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The case of the missing commercial real estate cycle[1]

Booms and busts in commercial real estate have been a traditional source of distress for financial institutions.[2] In the early 1990s, for example, the downward correction of commercial property prices caused a significant increase in bad debt expenses for banks and other financial institutions, and turned out to be a major contributor to the global economic downturn. In contrast, the commercial property cycle was much less pronounced in the recent global business cycle. While housing prices have risen markedly in a number of countries in the past five years, with few exceptions commercial property prices have remained well below the level reached a decade ago.

This "missing" commercial real estate cycle is arguably partly attributable to the rapid growth of real estate securitisation in the past decade. First, the emergence of new financing methods provided a substitute for traditional banking finance and may have helped even out the flow of capital into the commercial property sector. Second, the development of public markets improved information transparency and may have strengthened market discipline. And finally, the development of public real estate equity and debt markets made it possible for commercial property risk to be spread through capital markets to a wider array of investors.

Nevertheless, these structural changes by no means imply that commercial real estate cycles have disappeared. To a significant extent, the absence of a commercial property boom in the late 1990s could be a consequence of the slow pace of absorption of the overcapacity generated during the late 1980s boom. Furthermore, the closer integration of commercial real estate markets with capital markets does not suggest that the commercial property sector will now be immune to all shocks. In fact, commercial property markets might even be subject to new sources of market volatility.

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[1] I would like to thank Gert Schnabel for excellent research assistance. The views expressed in this article are those of the author and do not necessarily reflect those of the BIS.

[2] Hilbers et al (2001) document a series of episodes in the last two decades in which real estate imbalances helped predict banking crises. Borio and Lowe (2002) also suggest that a rapid increase in property prices might signal the formation of financial imbalances.

Performance of the commercial real estate sector

The early 1990s downturn

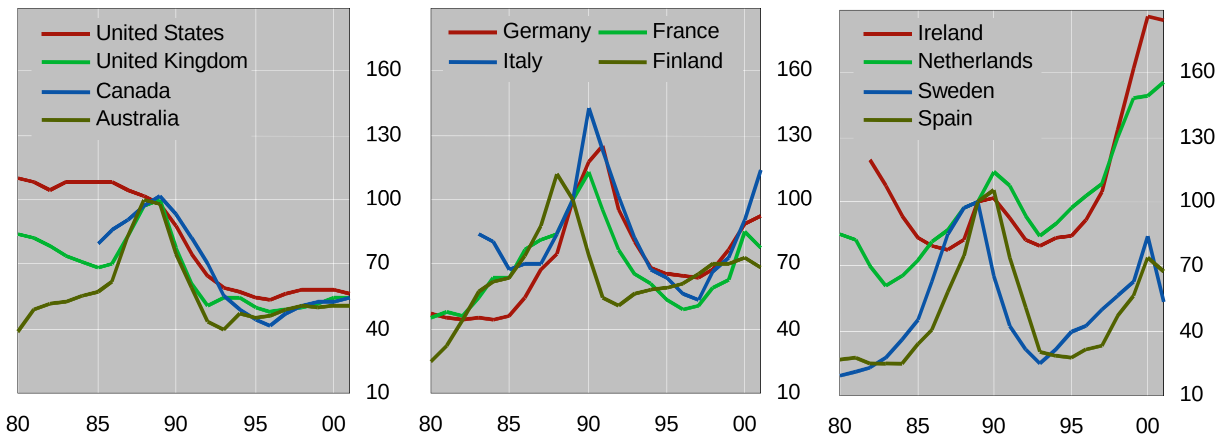
Boom and bust in the commercial property sector were a major contributor to financial distress in the early 1990s ...

The commercial real estate sector played a prominent role in the early 1990s business cycle.[3] Commercial property prices in most industrial countries rose steadily during the second half of the 1980s in response to an acceleration in the growth of real income and fuelled by strong growth in private sector credit (Graph 1). Buoyant expectations prevailed in the markets and generated a high level of construction, which in turn helped stimulate the economy. However, as economic activity slowed and demand for real estate collapsed, commercial properties suffered a considerable loss of value. Falling property prices drove some financial institutions into distress. In particular, there was a broad-based reduction in profitability and a widespread deterioration in asset quality in the banking industry, not only because of the direct effect of mounting property loan losses, but also because of a deterioration in the balance sheets of corporate borrowers that had used real estate as collateral.[4] Not surprisingly, lending to the property sector was significantly curtailed, in turn exacerbating the commercial real estate cycle.

