C COMMERCIAL PROPERTY INVESTMENT AND FINANCIAL STABILITY

Commercial property markets are important for financial system stability mainly because commercial property constitute large holdings of different kinds of investors and because of the considerable amounts of bank lending that such holdings entail. Volatility in commercial property prices has proved to be a source of financial system instability in the past. Hence, from a financial stability viewpoint, it is important to monitor the nature and scale of exposures to commercial property within the financial system.

INTRODUCTION

History has shown that adverse developments in commercial property markets have the potential to cause severe financial instability. In the US in the 1980s, for example, investment in commercial real estate reached speculative levels. The financing of commercial property by commercial banks and other institutions grew to meet the rising demand, with deregulation having created an environment in which commercial real estate lending was lucrative for lenders. The US commercial property market ultimately crashed in the late 1980s and its after-effects continued into the early 1990s with the banking sector recording heavy losses and many banks failed as a result.[1]

Another example of a commercial property boom and bust can be found in Sweden, where deregulated credit markets after 1985 stimulated competition between financial institutions, which – together with low real interest rates – contributed to a commercial property asset price boom. Overinvestment in commercial property and increasing real interest rates brought the boom in real estate prices to an end and triggered a downward price spiral, resulting in bankruptcies and large credit losses. The Swedish government ultimately had to rescue the banking system and it did this by issuing a general guarantee covering bank obligations. The total direct cost to taxpayers has been estimated at around 2% of GDP.[2]

THE IMPORTANCE OF COMMERCIAL PROPERTY MARKETS FOR FINANCIAL STABILITY

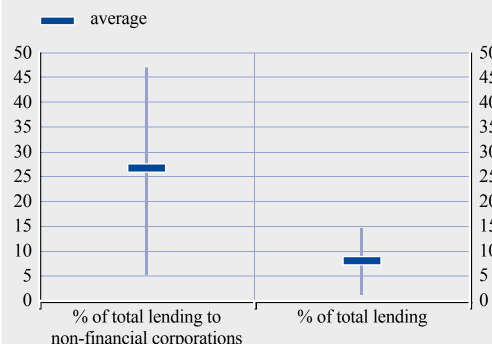
The importance of commercial property markets from a financial stability perspective has three main reasons. First, commercial property loans can be an important component of banks' assets. Second, commercial property lending has proven to be a volatile component of some banks' loan portfolios. Finally, institutional investors such as insurance companies and pension funds are large investors – both directly and indirectly – in commercial property markets.

Lending related to commercial property accounts for around 8% of total bank lending and around 27% of total lending to non-financial corporations in the euro area (see Chart C.1). However, these shares vary considerably among euro area countries, with the share of lending for commercial property investment as high as almost half of total lending to non-financial corporations for some banking sectors.

1 See US Federal Deposit Insurance Corporation (FDIC) (1997), "History of the Eighties – Lessons for the Future", December.
2 See, P. Englund (1999), "The Swedish Banking Crisis: Roots and Consequences", *Oxford Review of Economic Policy*, vol. 15(3).

Chart C.1 Bank lending for commercial property purposes in the euro area

(2005; country distribution; maximum-minimum distribution)



Sources: IMF, national central banks and ECB calculations.
Note: Data for Belgium, the Netherlands and Luxembourg are not available.

In addition to direct lending for commercial property investment, banks can also acquire indirect exposures by lending to developers and construction companies and financial intermediaries engaged in real estate lending. Banks may also be exposed to commercial property markets if they have direct holdings of property.

Bank lending creates two links between commercial property companies and the banking sector: interest payments and the value of collateral. Although falling commercial property prices do not automatically lead to increased loan losses for banks, as borrowers' ability to service debt might not be affected, they can affect banks directly to the extent that lending volumes decline. For financial stability assessments, it therefore makes sense to analyse property companies' earnings capacity and ability to repay their debts, as well as the value of property used as collateral.

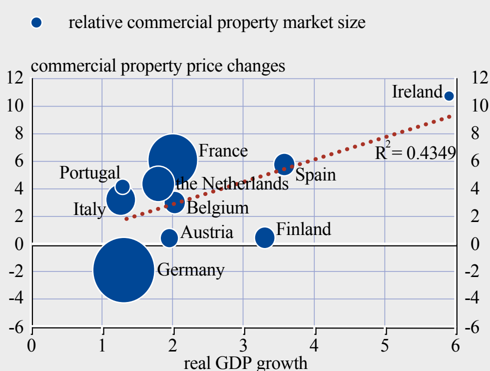
Commercial property lending has proved to be a volatile component of some banks' loan portfolios, more so than residential property lending.[3] This is because commercial property prices tend to be much more closely correlated with business cycle conditions: a positive relationship between property price changes and GDP growth can be found in euro area countries in recent years (see Chart C.2).

