Dutch covered bonds
Finessing fundamentals

The strong performance we have seen from Dutch covered bonds confirms the good market interest in the product, from bullet up to conditional pass-through. Investor comfort with Dutch covered bonds has been supported by the improvement in the fundamental backdrop, with the proposed changes to the Dutch covered bond regulation being a definite bonus.

There are probably few covered bond markets that have attracted the amount of attention that the Dutch covered bond market has over the past two years. The introduction by NIBC Bank of its conditional pass-through covered bond programme in 2013 indeed put the market right in the spotlight. Here we saw a smaller moderately rated Dutch issuer that managed to achieve it all: a transfer of refinancing risk to investors, lower overcollateralization levels, more stable AAA ratings, a removal of the swaps burden under its programme, ...and... attractive funding levels.

This all occurred against a backdrop of the Dutch housing market still struggling to recover from a prolonged period of house price declines, the Dutch sovereign facing rating headwinds and the drafting of the Bank Recovery and Resolution Directive promising a future of declining government support for banks.

It proved to be something of a sign. Dutch covered bonds aligned themselves among the strongest performing core European jurisdictions this year. For many years concerns with respect to the future of the mortgage rate tax deductibility and the related consequences for the Dutch housing markets kept Dutch covered bond spreads at relatively elevated levels versus other core countries. As did investor unease with the Dutch principle-based covered bond legislation, perceived as comparatively weaker by investors.

But things have demonstrably changed. The housing market is bottoming out and economic growth conditions are showing signs of improvement. The market is gradually adjusting its doom and gloom expectations about the impact of the past years’ housing market policy measures, towards their more promising longer term effects on household indebtedness.

Equally, if not more important, in March this year the Dutch regulator gave investors some first insights into the potential amendments to the Dutch covered bond legislation. Proposals such as the introduction of a 5% minimum overcollateralization requirement, a 180 day liquidity rule and stricter asset eligibility criteria served to further enhance investor comfort with the Dutch covered bond product.

In the meantime, primary market activity of Dutch issuers offers very few opportunities to gain exposure to Dutch covered bonds. The lower funding needs of banks contributed to a decline in € benchmark issuance to €3.25bn last year. With €2bn issued in the first half of this year, and the funding needs of banks expected to remain low until we see a stronger recovery in bank lending, supply is not expected to show a significant increase.

While technicals remain supportive for the performance of Dutch covered bonds, we believe that today’s tight trading levels will restrict the potential of Dutch covered bonds to further outperform versus other jurisdictions. Dutch covered bond curves are currently flat and can be expected to show some re-steepening especially over the flat 7-10yr part of the curve where spreads over sovereign alternatives are least attractive.
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Introduction

In 2012 we published a special report on Dutch covered bonds, discussing among other things the Dutch covered bond regulation, programme characteristics, rating agencies’ view on the bonds and their performance. A lot has changed since. Not only did the market welcome a new covered bond product with NIBC Bank’s conditional pass-through covered bonds, the Netherlands is also on the verge of making some far reaching improvements to its covered bond legislation. Numerous programme amendments, altered, among other things, some of the key characteristics related to the monthly Asset Cover Test performed by Dutch issuers. Furthermore, important policy measures have been implemented in the past two years with respect to the Dutch housing market that will positively impact collateral pools and covered bond fundamentals. Rating agency methodologies have been subject to changes, not in the least due to the Bank Recovery and Resolution Directive (BRRD), also affecting Dutch covered bonds. These are all reasons to update this report. Parts of the content remain unchanged and may look familiar to those who have read the previous report, but we have also included new material and expanded the report where we felt further details were warranted.

We hope the document proves valuable for those market participants that wish to gain more detailed insight in the characteristics of Dutch covered bonds. The first chapter discusses the amended regulatory framework according to the proposals. The amendments are expected to come into force on 1 January 2015, but may be subject to revisions before that time and are likely to be complemented with a ministerial regulation providing further detail on among others the criteria for asset segregation, asset eligibility, supervision and reporting requirements. The most important changes made to the Dutch covered bond legislation, include the introduction of a minimum overcollateralization requirement of 5% and a 180 day liquidity rule, covering interest payments and (for hard bullet covered bonds) redemption payments due over a period of six months. The criteria for asset eligibility are also strengthened, while the minimum rating requirement for the issuance of covered bonds will be removed. We end the chapter by analysing the amended legal framework based upon, among other things, the recent EBA best practice proposals, concluding that the intended amendments, irrespective of their “principle based” character, create a very robust legal backbone supporting Dutch covered bonds.

