

Asia's Reserve Accumulation: Part of a New Paradigm

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So far, various contributions have failed to explain Asia's fat foreign currency reserve accumulation. In this paper, I analyze reserve holding decisions in a wider social, political, and economic context. Using Weber's heuristic of ideas and interests as determinants of actions, I show that Asian countries' reserve accumulation is caused by a paradigm shift. In Asia's former Development State paradigm, accumulation of huge reserves was not of central importance because of closed and heavily regulated financial markets. After the Development State paradigm had collapsed in the 1980s, a new paradigm was built around the ideas of liberalism, the unconditional avoidance of any further financial crisis, and high employment. In order to harmonize the requests of liberal politics and open financial markets in addition to 'full' employment driven by export-led growth and the avoidance of further crises, hoarding reserves was a suitable strategy.

Keywords: Asian reserve accumulation, Asian transformation, Asian paradigm shift, Weber's heuristic

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1) Introduction

The current financial crisis brought account imbalances and foreign currency reserve accumulation *back* on the top of the discussions in international economics. Explosive growth in foreign currency reserves is currently considered to be one of the most important macroeconomic conundrums. Many contributions discuss how developing countries' *over-saving* and investment in a few very save assets has affected and altered developed countries' financial markets.

Advocates of the *Global Saving Glut (GSG) Hypothesis* blame developing countries' foreign currency reserve accumulation for low interest rates. Bernanke (2005; 2007) stated that the *oversaving* of emerging countries and the export of *excessive savings* to *financial centers* forced the United States to build up huge long-lasting currency account deficits. According to the *GSG Hypothesis*, the capital inflows depressed interest rates and increased stock and real estate prices which caused citizens to consume and in particular to borrow more than they would have done otherwise.

Among politicians and central bankers, the *GSG Hypothesis* is quite popular because it puts part of the blame for high currency account deficits, deindustrialization, and excessive loan granting on Asia and the Middle East. For many politicians, excessive foreign reserve accumulation is the consequence of some developing countries' *unfair* export-led growth policy. Central bankers focus on the downward pressure foreign reserves put on world interest rates. When more and more experts argued that the federal reserve's policy of easy money was the main cause of the crisis, American central bankers were in need of an alternative explanation. Leading central bankers such as Greenspan (Greenspan *et al.* 2010), Paulson (Obstfeld and Rogoff 2009), and Bernanke (2010) to deny a strong connection between the Fed's low short-term rates and long-term mortgages rates. Instead, they renewed the *GSG Theory* and proposed it as a possible explanation for low long-term interest rates and the housing bubble.

The sharp increase in the world's foreign currency reserves is a fact. The question is why some developing countries hoard large amounts of reserves and how much they should actually hold. Several rules of thumb or optimal reserve holding models have been outlined as guidance for the 'right' reserve policy. Only a few contributions have taken shifts in the political and economic system as a possible explanation of heavy reserve accumulation into account. In line with Ghosh *et*

al. (2012) and Cheung and Ito (2009), I argue that reserve accumulation strategies have changed in the last decades. Following Aizenman and Lee (2008), I argue that a paradigm shift caused East and Southeast Asian countries (Malaysia, Thailand, South Korea, Taiwan, Hong-Kong, Singapore, Philippines, Indonesia) to modify their reserve policies. In contrast to those contributions, I show how changes in the cultural, political, and economic order have altered countries' reserves policies. By showing how changes in those three types of order have caused East and Southeast Asian countries to accumulate huge reserves, I hope to provide insight into the ideological, political, and economic reasons for fast reserve accumulation.

First, I will provide an overview of previous literature on reserve accumulation. In the second part of the paper, some empirical facts on the reserve accumulation of East and Southeast Asian countries will be outlined. Section three will address the paradigm shift and its consequences for the reserve policy. Section four contains concluding remarks.

2) Previous Works on Reserve Accumulation

The previous literature on reserve accumulation has focused on three main questions: 1) Why do some countries hoard huge amounts of reserves? 2) How much reserve should these countries hold? 3) What are the consequences of reserve hoarding of some countries for reserve receiving countries?

Regarding the first question, two main answers are provided in the literature. The first answer is that an export-led growth strategy motivated many developing countries to hoard huge foreign currency reserves. The second answer is that the previous crisis forced countries to hold reserves for precautionary protection against financial contagion. With respect to the second question, it can be stated that according to the literature, three rules of thumb should help (emerging) countries to hold a reasonable quantity of foreign reserves. In addition, several contributions developed optimal reserve hoarding models. With regard to the third question, it can be noted that authors widely agree that developing countries' reserve hoarding decreased world interest rates.

Why Do Several Developing Countries Hoard Huge Amounts of Reserves?

The literature provides two answers to the question of why some developing countries hoard massive reserves. The first answer highlights mercantilist trade and growth strategies. The second answer foregrounds the motive of self-insurance against certain market disturbances.

Mercantile Motives

Dooley *et al.* (2004) and Palley (2007) argue that fast reserve building is an endogenous effect of Asian countries' neo-mercantilist, export-led growth strategy. According to Dooley *et al.* (2004), the current situation is comparable to times of the Bretton Woods system when many developing countries followed a *neo-mercantilist* growth strategy. As Dooley *et al.* outline:

[some countries,] mainly in Asia, chose the same periphery strategy as immediate post-war Europe and Japan, undervaluing the exchange rate, managing sizable foreign exchange interventions, imposing controls, accumulating reserves, and encouraging export-led growth by sending goods to the competitive center countries. (Dooley *et al.* 2004, p. 308).

In order to remove pressure from their *undervalued* currency and to preserve competitiveness, countries invest their export revenues abroad. Bar-Ilan and Marion (2009) show that *weakening* the currency, pursuing export-led growth, and reserve accumulation are optimal measures in case output falls below potential output. In addition, Delatte and Fouquau (2012) found that fast reserve accumulation is mostly explained by the desire of countries to maintain an external surplus and exchange rate undervaluation.

More recently, the mercantilist argument faces challenges since many empirical studies (Ghosh *et al.* 2012; Obstfeld *et al.* 2010) find little evidence for neo-mercantilist reserve hoarding. However, advocates of the neo-mercantilist position have a point as export-led growth and exchange rate managing is still part of many Asian countries' economic policy.

Precautionary Motives

Self-insurance is an important motive for holding foreign currency reserves. Foreign currency reserves help countries to avoid or at least smooth current and capital account shocks. In case of current account shocks, reserves are used to maintain imports. Empirically, insurance against current account shocks is still an important motive for reserve holding (Ghosh *et al.* 2012). In particular, countries with highly volatile current accounts insure against import and export stops. In addition, countries face the risk of (*rational or irrational*) hasty capital outflows, sudden stops of

capital inflow, and speculative attacks against their currencies. According to Feldstein (1999), the East and Southeast Asian crisis had shown that emerging countries cannot rely on international institutions such as the IMF to change the international *financial architecture*. They should rather hold more liquid foreign reserves in order to protect themselves against a financial crisis. In this context, Mervyn King, governor of the Bank of England stated:

Following the Asian crisis of the late 1990s it was likely that countries might choose to build up large foreign exchange reserves in order to be able to act as a 'do it yourself' lender of last resort in US dollars. (cited from Aizenman and Lee 2007, p. 191).

Calvo *et al.* (2004) found that sudden stops are particularly a problem of emerging countries and that the likelihood of sudden stops increases sharply with financial openness. Countries with large short-term debt and underdeveloped financial markets bear a heavy risk of capital account shocks and currency attacks. In case of sudden stops or capital outflows – due to panics or speculation against the currency – reserves may be used to provide liquidity support to the domestic capital market. Empirical evidence (Ghosh *et al.* 2012; Bastourre *et al.* 2009; Obstfeld *et al.* 2010) suggests that nowadays precautionary motives are the most important reason for reserve hoarding.

The question to be answered is 'How much should countries hold in reserve for precautionary motives?' Several optimal reserve models (Jeanne 2007; Caballero and Panageas 2007; Jeanne and Rancière 2011) were developed by comparing costs of shocks to the ones of reserve holding. Those models are poor predictors for actual reserve levels, quite sensitive with regard to assumptions about the reserve holding countries' economy and not widely used by reserve managers as an IMF survey shows (IMF 2011).

