



A first look at loan level data

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With the launch of the European Datawarehouse (ED), European loan level data for RMBS pools is set to make an entrance into the European RMBS landscape. While already available for ca. 100% of UK prime RMBS deals (since December 2011 BOE loan level requirements) and about 50% of UK non-conforming deals, (more market driven) it is entirely absent from other ABS and RMBS sectors, to include peripheral RMBS. The lack of loan level data has meant the market has had to rely on Bloomberg/Intex algorithms to build rep lines (frequently less than 10 in number) that are in turn used to generate asset side cashflows. Such information asymmetry has, in our opinion, inhibited the development of a more rigorous fundamental analysis and meant that many bonds, particularly from more beaten-up sectors “trade to worst”.

In aggregate the ED captures 263 investor placed deals across our investment universe. The table on page 3 shows the breakdown by key sectors. In time similar data is expected to be available for other ABS sectors. We should point out that not all fields sought by the ED are replete; problems encountered include different jurisdictional data standards, and sponsor MIS challenges. While the list of fields the ED seeks to track is long (238+ for the RMBS template for example), we believe key fields such as LTV, original income, original valuation, origination date, arrears, mortgage rate, original and current loan balance, and geography at a loan level, where reported, should allow for better credit risk assessment. Over time the building up of a historical loan level database should allow analysis of arrears transitioning across buckets.

We begin by looking at one of the most credit intensive sectors across our investment universe - Irish RMBS. With arrears (90d+) averaging 17.5% across (prime) pools, the ability to better understand and size where the real credit risk lies in pools – e.g. the extent of negative equity of loans in arrears, the composition of loans in arrears – should inform superior investment decisions. We intend to repeat this exercise for other RMBS sectors in due course.

We project significant differences in expected losses across Irish RMBS pools, with for example a theoretical forced liquidation of total loans in arrears in FSTNT 2 and CRSM 10 resulting in 3.4% and 8.6% losses respectively. The inability to upload loan level data to replace rep lines at market standard third party models (intex/Bloomberg) has meant extrapolating more precise bond cashflows and ultimately pricing data remains elusive, however. Nonetheless, a static analysis of loan level data we believe throws up some interesting insights and can lead to better investment decisions. Chief amongst our recommendations is switching from CRSM 10 to CRSM 9 – both seniors and mezzanine bonds. The class B bonds of CRSM 9 and CRSM 10 trade within a 2 point range of each other (DB trading runs of 30 and 28 respectively), yet we believe loan level data reveals the credit risk inherent in each of these pools is significantly different.



The European Data Warehouse: A recap

The European Datawarehouse (ED), a repository for ECB-mandated loan level data, was launched in June 2012 with data users (to include investors and other market participants) being able to download loan level data where reported from April 2013. ED shareholders include a diverse mix of institutions including issuers, rating agencies, guarantors and associations from across Europe.¹ The ED acts as a central utility (portal or warehouse) where investors, originators, rating agencies and other market participants can access loan level data. We believe the initiative, which is designed to meet the ECB's intention to incorporate loan-level data into its eligibility criteria, will bring greater transparency, particularly for hard to value sectors. Loan level data is market standard in the US and already available for 100% of UK prime RMBS deals (since December 2011 BOE loan level requirements) and about 50% of UK non-conforming deals (more market driven), yet is entirely absent from peripheral RMBS sectors. The lack of loan level data to date has meant market participants have had to rely on Bloomberg/Intex algorithms to build rep lines (frequently less than 10 in number) which are in turn used to generate asset side cashflows. Such information asymmetry has, in our opinion, inhibited the development of a more rigorous fundamental analysis and meant many bonds, particularly from more beaten-up sectors "trade to worst".

Operational background

While the ECB loan-level initiative was first announced in 2010 (just a few weeks after a similar BOE announcement), it has taken until very recently to reach its implementation stage. The ECB has published a series of templates defining fields that are deemed necessary and specified that reporting frequency must be at least quarterly. Loan level reporting timelines are now in place with non-eligibility for non compliance (Figure 1). Loan level reporting deadlines for RMBS and SME CLOs have been in place since the 3rd January 2013 with the CMBS deadline coming into being 3 months later on the 1st March. All other asset classes covered under the programme (Auto ABS, credit Card ABS, Lease, and consumer finance) currently will have to meet a 1st January 2014 loan-level reporting deadline.

