

# DTZ Insight European debt funding gap Resolutions under way

### 29 March 2010

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- €482bn of European commercial mortgage loans is due to be refinanced in the next two years. Not all outstanding principal debt will be refinanced, due to value declines and more conservative lending and LTV terms. This shortfall is defined as the debt funding gap.
- In our view, the debt funding gap is the biggest short term challenge to the European property markets. In the first instance, it is the borrower's problem to resolve pending debt refinancing. But, in the event of a default at maturity, the problem passes over to the original lender.
- The European debt funding gap is €115bn over the next two years, in our base case. This goes up to €156bn in our pessimistic scenario, assuming LTV ratios stay low. The UK and Spain have the biggest funding gaps. But, smaller markets, including Ireland, Hungary, Romania and Portugal also have large gaps, relative to their size.
- The €115bn shortfall in our base case roughly matches the €116bn in available new equity targeting European property (Figure 1).Up to recently, there have been a number of obstacles that have prevented the effective matching of the new equity with the debt funding gap.
- However, we expect increasing pressures on both equity investors and lenders to result in a higher urgency to find effective and creative solutions to resolve the funding gap. In fact, this process has already started, as we categorise a number of recent solutions implemented in the market – either pure debt, pure equity or hybrid solutions.
- We expect borrowers and lenders to continue to put in place a wide range of different solutions across Europe. In the end, there is sufficient new equity available to negotiate and agree terms with.
- Based on this, we come to a positive outlook for the overall market, as we expect equity investors to work closely with lenders to resolve the European debt funding gap in the next 2-4 years.

#### European funding gap and available equity 2010-2011 €bn 90 80 70 60 50 40 30 20 10 0 Debt Funding New Equity Debt Funding New Equity Gap Gap 2010 2011 Base Pessimistic



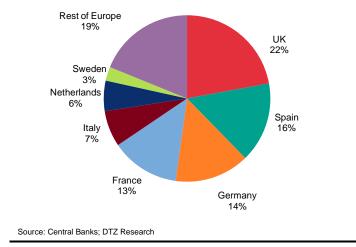
Source: DTZ Research

#### Introduction

At the end of 2009, the total outstanding debt to commercial real estate across 24 countries in Europe totalled €1,848bn, 65% higher than in 2004. Of this, 72% is concentrated in just five countries (Figure 2). Much of this lending originated or was refinanced towards the peak of the market in 2006/07 and at loan-to value ratios (LTVs) mostly in excess of 80%.

Outstanding European property debt, year end 2009

#### Figure 2



Since the market peaked in 2007, capital values have fallen considerably in many markets and on average by 26% across Europe. As a consequence many investors have seen their equity wiped out, as the loan amount is now higher than the collateral's market value.

Despite this negative equity, loan defaults during the loan term have been limited so far as cash flows have mostly remained sufficient to cover interest payments. Despite expecting an increase in defaults during the loan term, we do not expect it to be as significant as defaults at maturity. This is partly due to the potentially high cost of swap breakage prior to the loan maturity. This has also triggered a reluctance to test non-monetary covenants. Cash sweeps have been put in place in some cases.

But, as many loans reach their maturity in the next few years, we expect defaults to become more likely. This is especially the case as the availability of debt remains restricted and LTV terms are much tighter. As a consequence, we expect there to be a funding gap for existing debt. The funding gap is defined as the gap between the existing debt balance and the debt available to replace it.

It is important to note that the funding gap is more due to the adjustment of lending terms than the occurrence of negative equity. Where previous, lending was at 85% LTV, now lending will be at 65% or 70% LTV. In fact, in the base and pessimistic case, only 5% or less of the European debt funding gap is due to negative equity (i.e. where the LTV is above 100%). This is because, with recoveries in property values, the LTV will reduce over time, but will still be in excess of what is available from lenders in the market.

Only at loan maturity is the borrower forced to find an alternative refinancing source and we expect the biggest problem to arise at this point. That is why we have focused on the gap rather than interest coverage or LTVs.

