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## MORGAN STANLEY BLUE PAPER - REVISIT



### Banks Deleveraging and Real Estate Banks are 20-25% through CRE deleveraging

**CRE deleveraging risk of up to €700 billion confirmed.** Our initial estimate of the €300-600 billion banks' financing gap has been validated, and the range has now tightened towards the top end, with banks enlarging their original deleveraging plans and announcing new ones. The original €100 billion risk from CMBS run-off and liquidating open-end funds also remains valid and has seen c.10% reduction so far.

**Banks are 20-25% through our estimated CRE deleveraging, a faster pace than expected.** We estimate that c.20-25% of the expected deleveraging has been done in the last 18 months, through a mix of sales (c.20%), repayments (c.55%), asset repossessions (especially in Spain) and some write-downs (remaining c.25%).

**Many moving parts – increased investor interest in debt funds is main positive.** During the last six months, we have witnessed a significant rise in investor interest in debt funds, increased bond issuance, a gradual step-up in lending by insurers, SWFs continue buying in Europe, and a higher likelihood for equity issuance by REITs. The rising interest in debt funds is particularly vital, we believe, as these funds target a broad asset quality spectrum. Admittedly, some of this is offset by regulatory pressures on CMBS origination, insurers and pension funds.

**'Prime' real estate is holding up, the rest of the market is not.** Most asset classes in most regions are experiencing some weakness on average. However, the range of outcomes around that average is wide; 'prime' assets are holding up or rising in value, secondary is showing weakness. This trend is likely to continue.

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## Executive summary and key conclusions by industry

### **We now estimate a €450-700 billion CRE financing gap, up from €400-700 billion in March**

Banks have increased their deleveraging plans and as such we have more conviction that the lower end of the range for our estimated capital shortfall will be even higher. We have revised our original estimate of deleveraging risk to €350-600 billion.

At the same time, we see no major change in the original up to €100 billion of possible risk deriving from refinancing risk in maturing CMBS and liquidating German Open-ended funds. We note CMBS have seen c. €11 billion roll-offs.

### **We think Banks are likely 20-25% through their deleveraging in CRE, a faster pace than expected**

We estimate that c. 20-25% of the expected deleveraging has been done in the last 18 months, based on our estimate of a total €600 billion risk and the deleveraging progress for the banks for which we have exact updates. We estimate a mix of sales (c. 20%), asset repossession and NPLs (c. 25%, largely in Spain) and repayment (largely the remainder) as the reason for the reduction. This is a faster pace than we have witnessed in the past, and has likely been spurred by capital requirements, expensive funding and the need to increase RoEs for banks.

Reduction in cross-border exposure is the likely driver of faster deleveraging as banks have been able to sell their exposure outside Europe to non-European banks. This has been especially evident in the US.

### **We remain concerned that the 'easier part' of the deleveraging has been done**

We will be watching for signs of slow down from here as some banks have indeed mentioned that the pace of reduction seen so far may not be maintained. There is still 75-80% to be done over time and, admittedly, CRE loans tend to be of longer duration than other commercial loans. One area where we expect acceleration is Spain.

### **Alternative capital availability is likely closer to the top end of our previous €100-200 billion estimate**

We are convinced that a total of up to €200 billion of capital is becoming available to replace reduced funding from traditional debt and equity capital providers. This is towards the top end of the €100-200 billion range we discussed in March. We estimate that year to date sources of 'alternative' capital (i.e. anything other than bank debt, mainly from bond issuance, insurers lending, SWFs and private equity) have

redployed enough capital and funding to explain around half of the CRE loans repayments to banks.

### **Very encouraging signs from alternative capital sources**

Investor interest in debt funds is rising rapidly, with a threefold increase in the number of institutions that aim to allocate to debt. In addition, SWFs from all over the world continue buying assets in Europe with several transactions in recent weeks. We are also seeing increasing efforts from insurers to lend to commercial real estate, a rapid uptick in real estate bond issuance (€6 billion issuance year to date, more than double the yearly average issuance volumes for the last decade). Lastly, we think it is important to flag that the 20% re-rating of quoted property stocks year to date suggests many listed players are now better positioned to issue equity.

### **Increasing appetite for debt funds is the most significant development**

A significant portion of this alternative capital (SWFs, quoted property companies and insurers in particular) is highly selective, and many of these players often lack the ability and/or willingness to progress quickly. Therefore, only a small part of real estate markets is set to benefit any time soon, we believe. In this context, we consider the investor interest in debt funds to be the most significantly positive data point for wider real estate markets, as these private equity sponsored funds can be nimble and tend to target a wider real estate quality spectrum.

### **Also increased interest in real estate private equity**

Prequin data on investor interest for private real estate investment over the next 12 months have shown a marked increase in interest in European real estate private equity funds. Compared with the 33% of investors surveyed at the end of 2011 seeking new investments in Europe over the following 12 months, the 3Q12 data show that 40% of investors surveyed were seeking to make allocations to Europe.

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**But also some concerns**

It is increasingly clear that Solvency 2 and reduced competition from banks are driving more insurers towards mortgage lending. This is hardly a new topic. But, we think it is yet unclear whether insurers will add to their total real estate exposure or whether they will reallocate away from other real estate investments. The same concerns hold for many pension funds as IORP could be very similar to Solvency 2. In addition, in this Blue Paper Revisit we also point to increased efforts from governments and corporates to sell down real estate portfolios.

**Values to continue softening as banks reduce exposure**

In the meantime, as banks are making rapid progress in running down their exposure, real estate values are softening across different asset classes and geographies. We reiterate our view that values are likely set to slide by up to 10% across the board, and it appears we are about a quarter through this already. But, we also reiterate our view that differentiation remains key; we think better quality assets will continue holding up, and could in some cases enjoy capital appreciation.

**Winners and losers****Quoted property companies likely to be relative winners**

The quoted property sector owns exactly the type of assets many new entrants in this space are targeting, and therefore it is not surprising that these companies' portfolios are holding up and that the stocks are outperforming. We think this trend is set to continue and reiterate our Attractive view on this space.

**Among the quoted private equity players Blackstone looks best placed; we also see opportunity for Oaktree**

We see Blackstone as almost uniquely well placed to benefit from the dislocation in the real estate space globally, given the significant fire power at its disposal. In the equity space, few players can compete for scale deals other than as part of a syndicate. We also see significant opportunities for Oaktree driven by its fire power.

**Banks are still in a tough position, but they have been able to move faster than expected, and are repricing loans**

Banks with large exposure have been able to reduce loans fast and we have been especially surprised by the progress made by the three banks with meaningful restructuring plans, Lloyds, RBS and Commerzbank. However, the fast deleveraging has taken its toll on earnings (especially in the non-core divisions) and they will likely remain under pressure.

Overall, better funding conditions and a lower cost of equity (linked to a broad reduction in systemic risk in Europe) have improved the economics for banks' lending, including lending in CRE. We also have anecdotal evidence of continued efforts to improve loan repricing. Having said that, the economics remain very difficult for banks with higher funding costs (smaller banks, banks with a weaker sovereign and generally lower rated banks).

**Spotlight on Spain and Benelux**

We are watching Spain, where we expect faster asset sales from next year once asset valuations are fully adjusted: in this context, we have flagged that Santander has been accelerating its deleveraging and is one of the reasons why we have recently turned more positive in it.

We continue see some risks in weakening Benelux real estate (potentially putting pressure on the banks exposed to this region) and this is why we have already increased credit provisions for ING substantially, despite its relatively more resilient asset quality (as shown in their recent results); in our view restructuring and asset sales remain the key catalysts for this stock.

**Collaborative effort**

Blue papers are collaborative reports focusing on key secular themes transcending sectors or geographies, where Morgan Stanley looks to identify the key debates and give investors a clearer understanding of what will define the companies most likely to benefit from or be challenged by those trends.

**Differentiated approach**

The reduction in the availability of commercial real estate debt is a topic that has been written about in a wide range of publications<sup>1</sup>. We have sought to provide incremental insight through a collaboration of Morgan Stanley's banks, insurance, property, diversified financials and CMBS analysts. This paper also reflects evidence gleaned from direct conversations with influential capital players in the industry. We have sought to better quantify the likely size of the expected capital gap, the likely capital replacements, as well as potential impacts on CRE values/profitability and winners and losers in the capital restructuring process.

<sup>1</sup> Reports on the topic include the "Global Debt Funding Gap" by DTZ, "Capital Sources" by INREV, "Emerging Trends" by the ULI and PwC, "Distressed Real Estate Debt" by the European Business School et al.

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## Providers of financing to CRE: The moving parts

	CURRENT POSITION	LONG-TERM TREND	MORGAN STANLEY VIEWS	CHANGES SINCE MARCH
<b>Banks</b>	€2.4trn exposure around 90-95% of all CRE debt in Europe	A significant structural and cyclical decline in available CRE senior debt from the default lender.	↓↓ Expect as much as €600bn of reduction in CRE lending, and a rise in lending spreads.	20-25% progress on deleveraging
<b>CMBS</b>	Small; just over €85bn outstanding, limited origination	Gradual run-off in the pool of CMBS securities with hardly any origination.	↓ The run-off in CMBS adds to the problem; CMBS could reduce lending availability by another €64bn.	Limited issuance, some restructuring
<b>GOEFs</b>	AUM of €33bn of equity invested in real estate	Increased redemption pressure drives even more funds to close and liquidate.	↓ A significant part of the industry liquidates gradually. AUM falls by €25bn.	€5bn of sales, but also some new funds closing
<b>Governments</b>	Significant owners of real estate	Government deleveraging initiatives to drive significant disposals.	↓ Likely disposal volumes will be smaller than official targets, but could reach €20bn over the next 5 years.	New - governments focusing more on selling assets
<b>Private equity</b>	Raising funds for equity, debt and mezzanine finance	Opportunistic fund raising for a variety of equity and debt strategies.	↑ €25bn of firepower, with more funds expected to be raised as opportunities arise to invest and to lend.	Interest in debt funds is rising rapidly
<b>Insurers</b>	Stepping up CRE lending efforts, but early days for most	Insurers add senior debt to their real estate portfolios, driven by regulation (Solvency 2).	↑ Increase in lending between €50bn and €100bn over the next 5-10 years, but little change in the next two years.	More focus on debt, very gradual; as expected
<b>Quoted property stocks</b>	Underdeveloped relative to US/Asia	We anticipate an increase in equity issuance through initial public offerings and secondary offerings.	↑ Our central scenario is €25bn; we think the amount of issuance ultimately depends on the alternatives available to owners.	Reduction in cost of equity, but yet to issue equity
<b>SWFs</b>	Increasing AUM; investing more in real estate	Continued investments in high quality assets through private equity and JVs with REITs.	↑ SWFs invest more in European real estate in a drive for yield and capital protection (€50bn).	Continue to invest, at a glacial pace; as expected
<b>Corporate Bonds</b>	Insignificant; less than €30bn outstanding	A pick-up in issuance as more companies tap into this market.	↑ Issuance could treble, but even in that case the net increase of senior unsecured credit could perhaps add only around €40bn.	Issuance is rising; as expected
<b>Pension funds</b>	Weightings usually track inflation, looking for yield	Unclear to what extent IORP will affect real estate but it could reduce allocations to the asset class.	? Current drafts suggest IORP could be similar to Solvency 2, but many questions remain.	IORP regulation creates uncertainty
<b>Other unlisted funds</b>	The default way for institutions to invest in the asset class	Some inflows and close to €30bn firepower, but terminations of funds originated in 2005-2007.	= The rotation in preferred style (towards lower gearing) and geography (into Germany and Nordics) is a concern.	No material change since March

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## Section 1: Framing the debate and possible risks

**We estimate a €450-700 billion CRE financing gap, up from €400-700 billion in our March Blue Paper**

Banks have increased their deleveraging plans and as such, we have more conviction that the lower end of the range for our estimated capital shortfall will be even higher. We estimate our new range at €350-600 billion.

At the same time, we see no major change in the up to €100 billion of possible risk deriving from refinancing risk in maturing CMBS and liquidating German Open-ended funds. We note that CMBS have seen c. €11bn roll-offs so far.

Exhibit 1

**Deleveraging risk – €350-600 billion as banks retrench**

Deleveraging risk in CRE (€ bn)	Minimal → Cautious				
Announced CRE deleveraging plans	c. 350	c. 350	c. 350	c. 350	c. 350
Exposure to "non-home markets"	c. 100	0	c. 50	c. 50	c. 100
LTVs reduction	c. 150	0	c. 50	c. 100	c. 150
<b>Deleveraging risk in CRE, total</b>	<b>c. 350</b>	<b>c. 450</b>	<b>c. 550</b>	<b>c. 600</b>	
As % of Tot CRE lending exposure	18%	23%	28%	30%	

Source: Morgan Stanley Research estimates

**We think Banks are likely 20-25% through their deleveraging in CRE**

We estimate that c. 20-25% of the expected deleveraging has been done in the last 18 months (note that our analysis at the time of our March Blue Paper was done on December 2010 data), based on our estimate of a total €600 billion risk and the deleveraging progress for the banks for which we have specific updates.

Exhibit 2

**We think c. 23% of our estimated deleveraging (€600bn) has been done in the last 18 months**

Summary of our forecasts and findings	CRE loans	plans	plans/forecasts	delev. done	delev. done	delev. done
			as % of exposure	done	as % of exposure	as % of plans
banks with plans	771	353	46%	76	10%	22%
Banks in our sample without official plans	245	100	41%	42	17%	42%
Total MS sample	1016	450	44%	118	12%	26%
Other Banks & exposures	1434	150	10%	23	2%	15%
<b>Total system</b>	<b>2450</b>	<b>600</b>	<b>24%</b>	<b>140</b>	<b>6%</b>	<b>23%</b>

Source: Company Data, Morgan Stanley Research

**The key issues we highlighted in our March Blue Paper remain valid today**

**Recent trends have confirmed that CRE deleveraging is structural and strategic, not just cyclical**

In our March Blue Paper we highlighted that in previous cyclical downturns in real estate in the UK (where historical series are available) banks reduced their exposure over a period of 5 to 7 years. Given the larger scale of the problem and synchronization across several countries, we contend that this time the issue is structural rather than cyclical and could impact the sector over an even longer period (up to 10 years). In addition, more banks have announced their exit from Real Estate financing and have increased their deleveraging plans in the space, confirming our view that this area of lending is strategically less attractive.

**Banks have accelerated their loan reduction**

We estimate that banks are c. 20-25% through their revised (upwards) deleveraging plans. This is a faster reduction than we had anticipated (implying a 4 to 5 year deleveraging period versus the 5 to 7 years witnessed in past cycles) and is testament to the fact that most banks no longer see CRE as a core activity.

**Indeed, cross-border exposure has been the first to be reduced, for all loans**

In March, we flagged that €100 billion of our deleveraging range would be a reduction in exposure to 'non-home markets'. The intense deleveraging not just in CRE, but across all cross-border lending exposures, has confirmed that, and indeed this is where banks have made faster progress. Banks outside Europe have been the biggest buyers of portfolios of loans.

**Liquidity and reduction of funding spreads have helped the deleveraging process and avoided dislocations**

Both the LTRO as well as the general spread reduction generated by the ECB announcement during the summer have, in our view, facilitated banks' deleveraging by providing broad liquidity in the system, improving confidence and reducing systemic risk in Europe.

**UK, German and Irish banks have shown fastest trends**

Unsurprisingly, restructuring plans for these banks have been in place for longer and thus they are more advanced in their asset reductions. Of the €120 billion loan reduction for which we have granularity, UK banks represent 39%, German 19% and Irish 11%.



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**A mix of sales, repayments, and asset repossessions is driving loan reduction**

It is difficult to glean an exact breakdown of how loans have been reduced, but anecdotal evidence and analysis of the €120 billion reduction for which we have granularity suggests up to 20% is from asset sales, c. 25% is explained by Spanish repossessed assets and the remainder by loan repayments.

**Spanish banks to deleverage significantly from next year**

Spanish banks' restructuring this year has been dominated by asset repossession and adjustments to loans and asset value. We expect this process to be completed by year-end and thus we anticipate an acceleration in sales from next year.

