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# The overall context of the Asian financial crisis and its interaction with domestic property markets

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## **Chapter One**

### **Introduction - The Overall Context of the Asian Financial Crisis and its Interaction with Domestic Property Markets.**

**Natacha AVELINE**

In mid-summer 1997, East Asian countries experienced a crisis of dramatic magnitude that threatened to erase half a century of economic progress. Since then, most Asian economies have been on the road to recovery, yet the financial storm continues to stimulate extensive research analysis. Although there has been little agreement on how to characterize the crisis, a broad consensus has emerged on the major structural differences across Asia, as well as on the compounded nature of this event.

This so-called ‘21st century-type’ financial crisis was undoubtedly not a simple phenomenon, but rather a combination of currency, banking, economic, and confidence crises, as well as asset deflation. The first four issues – not to mention political issues – have been widely discussed and written about extensively. Nevertheless, there has been very little focus on the last phenomenon: asset deflation.

Yet the movement of asset values, especially property assets, has played a growing role in financial crises since 1990. Simultaneous property booms occurred in most OECD countries in the late 1980s, including Japan. This phenomenon was followed, a few years later, by a reversal of property markets of a similar synchronous nature around the world. In many countries, these boom-bust cycles in real estate severely damaged the financial system, as proved by the magnitude of the Japanese and Swedish banking crises (Renaud, 1997, *L’Observateur de l’Immobilier*, 1999).

In the early 1990s, while Japan and other mature economies were entering a new phase of recession, most NIEs and developing Asian countries recorded unprecedented economic growth and booming asset values (both in property and stock markets). The 1997 crisis, however, went hand-in-hand with severe slumps in real estate markets. To what extent did the property boom-bust cycles contribute to inducing or worsening the crisis across Asia? Although most analysts have acknowledged the significant impact of asset inflation and subsequent deflation in the Asia crisis, very little research has closely investigated this issue.

One pioneering work worth mentioning is the book edited by Bertrand Renaud and Koichi Mera (2000), that examines the linkage between the real estate sector and the financial crisis, with a geographical coverage of eight countries (Japan, Korea, Taiwan, Hong Kong, China, Thailand, Singapore, and Indonesia). This survey provides evidence that real estate was involved in the financial crisis in Asia, though to a different degree from one country to another. In Japan, the real estate boom was the catalyst of the domestic crisis of the early 1990s. Excessive building and highly leveraged real estate investments were also a major factor of the crisis in Thailand and Indonesia. In Hong Kong, real estate also played a causal role in the crisis, but the sharp property asset deflation was primarily due to the hike in short-term interest rates required for the defense of a dollar-pegged currency. In the other Asian countries, real estate was not a causal factor of the crisis, but contributed to worsen it in most cases (Mera, Renaud, 2000).

In the recent economic recovery in Asia, it is noticeable that countries where real estate investments were excessive and highly leveraged are currently experiencing the slowest upturn. Conversely, among economies hit the most severely by the crisis, the quickest to recover has been Korea, where bank exposure to real estate was the smallest

across Asia. Although multiple factors (including the noticeable boom of the IT industry from 1999 onwards) are involved in the recovery of Korea, as well as of other countries, the role of real estate should be adequately considered –not only to appraise the sustainability of the current recovery, but also to allow appropriate policy-making to ward off the dramatic effects of further property boom-bust cycles.

Real estate assets have the unique characteristic of being simultaneously a medium for investment and a major input to the productive capacity of the economy. Public policies in Asian developing countries have historically promoted cheap housing for low-income households to sustain low wages in labor-intensive sectors, to maintain a comparative advantage in international competitive markets. However, as financial globalization progressed, the use of real estate as a financial vehicle grew, thus generating a major contradiction between capital accumulation and labor reproduction. Asian governments were compelled to balance their position between the need to overcome this contradiction, and the need to maintain their political legitimacy. Policies specifically addressing these issues were taken through regulatory frameworks referring to land or housing policies.

The purpose of this book is to examine whether land and housing policies contributed to mitigate or to worsen the property cycles in East Asia, and whether they had a significant impact on the overall economy of each country. The survey encompasses five major Northeast Asian cities, namely Tokyo, Seoul, Taipei, Hong Kong and Shanghai.

Before examining each case study, I shall first briefly outline the overall context of the Asian financial crisis and its interaction with domestic property markets.

One of the most fundamental changes in the majority of East Asian economies in the 1990s was the dramatic increase in inflows of international capital. Net private capital inflows into Asian economies increased six-fold, from 1983-1989 to 1996, from \$US17 billion to \$US110 billion. By the mid 1990s, Asian countries were taking 40% of global foreign direct investments (compared with 15% in 1980) and accounted for 30% of global portfolio equity flows (compared with 2% at the start of the decade). This dramatic increase in capital flows reflected a combination of factors, on both the supply and the demand sides.