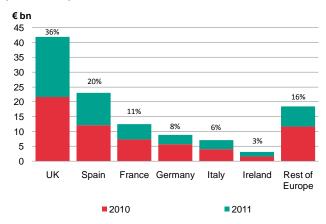
The focus of this report is to estimate the nominal and relative sizes of the debt funding gap across European countries. Also, we match the debt funding gap against the available new equity capital targeting the region. We identify the challenges which the markets have faced to date in bridging this gap. We categorise solutions seen the markets so far. Based on these, we present our outlook for the markets. Finally, we discuss our methodology in more detail in Appendix 1 and provide deal examples in Appendix 2.

#### Section 1: The debt funding gap

We estimate the debt funding gap to be €115bn over the next two years, in our base case scenario. In this scenario we assume a recovery in LTVs rising from 65% to 70%. The debt funding gap increases to €156bn in our pessimistic scenario. In this case, we assume LTVs remain tight at 60% during 2010-2011. A high proportion of our base case funding gap (56%) is in the UK and Spain. France, Germany, Italy and Ireland account for a further 28% (Figure 3).

#### Figure 3

# Estimated European debt funding gap 2010-2011 (% of total)



Source: DTZ Research

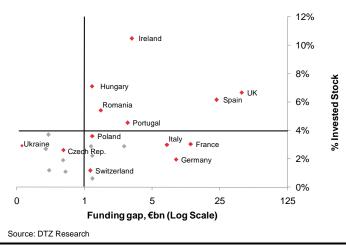
The relative burden of the debt funding gap for each individual country depends on the size of the gap in relation to the overall size of that market, as measured by invested stock. This is highlighted by differences between the countries with the biggest funding gaps.

The UK and Spain are expected to have the largest funding gaps over the 2010-11 period, with €42bn and €23bn respectively. These represent a relatively high proportion of invested stock (6-7%). In contrast, despite having big absolute funding gaps, France (€13bn) and Germany (€9bn) have relatively modest gaps when measured as a percentage of invested stock (2-3%)

Of course, the reverse can also be true. There are countries with small funding gaps in nominal terms, which as a percentage of their total invested stock are disturbingly high. A prime example of this is Ireland, which has in fact the highest percentage (10%) debt funding gap in Europe. Other small countries with high relative funding gaps are Hungary, Romania and Portugal.

#### Figure 4

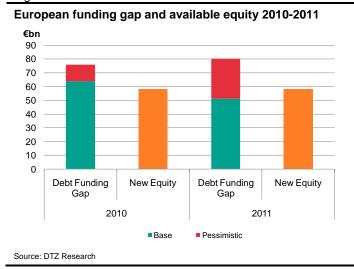
#### 2010-11 Funding gap in Euro billions and as proportion of invested stock



#### Section 2: Available new equity

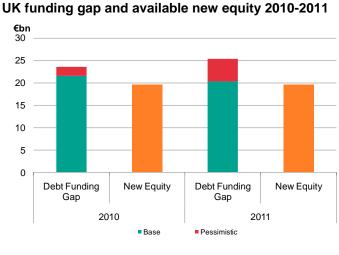
Drawing upon previous research<sup>1</sup> we estimate there to be €58bn of new equity available to target direct real estate in Europe in each of the next two years (Figure 5). In the base case scenario, there is sufficient equity to finance the European debt funding gap in the next two years. But in the pessimistic scenario there is a €40bn shortfall after new equity is considered.





For the UK, where we see the largest debt funding gap of €42bn, the amount of new equity €39bn only marginally falls short of the debt funding gap in our base case scenario (Figure 6). In the pessimistic scenario, the UK has a €10bn mismatch between the new equity and the debt funding gap.





Source: DTZ Research

Insufficient data is available on the equity targeting other individual countries, other than the UK, to extend the same comparison across Europe.

