about a fifth of its portfolio (GIC 2015). According to GIC, after 2003 it refocused its investment strategy to ‘better capitali[z]e on new global investment opportunities’ (ibid.). The web site also alludes to equities investments during the current economic crisis: ‘When the global financial crisis of 2008-2009 hit, a quick decision to sell down equities protected the portfolio, which has since returned to its normal profile, more than making up lost ground’ (ibid.).

The relation between GIC and the government is similar to that of Temasek as it is also a ‘Fifth Schedule’ entity. Officially, the government has no direct influence on investment decisions (gic.com/sg/faq). However, it is wholly owned by the government of Singapore and manages funds on behalf of the government and the MAS (Sovereign Wealth Fund Institute 2015b). GIC receives an annual contribution from the government of Singapore which is not set at a fixed amount (ibid.).

#### *GIC’s investments at the start of the current financial crisis*

GIC also publishes a yearly report. The 2007/2008 report states that although GIC’s executives and board members were concerned about the likelihood of ‘market dislocations’, they were surprised by the magnitude of the subprime mortgage crisis and ensuing credit crunch (GIC 2008: 12). Interestingly, the report suggests that the onset of the crisis was viewed as an opportunity:

GIC was in a good position to respond to investment opportunities arising from the turmoil. In particular, we invested directly in convertible securities of UBS AG and Citigroup. We also participated in several external funds that invested in mortgage-related securities and corporate leveraged loans, where selling by distressed holders had created compelling value (ibid.).

The 2008/2009 GIC yearly report discusses the large investments in UBS and Citigroup and address the extensive media coverage given to these investments (GIC 2009: 12). The report restates that the

investments were made to ‘capitalise on the unique business franchises’ of these institutions during the initial stages of the financial crisis, and that the crisis had worsened beyond expectations (ibid.). GIC was able to recover the initial loss on the Citigroup investment but not from the UBS investment (ibid.).



### **3.3 Analysis: South Korea development strategies, accumulation regimes and SWF behavior**

#### **3.3.1 Background information on South Korea**

The Republic of Korea (referred to here as South Korea) was founded in 1948 and entered almost three decades of authoritarian rule following a coup by General Park Chung Hee in 1961 (Wan 2008: 30). The government under Park was highly interventionist and sought to catch up with earlier industrializers such as Japan (ibid.: 31). While the authoritarian state played a crucial role in South Korea's development strategies, economic policies were also shaped by a politically active society, including sometimes militant labor and student movements.

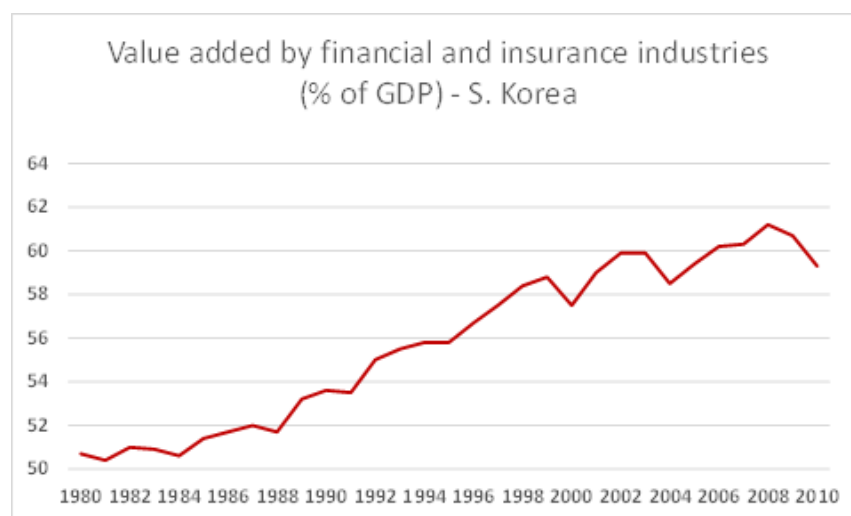
#### **3.3.2 Productive versus financialized Accumulation in South Korea**