### **Changes in the supply of foreign capital flows**

On the supply side, the lowest interest rates in most developed countries in the early 1990s were a powerful force encouraging greater flows. U.S. interest rates, in particular, fell by 200 basis points between 1991 and 1993. The low rates encouraged investors to seek higher returns overseas, thereby tempting them to accept greater risks. A second dominant factor of the 1990s on the supply side was the growth of pension funds in Western industrialized economies with enormous capital to invest. Institutional investor fund flows to emerging markets grew from \$US2,454 billion in 1980 to \$US7,466 billion in 1988, and then increased yearly by around \$US1,000 to 2,000 billion, reaching \$US20,641 billion in 1995. For the United States, the major supplier among Western industrial countries, institutional investments grew from 10% of GDP in 1980 to 200% in 1997 (Greenville, 2000). The majority of the new inflows took the form of portfolio rather than direct investment –flows that could easily be reversed through the

non-renewal of loans (most of which were of very limited duration). The portfolios focused on the need for diversification, and shifted towards investments of significant exposure, including property investments. The rapid changes in information technology enabled investors to move funds instantaneously around the world, thereby increasing the volatility of investments.

In addition to institutional investors, banks had become more internationalized and were therefore able to lend to emerging countries. Japanese banks, in particular, were the most induced to lend to emerging Asian economies, as they enjoyed the highest interest differential rate among international lenders, following the lowering of the discount rate to 0.5% by the Bank of Japan in 1995. They became the largest creditors in the region, providing 30% of all international loans to Asia. The influence of Japanese banks was particularly strong in Thailand –where they accounted for over half of all international lending– because the differential interest rate reached the greatest level with a local borrowing rate of 10%.

### **Major structural changes in the demand**

The growth in capital flows to Asia also reflected a combination of factors on the demand side. First, the difference between Asian countries was not clearly perceived by foreign observers, who were still strongly influenced by the World Bank's 1993 publication *The East Asian Miracle*, praising the so-called 'Asian model of development' (World Bank, 1997). East Asia at large was seen as a success in macro-economic stability, and as offering better prospects than other regions. Economic growth accelerated to a rate nearly three times that of the world economy. Inflation rates were only half as high as

those in other low and middle-income countries. Real interest rates averaged 4%, compared with a negative 3% in other developing countries, ensuring good returns on savings and the efficient use of capital. Real exchange rates were generally competitive and less volatile than exchange rates elsewhere. Budgets were generally in surplus, and the share of government foreign debts were declining relative to GDP.

The major attractive features of East Asian markets underpinning the rush of foreign capital –high interest rates, fixed exchange rate systems and low inflation– turned out to have been optimistically overlooked by investors and caused further damage after the currency crisis. High interest rates exacerbated the banking crisis by weakening the liquidity of banks further, causing a sharp deflation of assets. Fixed exchange rate systems, pegging local currencies to the dollar on a nominal basis, severely damaged the domestic balances of payment when the yen depreciated relative to the dollar in late 1995 (Kim, 2000). As for low inflation, it was misunderstood as a signal of sound fundamentals, while asset inflation was underestimated in the macro economic indices. In short, the previously warning indicators of a crisis –too low a rate of savings, persistent budget deficits, and a high rate of inflation– which were relevant for the 1994-1995 Mexican peso crisis, did not apply in Asia.

Another key factor responsible for the dramatic capital inflows in Asia, on the demand side, was the financial deregulation implemented in most Asian economies. The U.S. government, pushed by Wall Street firms, pressed for rapid liberalization throughout Asia in the 1990s. Most broadly, the U.S. stimulated the opening of financial systems by spreading policy-relevant knowledge favorable to open markets under its intellectual and moral leadership. It also applied direct pressure on East Asian governments to open up, bilaterally and multilaterally, through organizations such as the World Bank, IMF, OECD,

and World Trade Organization (Lukauskas, Rivera-Batiz, 2001). In parallel, international organizations, amongst which IMF and the World Bank, gave strong legitimacy to the view that the free mobility of capital, including portfolio flows, had enormous benefits for developing countries.

This view was supported in Asia by domestic investors, firms and banks, who exerted pressure on their ruling authorities to deregulate financial markets. The opening of capital accounts allowed investors to escape from rigidities in their domestic financial systems, and provided them with abundant foreign capital (relatively inexpensive compared with that available in the domestic market). Deregulation was also seen as profitable for Asian firms, because it enabled them not only to contract foreign funds offshore, but also to tap foreign capital markets. In a similar vein, deregulation offered opportunities to domestic banks to profit from arbitrage by borrowing at low interest rates abroad and on lending domestically –and in some instances internationally– at much higher rates.

It is worth noting that Asian economies chose to liberalize their financial markets despite the fact that they had already unprecedented levels of domestic saving rates –close to 40% of their GDP in many instances– and that firms had created substantial overcapacity of investments in some industrial sectors. The new inflows of foreign capital were thus used as a new source of finance for corporations or institutions already overexposed to the domestic financial system, which could not service past credit without access to new loans. They also provided funds for risky investments, such as in stock or real estate, as long as foreign investors underestimated the dangerous trends in these markets (Jomo, 1998).



## **Dominance of foreign indirect investment**

Boosted by both ‘pushing’ and ‘pulling’ factors, foreign private capital flows in Asian emerging economies recorded unprecedented growth in the early 1980s. In 1995 and 1996, they exceeded \$US200 billion each year (Table 1).