**CEE deleveraging generally well advanced**

Deleveraging in CEE is well advanced and has been less dramatic than we feared, not just in CRE, but across all loans.

**Markets under watch: Netherlands and Poland**

The two markets where we feel trends are still deteriorating are the Netherlands and Poland, where values are still declining substantially and the construction sector is still suffering large losses (especially in Poland).

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## 1. Update on deleveraging plans and trends

**Key changes since March:** Banks are deleveraging more, our gap has increased towards our €600 billion top estimate.

**Our initial estimate of the banks' financing gap (€300-600 billion) has been validated and in fact the range has tightened towards the top end**

We remain convinced that CRE deleveraging is a structural process not a cyclical one and indeed this has been validated by an increasing number of banks strategically reviewing their exposures and either enlarging their deleveraging plans or announcing new ones.

The original plans announced (which constituted the €300 billion bottom of our range) have increased by c. 20% to €350 billion.

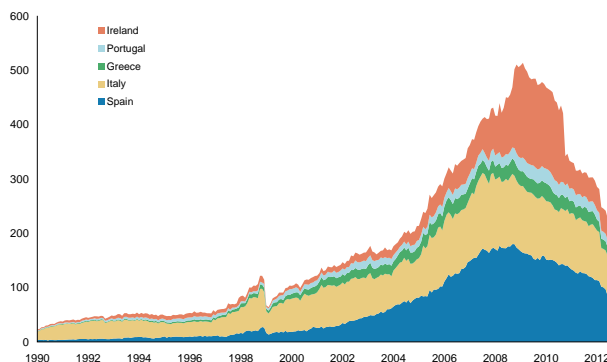
### European banks deleveraging has been intense in 2012

Notwithstanding significant liquidity injections provided by both the ECB and the Bank of England, we have seen massive deleveraging by banks in Europe.

Cross-border financing, of any kind, not just CRE, has been deeply affected. For example, German banks have reduced their European cross-border lending since peaking at €520 billion in 2009 by 60%, back to the €200 billion level. Similarly, French banks have reduced their cross-border lending by 40% since the peak to €430 billion.

Exhibit 3

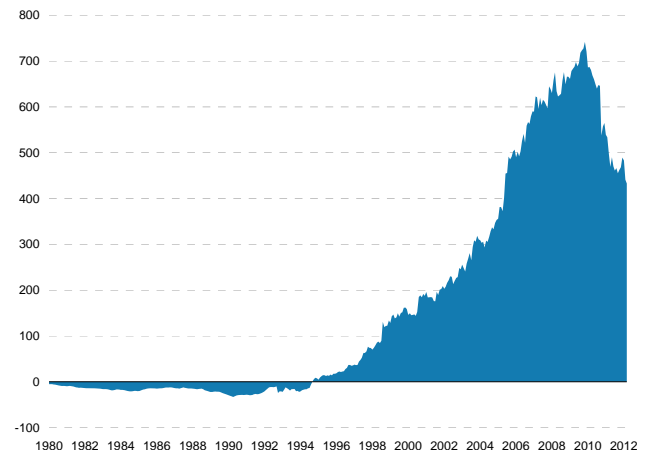
### German banks' GLIPS funding gap



Source: Company Data, Morgan Stanley Research, Bundesbank

Exhibit 4

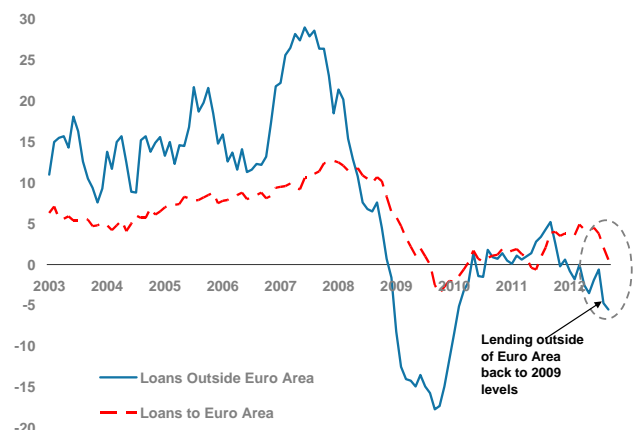
### French Banks: Eurozone funding gap\* (outside France)



Source: Banque de France, Morgan Stanley Research

Exhibit 5

### European Banks: Lending outside vs. within the euro area



Source: ECB, Morgan Stanley Research

### Despite LTRO and OMT banks are still tightening their financing conditions, not just in CRE

While the OMT has cut off the tail risk and helped bank funding markets, credit conditions remain tight. The ECB bank lending standards survey, for example, points to tighter lending conditions in the core, especially for corporates. The Q3 survey highlights changes in bank behaviour towards SME lending being the most pronounced. This chimes with the September ECB lending data, which again saw corporate lending in the euro area contract sharply to its lowest level in

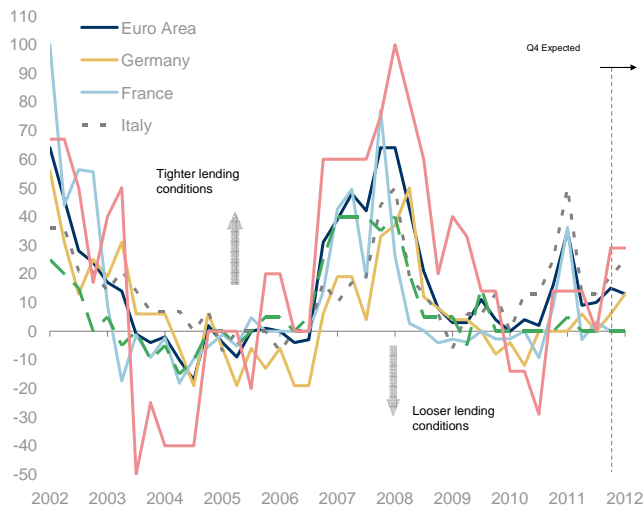
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two years at -1.4% YoY and we think CRE lending remains an area deeply affected.

Exhibit 6

### Corporate standards tighten further in core countries



Source: ECB, Haver, Morgan Stanley Research

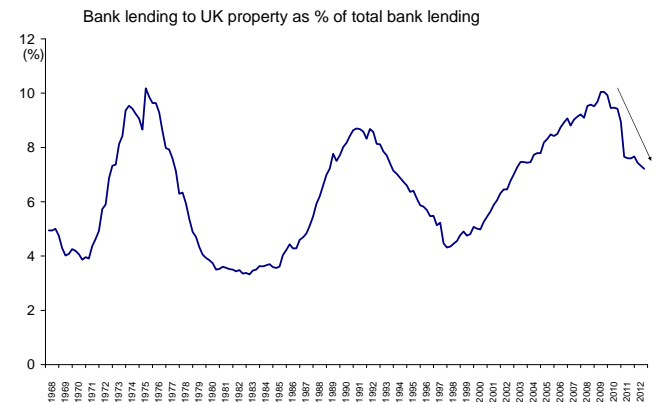
### CRE deleveraging in this cycle appears faster than in previous cycles

Our analysis shows that for the banks in our sample deleveraging has accelerated substantially in the last 18 months.

Exhibit 7, which maps the shape of previous real estate lending cycles in the UK, shows that in the past 30 years the market has suffered two major corrections, when banks have pretty much halved their exposure to CRE over a period of 5 to 7 years, with an average of 7-10% reduction per year. The slope of the reduction in the UK has clearly accelerated.

Exhibit 7

### UK CRE lending is cyclical, and the cycles are long



Source: BoE, Datastream, Morgan Stanley Research

### European banks have reduced their CRE exposure by over c. €120 billion or 14% in the last 18 months and we expect further acceleration

Since the end of 2010, the European banks in our sample have reduced their exposure by just over €120 billion or 14%. Of the 44 banks in our sample, 36 banks reduced their exposures to various degrees, from 5% to 30%. Note that this includes Spanish banks, which have seen a decrease in their developers lending exposure but a corresponding increase in repossessed assets. Given the valuation adjustment enforced by the new Royal Decree Law (RDL), we expect the sale of assets and loans to accelerate from next year (for further details please see the section on Spain in this note).

### Liquidity and disintermediation have likely helped to avoid market dislocations ...

In our March Blue Paper, we pointed out that it is obviously not in the banks' interests to cause a market dislocation, which would generate even larger losses for them. This is why we thought that there would be a trade-off between the amount that banks would wish to recover and when they could do so, and why ultimately it could take years.

However, recent evidence of acceleration in banks deleveraging seems to have contradicted our concern on the length of the process. In our view, it is likely that the liquidity injected into the market by the central banks may have helped, if not directly to avert banks' deleveraging, at least indirectly, to absorb part of the deleveraging undertaken by the banks, and why they have been able to accelerate it. As we explore in Section 2, corporates have been able to issue more bonds and in general other market participants have stepped up their involvement in CRE financing.



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### ... but also the fact that banks outside Europe have stepped up their presence

Anecdotal evidence suggests that European banks have been able to dispose relatively quickly and successfully of their CRE exposures outside Europe to non-European banks. We have witnessed this trend not only for CRE, but also generally for the loan exposure across most categories (for example, French banks' trade finance exposure to Asia has been substantially picked up by the local banks).

### Pricing has also increased

In our March Blue Paper, we indicated that while in other markets (for example, the US) prices for real estate loans had increased substantially, in Europe CRE lending spreads (although 50-100% higher than prior to the crisis) were still relatively low and insufficient to justify lending. We have seen considerable anecdotal evidence that this is starting to adjust.

## The CRE financing gap is moving towards our €600 billion top estimate

When we originally wrote in March, we used the CRE deleveraging plans that banks had already specifically announced as a starting point to estimate the financing gap. To this €300 billion we added our estimate of the additional amount at risk on cross-border lending not necessarily linked to the banks' own core client franchises and banks' refinancing at lower LTVs to reach our top end estimate of €600 billion deleveraging.

Overall, we remain comfortable with our top estimate of €600 billion, equivalent to c. 24% of the total €2.4 trillion CRE lending exposure in Europe, but the bottom of the range has increased by c. 25% to €350 billion.

### Explicit deleveraging plans of €300 billion have increased by c. 25% over the last six months

Since we wrote in March, more banks have either announced new plans or increased existing plans, especially with regard to cross-border exposures, as we expected. The result is a c. 25% increase to c. €350 billion in announced deleveraging plans. We think this is likely linked to the more aggressive reduction in international operations.

Exhibit 8

### Deleveraging risk, €350-600 billion as banks retrench

Deleveraging risk in CRE (€ bn)	Minimal → Cautious				
Announced CRE deleveraging plans	c. 350	c. 350	c. 350	c. 350	c. 350
Exposure to "non-home markets"	c. 100	0	c. 50	c. 50	c. 100
LTVs reduction	c. 150	0	c. 50	c. 100	c. 150
<b>Deleveraging risk in CRE, total</b>	<b>c. 350</b>	<b>c. 450</b>	<b>c. 550</b>	<b>c. 600</b>	
As % of Tot CRE lending exposure	18%	23%	28%	30%	

Source: Morgan Stanley Research estimates

### Banks are extending financing at lower LTVs

Speaking to the banks it also transpires that the financing that banks renew is being done at lower LTV ratios, further supporting the view we expressed in our report.

### Banks have increased their existing CRE deleveraging plans ...

Some banks have decided to expand their deleveraging plans. For example in June Commerzbank decided to classify all commercial real estate finance as non-core, and therefore EuroHypo's entire €56 billion European real estate loan book will be transferred to Commerzbank's non-core assets and wound-up over time. This marks a significant reversal of its prior decision to re-focus commercial real estate lending on four key markets: Germany, UK, France and Poland.

### ... and more banks have announced CRE deleveraging

Since March, a significant number of additional banks have announced a substantial reduction in their CRE portfolios and exit of certain countries. In particular, the UK, Spanish and US market are seen as less attractive or simply these are the markets where banks are finding more willing buyers.

Societe General, German lender Landesbank Berlin along with Clydesdale, Yorkshire and Nationwide have decided to pull out of the UK commercial real estate market or announced wider deleveraging plans in CRE especially with regards to their international operations. NordLB another large lender with a €35 billion CRE portfolio has announced its planned exit from the US and Spanish commercial real-estate markets. It is noteworthy that most of these banks have said that they will simply let the existing loans mature rather than selling them off.

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Exhibit 9

### Deleveraging plans announced by banks have increased by c. 25% to €350 billion

Institution	CRE exposures (end 2010)	Deleverage plans (end 2011)	Deleverage plans (1H12)
RBS	84	37	37
Lloy	56	25	25
CBK	72	30	72
DBK	48	7	7
FMS	26	26	26
Westimmo	16	16	16
NAMA	30	27	27
AIB	19	8	8
BoI	20	8	8
Irish Life	1.7	1.7	1.7
<b>Sub total</b>	<b>372</b>	<b>185</b>	<b>227</b>
Spain	336	100	100
<b>Total</b>	<b>708</b>	<b>285</b>	<b>327</b>
SocGen	3	-	2
NordLB	14	-	4
LBB	8	-	1
ING	37	-	19
<b>Total new</b>	<b>771</b>	<b>285</b>	<b>353</b>

Source: Company data, EBA, Morgan Stanley Research.

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## 2. Progress on Deleveraging

**Key changes since March:** We think c. 20-25% of our estimated deleveraging has been done in the last 18 months, faster than we had expected.

To assess how much deleveraging has actually been done is not simple as there are banks with official plans, banks with no official plans but that are still decreasing exposures, and banks that are still lending in CRE, albeit just in their domestic markets. We summarise the trends below:

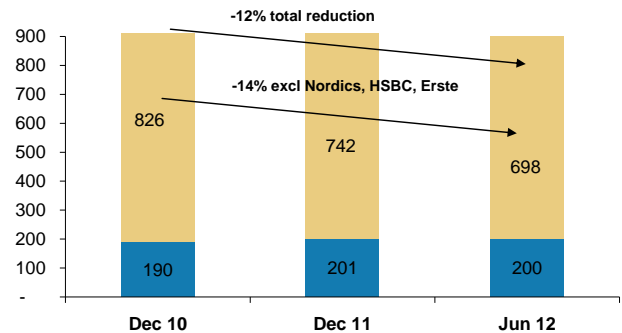
1. On average, banks in our sample (excluding banks that are still lending in CRE and increasing their books such as the Nordics and HSBC for example) have reduced their CRE lending exposure by c. 14% since end-2010 or €120 billion.
2. Banks with official plans have made c. 22% progress on their revised upwards plans.
3. Banks with no official plans (but also smaller exposures) seem to have been more aggressive, reducing their exposure by 17% and, based on our view of their 'unofficial' deleveraging plans, have likely made 26% progress on deleveraging.
4. We think overall the sector has likely reduced its exposure to CRE by c. 6% (or €140 billion), signaling c. 23% progress vs. our estimate of €600 billion deleveraging risk.
5. While previous CRE deleveraging cycles (for example in the UK) have lasted 5 to 7 years, current progress would indicate a faster deleveraging cycle of c. 4 to 5 years.

### Banks in our sample have reduced exposures by c. 14%

We set out below the progress we are able to provide for the 44 banks in our sample, some with official deleveraging plans, some with no official plans but that have nevertheless reduced their CRE loans in the last 18 months.

Exhibit 10

**Our sample of banks has shown a 14% decline in CRE loans since December 2010**



Source: Company Data, Morgan Stanley Research

Exhibit 11

**22% progress on official (revised) CRE deleveraging plans with 12-14% of exposure now reduced**

Summary of our findings	CRE loans	plans	plans as % of exposure	delev. done	delev. done as % of exposure
Banks with plans	771	353	46%	76	10%
Banks in our sample without official plans	245	na	na	42	17%
<b>Total MS sample</b>	<b>1016</b>			<b>118</b>	<b>12%</b>

Source: Company Data, Morgan Stanley Research

Exhibit 12

**Banks with official deleveraging plans have executed c. 22% of their plans**

Institution	CRE exposures (end 2010)	Deleverage plans (1H12)	reduction 2010-1H12	Residual plan
RBS	84	37	18	19
Lloy	56	25	13	11
CBK	72	72	19	53
DBK	48	7	-	7
FMS	26	26	3	23
Westimmo	16	16	2	14
NAMA	30	27	5	22
AIB	19	8	3	5
Bol	20	8	4	4
Irish Life	1.7	1.7	0	1.5
<b>Sub total</b>	<b>372</b>	<b>227</b>	<b>68</b>	<b>159</b>
Spain	336	100	4	96
<b>Total</b>	<b>708</b>	<b>327</b>	<b>72</b>	<b>255</b>
SocGen	3	2	1	1
NordLB	14	4	1	4
LBB	8	1	-	1
ING	37	19	3	16
<b>Total new</b>	<b>771</b>	<b>353</b>	<b>76</b>	<b>277</b>

Source: Company data, EBA, Morgan Stanley Research

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**We think c. 20-25% of our estimated deleveraging (€600 billion) has been done in the last 18 months**

Using the data we have available in our sample (which represents c. 40% of the total CRE lending exposure), we can reasonably estimate that deleveraging has encompassed c. 20-25% of our original estimate for reduction.