Starting in the 1960s, South Korea initially relied on a combination of import substitution and export expansion (Schwartz 2010: 251-252). The state initiated many basic industries and state-controlled banks invested heavily in the private manufacturing sector (ibid.: 249). The use of export processing zones (EPZs) – which provide cheap, generally female, labor to foreign transnational corporations – was a key part of the export-oriented industrialization strategy (ibid.: 252). Facing political and labor repression, citizens began to exert bottom-up pressure for democratization in the 1980s and the first free elections were held in 1987 (Kang 2010: 534; Lee 2015: 185). At the same time, neoliberal ideology was gaining a foothold with elites and policymakers (ibid.). In the late 1980s, the US began pushing for better market access for US financial service providers and engaged in bilateral consultations about liberalization with the South Korean government (Noland 2007: 492). Together, these trends – the democratization movement, neoliberalism, and US pressure – led a fraction of the country's elites to support both financial sector liberalization and disengagement from control of labor relations (Kang 2010: 534). Financial system reforms in the 1980s and early 1990s included privatization of banks and liberalization of the non-bank

financial sector, which resulted in a more ‘short-term’ orientation of the financial sector (ibid.: 535; Hahm 2003: 81-85).

Prior to the 1990s, the Korean government tightly controlled cross-border financial flows (Chang et al. 1998: 736). A series of modest financial liberalizations were introduced in the early 1980s. These reforms privatized some commercial banks, reduced barriers to FDI, and allowed for the establishment of new commercial banks and non-bank financial institutions (Wan 2008: 287). However, it was not until the Kim Young Sam government came to power in 1993 that significant liberalization began. The five-year financial liberalization plan announced in 1990s aimed at, among other things, interest rate deregulation and capital account liberalization (Chang et al. 1998: 736). The Kim government’s decision to apply for OECD membership subjected South Korea to increased external demands to open up the financial market (ibid.: 738). The increasing importance of the financial market in South Korea is demonstrated in figure 6. Between 1980 and 2008, the value added by financial and insurance activities increased by approximately 10%, with this trend reversing after 2008. This is comparable to Singapore, which experienced a 10% increased between 1980 and 2010.

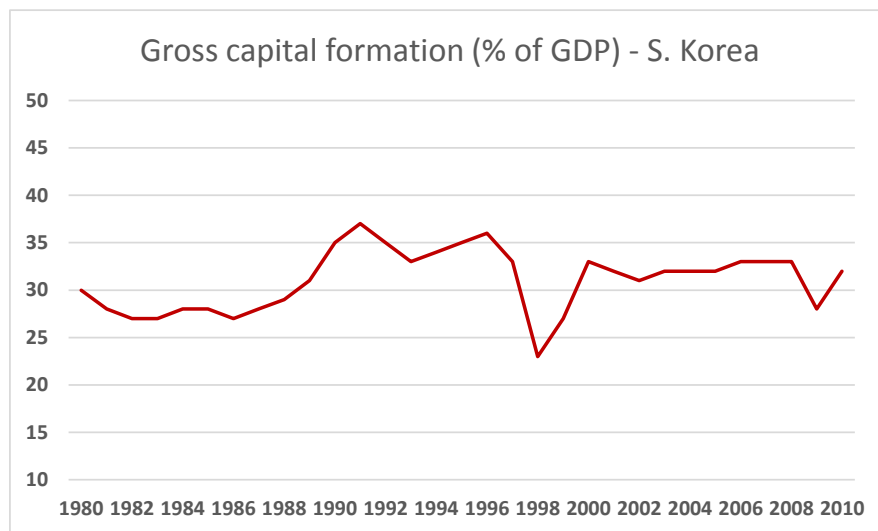
Figure 6: Value added by financial and insurance industries – S. Korea



Source: own graph; data from UN 2015

Unlike Singapore, which saw a steep decline in gross capital formation since the 1980s, gross capital formation as a percent of GDP in South Korea has remained relatively stable since the 1980s (figure 7). This indicates that while profits from the financial sector increased, levels of investment in the domestic economy did not change significantly. A noticeable exception is the period 1997-1998, which can be attributed to decreased revenues resulting from the Asian financial crisis.