Indirect investment, i.e., mostly portfolio investment and bank loans, soon overshadowed FDI, which had been so far the predominant component of capital flow in emerging countries. The dominance of direct investments was particularly pronounced in the five most severely hit countries. In 1995 and 1996, indirect investment exceeded by over five times that of direct investment in these countries. Bank loans (included in the ‘Other investment’ category in Table 1) dominated, with a share over 60% of indirect investments and half the total private inflows. FDI nevertheless grew steadily, because the rapid appreciation of the yen after 1985 encouraged Japanese manufacturers to transfer a large proportion of their production (particularly the low end of the technology spectrum) to the lower-labor-cost countries of Asia – namely Thailand, Malaysia, and Indonesia.

The Asian crisis highlighted the significant difference in behavior of investors in the three types of investments mentioned above. Foreign direct investment proved to be the most resilient inflow, while bank inflows, and to a lesser extent portfolio inflows, were the most volatile. There are indeed fundamental distinctions between direct investment and financial capital flows. In direct investment, the foreign investor bypasses financial market intermediation and outlays the budgeted capital to selected projects. Thus, assuming that all the necessary studies and investigations have been made before

the capital commitment, financial capital flows enter the host country through financial market intermediation, thereby relying on the financial markets –among them the banking sector– to allocate foreign capital. In the latter case, investors have no direct control over the uses of their capital, and may not even know who the end users are. But when the debt service is guaranteed either explicitly or implicitly by the debtor’s government or international institutions, as was the case in most Asian countries, investors have little incentive to care about how the funds are eventually used (Yang, 2000).

**Table 1. Net capital flows to emerging East Asian economies (\$US billions)**

	1992	1993	1994	1995	1996	1997	1998	1999	2000 <sup>b</sup>	2001 <sup>c</sup>
<i>Total</i>										
Private capital flows	112.6	172.1	136.3	226.9	215.0	147.6	75.1	80.5	70.9	127.8
Direct investment	35.4	59.4	84.0	92.6	113.2	138.6	143.3	149.8	153.0	144.6
Portfolio investment	56.1	84.4	109.6	36.9	77.8	52.9	8.5	23.3	30.4	33.5
Other investment	21.0	28.3	-57.3	97.4	24.9	-43.9	-76.7	-92.5	-112.5	-50.3
Official flows	21.2	17.2	3.4	11.7	0.4	23.5	44.7	3.0	14.4	6.6
Change in reserves <sup>a</sup>	-56.9	-63.7	-63.6	-117.9	-114.2	-73.1	-37.8	-78.5	-102.2	-00.7
<i>Asian-5 economies*</i>										
Private capital flows	29.0	31.8	36.1	74.2	65.8	-20.4	-25.6	-24.6	-40.6	-18.1
Direct investment	7.3	7.6	8.8	7.5	8.4	10.3	8.5	10.2	12.0	7.2
Portfolio investment	6.4	17.2	9.9	17.4	20.3	12.9	-6.0	6.3	6.6	3.0
Other investment	15.3	7.0	17.4	49.0	37.1	-43.6	-28.2	-41.1	-59.2	-28.3
Official flows	2.0	0.6	0.3	0.7	-0.4	17.9	19.7	-4.7	5.0	-1.9
Change in reserves	-18.1	-20.6	-6.1	-18.5	-5.4	-30.5	-52.1	-44.5	-17.2	-20.3

Source: Raja, Siregar, 2002.

\*Indonesia, Korea, Malaysia, the Philippines, and Thailand

a. A minus sign denotes a rise; b. estimate; c. forecast.

Direct and indirect foreign investments also differ in the commitment over time of the foreign investor in the recipient country. For FDI, the capital commitment is

long-term, and investors are responsible for the success or failure of their project. By contrast, indirect foreign investment can be withdrawn from the market very quickly, both for equities and loans. In Asia, short-term loans (3-month loans) were a large component of international lending. Foreign banks could therefore quickly reverse their positions without being accountable for the inefficient use of their capital.

The difference between the three types of investments is also well illustrated by the move of capital flows after the outbreak of the currency crisis. While FDI continued to flow into the five emerging Asian countries mentioned above in 1997, indirect capital flows were dramatically reversed from an inflow of \$US57.4 billion to an outflow of \$US30.7 billion. The maximum outflow occurred in the case of bank lending (\$US43.6 billion), later followed by portfolio investment (\$US6.0 billion in 1998). The pattern of capital outflows, however, significantly differed across Asia. Bank debts were the main route of capital outflows in Thailand and Korea. By contrast, in Malaysia, Indonesia, the Philippines and Taiwan, portfolio investments, along with bank debts, played a major role in triggering the crisis. Some analysts consider them as key factors of the propagation of the crisis at the regional scale (Tsurumi, 2001). The growing importance of portfolio and short-term banking flows proves that international investment is becoming more and more volatile. It also clearly indicates that a growing proportion of international capital funds are likely to target stock and real estate markets. The volatility of these flows is exacerbated by the short-term horizon of the institutional investors, who are judged on their quarter-by-quarter (or month-by-month) performance. As Stephen Greenville puts it:

*In a market dominated by such investors, there are no Friemanite stabilizing speculators to buy when the price falls. Even rational investors join the herd (Greenville, 2000).*

### **Immature domestic financial systems**

These large and volatile international capital flows interacted with immature domestic financial systems. Most East Asian countries had officially adopted rules consistent with international financial standards well before the crisis started, but these rules were not properly enforced. Hong Kong and Singapore were nevertheless an exception: as the two financial centers of Asia, they could not function efficiently under any lack of or prudential oversight of their very large financial sectors. Elsewhere, banking sectors were poorly supervised and lacked prudential reforms. The fact that financial liberalization was undertaken without adopting appropriate policy frameworks across Asia can be explained by the lack of experience of the governments, and by the cost generated by such regulations, both for firms (higher levels of reserves or provisions required in the short run) and for governments (building the administrative capacity to supervise financial markets). But there was also a strong incentive for domestic financial institutions to escape from prudential regulations, as short-term loans carried lower interest rates than their long-term counterparts, thereby increasing opportunities for profitable arbitrage (Noble, Ravenhill, 2000).

