

LEGACY OF THE DOWNTURN



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INREV is the European Association for Investors in Non-Listed Real Estate Vehicles. Our aim is to improve the accessibility of non-listed real estate funds for institutional investors by promoting greater transparency, accessibility, professionalism and standards of best practice.

As a pan European body, INREV represents an excellent platform for the sharing and dissemination of knowledge on the non-listed real estate funds market. The association's primary focus is on institutional investors, although other market participants such as fund managers, investment banks, lawyers and other advisors provide additional support.

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ACKNOWLEDGEMENTS

This report would not have been possible without the help and support of many individuals and companies who gave of their time, knowledge and proprietary research for the success of this research project. We are most grateful for the time and energy of all the attendees who participated in workshops. Special thanks are also due to those individuals involved in informal discussions and structured interviews. A number of investors and fund managers provided access to valuable secondary sources. CBRE and DTZ research contributed proprietary data and research, which is much appreciated.

Of course, those contributing information are not responsible for the views expressed in this report.

EXECUTIVE SUMMARY

This paper considers the legacy of the financial crisis on the structure of the non-listed real estate industry. Adopting a medium-term horizon to 2015, existing and expected trends for four principal drivers of non-listed real estate are assessed, namely: economic prospects, regulatory change, equity capital and debt capital. The interaction of these underlying drivers are evaluated to determine their likely impact on real estate pricing, together with their implications for the scale, organisational structure and focus of the non-listed real estate industry by 2015. The analysis suggests that the risk of pricing shocks remains. The research indicates a reduction in the capital base for non-listed real estate funds, clear separation of the industry by investment objective, further reflected in the polarisation of the industry into large and specialist organisations. It also points toward a strong wave of industry consolidation.

Key finding of the research are:

- Although Europe's recovery has gained traction, economic growth prospects are moderate relative to historical performance and to those in other regions. With a refocus on real estate fundamentals, differences in growth are mirrored in lower expected real estate returns. This points towards a reduced capital weighting toward European real estate in favour of the US and Asia.
- Across Europe, there is wide variation in the degree and timing of economic growth. While this indicates polarisation, differences in the timing of recovery also point toward a resurgence of real estate diversification opportunities. Such diversification benefits are likely to continue to be reflected in pricing given the higher risk premiums associated with the cost of capital in the weakest and most indebted markets.
- The financial crisis highlighted the need for better risk management and greater understanding of investment risk characteristics across asset classes. The relative volatility, illiquidity and transparency of real estate require an appropriate risk premium. However, the additional capital requirements to better manage this risk for institutions exaggerate the risk relative to return due to the mark to market accounting requirements embedded in both Basel III and Solvency II. This emphasis on short-term pricing rather than long-term value for long-term investments increases the market risk associated with the sector. Worse still, proposed OTC derivatives reform constrains the ability to hedge exposure. This increases the cost of capital and is likely to impact on real estate pricing as higher returns will be required to compensate for the additional risk premium. This will be particularly the case for secondary real estate.
- The proposed AIFM legislation increases the cost base for fund managers by raising the capital adequacy requirements for each entity, together with increased compliance and reporting demands. EU passporting will enable larger platforms to absorb additional costs more efficiently than their smaller counterparts and points toward much greater consolidation of the industry.
- Structural, regulatory and behavioural changes in long-term investing are reducing equity allocations to alternatives. There are a number of counter trends that soften the impact for non-listed real estate, including: a backlog of unplaced institutional capital previously allocated to real estate; the favourable risk profile of real estate relative to other alternative investing options; its stronger diversification benefits; partial inflation hedging characteristics; and, an increase in the number of institutions making first time investments.

- While these counter trends will lend support, allocations to European non-listed funds are anticipated to decline as the appetite for real estate declines. In addition to new regulation, changes in the structural and strategic objectives of institutional investors point toward a fundamental shift in the dominant sources of real estate capital. This has profound implications for target allocations, risk appetite and the structure of the non-listed real estate industry. At the same time, competition for real estate allocations is expanding among regions, across investment modes and by product range.
- Real estate's capital base will be further reduced by the low availability, higher marginal cost and behavioural changes in the use of debt capital. The impact will be disproportionate on the non-listed real estate fund universe given its greater use of debt historically.
- Analysis of the debt market suggests that the risks for real estate extend far beyond access to finance. The pragmatic approach taken by bank lenders to date in managing the work out of loan books may be increasing the risk of market destabilisation in the medium-term, potentially resulting in pricing shocks for a number of reasons. First, the rollover of debt is increasing the concentration of non-performing assets as a proportion of outstanding debt. Second, good quality secondary real estate is deteriorating in value further as capital expenditure for non-performing assets declines, impacting rental growth and increasing vacancy. Third, there is a risk of overheating in the prime sector with activity focusing on income secure assets, compounded by an absence of re-priced product or new financing for non-prime assets.
- With loan books tying up available capital, the supply of debt is set to remain low into the medium-term. In addition, given the additional cost of capital requirements associated with Basel III, it is anticipated that banks will withdraw a proportion of this debt capital from allocations to real estate.
- This low availability of debt capital is itself an opportunity. At present, the scale of alternative sources of capital remains low, but given increasing margins is expected to accelerate into the medium-term. Non-listed real estate debt funds are a major source of new debt capital. For many investors, such real estate debt and equity funds are considered within the real estate equity allocation and this trend is increasing.
- The impact of legacy issues from the financial crisis for real estate markets is greater for non-listed funds. This is due to the interaction of broader economic, regulatory and structural trends with behavioural change in the non-listed funds industry. This suggests a disproportionate adjustment in the capital base, adjustments to the organisational structure of the industry and, to both the scale and scope of fund products:
 - > The capital base of non-listed real estate vehicles will decline absolutely and relative to the wider real estate markets because of (i) greater reallocation of non-domestic capital toward other regions; (ii) large investors changing their mode of investing preference; (iii) greater impact of declining use and availability of debt; (iv) expansion of the range of permissible investments for investors within the non-listed real estate investment allocation.

- > The combined impact of the underlying drivers of real estate, together with shifts in investor strategies suggest that the organisational structure of the non-listed real estate industry will undergo significant change. Investors are reviewing their real estate investment objectives, leading to a trend of dividing portfolios into a core base, with a small allocation to satellite funds. This suggests a separation of real estate allocations and real estate investing into market beta funds and private equity style alpha funds. Regulatory change is both a driver and facilitator of such change. Given the lower fee profile of core funds, the economies of scale open to larger platforms will create significant competitive advantage, driving further consolidation of the industry.
- > The re-emphasis on beta and core funds requires strong diversification, which requires scale. This suggests larger funds in terms of strategic scope and by number of investors. However, this runs contrary to investors' current preferences for smaller funds focused on discrete markets.
- > The change in the business for higher risk strategy funds delivering alpha suggests this segment will become smaller, locally focused and/or more specialised. Given their higher risk profile and associated cost of capital in a muted economic recovery context, increased allocations to Asia may disproportionately impact on this segment.

1 INTRODUCTION

This paper considers the legacy of the financial crisis on the structure of the non-listed real estate industry. The aim of the research is to project the future structure of the non-listed real estate industry. The research builds upon earlier research re-evaluating the case for non-listed real estate post crisis which identified a number of long-term behavioural trends with potentially wide reaching implications for the future structure of the industry (INREV, 2010a). The likely manifestation of such change is dependent on its interaction with the wider drivers of the industry including, but not limited to economic prospects, regulatory change, equity capital and debt capital. Adopting a medium-term horizon to 2015, existing and expected trends for these four principal drivers for non-listed real estate are assessed.

By identifying and evaluating the drivers underpinning the sector it is possible to determine the future shape of the industry. Importantly, the research distinguishes between the elements that are known and certain, and those that are known but subject to considerable uncertainty. The research focuses on evaluating the impact of the four main drivers of real estate on:

- (I) The scale of real estate's capital base;
- (II) Real estate pricing;
- (III) Organisational structure of the industry;
- (IV) Product range and scale.

The report is structured to consider trends for each driver of change and their likely implications individually. Subsequently it considers their interaction and evaluates the likely implications for the pricing and structure of the non-listed real estate industry. First, consideration of the European economic outlook provides the underlying context against which the implications of change may be assessed. In addition to considering economic growth, inflation risks and potential movements in bond rates are discussed in relation to their likely impact on real estate pricing and capital allocations. Second, in the aftermath of the financial crisis the need for better risk management and greater understanding of investment risk was apparent. As a result, a wave of new financial regulation is in development that has direct and indirect consequences for real estate. This paper examines four regulatory changes that have major implications for the future structure and pricing of the non-listed real estate industry, namely; Basel III, Solvency II, AIFMD and EMIR. Third, structural and behavioural changes in the allocation of equity capital to real estate and to the non-listed sector in particular are considered. Trends and counter trends in the allocation of capital are considered, drawing out their likely impact for real estate's capital base at the aggregate and for non-listed real estate vehicles in specifically. Fourth, the role and availability of debt capital is assessed. As well as considering its impact on the capital base of the industry, particular consideration is given to the process of de-leveraging and its potential impact on market pricing. Finally, the interaction of these underlying drivers are evaluated to determine their likely impact on real estate pricing, together with their implications for the scale, organisational structure and focus of the non-listed real estate industry.

1.1 Methodology

This study has been conducted by Brenna O’Roarty from RHL Strategic Solutions and follows an earlier study re-evaluating the case for investing in non-listed real estate funds post financial crisis.

The first stage of the research is primarily desk based research. The key forces for change and their likely implications for the future of the non-listed sector are established through a review of existing literature. This is augmented by a series of informal discussions and more formal structured interviews with selected experts to ensure the selection of drivers is robust and the framework is comprehensive.

The second stage of the research involved the presentation and discussion of the trends analysis with selected industry participants. Two workshops were undertaken in London and Amsterdam, involving a total of 18 INREV members. The workshops enable the trends analysis to be stress tested and provided industry knowledge, expertise and valuable feedback of the drivers and their expected implications for the future structure of the non-listed industry.

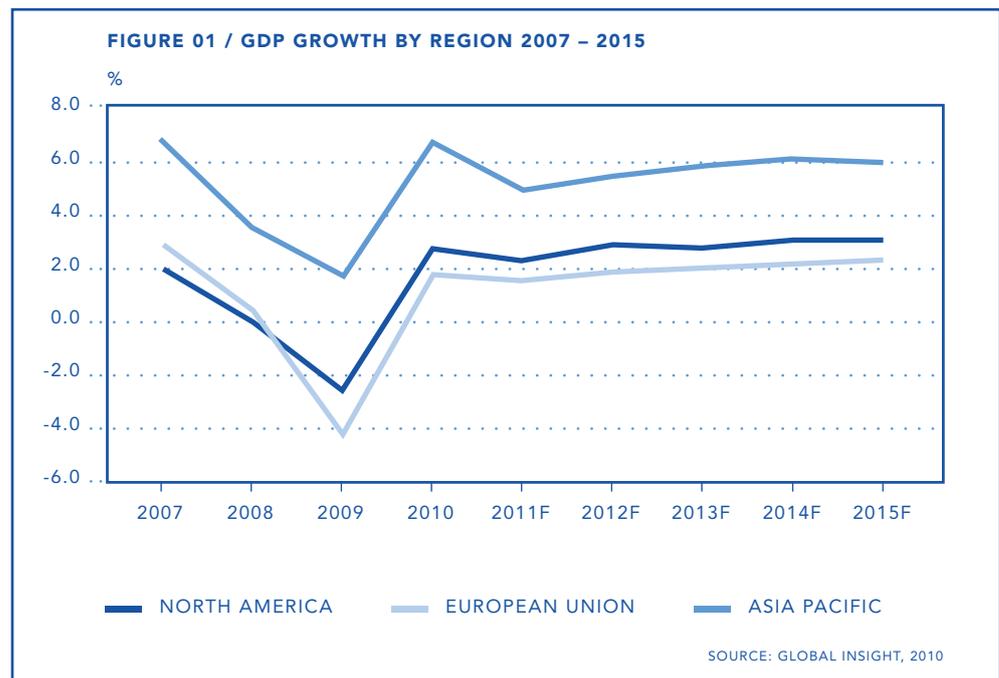
The third stage involved the evaluation of the future structure of the non-listed real estate industry, highlighting the key steps required to ensure future success and growth. The conclusions were tested on selected market participants to enable the fine-tuning of results.

2 ECONOMIC CONTEXT

While the impact of structural change on real estate goes beyond shorter term prospects, its interaction with the underlying economy is a crucial dynamic. In this section, the key economic trends underlying real estate investment decision-making are set out in brief. This provides the economic context within which broader legacy issues reshaping the non-listed real estate industry are considered. There are three principle and interrelated economic risks; economic growth, inflation and bond rates.

2.1 Economic Growth Prospects

Following the financial downturn, confidence in the stability of the European economic recovery is building. To date, the sovereign debt crisis has been contained, but it has dampened the magnitude of GDP prospects. Expectations for economic growth of 1.8% for 2011 build on the 1.8% achieved for 2010. This growth is supported by the recovery of the global economy, with the US and Asia delivering stronger rates of growth (Figure 01). Indeed, for the emerging markets of Asia the financial crisis was just an interruption to prolonged growth. Economic growth expectations indicate that Europe will continue to lag behind growth in Asia and the US. With real estate prospects firmly grounded in fundamentals, Europe's relative underperformance is expected to be mirrored in performance expectations.

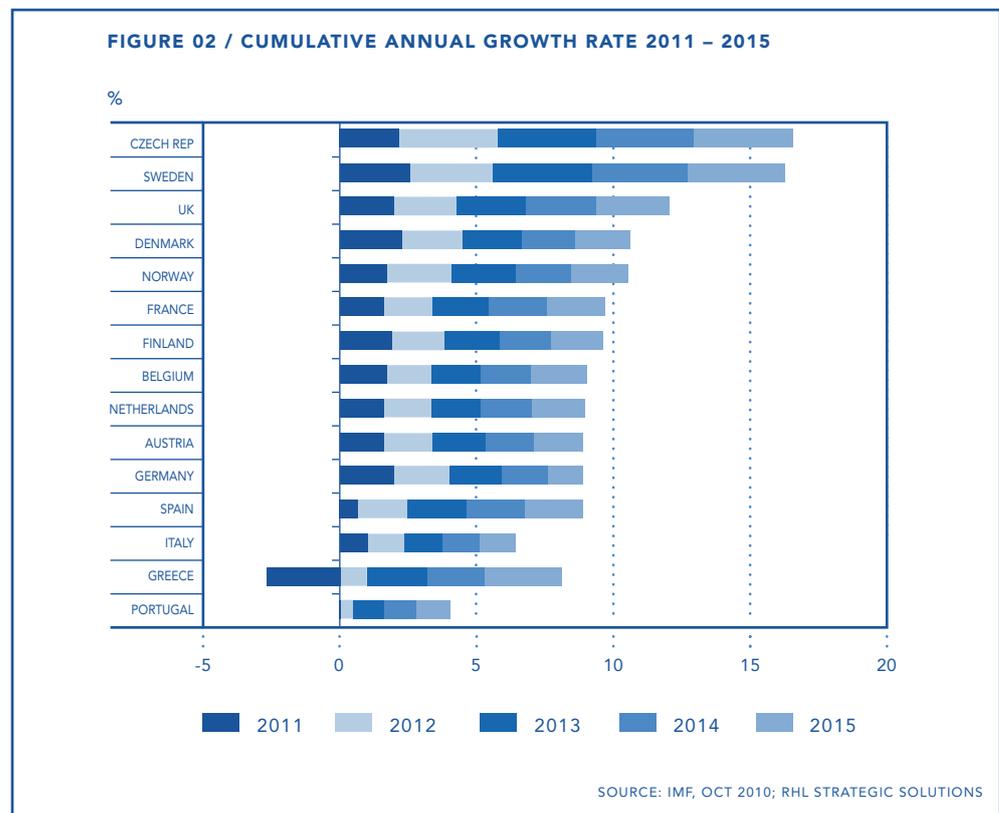


At the aggregate, European five-year economic GDP prospects are modest to 2015. Fiscal consolidation policies will ensure that growth remains moderate into the medium-term as government spending contracts and private consumption remains under pressure. Within Europe, economic prospects will vary widely through the medium-term, with Northern and Central Europe generally out performing Southern Europe. Strong policy in the eurozone has managed to contain the sovereign debt crisis, but downside risks remain.

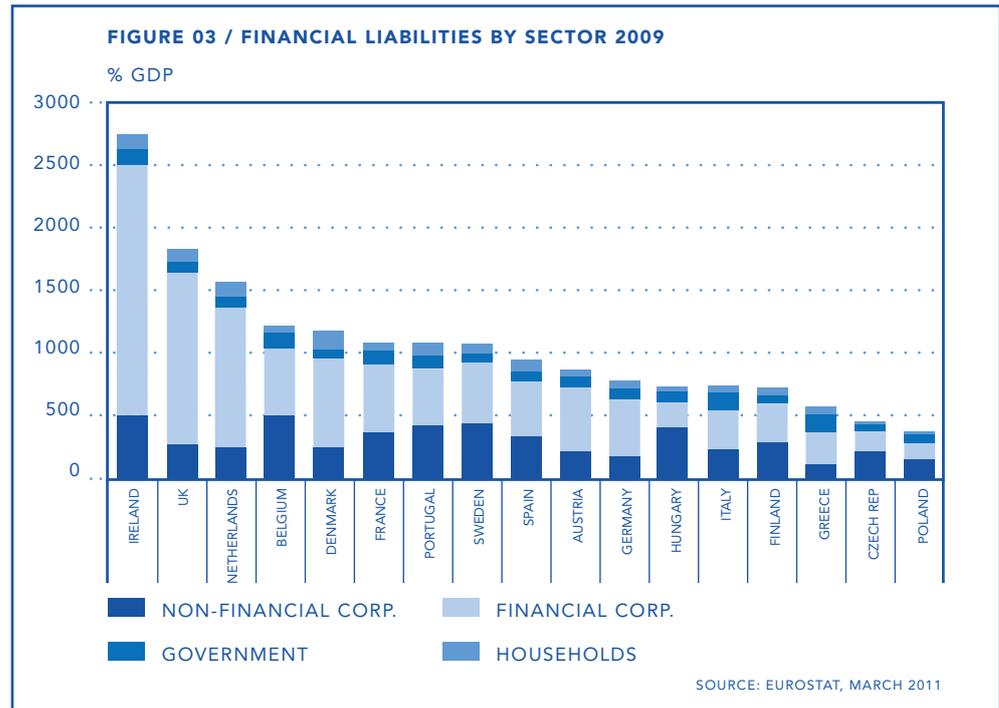
In the age of austerity, fiscal consolidation measures will continue to exert downward pressure on domestic demand, thereby limiting the potential for growth. This risk is greatest

in the weakest, over-indebted markets. This is heightened by the associated interest rate risk, which increases the cost of capital. However, there are also a number of upside risks. The recovery of export led growth came earlier than expected. In part this was assisted by weakened currency, but was also due to inventory replenishment being brought forward. In addition, as employment levels in most markets move past the trough, debt levels are stabilising, enabling the process of de-leveraging to begin.