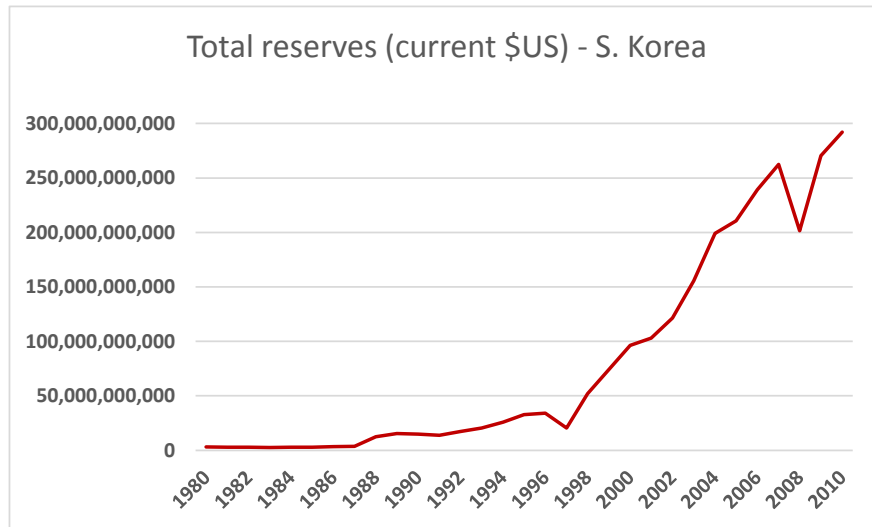
Figure 7: Gross capital formation – S. Korea



*Source:* own graph; data from World Bank 2015

Because gross capital formation did not decrease in South Korea, the argument that financialization functioned as an outlet for surplus capital accumulation (that is, overaccumulation) is less strongly supported than in the case of Singapore. However, the total reserves of South Korea (figure 8) have grown even more than those of Singapore since 1980.

Figure 8: Total reserves – S. Korea



Source: own graph; data from World Bank 2015

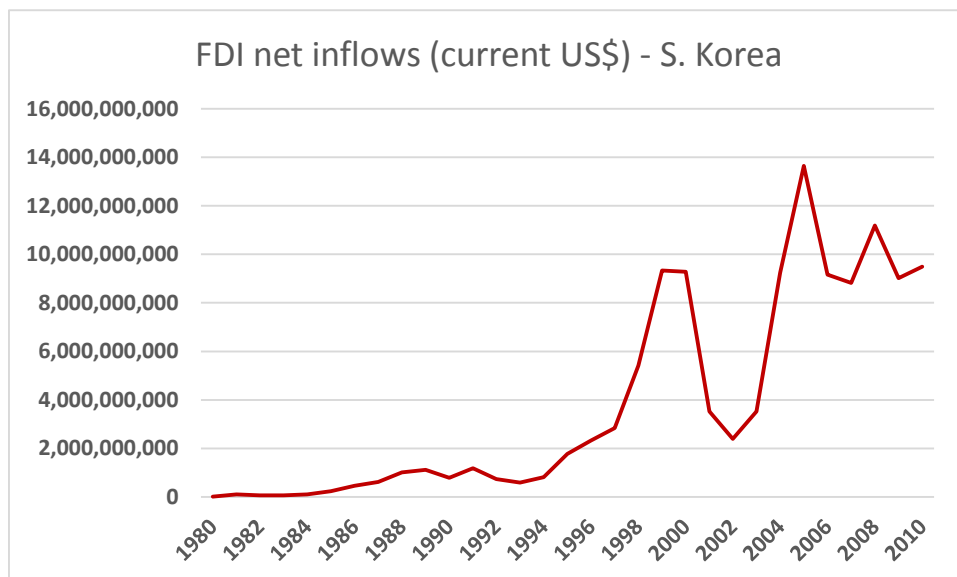
In summary: *South Korea's early industrialization model was based highly **productive accumulation**. External political pressures, global competition, and social conflict (first between citizens and the authoritarian regime, and later between workers and a new capitalist class) pushed South Korea toward a **financialized** regime of accumulation. Financialization accelerated greatly in the period following the Asian financial crisis.*