Poor banking supervision could not, therefore, prevent domestic banks from relying heavily on short-term resources. Loans of less than one-year maturity dramatically increased in many countries, reaching a share of 60% loans in Thailand,

Korea and Indonesia; and between 45 and 60% in Malaysia and the Philippines (Bhalla, Nachane, 2001). Banks eagerly borrowed short-term loans to finance long-term projects, especially in Korea, Malaysia and Thailand. This generated a maturity mismatch, which cumulated with a currency denomination mismatch, as short-term borrowing was offshore and long-term lending onshore.

### **Symbiotic relations between financial institutions and industrial corporations**

Weak corporate governance in Asian countries also played a key role in the misallocation of financial resources. Close, symbiotic relations between banks and industrial corporations encouraged bank lending to risky investment (including investment in real estate assets) and led to the accumulation of non-performing assets and high corporate gearing ratios. The dominance of the banking system, in a context where large corporations are often controlled by family owners, and investment decisions made jointly with banks as part of the corporate groups, also accentuated the misallocation of credit funding. Unproductive investments were often cross-subsidized from other branches of corporate groups (Stieglitz, Yusuf, 2001). Ironically, the dominance of the banking system, which had such ill effects on the allocation of financial resources, resulted from the sound and prudent budgetary policies of the Asian governments. Without fiscal deficits, there was not need to develop government bonds, and without public free-risk bonds playing the role of a benchmark, corporate bond markets could not expand and provide alternative financing vehicles to bank loans.

## New prospects for construction in Asian world cities

Real estate investments in Asia in the early 1990s are often referred to as speculative, but it is worth recalling that Asian property booms relied on robust fundamentals in the early period. The tremendous economic growth of the region was accompanied by enormous urbanization, and the major cities captured a growing share of both national population and production (Table 2). At the same time, Asian cities were progressively integrated into a transnational system, linking the nations through the imperatives of globalization, and taking the form of a large urban corridor between the Tokyo area and Northeast China (Lo, Marcotullio, 2001). The accumulation of networks based on this functional urban system has focused the development on the largest Asian cities and increased their status of ‘world cities’.

**Table 2. Population densities in major Asian cities**

	Tokyo Prefecture	Tokyo 23 wards	Singapore	Hong Kong	Shanghai center + inner suburbs	Shanghai center	Taipei	Seoul
Population (x 1000)	12,059	7,920	3,737	6,311	9,909	6,339	2,593	10,231
Surface (km <sup>2</sup> )	2,186.84	616	581	1,095	2,156	280.1	272.14	627.06
Population density (inh/km <sup>2</sup> )	5,514	12,848	6,432	5,763	4,596	22,634	9,528	16,315
Population of the total metropolitan area <sup>a</sup>	32,877		3,737	6,311	13,044		5,803	20,189
Share of the metropolitan area <sup>a</sup>	26%		100 %	100 %	1%		27%	44%

a. Tokyo Metropolitan area includes 4 prefectures. b. Population of the metropolitan area to the national population.

Sources: *Mitsui Fudôsan Kanren Tôkeishû* (2001), Lo and Marcotullio (2001), Nihon Kantei Kyôkai (2001)

To meet the requirements of both global and regional needs, cities in this region spared no effort to improve their infrastructure and redevelop their urban areas. Large amounts of public funds were invested in new transportation facilities. Before the 1997 crisis, 11 new international airports were slated to open within the next 10 years in different Asian cities (Lo, Marcotullio, 2001). Investments also targeted the development of roads and railroads, in an effort to facilitate access to large cities. Another important response to global economic pressures was the development of infrastructure for high-speed transmission of information. Almost each major Asian city had its TNCs quarters, as well as a project of 'industrial park' in its suburbs.

At the same time, as financial liberalization progressed, the need for prime office buildings increased, along with the growing demand for luxury housing for expatriates and newly rich local households, having enjoyed stock and property asset inflation. Large-scale redevelopment projects were undertaken by the private sector to meet this new demand. Traditional centers were suddenly replaced by first-rate, modern cores with high-rise office buildings, expensive condominiums, and luxury hotels –all easily accessible from an international airport by expressway and/or railway. Asian cities competed to erect the highest skyscraper in the world to be the symbol of the ability of NIEs and emerging economies to catch up with mature industrialized countries, notably those in the West. In 1986, the 10 tallest buildings in the world were all in the USA. Ten years later, 4 of the top 10 were in Asia: Petronas Towers in Malaysia; Central Plaza and Bank of China Tower in Hong Kong; Shun Hin Square in Shenzhen. This achievement was the tangible expression of the success and pride of the East Asian countries, most of which had suffered under colonization by empires in the past (Mera, Renaud, 2000). Just

before the crisis, a major Japanese development company, Mori Building, planned to build in Shanghai a record-breaking tower of 94 stories (460 meters high). But the bursting of the ‘invisible bubble’ in the largest Chinese city, followed by the September 11th terrorist attack in New York, led to the temporary abandonment of the project. However, before the Asia crisis, there was a widespread belief that any new development project would prove profitable because of the tremendous growth of the economies. Governments encouraged this belief through ambitious planning projects allowing high floor-area ratios (FARs) and loose construction rules. Investment of sizable amounts of public funds in modern infrastructure and facilities also supported the view that the demand for real estate was insatiable.