Figure 1: ECB loan level implementation timetable

| Implementation date | Asset class |
|---------------------|--|
| 3 January 2013 | RMBS, SME CLOs |
| 1 March 2013 | CMBS |
| 1 January 2014 | Auto ABS, Credit Card ABS, Lease, and Consumer Finance ABS |

Source: ECB

There is a nine month phase-in period for each asset class starting on the above dates. At the end of this nine month window, the loan-level data gathering requirements are expected to be completed. A system is in place to monitor compliance with loan level template requirements and will assign a score to the reporting quality depending on timeliness, consistency and level of completeness.

In aggregate, the European data warehouse captures 263 investor placed deals across our investment universe. The table below shows the breakdown by key peripheral sectors.

¹ A full list is available at http://www.eurodw.eu/a_brief_history.html



Figure 2: European DataWarehouse – Sector snapshot

| | Investor placed deal count at ED/total deals in sector | Investor placed amount outstanding (EUR Bn)* | Share of investor placed outstanding (EUR Bn) | Stock outstanding (investor placed in EUR Bn) |
|------------------|--|--|---|---|
| Dutch RMBS | 72/100 | 64.5 | 80% | 80 |
| Greek RMBS | 0/10 | 0.0 | 0% | 3 |
| Irish RMBS | 4 / 9 | 3.9 | 40% | 10 |
| Italian RMBS | 32/61 | 14.6 | 78% | 19 |
| Portuguese RMBS | 18/23 | 8.8 | 81% | 11 |
| Spanish RMBS | 95/134 | 50.2 | 81% | 62 |
| UK prime RMBS* | 9/29 | 81.3 | 71% | 114 |
| Spanish SME CLOS | 33/47 | 6.1 | 84% | 7 |
| Total | 263/413 | 229.4 | 75% | 307 |

Source: Deutsche Bank, * UK Prime RMBS is in EUR billion

Loan level data will apply for all bonds, i.e. there will be no grandfathering, although there will be no retrospective data gathering exercise for transactions already outstanding – i.e. it will not be necessary to gather historical loan level data to meet ECB eligibility criteria.

Citing effective reporting, the ECB also require loan level data to be from homogeneous pools (i.e. backed by single asset class, like only residential mortgages). Where the pool is heterogeneous and sponsors are unable to comply, the compliance date on the reporting requirements is extended to 31 March 2014, however non homogenous pools are effectively disenfranchised from ECB liquidity. This will have the greatest impact on certain peripheral deals, to include Spanish SME, Italian RMBS/SME transactions. To the extent some of the bonds from these deals are held by own sponsors or retained, these could be subject to restructuring or sell down.

While the list of fields outlined via the ECB templates² is long (238+), we believe “*key fields*” such as LTV, original income, original valuation, origination date, arrears, mortgage rate, loan term, original and current loan balance and geography are the pertinent ones. Over time, the building up of a historical loan level database should allow analysis of arrears transitioning. We should point out that not all fields sought by the ED warehouse are replete; problems encountered include different jurisdictional data standards, and sponsor MIS challenges. For example a cursory glance at Portuguese RMBS shows that key data such as income levels of borrowers (and consequently debt to income data) are currently not available in some deals.

Data uploaded by originators is automatically validated – a scoring system is applied based on the completeness of mandatory fields. In the RMBS template there are 69 mandatory fields including the “*key fields*” mentioned above. Following the submission and processing of loan-level data, the European Datawarehouse is required to generate and assign a score to every ABS transaction.

Where originators cannot provide data in accordance with the template, predefined “no-data” (ND) options are available which clarifies the reason for non-availability of data. (see Figure 3 for details)

² ECB templates are available at <http://www.ecb.int/paym/coll/loanlevel/transmission/html/index.en.html>


Figure 3: Data Scoring based on ECB guideline

| "No Data" option | Explanation |
|------------------|--|
| ND 1 | Data not collected as not required by the underwriting criteria |
| ND 2 | Data collected at application but not loaded in the reporting system at completion |
| ND 3 | Data collected at application but loaded in a separate system from the reporting one |
| ND 4 | Data collected but will only be available from YYYY-MM |
| ND 5 | Not relevant at the present time |
| ND 6 | Not applicable for the jurisdiction |
| ND 7 | Only for CMBS loans with a value less than EUR 500 000, i.e. the value of the whole commercial loan balance at origination |

Source: ECB

The ECB lays out the scoring matrix³ which measures the prevalence of ND (or no-data) entries. As Figure 4 highlights, the prevalence of ND 1 entries are coded by letter (A to D) while the aggregate prevalence of ND 2, 3, 4 entries are rated by number (1 to 4), which collectively form the matrix.