In Exhibit 13 below, we set out our estimate of the progress made based on our 'allocation' of the €600 billion deleveraging risk including banks that have official plans, banks that do not have official plans (but that we have polled), and our reasonable estimate of the loans reduction in the banks outside our sample. To arrive to our estimates we have allocated the €600 billion deleveraging risk as below (see grey areas in the table) and assumed that other banks not sampled have seen a c. 15% reduction in the deleveraging plans allocated to them (or 2% reduction in their total CRE exposure).

Exhibit 13

**We think c. 23% of our estimated deleveraging (€600 billion) has been done in the last 18 months**

Summary of our forecasts and findings	CRE loans	plans	plans/forecasts as % of exposure	delev. done	delev. done as % of exposure	delev done as % of plans
banks with plans	771	353	46%	76	10%	22%
Banks in our sample without official plans	245	100	41%	42	17%	42%
Total MS sample	1016	450	44%	118	12%	26%
Other Banks & exposures	1434	150	10%	23	2%	15%
<b>Total system</b>	<b>2450</b>	<b>600</b>	<b>24%</b>	<b>140</b>	<b>6%</b>	<b>23%</b>

Source: Company Data, Morgan Stanley Research

**Loans have been reduced through a mix of sales, repayments, and asset repossessions**

It is difficult to glean an exact breakdown of how loans have been reduced, but anecdotal evidence and analysis of the €120 billion reduction for which we have granularity would indicate the following:

1. Up to 20% of our €120 billion deleveraging has likely been done through loan sales, especially of exposures outside Europe as US, Australian, Canadian banks have been most active in purchasing loan portfolios in their home countries. As transactions are often private it is hard to derive an exact value.
2. We estimate that the vast majority (if not the entire amount) of the c. €30 billion reduction in the Spanish developers' exposure is due to asset repossession that will be sold at a later stage.
3. The remainder, or c. €70 billion, on our estimates, has been paid down by real estate investors using a mix of asset

sales and alternative sources of financing (other lenders, bond raising etc.).

**UK, German, Irish banks top the chart of the biggest reduction**

This is not surprising as Irish, UK and German lenders also sit on the largest CRE loan exposure.

**Spanish banks** have reduced loan exposure largely by repossessing real estate that was used as collateral and that will be sold at a later stage. Strictly speaking, the Spanish banks' exposure to CRE (loans and direct ownership of real estate assets, all before provisions) has barely changed.

It is interesting to note that Italian banks have also proactively reduced their exposure to CRE.

**UK Banks** have been typically ahead of their European peers in reducing commercial real estate exposures. In aggregate using Bank of England data UK bank lending to real estate companies has declined 23% from December 2010 to September 2012.

As an example looking at RBS, which has the best disclosure, their total CRE exposure has been reduced 24% to £66 billion from December 2010 to September 2012. The non-core component of such exposure has been reduced even more aggressively by 41%. This has been achieved primarily through repayment (51% of reduction), 21% through sales, but impairments have also helped significantly over the period (28% of reduction).

We believe UK banks have been conservative in their impairment policies especially on non-core UK CRE, with significant losses already recognised and by now show falling charges (albeit still a feature in the P&Ls). We understand that now asset marks are generally at levels such that there are minimal write downs when individual assets are sold; according to recent transactions it would seem that the market generally requires a discount typically in the range of 0-10% versus the level at which loans are valued in the banks' balance sheet. Sales can still be accretive to capital ratios and provide funding relief for the banks.

For the Irish commercial real estate exposures in the balance sheet of UK banks, the write downs have already been very material with manageable residual exposures remaining, (e.g. Lloyds has recognised 92% of the Irish CRE book as impaired, and has a 68% coverage ratio). The Irish commercial real estate market remains illiquid, making selling assets difficult, and though there is some cause for optimism on the Irish economy the banks still remain cautious about their CRE exposures there.

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**With regard to CBK for example**, we note that the €13 billion decrease in exposure in 2011 was largely explained by repayments with a smaller contribution from asset sales (and some, albeit small, move to NPLs). The biggest decline was in German exposure (€5 billion) followed by UK (€1 billion). The same geographical spread also applied to the H1 2012 deleveraging, which is understandable in our view given that the German market's liquidity and solidity attracts more of the alternative financing providers as we indicate in other sections.

Exhibit 14

### Irish, German and UK banks top the chart of the biggest deleveraging

Country	Dec-10	Dec-11	Jun-12	cumulative change since December 2010	%	€bn
IRL	70,067	63,739	57,412	-18%	(13)	
UK	298,481	267,792	254,002	-15%	(44)	
GER	162,953	146,206	140,458	-14%	(22)	
ESP	202,440	183,761	175,164	-14%	(30)	-2% including repossessed assets
ITA	91,347	86,921	80,728	-12%	(11)	
Other (FRA, NDL)	37,520	35,728	33,685	-10%	(4)	
AUT	22,405	20,733	20,644	-8%	(2)	
Nordics	122,751	131,863	130,499	6%	8	

Source: Company Data, Morgan Stanley Research

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Exhibit 15

### UK, German, Irish banks top the chart of actual reduction – Spanish banks have reduced loan exposure by swapping loans into direct real estate

CRE (EUR)		cumulative	CRE (EUR)		cumulative
SocGen	FRA	-39%	SAB+CAB	ESP	-10%
CEISS	ESP	-28%	Mare Nos	ESP	-9%
Banco Santander	ESP	-27%	UBI	ITA	-9%
Liberbank	ESP	-27%	BPMS	ITA	-8%
Swedbank	SWE	-25%	ING	NDL	-7%
CBK	GER	-24%	Unicaja	ESP	-7%
Lloyds	UK	-24%	POP+PA	ESP	-5%
Caja Ontinyent	ESP	-24%	BFA	ESP	-4%
UCG	ITA	-22%	NordLB	GER	-3%
La Caixa	ESP	-21%	Barclays	UK	-3%
RBS	UK	-21%	BP	ITA	-1%
BoI	IRL	-20%	Caja 3	ESP	0%
NAMA	IRL	-18%	LBB	GER	0%
RBI	AUT	-18%	DBK	GER	0%
BBVA	ESP	-16%	Intesa	ITA	1%
Ibercaja	ESP	-16%	HSBC	UK	4%
AIB	IRL	-16%	Erste	AUT	4%
March	ESP	-15%	Danske	DEN	5%
Irish Life	IRL	-15%	NDA	SWE	6%
Westimmo	GER	-12%	SEB	SWE	8%
FMS	GER	-12%	DNB	NOR	8%
Catalunya caixa	ESP	-12%	SHB	SWE	22%

Source: Company Data, Morgan Stanley Research

### On the other hand, Nordic banks are still growing CRE lending

Contrary to the trend in most European banks, the Nordic banks have actually increased their CRE lending since 2010 by 6% on average. This trend is understandable taking into consideration that Nordic banks are still committed to loan growth and have also been able to fund comfortably in longer maturities. This lending expansion is however mostly restricted to core markets Norway, Sweden, Finland and only partly to Denmark. As we wrote in our March report, it is unlikely that these banks are going to step in and fill the gap left by their European counterparts especially outside their core markets.

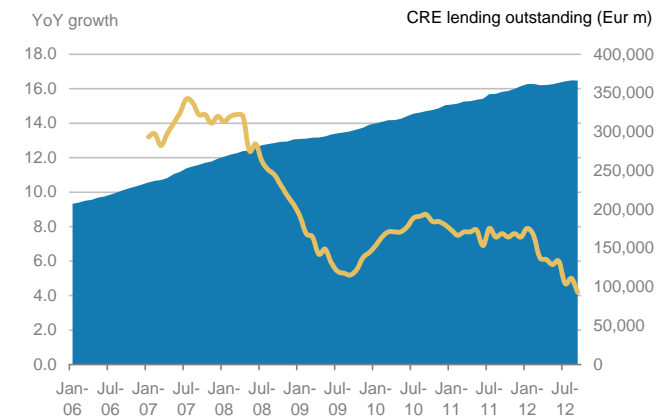
### 'Patriotic' deleveraging also seems to be the theme in CRE reduction for French banks

Nordic, HSBC and Erste banks were the only banks in our sample that either maintained or increased their exposure, largely in their home countries. Similarly, French banks (for which we do not have full granularity on CRE exposures) continued to support CRE financing in their home market, while still reducing cross-border exposures (as evidenced for example by SocGen's announcement that all international

real estate financing was no longer core and likely to be discontinued).

Exhibit 16

### French banks have continued financing in CRE albeit at a slower pace



Source: Company Data, Morgan Stanley Research

### Spain in focus: Real Estate exposure to come down in 2013 as coverage improves

Spanish banks' exposure to developers has declined by c. 13% since end-2010. However, true reductions are limited as banks have actually swapped their CRE loans for the underlying real estate assets. The process of deleveraging and actual sale/reduction is linked to the requirement for additional provisions as set in the Royal Decree Law (RDL).

Banks have now provisioned two-thirds of the RDL requirements, and by year end we believe over 90% will be completed, taking average write-offs on total real estate exposure to c. 35% vs. 17% in 2011.

Exhibit 17

### RDL provisioning progress in Spain

€mn	Total RDL requirements	Pending in Q3	% Completed
SAN	7,567	757	90%
BBVA	4,600	1,568	66%
CABK (*)	4,538	1,502	67%
POP	7,900	4,900	38%
SAB (*)	2,098	800	62%
BTO	2,069	1,344	35%
BKT	275	0	100%

Source: Company Data, Morgan Stanley Research (\*) CABK and SAB requirements do not include BCIV and CAM respectively. BCIV and CAM are fully compliant with the RDL requirements



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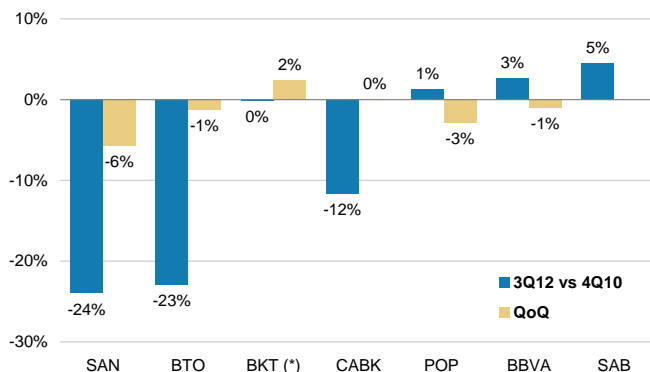
As a comparison, the Asset Management Company, known as Sareb (its acronym in Spanish), will buy assets with an average discount of 50%, ranging from 63% for repossessed assets to 46% for loans (For further details see our report [Spanish Banks: Asset Management Company details suggest more RE pricing pressure from October 30](#)).

**Asset sales still very limited.** Underlying Real estate exposure in most cases is showing very small or no signs of coming down yet with the exception of Santander and Banesto, which are down 23-24% since 2010. Given the lack of progress, we believe further provisions are likely given the macroeconomic outlook and the creation of the 'bad bank'.

**5% loan contraction in 2013e driven by real estate.** BBVA saw the sharpest loan contraction in Q3, down 5% QoQ, while Santander has persisted with its deleveraging effort and has now reached an 118% LTD ratio. For 2013e, we expect these trends to continue as real estate lending starts to come down.

Exhibit 18

#### Total real estate exposure trends (lending + repossessed assets)



Source: Company Data, Morgan Stanley Research

#### US banks have picked up the baton of European CRE deleveraging in their home market

As we wrote in our March Blue Paper, outside Europe, the US and CEE receive substantial financing from European banks. At the time we estimated c. 60% of the €76 billion CRE loans in the US related to 'true' cross border (the rest being linked to the business written by local subsidiaries of European banks).

As indicated in Exhibit 19 below, foreign share (and we assume European banks represent the majority) of CRE loans in the US has fallen by 15% in the last 18 months. While this data are volatile, it clearly appears to be on a downward trend.

Exhibit 19

#### Foreign share of CRE loans has fallen 20bp from 2.2% pre-LTRO to 2.0%

##### CRE Loans: Foreign Related Institutions % of US



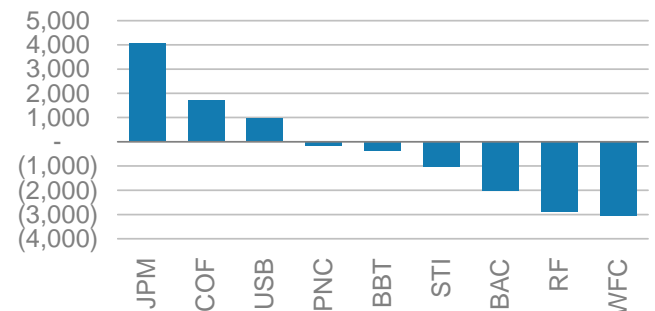
Source: Company Data, Morgan Stanley Research

Among US banks, JPM has grown its CRE loan book so far in 2012, followed by COF and USB. Asset roll-off is weighing on the rest of these banks' individual CRE loan growth. Relative to the size of its portfolio, COF's CRE loan growth was best in class year to date. Growth is occurring at banks with less CRE concentration and with solid balance sheets.

Exhibit 20

#### JPM, COF, USB lead US Banks in \$ CRE Loan Growth YTD

##### CRE Loan Growth YTD (\$mn)



Source: Company Data, Morgan Stanley Research

JPM, COF and USB are covered by Betsy Graseck

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## Market spotlight:

### Netherlands in focus: significant deterioration ahead

We flagged the Benelux market, and especially the Netherlands as critical markets in our March Blue Paper. Recent trends have confirmed our concerns.

The production of commercial real estate loans almost halved last year from €12 billion to €6.6 billion, according to research from PropertyNL. Compared with 2008, this marks a decline of 70%. At the peak of the market in 2007, lending production reached €27 billion. Prospects for 2012 based on figures for the first half of the year point to a further downward trend. In the first half, production was confined to less than €2 billion. The survey is based on figures from all the leading commercial real estate lenders in the Netherlands.

The retreat of SNS Property Finance has caused a huge gap in the market. Five years ago, SNS ranked third with production of around €5.6 billion, after FGH Bank (a subsidiary of Rabobank) and ING Real Estate Finance. The bank is now seeking to sell down its lending portfolio.

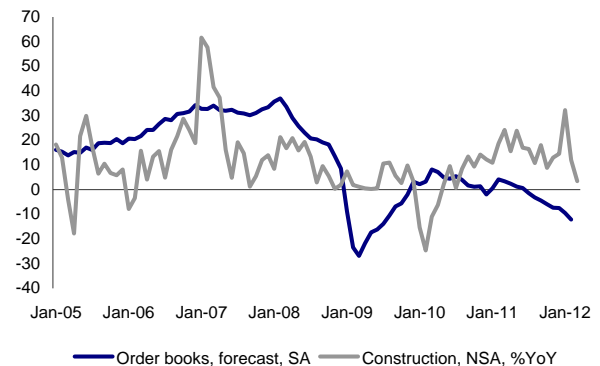
Overall, and coupled with the fact that we see German Open ended funds that are liquidating as proportionally more exposed to the Dutch market, we feel risk of further pressure in commercial property prices in the Netherlands remains high as we highlight in the following sections.

