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COMMENTARY

European Non-Performing Loan Securitisations: Development of a New Asset Class

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Introduction

Securitisation markets are not new to the use of non-performing loans (NPLs) as collateral, evidenced by the U.S. savings and loan crisis, the Asian crisis and recent European troubles. Securitisation provides a method for banks to remove bad loans from their balance sheets and shore up the financial system. The use of securitisation for NPLs is now spreading across Europe to help improve the banking system.

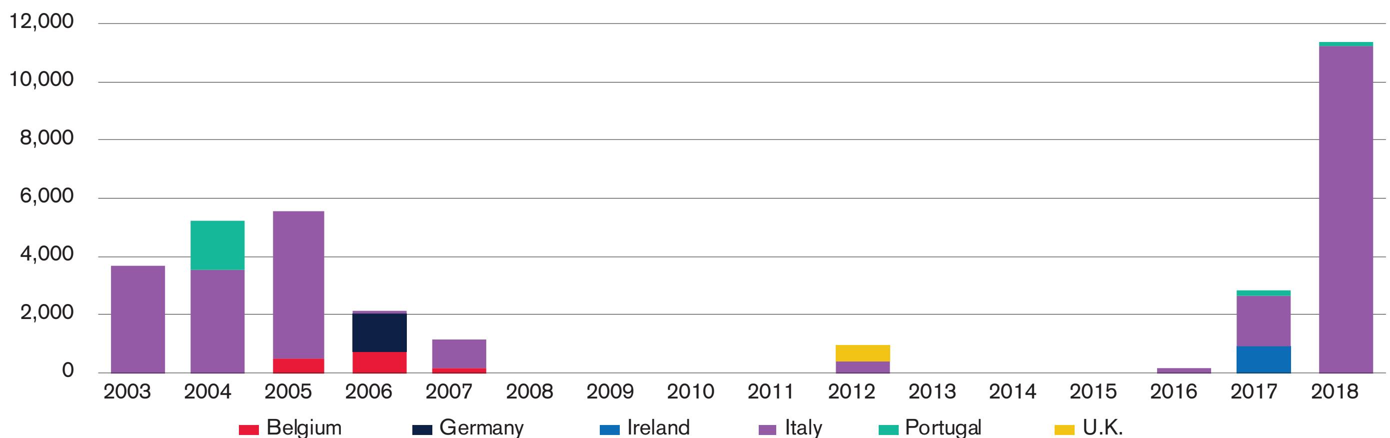
Plans are in place to establish a method to improve the management of NPLs in Europe with progress on the European Commission's action plan, first introduced in 2017. Prior to this, Italian banks were in a difficult position with high levels of NPLs on their balance sheets alongside the introduction of state-aid rules, preventing the establishment of bad banks. As a result, Italy targeted the securitisation market to address its NPL crisis. The introduction of the *Garanzia Cartolarizzazione Sofferenze* (GACS) allowed banks to securitise potfolios with the provision of a guarantee on the senior tranche. This guarantee has helped Italian banks to issue 19 transactions since 2016.

On the back of Italian NPL securitisations, transactions have also been completed with portfolios from Ireland and Portugal. With this prospect of new transactions, other regions such as Spain and Greece are now looking to the securitisation market.

European NPL Issuance Growth

Between 2003 and 2007, there were 15 NPL securitisation transactions from Italy, Belgium, Germany and Portugal. In total, EUR 17.8 billion was securitised in transactions of varying collateral types. In 2012, there were a few transactions from Italy and the United Kingdom; however, the market did not take off until the GACS was established in Italy. Since 2016, there have been 26 securitisation transactions – 20 from Italy, four from Ireland and two from Portugal. In total, EUR 15.0 billion of notes have been issued since 2016.

Exhibit 1: NPL Securitisation Issuance by Country



Source: Concept ABS Limited, SCI and DBRS.

DBRS assigned ratings to 19 securitisations (excluding one Irish transaction that has been redeemed and was rated by DBRS). In 2019, DBRS expects another year of strong issuance (i.e., EUR 9.0 billion to EUR 10.0 billion). As in previous years, most issuance will likely come from Italy, but the type of issuance may shift to unlikely-to-pay (UTP) loans transactions. Additional NPL issuance is expected in Ireland, Portugal, Spain and Greece. For further detail, please refer to DBRS's commentary, *European Structured Finance and Covered Bond Outlook 2019*.

Exhibit 2: Rated Notes and Transactions by Year

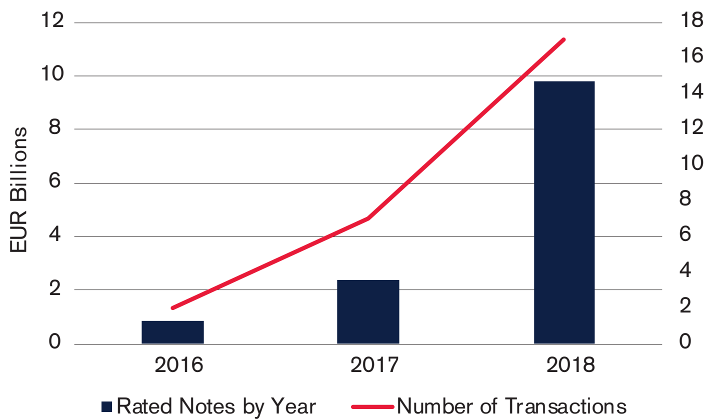
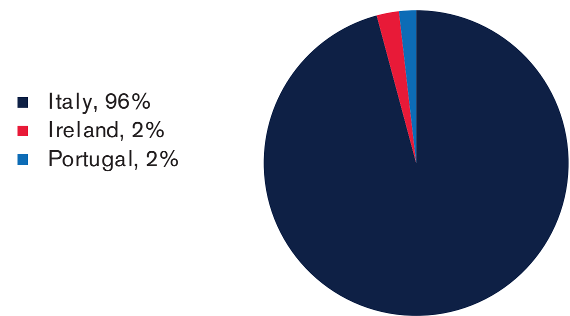


Exhibit 3: Issuance by Country (Gross Book Value %)



Bank Portfolios

The quality of European bank loan portfolios has improved over time. In Q3 2018, the ratio of NPLs to total loans continued to trend lower, currently at 3.4%. The NPL ratio decline is caused by the increase of total loans as well as the reduction of NPLs to EUR 714.3 billion as of Q3 2018. The NPL coverage ratio was 45.7% in Q3 2018 compared with 46.0% in Q2 2018.[1]

Exhibit 4: NPL Stock (EUR bn) by Country in Q3 2018

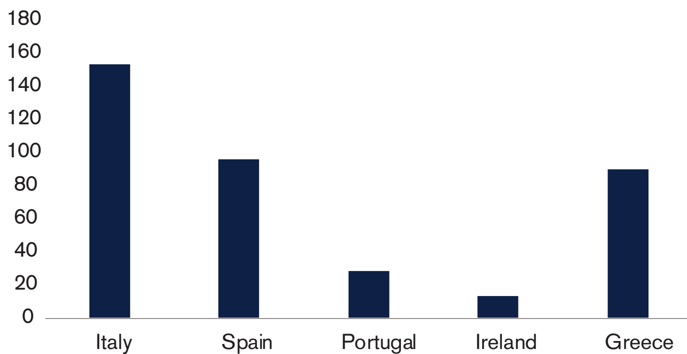
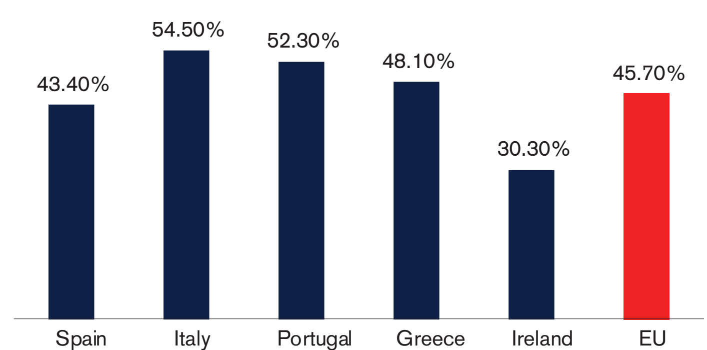


Exhibit 5: NPL Coverage Ratio by Country in Q3 2018



Over the past three years, securitisation has been a fundamental instrument in this respect, led by Italy and Ireland with multiple NPL securitisation issuances. Excluding the United Kingdom, there have been 26 transactions since 2016 (two in 2016, seven in 2017 and 17 in 2018) for a total amount of approximately EUR 58.7 billion in terms of gross book value (GBV). Italy has been the most active jurisdiction with 20 transactions covering on aggregate EUR 55.3 billion GBV. This is not surprising, given that Italy has the highest absolute stock of NPLs (EUR 153 billion as of Q3 2018[2]) in Europe as well as the government initiatives designed to promote the disposal of NPLs via public securitisations.