There is considerable divergence across countries in both the degree and timing of growth (Figure 02). This reflects differences in debt levels and economic structure. The Nordics and Central Europe are expected to have the strongest growth across the forecast horizon. German economic growth is strongest in the near term with the rate of growth tapering to more muted levels into the medium-term. Being the largest export led economy, its growth has important externalities for countries dependent on Germany for their own exports. To this end, Germany’s role as Europe’s engine of growth is critical to the broader economic health of the region. The economic recovery in Germany has gained traction across sectors, resulting in employment and income growth, further supporting domestic demand.



Similarly, economic growth in France is strengthening and will expand over the forecast horizon. In the UK, the recovery in financial markets and growth of exports (assisted by the depreciation of the pound), will help to offset fiscal consolidation. Rising unemployment due to sharp government spending cuts to reduce public sector debt will dampen already weak domestic demand. Indeed, de-leveraging economies carries deflationary risks (Figure 03, page 10). As a result, economic growth remains fragile, but is expected to rebound in the medium-term. The weakest growth is, unsurprisingly, in the over-indebted peripheral markets of Europe, Spain, Ireland, Portugal and Greece. Fiscal austerity measures to consolidate debt have contracted government spending, increased unemployment and dampened domestic demand. This will persist into the medium-term. However, stronger growth is expected from 2014, albeit from a low base.

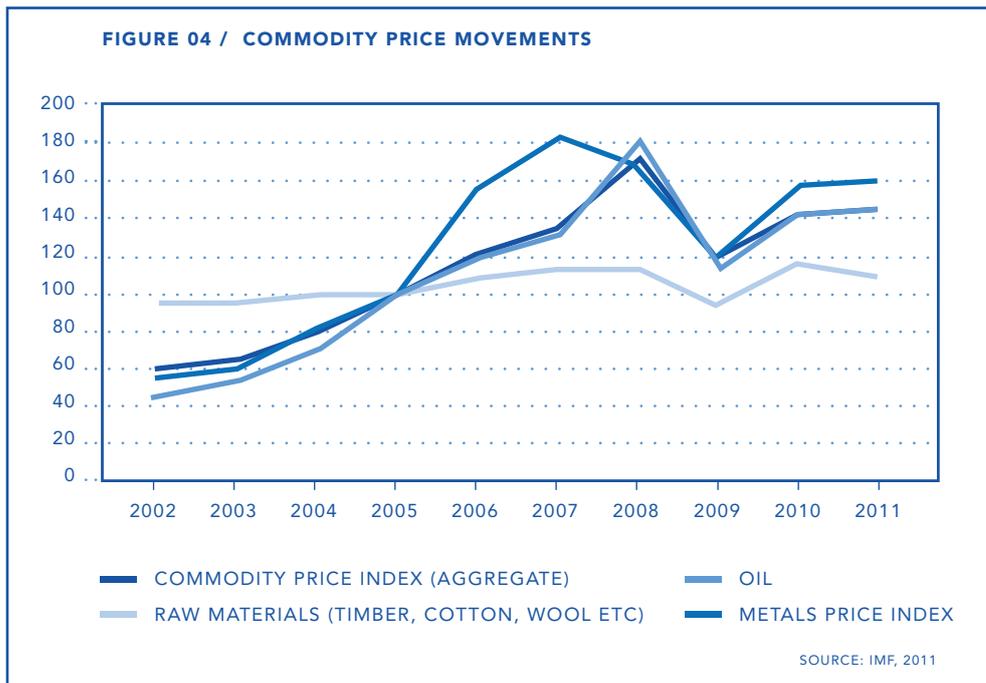


2.2 Inflation

Although a low inflation environment remains the consensus for Europe, rates have been rising ahead of expectations in both the eurozone and non-eurozone. Of greatest concern is the UK, where a VAT hike, currency depreciation and cost push commodities inflation have led to inflation gradually increasing to 4.4% (CPI) at February 2011. This is some 2.4% over target. Within the eurozone, the rate of CPI is lower at 2.2% but again, ahead of the target rate of 2%.

When inflation growth is modest, real estate can act as at least a partial hedge against inflation. Within many European markets, lease terms provide for the indexation of rents with CPI. This insures rents will keep pace with inflation in the short-term. However, this is not sustainable in the longer term if market rents have fallen behind inflation. At lease expiry, rental income will be reset to the prevailing market rent. Market rents will tend to keep pace with inflation if the source of price increase is weighted toward demand pull inflation, or if occupiers are able to pass through cost push inflation into pricing. That is, the occupiers' underlying profits are at least keeping pace with inflation.

The current source of inflation is cost push as a result of higher commodity prices and the higher cost of imports. Principally this is due to two factors. First, stronger demand for finite resources, especially within Asia, pushing up commodity prices (Figure 04). Second, the currency depreciation of both the euro and sterling. This reduces purchasing power for escalating commodities further, but also increases the cost of wider imports. The capacity for businesses to pass through their increasing cost base by raising the price of their goods and services is relatively straightforward in an expanding economy. However, it is more problematic in a weaker economy where demand is more fragile.



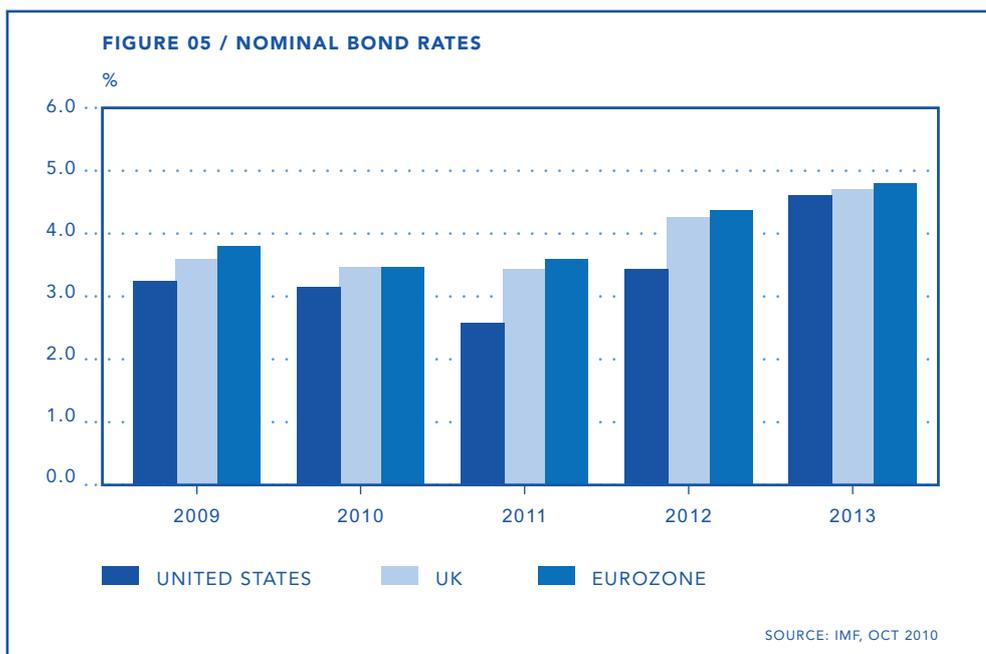
The recent rises in inflation have occurred at a time when the greater risk was considered deflation, given the risk of fiscal austerity packages eroding growth. The source of inflation is exogenous to Europe and occurs against a background of modest economic growth. In markets focused on fiscal consolidation, wages are already falling in real terms. Public sector jobs are contracting and pay cuts have occurred in Spain, Ireland, Portugal and Italy. In the UK and France wage increases are frozen at or below inflation rates. Already low domestic demand will weaken further as household spending power erodes. This reduces the ability for businesses to pass through the rising cost base in higher prices. In turn, this may narrow business profitability.

Within this economic context, the capacity for real estate to deliver an inflation hedge beyond short-term rental indexation is questionable. Of course, should this persist into the long-term, it would eventually impact on supply. If increases in the cost of construction or replacement continue to outpace rental growth, this will contract development activity and re-create hedging conditions. This reduction in the supply response to recovering demand would drive up rents, in turn stimulating supply. In contrast, inflation is already being reflected in wage increases in less debt burdened economies such as Germany. In such markets, stronger economic growth and increasing profitability may enable real estate to provide a partial hedge against inflation.

Prolonged above target inflation is also likely to lead to increases in official interest rates. It therefore heightens the risk of market destabilisation. Given the scale of highly leveraged assets that remain in breach of loan-to-value covenants, any interest rate rise could rupture interest coverage ratios. This would lead to an unexpected rise of defaults and disclosures. The surge in the supply of assets that would result would generate pricing shocks and greatly increase the risk of market destabilisation (Section 3).

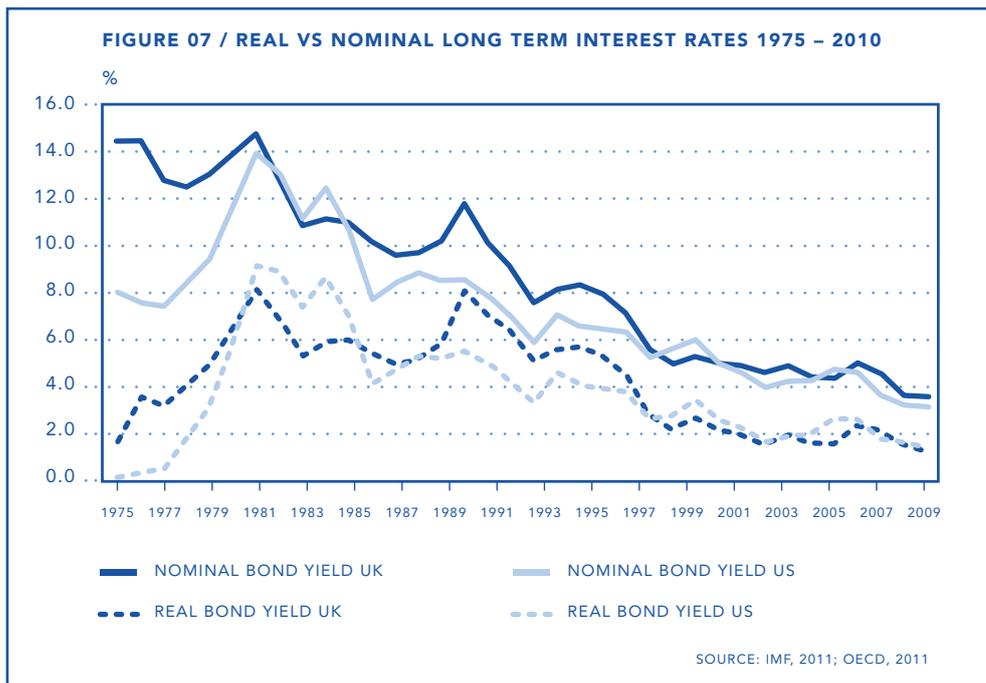
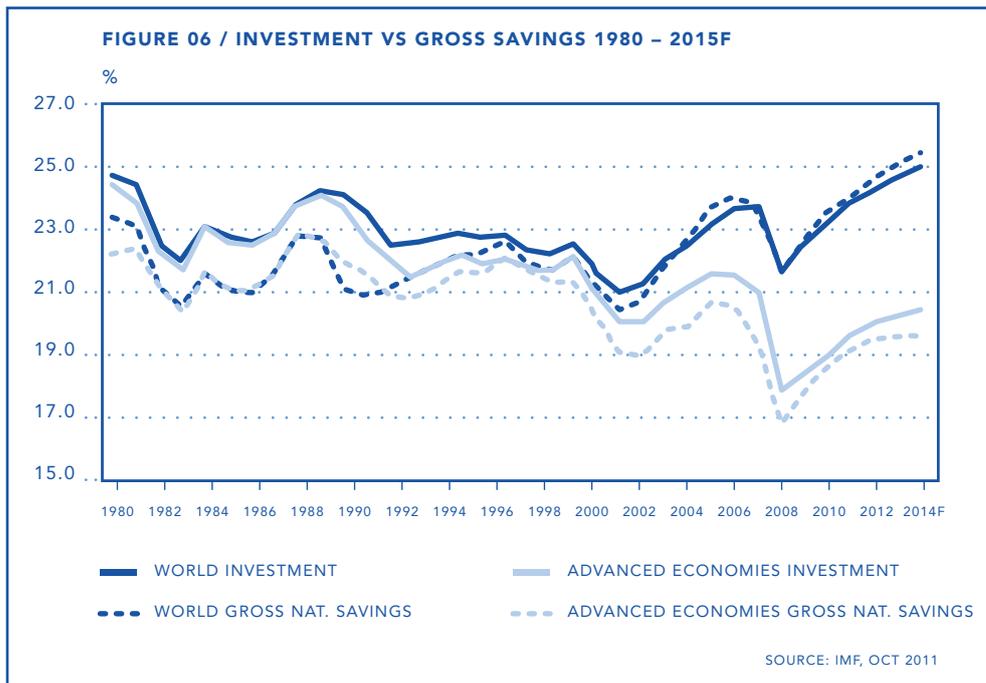
2.3 Bond Rates

Looking forward, the risk free rate of capital is expected to rise. Most economic forecasts point toward already rising nominal bond rates in the near term (Figure 05). This is due to the fiscal stimulus and expansionist money supply policies used to contain the financial crisis, restore stability and assist in the recovery of market liquidity. In part, this has contributed to raising inflation. However, McKinsey (2010) identify a number of global economic trends which suggest that the real cost of capital is set to rise into the long-term.



In mature economies, the investment rate has been in decline since the 1970s and is cited as a principal driver of the expansion and falling cost of debt capital up to 2007. Savings grew at much lower rates than the speed at which investment rates declined. This reflects the greater capital intensity of post-war rebuilding programmes for real estate and infrastructure in comparison to technology, the dominant investment sector after 1980.

Moreover, while the requirement to invest in technology has grown, the unit cost of such investment has fallen. Looking forward, emerging markets are set to rapidly increase investment demand given the importance of infrastructure and real estate development to growth (Figure 06). While globally, savings have increased since 2002, a number of structural shifts suggest they will fail to keep pace with the acceleration in investment demand. First, they are expected to decline as mature and ageing economies begin to drawdown savings. Second, China is attempting to rebalance its economy through stimulating greater consumption and reducing its very high savings rate. Third, savings will be highest in emerging economies where the financial infrastructure to access and use such capital is weakest. The excess demand for available capital could lead to a sharp rise in real long-term interest rates, which will begin to be priced in by the medium-term (Figure 07). This would impact upon real estate investment in a number of ways.



Within this environment, both investors and fund managers with direct and privileged sources of financing will have a clear competitive advantage. Fund managers that have a parent banking institution may benefit from direct access to capital. Equally, investors with deep sources of capital such as sovereign wealth funds, pension funds and insurance companies, will be able to use their access to capital as power. Potentially such investors might seek additional or privileged returns, or more innovatively, act as a principal and partner with a fund manager and/or REIT where permissible.

Of course, significantly higher real long-term interest rates will also impact on real estate returns. In a low inflation or deflationary environment, it would be rational for institutional, risk-averse investors to reverse allocations away from alternatives back to fixed income

investments. Given the risk premium associated with commercial real estate, cap rates would rise relative to bond rates. Indeed, as the weight of capital targeting real estate declines, the spread between bond rates and real estate may increase. Equally, the higher discount rates that would result would reduce the value of future cash flows.

More positively, this growth in demand for fixed interest allocations will limit the degree to which real interest rates can rise given increasing competition and supply of capital. Within the alternative sector, demand for annuity investments will increase as income yields rise. Income returns will be supported by limited development activity due to the cost of capital. The growth in other alternative investing options, especially those offering annuity investments such as infrastructure, may further decrease the level of capital targeting real estate. Of course, if inflation risks persist into the medium-term, allocations to real estate might increase the attraction of its partial inflation hedging characteristics.

While globally there will be a shortfall in investment demand over savings, there are some important differences between European markets. In particular, those markets characterised by current account surpluses. For example, Germany and the Netherlands are likely to encounter fewer issues in accessing capital. This follows the reversal in the globalisation of financial markets, with bank lending retreating to domestic markets in the aftermath of the downturn. This trend runs counter to the increasing investment and demand for debt capital from emerging markets, with a concentration on real estate and infrastructure sectors.

While increasing global competition for capital may put upward pressure on long-term interest rates, it is likely that in the short to medium-term the bias toward home markets will prevail. In contrast, those markets running a deficit will see the cost of capital increase more quickly and more sharply as competition increases. This is likely to be even more pronounced in peripheral markets at least in the short to medium-term. As banks concentrate on rebuilding their balance sheets and managing risks, they are refocusing on core markets.

2.4 Implications of Economic Backdrop for Non-Listed Real Estate

Europe's recovery from the financial downturn is expanding in geographic scope and in the number of industry sectors returning to growth. Its recovery is despite the sovereign debt crises over 2010 and into 2011. The effectiveness of policy in managing a series of sovereign default risks as liquidity dried up and in avoiding a second financial crisis is not to be underestimated. However, it has weakened the rate of growth and the euro currency against the dollar. The recovery will gain some momentum over the next five years to 2015. Such growth will be moderate relative to both Europe's historical performance and to growth expectations in other regions. In turn, more modest growth levels lower expected real estate returns absolutely and relative to competing regions. This development points toward a reduced capital weighting to European real estate in favour of the US and Asia.

Across Europe, there is wide variation in growth prospects in both degree and timing. Generally, the less indebted markets of Northern and Central Europe have earlier and stronger growth than those in Southern Europe and Ireland. While this indicates polarisation, differences in the timing of recovery also point to a resurgence of real estate diversification opportunities. Such diversification benefits are likely to continue to be reflected in pricing in view of the higher risk premiums associated with the cost of capital in the weakest and most indebted markets. However, more modest economic growth will be reflected in the performance of real estate across most markets. This suggests that real estate yields will rise in line with nominal bond rates, reducing real estate pricing nominally. The greater risk lies in movements in real bond rates.

Rising real bond yields are likely to result in real estate real value decline for two reasons. First, real estate yields will increase relatively. Second, if the level of rising real bond yields is sufficient to deliver investors' required returns from low risk fixed interest investments, real estate values would decline even further. This would reflect a reversal in the weight of capital to fixed interest investments, at least in a low inflation environment. A shift in capital to fixed interest investments would itself further compress bond rates, in this sense acting as an automatic stabiliser to pricing. Of course in the aftermath of the financial crisis, regulatory attitudes to risk and required premiums are changing. Together with legacy issues as well as broader structural trends within debt and equity markets, this will impact on real estate allocations and pricing.

3 REGULATORY CONTEXT

The financial crisis highlighted a number of weaknesses in the regulatory process concerning capital adequacy and risk. The rapid growth of relatively new sectors, including non-listed real estate investment vehicles, revealed a number of inconsistencies between risk management, fiduciary duty and reward. Such issues are being addressed through a wave of inter-connected legislative initiatives aimed at ensuring greater financial market stability going forward. The proposed Basel III, Solvency II, AIFM Directive and EMIR, which targets the use of OTC derivatives, will have far-reaching implications for the future structure of non-listed real estate sector in terms of its scale and risk profile.

3.1 Basel III

The objective of the regulations proposed within Basel III is to safeguard the banking system by improving not only their capital liquidity, but the quality of capital. The regulations have a long transition period. Full implementation is not expected before 2019, while compliance with new processes and reporting is required as early as the end of 2012. Its purpose is to make the underlying variables of risk management processes more transparent. Current proposals indicate that banks will be required to maintain a Tier 1 capital adequacy ratio of 6% (core 4.5% and non-core 1.5%). In addition there is a regulatory requirement to hold a buffer of 2.5% for core and 1.5% for non-core, resulting in a total of 7% for core Tier 1 and 8.5% for all Tier 1 capital. Banks will likely build in a cushion above the regulatory requirements and regulators in the UK and Switzerland have already indicated that their requirements will exceed those of Basel III. McKinsey (2010) estimate that within Europe the current shortfall of Tier 1 capital is €1.1 trillion. In addition the liquidity coverage ratio on short-term funding results in a shortfall of a further €1.3 trillion. While there is less certainty on the effects for long-term funding, current proposals suggest a shortage of €2.3 trillion. Overall, this development points to a reduction in available capital.