### 3.3.3 Intraverted versus extraverted accumulation in South Korea

According to Kang (2010: 530), there is a general consensus in the Korean political economy literature that strong state intervention in the period from the 1960s to the mid-1980s was motivated by serious need for catch-up development given the 'backwardness' of the economy. In this period, state intervention was geared toward building up local industries that would contribute to long-term national growth (ibid.: 531). Many of these became chaebols – large family-owned business groups that were crucial to South Korea's rapid development (ibid.). Similar to what happened in Singapore, South Korean

industries felt increased global competition in the 1980s and pressure from the U.S. and European trading partners to open up markets (Kang 2000: 242). As the Korean markets began to open up, FDI flows increased. From figure 9, it is evident that FDI flows did not begin to increase substantially until 1994. This change coincides with the five-year financialization plan announced in 1993 by the Kim Young Sam government.

Figure 9: FDI net inflows – S. Korea

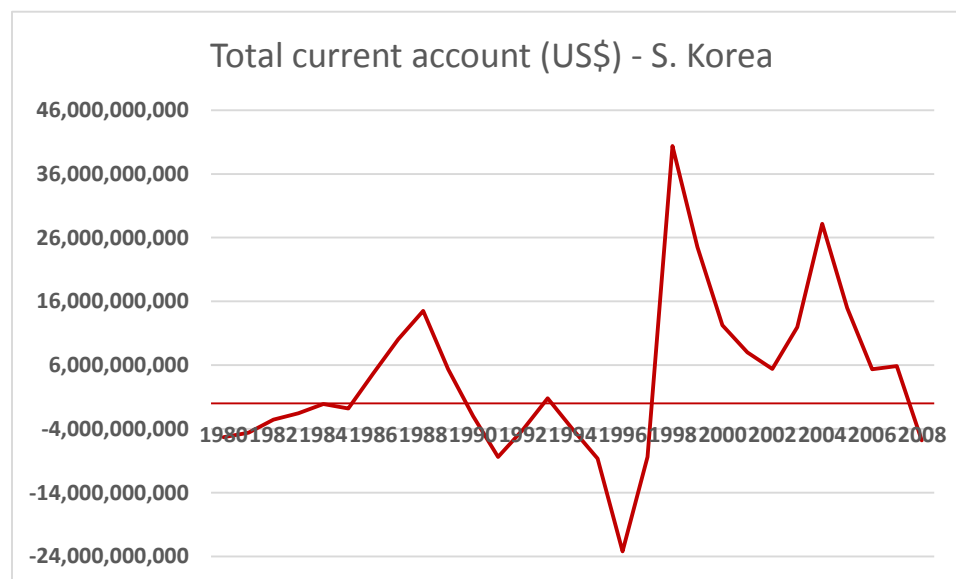


*Source: own graph; data from World Bank 2015*

As is evident in previous section on financialization in South Korea, the country became more externally-oriented as a result of political changes and increased competition. In this changing conditions, the tightly controlled chaebol system was no longer adaptable for continued capital accumulation (Chang et al. 1998). The largest changes in the openness of Korean markets came after the Asian financial crisis. The capital markets have been opened and investment overseas by residents has been liberalized (Ahn 2008: 305). The capital account has shown significant surpluses since 2000, and both capital inflows and capital outflows have increased significantly since 2006 (ibid.). The total current account (Figure 10), on the other

hand, has been highly cyclical since 1980, which is common, as the ability to invest depends on overall economic conditions. Importantly, despite several years of negative current accounts (especially after the Asian financial crisis), the current account rose sharply in the period of 2002-2004. Although it decreased again after 2004, the current account was still positive in 2007 and had increased slightly from 2006-2007.