1. Source: EBA Risk Dashboard, Q3 2018.
2. Source: EBA Risk Dashboard, Q3 2018. Data include main Italian banking institutions: Intesa Sanpaolo S.p.A., UniCredit S.p.A., Unione di Banche Italiane S.p.A., Credito Emiliano Holding S.p.A., Banco BPM S.p.A., Banca Carige S.p.A., Banca Popolare di Sondrio, S.C.p.A., Banca Monte dei Paschi di Siena S.p.A., BPER Banca S.p.A., ICCREA Banca S.p.A. , Mediobanca – Banca di Credito Finanziario S.p.A.

European NPL Securitisation Collateral

By jurisdiction, issuance has been strongly dominated by Italy to date, followed by Ireland and Portugal. DBRS expects public securitisation issuance to spread to other European countries in 2019, including Greece, Spain and potentially Cyprus.

Public European NPL transactions in different jurisdictions are currently characterised by different collateral types. Italian NPL securitisations typically consist of heterogeneous portfolios that include secured and unsecured exposures. By borrower type, these portfolios are dominated by small to medium-sized enterprises (SMEs)/corporates and the secured portion includes residential properties as well as different types of commercial properties. In contrast, Irish NPL securitisations consist of loans to individuals that are secured by residential properties. The portfolio composition of Portuguese NPL transactions issued to date resembles that of their Italian counterparts.

European NPL securitisations to date also differ by the predominant work-out strategy by the respective servicer. It is interesting to note that this differentiation can currently be made by jurisdiction and not by servicer – in Italian and Portuguese transactions, recoveries are expected to be realised by legal procedure (e.g., auction of the properties).

Diving Deeper into Italian NPL Transactions

Italian portfolios securitised thus far have been heterogeneous in terms of composition with an average of 48.9% and 51.1% by GBV for secured and unsecured loans, respectively. The maximum secured portion was in Red Sea (70.6%) while the minimum was in Juno 1 s.r.l. (Juno 1; 30.4%). In terms of secured exposures, DBRS notes that, in Italian NPL transactions, some loans are secured by first liens on the respective properties while others are secured by subsequent liens. For these numbers and those in Exhibit 6, DBRS classifies loans that are not secured by a first lien as unsecured loans.

In terms of borrower type, most borrowers are SMEs/corporate at 82.9% by GBV, on average, while 17.1% are individuals, which is in line with Italian NPL stock. The maximum SME/corporate concentration is in Fino 1 Securitisation S.r.l. (Fino 1; 100%) while Red Sea has the highest concentration in individual borrowers (28.4%).

Exhibit 6: Secured/Unsecured

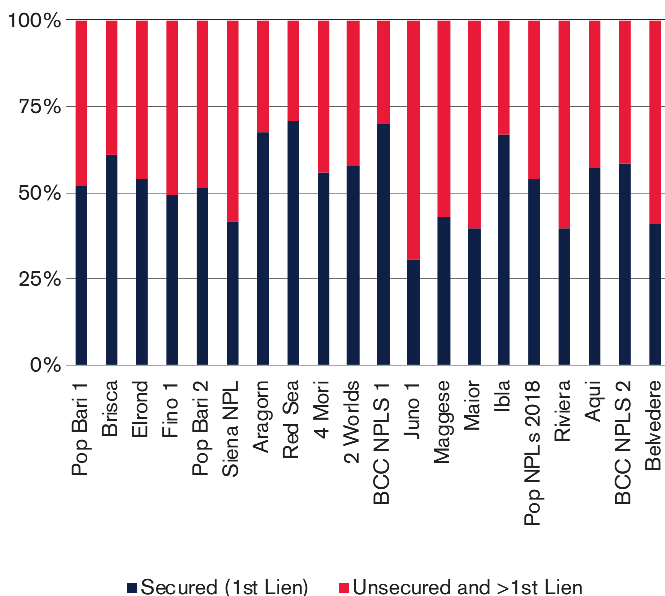
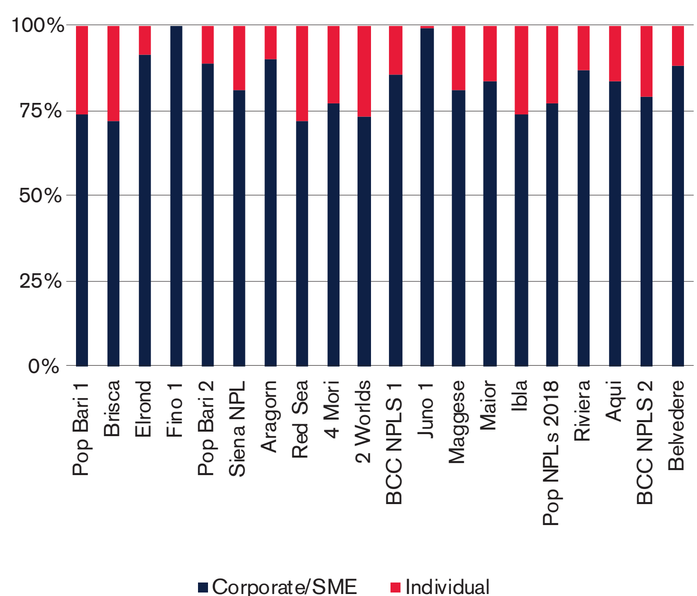


Exhibit 7: Type of Borrower



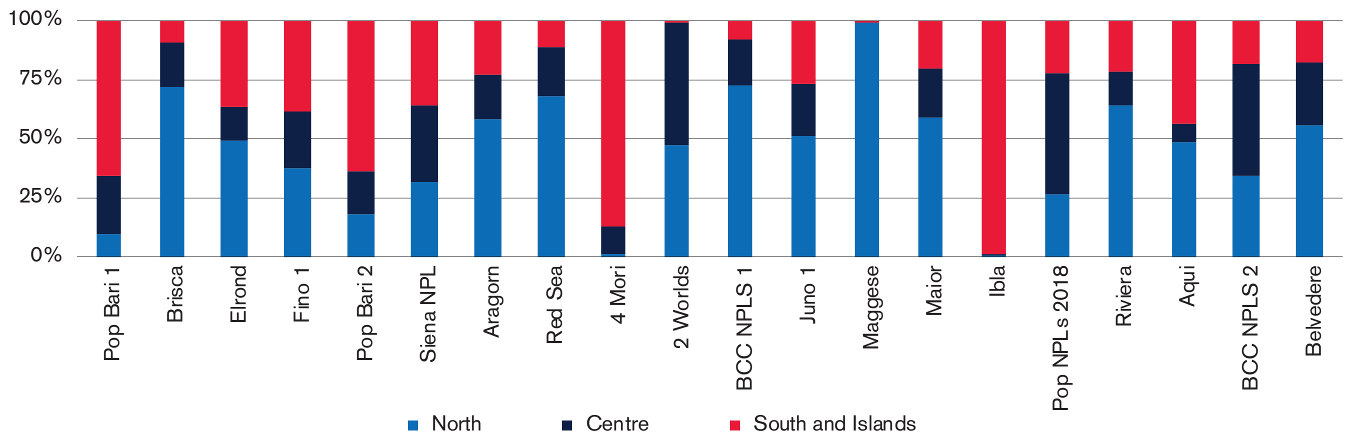
Source: DBRS Research, Offering Documents.

The average geographical distribution of the securitised collateral is 42% North, 27% Centre and 31% South and Islands. At the transaction level, there are significant differences, largely depending on the geographical focus of the originator. As a result, some transactions have a strong concentration either North of Italy or in the South and Islands.

Brisca Securitisation S.r.l. (Brisca), Aragorn NPL 2018 (Aragorn), Red Sea, BCC 2018-1, Maggese, Maior, Riviera and Belvedere have more than 55% concentration in the North. Here, Maggese stands out with nearly all (99%) of collateral located in the North.

On the other side of the spectrum, Pop Bari 1 (2016), Pop Bari 2 (2017), 4Mori Sardegna S.r.l. (4Mori) and Ibla have more than 60% exposure to the South and Islands. Here, Ibla stands out with nearly all (99%) collateral located in Sicily. Likewise, 4Mori has 87% exposure to the South and Islands in Sardinia.