While real estate is not specifically targeted, risk-adjusted weightings (RAW) are used to account for differences in the quality of capital. Assets with higher volatility have a higher RAW, resulting in a higher capital requirement. The capacity to quantify risk using reliable, historic data series within risk analysis is an important component. The impact on European commercial real estate is significant as RAW weightings will be higher and variable due to a number of factors. First, the relative lack of transparency in real estate pricing and measurement will result in a relatively higher risk weighting than highly transparent and liquid sectors. Second, the RAW will be higher in emerging and maturing markets and sectors due to differences in transparency and performance measurement across markets and sectors. Third, because of their higher volatility, secondary and tertiary assets will carry high RAWs relative to prime. Fourth, high leverage assets present higher value risk and therefore will also carry a high RAW. Fifth, the high income volatility associated with development lending and the associated high RAW this generates may inhibit a revival of bank lending for such activity.

Carrying a higher capital requirement results in a higher risk-adjusted cost of capital. This would lead to a widening of the perceived risk premium for real estate and higher margins on debt capital. In conjunction with the requirement to mark assets to market in balance sheets, it also points to shorter loan maturities, which runs contrary to the overriding aim of the legislation to reduce risk and underpin stability. Even where business lines exceed their target returns, they may represent inefficient use of capital. Carrying market risk and being illiquid, the RAW on commercial real estate may result in it being an inefficient business line for some banks. The withdrawal of a number of German lenders from the UK market in

the second half of 2010 as parent banks come under pressure to fall in line with the new regulations underlines the issue. It also highlights the reversal of financial globalisation.

The impact will be most severe on the availability of capital for secondary and tertiary real estate, which will become unprofitable for lenders given the high capital requirements. While Basel III may provide the incentive for banks to deal with the existing portfolio of such assets on their balance sheets, it is unclear whether the debt capital it would free up would be reemployed even for prime real estate. Given the opportunity cost of capital required to fulfil capital requirements, a reduction in the allocation of debt capital to real estate is expected. It may result in some banks exiting the sector altogether.

Basel III may also slow down the much needed reawakening and growth of the European mortgage backed securitisation market as a means of diversifying European real estate finance. Previously, the advantage of the market for banks was that it allowed loans to be removed from the balance sheet. The crisis in the market arose from the poor underwriting of many assets. Basel III requires banks to list securitised assets, together with their risk assessment and leverage. To ensure banks use more stringent risk analysis, especially from the rating agencies, they are required to retain 5% of such assets on balance sheets. Of course given the higher risk, such assets carry a high RAW. It remains to be seen whether the potential to generate a flow of fees from securitising assets, mainly off balance sheet outweighs the inefficient use of capital associated with the higher capital requirement for the retained holding.

3.2 Solvency II

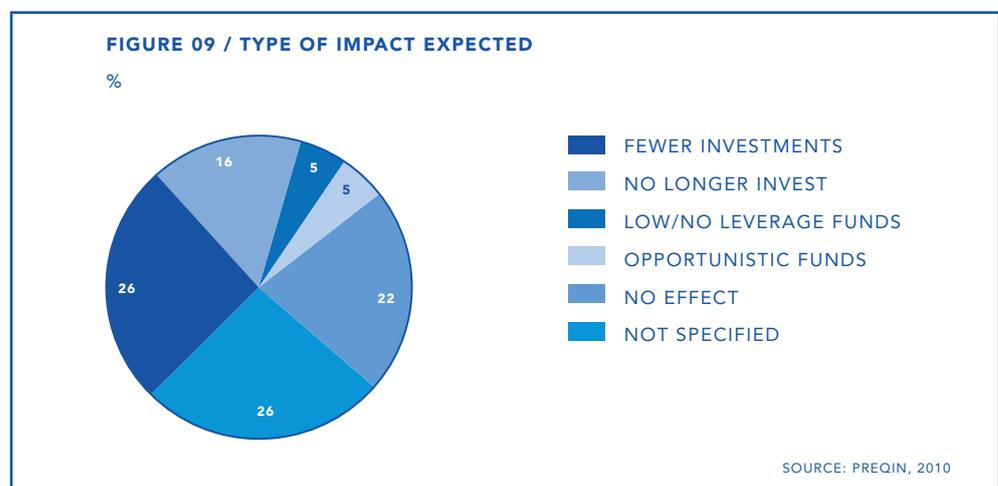
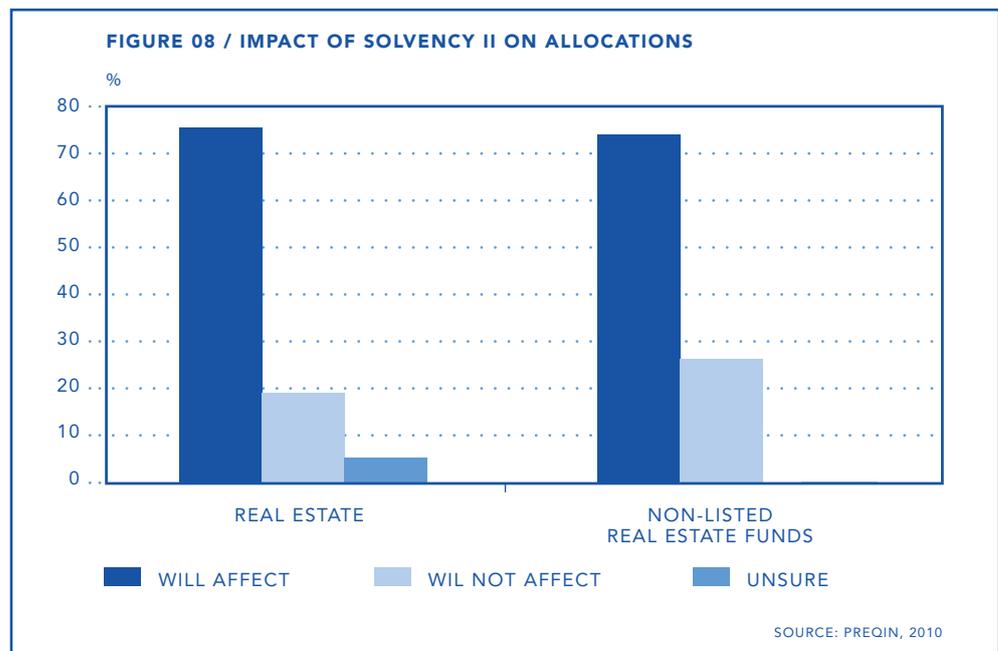
Sharing a similar objective to Basel III and its predecessor, the EU Directive Solvency II is focused on capital adequacy and risk management within the insurance industry. The implementation date is 1 January 2012 and, although still in its consultation phase, the proposed directive would have major implications for real estate capital. Initially conceived as being equally appropriate, the degree to which it will be included in the regulation of pension funds remains uncertain, yet of critical importance. It requires assets and liabilities in the balance sheet to be stated at market value. Solvency II also requires a surcharge be calculated to reflect the risk premium that is required to compensate for all risks that cannot be hedged or diversified away. To this end, the growth of the real estate derivatives market provides a means of hedging real estate risk and potentially reducing associated capital requirements. Proposed regulation of OTC derivatives would erode this advantage, indeed its impact on interest rate hedging is likely to increase the risk premium for real estate yet further (see section 3.4).

The calculation of the risk surcharge is based on a cost of capital approach and, when calculated for each separate risk component, is similar in principle to the RAW weighting within Basel III. The capital requirement is based upon the aggregated risk components for each type of risk (health insurance, life insurance), followed by the aggregation of the risk components. In these calculations, correlations, and by inference diversification benefits, are considered within the assessment of the Basic Solvency Capital Requirement.

The direct and indirect implications for real estate are potentially immense. The focus is on annual valuations and therefore short-term returns. This generates stronger volatility than the use of long-term performance measures, yet real estate holdings are generally long-term assets within insurance portfolios. The higher volatility of real estate relative to fixed income returns increases the capital requirement and therefore the cost of capital of the sector. The implications for allocations to real estate are uncertain. A recent study by Ortec (2010) suggests that an overemphasis on reducing the short-term risks, and therefore capital requirement, reduces the long-term expected returns.

There is a growing consensus that Solvency II will decrease allocations to real estate from the insurance sector, with allocations to more volatile and/or illiquid asset classes reducing in favour of fixed interest. This intensifies the existing trend of declining allocations of life insurers due to liability maturities. Nevertheless, non-listed real estate may compare favourably to other alternative investment classes. For example, non-listed real estate is less volatile than listed real estate and provides stronger diversification benefits with equities. Relative to private equity, real estate is less volatile and provides greater liquidity. While reduced allocations to alternative investments are expected, higher allocations to real estate within the alternative pool may offset at least a proportion of the decline in capital.

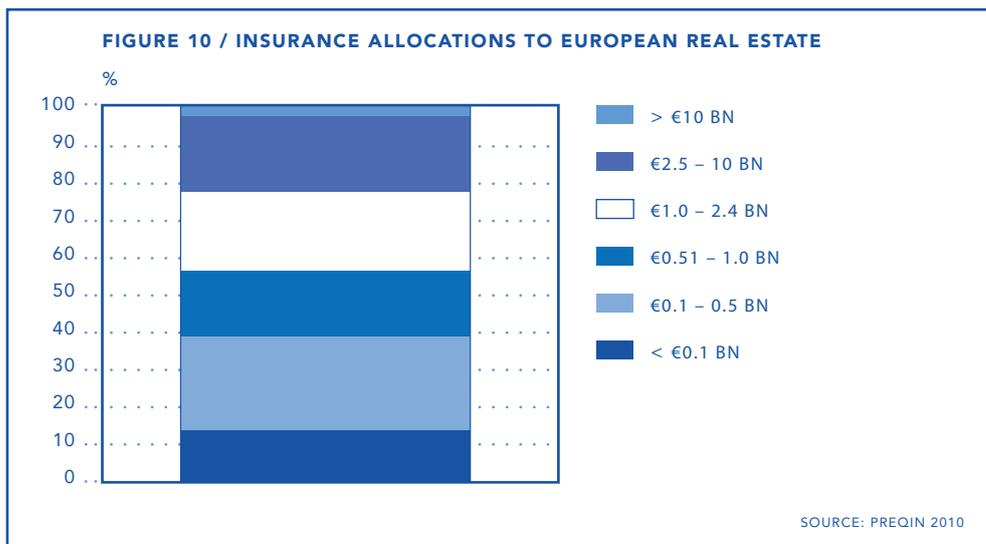
There is little agreement on the effect of Solvency II on risk appetite and allocations by style. A recent survey of European insurance companies indicates that 74% believe the new regulations will impact on non-listed real estate fund investments (Preqin, 2010). Of this, 42% will either make no, or fewer investments (Figures 08 and 09). While 26% state there is no impact, 5% indicate a re-focus on funds with no or low leverage, while 5% suggest a focus on opportunity funds.



This seeming uncertainty reflects differences in the underlying composition of existing portfolios in terms of scale and diversification of assets and liabilities (life insurance products versus non-life products). It also exposes differences in the readiness of insurers, with existing national regulation as well as individual insurers’ own rules varying widely as to current risk management practices. Differences in the starting point among insurers have an effect on the scale of higher capital required within the optimised risk return trade-off.

The somewhat higher cost of capital for opportunistic investments over core may shift the risk return trade-off to more opportunistic investments within internal models for some insurance companies. For others, optimisation may indicate only low risk investing. In practice, this will reflect differences in investment geography and associated transparency, data limitations and measurability of real estate risk, as well as differences in scale and diversification benefits.

The consequences extend far beyond the non-listed real estate funds sector. The insurance sector has been an important source of capital for real estate (Figure 10). The role of the sector long pre-dates the maturation of the asset class during the 1990s and 2000s. The scale of its involvement makes it much more than a source of capital for the real estate industry. Rather, it is a function of economic production. Its absence potentially points to new growth in owner occupation as a major source of development capital withdraws, diminishing the supply of suitable product and increasing rental levels.



3.3 AIFM Directive

It is expected that the EU Directive for Alternative Investment Fund Managers (AIFM) will become EU member state law in January 2012. It is applicable to both EU and non-EU AIFM and to EU and non-EU Alternative Investment Funds (AIF). Its aim is to ensure effective governance and risk management within the industry through increased regulation. It introduces a number of measures that act as barriers to entry to the industry. First, AIFMs must be authorised if capital exceeds €100 million if unleveraged or €500 million if leveraged, and there are no redemption rights for at least 5 years. Second, minimum capital requirements are stipulated. These amount to a minimum of €300 million for internally managed and €150 million for externally managed funds, with an additional 0.02% required for the amount by which AUM exceed €250 million, up to a capital requirement ceiling of €10 million. In addition, the capital adequacy requirement must be complied with, usually 25% of the previous year’s operating expenses.

Authorised AIFMs are permitted marketing and management passporting rights regarding private investors for both EU and non-EU funds, although this is deferred for 2 years in respects of non-EU AIFMs and non-EU AIFs from the date the directive becomes law. The marketing of such funds to retail investors is at the discretion of individual Member States, which may increase restrictions on the AIFM. Although Member States can continue to permit private placement regimes, it seems likely that these will be phased out by 2018, following the review of passporting implementation. Thus, smaller funds falling outside the act may want to choose to be governed by it, in order to hold passporting privileges where relevant to a fund.

Better risk management and communication are a focus of the directive. AIFMs are required to appoint external valuers for annual valuations and to provide investors with a minimum level of information including balance of accounts; income and expenditure; report on activities; disclosure of material changes; and total remuneration, broken down by fixed, variable and carried interest components. They are also required to disclose information to its regulator, including control of non-listed companies and leverage levels. The directive places no limits on leverage so long as it is in compliance with the wider criteria set out by the fund. The regulator does have the discretion to impose limits on the amount of leverage that may be used by the AIFM at the fund level. The directive also requires that an external custodian is appointed for each AIF.

Much of the legislation represents existing best practice. However, the necessary capital requirements, the need for a compliance function to ensure adherence to the organisational, risk management and reporting criteria, together with the cost of external appointments will result in a higher cost base for fund managers.

Similarly, with capital requirements focused at the AIFM level, it also points toward organisational restructuring. Many fund management houses have grown through merger and acquisition strategies, resulting in complex organisational platforms involving a wide variety of subsidiaries. The granting of an EU passport for marketing to professional investors enables AIFMs to generate efficiencies through consolidating operations into fewer entities. This would introduce cost efficiencies in the number of applications for authorisation, the associated capital requirements, and consolidate some compliance and reporting obligations. It also suggests issues of scalability for funds, as certain organisational, risk management and reporting costs must be absorbed at the fund level. This development points toward further consolidation of the industry.

3.4 EMIR

As with other financial market legacy legislation, the overriding objective of proposed regulations to reform OTC derivatives trading in the European Market Infrastructure Regulation (EMIR) is to reduce systemic risk, increase market transparency and improve risk management. While still in consultation the regulation is expected to be implemented by the end of 2012, and distinguishes between financial and non-financial counterparties. The central core of the legislation is the requirements to clear through a central counterparty (CCP). With an emphasis on regulating traders rather than trades, as end users, non-financial counterparties are not required to clear trades unless they breach a clearing threshold. Importantly, contracts used to hedge commercial risk are excluded from calculating this threshold. In this respect, the EU regulation is more flexible than its sister legislation, the US Dodd-Frank Reform (Clifford Chance, 2010).

The difficulty lies in emphasis on traders, rather than trade and the breadth of the definition of what is a financial counterparty. The latter includes those captured by the AIFM Directive, as well as pension funds, insurance companies, UCITs and investment firms. While certain of such funds may be involved in trading, the vast majority of derivatives usage is focused on hedging commercial risk. Within real estate, such contracts are generally used to hedge interest rates and/or currency, often with recourse to the underlying asset. More emergent are the use of real estate derivatives to provide enhanced portfolio risk management.

The requirement to use a CCP increases the cost of hedging substantially. In addition to paying for the services of the CCP, financial counterparties will be required to post a minimum margin of 5% of the notional principal. Where the fair value of the trade turns negative for a counterparty, they are required to post a variation margin. By treating real estate managers as traders, the approach works against the use of derivatives as a means of optimising cash management. The need to meet margin requirements will increase real estate's risk management costs for fund managers, banks, insurance companies and pension funds. The opportunity cost of required capital further increases the required risk premium and ultimately reduces the appetite for real estate.

3.5 Implications of Legacy Reform on Non-Listed Real Estate

Clearly, the financial crisis highlighted the need for better risk management within the financial industry and a greater understanding of investment risk characteristics across asset classes. The relative volatility, illiquidity and transparency of real estate require an appropriate risk premium. However, the additional capital requirements to better manage this risk for institutions exaggerate the risk relative to return. Traditionally, real estate has attracted long-term investors to the sector who in return for accepting associated risks, expect enhanced returns over the long-term. Both Basel III and Solvency II require short-term mark to market accounting. This emphasis on short-term pricing rather than long-term value has the effect of increasing the market risk associated with the sector. This increases the required capital for risk management, generating an excessive cost of capital.

The increased risk premium is likely to impact on real estate pricing for a number of reasons. First, higher allocations to fixed interest asset classes are expected for sources of both debt and equity capital in favour of more volatile and/or illiquid assets. This is exacerbated by proposed OTC derivatives reform which constrains the ability to hedge exposure cost effectively. This reduces the capital base for real estate, lowering the weight of capital and in turn, asset values. More positively, the greater demand for fixed interest investments may suppress bond rates, thereby increasing the appetite for asset classes that can deliver enhanced returns. Second, higher returns will be required to compensate for the higher cost of capital. Third, this will result in further polarisation of prime and secondary assets. The greater volatility, more limited transparency and illiquidity of secondary assets will result in a higher cost of capital, again made worse by mark to market accounting. This may result in withdrawal of capital from secondary markets and higher risk markets.