<sup>&</sup>lt;sup>1</sup> The Great Wall of Money, DTZ Research, December 2009 www.dtz.com

#### Section 3: Moving on from the stand-off

However, with this large amount of new equity funding available globally, we do need to pose the question -*Why has the debt funding gap not been resolved so far with all this available new equity?* 

In our view, there have been number of obstacles that have so far prevented the effective matching up of the available new equity to finance the debt funding gap. These are on both equity as well as the debt side. On the equity side, we have seen a split in the type of opportunities that investors are seeking:

- Many global, opportunity-driven fund managers have experience in and are keen to invest in bank's loan portfolios. But, their high total return requirements (20%+) would only be met if banks sell loans or existing equity investors sell partial interests at significant discounts.
- Most institutional investors are focused on investing in prime properties in core markets. These investors are able to accept lower returns (8-10%) as their risk tolerance is much lower. However, many of these investors do not have the ability to buy loan or partial equity positions.

On the debt side, we highlight the impact of recent monetary policies. Central banks have generously supported banks with unprecedented policy initiatives. These include, but are not limited to, liquidity/repo facilities as well as asset purchase and protection programs. These central bank supports have been effective and provided a useful substitute for the banks' failing wholesale funding markets, such as CMBS and covered bonds. Some new accounting rules (IAS 39) have also allowed additional flexibility. These supports have allowed banks to:

- Opt for "extend and pretend" policies on existing loans in order to avoid defaults at loan maturity. Of course, this has resulted in many borrowers having a false sense of security. They are expecting their lenders to not enforce on hard covenant breaches and even interest payment defaults.
- Avoid taking immediate mark-to-market write downs on loan assets that were transferred to the hold to maturity category on the balance sheet. Of course, bank write downs do not actually reduce the principal balance for the borrower.

In the end, these trends and policies have resulted in a stand-off between debt and equity over the last two years. In short, European banks have not wanted to and have

not been forced to sell loan books at distressed prices. Equity investors have not been allowed to or have not wanted to buy existing loans at non-distressed prices, especially if the pricing did not allow them to meet their target returns.

#### Extend and pretend cannot continue indefinitely

The current "extend and pretend" model adopted by many lenders in the last two years is not sustainable in the medium term. Rolling over loan maturities for a year or two increases the problem in future years. It also restricts the availability of capital for new and more profitable lending, in turn limiting new transaction volumes and further capital value improvements.

Short term funding of existing loan books from central bank liquidity facilities will be reduced and will trigger a decreased ability to continually extend loan maturities by one or two years. Therefore, we do not expect banks to extend loans indefinitely. Rather, they will begin to apply more rigorous discipline, particularly as recent improving market sentiment gives them more confidence in their ability to exit. In our view, equity borrowers need to be proactive in dealing with their lenders.

# Increased pressures on both sides going forward

In the first instance, it is the borrower who has the obligation to find funding to refinance the maturing loan. But, in the event of a default at maturity, the problem passes over to the bank. Fortunately, pressures have been building up on both the equity and debt side to more urgently meet a resolution in matching up the debt funding gap with the new equity available.

On the equity side, this pressure will mainly come from the timing of the commitment periods. Managers will face withdrawal of commitments, if capital is not invested prior to the end of the commitment period. The problem faced by many investors has been the ability to source investment opportunities, due to lack of sellers. The funding gap provides this investment opportunity for investors that are flexible enough to take advantage of it. Especially third party fund managers, will be keen to lock in their long term profitability by getting the committed capital invested, even if overly optimistic target returns cannot be reached.

In addition, we could see pressure on the letting markets from increases in taxes to fund the increased government deficits placing pressure on corporate tenants' profitability. Indirectly this could impact rental levels and income leading to reduced capital values.