The boom-bust commercial property cycle of the late 1980s–early 1990s can be partly attributed to the financial liberalisation of the 1980s, particularly

Real commercial property prices

1989 = 100



Sources: Catella; Frank Russell Canada Ltd; Investment Property Databank Ltd (IPD); Jones Lang LaSalle; Ministère de l'Équipement, des Transports et du Logement; National Council of Real Estate Investment Fiduciaries (NCREIF); Nomisma; Ring Deutscher Makler; national data. Graph 1

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[3] Chapter VII of the 63rd BIS Annual Report (1993, pp 155–81) describes the performance of the real estate sector during this period in greater detail. Wheaton (1999) provides both empirical evidence and a theoretical explanation of the cyclical movements of commercial property prices in the United States.

[4] Kiyotaki and Moore (1997) propose a theoretical framework in which collateral-based borrowing could provide a powerful transmission mechanism through which a small, temporary shock would generate large, persistent fluctuations in asset prices and output. Borio (1995) provides empirical evidence on the wide use of real estate as collateral in a cross-country study.

in the Nordic countries. As new types of less tightly regulated financial institutions emerged, borrowers were able to access new funds at lower costs from the domestic and international capital markets, adding to upward pressure on real estate prices. The intense competition among financial institutions probably led to an underpricing of the risk of these loans, making the financial system as a whole more vulnerable.

Recent performance

... yet they have been largely absent in recent years

Commercial property prices have behaved very differently in the most recent business cycle (Graph 1). In most countries, commercial property price fluctuations have been at most modest, even as residential real estate prices in a number of countries have reached historical highs.[5] In fact, there has been no commercial real estate boom in most English-speaking countries. Real commercial property prices in these countries have been relatively stable, following a sharp decline in the first half of the 1990s. In most European countries, the markets have witnessed a robust recovery since the mid-1990s. However, in real terms prices have remained well below the levels reached a decade ago. The notable exceptions are Ireland and the Netherlands, where commercial property prices have increased sharply to historical highs in recent years. In Japan, commercial property prices have continued to decline, resulting in added pressure on the fragile banking industry and the weak economy.

The property sector has performed strongly

Today, while the global economy has weakened and financial institutions have experienced increasing defaults on their corporate loans, the commercial property sector has performed strongly and the banking industry has so far shown great resilience in most countries. This has been reflected in the historically low delinquency rates on commercial real estate loans. In addition, the property sector has been posting robust returns over the past few years, outperforming the broader stock market (Graph 2) and creating an attractive diversification opportunity for investors.

The main influence on commercial real estate markets has come from the demand side. There has been a contraction in certain sectors, particularly in technology, media and telecommunications, and in tourism. This is in sharp contrast to market conditions in the early 1990s, when major problems arose from excessive new supply. Looking forward, there is some risk of vacancies and delinquencies increasing in the near term, but with new construction at modest levels in most markets, conditions appear more benign than in the early 1990s in most countries.

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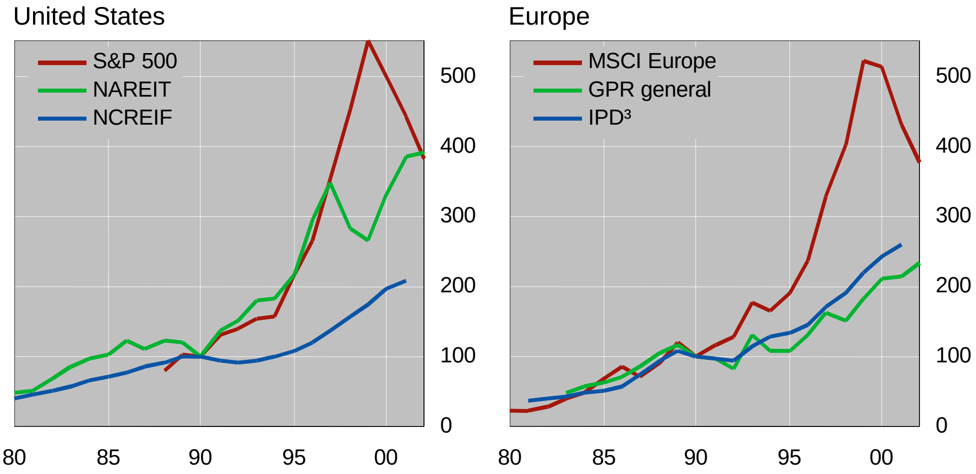
5 Residential real estate markets in most industrial countries (with the exception of Germany, Japan and Switzerland) have posted strong gains since 1998. Real housing prices have reached new historical highs in a number of countries, including Australia, Belgium, Denmark, France, Ireland, the Netherlands, Norway, Spain, Sweden, the United Kingdom and the United States.