The real estate euphoria came to an end in 1997. The belief that land prices would rise forever, supported by the lack of experience of land cycles in most countries, turned out to be a myth. The rush to new building projects, regardless of the real absorption capacity of demand, provoked overbuilding in many cities. Vacancy rates started to rise sharply, both in newly constructed office buildings and condominiums. The currency crisis thus hit already sluggish real estate markets in some countries. For example, in Bangkok, the office vacancy rate was estimated as high as 23% before the outbreak of the crisis (Renaud, 2000). Needless to say, the collapse of local currencies accentuated the impact of the crisis in the real estate sector, as many development projects were put on the market at a time when the demand for both office and housing was drastically reduced.

### **Banking exposure to real estate**

Property has distinctive features that tend to exacerbate the risks taken in the banking sector – particularly in countries with immature financial systems.



First, real estate construction projects require extensive funding. They involve long-term financing with a high ratio of leverage. In the absence of alternative financial vehicles –for example, the securitization of real estate– banking loans become the dominant mode of financing. In the Asian context of the 1990s, the high leverage of banking loans was made more dangerous by the significant share of short-term loans issued in dollars, as domestic banks financed real estate with long-term loans in local currency. The cumulative mismatching of loans, i.e., both maturity and currency mismatching, was thus exacerbated in the case of real estate investments.

Second, property assets, and in particular land, can be used as collateral for banking loans. Such a practice is observed in countries combining immature financial markets and inflated land prices. It was used, for example, in Lebanon, where land was considered the most valuable security during the war (Aveline, 2000). Land collateralization has been also widely used in Asian countries, as land prices inflated faster than financial interests and share dividends under the economic boom.

The practice of land collateralization becomes particularly dangerous when massive capital inflows pour into real estate, because it raises the collateral values, thereby encouraging the belief in the appropriateness of these values. When techniques for credit risk assessment by banks are poorly developed, banks tend to rely mostly on the collateral value instead of paying attention to the soundness of the borrower's business prospects and capacity for loan repayment. Investors are thus encouraged to buy land in order to secure easier access to bank credit allocations. This creates an endogenous and self-filling dynamic based on the myth of 'ever-rising land prices', by which inflation of real estate assets stimulates further lending, encouraging, in turn, further investment in real estate.

In Asian countries, including Japan, banks were not only keen to grant loans to real estate, but they relied heavily on collateralized property in their risk assessment, and used loose underwriting standards for loans (e.g. maximum loan-to-value ratio). The real estate sector absorbed 20 to 50% of total banking portfolios before the outbreak of the crisis, in 1997 (Table 3). The share of lending to property was particularly high in Hong Kong SAR, Malaysia, Singapore, and Thailand. Elsewhere, it was less pronounced, notably in the Philippines (where the growth experience was less dramatic) and in Korea, where capital flows tended to be channeled more directly to the *chaebols* (large industrial conglomerates). Flexible underwriting standards allowed the banks to lend up to 100% of the collateral value, except in Hong Kong where the ratio was much lower (50 to 70%, Table 3). This proved to be particularly dangerous when property prices were rising rapidly and beginning to deviate from fundamental values.

As a consequence, non-performing loans mushroomed in Asia after 1997, except in Hong Kong SAR and Singapore, where the quality of banks and bank's supervision have been traditionally high. In 1998, non-performing loans accounted for 22.5% of bank assets in South Korea, 20% in Indonesia, 15% in Malaysia and 25% in Thailand. Estimates of non-performing loans in China vary, but some sources estimated them to over 20% of the assets of the state banks as early as in 1997 (Wang, 2000).

Empirical studies on the linkage between lending booms, property cycles, and financial crisis across Asia have shown a strong positive correlation between the growth of private bank lending and real estate prices. Furthermore, Collyns and Senhadji (2002) have provided econometric evidence that the response of property prices to banking credit is asymmetric and depends on whether property prices are rising or falling: the response during periods of rising property prices is much higher than the response during

periods of declining prices (three times higher in the test of four selected countries). The higher response of property prices to banking credit in the increasing phase of the cycle confirms previous evidence that there is myopia intrinsic to real estate lending when property values have been climbing steadily for sustained periods of time (Renaud, 2000). As for the subsequent lower response in the declining phase of the cycle, it reflects the fact that banks tend to reduce the share of credit to the property sector, and therefore decrease their exposure to the property market once the real estate bubble bursts. The asymmetry also reflects downward rigidity of property prices, at least in the short run, as investors are reluctant to sell property at a price lower than the purchase price (the ‘lock-in effect’). A similar asymmetry, though of much weaker importance, was also observed on the stock markets.