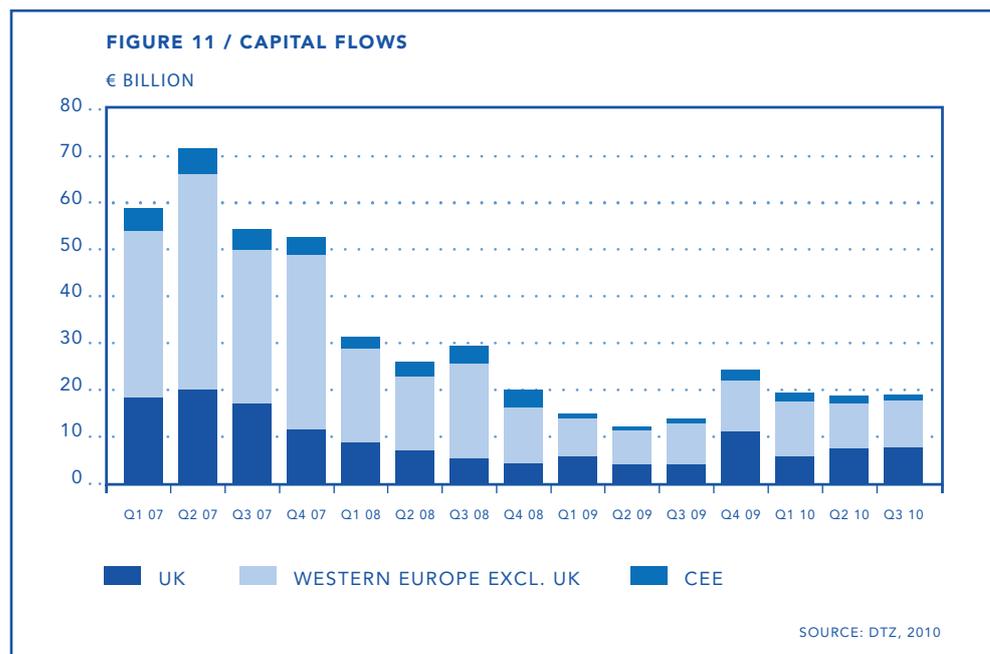
This suggests increased competition for capital. Together with the proposed AIFM legislation which increases the costs of operation, this points toward further consolidation in the non-listed real estate fund management industry. EU passporting will allow larger platforms to absorb additional costs more efficiently than their smaller counterparts. EU passporting also enables platforms to generate economies of scale by consolidating the number of entities, thereby reducing capital adequacy requirements, as well as certain compliance and reporting functions. With a lower capital base, this suggests a smaller industry by number and value.

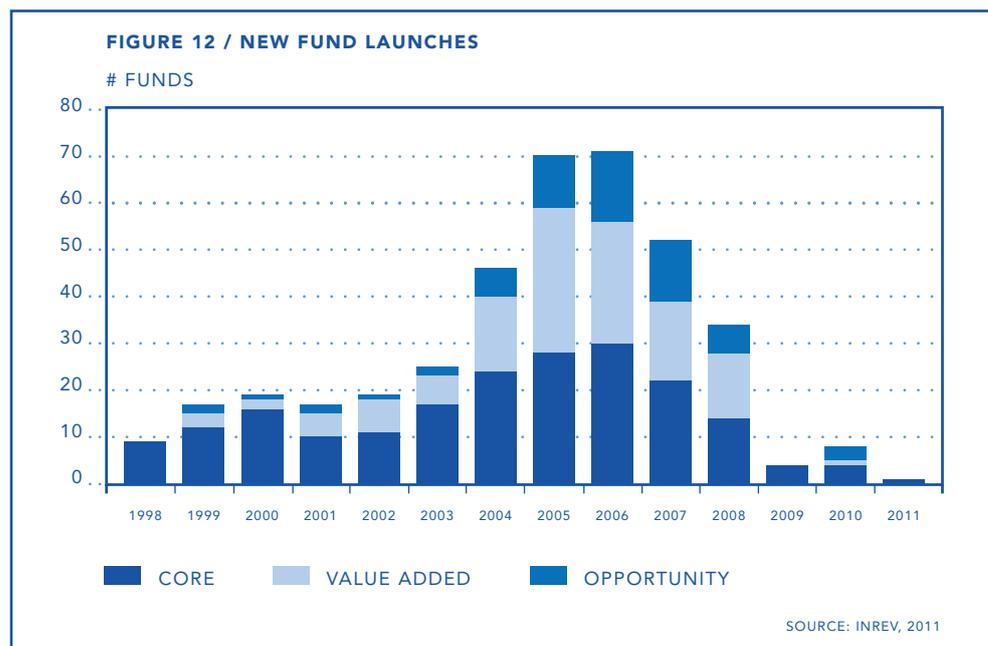
4.0 EQUITY CAPITAL

4.1 Allocations to European Real Estate

The great financial crisis of 2007/8 was a turning point for the expansion of global financial markets. McKinsey (2009) reports that from 1980 to 2007, the world's financial assets quadrupled in size relative to global GDP. By 2008, global asset values shrank by an estimated €16 trillion. This triggered a reversal of financial globalisation, evidenced by international capital flows declining by more than 80%.

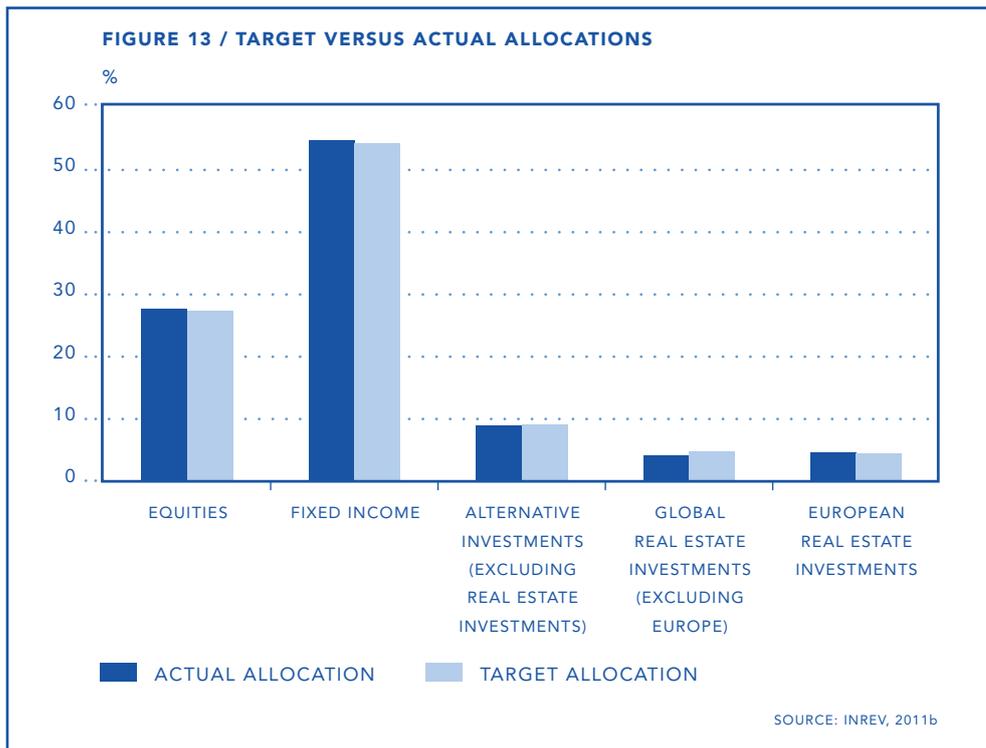
These broad trends in the financial markets were seen even more strongly in the European real estate market. Capital flows across the four quadrants of real estate investing (Public/Private/Debt/Equity) froze. While the European markets have recovered value more recently, values remain below their peak. Similarly, capital flows have gained some momentum but remain low relatively, particularly cross-border investment flows (Figure 11). From peak to trough, global capital flows declined by some 83% (DTZ, 2010). This is reflected in the slow recovery of the non-listed market, with a relatively low level of new European fund launches in terms of both number and scale (Figure 12).





The low levels of investment volumes do not necessarily indicate an absence of capital. Rather, estimates of latent target equity suggest that there is a mismatch of demand for real estate with available opportunity. Funds raised to capitalise on distressed markets failed to see such opportunities materialise, with lending institutions adopting extend and pretend policies. For good quality prime assets, re-appreciation of values suggests that the crisis is past.

Research undertaken by INREV to assess the size of the real estate institutional investor universe in 2010/11 suggests that, on average, pension funds are currently underweight to real estate (INREV, 2011a, 2010b, 2010c, 2010d). In part, this has been due to the denominator effect of a recovery in stock markets, but more strategic and tactical decision making also accounts for the positive gap between target and actual allocations. Some pension funds reduced allocations to real estate from the mid-2000s as they considered real estate to be unattractively priced and following the financial crisis, these have increased. Alternatively, during the financial crisis many institutions suspended commitments and subsequently, allocations have not been drawn or committed due to lack of movement in the market and the limited availability of suitable product. This has resulted in a backlog of pent-up capital waiting to be placed into real estate markets. In contrast, life insurance funds are overweight to real estate, with allocations to the sector continuing to decline. However, within the investor universe of these studies that represent the whole market, this is outweighed by the unfulfilled pension fund allocations. More recently, the INREV Investment Intentions Survey suggests that, at the aggregate investors are marginally overweight to real estate (INREV, 2011b). This reflects differences in the sample base, with the investment intentions survey representing INREV members, while the earlier surveys represent the wider institutional investor universe. Given the more recent timing of the investment intentions survey, it may also reflect the denominator effect of a recovery in real estate values.



Looking forward, there are a number of factors that point toward a fundamental shift in both the nature and scale of equity targeting European real estate and in particular, non-listed real estate. Competition for capital is increasing geographically and within real estate by asset range and investment mode. In addition, there is a fundamental shift in the dominant sources of real estate capital. Together, these structural and behavioural changes will have profound implications for target allocations, risk appetite and the structure of the non-listed real estate industry.

4.2 Increasing Competition for Capital

European non-listed real estate faces increased competition for available capital on three fronts. First, the expansion of investable markets globally. Second, investors are re-evaluating the benefits of investing in non-listed compared to other modes of investing, which reflects a heightened awareness of the power of control. Third, the range of investment products that are deemed as falling within the scope of real estate allocations is increasing.

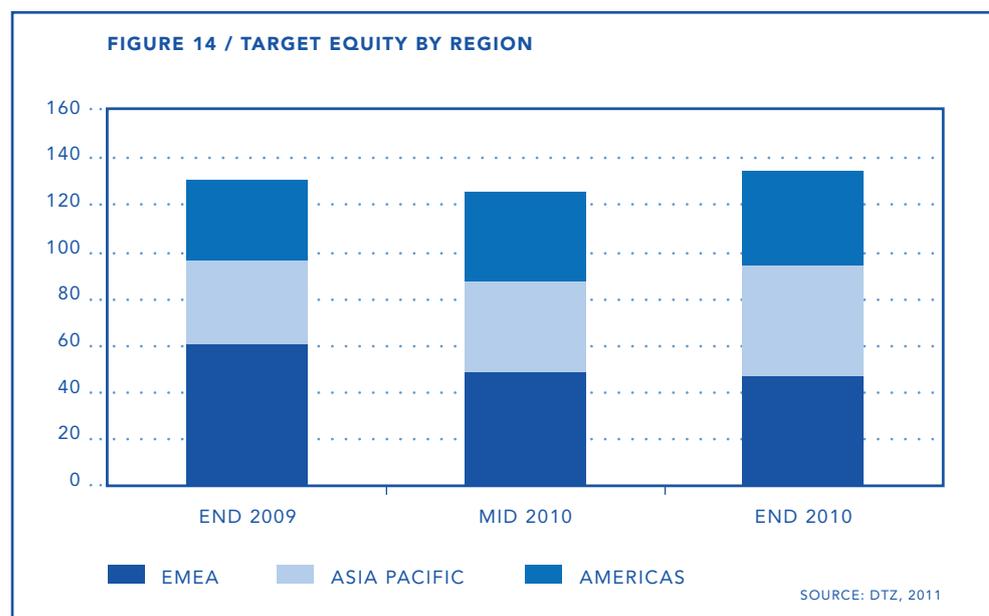
4.2.1 INCREASING COMPETITION FOR EQUITY ALLOCATION ACROSS REGIONS

Following a momentary pause at the point of crisis, the emerging markets of Asia have continued to expand, underpinned by strong economic growth. Their share of global real estate capital investment flows is accelerating across three measures. First, the growth in total investment flows in the region. Second, the growth of Asian sources of capital both inter- and intra-regionally. Third, the growth of cross-border inter-regional real estate investment flows into the Asia Pacific region. The latter are attracted by the strong performance and the gradual movement of markets up the maturity curve.

The scale of real estate markets in the region is relatively low, leading to some concerns as to whether the supply of investable product is greatly exceeded by current demand.

Nevertheless, investment in infrastructure and real estate is set to rise both in absolute terms and as a share of global capital investment. Many investors have been increasing target allocations to the region. While tending to be low as a percentage of AUM, this comes at the expense of European real estate allocations. While global equity targeting real estate has increased from 2009, Europe's share has declined in favour of Asia and to a lesser extent the US. Capital targeting the Asian region is dominated by domestic and intra-regional investors (84%) (DTZ, 2011). In the US, certain institutional investors have refocused lower risk portfolios domestically (CALpers, 2011). Worse still, they are favouring Asia for higher risk strategies, considering it to deliver stronger risk-adjusted returns given relative growth prospects and pricing to European assets.

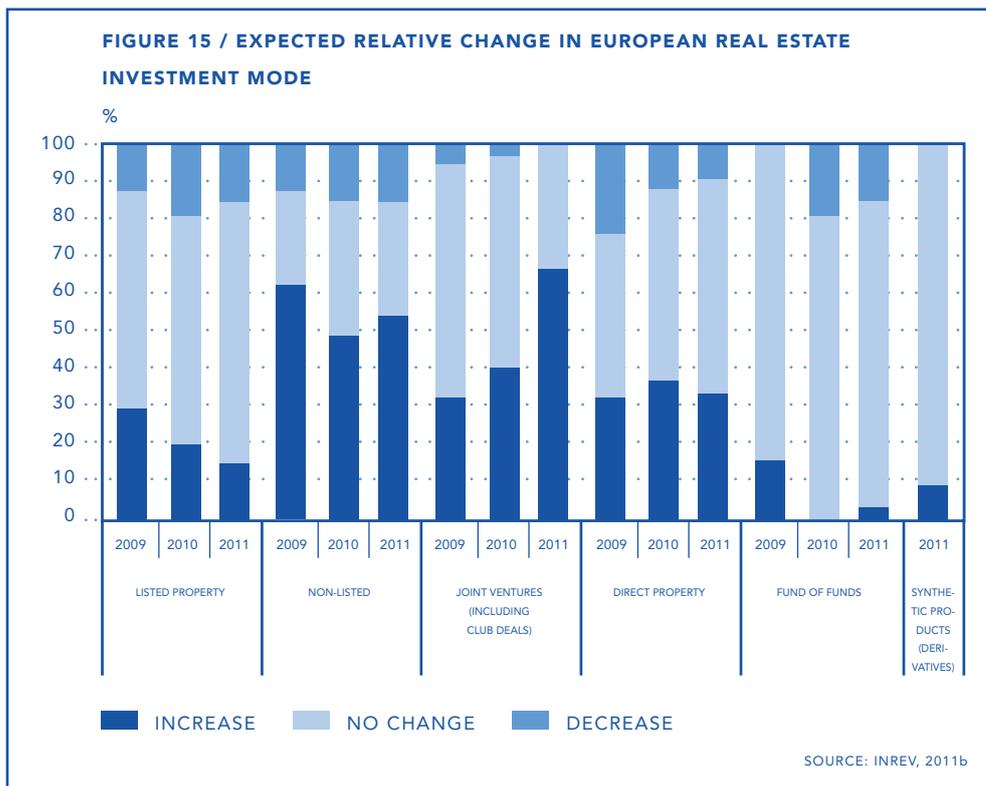
Of course, the accelerating growth of Asian economies also increases the Asian inter-regional capital base. Since the financial crisis, domestic and intra-regional sources of capital have dominated Asian real estate markets. However, many large sovereign wealth funds and Asian institutional investors are turning their attention toward real estate and toward global markets. Examples are the much publicised €287 million European investment mandate of the National Pension Service of Korea and the mandate of Malaysia's first pillar pension fund to invest €1.1 billion in the UK. Thus, Asian flows of capital into European markets will partially compensate for the dilution of European real estate allocations, although the net inflow of real estate capital to Asia is expected to remain positive. At the aggregate, while global real estate capital has increased by 40% since 2009, Europe's share has declined, resulting in virtually no growth. When considered in terms of absolute available equity for the regions, Europe declines over the same period (DTZ, 2011).



4.2.2 COMPETING MODES OF INVESTMENT

In the aftermath of the financial crisis, many investors re-evaluated the case for investing in non-listed funds (INREV, 2010a). Greater weight has been placed on the retention of control over market and liquidity risks. Investors in some open end funds found the promise of real estate liquidity a false dawn as funds closed to redemptions and/or funds struggled to liquidate assets in a declining market. As a consequence, investors were forced to sell longer term, good quality assets to achieve the required liquidity they had previously assumed underwritten by some open end non-listed funds. Similarly, issues surfaced in regard to governance and alignment of interest with both managers and co-investors.

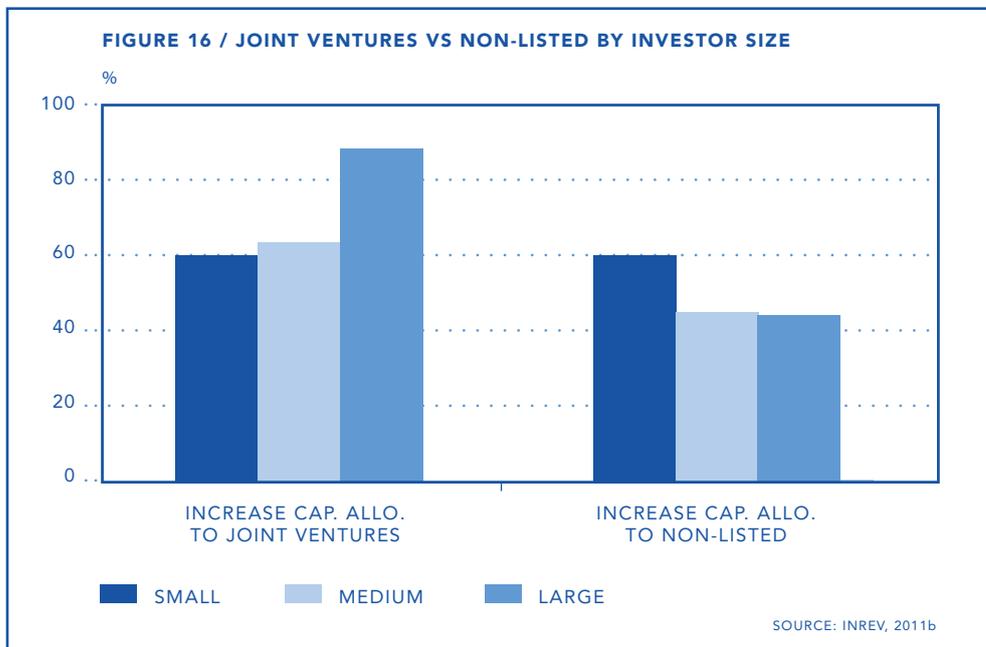
Since the financial crisis managers and investors have focused on restructuring funds to remedy weaknesses in the model as discussed in a previous report addressing legacy issues for the case for non-listed investing (INREV, 2010a). These have centred around better alignment of interest through co-investment and fee restructuring; improved governance and reporting, with more effective roles for advisory boards and committees; refocus on risk-adjusted returns; and an increase in capital adequacy levels. Nevertheless, interest in ways of investing other than non-listed, such as direct, JVs and separate accounts remains strong (Figure 15).