Commercial property and stock returns[1, 2]



[1] Total return indices; 1990 = 100; for 2002, mid-year data. [2] The NAREIT and NCREIF indices reflect the total return, respectively, of the public and private real estate markets in the United States. In Europe, the two equivalent indicators are the GPR and IPD indices. [3] Covers the United Kingdom only.

Sources: Datastream; Global Property Research (GPR); IPD; National Association of Real Estate Investment Trusts (NAREIT); NCREIF; national data. Graph 2

New financing methods in commercial real estate markets

The recent resilience of the commercial property sector has been partly due to the shallow nature of the global slowdown and the low interest rate environment.[6] Nevertheless, it can also be explained by the fact that commercial property booms were largely absent in the late 1990s in many countries. Looking back, one contributing factor to this missing commercial property cycle could be the development of innovative financing methods in the commercial property sector in the past decade. As funds from traditional sources, such as banks and insurance companies, were significantly curtailed in the early 1990s, new financial resources started to develop. In particular, public sources of financing, in both equity and debt forms, have grown rapidly and their roles have expanded on an unprecedented scale.

Documenting in a comprehensive way the role of public markets in the financing of commercial real estate is not straightforward. Given the nature of intermediation structures, the layers of financing can be quite complex and differ considerably across countries. In addition, available information is rather fragmentary. Nevertheless, the broad trends can be ascertained reasonably well.

Public equity markets

Public real estate equity markets ...

There are two major forms of publicly traded property equity investments: shares of listed property companies and shares of real estate investment trusts

[6] See Chapter VII of the 72nd BIS Annual Report (2002) and Sutton (2002) for relevant discussions. In addition, growing economic integration and the introduction of the euro stimulated cross-border property investment and provided further support to the European property markets.

(REITs). By definition, both property companies and REITs have to derive at least 75% of gross income from property investment (either via rents from property ownership or interest on mortgage loans) or development activities. However, REITs are distinguishable from listed property companies in several important respects. First, a REIT is a particular type of corporate or trust that is exempted from corporate income tax; in return, it is required to distribute at least 95%[7] of its net income to shareholders. Second, REITs are characterised by a relatively low level of gearing, with an average leverage ratio of 45% in the United States, and even lower in Australia. The fact that developers are betting with their own money makes them less likely to build aggressively for speculative future demand. Third, REITs are less involved in construction and development activities. Their revenue comes principally from rents or interest payments on mortgage loans, which are more stable across the business cycle. By contrast, some listed property companies (particularly in Hong Kong SAR and Japan) are conglomerates and have a greater tendency to be involved in development activities or even in other lines of business, such as telecommunications and shipping.

... have grown steadily in Europe ...

The growth of public real estate equity markets has been rapid but uneven across countries (Table 1). In Europe, the market took off at a very early stage in the form of listed property companies. By 1990, the total volume of European traded stock had reached $64 billion. The growth trend has continued in the past decade. In the United Kingdom and Germany, the two leading European markets, public equity markets have more than doubled in size since 1991. A notable exception is France, where the market has shrunk by almost one third.