In conjunction with the scoring matrix, a transition timeline is laid out. The first three months following the implementation date is a test period where loan-level reporting is necessary but no minimum compliance levels are specified. In the second three month period, the prevalence of ND 1 cannot exceed 30% for **mandatory fields**, and ND 2, ND 3 and ND 4 cannot exceed 40%. In the subsequent three month period, the number of mandatory fields coded as ND 1 may not exceed 10%, with the upper limit for ND 2, ND 3 and ND 4 put together being 20%. After the nine month transition period, no mandatory fields can be reported with a ND 1, ND 2, ND 3, or ND 4 label. However, ND 5, ND 6 and ND 7 may selectively be used if applicable to relevant fields in the reporting template.

Figure 4: Scoring Matrix

| | | ND 1 fields | | | |
|--------------------|-------|-------------|-------|-------|-------|
| | | 0 | ≤ 10% | ≤ 30% | > 30% |
| ND 2, ND 3 or ND 4 | 0 | A1 | B1 | C1 | D1 |
| | ≤ 20% | A2 | B2 | C2 | D2 |
| | ≤ 40% | A3 | B3 | C3 | D3 |
| | > 40% | A4 | B4 | C4 | D4 |

Source: ECB

³ <http://www.ecb.int/paym/coll/loanlevel/implementation/html/index.en.html>

Figure 5: Irish RMBS loan level summary

| | CRSM 9 | CRSM 10 | EMERM 4 | FSTNT 2 |
|--|-------------------|-------------------|-------------------|-------------------|
| Total pool (EUR)* | 827,212,691 | 1,007,676,999 | 866,804,127 | 1,170,744,628 |
| Performing pool (% of total pool)* | 66% | 63% | 86% | 81% |
| Non-performing pool (% of total pool)* | 34% | 37% | 14% | 19% |
| Monthly average excess spread (last 12 month average) | 1,190,618 | 1,471,370 | 597,670 | 224,641 |
| Risk measures | | | | |
| Indexed LTV > 100%* | 32% | 57% | 59% | 49% |
| Loans in arrears and Negative Equity (% of total pool)* | 15% | 24% | 10% | 9% |
| Arrears and restructured loans | | | | |
| Total Arrears* | 279,574,997 | 368,726,049 | 118,013,567 | 223,706,361 |
| Total Arrears as per IR | 281,982,868 | 374,738,446 | 121,511,640 | 228,976,753 |
| 90d+ arrears | 207,365,040 | 267,833,658 | 93,708,617 | 190,454,370 |
| 180d+ arrears | 165,643,118 | 218,204,622 | 76,445,272 | 160,348,855 |
| 360d+ arrears | 115,059,085 | 146,727,802 | 54,374,705 | 113,665,099 |
| Restructured loans* | 3,224,381 | 2,819,357 | - | 69,051,584 |
| Restructured and in arrears* | 1,438,647 | 1,918,742 | - | 34,211,977 |
| Total arrears (% of total pool) | 34% | 37% | 14% | 19% |
| 90d+ arrears (% of total pool) | 25% | 27% | 11% | 16% |
| 180d+ arrears (% of total pool) | 20% | 22% | 9% | 14% |
| 360d+ arrears (% of total pool) | 14% | 15% | 6% | 10% |
| Restructured loans (% of total pool)* | 0.4% | 0.3% | 0.0% | 5.9% |
| Restructured loans in arrears (% of total pool)* | 0.2% | 0.2% | 0.0% | 2.9% |
| Credit Enhancement / Attachment point | | | | |
| Class A | 15.52% | 15.63% | 8.86% | 14.55% |
| Class B | 7.10% | 6.86% | 5.30% | 11.53% |
| Class C | - | - | 1.44% | 8.87% |
| Reserve Fund (as % of pool) | 53,811,188 (6.5%) | 54,894,960 (5.4%) | 16,500,000 (1.9%) | 70,000,000 (6.0%) |
| Liquidity Reserve Fund | 8,157,091 | 10,029,840 | - | - |
| 12m excess spread (% of total pool) | 1.7% | 1.8% | 0.8% | 0.2% |
| Reserve fund + 12m excess spread (% of total pool) | 8.2% | 7.2% | 2.7% | 6.2% |
| Negative equity loss (entire pool liquidated)* | -9.9% | -19.7% | -18.8% | -16.8% |
| Arrears loss (only total arrears liquidated)* | -4.9% | -8.6% | -3.6% | -3.4% |

Source: Deutsche Bank, European Datawarehouse loan level data, Deal investor reports. *- Refers to fields that are calculated or taken from loan level data from European Datawarehouse. Other fields are taken from investor reports.