Figure 10: Total current account – S. Korea



Source: own graph; data from UN 2015

In summary: *The regime of accumulation in South Korea prior to political independence was based on exports, which indicates **extraversion**. However, the economy was generally closed off from global capital flows until the 1990s and the process has significantly increased since the Asian financial crisis. This indicates a shift toward an increasingly **active extraverted** regime of accumulation. Since the 1960s capital accumulation in South Korea has moved in the direction of a financialized and active extraverted accumulation regime. This changes are shown in Table 3:*

Table 3: Changing accumulation patterns in South Korea, 1960s to present

	<b>1960s – 1990s</b>	<b>late 1990s – present</b>
<b>Productive vs. Financialized</b>	<b>Productive, moving toward financialized; finance becomes increasingly global</b>	<b>Financialized accumulation, increasing after Asian financial crisis</b>
<b>Intraverted vs. Extraverted</b>	<b>Increasingly moving toward active extraversion</b>	<b>Active extraversion</b>

*Source:* own table

In summary, Singapore and South Korea followed different paths to similar regimes of accumulation. The regime of accumulation in both countries in the period of 2007-2008 was characterized by financialization and an extraverted relation to the global economy.

### 3.3.4 Changes in labor relations in South Korea

In the period from the 1960s to the mid-1980s, the South Korean state strongly intervened in labor relations, restricting union activity to a single state-regulated trade union (the Federation of Korean Trade Unions) (Kang 2010: 531; Lee 2015: 185). The repression of organized labor served the purpose of restraining wages, which was an important aspect of the country's export-led growth model (ibid.). In this sense, wage restraint and labor repression were a fundamental part of South Korea's rapid economic growth.

The labor movement began to grow after political democratization arrived in 1987 (Lee 2015: 185). Unionization density grew from 12.3% in 1986 to 18.6% in 1989 and wages increased dramatically during the same period (ibid.). The strength of labor after 1987 brought major changes to industrial relations. Earlier, unions had very little say in issues of wages, hours, or layoffs and attempts to form independent unions were severely punished by management and state authorities (Koo 2000: 233). Since the early 1960s, Korean capitalists relied on the state's control of labor to pursue their rapid export-oriented industrialization and were unprepared for the sudden power shift (ibid.). Starting in the early 1990s, Korean firms were facing increased regional and global competition and sought ways to reduce labor costs and increase labor 'flexibility' in the face of stronger organized labor (Koo 2007: 5). In 1996, the Kim Young-sam government

secretly passed a new set of business-sponsored labor laws supported by Korean industrialists that would have severely weakened unions (ibid.; Koo 2000: 227). This action triggered massive resistance from labor and civil society on a scale not previously seen in South Korea and the government agreed to amend the laws (Koo 2000: 227).