### CRE financing in CESEE: focus on Poland

While broadly financing conditions in CESEE have eased (as indicated by the recent IIF survey), CRE financing is an area that is likely to remain under some pressure. Poland and Hungary are the two countries where CRE financing has been more intense and while in Hungary deleveraging has been under way for some time, we also see signals of some tightness in Poland especially as the economy weakens, credit has effectively ground to a halt, and concerns mount on the health of the construction sector.

Exhibit 21

### Polish construction sector entering recession



Source: GUS, Morgan Stanley Research

CRE lending exposure is relatively large among the biggest Polish domestic lenders, averaging 8% of loans (at the higher end of the 6-8% in CEE markets) and closer to the European average of c.10%, which we see decreasing over time as part of the deleveraging process. Banks clearly remain cautious, as the construction sector enters recession (See Pasquale Diana and others, [Poland Economics, Delaying the Inevitable](#), 3 October 2012)

The Polish construction sector is already loss making, even at the operating level, although seemingly driven in large part by the significant drop in public infrastructure spending as well as poor pricing on a number of projects, particularly in the road-building segment). While contractors' problems have remained reasonably isolated, clearly there is a risk this spills over — Moody's pointed out in their recent sector outlook for Poland, the correlation between construction sector confidence and system corporate NPLs, which are moving up.

Given the fact that the sector has been one of the main drivers of the Polish economy (both in terms of public infrastructure investments as well as resilient housing activity), the slump may be more long lasting and become an additional drag on the economy. This may continue to support the banks' cautious stance towards CRE financing, especially as exposure is already large in relative terms.

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## CMBS

**Key changes since March:** Only one origination deal. And while ~€11 billion of CMBS has been paid down, a lot of legacy maturities are yet to be dealt with. As such, we reiterate our view that as much as €4 billion is at risk. We maintain our view that European CMBS will remain in a gradual wind-down mode through property disposals in weaker loans and selective refinancing of stronger loans. But, we highlight that the asset class continues to offer good investment opportunities, senior tranches in particular as they benefit most from disposal driven cash flows.

## Only one origination deal since March

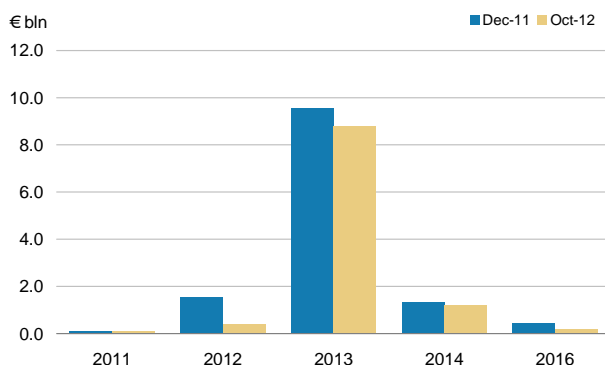
Secondary trading activity in the European CMBS market has been strong, but primary issuance volumes remain very subdued. The only typical transaction to price since the first quarter of the year was Florentia 2012-1, a €754 million German multi-family CMBS. The transaction refinanced the maturing loans in an existing securitisation called Eclipse 2005-3. In the process, the blended margin on the CMBS notes has increased from 38bp to 300bp for a loan pool that has a weighted average loan to value of 63.6%.

## Existing pool reducing

Outstanding CMBS volumes continue to decline steadily. Of the €10.8 billion scheduled to mature in 2012 at the beginning of the year, loans worth €3.6 billion have paid down while another €1.7 billion has been extended beyond 2012 (see Exhibit 23). Of the outstanding 2012 'maturity wall' amounting to €5.5 billion, only €360 million relates to Nov-12 and Dec-12 maturities; the remainder are year-to-date maturities that are yet to be resolved. Furthermore, we note that resolutions of past defaults and redemptions of loans maturing after 2012 have reduced the size of the overall CMBS market by €11 billion (around 15% of beginning of year market size).

Exhibit 22

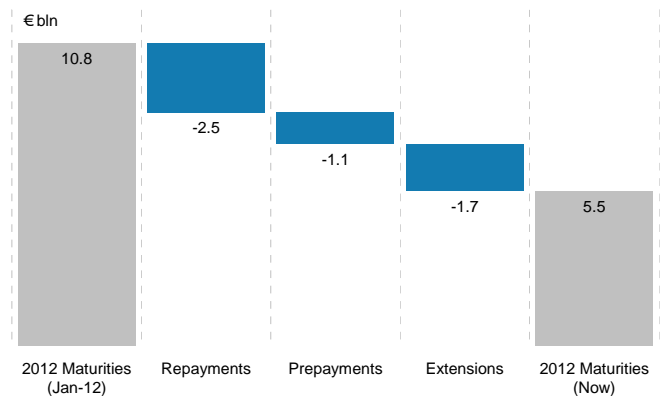
## German multi-family loan maturity wall



Source: Investor reports, Bloomberg, Morgan Stanley Research

Exhibit 23

## Chipping down the 2012 maturity wall



Source: Company Data, Morgan Stanley Research

## German multi-family issues have higher redemption rates

Redemption rates in the German multi-family space have been marginally higher at 17%, with outstanding volumes dropping from €13 billion at the start of the year to €10.7 billion now. In addition to the Eclipse 2005-3 loans, other notable redemptions this year include the €537 million loan in IMMEO 2 and the €146 million Prima loan in OPERA GER1. We calculated an additional €450 million in the form of pay downs in smaller loans and property sale related partial payments.

## 2013 is a big year for CMBS maturities

Looking ahead, 2013 is a big year for CMBS loan maturities in general and German multi-family loans in particular with as much as €20.6 billion of CMBS loans scheduled to mature, €8.8 billion of which relate to German multi-family. In effect, nearly 80% of the outstanding multi-family market comes due next year, although almost half the maturities come from Deutsche Annington's GRAND transaction that is currently being restructured.

Exhibit 24

## Largest German multi-family loans

Deal Name	Loan Name	Sponsor	Cur Bal €mln	Loan Maturity	Deal Legal Final
GRND 1	GRAND Portfolio	Deutsche Annington	4,325	Jul-13	Jul-16
GRF 2006-1	German Residential Funding	Gagfah	2,129	Aug-13	Aug-18
WINDM IX, DECO 2007-E5	WOBA MF (Syndicated)	Gagfah	1,037	May-13	Aug-16, Oct 20
TITN 2006-2	Margaux Portfolio	NA	273	Jul-12	Jan-16
TITN 2006-2	Petrus	NA	208	Jan-13	Jan-16

Source: Investor reports, Bloomberg, Morgan Stanley Research

*This section on CMBS was written by Srikanth Sankaran, a Fixed Income Research Strategist.*

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## Section 2: Identifying alternative capital sources

### Expected capital availability towards top end of our previous €100-200bn estimate

We remain convinced that up to €200 billion of additional capital could become available to replace reduced funding from traditional debt and equity capital providers, which is towards the top end of the €100-200 billion range we discussed earlier this year.

### Key concerns from six months ago remain

This incremental capital availability is clearly good news, but we reiterate the following two concerns:

**1. Cost.** A significant portion of this capital appears to be available at much higher spreads than legacy capital sources. But it is important to flag that while lenders' profitability is driven by spreads, borrowers care about the all-in cost of debt. As such, the negative effects of higher spreads are mitigated by low interest rates. This will change when interest rates rise.

**2. Shortfall.** Our estimate of up to €200 billion of capital from alternative sources is well below the estimated total €400-700 billion shortfall we expect from bank deleveraging, CMBS run-off and open-ended fund liquidations. Unless another unexpected capital source arises, this would suggest at least some price decline for European commercial real estate assets in order to 'make up' the gap. It remains unclear to what degree this decline will be absorbed by lenders (write downs) versus current owners (lower asset values).

### Five items of focus in this section

The following topics are either new additions to our original Blue Paper from March, or areas we explore in more detail.

#### 1. Additional sources of capital shortfall: governments and corporates

Deleveraging is happening at a variety of levels. There are increasingly more **governments** that are taking measures to sell part of their commercial real estate portfolios (UK, Germany, Sweden and Russia have been active already in 2011, Italy and Greece are stepping up their efforts). We think it is unlikely many countries will achieve their sales targets, but we think government sales could nevertheless add further pressure. In addition, we are witnessing more **corporates** that are considering rationalising their balance sheets.

#### 2. Rising investor interest in debt funds

We see increasing interest from investors looking to invest in Europe and in debt funds, with a threefold increase in the number of institutions looking to allocate to debt over the next 12 months.

#### 3. Quoted sector now better positioned to issue equity

The greatest uncertainty in our central scenario and conclusions is the likely role of the public markets, which were a key source of capital during the 1990s after the US commercial real estate credit crunch. Issuance of CMBS has been moribund year to date with only one issue since March. But the re-rating of quoted property stocks (up around 20% year to date) suggests there is now a higher likelihood that they could play a role in recapitalising at least part of the shortfall.

#### 4. Insurers: While capital for mortgage lending is increasing, we suspect this is merely a shift from direct real estate or equity exposure

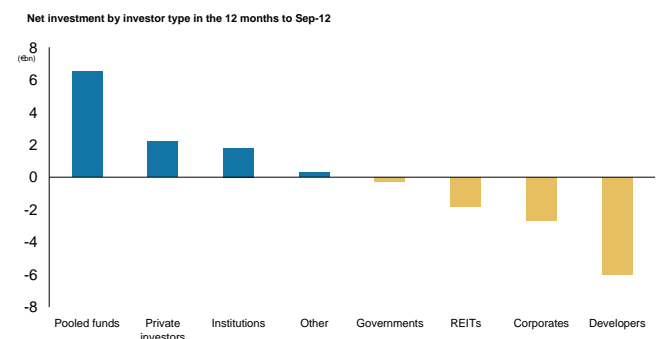
As we see more insurers announce commercial real estate lending initiatives, it also becomes increasingly clear from discussions with the insurance industry that the additional capital provided for mortgage lending is not all additional capital. We think there is a risk that at least some insurers will reduce their exposure to real estate equities or direct real estate investments.

#### 5. Uncertainty around IORP for pension funds

This summer, the European Insurance and Occupational Pensions Authority (EIOPA) launched a consultation process trying to quantify the impact of the proposed new IORP directive for occupational pensions. It looks as though IORP will be very similar to Solvency 2 for insurers when it comes to capital allocations to direct real estate investments, also requiring a 25% capital allocation (i.e. providing for a 25% fall in real estate values).

Exhibit 25

#### Net buyers and net sellers



Source: JLL, Morgan Stanley Research

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## 1. German open-ended funds

**Key changes since March:** GOEFs have sold €5 billion of assets, and several small GOEFs running €2 billion AUM have closed for redemptions.

Risk = €25 billion (no change since March)

GOEFs have sold €5 billion year to date. In addition, in the last six months five further funds with €2 billion AUM have suspended redemptions. As such, we reiterate our view that we expect a gradual reduction in capital availability from these funds to the tune of around €25 billion.

### Around €33 billion AUM

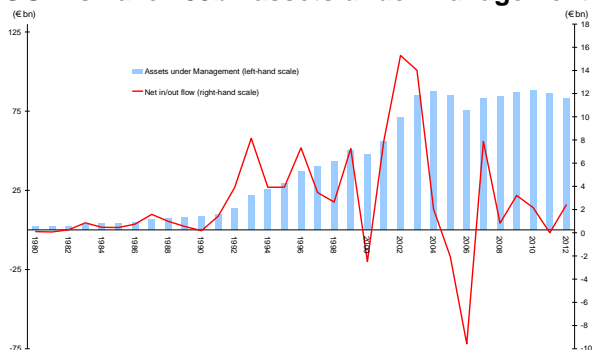
GOEFs are a fund product mainly aimed at retail investors whose units can by law be redeemed on a daily basis. According to CB Richard Ellis, "German retail investors see the product as a secure pension-type investment", and "the ability to redeem their investment at any time has been an important factor in building investor confidence". As part of a push for more personal pension products, GOEFs' AUM grew from €8 billion in 1990 to €50 billion in 1999. Today, GOEFs have about €33 billion under management.

### Large redemption pressure since Lehman's collapse

The GOEF industry suffered large redemptions after Lehman's filed for Chapter 11 in 2008, mainly because it was one of a few asset classes that offered daily liquidity. This led funds representing about a third of AUM to halt redemptions. Under current legislation, funds can stop redemptions for a maximum of two years. Thereafter, they either have to start allowing redemptions again or they have to liquidate.

Exhibit 26

### GOEFs have €33bn assets under management



Note: 2012 AUM and inflows as of July 2012  
Source: BVI, Morgan Stanley Research

The vast majority of funds that have suspended redemptions since autumn 2010 are now in wind-up (see Exhibit 27).

### Regulation to trigger more disposals and redemptions

New regulation coming into force in January 2013 will require GOEFs to lower their loan-to-value ratios to 30% by January 2014. We think that this may mean further selling pressure for at least some funds. Moreover, lower gearing is set to affect returns negatively, therefore making GOEFs relatively less attractive. Furthermore, owing to the changes in regulation, insurance companies will no longer be able to invest in GOEFs, as they can only invest in products with a maximum notice period of six months.

### Dutch offices to be most affected

We estimate that the market that will be most affected is Dutch offices. Funds in wind-up own the equivalent of 4.6x average Dutch office trade volumes. Other office markets affected are Germany (3.5x), Belgium (3.2x) and Italy (3.0x).

Exhibit 27

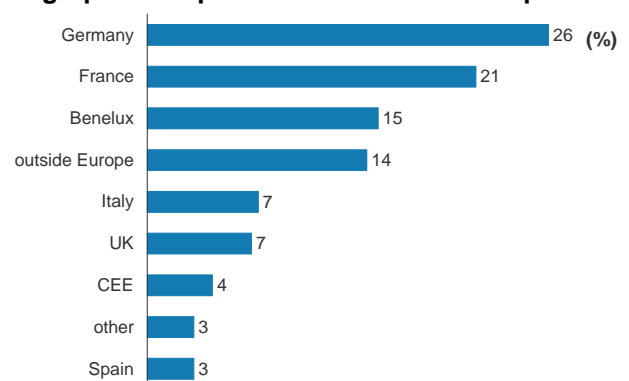
### About €20bn of AUM are in funds in wind-up

Fund	AUM (€bn)	In wind-up until...
CS Euroreal	5.3	30/04/2017
SEB Immoinvest	4.8	30/04/2017
KanAm grundinvest	3.5	31/12/2016
AXA Immoselect	2.3	20/10/2014
Degi international	1.4	15/10/2014
Degi Europa	0.8	30/09/2013
TMW Weltfonds	0.6	31/05/2014
AXA Immosolutions	0.3	11/05/2015
UBS D 3 Sector	0.3	05/09/2015
HANSAimmobilia	0.3	05/04/2013
Degi Global Business	0.2	30/06/2014
<b>Total</b>	<b>19.8</b>	

Source: BVI (as of July 2012), Morgan Stanley Research

Exhibit 28

### Geographical exposure of funds in wind-up



Source: BVI, Morgan Stanley Research  
Note: Country exposure of funds in wind-up



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## 2. Other unlisted funds

**No major change since March. We do not see a major risk regarding the absolute amount invested, but we are concerned about rotational effects.**

Unlisted funds will most likely remain the preferred vehicle for many institutional investors and high net worth individuals to gain exposure. As such, we expect continuing demand for this product. However, **we worry about (i) rotation in style (towards lower risk) and (ii) change in preferred geography (away from some European markets to mainly Germany and Nordics).** While we do not expect a major change in overall capital allocated to these funds, we are concerned about the potential impact of these changed preferences.

### Origination of new funds has effectively dried up ...

According to INREV, the origination of new funds has fallen sharply in recent years, from as much as 125 new funds in 2006 to only three new funds in 2011.