The chapter on programme characteristics gives a detailed overview of the structural differences between the Dutch covered bond programmes. We make no reference to the structured covered bond programme of Achmea Hypotheekbank as the issuer no longer has € benchmark covered bonds outstanding. Among the four registered Dutch covered bond programmes the structural differences are most evident between the regular bullet covered bonds and NIBC Bank’s conditional pass-through covered bonds. These differences stretch beyond the maturity extension feature, and include asset segregation characteristics, the minimum overcollateralization commitment of 15%, features tackling commingling risks and set-off risks and the consequences of a breach of the programme tests. Also the regular covered bond programmes sometimes have specific features distinguishing them from the other programmes. SNS Bank’s programme stands out for its soft bullet covered bond maturities, collection foundation account and the introduction of a commingling risk reservation under the Asset Cover Test. The issuer also commits itself to an overcollateralization level in line with an Aaa rating at Moody’s, irrespective of the actual rating of the covered bonds at this rating agency. ING Bank is the only issuer making use of automated valuation models (AVM) to calculate the original loan-to-market value on its mortgage loans, while ABN AMRO Bank qualifies mortgage receivables as defaulted (i.e. not eligible) if they have been in arrears for more than three months, rather than for a period longer than six months.
In the chapter on **collateral pool resilience** today’s housing market developments are discussed. The Dutch housing market is slowly recuperating from the price correction that started in 2008. Our economists expect that house prices will continue to rise on the back of stronger consumer confidence and improved housing affordability. However, the housing price declines in the past five years have had a significant impact on indexed loan-to-value ratios in the Netherlands which are now, for all collateral pools, above the 80%. Yet delinquencies remained low. The 100% owner occupied and fixed rate loan characteristics of Dutch mortgage receivables are important reasons, with the solid social security system in the Netherlands mitigating the impact of rising unemployment rates in recent years. Housing market related policy measures such as the introduction of LTV caps, limitations to the tax advantage on mortgage interest payments and restrictions on interest only loans, have up until now hardly impacted Dutch collateral pools, but are expected to improve cover pool and covered bond fundamentals longer term.

The **rating agencies** chapter discusses the view of Moody’s, Fitch and S&P on Dutch covered bonds. The in majority Aaa/AAA/AAA ratings for Dutch covered bonds confirm the rating agencies’ comfort with Dutch bank and covered bond fundamentals. Dutch bullet covered bonds have a Timely Payment Indicator (TPI) of “Probable” at Moody’s, a D-Cap of 4 at Fitch and are classified in programme Category 2 at S&P with “Low” ALMM risk. By designing its programme in such a way that payments on the assets can be passed-through to investors if redemption obligations cannot be met at the maturity date, NIBC Bank managed to obtain a D-Cap of 8 at Fitch and a “Zero” ALMM risk classification at S&P. The issuer thereby found a way to achieve a (more stable) AAA equivalent rating despite its BBB- equivalent issuer ratings.

In the chapter on **supply and demand dynamics** we show that the Dutch covered bond market nowadays has a €62.7bn size, of which €42.1bn has been issued in € benchmark debt. Covered bond supply has slowed down significantly on the back of the lower funding need of banks and due to the fact that two issuers for a period of time didn’t have access to public covered bond funding as their covered bond ratings no longer fulfilled the minimum regulatory rating requirement. The slow supply conditions are not expected to change in the coming year, with the general funding need of banks expected to remain low until we see a stronger recovery in economic growth and bank lending conditions. We do not expect existing issuers to set-up pass-through programmes for the funding of their mortgage lending business next to their existing bullet programmes. This may render the existing programmes inactive, which could have negative reputational or rating consequences. Even though any potential new issuers might opt for a conditional pass-through product, this part of the market is expected to remain small compared to the traditional bullet covered bond market in the Netherlands.