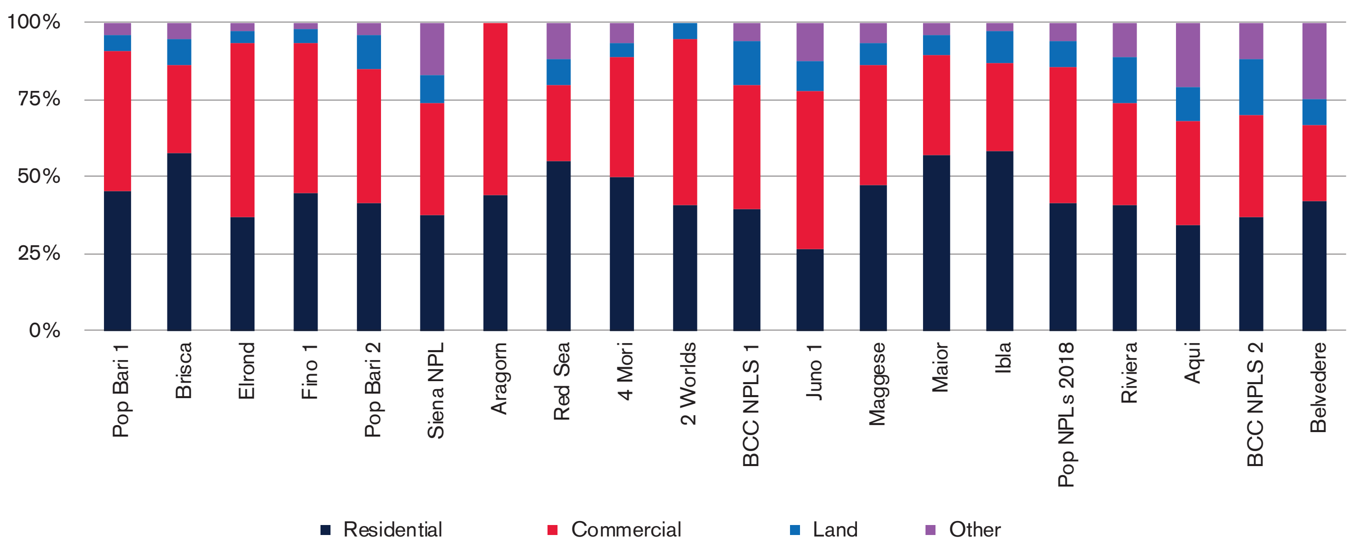
Exhibit 8: Distribution by Court



Source: DBRS Research, Offering Documents.

Italian NPL securitisations to date have also been heterogeneous in terms of property type underlying the secured loans. By property value, the average contribution of residential properties is 42% and commercial real estate (i.e., office, retail, industrial and leisure) is 38%. Land contributes 8% and "other" property types which, in some transactions, include already-sold properties, contribute 12%. No transaction shows full concentration toward one property type. Transactions with more than 50% exposure to residential properties are Ibla, Maior, Brisca and Red Sea while transactions with more than 50% exposure to commercial properties are Elrond, Aragorn, 2Worlds and Juno 1. There are several deals with more than 10% exposure to land – both BCC NPLS, Riviera, Pop Bari 2 and Aqui.

Exhibit 9: Property Type



Source: DBRS Research, Offering Documents.

Irish NPLs More Homogeneous than Italian NPLs

Unlike Italian NPL transactions, Irish NPLs are more homogenous, given that they consist entirely of secured loans granted to individual borrowers and are secured by residential properties. One differentiating factor between Irish NPL securitisations is that three of the four transactions issued since 2016 (ERLS 2016 was refinanced by ERLS 2018) also included a large percentage (15% to 40%) of performing (current) loans, except for ERLS 2017-1 NPL1 with 2.3% current loans as of closing.

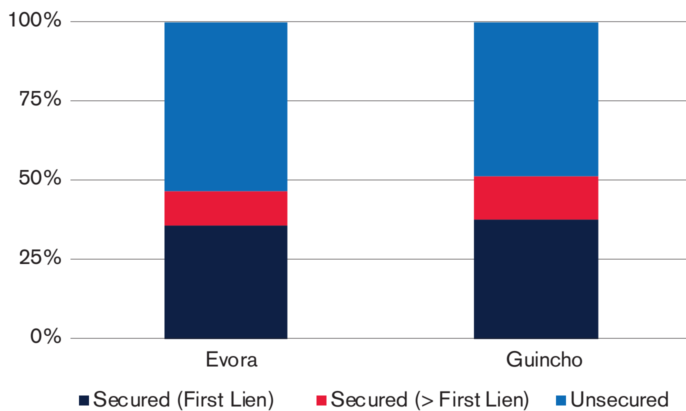
All Irish NPLs have a significant concentration in the Dublin area (20% to 33%). Three of the four transactions had approximately 12.5% buy-to-let exposure, except for ERLS 2017-1 with only 2.5%.

Another difference between Irish NPL and Italian NPL is the work-out strategy for defaulted loans. While Italian NPL servicers anticipate legal enforcement for the vast majority of loans, including legal auction for secured exposures, Irish NPL servicers are expected to follow alternative work-out solutions to a large extent (e.g., loan restructuring, discounted purchase offers or loan sale).

Portuguese NPLs Resemble Italian NPLs

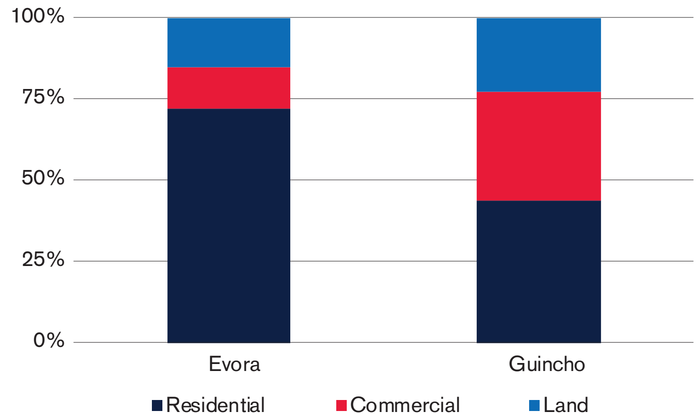
The two Portuguese securitisation transactions issued since 2016 resemble their Italian counterparts more than Irish NPL securitisations. The securitised portfolios are heterogeneous and consist of approximately one-third secured loans (first-lien security) – 36% and 38% in Evero and Guincho, respectively. The remaining loans are either unsecured or secured by subsequent liens.

Exhibit 10: Portuguese NPL by Security



Source: DBRS Research.

Exhibit 11: Portuguese NPL by Property Type



Source: DBRS Research.

Portuguese NPLs issued to date are dominated by corporate/SME borrowers – 65% by GBV in Evora and 82% by GBV in Guincho. In terms of property types, Evora is heavily skewed toward residential assets whereas Guincho is concentrated in commercial real estate and land (Exhibit 11), making it more comparable to the average Italian NPL. One aspect both transactions share with their Italian counterparts is the predominant work-out strategy that focuses on legal enforcement, including property auctions.

European NPL Securitisation Structures

Irish and Italian deals differ on their collateral portfolios and work-out strategies as well as their transaction structures. Unsurprisingly, Italian NPL securitisation structures since 2016 are heavily influenced by the rather prescriptive requirements of the GACS whereas Irish deals follow sponsor and investor demand to a larger extent. In addition, some structural differences between Irish and Italian NPLs stem from different work-out strategies. Irish NPL transactions typically have two or three mezzanine classes compared with one for Italian deals and many Irish deals include a subordinated note that could be redeemed by excess loan sale of REOCO proceeds, ahead of the senior and mezzanine notes. Obviously, Italian NPL transactions that utilise the GACS contain a senior-ranking cost item absent in NPL transactions in other markets: the GACS fee.

Another difference is that the most recent Irish deals contain a purely sequential waterfall for most net collections (i.e., principal on senior notes is paid before interest on more junior notes) combined with mezzanine note-level reserve funds that will be used to pay interest on these notes over time. Given these tranche-specific reserve funds, recent Irish NPL transaction structures do not contain mezzanine note interest deferral triggers. The exception is ERLS 2016-1 as this deal did not feature mezzanine-level reserve funds. Unlike Italian deals, the mezzanine note interest deferral trigger in this transaction was based on principal deficiency ledger debit and not on cumulative disposition proceeds and/or cumulative work-out profitability (see below).

Given the specific collateral type, European NPL transactions are not differentiated between loan interest and principal proceeds, but by combined principal and interest waterfalls at the transaction level. Italian and Irish transactions resemble each other in that they redeem note principal sequentially, but most recent Irish deals' senior note principal ranks senior to interest on more subordinated notes. In all Italian deals except Belvedere, interest on mezzanine notes will be paid from collateral proceeds unless a subordination trigger is breached. In Belvedere, principal on Class A is always paid before mezzanine note interest.

With similar collateral type and work-out strategies, the structure of the two Portuguese transactions issued in 2017 and 2018 more closely resemble Italian NPL than Irish NPL transactions, except for the GACS fee.

Spotlight on Italian NPL Securitisation Structures – Not Fully Standardised

Considering the descriptive nature of the GACS law, which requires transactions to follow a certain template to be eligible for the guarantee, it is not surprising that Italian NPL transactions issued since 2016 using the GACS strongly resemble each other. The GACS structural requirements include (1) that the GACS fee is paid senior in the waterfall, (2) that junior tranches are only repaid after the senior tranche, (3) that senior and mezzanine notes pay interest on a floating-rate basis and (4) that mezzanine note interest payments are deferrable. Notably, the GACS law requires that senior and mezzanine notes accrue interest on a floating-rate basis, which indicates the potential need for hedging instruments in the structure, given that the collateral is non-performing and, therefore, does not accrue interest on a floating-rate basis.