In addition, several institutions and economists developed various rules of thumb. Traditionally, the IMF recommended to hold reserves equal to three months of imports to insure against current account shocks. However, the increasing significance and frequency of financial crises in developing countries strongly challenged the adequacy of this rule (de Beaufort Wijnholds, Onno, and Kapteyn 2001) and showed that much risk originates from capital account shocks. It turned out that countries with higher levels of reserves are less likely to be attacked and are better equipped to protect their currency if attacks occur (Feldstein 1999). Low reserves compared to short-term external debt (Rodrik and Velasco 1999) and M2 (Calvo 1996; Kaminsky *et al.* 1998;) are *good* predictors for financial crises. In the aftermaths of the Asian crisis, the Greenspan-Guidotti

rule was established which suggests to hold reserves equal to short-term external debt with a maturity less than one year. Later, a different rule suggested to hold reserves equal to 20% of the monetary aggregate M2. Both rules have several shortcomings. The first rule only takes capital account shocks and debt with a maturity less than a year into account and idealizes the patriotism of investors. With regard to the last point, Rothenberg and Warnock (2011) showed that many financial crises in emerging countries were caused by sudden flights of domestic capital rather than by sudden stops of foreign capital flows. The second rule's advantages are that it takes domestic short-term liabilities and a wider range of *near moneys* into account, but it remains unclear why 20% should be better than 15% or 30% and why M2 should be a better aggregate than others.

Consequences for Receiving Countries

More recently, the effects of reserve hoarding on reserve receiving countries has been of major interest. According to data of the IMF, 60 to 70% of all reserves are held in US dollars, predominantly in US Treasuries¹.

Several authors have estimated the effect of foreign Treasury purchases on long-term US Treasury yields. According to various estimates, the Treasury yield reduction caused by foreign reserve accumulation varies widely (see for example Bertaut *et al.* 2012, Warnock and Warnock 2009, Beltran *et al.* 2013). However, most contributions reached the same conclusion: foreign (official) Treasury purchases have reduced Treasury yields significantly. Since long-term Treasury yields are a benchmark for other long-term interest rates, lower Treasury yields have depressed mortgage rates which tempted private households to borrow heavily. The sharp increase in outstanding debt has made financial markets more unstable. At the same time, the USA benefited from reserve inflows. The strong demand for safe assets enabled the USA to increase its public debt extensively without paying higher interest rates. High public and private debt made it possible for the USA 'to postpone though policy choices' (Obstfeld and Rogoff 2009, p. 2). Deep financial markets allowed *financial centers* to borrow *cheap* money from abroad and to invest it in risky high-yield foreign assets (Caballero *et al.* 2008). However, reserve accumulation caused a paradoxical situation of more financial stability in reserve hoarding countries and less stability in international financial markets (Steiner 2014; Obstfeld and Rogoff 2009; Taylor 2013; Ferguson and Schularick 2011).

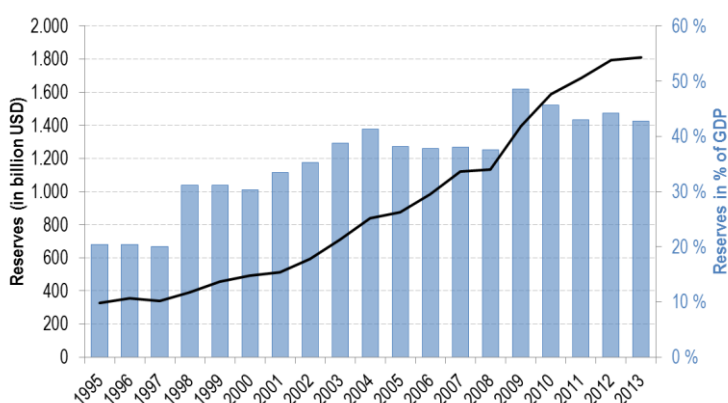
¹ We know from the Treasury International Capital System that more than 70% of the Treasuries held by foreigners are booked by official institutions.

Analyzing empirical data, I will show in the next section that all three rules of thumb fail to explain Asian countries' reserve hoarding. Additionally, I will demonstrate that fast reserve accumulation contributes significantly to Asia's huge net asset position surplus.

3) Empirical Facts

World foreign currency reserves increased explosively from 1.5 trillion dollars in 1995 to over 11 trillion dollars in 2013.² Also geographical distribution changed significantly. In 1995, advanced economies held about 67% of the world's reserves and emerging and developing countries the rest. These shares have changed dramatically. Only a handful of countries and regions accounts for the lion's share of reserve growth. East and Southeast Asia (including China and Japan) contributed more than 60% to the world's reserve growth. Countries which were hit hardest by the East and Southeast Asian financial crisis saw astronomical reserve growth rates. Those countries increased their reserves by between 4 and 11 times between 1995 and 2013.³ Particularly countries with relatively small pre-crisis reserves have had high reserve growth rates.

Figure 1: Reserve Accumulation of Selected Asian Countries



Note: Countries: Hong Kong, Indonesia, Singapore, Malaysia, Korea, Philippines, Taiwan, Thailand.
 Source: World Bank data, Central Bank of Taiwan and National Statistics Taiwan; Own Calculation.

Reserve growth of selected Asian countries was strong in absolute terms and relative to GDP as Figure 1 shows.

² IMF and World Bank data.

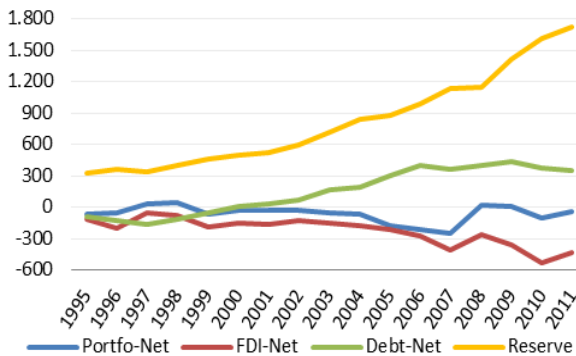
³ Singapore: 4 times, Taiwan and Thailand: 4.5 times, Malaysia and Hong Kong: 5.5 times, Indonesia: 7 times, South Korea: 10 times, Philippines: 11 times.

Figure 2A shows that the net asset position of the selected Asian countries is strongly positive⁴. Portfolio investment, FDI, and the foreign debt position almost cancel out to zero; hence, the reserve accumulation turned the net asset position strongly positive as figure 2B demonstrates.

Figure 2A: Asian Net-Asset Position



Figure 2B: Asset Position by Type of Asset

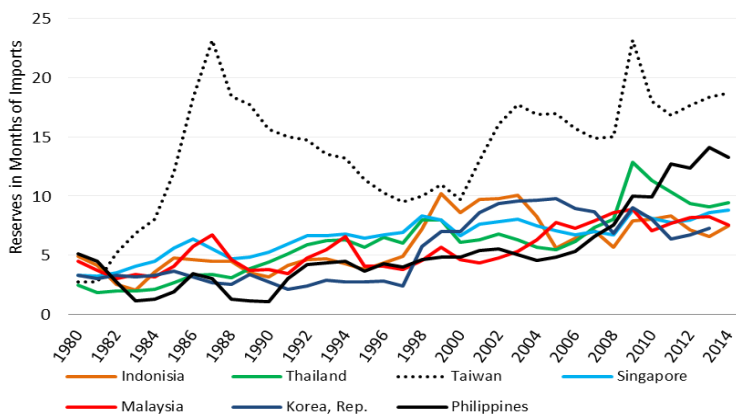


Note: Countries: Hong Kong, Indonesia, Singapore, Malaysia, Korea, Philippines, Taiwan, Thailand.
Source: Lane and Milesi-Ferretti (2011); Own Calculation.

According to the IMF Survey of Reserve Managers, 50% of all reserve managers use at least one of the three rules of thumb (IMF 2011, p. 17) described above. Unfortunately, we have no knowledge about the preferred rules of specific countries. However, all three rules of thumb heavily underestimate East and Southeast Asian countries' reserve accumulation.

Figure 3 shows that selected countries hold reserves equal to between 7 and 15 months of imports; hence much more than stated by the rule of thumb.

Figure 3: Months of Import Covered by Reserves

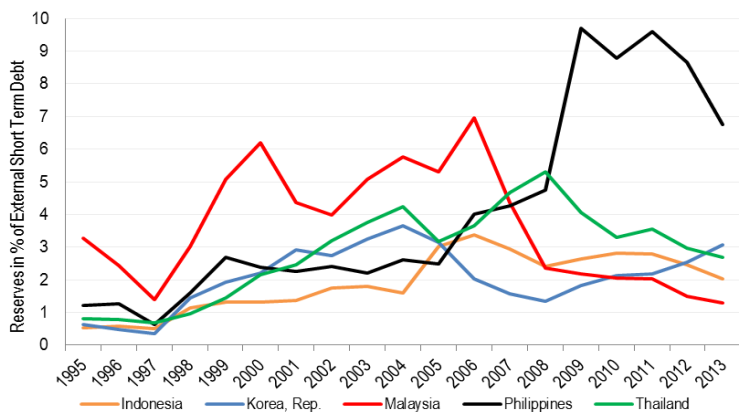


Source: World Bank, Central Bank of the Republic of China (Taiwan), Thomson Reuters; Own Calculation.