Irish RMBS

First off, just 4 (CRSM 9 and 10, FSTNT 2 and EMERM 4) out of the 11 investor placed Irish RMBS transactions have loan level data currently available⁴. Key fields such as mortgage principal balance, interest rate, term of the loan and arrears status are indicated at a loan level, which enables us to analyse credit performance. Figure 6 presents arrears ratios as a percentage of the total pool for outstanding investor placed Irish RMBS transactions, with data sourced from investor reports.

Figure 6: Arrears across Irish RMBS transactions

| % of total pool | CRSM 9 | CRSM 10 | CRSM 11 | CRSM 12 | EMERM 4 | FSTNT 2 | KDRE 2007-1 | Prime deal average | LANSD 1 | LANSD 2 |
|-----------------|--------|---------|---------|---------|---------|---------|-------------|--------------------|---------|---------|
| Total arrears | 34% | 37% | 19% | 38% | 14% | 19% | 12% | 23.5% | 72% | 72% |
| 90d+ arrears | 25% | 26% | 13% | 27% | 11% | 16% | 8% | 17.5% | 67% | 67% |
| 180d+ arrears | 20% | 21% | 9% | 21% | 9% | 14% | 6% | 13.2% | 61% | 62% |

Source: Deutsche Bank, Deal investor reports

With late stage 90d+ arrears at an average 17.5% for prime Irish RMBS transactions, the sector remains particularly credit intensive for RMBS investors. We use available loan level data to dig deeper into the credit performance of the four Irish transactions. We specifically discuss three drivers of arrears in pools and draw broad conclusions – a) Loan to value (LTV) stratification of pools, b) Debt to Income distribution and c) Mortgage rate distribution

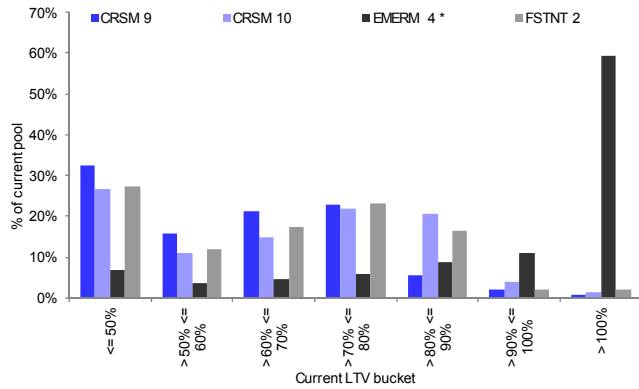
Loan to Value (LTV) stratification

Investor reports for Irish RMBS transactions provide stratifications of current loan balances to original property values. Using national property indices and date of origination, current property values can be estimated and in turn used to calculate the level of housing equity or indeed negative equity, all at a loan level. We illustrate the indexed LTV distribution of the four deals, and also show the LTV distribution as per the investor report (which is unindexed and is calculated as current loan value divided by original property valuation). (Figure 7 and Figure 8).

⁴ Loan level data on CRSM 11 and CRSM 12 are currently unavailable but could become available shortly