The chapter on the **secondary performance** confirms the impressive performance of Dutch covered bonds compared to other core European market this year. The proposed changes to the Dutch covered bond legislation, the improvement in the Dutch housing market conditions, the more favourable trend in Dutch covered bond ratings and the limited supply in Dutch covered bonds have all enhanced their performance. Today’s relatively tight trading levels do restrict, in our view, the potential of Dutch covered bonds to further outperform covered bonds from other jurisdictions. We also think that Dutch covered bond curves look flat at the moment and expect to see some re-steepening in particular over the 7-10yr part of the curve.
The Dutch regulatory framework

Regulatory background
The Dutch regulatory framework for the issuance of covered bonds came into effect on 1 July 2008. Dutch covered bond issuance has been regulated since via the 3 June 2008 Dutch Covered Bonds Decree, amending the Decree on Prudential Rules for Financial Undertakings and the Decree on Conduct of Business Supervision of Financial Undertakings,¹ and the 19 June 2008 Ministerial Regulation amending the Regulation Implementing the Financial Supervision Act.² At that time, the principal aim of the legal framework was to set up a level playing field for Dutch banks issuing covered bonds to comply with article 52(4) of the UCITS Directive or other relevant EU Directives to make sure that the bonds held by bank investors would qualify for a preferential risk-weighting, while insurer investors and collective securities investment enterprises (CSIEs) would benefit from less restrictive exposure limits. The Dutch covered bond rules were structured in such a way that all contractual covered bonds that had been issued to that date would fit into the legal framework.

As the covered bond rules were included in secondary legislation, the possibilities to subject Dutch covered bond issuers to additional requirements have been restricted. For that reason, on 14 August 2013 the Dutch government published a draft bill (Amendment Act Financial Markets 2015)³ proposing to amend the Financial Supervision Act (Wft)⁴. In order to strengthen the supervisory regime with respect to Dutch covered bonds, the amendments to the Financial Supervision Act intend to bring the legal framework for covered bonds to the level of this law. On 14 March 2014, the Dutch regulator published the draft Amendment Decree Financial Markets,⁵ proposing further rules (AMvB) for the implementation of the aforementioned amendments to the Financial Supervision Act.

The Amendment Act Financial Markets 2015 was sent to Parliament on 11 April 2014. The revisions to the Dutch covered bond legislation are expected to come into force on 1 January 2015. At the time of writing of this report, the final details of the regulation had not been published. Therefore the regulatory overview discussed in the remainder of this section may still be subject to revisions, while further details may be provided via a ministerial regulation at a later stage.

Asset segregation
The asset segregation features protecting covered bondholders in the case of bankruptcy of the issuing bank and giving them preferential rights over other bondholders regarding the cover assets broadly remain the same. In order to secure cover assets in favour of the covered bondholders, the assets have to be transferred to a separate legal entity, i.e. the Covered Bond Company (CBC). This legal entity is solely responsible for the management of the assets and for making payments to the covered bondholders, and does not perform any other corporate function. The Covered Bond Company gives a right of lien over the cover assets to another separate legal entity (the Security Trustee), that represents the interests of the covered bondholders. To assure the independence of both legal entities, the issuing bank is not allowed to hold shares in or have control over the policy of these legal entities.

¹ Besluit gedekte obligaties, ter wijziging van het Besluit prudentiële regels Wft en het Besluit gedragstoezicht inzake financiële ondernemingen Wft
² Regeling tot aanpassing van de Uitvoeringsregeling Wft
³ Wijzigingswet financiële markten 2015
⁴ Wet op het financieel toezicht (Wft)
⁵ Wijzigingsbesluit Financiële Markten 2015
That said, other issuance and asset segregation models are not ruled out. If as a consequence of market innovations, an alternative safe structure is considered to adequately secure the cover assets for the purpose of covered bondholders, this can be regulated via a ministerial regulation upon consultation with the Dutch Central Bank (DNB).

### Categorization and asset eligibility

The Dutch covered bond legislation will no longer provide for a distinct description for “covered bonds” versus “registered covered bonds”. Only the latter will be defined by the law. Dutch registered covered bonds are UCITS\(^5\)(4) compliant. This means that collective securities investment enterprises (CSIEs) and life- and non-life insurers are allowed to have exposure to one issuing bank of 25% and 40% respectively, compared to 10% or 5% for normal bonds. Fulfilment of the requirements of Article 129 of the CRR, facilitating preferential risk weight treatment for banks holding the bonds, remains optional, although the cover asset eligibility criteria do promote alignment with the CRR.

**Asset eligibility**

Cover assets are defined as assets that, in the case of a default of the issuer, are allocated with priority to the covered bondholders to assure that the coupon and redemption obligations of the registered covered bonds are met. Under the amended legislation, the cover assets securing the covered bonds can consist of primary cover assets and substitute cover assets.