**Table 3. Banking system exposure to risk (% of assets at the end of 1997)**

	Property Exposure (%)	Collateral Valuation (%)	Non-performing loans		Capital Ratio (%)
			1997	1998	
South Korea	15-25	80-100	16.0	22.5	6-10
Indonesia	25-30	80-100	11.0	20.0	8-10
Malaysia	30-40	80-100	7.5	15.0	8-14
Philippines	15-20	70-80	5.5	7.0	15-18
Singapore	30-40	70-80	2.0	3.5	18-22
Thailand	30-40	80-100	15.0	25.0	6-10
Hong Kong	40-55	50-70	1.5	3.0	15-20

Corsetti, Pesenti, Roubini, 2001

A third factor that contributed to amplify the magnitude of the boom-bust cycle was the immaturity of the real estate sector, which was even more acute than that of the financial sector. In most countries, property markets were not adequately monitored with accurate and timely information. Development companies also lacked experience in marketing methods. They overestimated the demand in some real estate sub-markets,

bringing about a sharp rise in vacancy rates in the concerned segments. For example, in Bangkok, the supply of condominiums focused on the tiny luxury sub-market. New housing units in this segment increased by more than 18 times from 1988 to 1996 –from 3,686 to 68,000 units–, while the large demand emanating from middle-range households was left unsatisfied (Renaud, 2000). In some instances, development companies also lacked experience in construction. This was particularly obvious in Shanghai, where public companies constructed, through development subsidiaries, poor-quality office buildings unable to meet international standards, in the prestigious new Pudong CBD.

Finally, intrinsic characteristics of real estate markets tend to amplify cyclical influences originating from the wider economy. There is an inherent tendency towards overproduction in the real estate sector, which can be explained by at least three factors: inertia in rents, stickiness of vacancies, and development lags (Renaud, 2000). Inertia in rents is due to the high ‘entry and exit’ costs, particularly in the case of office buildings. High transaction costs tend to slow down space take-up when prices are booming; after the bust, tenants tend to renegotiate their existing rents instead of moving into cheaper locations, thus hampering the adjustment mechanism (Grenadier, 1995). Stickiness of vacancies results from the combination of demand volatility and adjustment cost. The more volatile the underlying demand and the higher the cost of space adjustment, the more sticky vacancy rates tend to be. In the case of emerging countries, demand is more volatile than in their advanced counterparts, and entry costs can be very high due to the immaturity of the financial markets (particularly in Korea, see chapters 4 and 5). Development lags are the consequence of the long gestation of real estate projects. For office space, an estimate of the average lag between the initiation and the completion of construction is two and half years (Grenadier, 1995). By the time the project is completed,

reversal in demand may have occurred, especially if most of the buildings are put on the market at the same time –which typically happens when markets are booming. This tendency towards myopia is compounded by the asymmetric rewards from real estate development. Owners do not totally adjust in accordance with the subsequent upward and downward phases of the real estate cycle: they follow the trend when prices are rising, renting at high levels; but when prices are declining, they prefer to wait for the next cycle rather than to lower their rents, to avoid the high cost of leasing space (Grenadier, 1995).

### **The Japanese crisis in the background**

Although Japan was not directly concerned by the currency crisis, the collapse of the Japanese ‘financial bubble’ in 1991 played a key role in inducing the boom and the subsequent distress in the East Asian economies. The story goes back to the early 1980s, when Japan took its first steps towards financial liberalization –as did East Asian countries a decade later. Control of offshore capital investment was progressively removed after 1981, and Japan became, in a few years, a major capital exporter to most OECD countries and to many middle-income developing countries. Japan’s share of long-term capital outflow among the G-7 countries plus traditional exporters Denmark, the Netherlands, Switzerland and Saudi Arabia grew from a quarter in 1982 to nearly 90% in 1987. In 1989, more than half of all foreign direct investments in these countries came from Japan (Werner, 1994). These massive flows were triggered by the Plaza Agreement of September 1985 (see chapter 1), which led to a major yen-dollar realignment, followed by a dramatic lowering of the discount rate by the Japanese central bank (from 5 to 2.5% between 1985 and 1986). Easy and cheap credit at home fuelled the real estate market

boom, where new incentives in the form of liberalization of urban planning and construction rules strongly favored investment. The combination of easy money and growing demand for prime office buildings and top-of-the-line condominiums generated by the financial liberalization, brought about a surge in land prices in the major Japanese metropolitan areas.

The soaring value of land provided the collateral against which Japanese firms could borrow at home to buy assets abroad. Much of this investment took the form of portfolio investments (U.S. bonds and other securities), but direct investment –notably in real estate– also held a significant share. From 1984 to 1989, Japanese Foreign Direct Investment (FDI) increased by more than five times (from \$US10,155 million to \$US67,540 million, Chart 1). During this period, a wide range of Japanese firms engaged in real estate investment of unprecedented size around the world. The share of FDI in real estate relative to the total FDI flows –a mere 4.2% in 1984– peaked at 20.9% in 1989. In the U.S., real estate accounted for 63% of these investments. These funds flowed broadly to resort locations familiar to Japanese tourists, provided that foreign investment and other regulatory barriers in these countries allowed such investment (which was not the case for most East Asian countries, where purchase of property by foreigners were strictly controlled). Typical recipient regions in Asia/Oceania were Guam or Hawaii<sup>1</sup>, the Australian Gold Coast, and to a lesser extent, Hong Kong or Singapore (Table 4). Similarly, Japanese real estate investments targeted cities around the world with a high proportion of finance and other services and developed property markets, to finance office and hotel construction in the central business districts. Cities such as New York,

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<sup>1</sup> From 1987 to 1991, Japanese investment in California, Hawaii and New York alone accounted for over 72% of FDI in the United States (Farrell, 2000).