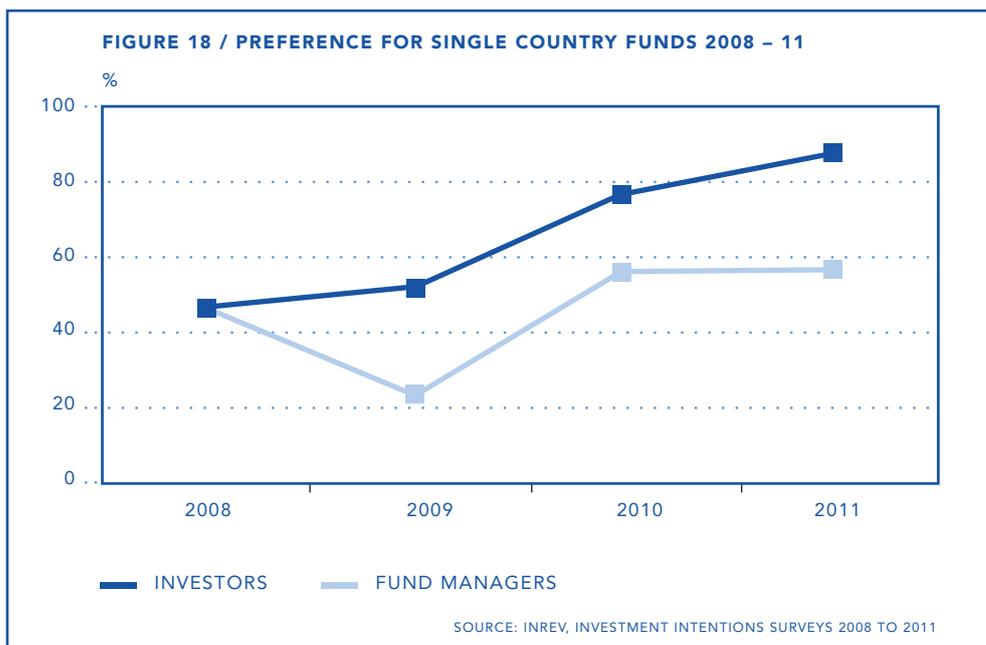
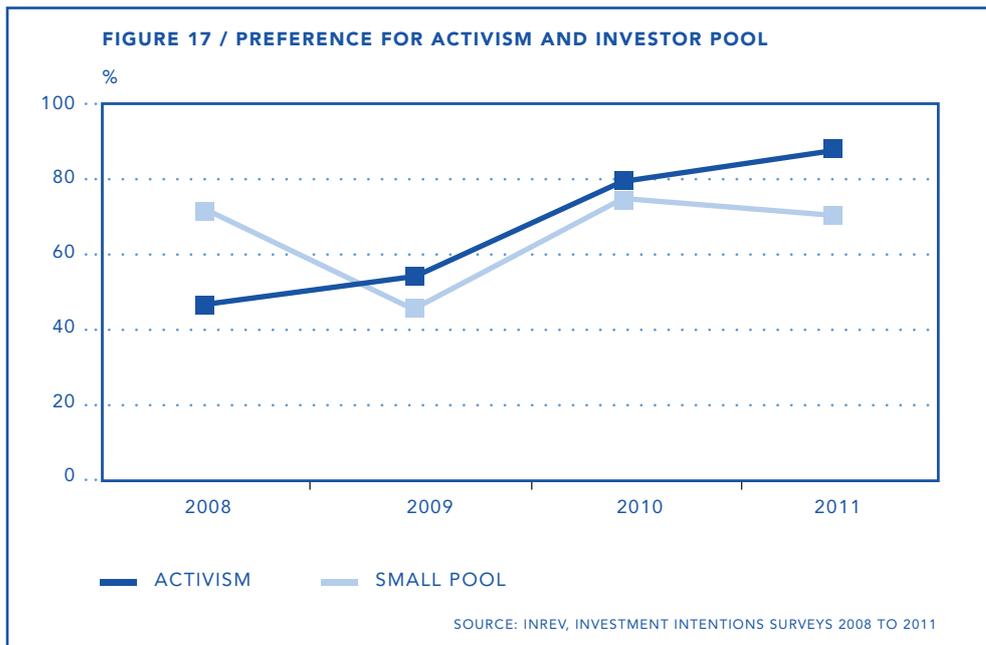
Many of the large institutional investors have always demonstrated a strong preference for holding direct real estate, at least domestically (INREV, 2010b, 2010c, 2010d, 2011a). Other large investors are shifting toward modes that offer greater control, which are also being used for non-domestic investing. Indeed, as well as direct holdings, separate accounts and JVs, certain large investors have created joint enterprises with fund managers that effectively transform their participation from LP to GP in certain controlling respects.

Recognising their in-house expertise and skill base as well as the power of their capital, some large investors have been further investing in their in-house capability. With some variation in delivery, such investors have been selecting preferred fund managers to execute the strategy, often opening the fund to third party investors but on the originating investor's terms. The role of investor as GP is not a new concept of course. Many of the largest fund management platforms in Europe originated from institutional investors placing their real estate holdings into fund structures and inviting third parties to invest. Indeed, issues of scalability are currently resulting in an acceleration of this trend within Dutch institutions (INREV, 2010d). In particular, life funds are keen to capitalise on their longstanding real estate expertise amid declining allocations to real estate, as the business model approaches maturity. Other global institutional investors are adopting the approach as a means of retaining control while leveraging their expertise and servicing the cost of building the resource platform required.

The appetite for investment modes offering control is not limited to large investors (Figure 16). Building a direct portfolio and securing separate account mandates requires capital scale to develop a well-diversified, balanced portfolio that provides the economies of scale required for effective cost management. Moreover, there is a limited amount of capacity for such strategies given the scarcity of knowledge resource.



Both medium-size and small investors indicate a strong preference for joint ventures, but their capacity to execute them effectively given more constrained capital and human resources is less plausible. As a means of effecting greater control investors have also increased their desire to be activists within funds (Figure 17, page 28). In practice, this results in greater specificity of investment strategies. Fund managers are required to seek the permission of advisory boards should they wish to deviate from or subsequently alter the strategy. In line with narrowing fund manager discretion, investors have increased their preference for single country funds, thereby retaining control as to country allocation (Figure 18, page 28). However, monitoring and managing what is effectively an in-house fund of funds also requires significant resources. With limited control over individual assets it also reduces such investors’ ability to invest in a truly diversified portfolio.

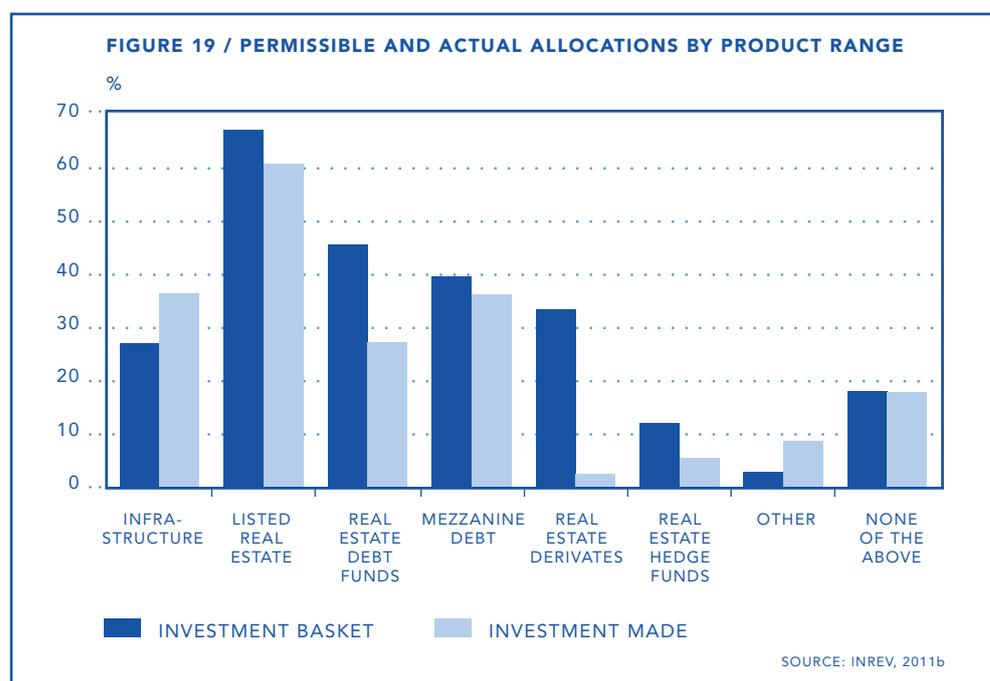


To some extent this runs contrary to the sharp reemphasis of the purpose of real estate investing within institutional portfolios. The strong preference for core investing reflects a lower appetite for risk, with such products proving more liquid during the downturn as well as greater value being placed on income over growth. However, underlying this change is a more fundamental shift in investment strategies. Traditionally, real estate’s strong, lagged correlation with the economy was used as an agent to deliver diversified returns that tracked economic growth. Following the crisis, some long-term investors are restructuring portfolios into core and satellite structures. This trend is likely to speed up given structural changes in the sources of long-term investment capital (see 4.3). The objective of core portfolios is to deliver stable, long-term market returns, or beta, through building a well-diversified asset base. Satellite portfolios are used to deliver growth, or alpha, with

an emphasis on risk-adjusted returns. Importantly, allocations are made as part of a separate risk allocation. This clear separation of investment strategy will be reflected in the structure of non-listed funds.

4.2.3 THE REAL ESTATE UMBRELLA SHELTERS A BROADENING PRODUCT RANGE

For many investors, allocations to real estate may be invested across an extended product range that includes listed real estate, an array of debt funds, derivatives, infrastructure, as well as non-listed real estate funds (Figure 19). Both the array of investment products and the number of investors required to consider them within their real estate allocations has increased in recent years. More importantly, the number of investors actually making allocations has risen. Only 18% of investors have no mandate to consider other alternative products within real estate.



4.3 Structural Changes in Sources of Capital

Traditionally, real estate has been the focus for long-term investors as it offers stable real returns over the long-term and inflation hedging characteristics, while at the same time acting as a strong diversifier to equities. The sources of long-term investment capital are predominantly institutional investors comprising life insurers, pension funds, sovereign wealth funds, family offices, endowments, foundations and charities. Estimated to own around 50% of managed global financial assets, they play a critical role in the stability of financial markets. Such investors allocate around a quarter of their assets to long-term investing strategies (WEF, 2011). Allocations to real estate vary by type of investor.

Due to their capital base, the largest investors in real estate by volume are financial institutions, although their allocations as a percentage of AUM are lower than other long-term investors (around 4% for insurance companies and 9% for pension funds). As real estate allocations are mainly concentrated within the broader long-term investment capital allocation, any change in long-term investment strategies will have a disproportionate impact on the sector (INREV, 2010a, 2010n, 2010c). Having less regulatory constraints,

endowments/charities and family offices tend to have considerably higher allocations, generally in excess of 20%. SWFs are relatively conservative in their allocations at 10%, reflecting their more modest risk appetite in comparison to endowments and family offices. Looking forward, structural and behavioural changes suggest the proportion of assets invested long-term will decrease. This will have a disproportionate impact on real estate given its higher concentration within long-term investing strategies. At the same time, there will be a shift in the balance of investors pursuing long-term strategies by investor type with further implications for real estate.

The impact of ageing populations on the liability profiles of pension funds and life insurers has been long expected by financial intermediaries and is already well embedded in long-term business strategies. Generally this is reflected in the decline of capital guaranteed products and defined benefit plans, with risks passed through to policyholders. To date, the maturity of liability profiles is most evident within life insurance companies that will be required to distribute approximately 60% of current assets to match short-term liabilities in the next 10 years. Life insurers have long been reducing, and continue to decrease, their allocations to illiquid assets, including real estate. The liability profile of defined benefit pension schemes has a longer duration. However as the baby-boomer bubble starts to push into retirement over the next 20 years, they will distribute circa 70% of current assets (WEF, 2011). As with life insurers, pension funds have been focused on changing their business model in favour of defined contribution schemes for over 15 years. However, following the financial crisis there has been acceleration in the conversion of established defined benefit plans to defined contribution schemes.

The decline of capital guaranteed policies in favour of pass-through risk products has a number of implications for long-term investing. Where risks are passed through to policy holders, it is usually accompanied by decision-making. As a result, retail investors' investment decision-making is difficult to predict, leading to higher volatility in capital flows and therefore greater liquidity requirements for funds. This constrains the allocation to long-term investing as fulfilling volatile calls on capital requires greater liquidity. At the same time, passing through the risk increases fiduciary duty, lowering risk appetite for illiquid products yet further.

Perhaps less discussed are the changing liability profiles and risk appetites of SWFs, endowments and family offices. These were explored in a recent study assessing the future of long-term investing and involving some 150 industry experts (WEF and Oliver Wyman, 2011). The research indicates that non-financial intermediary investors have lower and more flexible short-term liabilities. However, it also suggests that they are increasing as wider financial constraints cause beneficiary institutions to rely more on contributions from endowments and foundations for predictable operational costs. Family offices face greater liabilities as the number of beneficiaries grows with the generations. In addition, some SWFs are revising their objectives. After the crisis, within some states there is a realisation that certain funds that were expected to provide multi-generational income and therefore to be long-term, have a dual stabilisation purpose. That is, they are used to stabilise the economy where there is volatility in the price movements of underlying resources, for example oil. Fulfilling stabilisation needs requires short-term flexibility and greater liquidity.

At the same time, long-term investors are re-evaluating their risk appetite and their risk management. Long-term strategies generally focus on investments that offer a premium for market risk, illiquidity and usually limited transparency relatively. To compensate, they deliver enhanced returns. Such assets often provide strong portfolio diversification benefits. In theory, long-term investing can deliver enhanced returns and diversification benefits. The experience of the financial downturn was a synchronised value decline across asset classes. This has led some long-term investors to refocus on the overriding investment objective as being either the delivery of enhanced returns, or lowering portfolio risk

through diversification. To this end, some investors are explicitly constructing portfolios into core and satellite funds, with the former required to provide a market tracking return and the latter used to deliver enhanced returns.

The financial crisis exposed liquidity issues for many long-term investors. Short-term liabilities proved greater than expected and allocations to what were thought to be more liquid investments failed to deliver the required capital. As a result investors are reviewing their risk management in two main ways. First, they are increasing reserves and allocations to short-term investing. This is made worse by the several new legislative proposals affecting the cost of capital (See Section 3). Second, they are reviewing their decision-making processes, favouring processes that retain investor control as discussed earlier.

The appetite for long-term investing in illiquid assets and products is declining sharply for life insurance companies, pension funds and to a lesser extent for endowments and SWFs. However, the change in percentage allocations should be considered in the context of the absolute capital base (Table 01). While this is decreasing for defined benefit pension funds, defined contribution schemes are growing rapidly in developed and emerging markets. Given their greater liquidity requirements and lower risk profile, allocations to illiquid products are limited. More positively, there is a growing requirement for retail fund managers to deliver appropriate diversification. Allocations to real estate will remain low and primarily focus on listed real estate. However, the capital base is growing rapidly and is fastest for time targeted and lifestyle products. There is also greater emphasis on ensuring appropriate diversification for default funds. Allocations to real estate will remain low, but growth in product innovation and plans seeking better diversification may partially offset the decline in defined benefit long-term investing. Similarly, life insurers are expanding in emerging markets, but supply of capital guaranteed products remain low.

TABLE 01 / IMPACT OF CHANGES TO LONG-TERM INVESTING ON REAL ESTATE

	AUM (€ BN)	EXPECTED CHANGE IN LONG-TERM AUM	REAL ESTATE ALLOCATION	EXPECTED CHANGE IN ALLOCATION	EXPECTED CHANGE IN REAL ESTATE CAPITAL BASE
LIFE INSURANCE	7,764	DECLINING	4%	DECLINING	DECLINING AS BUSINESS MODEL MATURES, WITH DECLINE IN CAPITAL GUARANTEED PRODUCTS IN NEW MARKETS. UNDERLINED BY REGULATORY AND ACCOUNTING REQUIREMENTS.
PENSION FUNDS (DEFINED BENEFIT)	7,764	DECLINING	9%	DECLINING	STABLE AS DECLINE IN ALLOCATIONS OFFSET BY INCREASE IN NUMBER OF PENSION FUNDS. GROWTH IN ALLOCATION FROM DEFINED CONTRIBUTION, BUT REMAINS LOW RELATIVELY. BENEFITS FROM PARTIAL INFLATION HEDGING CHARACTERISTICS, BUT REGULATORY AND ACCOUNTING REQUIREMENTS ACT AS CONSTRAINT.
SWFs	2,187	INCREASING	10%	STABLE	STABLE AS LOWER RISK APPETITE OFFSET BY GROWTH IN SWFS AND APPETITE FOR PARTIAL INFLATION HEDGE.
HNW FAMILIES	847	INCREASING	30%	DECLINING	GROWTH IN HNW OFFICES OFFSETS REDUCED APPETITE FOR HIGHER RISK ASSETS. CORE REAL ESTATE MAY BENEFIT RELATIVE TO OTHER ILLIQUID ASSETS.
ENDOWMENTS / FOUNDATIONS	917	INCREASING	20%	DECLINING	STABLE AS GROWTH IN CAPITAL BASE OFFSETS INCREASE IN GREATER LIQUIDITY REQUIREMENTS

SOURCE: ADAPTED FROM WEF (2011); RHL STRATEGIC SOLUTIONS
 * AUM FROM WEF (2011) ESTIMATES, CONVERTED TO EURO AT PREVAILING RATE (.706)

In contrast, the number and value of sovereign wealth funds are expanding. The growth of High Net Worth individuals is leading to an increase in both the number and value of family offices. This growth has always resulted in the expansion of endowments and foundations, with a corresponding increase in donations. Given that allocations to long-term investing are declining more modestly for these investors, their share and role within the aggregate

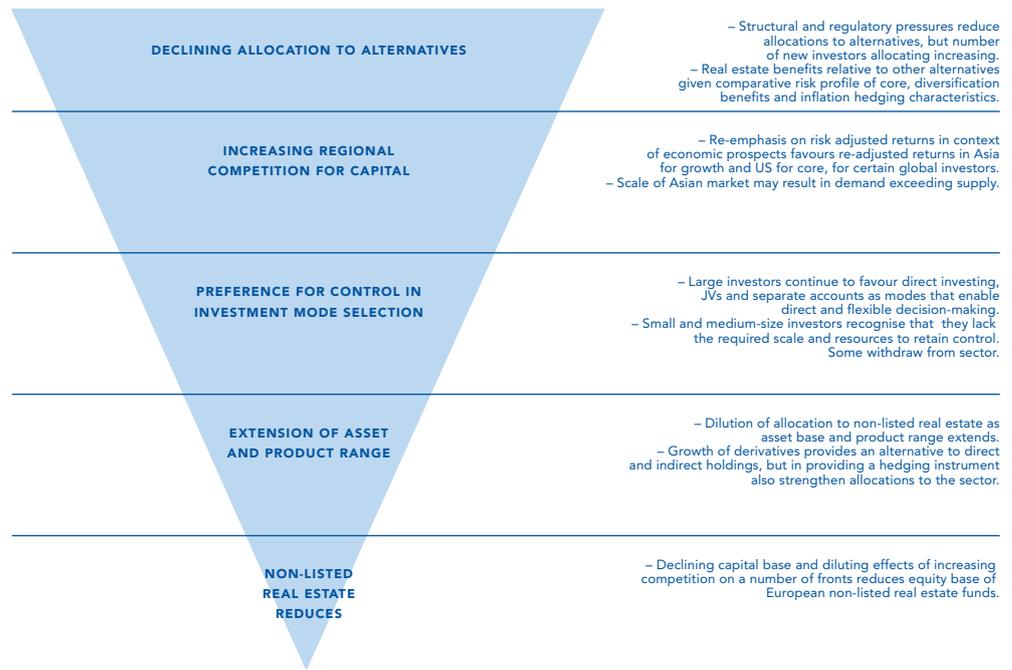
capital base for long-term investing will increase. Ultimately, this is a larger slice of a smaller pie.