- **Primary cover assets** are defined as assets that can be used *without restriction* to secure a category of covered bonds, based upon the applicable conditions for that category.\(^6\) These are in the first place CRR eligible assets, such as exposures to sovereigns or public sector entities located in the EU, eligible exposures to sovereigns or public sector entities outside the EU, residential mortgage loans or eligible guaranteed housing loans, commercial mortgage loans and ship loans. CRR eligible AA- or better rated senior securitization notes do not qualify as primary cover assets. Other asset classes permitted to be used as primary cover assets may be set out in a ministerial regulation. Only programmes that aim to be CRR compliant also have to fulfil the applicable soft LTV restrictions defined by the CRR of 80%, 60% and 60% respectively for residential mortgage loans or eligible guaranteed housing loans, commercial mortgage loans and ship loans.\(^7\)

- **Substitute cover assets** on the other hand may consist of all CRR eligible assets, including eligible AA- or better rated senior securitization notes up to 10% of the nominal amount of the outstanding issue, and exposures to AA- or better rated institutions if they do not exceed 15% of the nominal value of the outstanding covered bonds.\(^8\) Only programmes that commit to being CRR eligible, are subject to the restrictions mentioned here for CRR eligible assets. Substitution assets can be used as cover assets up to 20% of the nominal amount outstanding in a category of registered covered bonds. However, via a separate a ministerial regulation further rules with respect to this maximum can be provided.

With these requirements the Dutch regulator introduces specific collateral pool restrictions that are non-existent under the current covered bond rules. Via a ministerial

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\(^5\) Registered covered bonds are UCITS\(^5\)(4) compliant but not necessarily CRR compliant

\(^6\) A “category” of registered covered bonds, is a segment of covered bonds that are issued by the same bank under the same conditions and under the same coverage. The issuing bank can register covered bonds that are issued under the same conditions at one specific moment in time as “category”, or the bank can register all covered bonds of a certain type, issued at different moments in time under a single programme as “category”.

\(^7\) The LTV ratio for commercial loans can exceed the 60% cap under the CRR up to 70% if the value of the assets pledged as collateral for the covered bonds exceed the nominal amount outstanding on the covered bonds by at least 10% and the bondholders claim takes priority over all other claims on the collateral.

\(^8\) Exposures to A- up to A+ rated institutions within the European Union with a maturity not exceeding 100 days are also eligible under this 15% cap under the CRR.
regulation the scope of eligible primary assets may still be expanded beyond the aforementioned CRR eligible asset classes, potentially offering banks the opportunity to issue registered covered bonds against aircraft loans, SME loans, corporate loans, credit card receivables or leasing receivables, to name a few examples. However the eligibility criteria will still be specified by the regulation. This is an improvement compared to the current covered bond rules, where criteria on cover asset eligibility are fully absent.

**Categorization**

Upon request for registration of a category of registered covered bonds, the issuing entity has to specify to the Dutch Central Bank which conditions are applicable for this category of registered covered bonds. These comprise the contractual features backing the issuance of covered bonds under the registered programme, including the size of the programme, the rights and obligations of the Covered Bond Company and the Security Trustee, the rights of the covered bondholders, the type of cover assets and the risk management procedures. However, to enhance transparency to investors and to avoid that registered covered bonds that differ structurally are issued from the same programme, the bank has to specify at least the following conditions:

- **The redemption structure** of the covered bond: i.e. is the covered bond a hard bullet or a soft bullet covered bond, or does it have a pass-through redemption structure? More specifically the redemption structure allows for a distinction between two types of registered covered bonds:
  
  o *Regular covered bonds*: covered bonds with a hard bullet maturity structure or with a soft bullet maturity structure with an extension period up to 24 months
  
  o *Pass-through covered bonds*: covered bonds with an extendible maturity structure of more than 24 months (conditional pass-through or pass-through).

  Hard and soft bullet covered bonds with an extension period up to 24 months can be issued under the same programme, but (conditional) pass-through covered bonds have to be issued under a different programme for covered bonds with an extension period of more than 24 months.

- **The type of primary cover assets** used as collateral

- **Whether the cover assets** are eligible for preferential risk-weight treatment under Article 129 of the CRR.

- **In which country** the debtors of the cover assets are located and by what law the cover assets are covered.

These conditions can be further expanded in a ministerial regulation.