Apart from business cycle considerations, a further source of commercial property price volatility stems from the fact that commercial property is often more likely to be bought as a speculative investment than residential property, which often serves as accommodation for its owners and has an intrinsic value. Vulnerabilities can therefore arise in commercial property markets if property prices diverge from the net present value of the future earnings stream generated by the property, typically rents. Such vulnerabilities are often unearthed during economic downturns and, if sufficiently large, can generate property price declines and loan defaults that can ultimately create problems in banks' commercial property loan books. This may, in turn, increase impairment charges and ultimately reduce profitability.

3 See, for instance, E. P. Davies and H. Zhu (2005), "Commercial Property Prices and Bank Performance", *BIS Working Paper*, No 175.

Chart C.2 Commercial property market size, price changes and real GDP growth for selected euro area countries

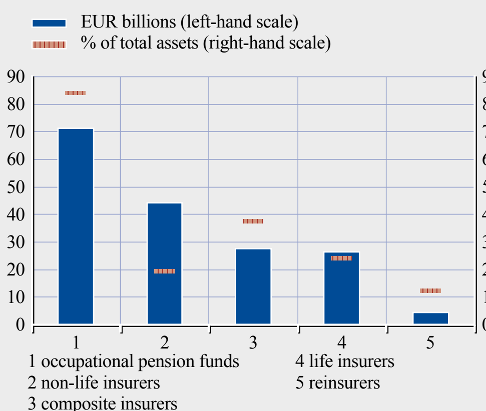
(average of 2000 – 2006; % change per annum)



Sources: Investment Property Databank, Eurostat and ECB calculations.
Note: The coverage of the total property sector within countries ranges between around 20% and 80%.

Chart C.3 Direct investment in commercial property by euro area occupational pension funds and insurance companies

(2006)



Sources: CEIOPS and ECB calculations.
Note: Data for occupational pension funds are for 2005.

Another channel through which commercial property market developments can impinge on financial stability is through the balance sheets of insurers and pension funds who are large investors – both directly and indirectly – in commercial real estate markets. Direct commercial property investment accounts for €71 billion – or around 8% – of the total assets of occupational pension funds in the euro area, and around €103 billion – or an average of 2.5% – of the total assets of euro area insurers (see Chart C.3). In addition, pension funds and insurers are large indirect investors in commercial property investments such as property funds and they also sell credit protection on commercial property loans by buying commercial mortgage-backed securities (CMBSs).

TYPES OF COMMERCIAL PROPERTY INVESTMENT

Investors seeking exposure towards commercial property markets can invest directly by purchasing property, or indirectly by investing in different types of property fund or financial market product (see Table C.1). These types of investment typically attract demand from institutional investors and high net worth individuals.

Many investors are attracted to commercial property investment because of the sometimes limited correlation with other asset classes, which can provide portfolio diversification benefits. The main risks facing investors in commercial property are: liquidity risks, because of the illiquid nature of direct commercial property investment; and concentration risks, as investors often focus on one market segment, or only a few segments, because of entry barriers or more limited knowledge of other markets.

DIRECT INVESTMENT IN COMMERCIAL PROPERTY

The value of the invested euro area commercial property market was around €670 billion at the end of 2006, which represented about 8% of

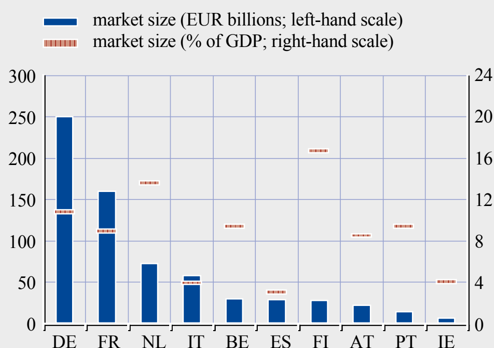
Table C.1 Direct and indirect commercial property investment

	Direct investment	Indirect investment						
		Open-ended property funds	Closed-ended property funds	Speciality funds	Private equity and hedge funds	Real estate investment trusts (REITs)	CMBSs and commercial property CDOs	Property derivatives
Main investor group	High net worth private investors, institutional investors	Private investors	High net worth private investors	Institutional investors	High net worth private investors, institutional investors	Institutional investors	Institutional investors	Institutional investors
Tradability	Poor	Good	Poor	Poor	Poor	Very good	Good	Possible
Transaction costs	Very high	High	Very high	Moderate	High	Low	Low	Low
Correlation with other asset classes	Low	Moderate	Low	Low	Moderate	Correlated with equities	Low	Low
Main risk for investors	Liquidity risk/ concentration risk	Liquidity risk	Liquidity risk	Concen-tration risk	Liquidity risk/ operational risk	Stock market volatility	Credit risk	Liquidity risk

Sources: ECB and Deutsche Bank Research.