### ... in particular for value added and opportunity funds

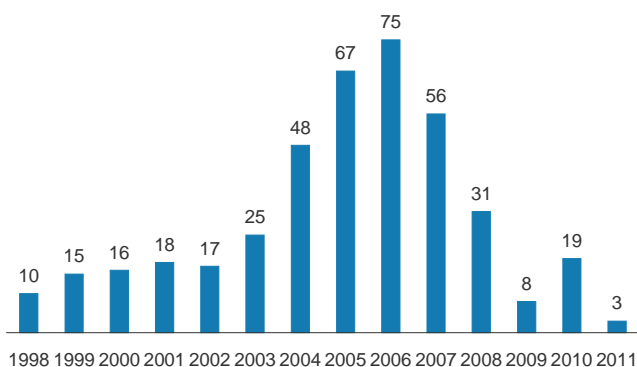
The sudden origination boom from 2004 to 2007 saw an increase in all styles, but the increase was largest for opportunity and value added funds. Prior to 2004 most of INREV had a core focus. More than half of the funds raised in 2004-2007 were value added or opportunity funds, which reflected the risk appetite and availability of debt at the time.

### A lot of terminations ahead

The majority of these funds have a limited life, and given the significant origination in recent years, it is not surprising that a lot of these funds are terminating (see Exhibit 30).

Exhibit 29

### New fund origination has been limited in recent years



Source: INREV, Morgan Stanley Research  
Planned terminations (Gross asset values) (€bn)

INREV estimates that as many as 130 funds with total assets under management of €128 billion will be terminating in the next 4 years.

### Significant firepower ...

INREV estimates that its funds have as much as €29 billion of dry powder for investment in Europe. It also estimates that a lot of investors' actual allocation remains below their targeted weighting to real estate. INREV believes this could account for as much as €95 billion, all else equal.

### ... and allocations could rise

In addition, there appear to be more investors that aim to increase their allocations to real estate than aim to reduce their exposure, although the gap is narrowing rapidly.

### But demand differs significantly from funds' exposure

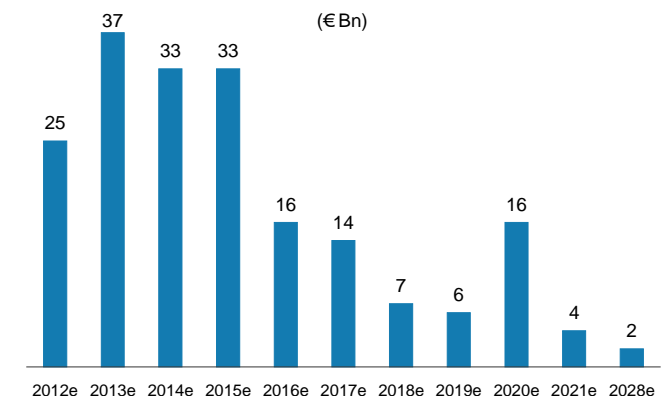
The two main problems are geographic allocation and gearing. The current capital available for unlisted funds is targeting mainly core funds (with low gearing) to be invested in (i) German retail, (ii) Nordic retail, (iii) Nordic offices and (iv) German residential, according to the Investment Intentions Survey 2012. Many of the funds that will be terminating own all types of assets located across geographies, and often with more leverage.

### Asset rotation and deleveraging are concerns

Therefore, even if the unlisted fund industry remains a source of equity inflows for European property, we worry about the potential negative impact of asset rotation and deleveraging on certain European property markets.

Exhibit 30

### Funds owning significant amounts of property are reaching the end of their life in 2012-2015



Source: INREV, Morgan Stanley Research  
Fund launches (number funds).



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### 3. Private Equity

**Key changes since March:** Increasing interest from investors looking to invest in Europe and in debt funds, with a threefold increase in the number of institutions looking to allocate to debt over the next 12 months.

**Firepower broadly unchanged at around €25 billion.** Whilst we continue to see interesting opportunities for alternative managers to benefit from the distress in CRE as European banks look to delever, we believe that these opportunities will accrue to a limited number of players with the requisite execution skills and liquidity.

#### Increase in fund raising momentum

We note an increase in fund raising momentum in real estate credit products (the seven largest fund launches in 3Q12 are targeting debt investments either primarily or in addition to another strategy) reflecting growing investor interest in this area. As we have recently argued (see [Global Asset Managers: Navigating Low Growth](#)) we expect the thirst for yield in a low rate environment to drive multi-year demand for real assets, EM credit and yield extraction from equities. In this context, we think the mid-to-high single digit unlevered return potential from real estate debt, is increasingly attractive.

#### Dry powder for European CRE investing at around €25bn

Overall, dry powder available within private equity real estate funds was around \$165 billion at September 2012, broadly in-line with levels available at the end of 2011. Of this, approximately \$35bn of dry powder relates to funds with a principally European focus, or around 20% of total. Again, this is fairly consistent with levels at end 2011, implying that currently €25 billion of fire-power is available for real estate deals in Europe.

Exhibit 31

#### Seven largest funds launched in 3Q12 are targeting debt investments

Fund	Manager	Strategy	Target Size (m)
Blackstone Real Estate Debt Strategies II	Blackstone Group	Debt	4,000 USD
CRE2	Axa Real Estate	Debt	1,000 EUR
Europa Fund IV	Europa Capital	Opportunistic, Debt	750 EUR
Dune Real Estate Fund III	Dune Real Estate Partners	Opportunistic, Debt	850 USD
M&G Real Estate Debt Fund III	M&G Investments	Debt	500 GBP
M&G Real Estate Debt Fund II	M&G Investments	Debt	500 USD
RCG Longview Debt Fund V	RCG Longview	Debt	500 GBP

Source: Prequin Quarterly Real Estate Q312. Other significant debt fund launches 2011-2012 include Axa CRE Senior 1, Pramerica Real Estate Capital I, Colony Distressed Credit Fund II, DRC Capital European Real Estate Debt Fund.

#### Recent fundraising has been subdued

Recent fund raising has remained subdued with \$29 billion raised by global real estate funds in the nine months to September 2012 after \$55 billion in 2011 according to Prequin. However, the \$13.3 billion Blackstone Real Estate Partners VII fund close in October will substantially boost 4Q12.

#### But, there is increasing investor interest both in Europe and in debt investing

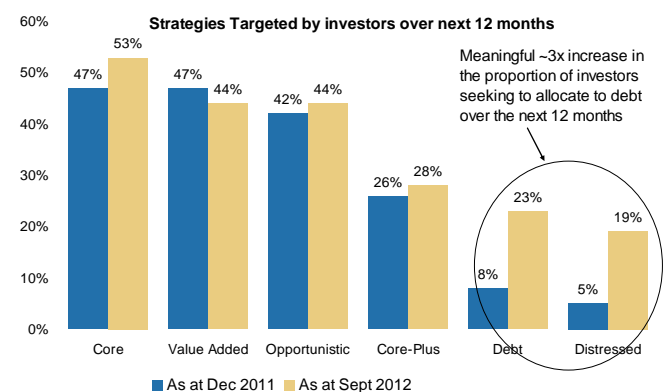
Interestingly, Prequin data on investor interest for private real estate investment over the next 12 months have shown a marked increase in interest in Europe. Compared with the 33% of investors surveyed at the end of 2011 seeking new investments in Europe over the following 12 months, the 3Q12 data show that 40% of investors surveyed were seeking to make allocations to Europe. Albeit interest in other regions has seen a similar level of pick-up. Similarly, although Europe accounts for around 20% of dry powder, of the funds currently on the road and seeking to raise \$155 billion in aggregate, European-focused funds account for around 30% of the target fund raising.

#### Signs of growing interest in debt funds

Debt and distressed funds represent a growing proportion of fund raising – as at 1Q12 there were 169 funds seeking \$55.6 billion, whilst of the funds launched in 3Q12, all seven of the largest funds were targeting debt investments. In our original Blue Paper in March we highlighted that institutional interest was principally in equity and opportunistic debt investing, with limited interest in debt. More recent surveys point to a significant increase in interest for the latter, with Prequin indicating a ~3x increase in the number of institutions looking to allocate to debt and distress over the coming 12 months.

Exhibit 32

#### Dramatic increase in investor interest in debt product over the past 9 months



Source: Prequin, Morgan Stanley Research

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**Fund raising for senior debt remains the exception rather than the rule, despite signs of pick-up**

Given returns targeted by real estate debt funds are typically >10% (only 15% of funds target returns below this level), the skew remains to high yield/mezzanine or distress investing rather than senior. However, we see evidence growing interest in the latter – for example, M&G's Real Estate Fund III is targeting senior loans, and anecdotal evidence reinforces this point. However, the pace of fund raising for senior debt still implies a meaningful mismatch in supply and demand against the potential deleveraging from European banks.

**Who will be the winners? Blackstone best placed – opportunity also for Oaktree**

We see Blackstone as almost uniquely well placed to benefit from the dislocation in the real estate space globally, given the significant fire power at its disposal (funds of >\$50 billion including recently raised \$13.3 billion Real Estate Partners VII fund, and \$14.0 billion dry powder). In the equity space, few players can compete for scale deals other than as part of a syndicate. We also see significant opportunity for Oaktree (given \$5.3 billion of real estate AUM, \$200 million of dry powder plus an ability to make large real estate investments from its \$28 billion AUM in distressed funds).

*Blackstone and Oaktree are covered by Matthew Kelley.*

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#### 4. Insurance Companies

**Key changes since March: More insurers are lending, with even more preparing to start lending to commercial property.**

**Opportunity = between €50 and €100 billion**

We expect further insurance sector lending in the commercial real estate space, amounting to potentially €50-100 billion over the next 5-10 years. However, exact timing and trajectory remains uncertain and much depends on the final rules on asset capital requirements under Solvency 2. The exact level of capital requirements on these assets are yet to be finalised, and until there is greater clarity on Solvency 2 rules, which may not come until 2014-2015, we would not expect insurers to make substantial changes to their asset allocation approach. Also, any lending activity may be merely rotational rather than incremental real estate investment.

**Insurers likely to become more active**

We continue to expect that we will see a steady increase in the importance of the insurance industry as a provider of debt finance to property companies. Although the final form of Solvency 2 is subject to intense debate – and the implementation date could be pushed back as far as 2016 – we believe that insurers are likely to emerge with significant advantages over the banking industry in the long-term lending market.

**Longer maturities are attractive**

Those insurers that originate long-term illiquid liabilities (for example, players in the UK individual and bulk annuity market) are increasingly seeking to invest in long-term property-backed assets. Long-term fixed rate loans secured on properties let to high quality tenants are an excellent asset for insurers – providing longer maturities than much of the fixed income market, which allow less capital to be held against reinvestment risk.

**Retreat of banks an opportunity**

The retreat of banks from the property sector has led to a repricing of assets, which is attracting insurers. Furthermore, the cost of long-term funding for insurers is much lower than that of the banking industry in our view – which increases the net spreads available.

**Skills gap an issue**

While several insurers – Aviva, Allianz and AXA – have longstanding experience in lending against property assets in

their respective domestic territories, we believe the challenge for the industry in general is developing the skill set in order to be able to make a material difference to investment allocations. Legal & General – which has not traditionally lent against property assets – is one insurer that is building the capability to invest in the space. We note that L&G recently lent £121 million to Unite Group in the student housing space.

**Therefore the trajectory could be shallow**

A recent study from law firm DLA Piper, which surveyed 20 “mid-tier and senior executives” from UK insurers, found that insurers’ lending to property developers is likely to expand from £4.1 billion a year for 2012 to around £5.5 billion by 2017. While we believe that insurers will become more of an important source of capital, the trajectory is likely to be a shallow one and is unlikely to be able to make a significant short-term difference to the deleveraging by the banks.

**Still waiting from regulatory clarity**

The rules on Solvency 2 still remain very unclear, while the EIOPA recently published updated charges for various asset classes, we are still waiting for the details of how long-term guaranteed life liabilities are likely to be treated. In our view this is crucial for the ultimate attractiveness of property as an asset class – we note insurers continue to lobby for their advantaged position versus other types of financial institutions to be reflected in the final rules.

**UK insurers focused on a workable outcome**

The UK insurers are focused on achieving a workable outcome for the matching premium, which Legal & General commented on in its recent 3Q statement “*we are working with regulators and politicians to develop workable, commercial and risk based solvency rules, which alongside sensible prudential guidelines, stimulate economic growth and jobs. As one of the UK’s leading providers of long-term capital we believe we should be encouraged to invest in long-term UK assets, a combination of infrastructure, corporate bonds and equity, to match our long-term UK liabilities*”.

**Insurers reluctant to make significant allocation shifts**

We expect the industry in Europe to undertake a mini Quantitative Impact Study (QIS6) on the long-term guarantee element of the new rules – draft rules are likely before the end of 2012. The implementation date of Solvency 2 is now likely to be 1 January 2015 or even 1 January 2016 – given this, it is likely that insurers are reluctant to make significant asset allocation shifts until the rules are more developed.

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## 5. Listed Property Companies

**Key change since March:** The sector has re-rated (up 20% year to date) trading at only a 10% NAV discount. Several stocks are trading at premiums, increasing the likelihood of equity issuance.

**We reiterate our view that REITs will grow in the medium term, but not by a huge amount (Opportunity = €25 billion)**

The European quoted property sector remains underdeveloped relative to the US and Asia, and its holdings represent only a small proportion of the overall property market. Historically, REITs have taken advantage of shocks to debt capital markets, gaining market share by recapitalising property markets (e.g. the US in the 1990s). In that context we expect some issuance over the next five years, but we think the volume will depend mainly on the alternative financing options available to property owners.

### REITs tend to raise equity at deep discounts ...

European property companies tend to raise equity either when they are distressed (e.g. in 2009 owing to rapidly falling property values triggering covenant breaches), or when the sector is trading at premiums to NAV. In the medium term, we think the likelihood of the quoted property sector going through a period of distress is remote; not only do most companies have healthy balance sheets, history suggests that a meaningful double dip in property values would be unprecedented.

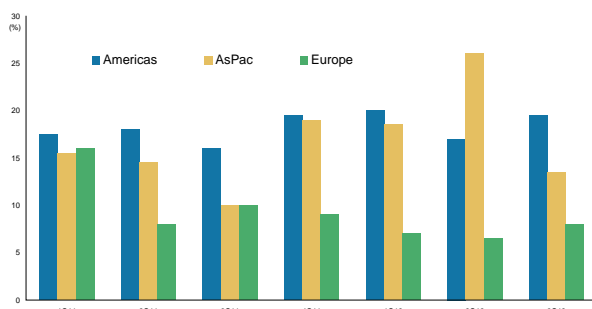
### ... or when they are trading at premiums to NAV

The recent re-rating has increased the likelihood of equity raising; we think some quoted companies could be tempted to

Exhibit 33

**Not only is the European REIT sector underdeveloped, European REIT participation in investment markets has also been limited recently**

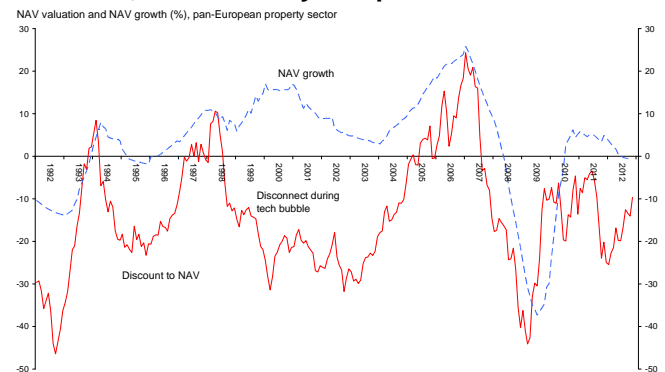
REITs' purchaser share market



Source: JLL, Morgan Stanley Research

Exhibit 34

**European property stocks are trading closer to NAV now, some already at a premium**



Source: Company data, Datastream, Morgan Stanley Research  
NAV valuation and NAV growth (%), pan-European property sector

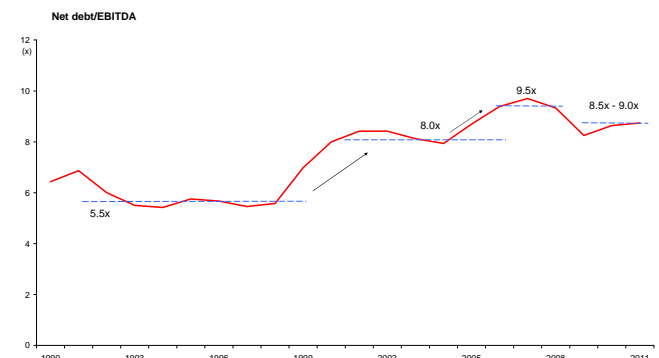
raise equity capital for acquisitions, while we would not be surprised if unlisted vehicles were considering an IPO.