The Asian Financial Crisis hit South Korea in 1997. As Klein (2007: 332-353) argues, the devastating crisis was instrumentalized by the Chicago School economists running the IMF. Klein (ibid.: 340) writes: “After the IMF had stripped the Tigers of their old habits and ways, they were now ready to be reborn, Chicago-style: privatized basic services, independent central banks, ‘flexible’ workforces, low social spending and, of course, total free trade.” Neoliberalism took hold in the post-crisis period beginning with new policies forcing unions to accept mass layoffs, and major protests from workers could not put a stop to it (Koo 2007: 5; Lee 2015: 186). Inequality has risen since the late 1990s and the percentage of workers hired on a non-regular basis grew from 42 percent in 1995 to 52 percent in 2002 (Koo 2007: 1). Lee (2015: 188) describes this group of Korean workers living in highly precarious social situations (excluded from company medical and welfare benefits, barred from unions, earning severely depressed wages, lacking job security, etc.) as the ‘insecure class’. Standing (2011) popularized the term ‘precariat’ to describe a similar class of workers. As in Singapore, workers were directly affected by structural changes that accompanied changing patterns of accumulation. The agency of Korean workers is also evident, as strikes and protests forced the government to reconsider policies that pushed forward the liberalization program. However, the influence of organized labor was not long-lasting and the transition to a new regime of accumulation accelerated after the Asian financial crisis.



### **3.3.5 The Sovereign Wealth Fund of South Korea - Korea Investment Corporation**

#### *Formation and descriptive information*

Korea Investment Corporation (KIC) was established in July 2005 and manages assets from public funds, particularly Korea's foreign exchange reserves (KIC 2015). The management of entrusted assets is regulated under the National Finance Act (ibid.). In 2003, the Korean government adopted a national policy initiative called the 'Northeast Asian Financial Hub Strategy', which encouraged South Korea to become a regional financial hub with a strength in the asset management industry (ibid.). KIC was formed as a part of this strategy. The governance structure is similar to that of the Singaporean SWFs. The president of KIC is officially appointed by the President of the Republic of Korea but it recommended by the Minister of Strategy and Finance (KIC 2015). Because the government is its shareholder, KIC is subject to annual government audits and inspections (ibid.).

KIC manages Korea's foreign exchange reserves (ibid.). On its English language website, KIC states that it aims to 'strengthen the international competitiveness of Korean financial institutions and enhance market practices by introducing advanced investment techniques' (KIC 2015). Also, in accordance with the 'Northeast Asian Financial Hub Strategy', another aim is to further Korea's development into a regional financial center.

#### *KIC's investments at the start of the current financial crisis*

KIC's 2007 yearly report discusses the subprime mortgage collapse at length, indicating a recognition that the global financial markets were unstable (KIC 2007: 3, 20-25). The 2008 report discusses KIC's investment in Merrill Lynch:

In January 2008, the Ministry of Strategy and Finance decided to entrust USD 2.0 billion to KIC for investment in alternative assets, in addition to the initially entrusted amount of USD 3 billion

from the foreign exchange stabilization fund. The USD 2.0 billion was invested in Merrill Lynch. KIC was entrusted with an additional USD 2.7 billion from the foreign exchange stabilization fund in October (KIC 2008: 20).

The 2008 KIC yearly report describes the new investments made at the start of the financial crisis as part of ‘...new strategies to seize opportunities from the recent global financial turmoil’ (KIC 2008: 3).

Similar statements were made by GIC and Temasek as stated above.

### **3.4 Summary and interpretation of key findings**

According to the yearly reports of the SWFs of Singapore and South Korea, all three SWFs recognized the potential for the financial crisis to worsen but underestimated this possibility. Temasek’s yearly report is the most transparent of the three and includes the most information about portfolio composition. This information indicates that Temasek continued to invest in financial services but moved out of the US financial sector in favor of Asian markets. Temasek’s 2014 investment in the Dutch bank ING might indicate that Temasek’s analysts saw the European market as once again safe for investments (The Straits Times 2014). Overall, the role of the SWFs in linking their owning governments to global financial markets is in line with the accelerating financialization processes that have been underway in both countries for decades. The earlier move toward financialized accumulation in Singapore helps explain its decision to set up SWFs earlier than South Korea. Importantly, the state in both countries plays an important, but indirect, role in the activities of the SWFs. This suggests a continuing role of the state, but a role that is more hands-off than in previous decades and with different goals. Whereas the ‘developmental state’ traditionally encouraged rapid development based on exports and industrialization, the state now plays a critical role in encouraging and regulating finance-led accumulation. This is most clearly

demonstrated in the case of Korea Investment Corporation, which was created with the explicit goal of establishing South Korea's position as a regional financial hub.