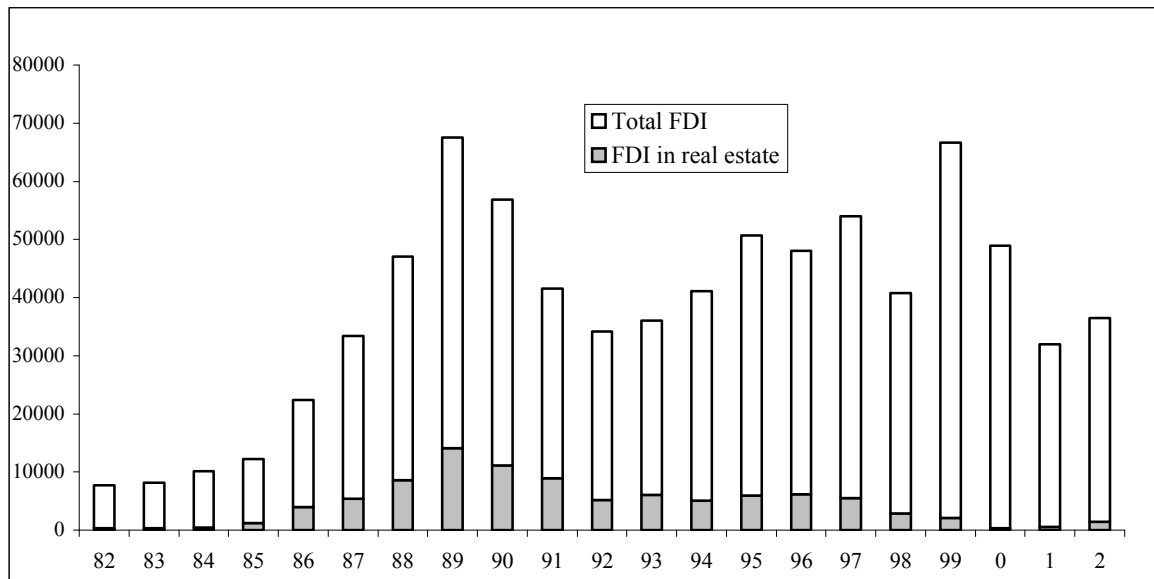
Los Angeles, London, Paris or Sydney attracted a significant share of these investments (Farrell, 2000).

With easy access to credit and inflating collateral values at home, Japanese investors were not encouraged to pay attention to the soundness of their investments abroad. Rather than seeking long-term returns, they anticipated short-term capital gains and resorted to risky investments. Such strategies are hardly surprising, given the very low yields on real estate historically recorded in Japan, especially relative to the enormous capital gains generated by land transactions. However, a noteworthy fact is that local institutional investors, i.e., insurance companies or mutual funds, usually followed the herd, and started to seek short-term capital gains rather long-term yields. Needless to say, such behavior triggered property booms or exacerbated existing ones, in most local property markets. This process coincided, in many countries, with major moves towards financial deregulation, which further destabilized the property sector. This factor might explain the unprecedented simultaneity of property booms around the world in the late 1980s (Renaud, 1997).

Yet the boom of Japanese real estate foreign investments abroad did not last long. In 1991, the bursting of the Japanese ‘financial bubble’ caused a slump in asset values –stock at first, then land–, thus drying up the source of Japanese speculative investment abroad. Total FDI capital flows decreased by 49% from the peak year 1989 to 1992 (\$US67,540 million down to \$US34,138 million), and then regained momentum, underpinned by the transfer of part of the Japanese production to the lower low-labor-cost East Asian countries. By contrast, real estate FDI followed a downward slope from 1989

on, falling to \$US5,122 million in 1994, then to \$US380 million in 2000, with a share of a mere 1% of all FDI capital flows (Chart 1).

**Chart 1. Trends in Japanese FDI and real estate FDI, 1982-1999 (in million \$US)**



*Source: composed by the author with data from Mitsui Fudôsan Kanren Tôkeishû 2003*

The outbreak of the crisis in Japan coincided with the boom in East Asian economies, and with subsequent inflation in property and share values in NIEs and emerging economies. This was not incidental. Japanese investments once again played a role in recipient countries' property markets, but this time not through FDI. It was Japan's domestic policy choices for her own financial crisis that indirectly played a role, by fuelling local banks with easy money. In the aftermath of the bubble's collapse, the Japanese Ministry of Finance (MoF) adopted a 'soft landing policy' towards bad debts, concealing the magnitude of the problem in the hope that the economy would recover –instead of requiring banks to actively clear away their bad debts. As assets values



continued to fall, the government lowered the official discount rate to help Japanese banks recover with high interest rate margins. In 1995, the rate was lowered to an unprecedented level of 0.5%. The MoF also encouraged banks to expand lending, in the hope that they would resolve their problems.