Furthermore, we expect banks to come under increased pressure from the pending reversal of some of the accommodating policies, mentioned above. Wholesale funding markets, especially the covered bond markets, might struggle when the ECB's asset purchase program is completed. In addition, new retention rules for securitisations will make funding much less efficient. Also, the Basle III reserve requirements are expected to curtail lending to higher risk commercial property in the medium term. This will trigger banks to become more pro-active in dealing with their legacy loan books, effectively reversing the current policy of 'extend and pretend'. Evidence of this is widespread as many banks have now set up separate bad banks and/or property work-out teams that are able to deal with borrower negotiations.

As a result, we expect that both equity and debt market participants will work closer together in resolving the debt funding gap. Of course, after this macro outlook, we can ask the question – *What is the exact solution on the Ioan level?* 

#### Section 4: Multiple solutions

There are a number of different solutions that are evidenced by recent restructurings and events in the market. We highlight the examples and their categorisation in Appendix 2. The solutions deal with existing or pending loan defaults, either at the loan maturity date or during term. These solutions can be categorised along a continuum of equity and debt, which we describe below.

Pure equity solutions include:

- Existing borrower injects new equity
- New equity partner injects equity

Pure debt solutions include:

- Restructuring, including extension of maturity
- Sell (part of) loan to third party
- Foreclosure

Hybrid equity-debt solution:

Debt for equity swap

#### Pure equity solutions

Where borrowers wish to retain full control, the injection of new equity would be the ideal solution. It enables them to avoid defaulting on the loan and retain the benefit from any future capital value upside potential.

Not all borrowers will be in a position to provide this extra capital. Therefore, some may need to seek equity from a third party. Finding equity from a third party means relinquishing a share of the property in return for additional equity to avoid the loan default. The share of the asset given up will depend on the level of funding required. The challenge will be to find a partner who can match the equity against the underlying assets and risk return profile and with whom the borrower will be able to work with in the longer term. Inexperienced investors, which were able to find funding near the top of the cycle, will be more likely struggle to find new and/or additional equity. They might be faced with enforcement by the lender or agreeing to a greater dilution by new equity investors later in the process.

#### Pure debt solutions

Loan restructurings, including loan maturity extensions are the most used solution to date. Maturity extensions simply roll-over the existing loan term for a period of time, usually one to two years. Some changes to the terms of the loan e.g. increased margins and increased amortisation can be added.

Banks can also sell (part of) their loan positions. Although common place in the US, only few European banks have done this so far. As banks come under increasing pressure to strengthen their balance sheet, sales of nonperforming loans will increasingly be a realistic option.

Foreclosure is typically an option of last resort. After borrower defaults on the loan, the bank enforces on its collateral and gains equity ownership over the properties. Subsequent sales are likely to be at distressed prices (and below book value) with additional management and sales cost. Of course, foreclosure procedures vary across Europe and can lead to delays for lenders gaining control over their collateral. In many Central and Eastern European countries, the legal system remains untested for banks to gain title in foreclosure.

#### Hybrid equity-debt solutions

Ultimately, a pure debt or equity play may not be the right solution. Instead a combination of new equity, loan restructuring, or a debt for equity swap may prove to be the most opportune. These hybrid solutions may prove attractive to both the debt and equity side, and will likely lead to more complex solutions.

In some cases, banks may be willing to swap part of their debt position for new equity and partnering with the borrower in the potential upside over the longer term. This effectively involves the bank forgiving some of its debt secured by the property, in exchange for an equity share in the property.

#### Risk of delayed solutions

If a negotiated solution is not found, there is a risk for the dispute to end up in a prolonged legal battle. A primary example is Coeur Defense, where the borrower has been able to delay the CMBS lenders from gaining control over the building for well over two years so far. Further delays will depend on possible next appeals to higher courts. The impact on the property value can be very negative as no funding is available for capital expenses and tenant break clauses are not actively managed. All in all, such extended delays in finding practical solutions have been rare so far, but are very likely to increase the loss to both the equity and debt. A case like this serves as a stark example for all market participants to be avoided.

#### Impact of State Initiatives

The behaviour of individual banks will be partly determined by various central government initiatives and central Bank supports some of which are outlined in Table 1. There is little consistency between the initiatives among the different countries, apart from the ECB's policies, which have been available to all Euro-area banks.