Cash Reserves – Liquidity

Available cash flow from NPL portfolios can be erratic; therefore, at the transaction level, sufficient liquidity provisions for portfolio cash flow shortfalls are important. In the context of Italian NPL transactions issued since 2016, as well as for all non-Italian NPLs, this liquidity provision is offered by cash reserves. On average, the cash reserve fund of all Italian NPL transactions is 4.4%, ranging from 3.5% (Siena NPL 2018 S.r.l. (Siena NPL 2018)) to 7.5% (Ibla S.r.l.). In some transactions, such percentage only references the senior notes whereas, in others, it references the aggregate of the senior and mezzanine notes. Except for one transaction, cash reserves amortise from day one in line with the target percentage, referencing either the senior note balance or senior and mezzanine note balance. In Maior SPV s.r.l. (Maior SPV), cash-reserve amortisation starts in year two of the transaction. In DBRS's view, a cash-reserve target percentage referencing the aggregate of the senior and mezzanine note balance provides more protection to Class A noteholders when the senior note is nearly fully repaid.

On the portfolio side, the extent to which a certain amount of cash reserve provides protection depends on several factors, including the secured/unsecured loan split, property types, the portion of the portfolio subject to bankruptcy proceedings and, importantly, portfolio granularity. At the transaction level, the extent of liquidity protection (in terms of time) a certain amount of cash reserve provides for senior bondholders in periods of low portfolio cash flow generation depends on the level of senior costs, note interest rates (including hedging provisioning) as well as margin and potential mezzanine interest deferrals. For Italian NPLs that utilise the GACS, the GACS fee amount is important, given their senior-ranking position and that non-payment would constitute a default under the GACS. In DBRS's observation, considering bonds rated BBB (low), annual GACS fees range from 0.5% in the first year to 4.6% in later years. Annual GACS fees depend on the rating of the senior class and increase over time.

DBRS notes that cash reserves and how they are funded are important considerations. For Italian NPL securitisations, DBRS observed different funding mechanisms:

- Limited-recourse loan (ten of the 14 DBRS-rated Italian NPL transactions): Cash reserve is funded on day one by such loan and the loan is repaid in subsequent periods by portfolio collections. The loan principal repayment typically ranks junior to senior costs and senior note interest, but senior to mezzanine note interest and senior note principal. In such structures, the limited-recourse loan effectively prefunds future collections and the cash reserve provides only liquidity support to the structure, considering that the collections used to repay the limited recourse would have otherwise been used to repay the notes.
- Initial collections (two of the 14 DBRS-rated Italian NPL transactions): Cash reserve is funded by portfolio collections after payment of senior costs and senior note interest. As in the first option, the cash reserve provides only liquidity support but, unlike a limited-recourse loan, there is higher reliance on initial collections.
- Subordinated loan or notes (two of the 14 DBRS-rated Italian NPL transactions): Cash reserve is funded by a subordinated loan or notes, which are repaid junior in the waterfall. In this situation, the cash reserve adds not only liquidity protection, but also credit enhancement to the senior and potentially the mezzanine notes.

Some Italian NPL transactions have additional reserves to cover recovery expenses or other items. Like the cash reserve fund, these reserves are either funded by limited-recourse loans, subordinated loans or notes or collections.

In its cash flow analysis for NPL securitisations, DBRS considers the amount of the respective reserves and how they are funded (e.g., a cash reserve funded by initial collections can be rating negative because, in certain stress scenarios, collections would not be enough to fund the reserve. If the same reserve was funded by a limited-recourse or even subordinated loan, however, the same rating scenario might pass).

For the matter of completeness, cash reserves in Irish and Portuguese deals range from 3.0% to 4.5% of the senior notes (if mezzanine notes have separate reserve funds) or all rated notes, respectively. In all cases, the reserves were funded with subordinated loans or notes.

Mezzanine Note Interest Deferral

Likely to increase investor interest in mezzanine notes, the GACS law states that interest on mezzanine notes needs to be paid junior to interest due on senior notes, but can be paid ahead of principal on the senior notes. During the analysis of NPL securitisations, such interest payments to non-senior notes (or equity) can pose a risk to senior investors in times of underperformance if collection proceeds are used to pay subordinated noteholders (or equity). To mitigate such risk, European NPL transactions that allow interest on more subordinated notes to be paid ahead of principal on senior notes usually incorporate interest deferral triggers based on one or two metrics. The first metric is typically the cumulative gross or net collections realised to date compared with a predetermined benchmark, which is usually the servicer's initial expectations (business plan). If actual cumulative collections fall below a certain level compared with cumulative expectations up to that point in time, mezzanine interest would be deferred. A cumulative collection trigger is usually preferred over a periodic comparison, given that actual collections of NPL portfolios can be volatile from one interest period to another. However, cumulative collections indicate only one part of the story for an NPL transaction's performance; it would be theoretically possible for a servicer to work out more exposures in a shorter period of time than initially expected, but at lower proceeds than expected. As a result, while cumulative collections would still meet initial expectations, remaining collateral would be depleted. To mitigate this, a cumulative collection trigger is often complemented with a cumulative closed file profitability trigger, which measures the extent to which aggregated recoveries of fully worked-out exposures exceed or fall short of initial expectations. If a transaction features a cumulative closed file profitability trigger, interest on more subordinated notes would be deferred if profitability is below a certain level compared with initial expectations.

Based on its analysis of Italian NPL securitisation transactions issued since 2016, DBRS formed the following observations:

- All transactions that utilise the GACS allow interest on mezzanine notes to be paid ahead of senior note principal. As mentioned above, the only Italian NPL transaction not utilising GACS (Belvedere) pays interest on the mezzanine notes only after principal on the senior notes.
- Of the Italian NPL transactions utilising the GACS, all but one (Elrond NPL 2017; not rated by DBRS) contain mezzanine note interest deferral triggers.
- Of the Italian NPL transactions utilising the GACS that contain mezzanine note interest deferral triggers, the vast majority (15 out of 18) incorporate both a cumulative collection trigger and a cumulative profitability trigger. In nearly all these transactions, the breach of either would result in mezzanine interest deferral (in one transaction, both triggers would need to be breached to result in mezzanine interest deferrals). In some transactions, triggers are based on gross collections while, in others, they are based on net collections. Likewise, some triggers are curable while others are not. Trigger levels also differ – while a 90%

threshold for both is featured most prominently (8 out of 15), levels range from 70% to 100%. DBRS notes that the higher the threshold, the more credit protection for senior noteholders.

- The remaining three transactions, notably including the two largest Italian NPL transactions (Siena NPL 2018 and Fino 1) incorporate either a cumulative collection trigger only or a cumulative profitability trigger only at different threshold levels ranging from 50% to 90%. For the transaction with the 50% cumulative collection trigger (Siena NPL 2018), the benchmark is not the initial servicer business plan, but a predetermined schedule set at a higher level than the business plan.
- Some transactions contain an additional trigger, according to which mezzanine interest would be deferred if interest paid on the senior notes is less than the "relevant amount." In DBRS's view, it is highly likely that any cumulative collection and/or cumulative profitability triggers will have already been breached in such an event. In addition, it will be highly unlikely that available cash is sufficient to pay interest on mezzanine notes.

Consequently, mezzanine note interest deferral triggers in Italian NPL securitisations are far from standardised and warrant closer analysis by investors. DBRS analyses the effects of different triggers (or their absence) and trigger levels in its cash flow analysis for European NPL transactions, including scenarios wherein the servicer initially performs in line with or beyond initial expectations (resulting in interest payment to mezzanine notes) before performance weakens.

For a matter of completeness, DBRS notes that the two Portuguese transactions issued in 2017 and 2018 contain a cumulative collection trigger and a cumulative profitability trigger with threshold levels of 90% each.

Hedging Structure

As mentioned above, the GACS law prescribes that senior and mezzanine notes should accrue interest on a floating-rate basis. Considering the nature of the collateral, absent an interest-rate hedge, this would expose the structure to the risk associated with rising interest rates, reducing the amount of collections available to repay note principal. From the viewpoint of senior noteholders, this interest-rate risk is even more elevated if mezzanine note interest is deferred relatively late or not at all. To mitigate such interest-rate risk, Italian NPL transactions incorporate hedges, but there is no real standardisation. In contrast, DBRS observes that hedging structures became more elaborate over the course of 2018.

- The hedge instrument of choice has most often been a cap agreement. More recently, some issuers used collars, separate cap agreements for senior and mezzanine notes and to additional floating-rate caps incorporated in the terms and conditions of the notes. One transaction combines a collar for the senior notes with a plain vanilla cap for the mezzanine notes.
- In some deals, the cap strike rates are constant over time whereas, in other deals, strike rates increase. DBRS observed constant strike rates as low as 0.1% and start strike rates of 0.0%. If increasing, the maximum strike rate was 3%. Mezzanine note floating-rate caps incorporated in the terms and conditions (if any) are typically 6% or 7%.
- Another variant in different hedging structures is the hedge notional which, at the outset of some transactions, is the combined senior and mezzanine note balance while, in others, the senior note balance only or less than the senior note balance or somewhat higher than the senior note balance. Over time, the hedging notional typically declines with various profiles. In some transactions, the hedge notional covers the expected note outstanding if the transaction performs in line with the business plan but, in other transactions, the hedge notional follows a slower pace.