Within real estate, given their scale, pension funds and life insurers will remain the dominant investor base into the medium-term, but relatively their dominance will decline in favour of SWFs, family offices, endowments and foundations. While the overall capital base for long-term investing will remain under pressure, the capital base of real estate will benefit from an expansion of the number of investors attracted to the sector. This is due to two interrelated factors. First, real estate has matured as an asset class, with improved transparency and the growth of derivatives enabling better management of its risk profile. Proposed OTC derivatives regulation may limit such risk management for those defined as ‘financial’ counterparties. This is leading to growth in the number and range of pension funds investing in the sector. Second, real estate offers greater flexibility, liquidity and transparency relative to other long-term investing options such as infrastructure and private equity. To this end, allocations to real estate benefit from a reduced appetite for higher risk, more illiquid and uncertain long-term investing options.

4.4 Summary of Impact of Changing Real Estate Allocations for Non-Listed Funds

Changes in allocations to real estate both relatively and absolutely suggest that in the medium-term the equity capital targeting European non-listed funds will decline. This is due to a number of factors that on the one hand are reducing the appetite for real estate and on the other are increasing the competition for reduced capital allocations. These are summarised in Figure 20.

FIGURE 20 / SUMMARY OF TRENDS AND COUNTER-TRENDS IN EQUITY ALLOCATIONS



SOURCE: RHL STRATEGIC SOLUTIONS

Structural, regulatory and behavioural changes in long-term investing are reducing allocations to alternatives. However, there are a number of counter-trends that soften the impact for non-listed real estate. The risk profile of real estate is favourable relative to other alternative investing options, with core providing more certainty and greater liquidity than other options, including private equity or infrastructure. It also provides stronger diversification benefits than listed real estate and carries partial inflation hedging characteristics that are expanding appetite for the sector. The greater maturity of real estate as an asset class is increasing the number of institutions making first time investments, broadening the capital base. Many of these institutions are small and medium-size funds. Requiring expertise, non-listed funds are the preferred mode of investing. Potentially, this may reduce the impact of large investors favouring investing options that offer more direct control and flexibility.

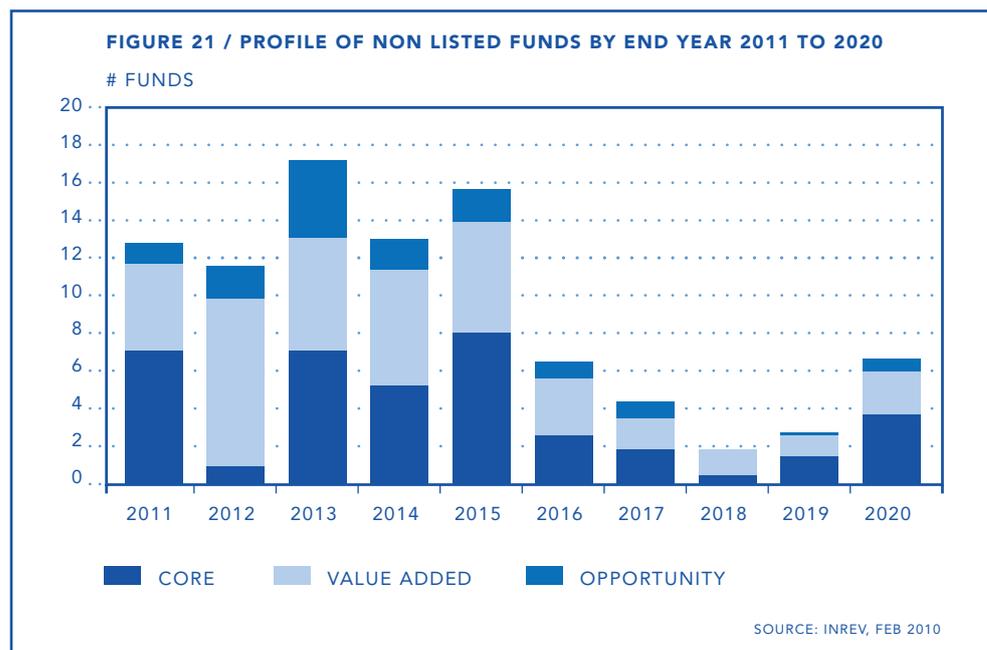
5 DEBT CAPITAL

5.1 The Real Estate Debt Bubble

The expansion of debt markets during the 2000s fuelled the global asset bubbles that had burst by 2008. Total global borrowing rose by 70% from 2000 to 2008 (McKinsey, 2009). Regionally borrowing in the US, UK and the eurozone accounted for the greatest share, although the breakdown of debt differs. In the US and UK the growth in secure and unsecured household debt accounted for over 40% of credit, while in the eurozone, non-financial institutions accounted for the largest share of growth. Declining asset values have led to leverage in the global economy increasing both relative to GDP and in absolute terms. Governments increased borrowing in the aftermath of the crisis to support the banking and wider financial sector. This resulted in the global debt to equity ratio doubling in the immediate aftermath of financial crisis. More recently rising unemployment increased spending on social welfare. As a consequence, the de-leveraging process has only just begun.

European commercial real estate markets proved particularly vulnerable to debt-fuelled bubbles. New investors were attracted to the sector to exploit the positive yield gap between swap rates and real estate yields. With returns being driven by the accretive effects of leverage over fundamentals, asset values began an upward spiral that became self-fulfilling in the short-term. Asset values rose as leverage levels increased the weight of capital targeting the sector, attracting additional capital fuelling value growth even further as the competition for a limited amount of product intensified.

The impact of the financial crisis on real estate markets has been severe. Falling asset prices inverted loan-to-value ratios leading to equity shortfalls. A shift toward shorter term debt arrangements was a key characteristic of the expansion of competitive debt markets. As a result, an estimated 73% of European commercial loans are due to expire over the next five years to the end of 2015. This mirrors the profile of non-listed funds expiries, with some 156 funds with a total GAV of €70.3 billion set to mature (Figure 21). Of these, 109 funds with a GAV of €41.9 billion are value added or opportunity, which tend to have larger funding gaps. This is due to the former tendency of such funds to use high leverage on mainly secondary assets. The acquisitions of many such funds were characterised by large lot sizes, which may present an additional financing issue for some funds. For many assets, the debt funding gap far exceeds equity contributions and while such assets may have been written down on the balance sheet by fund managers, banks have been more reluctant to do the same. Closing equity gaps and refinancing loans remains the greatest risk to the stability of commercial real estate markets.

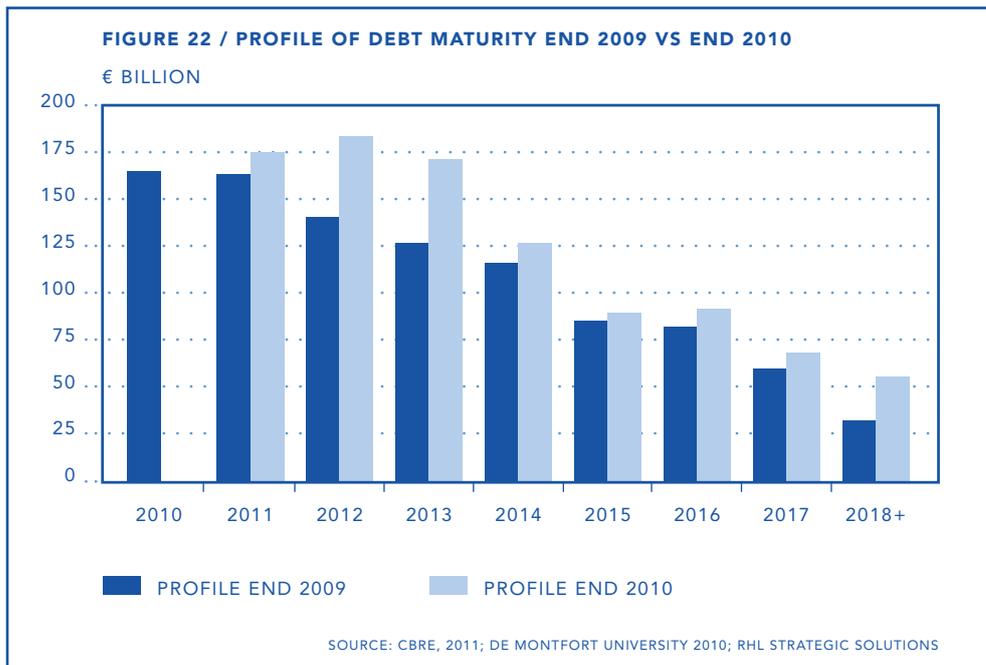


The limited transparency of European commercial real estate debt markets remains a barrier to risk analysis. The availability of reliable data on outstanding commercial real estate debt varies significantly across markets. DTZ (2010a) reports that at the end of 2009 some €1,848 billion of commercial real estate debt was outstanding across their sample of 24 European markets. The classification of commercial real estate debt varies significantly by country in terms of whether it relates to the organisation securing the debt or the asset it is secured on, sector coverage, what is underwriting the debt and what might be a second charge. Using a bottom up analysis of their transaction database, CBRE estimates outstanding real estate debt at the same date at €970 billion for core commercial sectors. The profile of debt gives rise to concerns as to the stability of commercial real estate markets for three inter-related reasons. First, the combined impact of the vintage of loan origination and the loan maturity profile. Second, the scale of the debt funding gap. Third, the refinancing risk, made worse by differences between the domicile of assets and sources of funding.

5.2 The North Face of Commercial Real Estate Debt

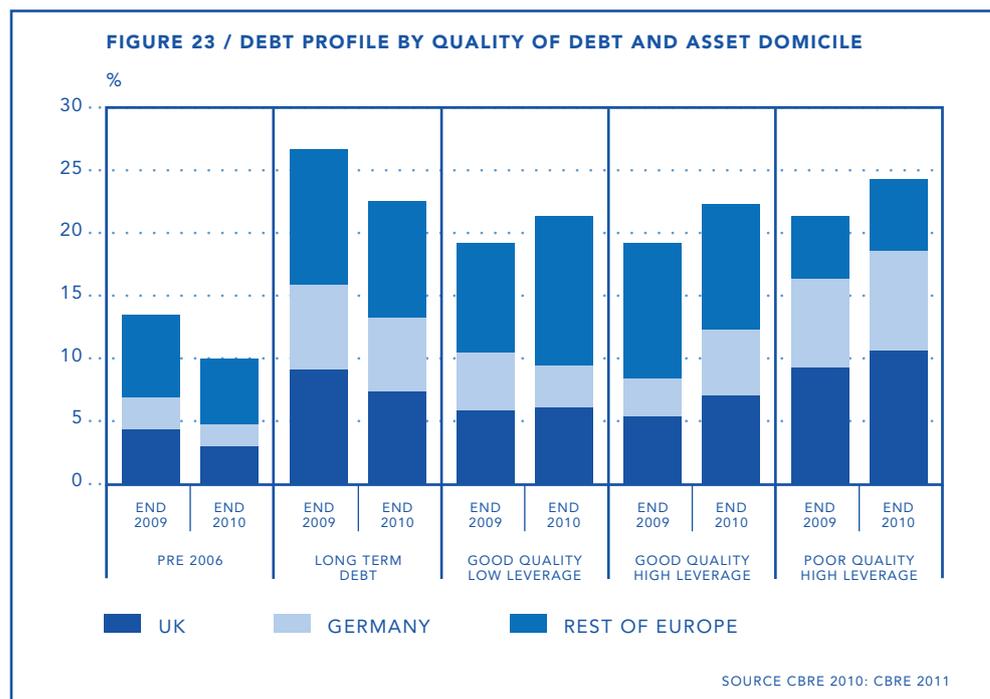
Of the €626 billion of commercial real estate loans up to 2010, over 63% had an origination vintage from 2006 to the start of the debt crisis in 2008 (CBRE, DMU, 2010). This represents the peak of the real estate bubble by value and the debt bubble in terms of the highest loan-to-values on short durations. During this period, approximately 60% of loans had durations of five years or less, while a mere 10% had terms of eight years or more. Thus, the profile of loans by maturity is steep, with the majority of loans falling due in the next three years to 2014.

The inertia of banks is adding to the issue. Comparing the profiles of outstanding real estate debt by maturity at the end of 2009 and the end of 2010, it is apparent that the majority of debt falling due in 2010 was rolled over (Figure 22, page 36). Analysis of the data suggests that lending institutions extended loan duration from 1 to 3 years, resulting in the proportion of loans expiring within 3 years increasing from 44% at the end of 2009 to 55% of outstanding debt at the end of 2010. Indeed, although loans expiring in 2010 represented 15.5% of all outstanding debt, there was only a 3% reduction between the end of 2009 and the end of 2010 in the value of loans expiring by the end of 2013.



Indeed, bank lenders have been pursuing such an approach to loan expiries since 2007, initially on existing terms combined with equity calls, but more recently on amended terms (DTZ, 2010b). Where the loan is being serviced, banks have tended to take a pragmatic approach of delaying any foreclosure until the markets have recovered. There are a number of reasons for this lack of action by lenders. First, is the lack of availability of alternative debt financing or equity. Second, many loans remain in breach of their loan-to-value covenants and banks are reluctant to enforce such a technical breach, at present. Third, with over half of loans having an interest rate hedge, the significant break costs underline this pragmatic policy.

The consequences are manifold. First, the activity of revolving such debt extends the lack of action of the lending markets by tying up capital and balance sheets, thereby restricting new lending. Second, the rollover approach has reduced the spread of loan maturities over time, increasing the risk of market instability. This is evidenced by growth of highly leveraged loans as a proportion of outstanding debt, which has increased from 40% to 46% from the end of 2009 to the end of 2010 (Figure 23). Importantly, the risk is not evenly distributed across markets. The analysis of investment flows and investor characteristics suggests that the UK and German markets have particularly high concentrations of assets secured by such debt, followed by Spain and CEE (CBRE, 2011). This reflects the strong activity of opportunistic investors and highly leveraged private investors in these markets in 2006/7. For Germany, the risk is highly concentrated in the retail and residential sectors.



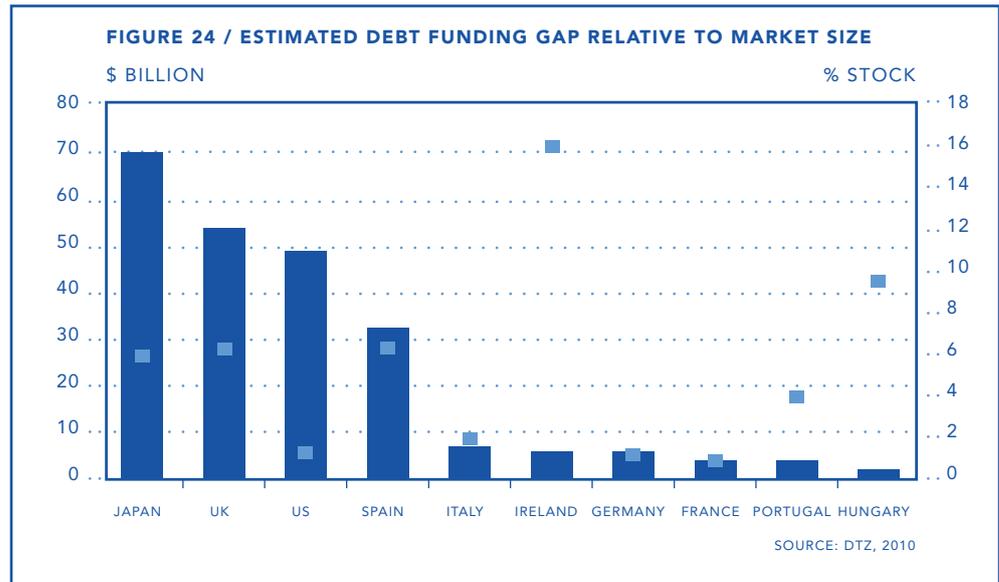
While the strengthened prime real estate market has assisted in recovering some value for lenders in the UK, Germany and CEE, the secondary markets remains weak. It is this debt funding gap that remains the greatest risk.

5.3 The Debt Funding Gap

This gap reflects the difference between the loan value, available equity and the loan-to-value covenant. Debt funding gaps have increased due to declining real estate values and lower loan-to-value thresholds on new financing terms. At the same time as the availability of debt grew in commercial real estate lending, average loan-to-value ratios increased, while the duration of loan terms shortened. Consequently, the highest loan-to-value ratios are secured on assets at the peak of the market, which are therefore subject to the greatest equity gaps on existing terms, given that they will experience the largest falls in value. As the duration of loan terms expire, new terms granted on extensions, renewals or new finance arrangements will reflect lower loan-to-value thresholds.

During the course of 2010, DTZ (2010b) reports that loan-to-value ratios recovered earlier than expected, increasing to up to 72% for absolute prime. In contrast, PIA (2011) report that maximum loan-to-values remain at 60%, considerably below the 80% to 85% threshold pre-crisis. It is important to stress that such terms are the maximum available and remain limited to prime, income secure assets.

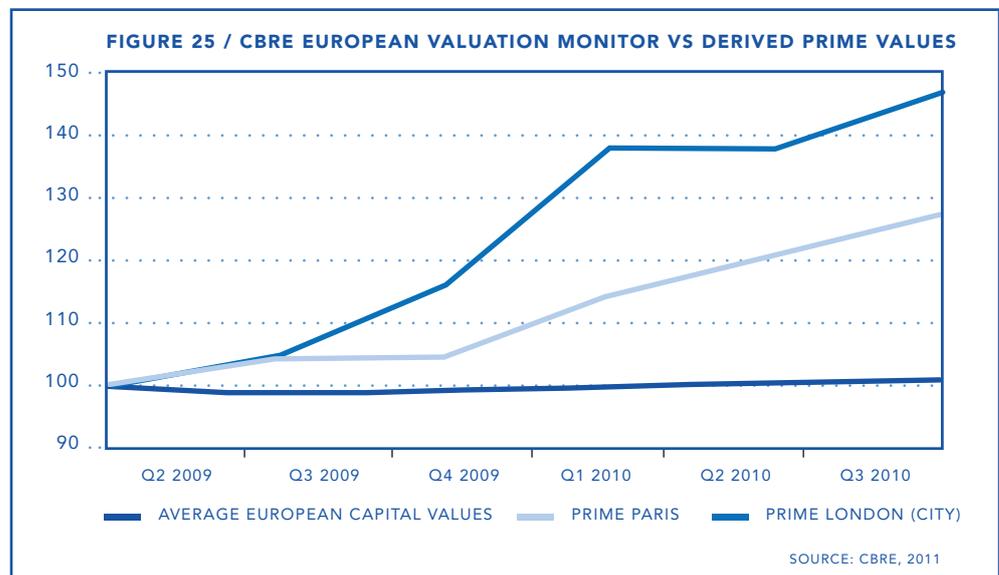
Using its transaction database, DTZ (2010) estimates the European debt funding gap at €126 billion. At €54 billion, the largest share of the debt funding gap is secured on assets in the UK (Figure 24, page 38). While Ireland’s share of the debt funding gap is low in absolute terms, it is the highest relative to the aggregate real estate market value. It is noteworthy that residential markets are not included in the analysis. This reduces the debt funding gap for Germany in particular, as immediately pre-crisis, the majority of cross-border high leveraged investing was focused on large residential and retail portfolios.