To help explain the roles of SWFs in the financialized accumulation regime, it is necessary to consider the massive reserves upon which the SWFs are based. All three SWFs were established to manage government savings (at least as a significant part of their assets under management). In the aftermath of the 1997 Asian Financial Crisis, there was a great deal of skepticism in many East Asian countries about relying on the International Monetary Fund (IMF) as a lender of last resort (Bolton, Samama and Stiglitz, 2012:6). This can help explain why states preferred to build up their own reserves as a kind of insurance policy against future crises (ibid). In many cases these reserves were transformed into SWFs. As Wan (2008: 282) puts it, 'savings need to be put into use'. On one hand, the need to invest government savings helps explain the function of SWFs in the global economy. On the other hand, it is not clear why SWFs that are accountable to their owning governments would risk these savings by investing in the US financial market. The yearly reports suggest that the investments were seen as potentially highly profitable, but it is also evident that the investments carried a fairly high risk. But whether or not the investments were considered involve a high risk, these questions only address the proximal reasons behind the investments and not the root causes.

The concept of 'overaccumulation' offers an explanation that addresses the root causes. In its basic sense, overaccumulation refers to a dilemma for continued capital accumulation that occurs when there is a surplus of labor and capital side-by-side in a given geographic area (Harvey 2004: 64). Surplus capital cannot be turned into profit because it cannot be absorbed by domestic consumption (ibid.). Harvey (2010: 30) argues that the turn to financialization occurred out of necessity of dealing with the 'capital surplus absorption problem'. The 'surplus absorption problem' is closely related to the concept of accumulation; it refers to the observation that the nature of capitalist competition requires new profitable outlets to always be found (Harvey 2010: 26). Bello (2006: 1350) also explains the proliferation of finance capital in the 1990s as a result of overaccumulation – or, in Bello's words, 'the declining profitability of industry brought about by the crisis of overproduction'.

Consistent with the argument for overaccumulation, a 2006 report from the International Monetary Fund (IMF) argued that the global economy was ‘awash with cash’ and pointed out two ‘striking changes’ in the global financial landscape. First, emerging market and oil-exporting countries had become substantial net savers (IMF 2006: 135). According to the report, this change reflected low investment in the case of emerging markets. The consequence was that capital was flowing to industrial countries, especially the United States, which is the opposite of what would be expected according to economic theory. These trends are reflected in data presented above for Singapore and South Korea, but more strongly in the case of Singapore. Singapore was characterized both by high savings (interpreted as total reserves) and low investment (with gross capital formation as a proxy). South Korea did not display low investments, but was indeed rapidly accumulating high savings. Second, the IMF report commented that many emerging market countries had high current account surpluses, a condition that was referred to as a ‘global savings glut’ by then US Federal Reserve chairman Ben Bernanke in 2005 (IMF 2006: 135). Indeed, in 2006 the current account surpluses of both countries were positive and rising (albeit still lower than in 2004 in the case of South Korea). These characteristics – high savings, low or stagnating domestic investment, and becoming net exporters of capital – in combination with ongoing trends toward financialized and extraverted accumulation patterns, form the core of the argument for this thesis. These characteristics lend strong support to the argument that financialization in Singapore and South Korea occurred as a response to capital overaccumulation, and that SWFs functioned as an outlet for surplus capital. Moreover, evidence from yearly SWF reports demonstrates that the US financial markets were perceived as destinations of potentially highly profitable investments.