**Fig 1** Existing types of Dutch covered bonds

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<th>Type</th>
<th>Issuer</th>
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<td>Structured Covered Bonds</td>
<td>Achmea Hypotheekbank</td>
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<tr>
<td>Registered covered bonds (UCITS 52(4) compliant)</td>
<td>ABN AMRO Bank, ING Bank, SNS Bank</td>
</tr>
<tr>
<td>Registered covered bonds (CRR Art 129-compliant)</td>
<td>NIBC Bank</td>
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<tr>
<td>Regular (hard bullet)</td>
<td></td>
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<tr>
<td>(soft bullet)</td>
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Source: ING

The issuing entity needs to make sure that covered bonds, registered within a specific category, continue to fulfil the conditions specified by the issuer upon registration. Issuers can opt to include only one type of primary cover assets, but can also opt to include multiple types of primary assets such as residential and commercial mortgage loans. That said, issuers are not allowed to add commercial real estate assets to the collateral pool if
they indicated that the pool would only contain residential mortgage loans. This reduces substitution risks for Dutch collateral pools, irrespective of the strict collateral pool requirements that are already laid down in the existing programme documentation and the potential reputational consequences of programme amendments. It also mitigates risks associated with documentation changes that may affect a programme's CRR eligibility. That said, the aforementioned does not prohibit issuers that initially did not fulfil the CRR criteria, to commit to these criteria at a later stage.

Although issuers can choose to meet the CRR requirements for preferential risk weight treatment, which implicitly means they have to comply with the related valuation (LTV) criteria for the cover assets, the Dutch covered bond rules still do not explicitly specify LTV limits for residential and commercial mortgage loans. A ministerial regulation may cover this at a later stage. The same holds for the geographical scope of the cover assets. Under the current regulatory regime, assets securing Dutch covered bonds have to be located in an EU member state, the US, Canada, Japan, Korea, Hong Kong, Singapore, Australia, New Zealand or Switzerland. The Dutch regulator could decide to amend this scope via a ministerial regulation, aligning it for example with EBA’s best practice recommendations to restrict asset eligibility to EEA jurisdictions.

**Asset coverage**

Under the current Dutch covered bond rules, the cover assets always have to be sufficient to pay coupon and redemption obligations on the covered bond as well as administrative costs and management fees under the covered bond programme. Although this implicitly requires issuers to keep a certain amount of overcollateralization for administrative costs or management fees, we view the introduction of an explicit regulatory minimum overcollateralization percentage as positive. It enhances the regulatory security to investors considering that issuers will always have to fulfil this requirement. The amended Dutch covered bond rules oblige issuers to ensure that the value of the cover assets is at least 105% of the nominal value of the registered covered bonds issued. This nominal overcollateralization percentage of 5% is comparable with the Belgian regulatory regime. Banks typically commit to higher overcollateralization levels under their programme documentation, among others for rating agency purposes, but regulatory requirements remain, in our view, the best protection mechanism against programme amendments that may weaken the overcollateralization commitment. Substitute cover assets can be included for the purpose of calculating the minimum 105% asset coverage requirement up to 20% of the nominal value of the covered bonds. Additional details with respect to the overcollateralization requirement may be specified at a later stage in a ministerial regulation.

**Liquidity coverage**

The Dutch regulator also plans to introduce a 180 days liquidity rule. Issuers always need to maintain sufficient liquid assets to fulfil their coupon and redemption obligations on the covered bonds over a period of six months, as well as other obligations to be defined by a ministerial regulation. This ensures that the issuer always has sufficient liquid means to fulfil its short-term obligations without having to liquidate less liquid (mortgage) assets from the collateral pool.

The liquidity buffer requirement with respect to redemption payments is not applicable for soft-bullet or conditional pass-through covered bonds with maturity extension periods of more than twelve months. Derivative instruments related to the aforementioned liabilities will be considered when calculating the liquidity requirements.

The criteria for the types of liquid assets that qualify for the purpose of the liquidity coverage tests, the liabilities that should be covered, and the related derivative instruments, can be specified by a separate ministerial ruling.
Hard bullet versus soft bullet covered bonds
The sole purpose of the liquidity coverage requirements for redemption obligations is to reduce refinancing risks, not to mitigate extension risks. For that reason the Dutch regulator leaves soft bullet covered bonds and conditional pass-through covered bonds with maturity extension features of more than twelve months outside the scope of the liquidity test. In the case of these covered bonds refinancing risks are tackled by the maturity extension.