⁴The amount of foreign assets held by Asian residents (individuals and the government) heavily exceeds the amount of Asian assets held by foreigners.

Also short-term debt is highly *over-covered* in all countries as Figure 4 indicates; countries hold much more in reserves than the Greenspan-Guidotti rule suggests.

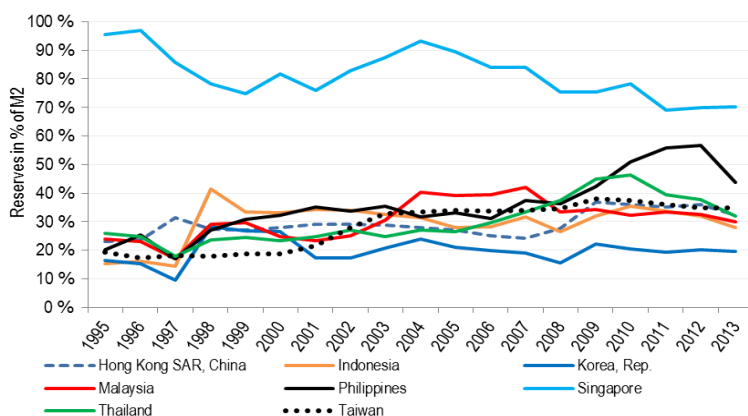
Figure 4: Reserve Coverage of External Short-Term Debt



Note: Hong Kong is excluded because of data problems. Singapore is excluded because as a regional financial hub its short-term debt is unusually high.
Source: World Bank, Central Bank of the Republic of China (Taiwan), Thomson Reuters; Own Calculation.

Figure 5 shows that the rule of holding reserves equal to 20% of M2 does slightly better.

Figure 5: Reserves as a Percentage of M2



Source: World Bank, Central Bank of the Republic of China (Taiwan), Thomson Reuters; Own Calculation.

Except for Korea, the countries hold larger amounts of reserves than 20% of M2. Taking the three rules of thumb as benchmark, *all* East and Southeast Asian countries analyzed *over-accumulate* reserves. Neither the optimal reserve models developed by Jeanne (2007) and Jeanne and Rancière (2011) nor the stability model developed by Obstfeld *et al.* (2010) can explain Asia's hunger for reserves.

Although numerous contributions have addressed the issue, there is no consensus with regard to the question why South and East Asian countries expanded their foreign currency reserves. Thus, it is worth investigating the motives for fast reserve accumulation in a wider context of historical and social change.

4) The Asian Regime Shift and Reserve Accumulation

The question to be answered is 'Why did East and Southeast Asian countries accumulate larger quantities of reserves than most other countries?'. A common answer is that the East and Southeast Asian financial crisis had shocked the entire region and caused states to follow a more precautionary reserve holding strategy. In addition, a *keeping up with the Joneses* effect spurred countries to imitate neighbors' reserve policies. Cheung and Qian (2009) found empirical evidence for the existence of a *keeping up with the Joneses* effect in Asia. However, even though the keeping up with the Joneses effect might be an important motive, other factors are as important. In this section, it is argued that fundamental changes in the cultural, political, and economic order occurred in Asia and made it necessary for countries to accumulate huge foreign currency reserves.

In order to analyze changes in the political, economic, and cultural order, Weber's heuristic of ideas as '*switchmen*' for economic and non-economic interests is used. Weber's heuristic will not be applied *directly* but in a modified form. Based on Weber, it is assumed that three types of orders influence economic decisions such as reserve holding: the cultural order, the political order, and the economic order. In this context, the term 'cultural' is not used in its customary sense. Rather, the cultural order is thought of as a set of ideas (norms, beliefs etc.) which influence institutional settings (political order) and economic actions (economic order). The cultural order consists of ideas which like 'switchmen' determine 'the tracks along which action [is] pushed by the dynamic of interest' (Weber 1946: 280, quoted from Kraemer 2013, p. 24). The political order and its institutions which legitimize economic and non-economic interests are based on and restricted by ideas (Schluchter 2008, p. 57). Ideas may be replaced by other ideas or some ideas become more influential than others. Due to the variability of the political order, the institutional setting is strongly influenced by political conflicts between more and less powerful groups advocating for the implementation of their political interests and their favored ideas. The political order aims to grant legitimacy to the political regime by conceding interests and favored ideas to influential groups. Economic interests, such as profits or utility maximization, but also status interests and ideas are determining the economic order. The legitimacy of the economic order and of economic behavior is based on their aim to pursue economic interests. No causality between ideas and interests is assumed; ideas and interests are interdependent. Ideas are *switchmen* for interests but interests are also *switchmen* for ideas.

Using the outlined heuristic, it becomes apparent that all three orders have changed significantly in East and Southeast Asia. Previous contributions overlooked important factors in this context. East and Southeast Asia, it is argued in this paper, have not just changed their reserve policies towards more precautionary holdings, but their entire social systems changed as well.

The East and Southeast Asian Development State

The *old 'Development State'* model was built around the ideas of anti-communism and inner stability. For some countries, it was also about breaking up Chinese minorities' economic advantages. Strong ties between bureaucracy, banks, and businesses dominated the economic order. However, bureaucracy was clearly in the leading position. Strong *Development States*, a centralized bureaucracy, authoritarian governments, heavy regulations, and the balancing of different groups' interests were the main ingredients of the political order.

All eight East and Southeast Asian countries in our focus (Taiwan, South Korea, Hong-Kong, Singapore, Thailand, Indonesia, Malaysia, Philippines) started their development in a situation of strong external challenges and internal weaknesses (Haggard 2004, p. 60). In addition to low wealth⁵, East and Southeast Asian countries faced hostility from neighboring countries. The entire region was a Cold War hotspot. According to Stubbs (2005), East and Southeast Asia's development cannot be understood unless wars – cold and hot ones – and their impact on societies, politics, and institutions are taken into account.

In addition to challenges from outside, several factors caused internal weaknesses in most of the Southeast and East Asian developing countries. The reasons for these internal weaknesses were numerous and diverse: a conflict between newcomers and the native population (Taiwan), a long and very bloody civil war which destroyed most of the infrastructure and led to a deeply divided society (Korea), damage left from the Second World War, an overflow of Chinese refugees and other challenges caused by China (Hong-Kong), major social differences because of a heterogeneous population (Singapore), or an overrepresented Chinese minority (Malaysia, Indonesia, and Thailand).

⁵ In 1950, Indonesia, South Korea, Thailand, and Taiwan had a GDP per capita similar to the one of Niger and Sudan. Malaysia was slightly richer with a GDP per capita similar to those of Djibouti and Senegal (Maddison 2006).

Anti-communism and inner stability became leading ideas. In Malaysia, Indonesia, and to a lesser extent in Thailand, these two ideas were accompanied by the idea of reducing Chinese minorities' economic influence. Fast economic growth was seen as the favorable strategy to face foreign and inner communist challenges (Stubbs 2009; Zhu 2002), increase domestic social and political stability (Wade 1990, p. 298; Kwon 1998, p. 54; Holliday 2000, p. 715), and end the economic dominance of the Chinese minority (Jomo and Chen 1997; Zhang 2003).

The so-called *Development State* model dominated the political order of Asian countries. In contrast to most other poor countries⁶, East Asia had weak societies and strong states (Haggard 1990; Stubbs 2009; Koo 1987). According to Migdal (1988, pp. 271ff.), a strong state is likely to exist if external forces support a strong government, if the country is under military pressure, if the basic conditions for an independent bureaucracy are given, and if there is skilled leadership. All those criteria were met in East and to a lesser extent in Southeast Asia. The USA and its Western allies had a great interest in strong centralist non-communist Asian states. Asian countries faced or at least perceived military pressure from communist neighbors. Japan's colonialism left the colonialist without strong *classes* (Aoki *et al.* 1997) but with well-established institutions (Wade 1990). The old landlord aristocracy was disempowered and the emerging industrial bourgeoisie was Japanese. After Japan's colonialism had ended and the Japanese bourgeoisie had fled, no strong class which could have challenged the government remained. Under English, Dutch, and US-American rule, the landlord class and the domestic bourgeoisie became less marginalized in Southeast Asia, therefore, there was less bureaucratic autonomy in those countries (Booth 1999; Jomo 2001). However, the influence of bureaucracy was still stronger than in typically weak developing states. High social status and political power made positions in the bureaucratic system attractive in Asian Developing Countries (Evans 1995).

Thus, there were no recruiting problems in this area. States were quite strong in East Asia while corruption, rent-seeking, and strong feudal classes survived in Southeast Asia's 'Ersatz-Capitalism' (Zhang 2003; Yoshihara 1988).

⁶ To a lesser extent this also holds true for Southeast Asian countries (Booth 1999, pp. 309f.)