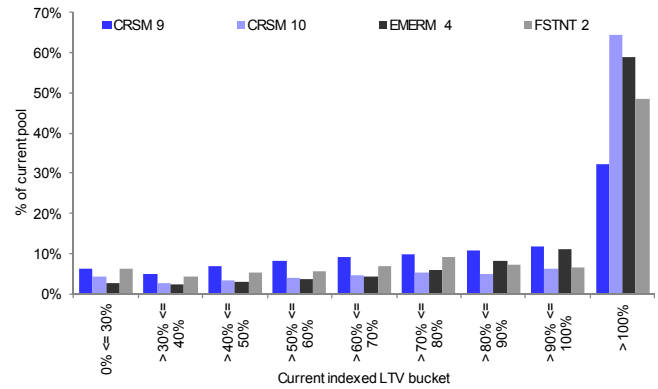


Figure 7: Current non-indexed LTV distribution from IR



Source: Deutsche Bank Investor Report, *EEMRM 4 is indexed LTV

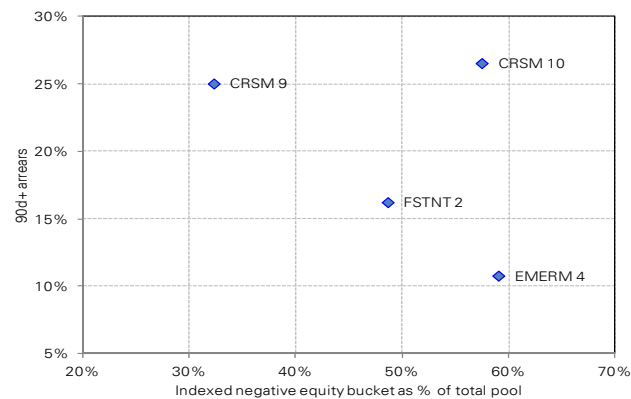
Figure 8: Current indexed LTV from loan level data



Source: Deutsche Bank, European Datawarehouse loan level data

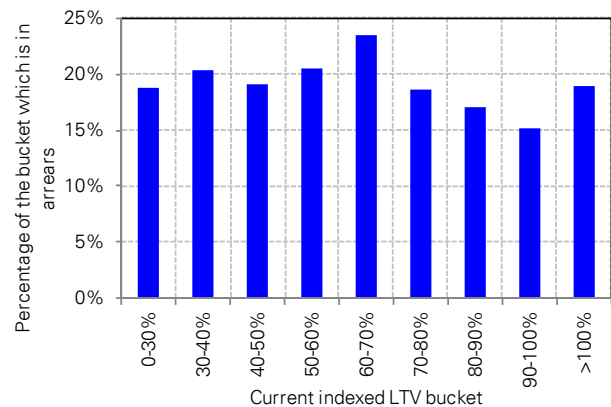
We find from this limited sample that the size of the negative equity bucket is not a significant driver of arrears across the four deals (Figure 9), although this is admittedly still a small sample to draw statistically significant conclusions. For example looking at Figure 9, CRSM 9 and CRSM 10 differ in terms of the size of their negative equity buckets by nearly 20 percentage points but show nearly the same 90d+ arrears. Similarly CRSM 10 and EMERM 4 differ in 90d+ arrears ratio by nearly 15 percentage points, yet, the size of negative equity bucket is about the same (close to 57%). Further, in FSTNT 2, we find that the fraction of the negative equity bucket which is in arrears is 19%, lower than that seen in the 60-70% LTV bucket (24%) (Figure 10). This tells us that negative equity is not the prominent arrears driver for the deal. Indeed across deals, the level of income shock on borrowers resulting from unemployment could play a larger role.

Figure 9: Arrears versus the size of the negative equity bucket



Source: Deutsche Bank, European Datawarehouse loan level data

Figure 10: FSTNT 2 – arrears likelihood is lower in the negative equity bucket than at lower LTV buckets



Source: Deutsche Bank, European Datawarehouse loan level data

Nevertheless indexed LTV calculation at a loan level enables us to compute the loss if the property underlying the mortgage were to be liquidated after repossession. We liquidated the entire arrears bucket to estimate the amount of cumulative loss that the deal would take, after assuming a 15% additional haircut as a liquidation discount on the estimated current property value. For example, if a loan with an indexed LTV of 100% and EUR 200,000 current



balance is liquidated with the property sold at 15% discount to market value, the loss for the trust is 15% (of the principal balance of the loan) or EUR 30,000. We aggregate this loss figure across all loans in the pool to estimate cumulative loss on arrears liquidation for the transaction.