#### Table 1

#### Government and central bank support

Country	Scheme/ Bank	Comment
Denmark	Danmarks Nationalbank	Financial support to banks, including bail out of Roskilde bank
Germany	Financial Market Stabilisation Fund	State initiative to support ailing banks
Ireland	National Asset Management Agency	State initiative to remove distressed assets off the bank balance sheets.
Sweden	Riksbank	Financial support to banks to manage loan defaults
UK	BoE Liquidity Schemes & Asset Protection Scheme	APS only taken-up by RBS. Partial Treasury ownership of RBS and LBG. Liquidity provided in exchange for wide range of assets.
Euro-zone	ECB Liquidity Schemes	Repo liquidity provided in exchange for eligible assets.
Source: DTZ Research		

Apart from central government initiatives, there have been many other initiatives effecting either individual banks or a number of banks in a particular country. We highlight these in Table 2.

#### Table 2

#### Specific bank initiatives **Bank (Country)** Comment Deutsche Establishing 'bad bank' to work out Pfandbriefbank distressed loans. Formerly known as Hypo Real Estate. (Germany) Ahorro Corporation Consortium of regional banks Soluciones established company for distressed Immobiliarias (Spain) loans. Established 'bad bank' to manage Swedbank (Sweden) loan defaults in the Baltic States. Set up specialist division 'Tennyson' Lloyds Banking Group to buy and hold assets it is unable to (UK) restructure. Set up non-core bank to wind down or sell off £36bn of loans. Royal Bank of Scotland Restructuring group established to (UK) work out distressed loans, includes working with JV partners.

Source: DTZ Research

#### Section 5: Positive Outlook

As in most cases, negotiations between borrowers and banks are ruled by each of their expectations. Since, in the first instance, debt refinancing is the borrower's problem to resolve, we expect the existing equity to:

- Engage in negotiations on multiple fronts, with the existing lender and potential new lenders, but especially with potential new equity investors.
- Show some initial resistance to give concessions to previously generous "extend and pretend" lenders, as they impose more rigorous discipline in their loan book management.
- Imply a lack of consistency in behaviour both across similar borrowers as well as across the loans of any single borrower.

On the debt side, we expect:

- State-controlled and large banks to show more consistency and program-like behaviour than other and smaller banks.
- Smaller lenders to act sooner to avoid being caught in the potentially increased volumes from the big banks.
- Internationally active banks, like equity investors, to re-trench to their home markets and sell off their overseas loans.
- Banks to establish joint ventures with non bank lenders in the market.
- Banks can be expected to be more pro-active in selling perhaps their better loan positions, especially now they can accept that they will not be a forced seller at the bottom of the cycle.

Based on the above analysis, we have a positive outlook for both existing and new equity investors to work with existing and new lenders to resolve the European debt funding gap in the next 2-4 years. We expect a further expansion of the already wide range of different combinations of solutions we have seen so far. These will likely vary widely across European countries.

In countries with high relative funding gaps, such as Ireland, the UK and Spain, we expect more creative and perhaps large scale, structural solutions. As we have seen, the largest Continental European markets have much less of a funding gap, over time we might expect equity investors from these countries might focus on opportunities in countries with large funding gaps. Also, we expect much of the global new equity capital to be sufficiently flexible to take advantage of the most attractive opportunities across the European markets In balance, we also expect a positive impact of the wide range of different solutions on investment transaction volumes. This is because each of the many solutions, we discussed above; involve a re-stacking of the property's debt-equity balance sheet. This will trigger either a (partial) sale of an equity position or a change of control from the equity to the debt. Even in the case of loan sale and enforcement, we expect the new owner or the bank to be more pro-active in selling than the current equity investor.