When rating European NPL transactions, DBRS analyses hedge counterparty risk under the *Derivative Criteria for European Structured Finance Transactions* methodology. In its cash flow analysis, DBRS considers the hedging structure (amount hedged and cap, collar or swap rate) and would analyse potential underhedged exposure (if the hedge notional is lower than the relevant note notional in the relevant rating scenario) with its *Interest Rate Stresses for European Structured Finance Transactions* methodology.

DBRS notes that, when analysing cash flows and the hedging structures in a given rating scenario, there is a strong interrelation with mezzanine interest deferrals. An underhedged transaction with no triggers or relatively looser mezzanine interest deferral triggers will have more cash flow leakage to mezzanine noteholders to the detriment of senior noteholders in an adverse interest-rate scenario than a transaction with tighter triggers.

Benchmarking European NPL Securitisations

In securitisation, different asset classes typically have certain metrics allowing market participants to compare or benchmark transactions with each other. For example, the level of subordination or credit enhancement are typical metrics in residential mortgage-backed securities and in other asset classes that are characterised by homogeneous asset portfolios (i.e., Auto or Consumer ABS). In contrast, European commercial mortgage-backed securities (CMBS) usually consist of a low number of loans and note subordination depends on loan leverage, making it a suboptimal metric. A preferred metrics with which to compare different transactions in European CMBS is bond note-to-value (NTV). But what is the best metric for European NPL?

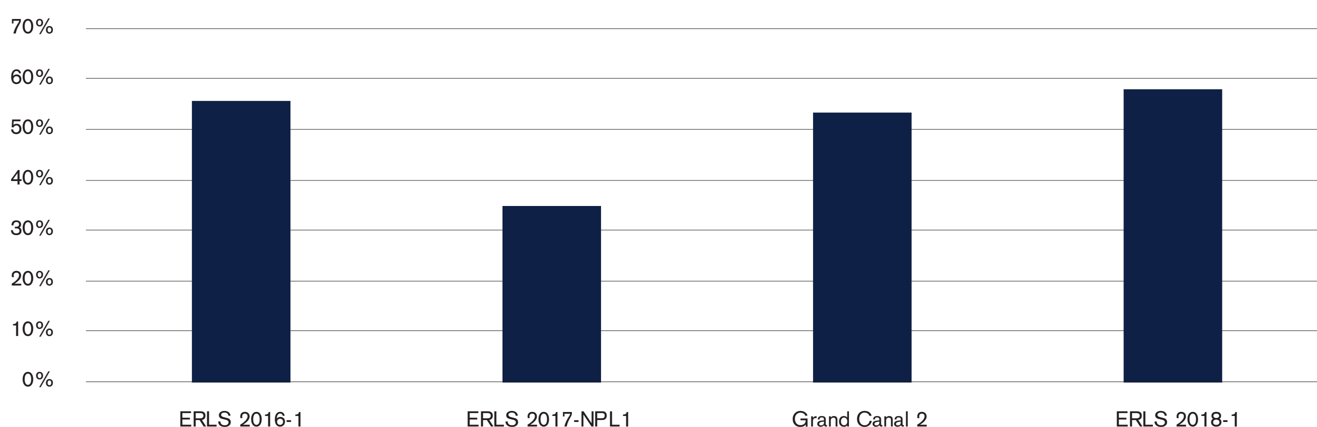
In DBRS's view, comparing subordination levels of different tranches in different transactions carries little value in European NPLs. Subordination levels depend on the issuer's choice with respect to the size of the subordinated notes, given that the sum of the issued notes is usually less than the GBV securitised, and it is the issuer's decision to what extent subordinated notes should be covered by expected recoveries. In Italian NPLs, the ratio of issued notes to GBV ranges from 14.3% in Fino 1 to 37.5% in Elrond NPL 2017; the simple average of all Italian NPLs is 28%. In Portuguese NPLs, this ratio is also around 30% whereas, in Irish NPLs, the ratio is closer to or at 100%.

In Italian NPLs, subordination below the senior class (usually in the BBB rating range) averaged 16% (simple average), but ranges from 8.3% (4 Mori Sardegna) to above 30% (Belvedere SPV and Siena NPL 2018). Subordination below the senior classes (in the BBB rating range) of the two Portuguese NPL transactions is above 30% in both cases. In Irish NPLs, the aggregate notional of the notes issued is typically close to the GBV and senior note (in the "A" rating range) subordination levels average 50.2%, ranging from 39.5% (ERLS 2018-1) to 56.5% (ERLS 2017-NPL1).

Likewise, a metric based on NTV (which is common in CMBS) is only of limited value in European NPL securitisations, except for the sub-market characterised by the securitisation of 100% secured loans (Ireland). In Italy and Portugal, the contribution of unsecured loans and loans secured by subordinate liens would distort any NTV benchmarking.

In Ireland, senior NTV levels for bonds rated in the "A" range have been in the mid-50% range, with the exception of ERLS 2017-NPL1. As mentioned above, ERLS 2017-NPL1 differs from the other Irish NPL securitisations as it contains nearly no performing loans.

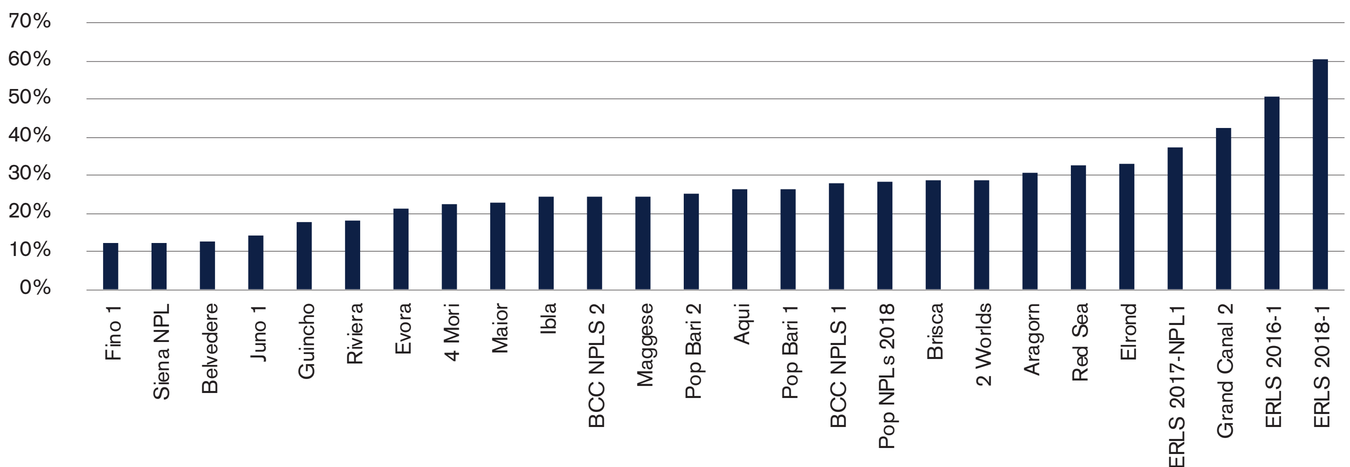
Exhibit 12: Irish NPL Class A NTV



Source: DBRS Research.

Considering that subordination levels in European NPL securitisations are to some extent depended on the ratio between total notes issued and GBV, a potential benchmarking metrics could be the note-to-GBV (cumulative note balance expressed as a percentage of GBV). However, like subordination levels senior note-to-GBV levels are very diverse, ranging from 12.1% to 60.5% (Exhibit 13).

Exhibit 13 – European NPL Class A Note-to-GBV



Source: DBRS Research, Offering Documents.

Senior classes of Irish NPL transactions generally have the highest note-to-GBV but, even within Italian NPL transactions, the senior class note-to-GBV ranges from 12.1% (Fino 1 and Siena 2018 NPL) to 33.0% (Elrond NPL 2017). DBRS notes that, to interpret note-to-GBV differences between different transactions, portfolio characteristics must be considered, including the default status of the loans (three of the four Irish deals contain a large percentage of performing loans), borrower type, the portion of secured versus unsecured loans and the property type and leverage for secured loans. Hence, comparing note-to-GBV levels only makes sense for transactions with similar collateral portfolios in terms of asset composition by loan type and leverage.

DBRS's preferred metric to compare different European NPL transactions is to relate the cumulative note balance to the initially expected gross disposition proceeds (GDP) (i.e., the initial business plan of the sponsor or servicer).