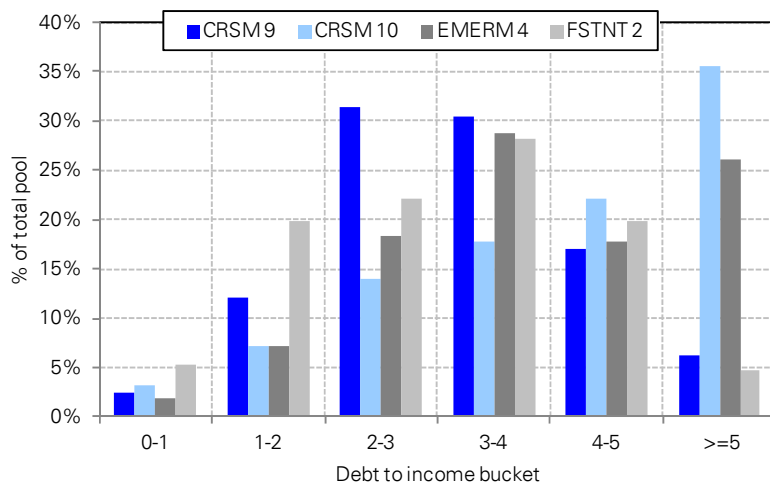
As a percentage of the total pool, we find wide differences in the estimated cumulative loss if all the properties backing mortgages in arrears were to be liquidated (Figure 5). While such arrears liquidation loss in CRSM 9 stands at 4.9%, for CRSM 10 it is 8.6%. FSTNT 2 and EMERM 4 arrears liquidation loss stands at 3.4% and 3.6% respectively.

Debt-to-income

Irish RMBS loan level data contains debt-to-income information, albeit the income figures are at the time of mortgage origination. While this poses a significant drawback to the measure since current incomes are likely to be significantly different, it still provides an approximate guide to where the tail risk may lie. We use the aggregate income (both primary and secondary borrower income) of borrowers to calculate debt to income.

Looking at the debt-to-income distributions of the four Irish transactions below, we find that CRSM 9 is less risky on this metric, with only 6% of the pool with a debt to income ratio greater than 5. FSTNT 2 loan level data also shows that just 5% of the pool is exposed to the high (>5) debt-to-income bucket.

Figure 11: Pool distribution by debt-to-income bucket

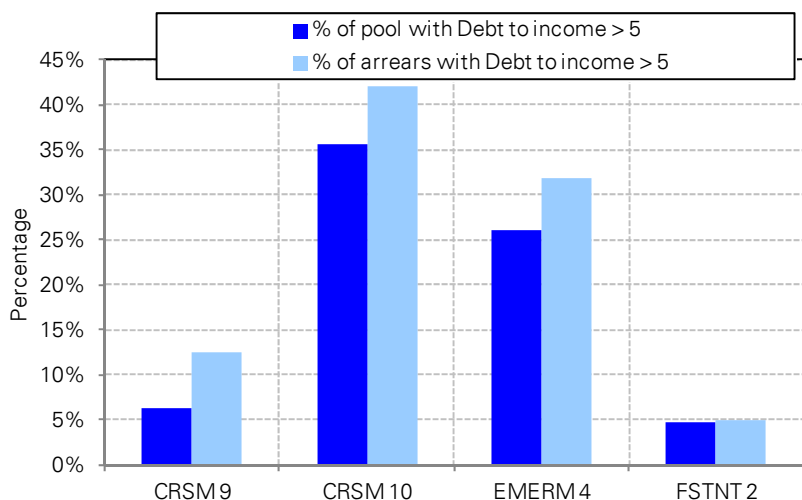


Source: Deutsche Bank, European Datawarehouse loan level data. Debt to income is current debt / income at loan origination

But does debt to income drive arrears? Figure 12 suggests that it does – indeed although only 6% of the pool in CRSM 9 has debt-to-income ratios greater than 5, 13% of the arrears come from this same bucket. This theme is noticed across all four deals – EMERM 4 for example has about a quarter (26%) of the pool with a debt to income that is greater than five, but nearly a third (32%) of total arrears are from loans with a high (>5) debt-to-income ratio.



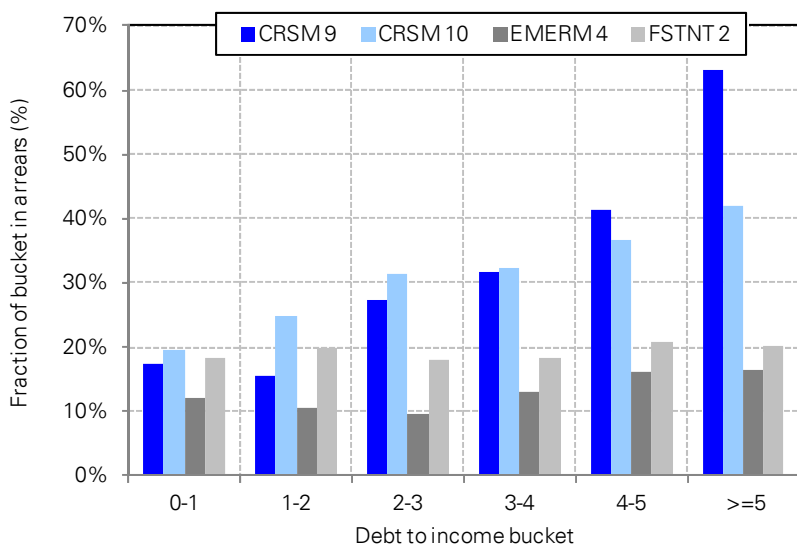
Figure 12: The relationship between Debt-to-income and arrears