### Quoted companies still in deleveraging mode

We reiterate our view that we do not expect European companies to buy a meaningful amount of assets on their current equity base as many are in deleveraging mode. Several property companies have announced disposal programmes, which add up to several billions worth of assets. In addition, even those companies that have access to low coupon bonds are so far refraining from using this cheap debt to make earnings accretive acquisitions, as there is a widely held view that earnings accretion does not necessarily equal value creation.

Exhibit 35

**The quoted property sector's leverage ratios remain high in a historical context**



Source: Morgan Stanley Research

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## 6. Sovereign Wealth Funds

**Key changes since March:** SWFs are continuing to buy assets, but at a very slow pace (for example Meadowhall).

**Our view on Sovereign Wealth Funds remains unchanged (Opportunity = €50 billion)**

Sovereign wealth under management has increased rapidly (up more than 40% in dollar terms over the last four years), and a significant portion of these assets are being invested in real estate. We reiterate our view that most funds lack the asset management platform to manage real estate across the globe. As a result, they typically invest through unlisted funds or partner up with strong local management teams. Some have also started taking stakes in quoted property stocks. We expect this trend to continue. However, even if SWFs were to double their historical investment in real estate, total additional equity available for Europe in the next five years would only be around €25 billion, which in combination with the €25 billion or so of allocated but yet to be invested capital could suggest around €50 billion of firepower. This is unchanged from when we expressed our views earlier this year.

### “A lot of equity capital waiting by the sidelines”

One of the key pushbacks on our original Blue paper in March was that many direct market property investors told us that “there is more equity standing by the sidelines” than we assume, and more often than not they referred to SWFs.

### Investing at a glacial pace

Recent transactional evidence suggests these investors are going about investing their significant firepower very slowly; the recent deal on Meadowhall, Sheffield (1.5 million sq ft shopping mall), in which Norges Bank acquired a 50% stake for around £0.8 billion, is a good example as the press started discussing this deal nine months before it was completed.

### Investment constraints

We believe traditional SWFs’ focus on asset quality and a lack of ‘in-house’ management and operations constrain their ability to expand in the commercial real estate arena.

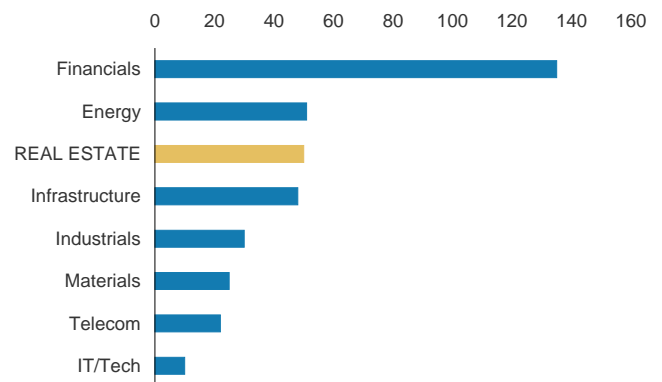
### Opportunity for quoted sector

While the need for an operating partner is generally a negative in the context of filling the bank deleveraging capital gap, we highlight that it is likewise a significant opportunity for European REITs, which are generally regarded as ideal partners. Partnerships between quoted property companies and SWFs could generate attractive profits for the REIT

partners through the fee arrangements that these structures typically provide.

Exhibit 36

**SWFs have invested around US\$50bn in real estate globally during the past 7 years ...**

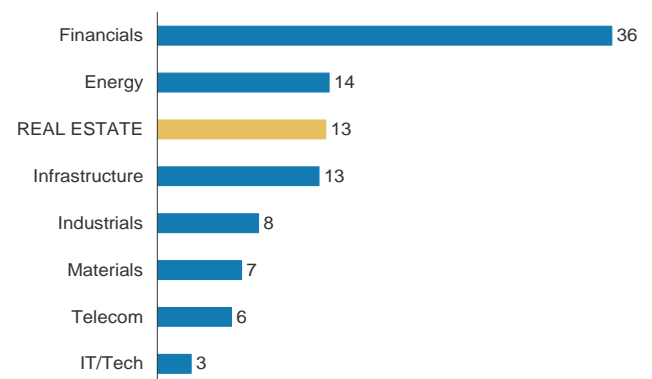


Source: SWF Institute, Morgan Stanley Research

Note: 2005-2011 (\$ bn)

Exhibit 37

**... or 13% of their overall investment volume**

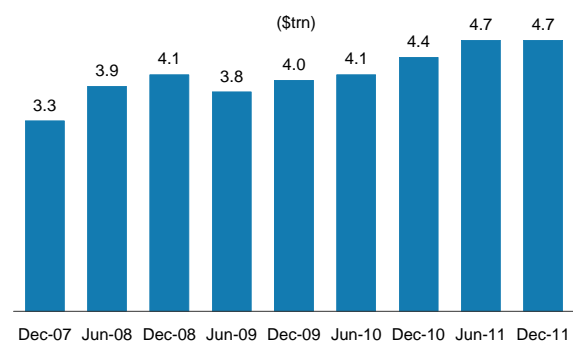


Source: SWF Institute, Morgan Stanley Research

Note: 2005-2011 (%)

Exhibit 38

**SWF assets under management have risen rapidly in recent years**



Source: SWF Institute, Morgan Stanley Research

Note: SWF Assets under management (\$ trillion)

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## 7. Bonds

**Key changes since March: Bond issuance is picking up pace, and coupons are falling rapidly.**

**We reiterate our view that bond markets will provide more capital to real estate and double our estimates (Opportunity = €40 billion, up from €20 billion)**

The corporate credit market for real estate companies remains small, with very few companies perceived to have access. But issuance is picking up. We think this trend is set to continue, and while this is in line with expectations, we think this could happen at a faster pace than we assumed before.

### Quoted players increasingly looking to the bond market

Since the end of the summer, we have seen a meaningful increase in straight and convertible bond offerings. September issuance volume alone reached €3 billion.

### Lower coupons are the icing on the cake

While the quoted property companies were looking towards the bond markets initially to diversify their debt portfolios and to reduce their exposure to bank lending, they are now increasingly attracted to this type of financing owing to the favourable terms. Last month Unibail-Rodamco issued 5-year bonds at only 80 basis points over mid swaps.

### So far used for refinancing, rather than acquisitions

So far, most quoted property companies have issued low coupon bonds to refinance existing debt that is close to maturity, or to increase the duration of the debt portfolio.

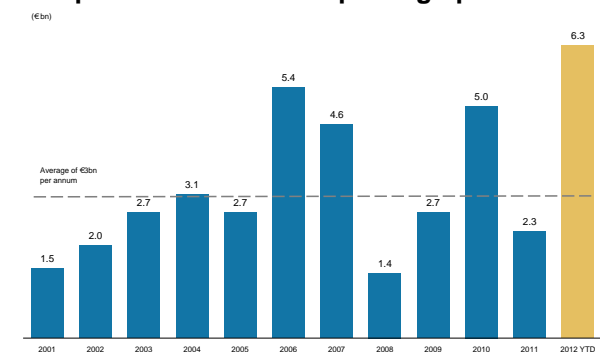
We are yet to see any meaningful issuance to finance acquisitions. It looks as though access to low cost bonds comes at the condition of a highly selective investment strategy and a disciplined balance sheet. As such, we think this could actually drive further deleveraging from quoted property companies.

### Issuance to pick up further

We reiterate our view that we could see a material increase in bond issuance, or at least that the growth in issuance that we have witnessed this year is likely to be sustained. However, we think it is worth highlighting that the size of the real estate corporate debt market is constrained by the size and number of public real estate companies. As such, while we are upping our estimates for bond issuance for the next 5 years from €20 billion to €40 billion, we think the level of origination is closely linked to issuance levels for quoted property companies.

Exhibit 39

### European bond issuance picking up in 2012



Source: Company Data, EPRA, Morgan Stanley Research

Exhibit 40

**Property companies have issued more than €6 billion of bonds year to date, which is more than double the yearly average issuance volumes for the last decade**

Month	Issuer	Size (mn)	Term	Coupon	Conversion premium (%)
<b>Straight bonds</b>					
Mar-12	Mercialys	€ 650	7 year	4.1	N/A
Mar-12	Unibail-Rodamco	€ 750	7 year	3.0	N/A
Apr-12	Gecina	€ 650	7 year	4.8	N/A
Aug-12	Unibail-Rodamco	€ 750	6 year	2.3	N/A
Sep-12	Hammerson	€ 500	7 year	2.7	N/A
Sep-12	Workspace	£ 75	7 year	6.0	N/A
Sep-12	Klépierre	€ 500	7 year	2.8	N/A
Sep-12	FdR	€ 500	5 year	3.9	N/A
Oct-12	Unibail-Rodamco	€ 500	5 year	1.6	N/A
<b>Convertible bonds</b>					
Sep-12	British Land	£ 400	5 year	1.5	31
Sep-12	Unibail-Rodamco	€ 500	5 year	0.8	35
Sep-12	CSC	£ 300	6 year	2.5	30

Note: This list is not comprehensive but merely mentions the largest deals year to date

Source: Company Data, Morgan Stanley Research



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## 8. Pension Funds

### **Key changes since March: Uncertainty created by IORP**

**Risk or Opportunity? Unclear (unchanged, but we think there is now more of a risk than an opportunity).**

We think that the European Insurance and Occupational Pensions Authority's IORP directive could increase pension funds' (defined benefit schemes in particular) lending activities, but we are concerned this could be merely a rotational effect, with overall no net increase in allocations to real estate, all else equal.

### **Inflation has been a key driver**

Pension funds have historically increased weightings to real estate when inflation rises, and vice versa (see Exhibit 41). As a result, it is not surprising that their weightings have fallen over the last three decades.

### **Loose monetary policy is a driver for increased allocation**

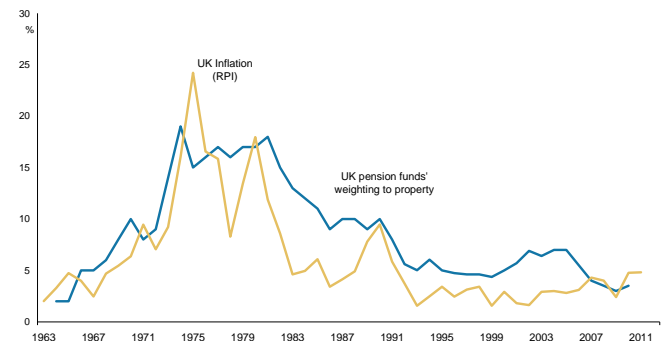
But in recent years we have seen a variety of pension funds that have increased allocations to real estate, reversing the trend of lower real estate allocations, driving low real interest rates and scarcity of yield products.

### **But regulation (IORP) is a concern ...**

However, it looks like the expected increase in allocations to real estate could be halted by regulation. This summer, the European Insurance and Occupational Pensions Authority (EIOPA) launched a consultation process trying to quantify the impact of the proposed new IORP directive for occupational pensions. It looks as though IORP will be very similar to Solvency 2 for insurers when it comes to capital allocations to direct real estate investments, also requiring a 25% capital allocation (i.e. providing for a 25% fall in real estate values).

Exhibit 41

### **UK inflation and weightings to real estate**



Source: Datastream, Morgan Stanley Research

### **... which could change pension fund behaviour**

So, a future rise in inflation and inflation expectations, which usually tends to coincide with increased allocations, may not trigger the usual capital reallocation.

### **Significant opposition to IORP**

According to a statement issued by the Department of Work and Pensions, the UK government remains "resolute" in its opposition to IORP.

### **Will pension funds start lending more?**

If IORP does indeed turn out to be similar to Solvency 2, there is a likelihood pension funds could start providing more senior debt to commercial real estate rather than investing through equity participation.

### **But not necessarily a net provider of capital**

While that would contribute in solving one of the commercial real estate industry's main issues, it would not necessarily result in a net increase in capital provided to this asset class, as pension funds could reduce some of their equity holdings.

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## 9. Governments

**Key changes since March:** Increasingly more governments are stepping up efforts to sell assets.

**Could be more significant in the future (Risk = €20 billion)**

A topic that we did not cover in our original Blue Paper in March is asset sales by governments. Admittedly, this is hardly a new topic as a variety of governments across Europe have been discussing the possibility of selling state owned assets for several years. But so far we are yet to see meaningful sales volumes coming from this corner hence our decision to exclude this from the previous report. We think this could change in the medium term.

### Volumes are rising, but remain relatively low

We have already witnessed a gradual increase in such sales; government owned property sales in Europe, including schools, hospitals and prisons, reached €2.3 billion in 2011, double 2010's volume, according to CB Richard Ellis.

### Challenging market dynamics

Richard Holberton at CB Richard Ellis has commented that even governments "that are seen as safer counterparties by property investors are struggling to sell down anything other than buildings that still have a use, such as prisons or government offices, and yield long-term, state-backed income streams. Even here, however, downgrades in the credit rating of several governments have raised questions as to their covenant quality as occupiers" (FT 26 April 2012).

### Mainly domestic buyers

So far, we are yet to see significant foreign investment interest in such assets. An article in the *Financial Times* (dated 26 April 2012) suggests that "the purchaser base for public sector disposals in Europe has been 85% domestic during the past four years" and that this was as much as "90% in 2011," which stands in stark contrast with the remainder of European investment markets where an increasingly larger share is accounted for by overseas investors.

### Likely significantly more government disposals

The rhetoric from many officials suggests it looks increasingly likely that governments across Europe will start executing on their asset disposal plans.

### An additional 'consumer' of capital

As such, we think governments could be an additional source of 'capital consumption' for the commercial real estate industry in Europe, as long-term holders are exiting real estate, reallocating equity capital to delever.

### Italy could be a high profile case ...

Last year, Germany, Sweden, Russia and the UK accounted for around 75% of all government real estate sales, but it looks like some southern European countries are working towards this too. The Italian press (e.g. *ItaliaOggi* 5 September 2012) is suggesting that Demanio, the government property agency, is preparing to sell hundreds of billions of state owned assets, a part of which is commercial real estate.

### ... Targeting €3-5 billion of sales per annum

Vittorio Grilli, Italy's Finance Minister, has publicly stated that selling between €3 billion and €5 billion per annum should be achievable. We think this is ambitious in the context of the liquidity of the underlying commercial real estate markets (see Exhibit 42).

### The Greek government has also been vocal on the matter

The Hellenic Republic Asset Development Fund, which owns a large amount of real estate and infrastructure assets is planning to raise €25 billion through disposals.

### UK also considering more sales

The Public Administration Committee has urged the UK government to reduce its real estate portfolio to cut costs, focusing particularly on unused or under-utilised assets. In addition, Margaret Hodge MP, who chairs the public accounts committee in the House of Commons, has commented on the matter that the government should "get on with selling buildings, rather than holding on in the hope of a future rise in property prices." ([www.parliament.uk/](http://www.parliament.uk/) dated 31 August 2012). According to the *Financial News* dated 17 September 2012, the UK government offices cost £1.8 billion a year to run and the National Audit Office estimates that the government could save £800 million a year by 2020 by selling excess space.

Exhibit 42

### UK (i.e. London), Germany and France (i.e. Paris) make up two-thirds of transaction volumes in Europe

Country/region	(€bn)	(%)	Cumulative (%)
UK	36.8	31	31
Germany	22.8	19	50
France	16.1	14	64
Nordics	15.7	13	77
CEE & Russia	13.2	11	88
Southern Europe	6.1	5	93
Benelux	5.3	4	98
Other	2.4	2	100
<b>Total</b>	<b>118.4</b>	<b>100</b>	<b>NA</b>

Source: JLL, Morgan Stanley Research

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## 10. Other

**Key changes since March.** Corporates are increasingly announcing balance sheet rationalization, which often includes sale-and-leasebacks. And we have also witnessed US REITs buying in Europe (Simon, Biomed, etc.).