DBRS's European NPL rating methodology includes an assessment of the business plan to determine DBRS's base-case gross and net recovery expectations, making the methodology applicable to a variety of European NPL exposures, including Italian UTP loans. This includes analysis of who has determined the sponsor's expectations and the resulting potential bias that the business plan may have (e.g., recovery expectations of a motivated bidder in a portfolio sales process tend to be more conservative than those of a portfolio seller). In European NPL securitisations, business plans tend to be created by third-party servicers, which may or may not bid for servicing business themselves, creating a certain bias.

In the next step, DBRS stresses its base-case recovery expectations and the expected timing of recoveries to determine rating-dependent stressed recovery expectations. At the loan or exposure level, DBRS caps its expected recoveries at the servicer/sponsor expectation to avoid a scenario in which expectations in a stressed environment exceed the sponsor's or servicer's base case.

The level of rating stress DBRS applies to the servicer or sponsor GDP depends ultimately on a number of factors, including portfolio composition (secured versus unsecured), property types and, importantly, the level of stress already included in the sponsor's or servicer's expectations. To date, stresses to the GDP expected by the servicer or sponsor for DBRS-rated transactions were as follows:

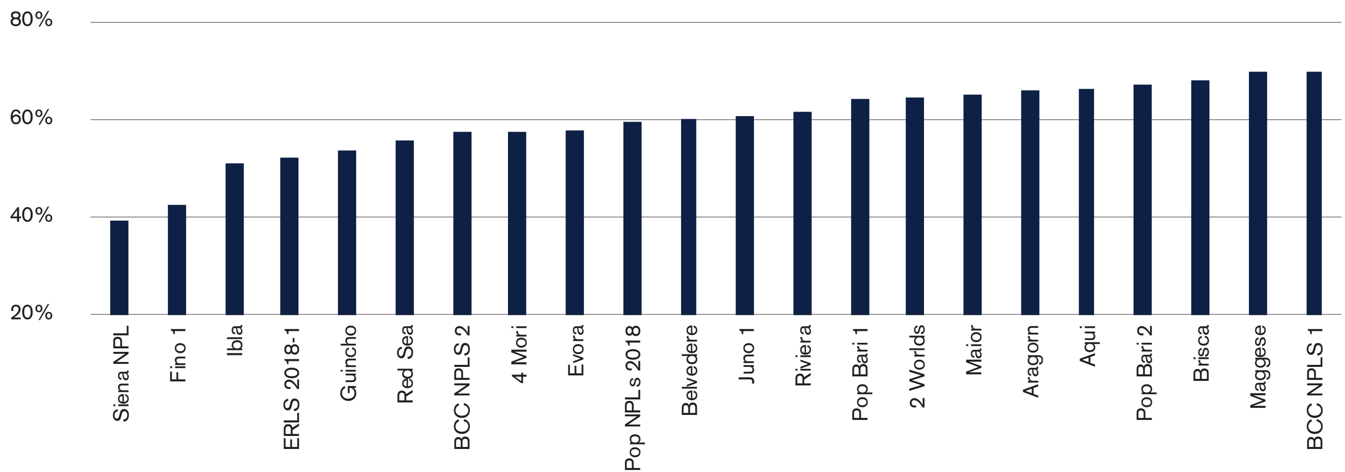
- Stress levels in the "A" rating category (Irish NPL) have been in the high-20% to low-30% range;
- Stress levels in the BBB rating category have ranged from 17% to low-30%;
- Stress levels in the BB rating category have ranged from 15% to 25%; and
- Stress levels in B rating category have ranged from 5% to 18%.

DBRS notes that the stress levels mentioned above only address the extent to which cumulative recoveries are stressed compared with the sponsor or servicer expectations. In addition, DBRS stresses the timing of recoveries, meaning that the actual stress is higher on a present value of cash flow basis.

Looking at senior note-to-GDP of recently issued European NPLs where initially expected servicer/sponsor GDP is publicly available, the range is narrower than for subordination levels or note-to-GBV (Exhibit 14). DBRS notes that, for all but one Irish NPL, the initial business plan is not publicly available and that, for the remainder (ERLS 2018-1), the senior note-to-GDP is at

a higher rating level ("A" range) than for Italian and Portuguese transactions (in the BBB range). Another transaction missing in Exhibit 14 is Elrond NPL 2017, which is not rated by DBRS and for which the initial business plan has not been disclosed to DBRS's knowledge. As mentioned above, Elrond NPL 2017 is the Italian NPL with the highest senior note-to-GBV.

Exhibit 14: European NPL Class A Note-to-GDP (Initial Servicer or Sponsor Expectation)



Source: DBRS Research, Offering Documents, Rating Reports.

As can be seen in Exhibit 14, for most European NPL securitisations, the senior note-to-GDP is around 60%, which is also the simple average, but outliers still exist. Notably, Siena NPL 2018's and Fino 1's note-to-GDP is low, which can be partially explained by the aforementioned interest deferral triggers. Based on cumulative collections only and set at a lower threshold than the relevant DBRS rating stress in both transactions, mezzanine noteholders receive relatively more interest in a stressed scenario relative to transactions with tighter triggers. As a result, the stressed cash flows can only support a smaller senior class as a proportion of expected collections. In addition, the senior bonds of Siena NPL 2018 and Fino are rated relatively high (BBB (high) and BBB, respectively). Another transaction with a low note-to-GDP is Ibla, which attracted a relatively high DBRS haircut amid its very high concentration in Sicily. For Portuguese NPL transactions, the differences in note-to-GDP can be attributed to different property types as Guincho is more concentrated in commercial properties and land, which typically attract higher stress than residential properties.

On the other side of the spectrum, BCC NPLS 1 (not rated by DBRS), Maggese and Brisca stand out with relatively high note-to-GDP levels. The latter two have a relatively high concentration in residential properties and in Northern Italy, both of which attract a lower haircut in DBRS's analysis.

Comparing Exhibit 13 with Exhibit 14, DBRS notes that benchmarking senior European NPL notes by note-to-GDP arrives at different results than benchmarking by note-to-GBP. For example, in the Italian NPL market, the Red Sea's senior note has a relatively high note-to-GBV at 32% (indicating relatively less credit protection), but a below-average note-to-GDP of 56%. In contrast, Belvedere and Juno 1 have relatively low note-to-GBV ratios at 12.6% and 14.2%, respectively, but average note-to-GDPs at 60%.

Overall, in DBRS's opinion, benchmarking European NPL transactions by initial sponsor or servicer expectations offers is a superior, although imperfect, method to comparing subordination levels or GBV. With some shortcomings, the note-to-GDP ratio ranks the extent to which the bond can withstand shortfalls of actual work-out proceeds compared with the servicer's or sponsor's initial expectations.

The limitations of the note-to-GDP metrics are related to interest due on the bonds. A note-to-GDP of 60% does not mean the senior bond can withstand underperformance at 40% as it does not consider the additional interest payments to be made on the bonds compared with the base case. In DBRS's experience, a senior bond with 60% note-to-GDP could withstand business plan underperformance of 20% to 25%, plus additional timing stress.

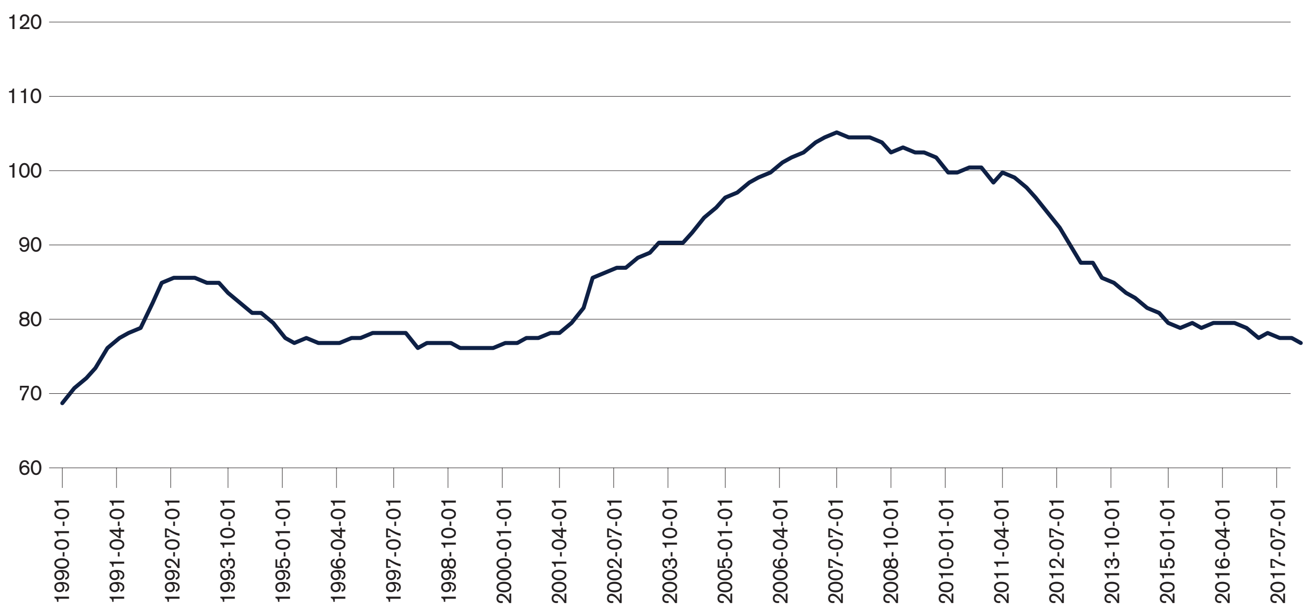
European NPL Securitisation Performance To Date

In terms of performance, the current macroeconomic dynamics in Ireland, Italy and Portugal are different as well as the conditions which brought on the emergence of NPL stock itself.