Development States were typically ruled by authoritarian regimes (Woo-Cumings 1999; Wade 1990) with a Leninist organization style and followed a strict growth-fostering economic policy (Haggard 1990; Weiss 1995; Heo *et al.* 2008). Economic growth was achieved through an outward-looking economic policy and extremely high investment rates. Export was stimulated by exchange rate interventions and government support for export-orientated companies, for example with cheap loans (Wade 1990; Weiss 2005; Jomo and Chen 1997). Fostering of investment (see for example Wade 1990) was accompanied by a policy which strengthened domestic saving (Kwon 2007; Stiglitz and Uy 1996; Jomo 2001; Shixue 2003; Wade 1990). Because of high saving rates, countries remained financially self-sufficient despite heavy investment. Although there was financial self-sufficiency in East Asian countries, some Southeast Asian states (Malaysia, Thailand, Singapore) were much more open for capital inflows and foreign direct investments than others (Jomo K. S and Chen 1997).

The economic development was organized, monitored, and controlled by the state bureaucracy. In contrast to Western 'Market Rationality' Asia's 'Bureaucratic Capitalism' (Woo-Cumings 1997: 332), followed a 'Plant Rationality' (Johnson 1982; Hayashi 2010). Asia's bureaucracy was an 'embedded autonomous' one (Evans 1995) since it enjoyed a great degree of autonomy but had strong ties with private entrepreneurs and banks. The strong connection between bureaucracy and businesses fulfilled two functions: firstly, it informed the bureaucracy about the needs of businesses and secondly, it ensured that bourgeois interests were safeguarded in order to strengthen the loyalty of the bourgeoisie.

Laborers had been excluded from politics for a long time (Deyo 1989). Labor unions were repressed and strikes were forbidden in most countries (Chowdhury 2008: 675; Woo-Cumings 1997: 337; Deen Shabbir 2011: 430f.) but governments were aware of the danger to lose the proletariat to the ideas of communism and radical groups.

'Shared Growth' or 'Growth with Equality'⁷ and a 'Consensual Policy' (Chowdhury 2008) ensured laborers' loyalty or at least prevented open revolts. Steady real wage growth and *lifelong* employment preserved laborers' interests. Nevertheless, welfare programs were almost non-

⁷ The terms 'Shared Growth' and 'Growth with Equality' describe the relatively equal wealth distribution in East and Southeast Asian countries (Rowen 1998). However, compared to East Asian countries, there was less equality was in Southeast Asia.

existent in all Asian Development States because of conservative ruling parties, weak and repressed unions and left parties, and a general fear of the negative effects of higher taxes on international competitiveness (Haggard and Kaufman 2008). The idea of welfare as a social right was underdeveloped (Goodman and White 1998; Holliday 2000) and most existing welfare programs followed the fund insurance principle. The only exception in most Asian developing countries were educational programs for laborers which enabled the advancement of workers and fostered growth even as growing real wage rates destructed competitive advantages (Stevenson 1998, p. 147; Haggard and Kaufman 2008).

State dominance over the heavily regulated financial markets was the strongest tool (Woo-Cumings 1999, pp. 10ff.) for the implementation of state-led growth. By determining which business gets how much capital at what interest rate, states were able to direct the economic development. In particular, the heavy industry was fostered because of its importance for possible wars against the communist enemies. Banks – state-owned or private – were subject to strict regulations and were forced to concentrate on long-term investments. However, protection from foreign competitors and domestic newcomers made banking a highly profitable business (Stiglitz and Uy 1996). Strong ties between entrepreneurs and banks lowered risks and transaction costs and increased long-term investments (Wade 2000). Capital inflows and outflows were heavily regulated or almost forbidden. Thus, they were low in most East Asian countries, except for Southeast Asia which relied more on foreign capital. Due to very high saving rates and a lack of investment alternatives, authorities were well-endowed with investable capital. Low interest rates and the government's will to promote growth led to unhealthily indebted companies.

High *Shared Growth* fostered social integration (Holliday 2000) and the consensual policy (Chowdhury 2008) succeed in the creation of *One National Interest* which brought about legitimacy of governments (Aoki *et al.* 1997, Hayashi 2010, p. 53).

Huge current account surpluses vis-a-vis Western countries – in particular vis-a-vis the USA – and anti-liberal social, economic, and financial market policies stood in sharp opposition to ideas of good policies promoted by Western countries and their institutions. Nevertheless, the Cold War ensured the alliance of Western countries. Ultimately, military policies and geostrategic goals were more important in Western countries during the Cold War period than economic goals.

Thus, the ideas of anti-communism and inner stability dominated the cultural order. In some countries, also the idea of abolishing economic advantages of Chinese minorities was important in this context. The economic order was characterized by strong ties between bureaucracy, banks, and businesses. However, bureaucracy was the leading force. Privileges and easy credits for sectors with a lot of exports turned the industry into the dominant sector in most Asian countries. Fast growth, protection against foreign competitors, and export promotion ensured relatively high profits for companies and banks. Strict regulations of the banking sector and the labor market and bureaucracies' dominance of the entire economy created an environment of stable long-term relations between labor, bureaucracy, banks, and entrepreneurs. The political order was dominated by strong *Development States*, a centralized bureaucracy, authoritarian governments, strong regulations, and the balancing of different interests. Due to many factors, such as small and strictly regulated capital flows, financial autarky, strong relations between banks and entrepreneurs, strictly regulated financial markets, manageable imports, and authoritarian long-term governments, there was no need to hoard huge amounts of foreign currency reserves. However, changing ideas and interests of influential social groups increasingly challenged the East and Southeast Asian *Development State* model.

The Destruction of the East Asian Development Model

The emergence of a strong middle class, the empowerment of workers, changing interests of domestic businesses, alliances with the West as well as the disappearance of anti-communism as leading paradigm contributed to the destruction of the old *Development State* paradigm. Unfortunately, no new idea was immediately at hand.

In the 1980s and 1990s, internal and external upheavals challenged the Asian development model (Wong 2004, Stubbs 2009). The development model created its own criticism by generating social groups *hostile* to the underling model. The expanding middle class increasingly demanded more social security and political liberalism (Lee 1991; Evans 1995, p. 229; see also Dosch 2008). Some members of society – in particular businessmen – demanded the opening of capital markets for easier investment (Zhang 2003: 131; Haggard 2004: 73 f.; Jomo 2001: 11) and consumption credit. Entrepreneurs expected a facilitation of financing from deregulation. Demanding *cheaper* consumer credits, mortgages, and more profitable investment opportunities, private middle-class households supported the request of businessmen for more open financial markets. Losing their

strongest tool to influence businesses, deregulation of financial markets diminished states' power significantly. Entrepreneurs which were strengthened by growth became less willing to subordinate themselves to bureaucrats. Well-educated laborers started to organize strikes and labor struggles to lend weight to their demands. Homecoming students brought new ideas to the countries. As bureaucracy kept losing legitimacy and competition of private businesses for the best and the brightest increased, a career in civil service became less interesting for highly skilled people (Stubbs 2009; Evans 1995).

Most importantly, as the Cold War ended, the idea of anti-communism ceased to exist. Moreover, the *blind* support of the West stopped. Cohesion at all costs was no longer essential for survival and social conflicts were no longer relevant for defense policies. As long as centralism, mercantilism, protectionism, and authoritarianism seemed to be necessary for fighting communism, Western countries – in particular the USA – tolerated Asia's *anti-liberal* economic and social policies. After communist threats had ceased to exist, Western countries and institutions demanded from East and Southeast Asian countries to adopt their political and economic ideas. Western countries expected East and Southeast Asian countries to become more democratic and to adopt human rights. Most importantly, however, Western countries insisted on ending mercantilism and on opening up markets for foreign products and capital (Stubbs 2009, pp. 9ff.). An increase in financial openness was the most important demand of the USA and several institutions such as the IMF and the World Bank (Deen 2011; Wong 2004; Fisher 1997).

Southeast Asian countries saw multiple crises in the 1980s which forced them to open up financial markets (Ariff and Khalid 2005). The financial crisis shattered the domestic anti-(financial-) liberalization coalitions, provided domestic and foreign liberalization advocates with strong arguments and forced governments to stimulate growth – quite often by liberalizing financial markets. South Korea partly adopted financial market liberalization in the 1980s.

However, it remained relatively financially isolated until it opened up in the mid-1990s due to its request to join the OECD (Jomo 2005). Singapore became the region's financial hub after strong deregulations in the early 1980s (Ariff and Khalid 2005). By the mid-1990s, all East and Southeast Asian countries, except for Taiwan, had deregulated their financial markets. Unfortunately, in most cases, financial liberalization was not accompanied by financial market supervision (Glick 1999, p. 45; Furman and Stiglitz 1998; Lee 2000). Southeast Asia with its relatively open financial markets

and fast growth attracted a lot of foreign capital. Thanks to steady capital inflow, Southeast Asia entered a growth era which lasted for more than ten years and was described as '*The East Asian Miracle*' by the World Bank in 1993. In the mid-1990s, capital inflows to East and Southeast Asia became crazy.