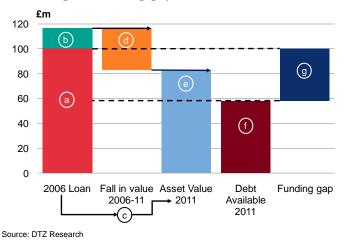
#### Appendix 1: Methodology

Estimating the funding gap

In reaching our estimate for the funding gap we have developed a comprehensive methodology which can be broken down into six steps, to be discussed.

But, our methodology is best summarised by an example of how we analyse a single property loan (Figure 7).





In the above example we calculate the gap as follows:

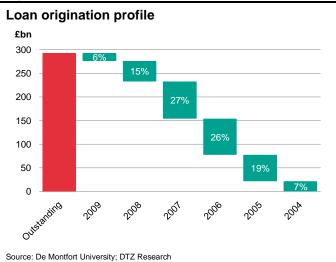
- Loan of £100m granted in 2006. a)
- b) Value of assets financed total £116m, assuming an LTV of 86% in 2006.
- Loan due to mature in 2011 (five year term). c)
- d) Based on capital value changes from the IPD index and our forecasts, we estimate that values will have fallen by 29% (£33m) over 2006-2011.
- The resulting asset value at 2011 is £83m. e)
- In 2011 we estimate that debt of £58m will be f) available for refinance based on a 70% LTV.
- The funding gap of £42m is the difference g) between the value of the original loan (£100m) and the estimated debt available for refinance (£58m).

In reality we are dealing with a multitude of loans, originated in different years and of differing maturities. The following describes in more detail how we reached our numbers based on the above process, step-by-step, for the whole of Europe.

#### Step 1: Calculate outstanding commercial real estate debt by origination vintage

Our starting point has been to take data for the UK using De Montfort University's (DMU) lending survey. From the data we know the originations (in bank lending and CMBS) for each year, and from these we deduct what has matured before 2010. For the purpose of this analysis we are only interested in the sum of originations which equate to the outstanding amount as at end 2009 (Figure 8).

#### Figure 8



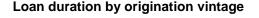
We assume that the origination of European loans follows the same pattern as the DMU data, and apply these proportions to the total outstanding debt secured against properties in each country taken from our Money into Property database, including the UK for consistency, as at the end of 2009. In this way, we look at the debt underlying the properties in each market, rather than the country in which the loans were originated.

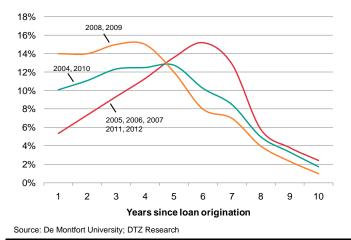
For example, 26% of the outstanding debt in the UK originated from 2006. We therefore assume 26% of debt originated in this year, in each European country. In this way the sum of the originations equals the current outstanding debt.

#### Step 2: Estimate refinancing requirements by origination vintage

The next step is to calculate the refinancing requirements using the loan originations calculated in step 1. The De Montfort study provides data on the loan duration of loans by origination vintage in the UK up to 2008. In order to complete the analysis to 2013, we have made assumptions on the loan duration of loans in 2009-2012 (Figure 9).

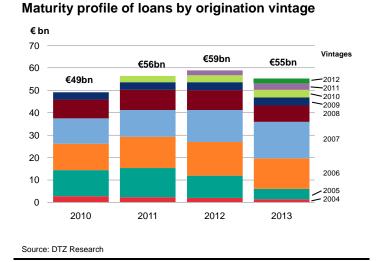
#### Figure 9





Applying these loan durations to the loan originations we create the future maturity profile. We assume the same profile for CMBS and for loans across Europe (Figure 10).

Figure 10

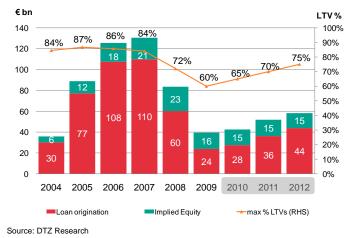


# Step 3: Estimate original property values by origination vintage

Based on historic maximum loan to value ratios (LTVs) at the all property level, derived from the De Montfort survey, we can calculate the value of the underlying assets in each year (Figure 11). In Europe we have assumed the same LTVs.