... and expanded rapidly in the United States and Australia

Property investment trusts have dominated public equity markets in the United States and Australia. In the United States, the market emerged in the 1960s with the introduction of REITs, but the development of the public equity market lagged well behind its European counterpart until 1992. Since then, the

Development of the public equity markets[1]

In billions of US dollars

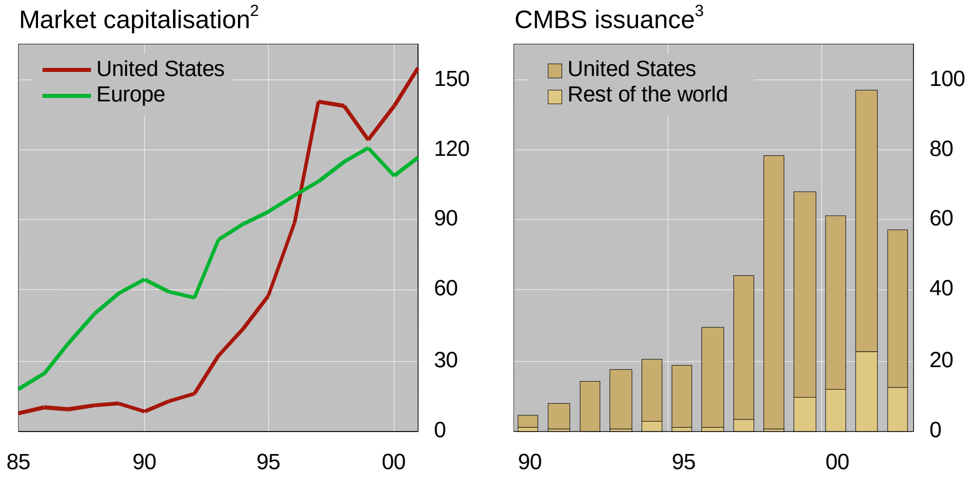
	1985	1987	1989	1991	1993	1995	1997	1999	2001
United States	7.7	9.7	11.7	13.0	32.2	57.5	140.5	124.3	154.9
Europe[2]	17.7	37.2	58.7	60.2	82.2	94.3	107.2	122.5	118.8
France	2.9	5.0	16.3	17.0	20.1	19.6	14.5	11.2	11.0
Germany	3.3	8.0	9.6	13.4	24.3	34.2	28.8	44.3	45.4
United Kingdom	7.1	13.6	16.4	14.9	21.2	21.8	40.3	40.6	32.3
Japan	12.0	40.5	67.5	37.8	32.2	38.9	33.3	27.6	27.2
Australia	–	–	–	–	7.8	12.4	16.6	25.9	22.5
Hong Kong SAR	6.2	7.7	12.4	17.2	44.8	98.6[3]	57.8	49.5	40.8

[1] Refers to REITs in the United States, LPTs in Australia and listed property companies in other countries; end-of-year data. [2] Includes all western European countries. [3] Refers to 1996, when the market reached its peak.

Sources: GPR; NAREIT; national data. Table 1

[7] This distribution requirement was reduced to 90% with effect from 1 January 2001 in the United States.

Development of the public equity and public debt markets[1]



[1] In billions of US dollars. [2] Refers to REITs in the United States and listed property companies in Europe. [3] For 2002, annualised first half-year data.

Sources: Commercial Mortgage Alert; GPR; NAREIT; national data. Graph 3

REIT market has grown very quickly, surpassing the European public equity market in size in 1997 and currently posting a capitalisation of more than \$150 billion (Graph 3). In September 2001, REITs overtook pension funds to become the most important institutional investor in the real estate equity market. They currently represent a share of close to 40% in this market, which measures about \$373 billion. In Australia, the rapid growth in the listed property trust (LPT) market over the past 12 years has resulted in AUD 44 billion of market capitalisation, controlling about one third of the commercial real estate assets in the country.

The notable exceptions in the wave of public equity market developments are Japan and Hong Kong SAR. In Japan, the market capitalisation of listed property companies has declined by about 60% over the past 12 years. The bursting of the commercial property bubble has continued to burden the banking sector and to be a drag on the underperforming economy. In Hong Kong, the market experienced a significant fall during the Asian crisis and has remained sluggish ever since.

Public debt markets

The most profound change in the commercial property debt market in the past decade has been the rapid expansion of the public debt segment, mainly in the form of commercial mortgage-backed securities (CMBSs). This innovative product involves the pass-through of interest payments on a portfolio of commercial real estate loans and can be traded publicly. It first appeared in the United States as an interesting extension of the residential MBS, but the market did not gain in stature until the early 1990s. Since then, not only has the CMBS market continued to expand in the United States, but it has also grown at an ever increasing rate in Europe.