To sum up, East and Southeast Asia saw a radical change in ideas and interests. The idea of anti-communism vanished and as a consequence, discussions about new ideas emerged. New groups such as the middle class and workers gained influence and increasingly demanded attention. Interests, for example those of entrepreneurs, changed. Also the requests of Western alliances changed as anti-communism disappeared. Ultimately, East and Southeast Asia experienced a creeping disintegration of its system of orders since it took time for a new system of orders to emerge.

In the mid-1990s, the Asian Development States disappeared after a long-lasting phase of destruction. Asia's crisis was the deathblow to the system. Causes and consequences of the crisis are well-known and have been discussed extensively in this journal and elsewhere. When several Asian countries ran out of foreign currency reserves and lost the 'war against currency speculations,' the result was one of the worst financial crises ever seen. Apart from the economic consequences of sharp GDP and currency value drops, the crisis strongly affected the social system. For the first time in their economic development, some countries faced high unemployment and the displacement of their old political elites. Turmoils, street fights, social insecurity, and inferiority complexes were traumatic for the region. The financial crisis marked the end of the era of the Asian development model.

As creditor of last resort, the IMF intervened in Thailand, Indonesia, and South Korea. The IMF's support was accompanied by a lot of problematic requests. Despite of the high unemployment and protests, the IMF demanded further cuts to government spending and interest rate increases.

If there ever was a tender plant of economic recovery, the IMF's crisis management killed it. Financial market liberalization (Ariff and Khalid 2005), financial account liberalization, (Weisbrot 2007) and banking liberalization increased under the IMF's supervision. The IMF's drastic remedy was heavily criticized by various actors of all political and economic orientations (Pang 2000, p.

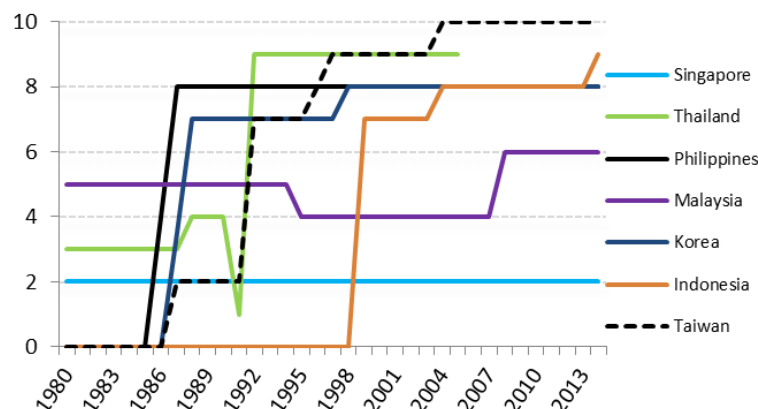
578). Even Milton Friedman criticized the fund (Bullard *et al.* 1998) which conveyed the feeling of being taken back to colonial times for many countries (Rajan 2010: 13).

The New Paradigm

After the most severe financial crisis since the Great Depression had passed, countries had to face the new situation and find ways to proceed. It was obvious that countries hit hardest by the crisis not only needed some adjustment but a new paradigm in order to be able to address new ideas and interests. The reintroduction of the Development State model was tempting since it had worked well for several decades. However, this would have meant to put the genie back in the bottle. The reintroduction of the Development State model would have implied the abolishment of civil societies and unions and businesses' right to voice their opinions. Moreover, it would have implied the end of rampant corruption, increases in bureaucracies' powers, implementation of strict financial market controls, and the reinstatement of authoritarian regimes.

Ultimately, a renaissance of the strong Asian Development States was no *real* alternative (Deen Shabbir 2011) since ideas and interests had changed significantly in the meantime. As civil societies grew stronger and interests of the Western alliance changed, the idea of political liberalism gained influence and new authoritarian regimes failed to establish themselves. As Figure 6 shows, democratization increased in most countries. Singapore and Malaysia are exceptions and Thailand was excluded from the analysis after 2005 because of its unclear political situation.

Figure 6: Democratization



Source: CSP Polity IV database.
 Note: For Hong-Kong no reliable data was found.

Another option, the mere reduction of financial liberalism and the maintenance of social and political openness was also not deemed suitable.

Closed financial markets were accompanied by restrictive rules on saving and investment and were dominated by large national banks which were close to big businesses and the government. Demand for private loans, the bankruptcy of many banks, harsh criticism regarding the strong ties between banks and enterprises, preceding liberalization and the demand by Western governments and institutions for further liberalization made a reversal of financial liberalization almost impossible. However, following the general trend, East and Southeast Asian states did not introduce strict financial regulation but built up a buffer against financial instability by accumulating huge amounts of reserves (Aizenman 2008, p. 490). Instead of closing and regulating financial markets again, deregulation, deepening, and in particular opening of financial markets continued. In the first years after the crisis, the IMF pushed for further opening of capital markets (Ariff and Khalid 2005; Weisbrot 2007). However, financial liberalization also continued when the IMF became less influential.

Figure 7A: Financial Liberalization

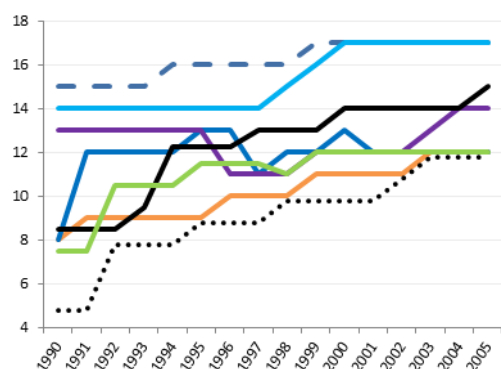
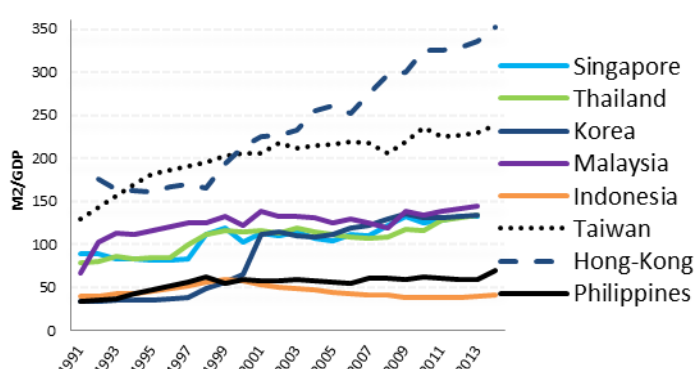


Figure 7B: Financial Deepening



Source: World Bank, database provided by Abdul Abiad, Enrica Detragiache, and Thierry Tresselt, Thomson Reuters; Own Calculation.

Figure 7A shows that liberalization of financial markets increased steadily in all East and Southeast Asian countries. Nevertheless, the degree of financial market liberalization varies widely between countries. Also financial deepening increased in most countries as the M2 per GDP rate shows in figure 7B. Hence, political but in particular financial liberalism became a new leading idea.

Although financial markets were opened up and liberalized, societies still suffered from the collective trauma of Asia's financial crisis. The crisis caught many East and Southeast Asian societies off guard. People were socialist in the environment of lifelong employment, strong

families, and deep ties between workers, businesses, and bureaucracy. It was a system that prioritized safety and stability. Wages did not rise or drop fast, but increased slowly and steadily. People did not get 'hired and fired,' instead they often experienced lifelong employment. Interests and profits generated by investment were low but people's savings were safe. The entire system of safety finally collapsed within one year of the financial crisis. People were by no means prepared for high unemployment, economic uncertainty, sharply falling real wages, and galloping inflation. However, for many people all of this was still better than the policies of the IMF.

At the popular level, the currency devaluation and demand-restricting austerity measures of the IMF (laxer labour laws in South Korea, higher petrol prices in Indonesia, new bankruptcy laws in Thailand) have led to riots in all three countries. (Higgott 1998, p. 338).