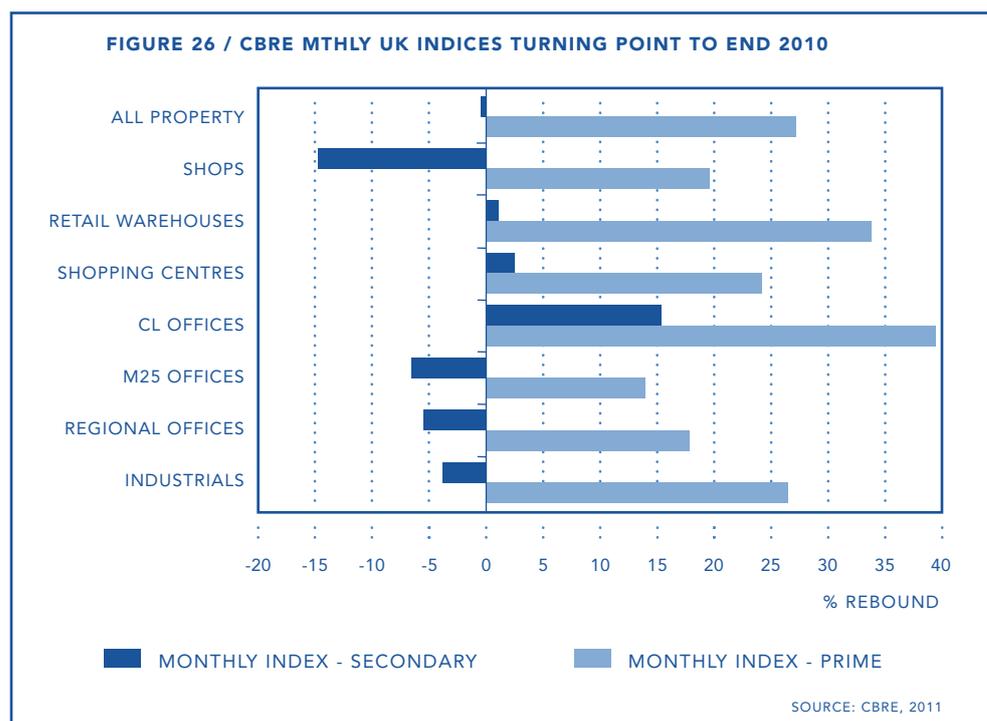


Given lower loan-to-value thresholds, any narrowing of the debt funding gap must come from capital appreciation or from new capital injections.

5.3.1 REAL ESTATE CAPITAL APPRECIATION

The illiquid nature of the market alongside differences and lags in valuation practices make it difficult to accurately quantify the decline in European real estate values. However, the GAV of funds within the INREV universe fell by some 27.5% from peak to trough on a leveraged basis. The INREV Index remained below its 2005 value at the end of 2009. While the market recovered value during 2010, values remain well below their historic peak, with wide variation among countries. However, the greatest divergence in values reflects quality, with recent value appreciation limited to prime. Figure 25 compares capital value appreciation of the strongest performing prime office markets with the market average appreciation using CBRE’s European Capital Value Index. While the divergence between prime and average is high, it is noteworthy that even prime London office markets values are 20% lower than at the end of 2006 (PIA, 2011).





Direct comparison of prime and secondary property segments for the UK demonstrates the much weaker performance of secondary, with certain segments continuing to depreciate in value (Figure 26). Worse still, the valuation base of these indices is highly skewed toward institutional grade assets. High leverage strategies required a yield spread. At the peak of the market, the spread between prime and secondary yields narrowed. Higher yielding assets tended to be poor secondary to tertiary quality real estate. Such assets are likely to have experienced value declines beyond those captured by CBRE's indices and the poorest quality assets are likely to still be depreciating. This depreciation stems from a much weaker occupier market for non-prime, which together with required capital expenditure will dampen income returns, putting debt servicing under pressure. The impact of falls in asset values and a more conservative lending market will have the hardest impact on this vintage of investments.

5.3.2 ALIGNING AVAILABLE CAPITAL TO THE FUNDING GAP

Following the financial crisis an estimated €116 billion of capital was raised to target real estate opportunities in Europe (DTZ, 2010a). This took the form of non-listed real estate funds, distressed debt funds purchasing loan books and/ or new funds providing mezzanine finance. In addition, institutional investors that had withdrawn from real estate in advance of the crisis remain keen to meet target allocations to the sector that are currently underinvested (INREV, 2010a, 2010, 2010c, 2011). In theory, this equity will fulfil the debt funding gap. The difficulty lies in the mismatch between available and desired investment opportunities.

The refinancing risk by quality and leverage level are considered by CBRE (2010), which estimates that €392 billion of outstanding commercial real estate debt is secured on high loan-to-value terms on short maturities granted after 2005. With the funding gap centred on such highly leveraged loans, the figure is consistent with the previous estimate of the funding gap. Approximately 24% of outstanding real estate debt is categorised as being highly leveraged poor quality and thus having the highest debt funding gap (CBRE, 2011). A further 22% represent highly leveraged good quality assets.

Equity raised to capitalise on distressed real estate markets has been frustrated by an absence of opportunities as banks have opted to extend loan terms rather than taking write downs on balance sheets. As a consequence, investors seeking to capitalise on distressed, good quality assets have failed to see them materialise. Given the appreciation of prime assets, this opportunity is passing for those seeking to buy sharply discounted assets. Institutional investors are seeking to purchase at, or below fair value. Good quality, but highly leveraged assets acquired at the peak of the market will require a mark down to match such investors' expectations.

The €145 billion that opportunity funds raised to capitalise on more secondary distressed loan books and assets requires large discounts to meet target returns (DTZ, 2010b). Given the increasing volume of loan expiries and growing pressure for banks to reduce exposure to the real estate sector, greater reconciliation of available equity to fulfil the funding gap is expected. Reductions in outstanding debt have centred on the sale of good quality assets with lower leverage. As the debt mountain steepens, the proportion of high risk assets in terms of loan default risk and large debt funding gap is increasing. This is accentuated by the concentration of near-term loan expiries originating from the peak of the market. Added to this is the withdrawal of major real estate lenders from the market. This suggests a shift in the sources of debt funding.

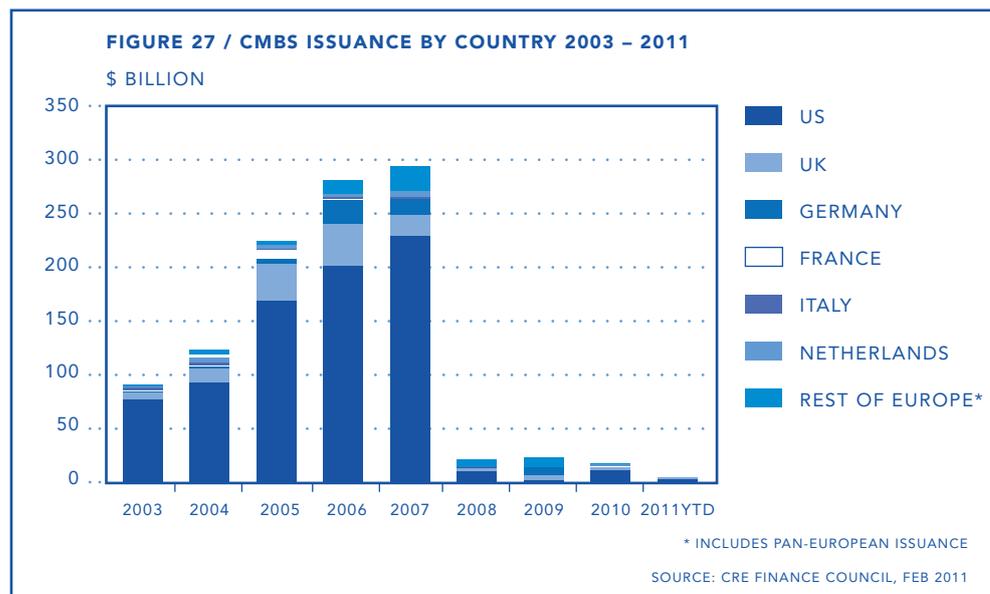
5.4 Sources of Real Estate Finance

Discussion on the decline in cross-border capital flows for real estate has tended to focus on direct investment and equity capital commitments. Less discussed, but equally significant is the reversal in bank lending flows. Following the withdrawal of non-domestic lending to non-bank borrowers in the wake of the banking crisis, cross-border lending turned negative as banks disinvested. The impact was most severe in the less mature and peripheral markets, with Hungary forced to seek assistance from the IMF. The sharp U-turn in cross-border lending activity is calling into question whether the advantages of having a global and competitive financial market outweighs the risk of having lending turned off sharply when foreign capital withdraws.

Within real estate, there is a growing understanding of the geographical spread of highly geared assets. The limited transparency of bank lending means much less is known about the domicile of banks that feature such assets on their loan books. Growth in cross-border lending was a cornerstone of the financial globalisation that accelerated from 2001. The domicile of the bank may differ from that of the assets. For example, in the UK, 38% of outstanding bank loans are under the control of non-domestic lenders, most notably German lenders and Irish banks. The latter are now under the control of the Irish government Agency NAMA (PIA, 2011). Following the debt crisis, the globalisation of finance reversed with banks refocusing on domestic markets. The uncertainty as to the speed of withdrawal or of asset disposals of non-domestic lenders creates additional risks.

Over the course of 2010, the retreat of a number of large German real estate lenders from the UK market indicates that this reversal of cross-border finance is continuing. In part, this is driven by German institutions focusing on complying with Basel III, but is also reflective of these large real estate lenders beginning to write down losses. The withdrawal of such lenders is expected to precipitate a sale of loan books and increased foreclosures as such banks seek to reduce non-domestic balance sheets. This suggests a mismatch of available finance to required demand for existing assets and a shrinking of capital for new business. This is in addition to the inactivity of the now state controlled Irish and UK banks, previously large real estate lenders, which are also seeking to reduce their real estate exposure.

In the US, sources of finance are more diverse. Given the relative immaturity of the European securitisation markets, on balance sheet lending accounted for a large proportion of debt. In the UK, the CMBS market gained greater traction than elsewhere in Europe (Figure 27). Yet even there it accounts for little more than a sixth of outstanding debt, although because such debt cannot be rolled over it presents a greater challenge. New issuance has been limited in scale and to very low-risk transactions. This lack of diversity may prove to be a barrier in reinvigorating markets. The passive approach to existing loans will limit the capacity of new lending in the short to medium-term, while the impact of Basel III in the longer term will increase capital requirements.



More positively, new sources of finance are emerging. A number of institutional investors have stated their intention to capitalise on the absence of new senior debt finance either directly or through non-listed debt funds, for example, Axa REIM and BNP Paribas. European mezzanine debt funds are emerging, that in return for equity participation in addition to a fixed return are able to bridge the funding gap for new assets and for good quality existing assets with a debt funding gap. However, the scale of these new sources of funding is small relative to the shrinkage of bank lending availability. Increasingly, it is competing directly with allocations to direct and non-direct real estate equity investing in allocations and thus, it has a neutral impact on net total real estate capital.

5.5 Implications of Debt Financing for Non-Listed Real Estate

Debt capital continues to pose the highest risk and the greatest challenge for real estate markets. The pragmatic approach taken by bank lenders to date is likely to result in further re-pricing of real estate and potential market de-stabilisation due to a number of inter-related factors. First, good quality secondary real estate is deteriorating in value further as capital expenditure for non-performing assets declines, impacting rental growth and increasing vacancy. Second, without discounts, market activity continues to focus on prime and excess demand may lead to inflated values in certain markets. This is exacerbated by an absence of new financing for non-prime assets, further concentrating investor demand on prime. Fourth, by rolling forward debt, the ability of lenders to manage a controlled disposal of assets over an extended time period is reduced, especially given the requirements of Basel III. This approach is increasing the risk of further market shocks and pricing falls.

The availability of debt capital is constrained due to this lack of action and its supply is set to remain low into the medium-term. Banks are expected to begin disposing of assets and loan books in the near term, but to manage such disposals over at least a three year time horizon. To date, disposals have focused on lower leveraged good quality assets. There is an absence of alternative finance to provide market liquidity for poorer quality assets. Thus, unless banks are prepared to make early write downs, thereby providing opportunistic investors with the discounts required, highly leveraged assets may be late disposals. Accounting for a larger share of outstanding debt, this would delay the growth of debt availability. Moreover, given the additional cost of capital requirements associated with Basel III, it is expected that banks will withdraw a proportion of this debt capital from allocations to real estate.

For real estate this indicates a lower capital base as debt capital declines. It also suggests a higher cost of such capital, given a much more competitive borrowing environment. This is in addition to the higher costs of capital resulting from Basel III. The impact on the non-listed real estate fund universe is greater relative to the wider non-listed market due to its previously higher use of debt proportionately to expand the size of funds. Even the conservative use of debt capital will be under pressure in terms of securing capital and in regard to the higher marginal cost of increasing the capital base.

Of course, this low availability of debt capital is itself an opportunity. At present, alternative sources of capital remain limited, but given increasing margins, it is expected to increase into the medium-term. Given that non-listed real estate debt funds are a major source of new debt capital, the net impact on non-listed real estate funds may be neutral. For many investors, such real estate debt and equity funds are considered within the real estate equity allocation and this trend is increasing (INREV, 2011).

As with changes in equity capital, constraints on debt capital point toward a separation of non-listed real estate by investment style. There are a number of possible outcomes for core funds. A lower capital base might suggest the same number of funds, but with relatively lower GAVs. Currently investors are indicating a preference for single country funds with a limited number of investors. Given lower use of debt, this strategy would have significant implications for achieving diversification due to the limited number of assets that might be acquired. Alternatively, the quality of assets would decline. This would point to lower performance and greater volatility. Thus, a more likely outcome is that non-listed funds will be required to achieve scale in the investor base in order to deliver strong, diversified performance. For all but the largest markets, this is likely to require a multi-country strategy.

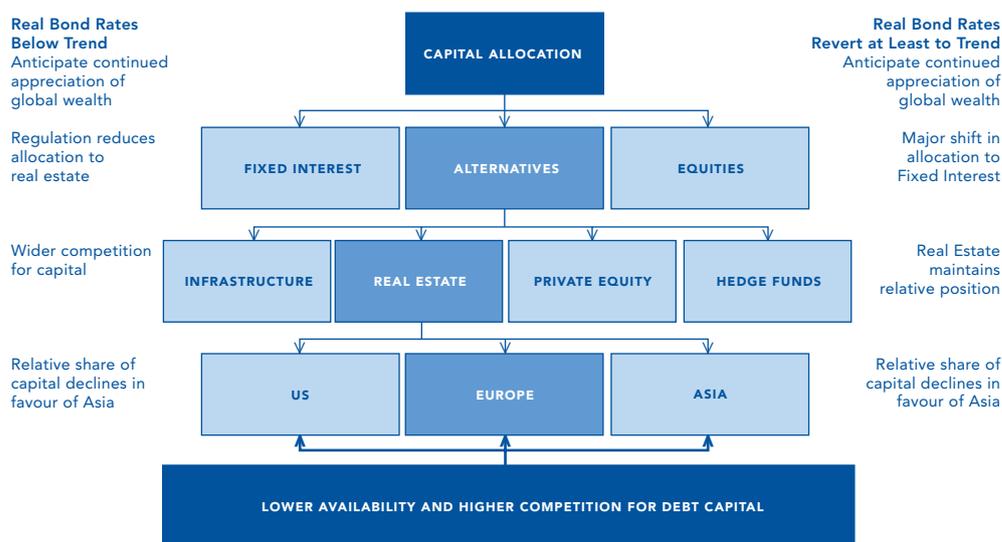
In contrast, lower leverage for value added and opportunistic strategies suggests more local, specialist funds. Without the accretive effect of high leverage, the efficient frontier of higher risk investing has a lower gradient. This brings into question whether higher risk strategies deliver appropriate rewards on a risk-adjusted return basis. To succeed, such strategies will require unique insight into industry dynamics and structural trends, enabling managers to spot undervalued or mis-priced companies and assets. More local expertise and operational management skills will become even more important to deliver returns.

6 THE IMPLICATIONS OF LEGACY ISSUES FOR NON-LISTED REAL ESTATE IN THE MEDIUM-TERM

6.1 Declining Capital Base

The legacy of the financial crisis continues to impact upon the principle drivers underlying the structure and performance of the European non-listed real estate funds industry. Individually and interactively, the drivers point toward a lowering of real estate’s capital base (Figure 28). While the recovery has gained traction in its breadth and depth, the economy is still being dragged by the scale of intervention needed to support market liquidity and to manage the sovereign debt crises. At the aggregate the outlook is for very modest growth levels to 2015. There is wide variation across markets, but even the relatively stronger economic growth of Germany, which is driving the recovery, remains modest. Given the stronger performance of other regions, capital allocation to the US and Asia are increasing at the expense of Europe.

FIGURE 28 / DECLINING CAPITAL BASE FOR EUROPEAN REAL ESTATE



The level of intervention in the economy required to restore liquidity and stabilise financial markets resulted in bond rates remaining artificially low. In the aftermath of capital expansion and as intervention is gradually withdrawn, nominal bond rates are rising. This also reflects the increased inflation risk. While average real estate yields are likely to increase relatively, this will impact on all asset classes equally. Importantly, real returns are stable. However, while not a central economic scenario, there is a downside risk that in the medium-term real bond rates might rise significantly due to gaps in investment demand and savings, absolutely and geographically. A sharp reallocation to fixed investments would be expected if actuaries find they are able to meet required returns from low risk investments. This lowering of demand would result in the spread between bond rates and real estate yields increasing, impacting on pricing in real terms.

Of course, if inflation rises further and persist into the medium-term, allocations to real estate would be expected to rise. This would reflect the partial inflation hedging characteristics of real estate. However, the central scenario is that inflation will remain low and that policy measures will keep inflation at or below target rates.

The wave of regulation being introduced in an effort to ensure greater stability and transparency of financial markets going forward will have major structural implications for the industry in its present form. At their core is the higher risk premium associated with the real estate sector, resulting in increased capital requirements. Under current pricing this cost of capital is expected to result in lower allocations to real estate from the banking and insurance sectors. The impact on the pension fund industry remains unknown, but similar regulation is expected to apply. This will highlight existing debt and equity trends that point toward declining capital bases for real estate.

The impact of the financial crisis has resulted in investors reviewing their liquidity requirements as well as those modes of investing that can provide liquidity in all market conditions. Allocations to long-term investing are declining, with a refocus on risk-adjusted market returns favouring a core and satellite portfolio approach. Modes of investing that enable investors to retain control and flexibility are favoured. The latter requires scale to be effective and thus in the medium-term is restricted to large investors. This legacy of the financial crisis is in addition to broader structural change in the asset liability requirements of investors, given maturing business models for capital guaranteed products and defined benefit pension plans.