CMBS issuance took off in the United States ...

The activities of the Resolution Trust Corporation in working out the distressed debts of the savings and loan industry largely explained the rapid increase in CMBS issuance in the United States in the first half of the 1990s. The market then evolved from a temporary measure for cleaning up non-performing property loans into an active means of tapping the capital markets as a source of funding and loan portfolio management. The CMBS structure eliminated a number of obstacles that had stood in the way of institutional buyers of long-term mortgage debt. In particular, the new market reduced the uncertainty of cash flows by pooling a number of commercial real estate loans; it improved investment liquidity given the existence of an active secondary market; and it increased investors' flexibility in managing their exposure to the commercial property sector. In September 2001, CMBSs represented 14.8% of the $1.68 trillion commercial mortgage debt market in the United States, a market share surpassing that of insurance companies and second only to that of commercial banks.

... and then spread to Europe

In the rest of the world, the CMBS markets were basically dormant until the mid-1990s. The markets then took off, stimulated by both banks' search for capital relief and investors' desire for cross-border property investment prompted by the accelerating economic integration. In 2001, European CMBS issuance reached a record $18.7 billion. The United Kingdom and Italy posted the strongest growth, increasing by 60% and 280%, respectively, to reach $8.2 billion and $7.3 billion.

Meanwhile, in the euro area, securitisation of mortgage loans has also grown substantially in the form of Pfandbrief-style products (mortgage bonds) since the introduction of the euro.[8] Today, mortgage bonds fund approximately 19% of mortgage loans in Europe, and register a volume outstanding of about €562 billion.[9] Germany and Denmark are the two dominant players, with a market share of 43% and 29%, respectively.

The impact of new sources of funding

The rapid development of public sources of financing may have contributed to dampening the commercial real estate cycle in at least three ways. First, the emergence of an additional source of funds arguably helped to even out the financing cycle. Second, it enhanced market discipline, not least by improving information transparency. And finally, it allowed for a better allocation of risk, notably by reducing its concentration in leveraged intermediaries.

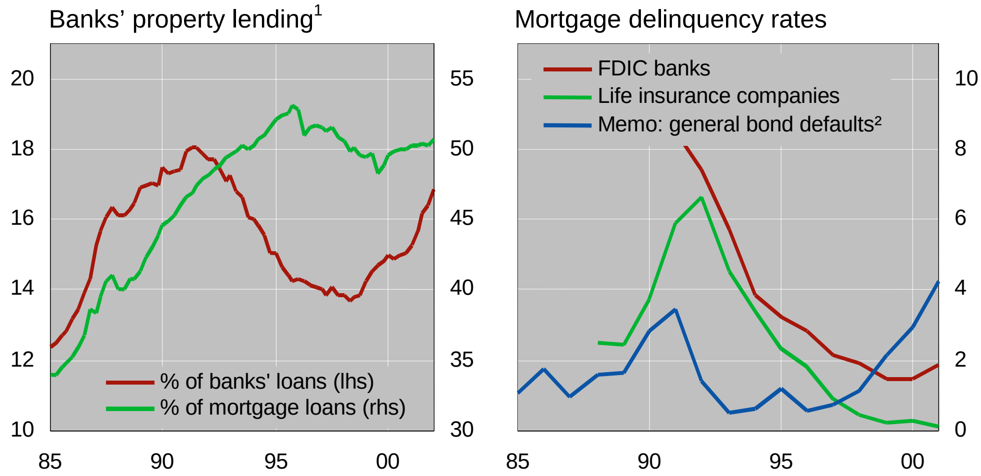
Real estate securitisation can provide new methods of funding ...

The rapid expansion of public real estate markets shifted property financing away from bank debt and reduced the role of traditional intermediaries. There is evidence that access to a wider variety of sources of capital helped to even out the flow of capital into the commercial property

8 Mortgage bonds are backed by first-ranking mortgage loans. They differ from MBSs in that the assets remain on the balance sheet of the issuer. Mastroeni (2001) documents the recent development of Pfandbrief-style products in the euro area and many eastern European countries.