Chart C.4 Size of invested commercial property markets in selected euro area countries

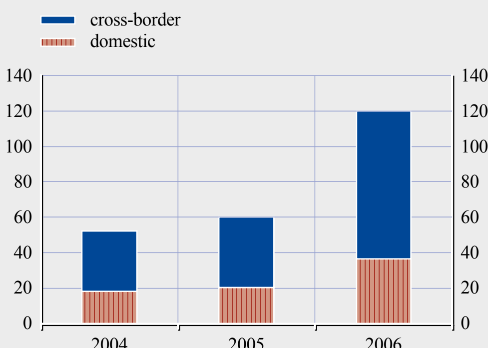
(2006)



Sources: Investment Property Databank, Eurostat and ECB calculations.

Chart C.5 Direct commercial property investment in the euro area

(EUR billions; flow data)



Source: Jones Lang LaSalle.

euro area GDP.[4] However, this figure includes only commercial property owned by professional real estate investors and the overall size of the market, including also owner occupied property, is estimated to be almost twice as high as this.[5] Across the euro area, there is considerable variation in the size of invested national markets as a proportion of GDP (see Chart C.4).

The euro area commercial property market has grown rapidly in recent years on account of large price increases in many countries and considerable development activity against a background of favourable economic conditions. In 2006 euro area commercial property transaction volumes reached a record level of €120 billion, double the level seen in 2005 (see Chart C.5).

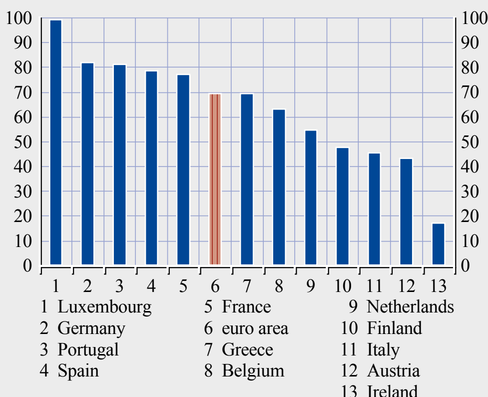
The share of cross-border activity, involving non-domestic buyers or sellers of property, has grown over recent years and it accounts for the largest share of transactions, making up almost 70% of total euro area investment in 2006.[6] However, large cross-country differences exist (see Chart C.6). These can be attributed to differences in accessibility for foreign investors and differences in foreign investors' perceptions of the profitability of investment opportunities.

Unlisted funds have recently been the largest direct investors in euro area commercial property markets, with around 40% of total acquisitions in 2006. The share of listed property companies – real estate investment

4 See Investment Property Databank (2007), "Pan-European property index: Results to December 2006", May. It should be noted that it is very difficult to obtain accurate figures on the size of the euro area commercial property market due to the fragmented and confidential nature of the industry across many countries.
5 See RREEF Research (2007), "The Future Size of the Global Real Estate Market", July.
6 The data source is Jones Lang LaSalle. For a description of conditions in the European commercial real estate market, see Jones Lang LaSalle (2007), "European Capital Markets Bulletin 2006", February.

Chart C.6 Direct cross-border commercial property investment in the euro area

(2006; % of total value of direct investment flows in each country)



Source: Jones Lang LaSalle.

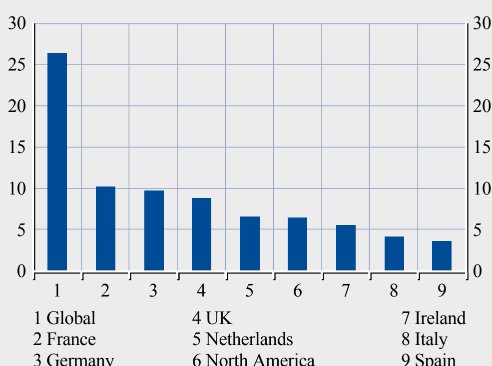
trusts (REITs) in particular – has, however, been growing in several euro area countries. Private investors were the third largest group investing in commercial property in 2006.