### Corporates deleveraging too

Increasingly more corporates across Europe are considering rationalising their balance sheets. Recent examples include Nokia (rumoured to be selling its Finnish HQ for €300 million, *WSJ* 3 October), IHG and Accor selling more hotels, and UK bookmakers trimming their portfolios to name just a few. While the combined amount of announced assets disposals remains limited, we think it is nevertheless worth flagging that corporates are also in deleveraging mode and therefore more asset supply (i.e. capital consumption) could come from this source.

### REITs have raised debt through US private placements

During 2011, at least two UK REITs (\$480 million for British Land and \$256 million for Great Portland Estates) went to the US and raised debt directly from institutional investors. Demand was such that these issues were upscaled, but ultimately they remain very small.

### Only available to few?

European quoted companies are attracted by the US financing terms, the flexibility and the speed on offer. We expect others to follow the example of British Land and Great Portland, but we do not expect a wave of such issues, as this remains an option only for a few high-quality companies.

### US REITs investing in Europe

During the last six months we have seen increasing investment interest from US REITs; for example Simon Property bought a 28.7% stake in Klépierre for €1.6 billion, and Biomed Realty bought Granta Park in Cambridge, UK for £127 million. US REITs appear more comfortable to use their lower cost of equity and debt capital to make acquisitions.

### Real estate is significant for high net worth individuals

High net worth individuals (HNWIs) typically have a relatively high weighting to real estate; Capgemini<sup>2</sup> estimates that in the last 5 years this has varied between 14% and 24%, comprising residential and commercial, directly held, unlisted and quoted exposure, developments and agricultural land.

### European HNWI overweight direct commercial real estate

Capgemini estimates that around 26% of HNWIs' real estate holdings are commercial real estate, adding that this is higher in Europe, where HNWIs have around 30% of their real estate allocations tied up in commercial assets, versus only 20% in North America.

### REIT exposure mainly in the US and Japan

As much as 15% of all HNWIs' real estate exposure is invested through REITs or other quoted property stocks, in particular in North America (24%) and Japan (23%), where REITs are more established, more liquid and genuinely considered to be one of the main ways to invest in the asset class.

### Weightings expected to fall

Global HNWI weightings to real estate have been rising gradually in recent years after a significant reduction in 2007. However, Capgemini estimates that this trend is set to reverse as "many HNWIs remain apprehensive about real estate given the sector's generally slow recovery from hefty crisis related losses."

### Focus on emerging markets

Capgemini estimates that HNWIs will mainly increase or maintain their weightings to the sector in emerging markets, where the asset class is still perceived to be an opportunity.

<sup>2</sup> World Wealth Report 2011, Capgemini

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## Section 3: Impact on real estate

**Most issues from earlier this year remain, if anything, we now have even more conviction that the lower end of the range for our estimated capital shortfall will be even higher, but this seems to be partially offset by rising investor interest in debt funds.**

**(1)** We worry about the **significant capital shortfall** between the size of the debt that European banks are seeking to reduce and the potential sources, as outlined in the previous section.

**(2)** There is a **huge quality mismatch in supply and demand**, which means parts of the market will remain fine, and potentially enjoy capital appreciation. But for the other, less desirable end of the spectrum, capital will be very scarce for potentially a long time and therefore valuation markdowns could be very significant.

**(3)** The European commercial real estate industry is **starting the deleveraging process at a much higher leverage level** than in previous cycles.

### **Higher spreads not the main worry, for now**

In general, we worry more about availability of debt rather than the cost of debt. In addition, we think that the negative impact of higher lending spreads is mitigated by the low interest rate environment. We think banks reducing their exposure to commercial real estate will have a meaningful and immediate impact for those borrowers that are highly geared and/or own secondary quality assets. But, for most others, banks re-pricing their reduced commercial real estate lending activities will only have a major impact as and when interest rates rise; in the meantime borrowers' all-in cost of debt should remain digestible.

### **We reiterate our view that values could fall 10% ...**

We expect values to fall on average 10% in the next five years. This is a larger average decline than in previous cycles, when asset prices over a similar workout period would have been stagnant or moderately positive in nominal terms.

### **... but with a wide dispersion around that average**

We expect truly prime asset valuation levels to prove robust (and rise further), but we expect up to 10% weakness in good quality institutional grade assets and up to 50% in secondary quality property, in line with the view we expressed earlier this year.

### **Prime office yields at around 5% should be sustainable**

Prime office yields are around 5% in most major cities across Europe, which is broadly in line with the long-term average. We think this yield (or rent multiple) should be sustainable; it is not overly demanding in a historical context, while a significant part of the equity and debt capital targeting property in Europe will focus on exactly this type of asset. We estimate that equity buyers and conservatively geared buyers (such as REITs) should make a 5-year IRR of 6% and 9%, respectively. Based on these admittedly very basic assumptions, we see potential for values to go higher over the next 5 years, but the prospect of significant upside in capital values looks limited, unless rental growth picks up more than we expect – which could well be the case when demand starts recovering while supply remains constrained.

### **Downside of 10% to average quality assets looks likely**

Based on our simple IRR analysis (see our Blue Paper from 15 March 2012) we estimate investment demand should balance out when these assets are valued off around a 6.5% yield, which should provide investors a sufficiently attractive IRR in a low-return environment. As a result, we think an average 5-10% downside risk is likely, with some assets probably maintaining their value while others could be marked down in double-digits.

### **Secondary all about cash flow protection**

A significant part of banks' exposure relates to assets that are secondary in nature and for which the potential medium-to long-term pricing movement could be significant. We think the main question for such assets is whether cash flow can be maintained (or reinstated).

### **Valuation movement could be anything, we believe**

In previous downturns, we have witnessed several assets trading at the net present value of the current lease payments with hardly any terminal value associated with the asset and the land once cash flow dries up. We think this is how a lot of these assets will be priced again. As a result, projected pricing changes are very much asset specific, and potentially up to 50% for some assets.

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## What's happening with property values?

### Property fundamentals are weakening

Fundamentals for most direct property markets are weakening and commercial property capital values (on average) are falling across asset classes and across Europe (see Exhibits 43 and 44).

Exhibit 43

### Values are weakening across all asset classes ...

(%)	YoY	QoQ
Office	-1.2	-0.9
Retail	-1.0	-0.7
Industrial	-5.9	-1.2
<b>All Property</b>	<b>-2.2</b>	<b>-1.0</b>
<b>All Property ex-UK</b>	<b>-2.2</b>	<b>-0.9</b>

Note: Data is pan-European, for 2Q12 (3Q12 data yet to be published)

Source: CBRE, Morgan Stanley Research

Exhibit 44

### ... and across Europe

(%)	YoY	QoQ
France	2.1	-0.3
Germany	-1.8	0.0
UK	-2.1	-1.3
Netherlands	-5.7	-0.7
Nordics	-1.9	-0.1
CEE	-0.5	-0.7
Southern Europe/Ireland	-9.8	-4.9
<b>All Property</b>	<b>-2.2</b>	<b>-1.0</b>
<b>All Property ex-UK</b>	<b>-2.2</b>	<b>-0.9</b>

Note: Data is pan-European, for 2Q12 (3Q12 data yet to be published)

Source: CBRE, Morgan Stanley Research

### But good quality property has been holding up

Admittedly, good quality assets are outperforming delivering moderately positive total returns, suggesting 'prime' is broadly holding up (see Exhibits 45 and 46).

Exhibit 45

### But 3Q12 prime yields remained broadly flat across the board ...

Prime EU-15 Yield Index	Sep-12	QoQ change
Office	5.59%	+ 2 bp
Retail	4.94%	+ 1 bp
Industrial	7.73%	+ 1 bp

Source: CBRE, Morgan Stanley Research

Exhibit 46

### ... and prime rents remained broadly flat too

Prime EU-15 Rent Index	QoQ change (%)
Office	-0.1
Retail	0.3
Industrial	-0.2

Source: CBRE, Morgan Stanley Research

## Likely winners and losers

### Differentiation is key

We remain concerned about any markets that (i) are not on the radar screen of the foreign equity that is investing Europe; (ii) are not very liquid; (iii) lack a strong domestic banking system; and (iv) where German open-ended funds have effectively set the 'prime' yield over the last decade by dominating investment volumes.

### All about London, Paris, Germany (and Nordics)

We think capital will remain available to finance good assets located in:

(i) London and Paris, which are very liquid and very much a priority for foreign investors; (ii) Germany, which we think could be 'flavour of the month' for the next several years, as many institutional investors in real estate remain underweight Europe's largest and strongest economy; and

(iii) parts of the Nordic region, such as Norway and Sweden, which have robust economies, strong domestic banking systems, are outside the eurozone, and where a lot of capital is looking to invest.

### Southern Europe is a concern, also CEE and Benelux

We reiterate our concerns about the property value and rental development in:

(i) most of Spain and Italy, where other than for some truly 'prime' shopping centres and offices, many investors in property could have difficulty sourcing debt capital;

(ii) parts of Central and Eastern Europe, which we think could suffer from the reduction in cross-border lending, unless domestic banking systems develop faster than expected; and

(iii) the Benelux, where underlying property fundamentals are weak, the strength of domestic banking systems has

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deteriorated, and where German open-ended funds own significant investments.

### **Focus on quality of assets and management**

We think the current polarisation trend is set to continue, with increasing differentiation between 'prime' assets and everything else. This is well understood but nevertheless highly significant. We think the scarcity of debt capital will drive a reclassification of assets with investors becoming more demanding on what they consider prime. Also, a lot of the foreign capital that is seeking exposure to good quality property in Europe is relatively passive. It often lacks direct property management skills, and therefore we think there will be a lot demand for partnerships and joint ventures with existing teams with a proven track record.

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### **Opportunities and threats for the quoted sector**

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The quoted property sector is up 20% year to date, and most companies have seen their marginal cost of decrease meaningfully. We think this sector will continue outperforming.

#### **(i) Cost of capital advantage**

Conservative leverage, greater transparency, high asset quality and earnings visibility should drive quoted property companies to have continued superior access to a variety of sources of debt capital (bank debt, long-term fixed rate senior debt issued by life insurers, unsecured bonds, private placements, etc.) and at a lower spread.

#### **(ii) Higher earnings through JVs**

We expect increasing demand from institutional investors to partner up on specific assets or portfolios (such as British Land with Norges Bank on Meadowhall, and Land Securities with CPPIB on Victoria). This should allow property companies to bolster earnings from management fees.

#### **(iii) Acquisitions at attractive pricing**

Many of the assets that are expected to change ownership over, say, the next 5 years, are not of interest to REITs, owing to their quality, size or location. However, that does not mean there won't be any opportunities at all.

#### **(iv) Development opportunities**

The lack of development finance will continue to favour well-funded and well-capitalised REITs with permanent pools of capital, which can exploit development opportunities in those property markets that remain supply constrained (eg the three largest developers in London are three listed companies; British Land, Land Securities and Songbird).

#### **(v) Nursing assets back to health?**

A significant portion of assets owned by companies that are in financial difficulty are being under-managed; leases are shortening, while in many cases all cash generated from rents is used to service debt (so hardly any or no maintenance capital expenditure). That should offer a real opportunity for good management teams to create value.

#### **We expect some, and potentially a lot of, equity issuance**

The pan-European listed sector is significantly underdeveloped relative to the US and Asia. We could see a scenario in which the quoted sector catches up with other regions by becoming a source of capital of last resort. We also see a high likelihood that more private property companies choose a listing as a way to gain better access to alternative debt capital markets, such as corporate bonds.

#### **A lot depends on how bad it gets**

Investors in unlisted funds often prefer the smoothness of valuation to the volatility of share prices, and their managers/distributors prefer the fee income. As a result, we would only expect a wave of unlisted funds to seek a listing if there is no alternative.



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## Impact on Banks

### Size of deleveraging means it will likely be a multi-year process, although initial progress is faster than expected

Given the material gap between the €350-600 billion exposure we estimate banks may need to reduce and what can reasonably be absorbed by alternative sources, banks may be forced to delever over several years. We think the recent acceleration in deleveraging is partly due to EBA capital requirements (that had to be met by June 2012), but also due to the fact that even banks with decent capital and funding positions are proactively reducing low RoE businesses.

### This has resulted in better recovery of capital and funding, but weaker earnings

We estimate that banks are looking to recover €15-50 billion of equity capital through a reduction in real estate lending exposures. For example, we expect RBS, Lloyds and Commerzbank to improve capital by c. 50bp, 80bp and 100bp each over time (before any possible loss absorption), thanks to the reduction in CRE loans. Some of this is being achieved already: for example, CBK managed to close its EBA capital gap, partly thanks to its CRE deleveraging. At the same time, banks are still taking the brunt through weaker earnings in their shrinking non-core divisions. For example in its Q3 earnings RBS showed substantial progress in non-core deleveraging (signaling it has not hit the top end of this year's target), but also suggesting that losses will continue to remain elevated. Similarly, Lloyds continues to send cautious messages on the profitability drag of its non-core units, although progress is also on track.

### Lending spreads are improving and this should help banks meet cost of equity

Our analysis shows that higher capital requirements and high funding costs (as regulators no longer allow funding maturity arbitrage) mean banks will have to reprice lending spreads well above the 200-250bp we see today, and by as much as 50% or more for RoE to meet CoE. This analysis has not changed materially although bank funding spreads have eased compared to six months ago and there is more consistent evidence of loan repricing. Still, CRE business has low RoE.

### Smaller or Tier 2 still most likely to exit CRE funding

Despite recent funding spread compression, and some loan repricing, we think smaller/Tier 2 banks (i.e. those with higher funding costs) will find it harder to stay in CRE lending. Even after repricing lending substantially (50-70% more than prices six months ago) our analysis suggests that banks with higher funding costs are unlikely to make sufficient returns to meet their CoE and therefore will be forced to reduce this business. However, our data suggest it is the larger banks that are able to reduce exposures more substantially.

### Low RoEs will require adjustment in loan values over time

Having said that we confirm our view that 'lumpy' losses are largely over, but we will continue to watch real estate valuations. We argue that liquidity helps banks 'delay the pain' and avoid disorderly deleveraging and defaults resulting in further 'lumpy losses'. Indeed the Spanish market is the only market where we see substantial valuation adjustments still being done. However, low returns mean the loans' net present values are still declining and will require further value adjustments over time. CRE losses are not entirely over although 'lumpy losses' likely are.

### We are most concerned about smaller banks in southern Europe

Banks with larger CRE loan books, exposure to lower quality borrowers, or to higher risk sovereigns, and higher funding costs are more at risk, we think. We are concerned about smaller banks in southern Europe (as they are affected by exposure to riskier countries and higher funding costs). We see some risks in weakening Benelux real estate (potentially putting pressure on the banks exposed to this region).

### Increase in lending spreads has not offset the decline in profitability

In Exhibit 47, we show how the RoE of CRE lending business has declined for banks as capital requirements have increased from 6% to 10%, and as funding costs have also increased materially. Note that the increase in lending spread from a range of 0.8%-1% to 2%-2.5% has not been sufficient to offset the decline in profitability. Recent evidence of further spread increase may help, but the evidence is still not sufficiently widespread.

Exhibit 47

### Double-digit RoEs have fallen to low single-digits, and even turned negative for Tier 2 banks

		How it was		What it is today	
				Tier 1 bank	Tier 2 bank
higher capital	RWA %	60	80	60/80	60/80
	Capital %	6	6	10	10
higher funding cost	lending spread (%)	0.80	1.00	2.0/2.5	2.0/2.5
	funding spread (%)	0.10	0.10	-1/-1.5	-2.5/-3
equal lower RoE	LLP (%)	0.10	0.20	0.30/0.50	0.30/0.50
	RoE (%)	11	9	4/0	-4/-7

Source: Morgan Stanley Research estimates

### Despite better funding and lower cost of equity versus 6 months ago, more loan repricing is still needed

In Exhibits 48 and 49 we have modeled the RoE for banks based on loan-to-value (LTV) ratios and the lending spread (there is usually a direct relationship between LTVs and pricing). We have reduced the banks' cost of equity to around 10% for higher quality banks and to 11-12% for

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weaker banks, and have also factored in better funding costs (100bp spread for larger, Tier 1 banks and c. 200bp for Tier 2 banks with a reduction of c. 100bp each since our March analysis).

Lending spreads have increased, but we still think they will have to increase further from the current level for banks to meet their cost of equity in their CRE operations.