9 We should to be careful in interpreting these numbers since they include mortgage bonds backed by both residential and commercial property loans. An equivalent market in the United States, the MBS market, posted an outstanding volume of $2.8 trillion in 2001.

Commercial property market in the United States



[1] Commercial banks. [2] Number of total bond defaults as a percentage of all rated companies.

Sources: American Council of Life Insurers; Board of Governors of the Federal Reserve System, *Flow of Funds Accounts*; Federal Deposit Insurance Corporation; NAREIT; Standard & Poor's Credit Pro.

Graph 4

sector. In the early 1990s, REIT and CMBS markets emerged when private commercial mortgage lending declined sharply as banks and thrifts came under heavy pressure to restructure their balance sheets. Conversely, when public markets slowed their pace significantly after 1999, traditional financing sources rebounded. Pension funds and private investors accelerated the pace of their net acquisitions of property, and commercial bank lending increased steadily (Graph 4).

... improve information transparency ...

The development of public markets also increased information transparency. Publicly observable prices for tradable securities reflect the changing preferences and concerns of market participants in a timely manner. Moreover, investors' demand for information and legal disclosure requirements for public markets spurred the development of an infrastructure for promptly conveying information about property and loan performance. As investment performance became subject to greater scrutiny by analysts, investors, consultants and rating agencies, information became more plentiful, more detailed and more timely.

... strengthen market discipline ...

These factors helped to strengthen financial discipline. In particular, better data concerning not only property market conditions but also broader industry trends has greatly improved the scope for the market to detect property and capital market imbalances. An example is the performance of the US REIT market in 1997–99. During that period, more construction took place and vacancy rates increased slightly. The REIT market responded quickly to the dwindling market return. Falling share prices forced REITs to curtail their investment strategies and helped prevent the build-up of imbalances.

... and contribute to the resilience of financial institutions

The development of public markets has also allowed a better allocation of risk across the economy. With the growth of low-leverage REITs, the market's ownership structure may have become more resilient to shocks. In addition, securitisation of commercial mortgage loans provides a useful instrument for banks and other financial institutions to manage their property-linked loan portfolios. Today, for instance, CMBSs are arguably just as liquid as corporate bonds. And active equity and bond issuance and secondary market trading allow better risk management and liability matching by market participants. The pressure associated with falling property prices can thus be spread through capital markets to a wider array of investors instead of being concentrated in the banking industry. As a result, the potential exposure of leveraged financial institutions to the commercial real estate sector may have been reduced. This, in turn, can make the emergence of financial strains less likely.

The end of commercial real estate cycles?

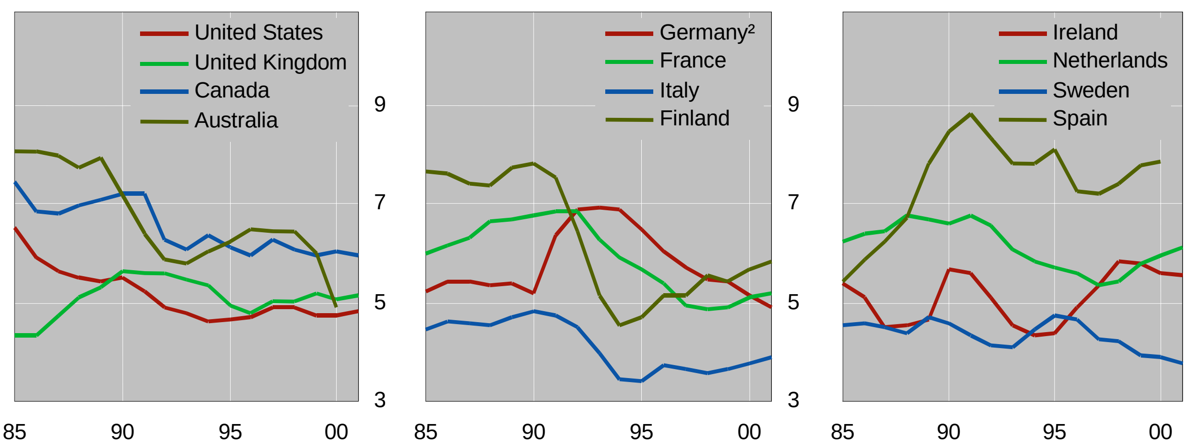
Cycles still exist because ...