Despite significant disposals during the past years, NPL stock is still high at approximately EUR 153 billion as of Q3 2018 with an NPL ratio equal to 9.4% as of September 2018 (according to EBA Risk Dashboard) compared with the 3.4% average NPL ratio at the European level. Italian macroeconomic fundamentals have improved since the trough during the Great Recession with growth slowing modestly to 1.0% in 2018 and an estimated growth rate of 0.9% for 2019. The unemployment rate declined to 10.2% as of Q2 2018 from 11.3% as at the end of 2017.[3] House prices declined 27.2% since the peak in July 2017 and there has been a decline of 1.2% from January 2017 to January 2018.

Italian NPL Securitisation Performance to Date

Exhibit 15: Italy House Price Index



Source: Bank for International Settlements; Federal Reserve Bank of St. Louis (Index 2010=100, Quarterly, Not Seasonally Adjusted).

All DBRS-rated transactions have triggers to monitor performance – the cumulative collection ratio and the present value cumulative profitability ratio – with the exceptions of Fino 1 and Siena NPL 2018. In Elrond 2017-1 (not rated by DBRS), there are no performance triggers on a cumulative or present-value basis.

Considering the early stage in the recovery process, DBRS received more than one data point in terms of performance from the following transactions to date:

- Popolare Bari NPLS 2016 S.r.l. (Bari 2016),
- Brisca Securitisation S.r.l. (Brisca),
- Popolare Bari NPLS 2017 S.r.l. (Bari 2017),
- Fino 1 Securitisation S.r.l. (Fino 1), and
- Siena NPL 2018 S.r.l. (Siena NPL 2018).

These transactions are performing below the servicer's initial expectations with the exceptions of Brisca and Fino 1. Bari 2016 performed above the business plan until the last investor report as of December 2018, which displayed a reduction of -3.3% in collections compared with the initial business plan. DBRS also noticed that, for Bari 2016, the servicer reduced the expected collections by EUR 12.1 million or approximately 6.5% (to EUR 185.0 million from EUR 197.1 million) in an updated business plan. Bari 2017 has been consistently behind the initial business plan presented by the special servicer, currently -30.5%. Siena NPL 2018 has also been collecting less than envisaged in the initial business plan, currently at -6.6%.

3. Source: Organisation for Economic Co-operation and Development (OECD).

DBRS also received one performance report for the following transactions:

- 4Mori Sardegna s.r.l. (4 Mori)
- Juno 1 s.r.l. (Juno 1)
- Maior SPV s.r.l. (Maior SPV)

As per the last investor report, 4Mori is behind the business plan by 3.1% while collections for Juno 1 are exceeding the business plan by 95.5%. Recoveries for Maior SPV are also above the initial business plan by 18.1%.

DBRS also received a notification that Aragorn breached its cumulative collection ratio; however, the trigger is set at the highest threshold levels for all Italian NPLs (100% until 31 July 2019 and 90% from January 2020 onward).

As mentioned, DBRS received performance updates for eight transactions (excluding Aragorn, for which only a notice was received) with meaningful data for five, three of which are underperforming the initial business plans in terms of cumulative recovery amounts. However, actual collections are above DBRS's expected stressed recoveries for the senior notes, except for Bari 2017, which is currently behind by 6.0%.

Thus far, the present-value cumulative profitability ratio has been above 100%, indicating that servicers are liquidating assets above their initial expectations with the exceptions of Fino 1 and Siena NPL 2018, for which there is no such mezzanine interest deferral trigger. As such, it appears that, for transactions underperforming initially expected cumulative recoveries, servicers are working out the exposures slower than initially expected, but the exposure-level recoveries are still in line with or higher than initial expectations.

DBRS did not receive any updated business plans during 2018, except for Bari 2016, but expects to receive several updates during 2019. DBRS will continue to monitor the business plans and recovery expectations in terms of timing and recovered amounts.

Exhibit 16: Cumulative Collections versus Initial Business Plan

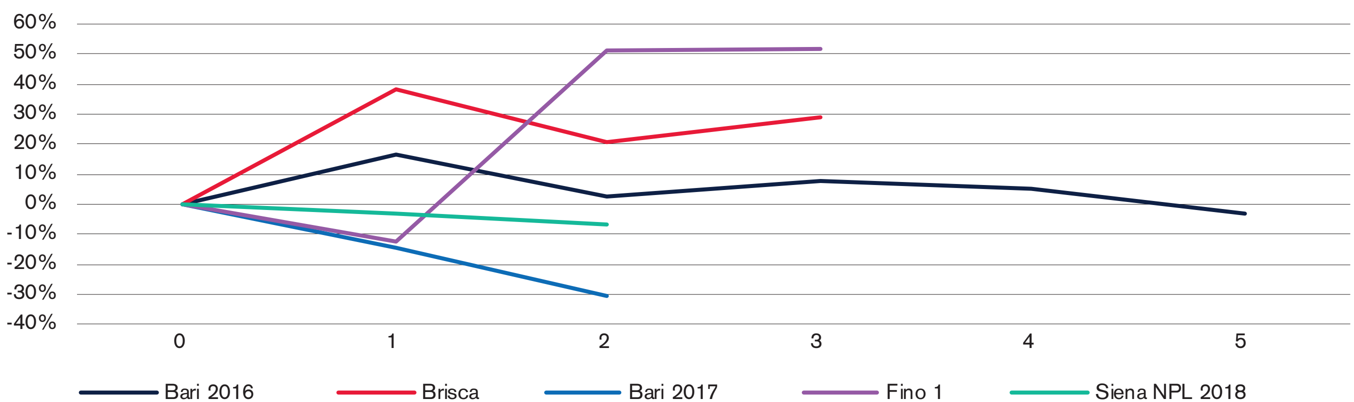
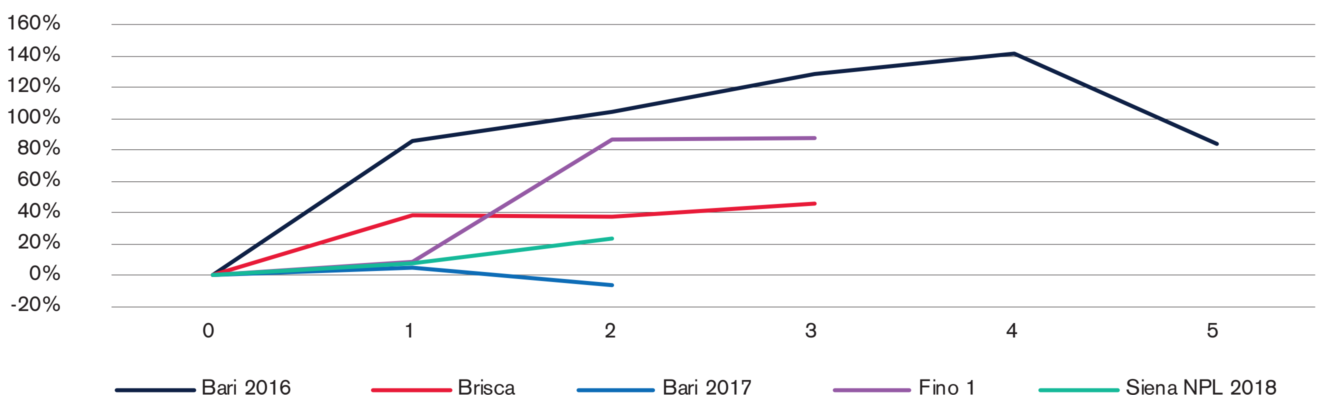