## Chapter 4: Conclusion, reflection, and avenues for future research

The question at the center of this thesis was: *Why did sovereign wealth funds, owned by states with a strong developmentalist tradition, invest in the risky US financial sector during the 2007-2008 subprime mortgage crisis?* Rather than approaching this as a question about the motives of SWFs, as a liberal or realist analysis would likely do, the thesis sought to explain the historical context in which the investments were made and uncover the root causes. To do this, a critical realist philosophy and insights from Regulation Theory were used. The analysis shows that the traditional role of the developmental state in Singapore and South Korea has changed and over time and that patterns of capital accumulation have changed substantially since the 1960s.

The answer to the research question involves several steps. It begins with recognizing that the regime of accumulation characterizing both countries was similar in the period of 2007-2008 when the investments in question were made. Both countries moved at different paces and for different reasons towards financialization and an extraverted relation to the global economy. In practical terms, this first means that development was no longer dependent on production, but increasingly on profits from the financial sector. Moreover, the national economies of both countries were increasingly open to global competition and capital flows (inward and outward). In this context, overaccumulation in the form of surplus savings no longer had a productive outlet in the domestic economies. Perceiving the precarious state of American financial institutions as a profitable outlet for surplus capital, the SWFs opted to take out large shares in Citigroup and Merrill Lynch.

This analysis demonstrates the applicability of Regulation Theory to the study of SWFs and of emerging economies more generally. Moreover, it challenges ‘mainstream’ GPE approaches as well as ‘structuralist’ or (unintentionally) ‘Eurocentric’ critical approaches by centering the analysis on local development processes rather than entirely on system-level or inter-state explanations. With this said, the

thesis faces a number of limitations. First of all, only three SWFs and two countries were analyzed out of a total of six SWFs from five countries that invested in US financial institutions from 2007-2008. Thus, the thesis can only offer an explanation regarding these three SWFs that cannot be generalized to the other SWFs. Second, the economic indicators used as quantitative data are imperfect measures of the two axes of accumulation. Although they are supplemented with qualitative data, it is possible that this quantitative data is misleading.

Future research might investigate whether (and if so, for what reason) the SWFs of Singapore and South Korea have changed their strategies on investing in foreign financial markets. For example, while it has been stated that Temasek recently invested in Dutch bank ING, future research could ask whether recent concerns about the Eurozone have changed the outlook of SWFs considering investments in Europe. The same question could be asked about the US financial sector. Another avenue for future research would be to expand the analysis to the four SWFs excluded from this analysis. The SWFs could be grouped into 'East Asian' and 'Gulf Arab' categories. It would be interesting to see if the investments by China Investment Corporation could be explained by the same conclusion reached for Temasek, GIC, and KIC. China is historically very different from the 'Tigers' Singapore and South Korea and does not fit neatly into the developmental state typology.

The investments by the Gulf Arab SWFs based in Kuwait and United Arab Emirates (UAE) likely require an entirely different explanation. Future research into the investments of these SWFs might consider how the problem of overaccumulation applies to the Gulf Arab region. A possible starting point is to look at the accumulation patterns of the Gulf Cooperation Council (GCC) states, a group of wealthy oil-producing states including Kuwait, UAE, Bahrain, Oman, Qatar, and Saudi Arabia. The GCC states have relatively small populations, with 40 million people in total in 2008, 28 million of whom lived in Saudi Arabia (Momani 2009: 15). Because of these small populations, there have historically been limited outlets for investing oil earnings domestically, leading to the question of how and where to recycle the massive petrodollar earnings (*ibid.*). Collectively, the six GCC states have amassed very large current account

surpluses, which reached US\$200 billion in 2006 compared to China's current account surplus of US\$250 in the same year (Momani 2008.: 294). SWFs – including Abu Dhabi Investment Authority and Kuwait Investment Authority, which invested in – manage a large portion of the GCC states' foreign reserves (ibid.). This preliminary information raises the question of whether Gulf Arab SWFs function as an outlet for capital surplus, and if this could help explain these SWFs investments in US financial institutions.

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