Exhibit 48

### **Tier 1 (banks with lower funding costs) will require more aggressive lending pricing for RoE to meet CoE**

Tier 1 bank RoE	RWA %				
	40%	50%	60%	70%	80%
<b>lending spread</b>					
2.00%	7.0%	5.6%	4.7%	4.0%	3.5%
2.25%	9.84%	7.9%	6.6%	5.6%	4.9%
2.50%	12.7%	10.15%	8.5%	7.3%	6.3%
2.75%	15.5%	12.4%	10.35%	8.9%	7.8%
3.00%	18.4%	14.7%	12.3%	10.50%	9.2%
3.25%	21.2%	17.0%	14.1%	12.1%	10.61%
3.50%	24.1%	19.3%	16.0%	13.8%	12.0%
3.75%	26.9%	21.5%	17.9%	15.4%	13.5%
4.00%	29.8%	23.8%	19.8%	17.0%	14.9%

Source: Morgan Stanley Research estimates

### **Tier 2 banks (those with higher funding costs) will likely be forced to exit this business**

We have run the same sensitivity for Tier 2 banks, but assuming a funding cost of 200bp (100bp cheaper than in our March analysis). This category would include smaller banks, banks with a weaker sovereign and generally lower rated banks. As can be seen in Exhibit 49, even if lending spreads were to go to 3.5-4%, these banks would barely be able to meet their cost of equity, and thus, in our view, will probably be forced out of this business.

Exhibit 49

### **Tier 2 (banks with higher funding costs) will likely be forced out of CRE lending**

Tier 2 bank RoE	RWA %				
	40%	50%	60%	70%	80%
<b>lending spread</b>					
2.00%	-4.4%	-3.5%	-2.9%	-2.5%	-2.2%
2.25%	-1.5%	-1.2%	-1.0%	-0.9%	-0.8%
2.50%	1.3%	1.1%	0.9%	0.7%	0.7%
2.75%	4.2%	3.3%	2.8%	2.4%	2.1%
3.00%	7.0%	5.6%	4.7%	4.0%	3.5%
3.25%	9.8%	7.9%	6.6%	5.6%	4.9%
3.50%	12.7%	10.2%	8.5%	7.3%	6.3%
3.75%	15.5%	12.4%	10.4%	8.9%	7.8%
4.00%	18.4%	14.7%	12.3%	10.5%	9.2%

Source: Morgan Stanley Research estimates

### **Banks are still in a tough position, but they have been able to move faster than expected and are repricing loans**

Banks with large exposure have been able to reduce loans fast and we have been especially surprised by the progress made by the three banks with meaningful restructuring plans, Lloyds, RBS and Commerzbank. However, the fast deleveraging has taken its toll on earnings (especially in the non-core divisions) and they will likely remain under pressure. We are watching Spain, where we expect faster asset sales from next year once asset valuations are fully adjusted: in this context, we have flagged that Santander has been accelerating its deleveraging and it is one of the reasons why we have recently turned more positive in it. We continue see some risks in weakening Benelux real estate (potentially putting pressure on the banks exposed to this region) and this is why we have already increased credit provisions for ING substantially, despite its relatively more resilient asset quality (as evidenced in their recent results); in our view restructuring and asset sales remain the key catalysts for this stock.

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(as of October 31, 2012)

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Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)		
	Count	% of Total	Count	% of Total IBC	% of Rating Category
<b>Overweight/Buy</b>	<b>1085</b>	<b>37%</b>	<b>446</b>	<b>40%</b>	<b>41%</b>
<b>Equal-weight/Hold</b>	<b>1288</b>	<b>43%</b>	<b>504</b>	<b>46%</b>	<b>39%</b>
<b>Not-Rated/Hold</b>	<b>109</b>	<b>4%</b>	<b>31</b>	<b>3%</b>	<b>28%</b>
<b>Underweight/Sell</b>	<b>481</b>	<b>16%</b>	<b>121</b>	<b>11%</b>	<b>25%</b>
<b>Total</b>	<b>2,963</b>		<b>1102</b>		

Data include common stock and ADRs currently assigned ratings. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months.

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**Analyst Stock Ratings**

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

**Analyst Industry Views**

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

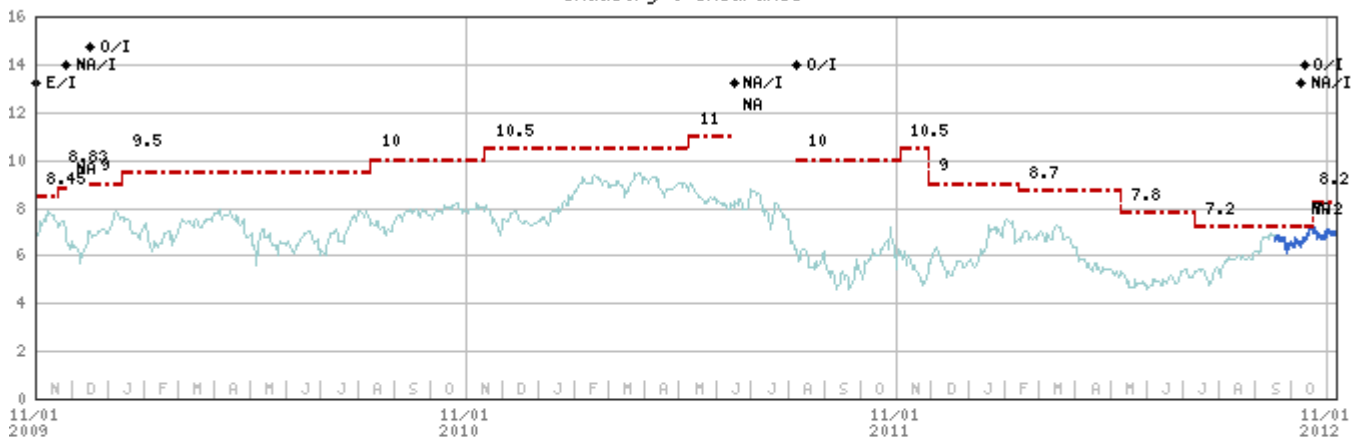
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index.

**Stock Price, Price Target and Rating History (See Rating Definitions)****Stock Price, Price Target and Rating History (See Rating Definitions)**

ING (ING.AS) - As of 11/7/12 in EUR  
Industry : Insurance



Stock Rating History: 11/1/09 : E/I; 11/27/09 : NA/I; 12/17/09 : O/I; 6/16/11 : NA/I; 8/8/11 : O/I;

10/10/12 : NA/I; 10/12/12 : O/I

Price Target History: 10/28/09 : 8.45; 11/20/09 : 8.83; 11/27/09 : NA; 12/17/09 : 9; 1/13/10 : 9.5; 8/12/10 : 10;

11/17/10 : 10.5; 5/9/11 : 11; 6/16/11 : NA; 8/8/11 : 10; 11/4/11 : 10.5; 11/29/11 : 9; 2/13/12 : 8.7;

5/10/12 : 7.8; 7/12/12 : 7.2; 10/10/12 : NA; 10/12/12 : 7.2; 10/19/12 : 8.2

Source: Morgan Stanley Research

Date Format : MM/DD/YY

Price Target --

No Price Target Assigned (NA)

Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) ■

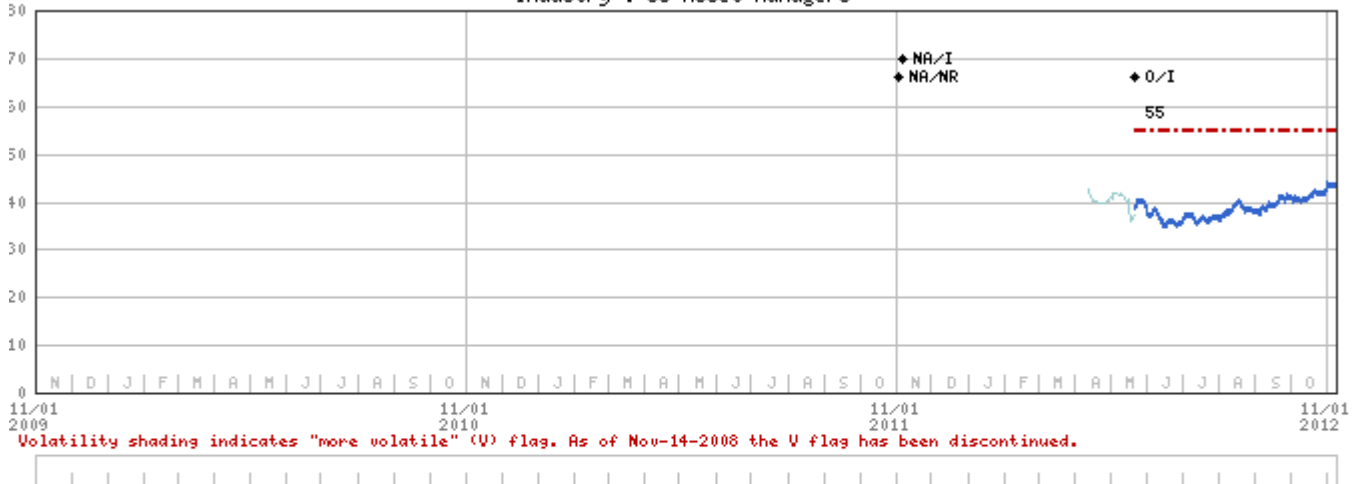
Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View

Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) More Volatile (V) No Rating Available (NA)

Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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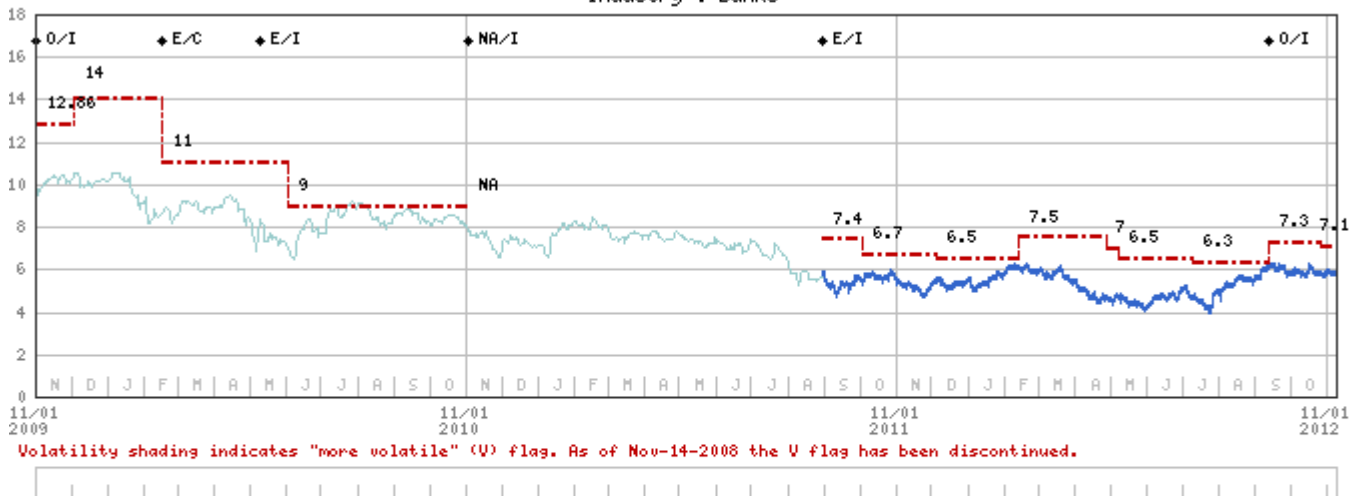
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Oaktree Capital Group, LLC (OAK.N) - As of 11/7/12 in USD  
Industry : US Asset Managers

Stock Rating History: 11/3/11 : NA/NR; 11/7/11 : NA/I; 5/22/12 : O/I

Price Target History: 5/22/12 : 55

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)  
 Stock Price (Not Covered by Current Analyst) --- Stock Price (Covered by Current Analyst) ---  
 Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View  
 Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) More Volatile (V) No Rating Available (NA)  
 Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Santander (SAN.MC) - As of 11/7/12 in EUR  
Industry : Banks

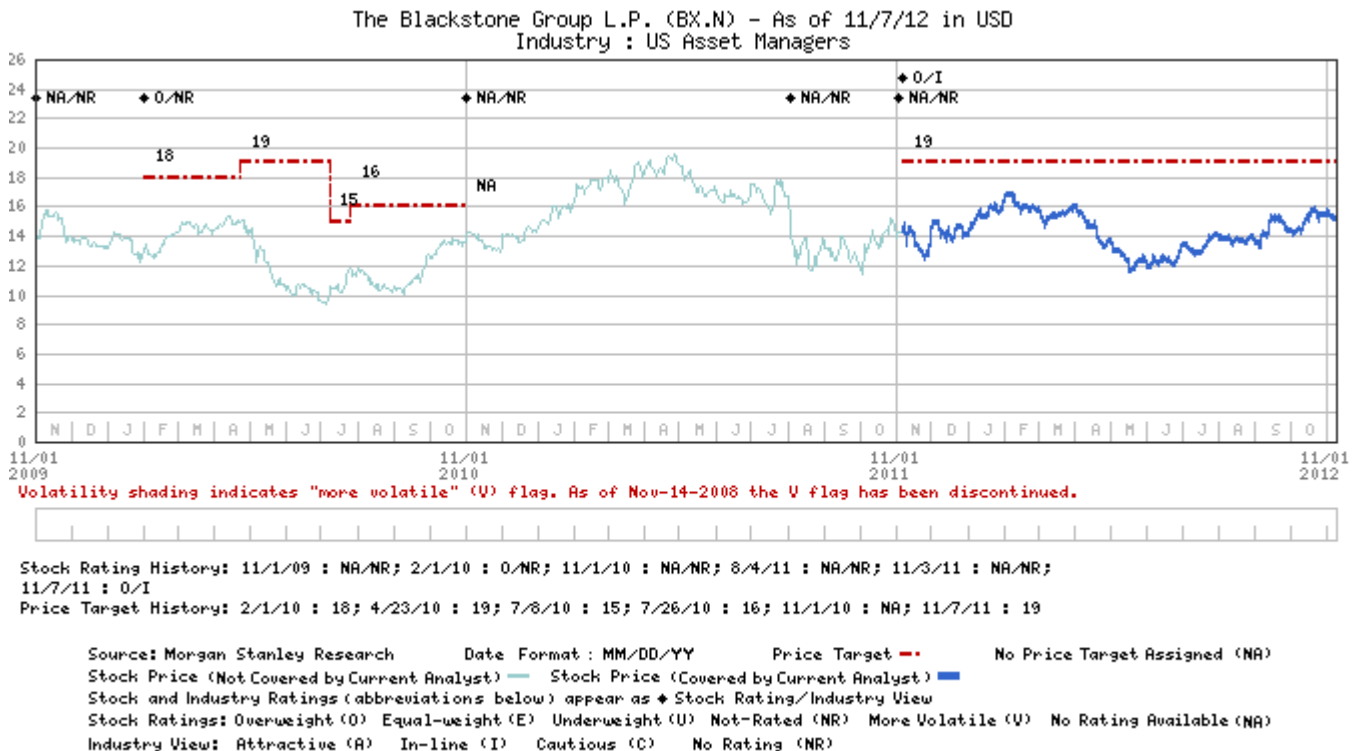
Stock Rating History: 11/1/09 : O/I; 2/16/10 : E/C; 5/11/10 : E/I; 11/3/10 : NA/I; 8/31/11 : E/I; 9/12/12 : O/I

Price Target History: 9/10/09 : 12.86; 12/4/09 : 14; 2/16/10 : 11; 6/3/10 : 9; 11/3/10 : NA; 8/31/11 : 7.4;  
 10/3/11 : 6.7; 12/6/11 : 6.5; 2/13/12 : 7.5; 4/27/12 : 7; 5/8/12 : 6.5; 7/10/12 : 6.3; 9/12/12 : 7.3;  
 10/26/12 : 7.1

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)  
 Stock Price (Not Covered by Current Analyst) --- Stock Price (Covered by Current Analyst) ---  
 Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View  
 Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) More Volatile (V) No Rating Available (NA)  
 Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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