Source: Deutsche Bank, European Datawarehouse loan level data, Debt to income = Current loan balance/income at loan origination

Further the likelihood of arrears tends to increase with increasing debt to income. This is observed in CRSM 9 and 10, less so in the FSTNT 2 and EMERM 4 transactions. In CRSM 9, for example, the likelihood of a loan being in arrears increases by more than twofold (2.3x to be precise) if it has a debt to income greater than 5, compared to if it has a debt to income between 2 to 3x. This suggests that arrears in CRSM 9 and 10 are being strongly driven by lack of mortgage affordability. While the relationship is not strong in FSTNT 2 and EMERM 4, we cannot conclude that debt-to-income is not playing a role. Unemployment, which is not measured in pool data, may distort the debt-to-income picture.

Figure 13: The relationship between Debt-to-income and arrears



Source: Deutsche Bank, European Datawarehouse loan level data. Debt to income = current loan balance / income at time of loan origination

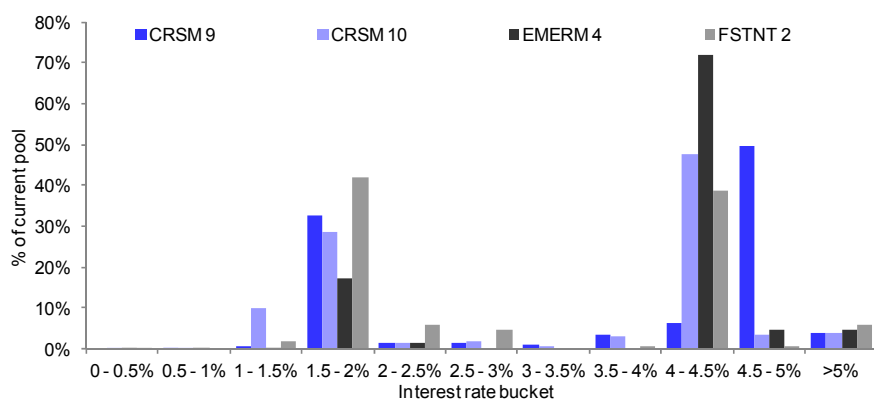


Interest rate distribution

Interest rate distributions in Irish pools can be said to be bimodal i.e. interest rates are clustered around two numbers as the chart for the four deals (Figure 14) shows. The lower “mode” or cluster represents tracker rate mortgages with ECB base rates or Euribor as the reference index.

The second cluster represents mortgages that track the Standard variable rate (SVR) set by individual banks. CRSM and EMERM do not detail the underlying reference indices, so we imply the tracker and SVR classification by looking at the interest rate distribution.

Figure 14: Irish RMBS interest rate distribution



Source: Deutsche Bank, European Datawarehouse Loan level data

Assuming a 1-3% bucket for CRSM 9, tracker mortgages comprise about 36% of the total pool, with 56% of the pool tracking the SVR (4-5% bucket). We show the composition of Irish deals in Figure 15. Note that the above estimation method excludes part of the distribution where it is unclear to us whether it is a SVR-type or a tracker mortgage and is the reason these do not sum to 100%.

Figure 15: Pool and arrears composition by rate type

| Deal | Ratio | Tracker | SVR |
|---------|-------------------------|---------|-----|
| CRSM 9 | Pool composition (%) | 36% | 56% |
| | Arrears composition (%) | 25% | 65% |
| CRSM 10 | Pool composition (%) | 38% | 45% |
| | Arrears composition (%) | 29% | 51% |
| EMERM 4 | Pool composition (%) | 19% | 77% |
| | Arrears composition (%) | 8% | 86% |
| FSTNT 2 | Pool composition (%) | 55% | 39% |
| | Arrears composition (%) | 40% | 53% |

Source: Deutsche Bank, European Datawarehouse loan level data; Numbers are estimates

We find that the interest rate distribution is an important driver of credit performance. All else being equal, we expect that the higher debt service entailed by SVR mortgages would result in larger arrears in the SVR bucket. Indeed, we find that 39% of the SVR bucket is in arrears compared to 24% of the Tracker bucket i.e. a default likelihood which is higher at 1.6x (39%/24%) compared to trackers. In EMERM 4, 20% of the SVR pool is in arrears, relative to 8% of the tracker pool, effectively showing an even higher likelihood of default of 2.5x (20/8).