Global investors (i.e. investors with capital sources in several countries) account for more than 25% of euro area commercial property purchases (see Chart C.7). Investors located in the United Kingdom and North America have also been large purchasers of euro area commercial property, with shares of 9% and 6% respectively.

The high level of cross-border commercial property investment in the euro area, coupled with the growing presence of different types of investor, has had an effect on market dynamics and the ownership of euro area commercial property. Broader ownership could lead to more efficient price-setting behaviour in real estate markets by providing a more diverse and stable market environment. However, some related risks cannot be ruled out. For example, a greater cross-border dimension could increase the risk of contagion in terms of the spreading of commercial property price corrections from one euro area country – or indeed from a non-euro area country – to another when investors have exposure to several markets at the same time.

Chart C.7 Investors in euro area commercial property markets

(2006; % of total value of direct investment flows in the euro area)



Source: Jones Lang LaSalle.
Note: Data include both domestic and cross-border investment for euro area countries. "Global" comprises funds that raise a significant amount of capital from more than one region, i.e. the source of capital is not identifiable as a single country or region.

INDIRECT INVESTMENT IN COMMERCIAL PROPERTY

Opportunities to invest indirectly in commercial property through different types of property fund and through different financial market products have grown in recent years. Such investment is mainly in the form of property funds, REITs, commercial property debt securities and derivatives. The main investors in indirect commercial property placements are private investors and institutional investors such as banks, insurance companies, pension funds, endowments, foundations and hedge funds.

Property funds

Commercial property funds raise capital from institutions and private investors and then invest in property, development projects, commercial property debt or companies. Property funds are often operated by private companies, although some are run by divisions of banks or other large financial institutions. Furthermore, some REITs have established affiliates to operate real estate funds – but in such cases, the fund targets an income return or geographical area which is different to that targeted directly by the REIT.

Property funds can be closed-ended or open-ended. While closed-ended funds stop raising money after reaching their targets and usually have fixed life cycles, open-ended vehicles can continue to raise capital over time and operate indefinitely. The redemption price which investors receive if they withdraw their funds from open-ended funds is determined by the daily market prices of the liquid assets and the book value of the property held by the fund. Since the property cannot, in general, be sold at book value (at least not at short notice), the fund therefore bears a liquidity risk. If actual withdrawals were to exceed the fund's liquidity, the fund could be forced to sell off property at less than book value in order to obtain additional liquidity, or to freeze redemptions

temporarily where the sale of property at less than book value is, in general, not permitted.

Liquidity shortages have surfaced in some open-ended funds in the euro area in recent years, which has not only resulted in the closure of individual funds, but has also led to the disappearance of this type of investment in some countries.[7]

Speciality commercial property funds invest primarily in REITs of various types. The risks related to speciality funds are similar to those associated with direct ownership of real estate, including: changes in real estate values and property taxes; interest rates; the cash flows associated with the underlying real estate assets; supply and demand; and the management skill and creditworthiness of the issuer.

Private equity funds and hedge funds

Investors can gain exposure to commercial property markets by investing in private equity funds or hedge funds specialising in different kinds of commercial property investment. Private equity firms acquire real estate-owning companies, or stakes in such companies, rather than investing in individual properties or commercial property debt. Another form of private equity real estate investment is the creation of a company which invests in real estate-owning companies, properties, debt or a combination of the three.

Moreover, hedge funds are sometimes large investors in commercial property markets. Some invest directly, but most invest in equities of commercial property companies or structured credit products.

Real estate investment trusts

REITs are publicly traded real estate stock corporations which are exempt from both corporate income tax and trade income tax. They must derive at least 75% of their income from property investment and pay at least 90% of their income to shareholders.

REITs are listed on stock exchanges and, although their value should depend entirely on the value of the property they represent, their values tend to move with the rest of the equity market. This can be a problem for investors seeking exposure to commercial property, and not exposure to equities.

Most REITs acquire or develop offices, apartments, shopping centres or industrial properties. In recent years some REITs have invested in niche or alternative property types, including prisons and self-storage properties.

Commercial mortgage-backed securities and commercial property collateralised debt obligations

The large volumes of direct investment in commercial property witnessed in recent years, which have, in large part, been debt-financed, have created a need for banks to spread some of the related credit risk via debt securities. Moreover, the proactive measures taken by banks in view of the introduction of Basel II have fuelled the transfer of such credit risks to non-bank investors – particularly for the more subordinated parts of those risks.