Exhibit 17: Cumulative Collections versus DBRS Senior Note Estimated Collections



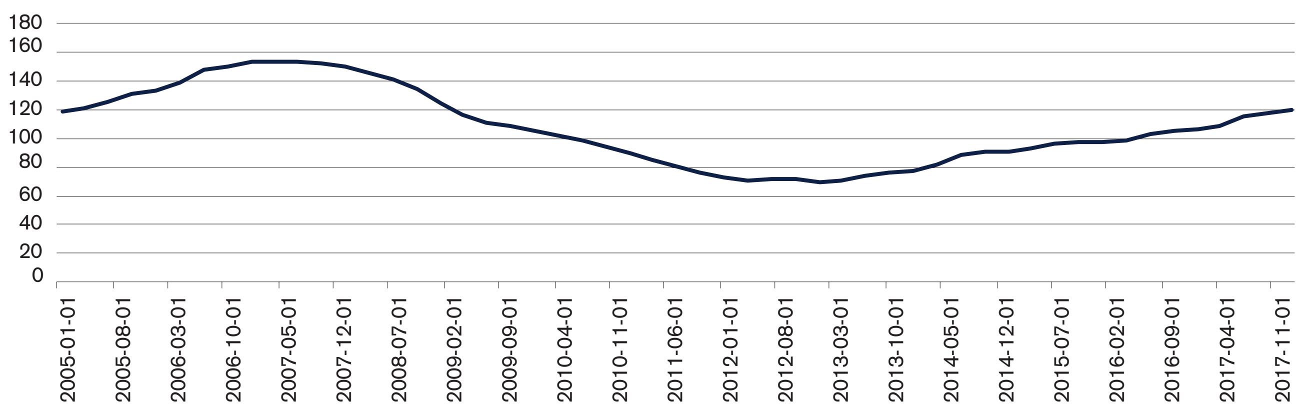
From the data gathered thus far, some Italian NPL transactions are recovering at a slower pace than the servicers estimated, but the vast majority are still higher than DBRS senior note rating stresses. To date, closed file profitability has held up, indicating that underperformance (if any) is currently timing related. However, it is too early in the recovery process to define a clear trend.

The slower performance than business plans might be a result of several factors: (1) the sheer amount of collateral which is being liquidated from 2016-2018 portfolios (worth approximately EUR 166 billion by GBV have been sold, nearly EUR 53 billion of which is securitised); (2) onboarding of NPLs as special servicers need time to digest new portfolios and commence recovery activity; and (3) court timing as the Italian government has implemented several changes aimed at speeding up the foreclosure process to make Italy a more creditor-friendly jurisdiction (however, considering (1), the government might be facing a significant legal and procedural overload).

Irish NPL Securitisation Performance to Date

Irish macroeconomic fundamentals are strong and supportive of positive performance for NPL transactions. The Irish property market is improving and economic performance is stable. Real GDP growth in 2018 is robust at 5.9% and is forecast at 4.0% for 2019 with unemployment levels equal to 5.7% as of Q3 2018.[4] Although Irish house-price declines were severe, prices have since recovered 71.4% from trough values. From January 2017 to January 2018, there has been a 12.3% increase in Irish residential property prices.

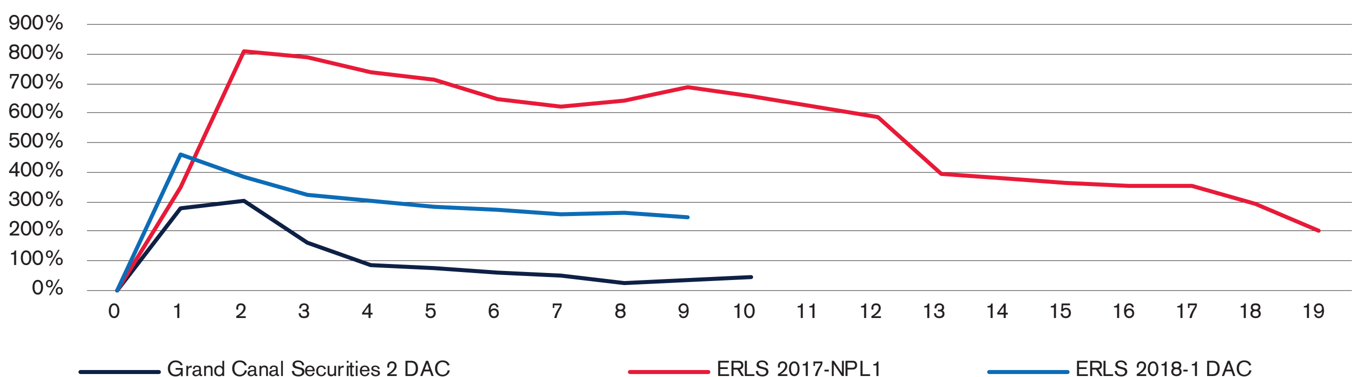
Exhibit 18: Irish House Price Index



Source: Bank for International Settlements; Federal Reserve Bank of St. Louis (Index 2010=100, Quarterly, Not Seasonally Adjusted).

As previously mentioned, DBRS assigned ratings to four Irish NPL transactions, three of which are still outstanding; however, all transactions are well above the stressed DBRS assumptions in relation to the senior notes.

Exhibit 18: Performance vs DBRS Senior Notes Collections



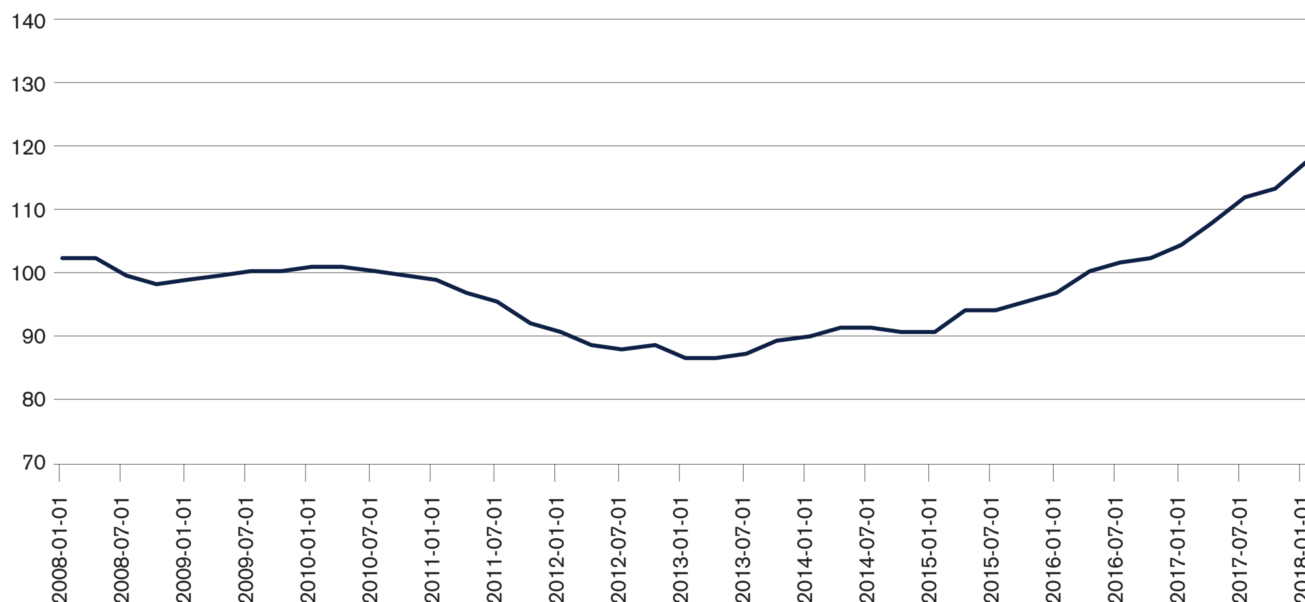
It is important to note that business plans produced by the servicers are quite conservative as they do not consider the sale of the receivables once they become performing (which is a common practice and one of the strategies used by special servicers). Also, except for ERLS 2017-NPL1, which is a purely NPL transaction, all Irish transactions are a mix of performing and non-performing residential mortgage loans.

4. Source: OECD.

Portuguese NPL Securitisation Performance to Date

Portuguese macroeconomic dynamics look favourable with a real GDP growth of 2.1% in 2018 and a forecast of 2.0% in 2019. Unemployment stands at 8.3% as of Q3 2018.[5] The maximum house price was observed in January 2018 and, from January 2017 to January 2018, there has been an HPI of 12.2%.

Exhibit 20: Portuguese House Price Index



Source: Bank for International Settlements; Federal Reserve Bank of St. Louis (Index 2010=100, Quarterly, Not Seasonally Adjusted).

DBRS assigned ratings to two Portuguese transactions. Evora is performing well above the servicers' initial recovery expectations, but there are only two data points as of November 2018. The cumulative collection ratio is equal to 249.0% (279.0% for Whitestar and 82.0% for Hipoges) while the net present value cumulative profitability ratio is equal to 136.9% (135.3% for Whitestar and 224.6% for Hipoges).

There is no data for the second Portuguese NPL securitisation yet. It is DBRS's view that most transactions are still in the initial stages of the recovery process and there are not enough data points to form a consolidated view at present.

Conclusion

European NPL securitisation transactions differ from deal to deal. Generically, there are regional differences to the transactions, but each deal has unique characteristics. There are some generic parts to their structures across regions, but even these can vary based on the choices made due to the collateral and participants in the transaction. Performance to date ranges from very strong to underperforming; however, none of the deals at this point are underperforming dramatically. DBRS will continue to monitor transactions as servicers adjust to working within a deal structure and to the collateral.

5. Source: OECD.

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