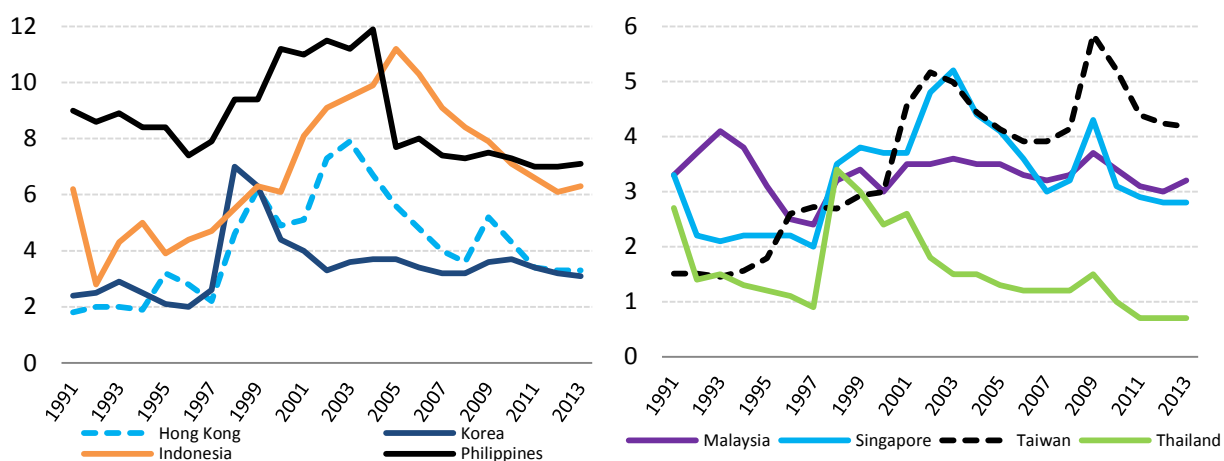
In a region where national success and national self-esteem are prioritized and where shipwrecks are perceived as national and social disasters, a financial crisis has severe consequences for the collective identity. Because of the Asian financial crisis, Asian societies had the impression that they were completely and utterly at Western mercy and experienced a deep collective humiliation. When the IMF stepped in, the Korean president stated that Korea had lost its economic sovereignty and the media labeled the day as 'second day of national disgrace (che iui kukchiil)' (Sharma 2003: 182).

Similarly to Korea, the financial crisis also led to a deep identity crisis in Indonesia. Resentment toward the IMF and the president who had 'humiliated the proud nation' and 'restored Western colonialism' was accompanied by deep national shame and feelings of inferiority (Budianta 2007). Asian politicians responded to accusations of *Western* 'robbery' and 'new-imperialism' by introducing 'popular nationalism' (ibid., p. 347). Korea, Thailand, and Indonesia repaid their IMF loans before their due-dates (Itō 2007) in order to get rid of the unwanted guest. Even today, distrust and hostility towards the IMF and similar institutions continue to exist. Countries make every effort to avoid becoming dependent on foreign aid again. The Korean vice minister for finance Huh summed this up by stating: 'We will never, ever, turn back to the IMF in the future. We suffered too much due to the IMF's policy' (Allen and Hong 2011, pp. 12f.). The Asian crisis was painful and dangerous for all *important* social groups. Workers lost their jobs, businesses had to close down, and governments were overthrown. Hence, the avoidance of any further crisis was a priority for all social groups. As a result of this painful crisis, a new idea emerged: financial crises

have to be avoided at all costs. This idea is closely related to the more general ideas of sovereignty, stability, and harmony which Stubbs (2008) identified as important for Asia.

Fighting recession and stimulating growth were again the main economic goals as high unemployment caused a serious problem for society. However, for the most part, there was no significant expansion of the social welfare system (Haggard and Kaufman 2008). Similarly to the old paradigm, the idea of security through employment was also central for the new paradigm. As figure 8 shows, unemployment rates increased (with time lags) after the Asian financial crisis, but have decreased significantly since the mid-2000s in most countries.

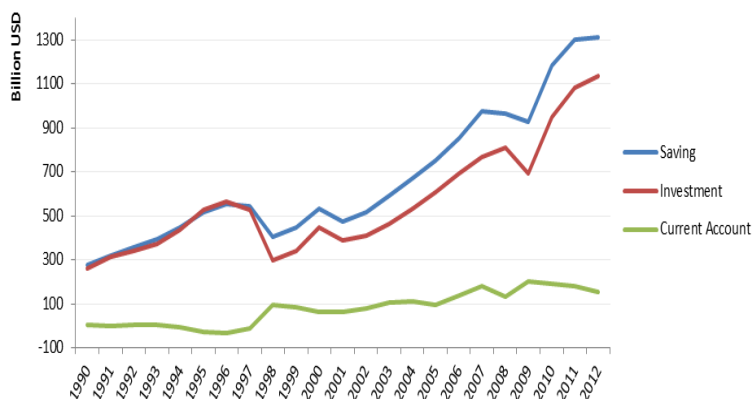
Figure 8: Unemployment



Source: World Bank, Thomson Reuters.

Extremely high saving rates (between 50% and 30% of GDP) prevented consumption-led growth. A vast amount of research literature has discussed Asia's strong preference for saving. According to research conducted so far, Asian saving seems to be different, perhaps because of institutional settings, demographic change, culture or a combination of these factors (see Park and Shin 2009). In pre-crisis times, high savings were accompanied by high investment rates. There was a balance between savings and investments in the entire region before the Asian financial crisis. Various economists agree that *over-investment* was one of the reasons for the Asian crisis. Thus, it was not surprising that investment rates fell short of the *unsustainable* pre-crisis rates. Nowadays, investment rates are lower than saving rates in all East and Southeast Asian countries. Figure 7 shows the difference between savings and investments for the entire region.

Figure 7: Investments, Savings, and the Current Account



Source: World Bank and IMF World Economic Outlook.

In pre-crisis times, the national budget was relatively balanced, private households saved substantial shares of their income while entrepreneurs invested heavily. Later on, this changed. Private households still saved but private non-financial corporations in many countries such as Taiwan, Korea, Thailand or the Philippines (IMF 2009) became net savers. Only the government would have been able to boost consumption by deficit spending, but a large deficit is incompatible with the idea of avoiding further crises at any cost. However, domestic demand (private and public) was too low to ensure high employment rates. One way to solve the problem of employment was the pursuit of export-led growth. Figure 7 shows that the current account surplus of the entire region has grown substantially since the early 2000s. The current account was almost balanced before the crisis in the entire region. Since then it has always been positive and still increases. Thus, fighting unemployment through export-led growth was the economic policy idea which satisfied the interests of many social groups. It provided jobs for workers and sales markets for businesses.

Hence, the new paradigm was built around the ideas of *more* (financial) liberalism, high employment, and the unconditional avoidance of any further crisis. In the political order, there was a trend toward liberalism and democracy. This included the formation of new parties, 'free' elections and the legalization of unions and other non-parliamentary movements. The economic order became more defined which meant that the political influence declined and that competition (domestic and international) increased sharply. Due to increasing competition and to increasing political pressure, many companies became more export-orientated.

I have outlined above that there was no need for hoarding huge reserves during times of the 'old paradigm.' This has changed radically. It seems that hoarding huge amounts of reserves was the *only* way to harmonize and coordinate the cultural, political, and economic order of the new paradigm. Political liberalization and the weakening of the deep ties between businesses and politics reduced governments' abilities to exert direct influence on the economy. For the legitimatization of the governments it was crucial to avoid another period of high unemployment, the loss of national sovereignty, and another experience of collective humiliation. The avoidance of any further crisis was particularly challenging given the 'natural' contradiction between open, deep, and underdeveloped financial markets and the unconditional avoidance of any crisis. One way to overcome this contradiction was to accumulate massive reserves to protect the financial market. Hence, hoarding reserves was a strategy allowing for the combination of the idea of (financial and political) liberalism and the imperative of the unconditional avoidance of any further financial crisis. Asian countries are frequently being accused of undervaluing their exchange rates in order to boost competitiveness. It is certainly true that equilibrium exchange rates are difficult to determine. However, as export-led growth was the main strategy to realize the idea of safety via employment, suppressed currency appreciation was required to foster foreign competitiveness. Sterilizing export gains in foreign currency reserves took appreciation pressure from domestic currencies. Hence, accumulating reserves is a 'natural' byproduct of currency account surpluses and the policy of 'undervaluing' exchange rates.

Asia's massive foreign reserve accumulation was caused by its unique cultural, political, and economic order. In no other region, fast financial market liberalization was accompanied by such a strong fear of a further financial crisis. In no other region, export-led growth was as important for 'full employment' and social cohesion as it was in most East and Southeast Asian countries.

The export-led growth strategy requires investing export gains abroad and the unconditional avoidance of any further crisis necessitates the investment in very liquid foreign assets. No other asset is more liquid than US Treasuries. Ultimately, many factors (and particularly their interplay) led to East and Southeast Asia's massive reserve accumulation. Among them are the idea of liberalism in combination with the imperative to avoid any further financial crisis. Also the idea of 'full employment' played an important role. Although an important political aim, realizing 'full employment' became increasingly more difficult as direct political influence on the economy

decreased. In addition to these two factors, the strong focus on exports in Asian countries is also important in explaining the massive reserve accumulation of East and Southeast Asian countries. From an Asian perspective, the answer to the question 'How much reserve is too much?' is: 'The more the better.' As Schularick (2009: 6) aptly points out: 'It is clear to policy-makers from Buenos Aires to Budapest and Bangkok that there is no such thing as excessive reserves in a world of volatile capital flows'.