This credit risk transfer is achieved mainly by means of the issuance of commercial mortgage-backed securities, which are a type of bond issued in security markets. These were first introduced in the US in the early 1990s, when they were used to clean up bad loans. They are a type of mortgage-backed security, but are backed by mortgages on commercial rather than residential real estate, and are usually structured into various tranches.

Record issuance levels were observed for CMBSs in Europe in 2006, with growth rates standing at around 60% year on year. Rising commercial property prices and declining property yields contributed to this development.

7 See Box 6 in ECB (2006), *Financial Stability Review*, December.

The United Kingdom is the largest market for CMBSs in Europe, but activity in euro area countries is increasing. In Germany, for example, the total value of CMBS issuance stood at €25.9 billion in 2006, compared with €4.9 billion in 2005, mainly because of the sale of large housing portfolios.[8]

Lately, commercial property collateralised debt obligations (CDOs) have joined CMBS transactions as an additional vehicle for the financing of commercial real estate. It is only in recent years that commercial property CDOs have started to emerge in Europe, with lenders beginning to follow the US practices of dividing commercial real estate loans into senior and junior pieces, which, in turn, has stimulated demand from investors with different risk appetites and allowed banks to transfer more subordinated real estate loan products (such as B notes and mezzanine loans).[9] Commercial property CDOs can be backed either by rated collateral, such as CMBSs, or by commercial real estate loans.[10]

CMBSs and commercial property CDOs have become popular among banks in order to transfer credit risks stemming from commercial lending loan portfolios. Such credit risk reduction activities on the part of banks are, in general, positive from a financial stability perspective, as they can reduce banks' exposure to credit events in commercial property markets. Banks could, however, face risks if demand for these products were to fall. Furthermore, banks, together with other financial institutions, such as insurers and hedge funds, also buy CMBSs and commercial property CDOs as part of their trading activities, and it is therefore important, from a financial stability perspective, to know who is selling protection against defaults on commercial property loans and to analyse developments in these markets. A further financial stability concern related to the growing CMBS and commercial property CDO markets stems from the sometimes complex structures of these instruments and their lack of transparency, which makes it difficult for investors to understand the risks involved.

Property derivatives

Property derivatives have several features that are positive from a financial stability viewpoint. They provide hedging functions for owners of commercial property and allow investors to gain exposure to – and diversify their investments into – commercial property markets without having to invest directly in property, thereby contributing to the efficiency of real estate markets. Furthermore, property derivatives (provided that they are not based on REITs) are not correlated with the stock market and thus provide opportunities for investors to spread investment risks. Although the commercial property derivatives market is still relatively small in the euro area, strong growth observed during recent years, together with the opaqueness of derivatives markets, which makes it difficult to know who is exposed to these instruments, and the danger that some investors do not have adequate risk management practices in place for investing in property derivatives, means that these markets need to be monitored in the context of financial stability assessments.

Property derivatives have existed for around 15 years, but significant growth has been witnessed only during the last three years in Europe, and mainly in the United Kingdom, Germany and France. The growth of the market has been weaker than expected by market participants.[11] Demand for commercial property derivatives has been hampered mainly by the fact that commercial property markets are often illiquid, as well as by the lack of transparency, standardisation and high-quality databases. Some market participants do, however, expect strong growth in property derivatives in the coming years given the size of the property market in Europe and thanks to improvements in the standardisation of derivatives and

8 See Moody's (2007), "2006 Review and 2007 Outlook: EMEA CMBS: Another record year with tremendous growth in the German CMBS and Multifamily market", January.
9 See Fitch Ratings (2006), "Laying the Foundations – the Potential for European Real Estate CDOs", September.
10 See Fitch Ratings (2007), "Commercial Real Estate CDO Servicing: A La Carte or Prix Fixe?", February.
11 See Risk Magazine (2007), "Property derivatives", September.

improved databases.[12] The high underlying amount of commercial property in the euro area provides a large base for derivative transactions. Furthermore, progress has been made in standardising property derivatives in order to make them easier for investors to analyse and, therefore, in order to increase their demand and reduce the set-up time needed. The establishment of commercial property price indices for derivatives by the Investment Property Databank has also supported the growth of the market – especially in the United Kingdom – and recent initiatives to broaden the geographical coverage of the indices could further develop property derivative markets in Europe.

CONCLUDING REMARKS

History has shown that adverse developments in commercial property markets have the potential to cause severe financial instability. This, together with the growth seen in euro area commercial property markets in recent years, means that there is a need from a financial stability viewpoint to monitor and analyse the nature and scale of exposures within the financial system to the various available types of commercial property investment.

12 See, for example, Deutsche Bank Research (2007), "Property derivatives marching across Europe", June.