Note that for the deals we discuss in the report, a majority of the pool consists of SVR mortgages, with the exception of FSTNT 2 where trackers dominate (55% of pool). We summarize similar results for all the four deals discussed in this report below.

Figure 16: Arrears likelihood by mortgage type

| Deal | Tracker | SVR | Default Likelihood ratio |
|---------|---------|-----|--------------------------|
| CRSM 9 | 24% | 39% | 1.61 |
| CRSM 10 | 28% | 42% | 1.49 |
| EMERM 4 | 8% | 20% | 2.49 |
| FSTNT 2 | 14% | 26% | 1.85 |

Source: Deutsche Bank, European Datawarehouse loan level data; Numbers are estimates

Summary and recommendations

Third party data models commonly used by the market (e.g. Intex, Bloomberg, and ABSNet) at present do not facilitate the uploading of loan level data to replace rep lines currently used. As such extrapolating more precise bond cashflows and ultimately pricing data remains elusive.⁵ Nonetheless an analysis of loan level data we believe throws up some interesting insights and can lead to better investment decisions. We outline our key insights and recommendations below.

Key insights from Irish loan level data

1. **Defaults driven by higher rates:** Higher interest rates appear to be a key driver of defaults across mortgage pools. Tracker rate mortgages demonstrate a lower propensity to default than SVR mortgages. SVRs show a 1.6 times higher likelihood of default of being in arrears compared to tracker mortgages, on average across the four Irish deals.
2. **Low correlation between incidence of negative equity and default:** Negative equity is not a strong driver of arrears, as evidenced by the weak relationship between negative equity buckets and 90d+ arrears across the four deals. Indeed in FSTNT 2, for example, we find a higher arrears likelihood in 60-70% LTV bucket than the >100% LTV bucket. This leads us to conclude that income shocks due to higher unemployment play a prominent role in driving arrears.
3. **Ability to calculate pool losses of credit risky loans:** Estimated pool losses vary significantly across deals. For example, under a scenario where 100% of total arrears are liquidated, we find that CRSM 9 and EMERM 4 are likely to experience losses of approximately 4.9% and 3.6% of the pool respectively⁶, whereas the CRSM 10 loss estimate of 8.6% is nearly double. This kind of analysis enables us to go a step further from comparing late stage arrears alone, since it enables the computation of more accurate cumulative losses from loan level indexed LTVs.
4. **Credit resiliency:** Comparing an aggregation of available reserve funds and 12 month projected excess spread (based on one year history) with pool losses in a scenario where 100% of loans in arrears are liquidated allows a more precise credit resiliency calculation. We find

⁵ Participants will be able to use proprietary models, albeit should be aware that extracting any gains from will likely depend on their model coming up to

⁶ Mortgages in arrears are liquidated using a 15% liquidation discount assumption i.e the property is assumed to be sold at a 15% discount to the current estimated property value.



that for CRSM 9 and FSTNT 2, the aforesaid cushion available is more than the arrears liquidation loss, which leads us to believe that the two deals are reasonably credit resilient even among mezzanine tranches.

Bond specific recommendations

1. **Buy CRSM 9 B over CRSM 10 B:** Both bonds trade within a 2 point range of each other (DB trading runs of 30 and 28 respectively) yet we believe loan level data reveals that the credit risk inherent in each of these pools is significantly different. Liquidating 100% of loans in arrears in CRSM 9 gives a 5% cumulative loss, while this number rises to 8.6% for CRSM 10.
2. **Irish RMBS seniors fundamentally sound.** Loan level data has not thrown up any surprises that lead us to alter our view that Senior Irish RMBS look resilient. The leakage of interest proceeds to RMBS mezzanine and first loss pieces due to forbearance for borrowers in distress in the last three years was a prominent concern among investors. However recent central bank efforts to accelerate arrears resolution and loss recognition should play well into senior RMBS, as reserve funds will increasingly be directed towards repaying senior bonds.



Appendix 1

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