**Table 4. Geographical distribution of Japanese FDI in real estate (\$US million)**

Major host country	1981-1989	% by country	1991	% by country	1994	% by country	2002	% by country
United States <sup>a</sup>	24,160	69	5,512	60	4,415	81	195	14
Australia	3,502	10	1,282	14	151	3	1,035	74
United Kingdom	1,695	5	830	9	90	2	171	12
The Netherlands	1,200	3	324	4	61	1	-	-
Hong Kong	1,278	4	60	1	57	1	7	-
France	487	1	161	2	97	2	-	-
Singapore	553	2	85	1	236	4	-	-
Canada	477	1	107	1	12	-	-	-
World	34,742	100	9,125	100	5,447	100	1,373	100

a. Includes heavy investment in Hawaii and Guam. Source: *Mitsui Fudōsan Kanren Tōkeishū 2003*

The historically low interest rates pushed money abroad, particularly in emerging Asian economies, where great returns could be expected (as previously mentioned, the interest differential rates reached almost 10% in Thailand). From 1994 to 1996, Japanese outstanding loans in Asia ballooned from \$US40 billion to 265 billion. Japanese banks were the larger creditors of the region, providing 30% of all international loans. The flow of Japanese credit abroad not only fueled Asia domestic banks with easy money; it also caused the depreciation of the yen, and in so doing, decreased the competitiveness of Asian exports relative to Japanese exports in third countries. Furthermore, when the financial crisis hit Asia in 1997, Japanese banks exacerbated the crisis by selling loans to Asian companies in order to improve their position at home (Amyx, 2000). Japanese

banks also contributed to impede the recovery in Indonesia. To be able to meet the requirements of the BIS, they refused to write-off large amounts of bad debts by Indonesian companies, thereby encouraging other major lenders to adopt a similar behavior (Amyx, 2000).

The Japanese dramatic cycle of land and stock assets was thus an indirect factor of the property cycles in Asian NIEs and emerging economies. In other words, Japanese banks and public authorities, by delaying the disposal of their bad debts, contributed to export the domestic 'financial bubble' in other Asian countries. It is therefore necessary to investigate more closely the domestic management of the Japanese financial boom.

### **A preview of the book**

This book examines the property markets and land policies in five major Northeast Asian cities. The selected cities can be assigned to groups with respect to land issues. The first group gathers together Tokyo, Seoul, and Taipei. The South Korean and Taiwanese capital cities were colonies of the Japanese Empire during the first half of the 20th century. Although the concept of land and housing policies significantly differs in the three countries, the legacy of Japanese occupation is still very much visible in the operational methods of urban planning in South Korea and Taiwan. Furthermore, agrarian reforms were undertaken in the three countries after the Second World War –though under very different conditions from one country to another– facilitated by the U.S. presence. These reforms ensured more equitable distribution of land and agricultural income, raised agricultural productivity, and, in consolidating land ownership in the predominant production sector of that time, contributed to maintaining political stability

(Koppel, Kim, 1993). This is in sharp contrast to most Southeast Asian countries, which have not experienced major land reform, despite considerable investments in agricultural expansion and rural development. These countries consequently still suffer from uneven income distribution and strong inequality in access to land.

The second group of selected cities, Hong Kong and Shanghai, are not affected by land reform, as they did not experience the development of private ownership. In Hong Kong, the former British government chose to keep land ownership in the hands of the public, and introduced a land-lease system, which was maintained in the Special Administrative Region (SAR) after the handover. A similar system has been progressively introduced, since 1987, in some urban zones of Mainland China (starting in Shenzhen), under the new 'socialist market economy'. Hong Kong and Shanghai thus share the major feature of having a total public monopoly over land. The two cities, however, strongly differ in the way both private and public bodies operate on property markets. While Hong Kong has a long tradition of open and sophisticated property markets, real estate in Shanghai is still in its emerging stage.

In the first chapter, Natacha Aveline elaborates on the background of this idea behind this book. She then examines the impact of the land structure and its related policies on the last boom-bust cycle in Tokyo, highlighting the major role of FAR deregulation in Chapter Two. Chapter Three focuses on the key issue of land information in Japan. Noboru Hidano and Yoshiro Yamamura give an account of the poor accuracy of the official land values, and propose a hedonic price index to improve the monitoring of property markets in the Tokyo central Business District. The fourth chapter deals with property markets and land policies in Seoul. Jae-Young Son discusses the bubble thesis for Seoul's real estate, emphasizing the strong shortage of land partly caused by

restricting land-use policies. Shin-Young Park provides a complementary discussion of housing issues in Chapter Five. Z.M. Ge and Ling-Hin Li observe in Chapter Six the role of public land ownership in the emergence of a sizeable local housing market in Shanghai. This is followed by Chapter Seven in which Chien Han, Andrew Liu and Shu-Yun Huang examine how the Taiwanese property markets are influenced and distorted by the land valuation and taxation systems. The final city is Hong Kong, which is examined by Ling Hin Li on the destabilizing effects of contradictory land policies on Hong Kong's real estate markets in Chapter Eight. Finally, in Chapter Nine, Natacha Aveline and Ling-Hin Li compare the major changes in property values over the last decade in the selected cities and examine more closely the linkage between land and real estate cycles in each sub-sector.

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