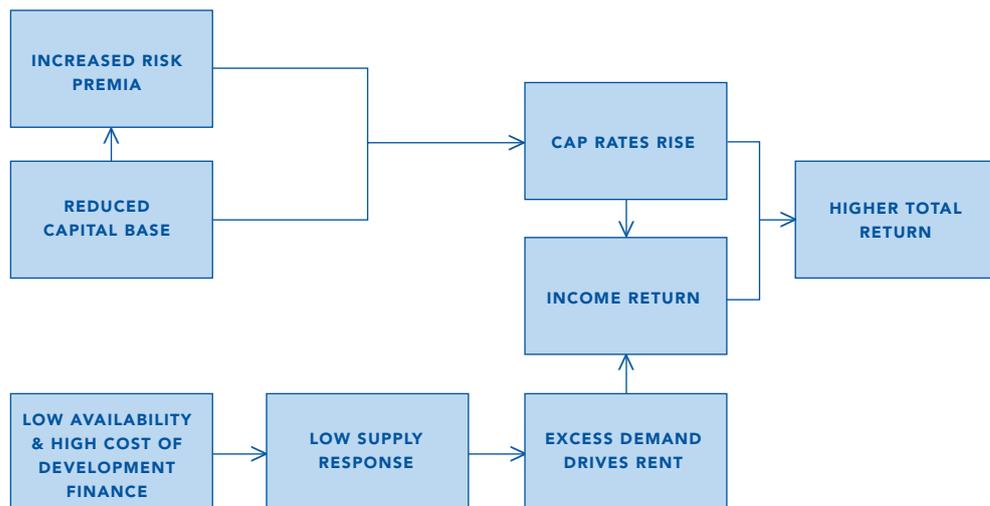
After the crisis, the debt market continues to be the greatest challenge facing the non-listed real estate industry and potentially, the greatest opportunity. The availability of debt capital remains constrained given both the withdrawal of lenders from the sector and inertia in managing existing loan books tying up capital. The supply of debt capital will remain low into the medium-term. Again, this lowers the capital base for real estate and is underlined by the higher costs of capital resulting from Basel III. Proportionately, this has a greater impact on the non-listed real estate fund universe which has previously used debt to expand the size of funds. Of course, the scarcity of debt capital is itself an opportunity for managers. Indeed, the provision of senior debt may also satisfy growing investor appetite for lower risk, fixed income products.

6.2 Real Estate Re-Pricing

Changes in the capital base are likely to impact pricing in two ways. First, a lowering of the capital base reduces the weight of capital targeting real estate, allowing yields to drift upwards if demand falls and the supply of investable stock remains constant. Of course, the investable universe may contract, having expanded rapidly as the demand for real estate accelerated during the boom. With excess demand for a limited amount of product, some more tertiary, non-institutional grade assets were acquired by leveraged private investors, opportunity funds and even core institutional funds. Such assets are likely to be withdrawn from the investable universe. However, the contraction of the real estate market will be small relative to the reduction in the capital base.

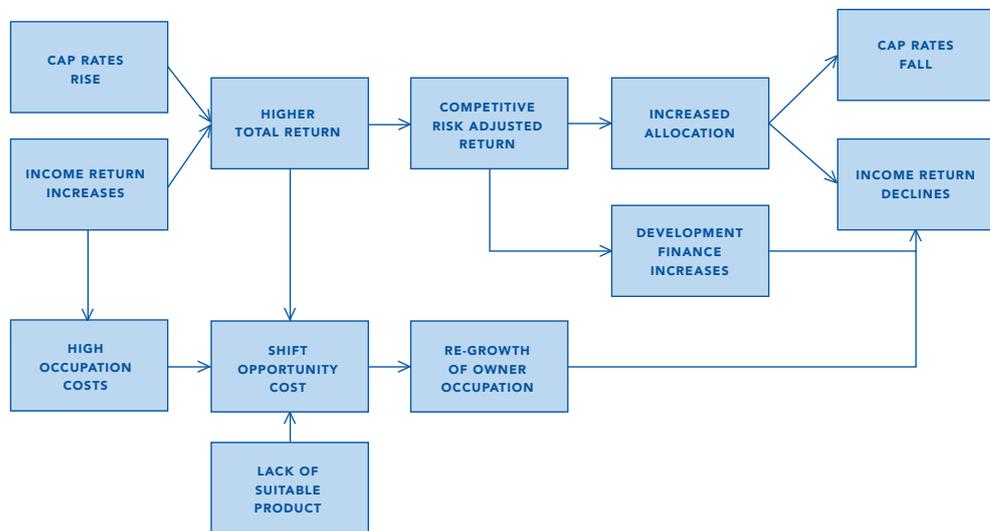
Second, regulatory change points toward a higher cost of capital for real estate, thereby increasing the associated real estate risk premium over risk free bonds (Figure 29). Lower demand and greater risk premium point toward a pricing readjustment for real estate. In the short-term this will have a negative impact on the value of existing holdings. In the medium-term, allocations to real estate may recover as higher total returns compensate for additional risk. This is due to the upward shift in cap rates, but also as a result of stronger income return. The elevated cost of capital for development finance impedes the supply response to excess demand, driving rental growth. However, given modest economic growth, a sharp increase in demand is not expected.

FIGURE 29 / RE-PRICING RESULTS IN HIGHER MARKET TOTAL RETURNS IN MEDIUM-TERM



As real estate returns increase, they start to outperform on a relative risk-adjusted basis. This stimulates the usual economic automatic stabilisers, resulting in increasing allocations to real estate that lower cap rates (Figure 30). Similarly, higher risk-adjusted returns may lead to greater availability of development finance. In addition, new accounting requirements regarding the capitalisation of lease obligations on balance sheets raise the opportunity cost of capital as rents increase. Thus, it might also be rational to expect a resurgence of owner occupier led development. Ultimately, the role of automatic stabilisers would lower returns to the new market equilibrium.

FIGURE 30 / AUTOMATIC PRICING STABILISERS



Any such pricing readjustment is expected to have a greater impact on prime than secondary given current pricing. The refocus of investor appetite on prime real estate is further driven by funding availability being limited to prime, income secure assets. This strong demand occurs amid low market liquidity and has driven the pricing of assets above long-term fair value in certain markets. In contrast, secondary market pricing remains weak and in many sectors continues to deteriorate. The scope of the secondary market has also expanded. The refocus on ultra prime has led to a redrafting of the boundary between prime and secondary. At one end of the scale, locationally prime assets that might have

some leasing risk or require limited capital expenditure are considered secondary by many investors. At the other end of the scale, there has been a tendency to bundle secondary and tertiary assets together. With lending criteria more strict in regard to quality, obtaining finance on secondary quality remains challenging. As a result secondary assets continue to decline in value given lack of demand. To this end, the pricing and risk premium associated with secondary real estate has already adjusted.

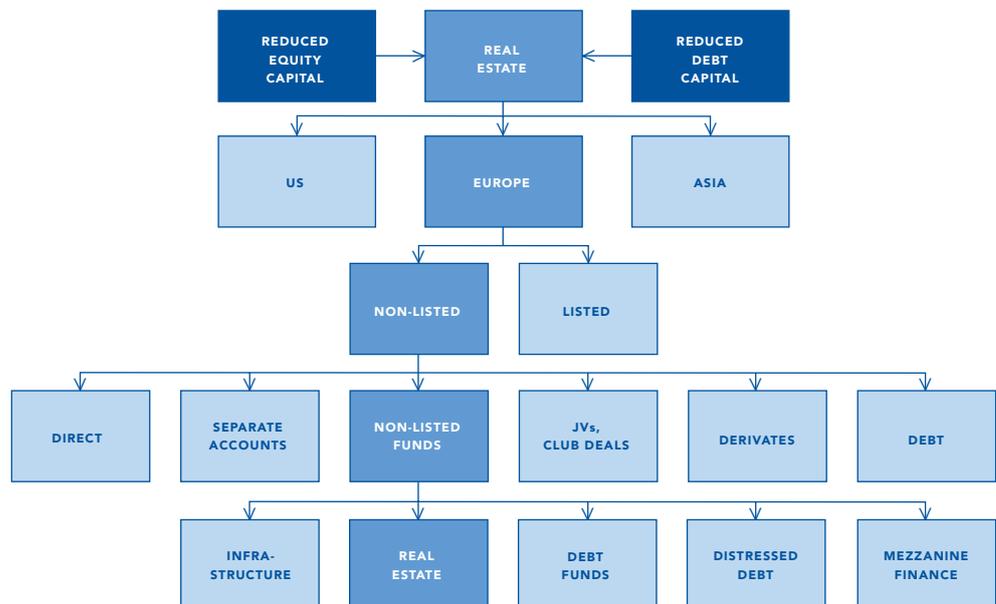
6.3 Implications for Non-Listed Real Estate funds

The implications of financial legacy issues for European real estate are greater for non-listed funds. This is due to the interaction of broader economic, regulatory and structural trends with behavioural change in the non-listed funds industry. This is seen in the relative size of the capital base, the organisational structure of the industry and the scale and scope of fund products.

6.3.1 THE CAPITAL BASE FOR NON-LISTED REAL ESTATE FUNDS

The lower capital base for real estate is greater for European non-listed real estate funds for a number of reasons (Figure 31). First, investor allocations to non-listed funds often represent non-domestic and/or inter-regional capital placement, with this mode offering access to required expertise. Given a refocus on home markets by some investors and increasing allocations to other regions at the expense of Europe, this is likely to have a disproportionate impact on non-listed funds. The counter-trend of institutional investors in many markets seeking to invest non-domestically for the first time may offset some of this decline.

FIGURE 31 / DECLINING CAPITAL BASE FOR NON-LISTED FUNDS



Second, non-listed core funds have made greater use of debt to expand the capital base, although conservatively. The lower availability and higher cost of debt point toward considerably lower leverage levels into the medium-term. Prior to the financial crisis, value added and opportunity funds used leverage extensively to expand the capital base and benefit from the perceived accretive effects of a positive spread between the cost of

finance and property returns. The downturn has highlighted the skewed, downside risk of such strategies. Value added and opportunistic strategies have altered fundamentally, with a re-emphasis on obtaining returns from specialist real estate knowledge and expertise. Given the scarcity of debt capital, fund managers who are able to draw on preferred sources of capital within their organisation or through developing special relationships with capital rich organisations will have a strong advantage.

Third, in the aftermath of the crisis the lack of control and flexibility afforded by non-listed real estate funds have led to a stronger preference for other modes of investing in non-listed real estate. Preferences in favour of separate accounts, joint ventures and direct investing are at the expense of non-listed funds. The practicalities of such investing require scale to deliver diversification benefits and for effective cost management. The scarcity and cost of human capital is a major limitation.

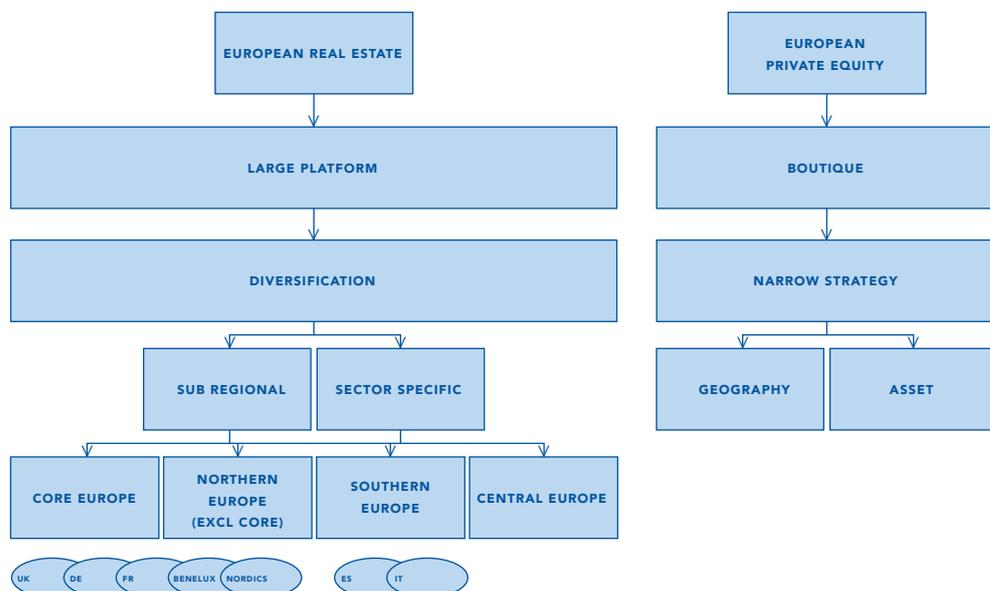
Fourth, the expansion of the range of allowable investments within the non-listed real estate investment allocation further reduce the capital base of non-listed real estate funds. However, for fund managers this also presents a major opportunity to expand their product range, thereby capitalising on the scarcity of debt capital and the stronger investor appetite for fixed interest products.

6.3.2 ORGANISATIONAL STRUCTURE OF THE INDUSTRY

The cumulative impact of the underlying drivers of real estate, together with shifts in investor strategies suggest that the organisational structure of the non-listed real estate industry will undergo significant change. Regulatory change is both a driver and facilitator of such change.

Many investors have been reviewing the role of real estate within their portfolios. This has led some long-term investors to explicitly construct portfolios into core, with a small allocation to satellite funds. The objectives of core portfolios are to provide a market tracking return, or beta. Satellite portfolios are employed to deliver alpha through enhanced, risk-adjusted returns. This development points to a separation of real estate allocations and real estate investing into market beta funds and private equity style, alpha funds (Figure 32).

FIGURE 32 / DIVERGENCE OF SCALE AND STRUCTURE BY STYLE



The implications of the AIFM Directive generate additional pressure on profitability by increasing the cost base through capital adequacy, compliance and reporting requirements. The granting of passporting rights across the EU allows cost efficiencies to be generated for larger platforms providing for a reduction in the number of entities. As larger platforms will have a significant competitive advantage, further consolidation of the industry is expected.

The lower capital base of real estate accentuates this issue. Indeed, large investors are recognising the value of both their capital and their expertise. Such investors want to use this power to greater affect either by investing directly, through separate accounts or through JVs with selected partners. In addition, certain large investors are pre-determining the strategy they wish to pursue and selecting their preferred manager to execute it on their behalf. Such funds may be open to other investors, but on the initiating investor's terms. This changes the relationship between the manager and principal investor from one of GP and LP, to that of co-partners. The relationship between the principal investor and wider investors is also changed from LP to LP, to that of GP to LP.

6.3.3 SCALE AND SCOPE OF FUND PRODUCTS

The re-emphasis on beta and core funds has implications for fund management revenues. Being more passive in style and tending to have longer hold periods, generating profit margins from low fees requires critical mass. In addition, the delivery of market beta requires strong diversification, which requires scale. This suggests larger funds in terms of strategic scope and by number of investors. However, this runs contrary to investors' current preferences for smaller funds focused on discrete markets. Looking forward, single country funds will lack the required scale to deliver diversification benefits and cost efficiencies in all but the largest markets. While there will be strong investor resistance to pan-European strategies, sub-regional funds are expected (Figure 31).

In contrast, the change in the business model of private equity real estate or alpha funds suggests that such funds will become smaller, locally focused and/or more specialist. Given their higher risk profile and associated cost of capital in a muted economic recovery context, increased allocations to Asia may disproportionately impact this segment.

The low availability of debt capital and the reduction in equity capital due to higher allocations to fixed interest products is a major challenge for the industry and points to lower GAV overall. However, the development of further debt products to exploit this market opportunity presents the greatest opportunity for the industry.

BIBLIOGRAPHY

Almond, N. (2010) The Great Wall of Money DTZ Research, 13 October

Almond, N. (2011) The Great Wall of Money DTZ Research, 10 March

Almond, N and Papadopoulos, K (2010) European debt funding gap: Resolutions under way DTZ Research, 28 March

Almond, N and Papadopoulos, K (2010) Global debt funding gap: New equity to plug into messy workout DTZ Research, 24 November

Bauer, A and Mork, L (2010) Taking Advantage of Solvency II Chapter 1, the Survivor's guide to Solvency II, PWC

Bowden, A (2011) Collective Significance: Sovereign Wealth Funds Investing in Real Estate Preqin Quarterly Report

CalPERS (2011) Real Estate Strategic Plan, CalPERS Investment Office, February 14

Clifford Chance (2010) Proposed EU Regulation on OTC Derivatives, September

Hornsby, M (2010) The AIFM Directive: Key practical implications for real estate funds, Ernst and Young, March

Hutchings, W. (2010) EU puts pensions on the road to nowhere Financial News, September 24, 2010.

IMF (2010) Regional Economic Outlook: Europe Building Confidence World economic and Financial Surveys, October

INREV (2010a) Re-evaluating the case for investing in non-listed real estate funds post-crisis, INREV, September

INREV (2010b) Investor Universe UK Survey 2010, INREV, March

INREV (2010c) Investor Universe Germany Survey 2010, INREV, June

INREV (2010d) Investor Universe Netherlands Survey 2010, INREV, September

INREV (2011a) Investor Universe Sweden Survey 2011, INREV, February

INREV (2011b) Investment Intentions Survey 2011, INREV, January

INREV (2011c) INREV analysis monthly update, INREV, February

McKinsey, (2010) Basel III and European banking: Its impact, how banks might respond and the challenges of implementation McKinsey & Co, November

McKinsey Global Institute (2010) Farewell to cheap capital? The long-term implications of shifts in global investment and savings McKinsey & Co, December

McKinsey (2010): Debt and de-leveraging The global credit bubble and its economic consequences, McKinsey & Co, January,

- McKinsey (2009) Global Capital Markets, Entering a new era, McKinsey & Co, September
- Mercer (2009) Asset Allocation Survey Mercer, April
- Miah, Farhaz, (2011) Investor Spotlight: US Based investors in Core Real Estate Funds
Preqin quarterly report
- Montulet, W; Hooghwerff, S and van de Burgt, E (2010) The influence of Solvency II on an insurer's strategic policy Institutional Investment, March 23, 2010
- Mullholland, S (2011) Commercial property soars as buyers bank on recovery, Bloomberg, January 25
- Mullin, K (2010) Crisis looms for commercial real estate in Europe, Reuters, July 29
- Petersen, A; Schneider, R and Voegeli, K (2011) European Economy: Outlook 2011 Working Paper 144, Allianz, December 16
- Preqin (2010) Impact of Solvency II Directive on Real Estate Investments: A Preqin Special Report, Preqin, November
- Preqin, (2010) The AIFM Directive: A Special Report, Preqin, December
- Property Industry Alliance (2011) Update on UK Commercial Property Debt Risk PIA 22 January
- Pylypchuk, I (2010) European Real Estate Debt, Paper presented at ERES 2010, June
- Pylypchuk, I (2011) European Real Estate Debt Presentation, March
- Pylypchuk, I and Hubbard, R (2010) European Commercial Real Estate Debt, CBRE, Spring
- Reilly, D (2011) CMBS may have been our ruin, but could now be our saviour Property Week, January, 14
- Scott, L. (2011) Bank Lending is about to get even trickier Property Week, 16 July
- Truell, D. Aging, Scarcity and Development: Wellcome Trust Looks for Growth Trends Beyond the Recession Wall Street Journal, April 8, 2007.
- Van Bragt, D; Steehouwer, H; Waalwijk, B; Possen, T; Eckhardt, A and Hooghwerff, S (2010) Impact of the Solvency II guidelines on ALM for Life Insurers Ortec Finance, Applied Paper No. 2010
- Walten, K and Bechard, M (2010) Fiduciary Responsibility and under-represented asset classes in defined contribution schemes, NAGDCA, Winter
- World Economic Forum (2011) The Future of Long-term Investing WEF, March

'NREV