5 Conclusion

Optimal policy models and rules of thumb failed to explain Asia's fast reserve accumulation. Those models and rules solely focus on a few dimensions of reserve holding and ignore the wider cultural, political, and economic contexts which influence reserve hoarding decisions. In this paper, it was argued that a fundamental paradigm shift caused East and Southeast Asian countries to accumulate huge foreign currency reserves. The new paradigm is built around the ideas of *more* (in particular financial) liberalism, full employment, and the unconditional avoidance of any further financial crisis. Reserve accumulation was not of primary importance in the former Development State paradigm. It was not necessary because financial markets were closed and strictly regulated, imports were manageable, and strong ties between businesses, banks, and bureaucracy created stable long-term market relations. The different ideas of the new paradigm, however, can only be implemented if huge foreign currency reserves are held. Open and liberalized financial markets, the unconditional avoidance of any further financial crisis, and export-led growth can only be achieved through hoarding large foreign currency reserves.

References

- Aizenman, J. (2008) 'Large hoarding of international reserves and the emerging global economic architecture', *The Manchester School* 76(5), 487–503.
- Aizenman, J. and Lee, J. (2007) 'International Reserves: Precautionary Versus Mercantilist Views, Theory and Evidence', *Open Economies Review* 18(2), 191–214.
- Aizenman, J. and Lee, J. (2008) 'Financial versus monetary mercantilism: Long-run view of large international reserves hoarding', *The World Economy* 31(5), 593–611.
- Allen, F. and Hong, J. Y. (2011) 'Why are there large foreign exchange reserves?: The Case of South Korea', *Korean Social Science Journal* 38(2), 1–33.

- Aoki, M., Kim, H.-K. and Okuno-Fujiwara, M. (1997) *The role of government in East Asian economic development: Comparative institutional analysis*, Oxford, New York: Oxford University Press.
- Ariff, M. and Khalid, A. M. (2005) *Liberalization and growth in Asia: 21st century challenges*, Cheltenham: Elgar.
- Bar-Ilan, A. and Marion, N. P. (2009) 'A Macroeconomic Perspective on Reserve Accumulation', *Review of International Economics* 17(4), 802–823.
- Bastourre, D., Carrera, J. and Ibarlucia, J. (2009) 'What is driving reserve accumulation?: A dynamic panel data approach', *Review of International Economics* 17(4), 861–877.
- Beaufort Wijnholds, J. Onno de and Kapteyn, A. (2001) *Reserve adequacy in emerging market economies*, Washington, DC: IMF.
- Beltran, D. O., Kretschmer, M., Marquez, J. and Thomas, C. P. (2013) 'Foreign holdings of U.S. Treasuries and U.S. Treasury yields', *Journal of international money and finance* 32, 1120–1143.
- Bernanke, B. S. (2005) *The Global Saving Glut and the U.S. Current Account Deficit*, Richmond, Surrey.
- Bernanke, B. S. (2007) *Global Imbalances: Recent Developments and Prospects*, Berlin.
- Bernanke, B. S. (2010) *Monetary Policy and the Housing Bubble*, Atlanta, Georgia.
- Bertaut, C., DeMarco, L. P., Kamin, S. and Tryon, R. (2012) 'ABS inflows to the United States and the global financial crisis', *Journal of International Economics* 88(2), 219–234.
- Booth, A. (1999) 'Initial conditions and miraculous growth: Why is South East Asia different from Taiwan and South Korea?', *World Development* 27(2), 301–321.
- Budianta, M., (2007) Discourse of cultural identity in Indonesia during the 1997-1998 monetary crisis, in K-H. Chen and B.H. Chua (eds) *The Inter-Asia cultural studies reader*, London: Routledge, pp 507-526.
- Bullard, N., Bello, W. and Mallhotra, K. (1998) 'Taming the tigers: The IMF and the Asian crisis', *Third World Quarterly Journal of Emerging Areas* 19(3), 505–555.
- Caballero, R. J., Farhi, E. and Gourinchas, P.-O. (2008) 'An equilibrium model of "global imbalances" and low interest rates', *The American Economic Review* 98(1), 358–393.
- Caballero, R. J. and Panageas, S. (2007) 'A global equilibrium model of sudden stops and external liquidity management', *Massachusetts Institute of Technology, Dept. of Economics Working Paper* 08-05.
- Calvo, G. A. (1996) 'Capital flows and macroeconomic management: Tequila lessons', *Federal Reserve Bank of San Francisco Working Paper* 96-02.
- Calvo, G. A., Izquierdo, A. and Mejía, L.-F. (2004) 'On the empirics of sudden stops: The relevance of balance-sheet effects', *NBER Working Paper* 10520.
- Chandrasekhar, C. P. and Ghosh, J. (2011) 'Financial structures, regulation and interlinkages: Developing Asia in the context of global crises', *AUGUR Working Paper*.
- Cheung, Y.-W. and Ito, H. (2009) 'A Cross-Country Empirical Analysis of International Reserves', *International Economic Journal* 23(4), 447–481.
- Cheung, Y.-W. and Qian, X. (2009) 'Hoarding of International Reserves: Mrs Machlup's Wardrobe and the Joneses', *Review of International Economics* 17(4), 824–843.
- Chowdhury, A. (2008) 'Labor Market Policies as Instruments of Industry Policy: What Can Europe Learn from Southeast Asia?', *American Journal of Economics and Sociology* 67(4), 661–682.
- Deen, S. E. (2011) 'The development state: An illusion in contemporary times', *African Journal of Political Science and International Relations* 5(9), 424–436.
- Delatte, A.-L. and Fouquau, J. (2012) 'What Drove the Massive Hoarding of International Reserves in Emerging Economies? A Time-varying Approach', *Review of International Economics* 20(1), 164–176.

- Deyo, F. C. (1989) 'Labor and Development Policy in East Asia', *Annals of the American Academy of Political and Social Science* 505, 152–161.
- Dooley, M. P., Folkerts-Landau, D. and Garber, P. (2004) 'The revived Bretton Woods system', *International Journal of Finance & Economics* 9(4), 307–313.
- Dosch, J. (2008) 'ASEAN's reluctant liberal turn and the thorny road to democracy promotion', *The Pacific Review* 21(4), 527–545.
- Evans, P. B. (1995) *Embedded autonomy: States and industrial transformation*, Princeton: Princeton University Press.
- Feldstein, M. (1999) 'Self-protection for emerging market economies', *NBER Working Paper* 6907.
- Ferguson, N. and Schularick, M. (2011) 'The end of Chimerica', *International Finance* 14(1), 1–26.
- Fisher (1997) 'IMF: Capital Account Liberalization', *IMF Seminar*.
- Furman, J. and Stiglitz, J. E. (1998) 'Economic crises: Evidence and insights from East Asia', *Brookings Papers on Economic Activity* (2), 1-114, 128-135.
- Ghosh, A. R., Ostry, J. D. and Tsangarides, C. G. (2012) 'Shifting motives: Explaining the buildup in official reserves in emerging markets since the 1980s', *IMF Working Paper* WP/12/34.
- Glick, R. (1999) 'Thoughts on the Origins of the Asian Crisis: Impulses and Propagation Mechanisms', in W. C. Hunter, G. G. Kaufman and T. H. Krueger (eds) *The Asian financial crisis: Origins, implications, and solutions*, Boston: Kluwer Academic, pp. 33–63.
- Goodman, R. and White, G. (1998) 'Welfare Orientalism and the Search for an East Asian Welfare Model', in R. Goodman, G. White and H.-j. Kwon (eds) *The East Asian welfare model: Welfare orientalism and the state*, London: Routledge, pp. 3–24.
- Greenspan, A. (2010) *Testimony of Alan Greenspan*.
- Greenspan, A., Mankiw, N. G. and Stein, J. C. (2010) 'The Crisis [with Comments and Discussion]', *Brookings Papers on Economic Activity* Spring, 201–261.
- Haggard, S. (1990) *Pathways from the periphery: The politics of growth in the newly industrializing countries*, Ithaca: Cornell University Press.
- Haggard, S. (2004) 'Institutions and Growth in East Asia', *Studies in Comparative International Development* 38(4), 53–81.
- Haggard, S. and Kaufman, R. R. (2008) *Development, democracy, and welfare states: Latin America, East Asia, and Eastern Europe*, Princeton: Princeton University Press.
- Hayashi, S. (2010) 'The developmental state in the era of globalization: Beyond the Northeast Asian model of political economy', *The Pacific Review* 23(1), 45–69.
- Heo, U., Jeon, H., Kim, H. and Kim, O. (2008). The political economy of South Korea: Economic growth, democratization, and financial crisis; accessed at <http://digitalcommons.law.umaryland.edu/mscas/>, 23 September 2015.
- Higgott, R. (1998) 'The Asian economic crisis: A study in the politics of resentment', *New Political Economy* 3(3), 333–356.
- Holliday, I. (2000) 'Productivist Welfare Capitalism: Social Policy in East Asia', *Political Studies* 48, 706–723.
- IMF (2009) *Regional Economic Outlook, October 2009: Asia and Pacific: Building a Sustained Recovery*, Washington, D.C.: International Monetary Fund.
- IMF (2011) 'Assessing Reserve Adequacy', *IMF Policy Papers*.
- Itō, T. (2007) 'Asian currency crisis and the International Monetary Fund, 10 years later: Overview', *Asian Economic Policy Review* 2(1), 16–49.