Looking forward, through the channels just outlined the development of public equity and debt markets should continue to have a stabilising effect on commercial real estate markets. However, it would be unwise to consider that the commercial real estate cycle is dead. There is a risk of overestimating the role played by the development of public markets in dampening the cycle in the 1990s. A number of mechanisms that trigger or amplify real estate cycles still exist and continue to play important roles. And the closer integration of commercial real estate markets with capital markets does not imply that the commercial property sector will be immune to shocks. In fact, the commercial property markets might be subject to new sources of market volatility even in the presence of good economic fundamentals.

... slow absorption of overcapacity has played a significant role in the current cycle ...

First, the missing commercial property cycle in the late 1990s can probably be explained to a considerable extent by the lasting legacy of the previous cycle. Overcapacity has taken years to be absorbed, and the painful memory may have acted as a catalyst for market participants to improve their management of commercial property risk. In most countries, the share of non-residential construction in national output has been lower in recent years than it was in 1990 (Graph 5). And the decline in construction activity has been more

Total non-residential construction[1]



[1] As a percentage of GDP. [2] Prior to 1991, western Germany only; jump due to reunification.

Sources: European Commission; OECD; national data.

Graph 5

pronounced in those countries that experienced a steep fall in property prices in the early 1990s, such as Australia, Canada, Finland, France and Italy. The only exception to this pattern is Ireland, where new construction activity has been rising considerably along with soaring property prices since 1995.

... construction lags and imperfect information remain ...

Second, long supply and construction lags, characteristics of rigidity unique to the property sector, remain at the root of real estate cycles. Developers tend to increase supply when property prices rise. However, as new construction may take several years to be completed, by the time it is ready for occupancy demand may have fallen, leading to price declines. The fact that supply adjusts slowly to changing demand will cause inefficiencies and continue to drive real estate cycles.

... banks' exposure to the commercial property sector is still significant ...

Third, the banking sector and commercial property industry remain closely related. Despite the rapid growth of public equity and public debt markets, bank lending still represents the single largest source of funding in commercial property markets. Just as before, rising real estate prices may improve banks' balance sheets and encourage the extension of new loans to the real estate sector. Conversely, declining property values can still generate banking system stress. The resilience of the banking industry and other financial institutions to falling property prices remains to be tested in the new environment.

... capital markets are not immune to shocks ...

Fourth, capital markets are also vulnerable. The liquidity appeal of securitisation to investors is a double-edged sword. Just as capital users can obtain rapid access to funds on a broad basis, so capital suppliers can quickly move their funds out of the markets. In particular, equity market swings in the past few years have provided an illustration of how the supply of capital can be vulnerable to fluctuating sentiment. During a boom period, buoyant expectations and the illusion of liquidity may induce market participants to lower their underwriting standards. Similarly, a bearish market may lead to capital flight and pessimism that further depresses prices. In fact, such a vicious circle of falling equity prices has been observed in Japan and Hong Kong SAR in recent years.

... and new sources of market volatility may emerge

Finally, as commercial property markets become more integrated with capital markets, there are new potential sources of market volatility that can constrain capital even when real estate market conditions are good. Disruptive market events, such as the Russian bond default and the implosion of Long-Term Capital Management in 1998, increased CMBS spreads by as much as 100 basis points and caused a drying-up of liquidity virtually overnight. Another example was the failure of Criimi Mae, a mortgage REIT, in autumn 1998. Since it was the predominant purchaser of low-rated CMBS tranches at that time, its failure generated a demand shortage that to some extent has remained unresolved. The limited absorption capacity of the market for the high-risk tranches represents one of the major obstacles to the CMBS market's further expansion.

Conclusion

The development of public equity and public debt markets has led to a closer integration between real estate and capital markets. From a long-term perspective, declines in commercial property prices may not generate as much stress to the banking sector because the risk has been diversified across a wider variety of investors. Similarly, the amplification of swings in commercial property prices due to coincident funding cycles might be less likely. It would, however, be unwise to think that commercial real estate cycles will not recur. As history suggests, capital markets are as vulnerable to shocks as banks, and this could even introduce new sources of market volatility into the commercial property markets.

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