#### Original property values by origination vintage



As part of our research we have calculated the debt funding gap for two scenarios, our base case and a more pessimistic case.

In our base case we have assumed a gradual loosening in the debt markets with a steady improvement in LTVs over the forecast horizon (see Figure 11). In our pessimistic case, we have assumed a more protracted recovery, in which LTVs remain tight in the near term at 60%, with only a gradually pick-up to 65% at the end of the forecast horizon.

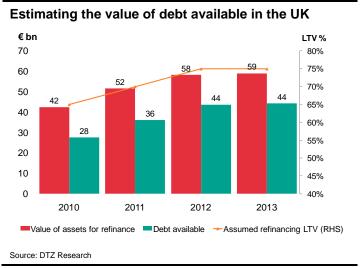
#### Step 4: Estimate future property value to be refinanced

Applying capital value changes to each of the assets underlying the loans by vintage and the known maturity profiles we can calculate the future value of the underlying assets. For the UK we have applied capital value changes from IPD as this provides a better proxy for the market as a whole. In Europe, IPD's coverage and history is not so strong, therefore we have derived an All Property series based on our own prime capital values for each country. For both series we apply our own forecasts, which provide us with the value of assets to be refinanced in future years.

## Step 5: Estimate available debt for future refinancing based on future LTVs

Taking the property values from Step 4, and applying our estimates for LTVs in these future years, we can calculate the value of debt that we estimate to be available in each of these future years (Figure 12).

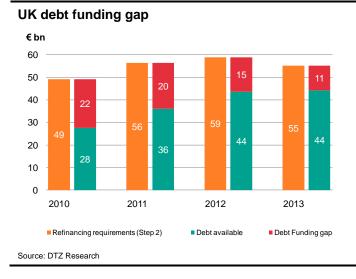




# Step 6: Calculate funding gap between existing debt refinancing requirements and debt available

The final step is to calculate the funding gap. We do this for each individual year by deducting the value of debt available (step 5) from the value of loans for refinance in each year (step 2). The sum of all the positive values leaves the total value of equity required – the debt funding gap (Figure 13). Although we calculate data up to 2013, we have only used data for 2010 and 2011 in this report given the higher degree of certainty over these numbers.





### Appendix 2: Debt & equity solutions

( reans solution implemented and reans solution not implemented)

Parties involved	Property/ Date Loan Name			Pure debt solution			Pure equity solution		Hybrid equity-debt solution
		ate Loan amount (millions)	Roll-over Ioan maturity	Sale of loan	Foreclosure	New equity by existing borrower	New equity by third party	Debt for equity swap	
Metrovacesa-HSBC	HSBC Tower	Dec 2008	£810						$\checkmark$
Carpathian- Deutsche Pfandbriefbank	The Promenada and Blue Knight portfolios	Aug 2009	\$235	√					
Colony Capital and Orion Capital Managers- Goldman Sachs	Inmobiliaria Colonial debt	Dec 2009	portion of €4,200		✓				
Colony Capital-Orco Property Group	Bond debt restructuring	Dec 2009	€411					×	
Morgan Stanley- RBS	Pegasus portfolio	Feb 2010	€1,900			~			
Inmobilaria Colonial- Syndicate	Company Ioan	Feb 2010	€4,900	$\checkmark$					$\checkmark$
Karstadt and Quelle- Syndicate	Fleet Street Finance II CMBS	Mar 2010	€3,400	~					
Tishman Speyer- Syndicate	Vulcan CMBS	Mar 2010	€400				✓		
Reyal Urbis- Syndicate	Company Ioan	Mar 2010	€4,600	✓					✓
Coeur Defense- Syndicate	Windermere CMBS	Mar 2010	€1,500	×	×	×	×	×	×

Source: DTZ Research



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