- Jeanne, O. (2007) 'International Reserves in Emerging Market Countries: Too Much of a Good Thing?', *Brookings Papers on Economic Activity* (1), 1–55.
- Jeanne, O. and Rancière, R. (2011) 'The Optimal Level of International Reserves For Emerging Market Countries: A New Formula and Some Applications', *The Economic Journal* 121(555), 905–930.
- Johnson, C. A. (1982) *MITI and the Japanese miracle: The growth of industrial policy, 1925 - 1975*, Stanford: Stanford Univ. Press.
- Jomo, K. S. (2001) 'Growth after the Asian crisis: What remains of the East Asian model?', *G-24 Discussion Paper Series* No. 10.
- Jomo, K. S. (2005) *Whither the East Asian Flying Geese?: Prospects for Regional Integration in East Asia*, London School of Economics.
- Jomo K. S and Chen, Y.-C. (1997) *Southeast Asia's misunderstood miracle: Industrial policy and economic development in Thailand, Malaysia and Indonesia*, Boulder: Westview Press.
- Kaminsky, G. L., Lizondo, J. S. and Reinhart, C. M. (1998) 'Leading indicators of currency crises', *IMF Staff Papers* 48(1), 1–48.
- Koo, H. (1987) 'The Interplay of State, Social Class, and World System in East Asian Development: The Case of South Korea and Taiwan', in F. C. Deyo (ed) *The political economy of the new Asian industrialism*, Ithaca: Cornell University Press, pp. 165–181.
- Kraemer, K. (2013) 'Imitation and Deviation. Decisions in Financial Markets Under Extreme Uncertainty', *Economic Sociology: The European Electronic Newsletter* 14(3), 21–27.
- Kwon, H.-j. (1998) 'Democracy and the politics of social welfare: a comparative analysis of welfare systems in East Asia', in R. Goodman, G. White and H.-j. Kwon (eds) *The East Asian welfare model: Welfare orientalism and the state*, London: Routledge, pp. 27–74.
- Kwon, K. (2007) 'Economic Development in East Asia and a Critique of the Post-Confucian Thesis', *Theory and Society* 36(1), 55–83.
- Lee, S.-J. (1991) 'Political liberalization and economic development in South Korea', *Korea Journal of Population and Development* 20(1), 77–100.
- Lee, Y.-h. (2000) 'The failure of the weak state in economic liberalization: liberalization, democratization and the financial crisis in South Korea', *The Pacific Review* 13(1), 115–131.
- Maddison, A. (2006) *The world economy*, Repr., Paris: OECD.
- Migdal, J. S. (1988) *Strong societies and weak states: State-society relations and state capabilities in the Third World*, Princeton: Princeton University Press.
- Obstfeld, M. and Rogoff, K. S. (2009) 'Global imbalances and the financial crisis: Products of common causes', *CEPR Discussion Paper* 7606.
- Obstfeld, M., Shambaugh, J. C. and Taylor, A. M. (2010) 'Financial Stability, the Trilemma, and International Reserves', *American Economic Journal: Macroeconomics* 2(2), 57–94.
- Palley, T. I. (2007) 'The fallacy of the revised Bretton Woods hypothesis: Why today's global financial systems is unsustainable and suggestions for a replacement', *International Journal of Political Economy a Journal of Translations* 36(4), 36–52.
- Pang, E.-S. (2000) 'The Financial Crisis of 1997–98 and the End of the Asian Developmental State', *Contemporary Southeast Asia* 22(3), 570–593.
- Park, D. and Shin, K. (2009) 'Saving, investment, and current account surplus in developing Asia', *ADB Working Paper Series* 158.
- Rajan, R. G. (2010) *Fault lines: How hidden fractures still threaten the world economy*, Princeton: Princeton Univ. Press.

- Rodrik, D. and Velasco, A. (1999) 'Short-term capital flows', *NBER Working Paper* 7364.
- Rothenberg, A. D. and Warnock, F. E. (2011) 'Sudden Flight and True Sudden Stops', *Review of International Economics* 19(3), 509–524.
- Rowen, H. S. (ed) (1998) *Behind East Asian growth: The political and social foundations of prosperity*, London: Routledge.
- Schluchter, W. (2008) 'Interessen, Ideen, Institutionen. Schlüsselbegriffe einer an Max Weber orientierten Soziologie' [Interests, Ideas and Institutions. Key concepts of an Max Weber passed Sociology], in S. Sigmund, A. Gert, B. Agathe and S. Mateusz (eds) *Soziale Konstellation und historische Perspektive: Festschrift für M. Rainer Lepsius [Social Constellation and Historical Perspective: Festschrift for M. Rainer Lepsius]*, Wiesbaden: VS Verlag für Sozialwissenschaften.
- Schularick, M. (2009) 'Touching the brakes after the crash: A historical view of reserve accumulation and financial integration', *Global Economic Journal* 9(4), 1–11.
- Shixue, J. (2003) 'Cultural Factors and Economic Performance in East Asia: In East Asia and Latin America', *LABEA Working Papers*.
- Sigmund, S. (2014) 'Begriffe: Ideen und Interessen' [Concept: Ideas and Interests], in H.-P. Müller and S. Sigmund (eds) *Max Weber-Handbuch: Leben, Werk, Wirkung [Max Weber-Handbook: Life, Works and Contributions]*, Stuttgart: Verlag J.B. Metzler, pp. 66–69.
- Steiner, A. (2014) 'Reserve accumulation and financial crises: From individual protection to systemic risk', *European Economic Review* 70, 126–144.
- Stevenson, H. W. (1998) 'Human Capital: How the East Excels.', in H. S. Rowen (ed) *Behind East Asian growth: The political and social foundations of prosperity*, London: Routledge, pp. 147–164.
- Stiglitz, J. E. and Uy, M. (1996) 'Financial Markets, Public Policy, and the East Asian Miracle', *The World Bank Research Observer* 11(2), 249–276.
- Stubbs, R. (2008) 'The ASEAN alternative?: Ideas, institutions and the challenge to 'global' governance', *The Pacific Review* 21(4), 451–468.
- Stubbs, R. (2009) 'What ever happened to the East Asian Developmental State? The unfolding debate', *The Pacific Review* 22(1), 1–22.
- Taylor, A. M. (2013) 'The Future of International Liquidity and the Role of China', *Journal of Applied Corporate Finance* 25(2), 86–94.
- Wade, R. (1990) *Governing the market: Economic theory and the role of government in East Asian industrialization*, Princeton: Princeton Univ. Pr.
- Wade, R. (2000) 'Wheels Within Wheels: Rethinking the Asian Crisis and the Asian Model', *Annual Review of Political Science* 3(1), 85–115.
- Warnock, F. E. and Warnock, V. C. (2009) 'International capital flows and US interest rates', *Journal of International Money and Finance* 28(6), 903–919.
- Weisbrot, M. (2007) 'Ten Years After: The Lasting Impact of the Asian Financial Crisis', in J. K. Sundaram and B. Muchhala (eds) *Ten years after: Revisiting the Asian financial crisis*, Washington, DC: Woodrow Wilson Internat. Center for Scholars Asia Program, pp. 105–118.
- Weiss, J. (2005) 'Export growth and industrial policy: Lessons from the East Asian miracle experience', *ADB Discussion Paper* 26.
- Weiss, L. (1995) 'Governed interdependence: Rethinking the government-business relationship in East Asia', *The Pacific Review* 8(4), 589–616.
- Wong, J. (2004) 'The Adaptive Developmental State in East Asia', *Journal of East Asian Studies* 4(3), 345–362.

- Woo-Cumings, M. (ed) (1999) *The developmental state*, Ithaca: Cornell University Press.
- Yoshihara, K. (1988) *The rise of ersatz capitalism in South-East Asia*, Singapore: Oxford University Press.
- Zhang, Y. (2003) *Pacific Asia: The politics of development*, London: Routledge.
- Zhu, T. (2002) 'Developmental states and threat perceptions in Northeast Asia', *Conflict, Security & Development* 2(01), 5–29.