Liquidity test vis-à-vis the pre-maturity test
The six month liquidity requirements covering the redemption obligations are stricter than the 12 month pre-maturity tests backing existing hard-bullet structures in the Netherlands, as they are not subject to minimum rating criteria (Figure 2). We do not necessarily expect that the contractual pre-maturity test will be replaced by the legal liquidity coverage test. After the introduction of the 180 days legal maturity test under the French covered bond legislation, covered bond programmes that were originally backed by a pre-maturity tests, continued to perform this test next to the legal maturity test. However, French issuers that perform both the contractual liquidity test (pre-maturity test) as well as a legal maturity test (180 days liquidity rule) also apply rating triggers under the latter test.

Risk management procedures
The issuing bank has to employ reliable and effective procedures and strategies to assure that during the term of the registered covered bond sufficient eligible cover assets and liquid assets are available at all times. The composition and nature of the cover assets and the liquid assets, the overcollateralization, the relevant risks, such as the credit risk, market risk, counterparty risk, concentration risk and currency risk, and stress tests all have to be considered. Further conditions can be detailed in a ministerial regulation.

Special supervision
Registration
Dutch registered covered bonds can be issued by licensed banks that are located in the Netherlands. The issuing bank has to apply for registration with the Dutch Central Bank, which in turn decides to include a) the issuing entity and b) the category of covered bonds (to be) issued in a public register. To be registered, the bank needs to prove that, in the case of a default of the issuer, the covered bondholders have a priority claim over the eligible assets securing coupon and redemption payments due on the registered covered bond. In practice this means that the issuer has to provide evidence that the cover assets are secured in favour of the covered bondholders, via the transfer of the cover assets to a separate legal entity, the Covered Bond Company.9

The issuer furthermore has to demonstrate that it fulfils all regulatory requirements ensuring that the payment obligations due on the registered covered bonds are secured

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9 Under the current covered bond rules the issuer has to provide an independent legal opinion confirming that the preferential claim of the covered bondholders is secured via such a transfer of the assets to a separate legal entity. The issuing entity furthermore has to provide the supervisor with a written statement by the board of directors that the bonds fulfil the definition of covered bond, and all the relevant documentation (prospectus, transaction documentation, rating agencies reports) regarding the covered bond programme, including the underlying aforementioned legal opinion.
in an adequate, transparent and responsible manner. These regulatory requirements include the bank’s obligation to specify, upon request for registration, the conditions applicable to the category of registered covered bonds, such as the redemption profile, the type of primary cover assets, whether the assets are CRR eligible, and the geographical location of the assets. The bank also has to show that it has the required reliable and effective strategies and procedures in place to ensure that sufficient eligible cover assets and liquid assets are secured during the term of the registered covered bond. The bank furthermore has to demonstrate that it is able to fulfil its reporting obligations towards the Dutch Central Bank and the covered bondholders.

After registration, the issuer has to make sure that the registered covered bonds continue to meet the registration requirements. This issuer also has to inform the Dutch Central Bank about its intentions to issue any new covered bonds ahead of issuance. New covered bonds issued under a registered programme will be registered as well, by specifying the date of issuance, the nominal value of the bonds and their maturity date.

**Deregistration**

If the issuer is no longer capable of securing the eligible assets in favour of the covered bondholders via a transfer to the Covered Bond Company, the Dutch Central Bank will deregister the category of registered covered bonds, unless the issuer manages to fulfill this requirement again within a reasonable period of time. This situation is not likely to occur as structural changes to a covered bond programme require bondholder approval. We understand however, that a refusal by the issuer to transfer sufficient eligible assets or if the Dutch Central Bank no longer receives the information required to verify compliance with this condition, can be grounds for deregistration. The latter situation may for example occur if, in the case of a bankruptcy of the issuer, the Covered Bond Company fails to provide the Dutch Central Bank with the required information to maintain registration. This shows that also post issuer insolvency the Dutch Central Bank will continue to perform its supervisory tasks with respect to registered covered bond programmes to assure that the registration requirements are still met. Deregistration of a category of registered covered bonds means that the bonds will no longer be UCITS 52(4) compliant. They will consequently no longer qualify for preferential risk-weight treatment or favourable exposure limits for CSIEs and insurers.

The preferential risk weight treatment of a category of registered covered bonds can also be affected by a decision of the Dutch Central Bank to remove CRR recognition from the register. In principle, if a registered covered bonds fulfils the CRR requirements for preferential risk weight treatment, this is included in the register. However, if the issuer (or the Covered Bond Company post issuer bankruptcy) no longer fulfils these requirements or fails the provide the requested information to the Dutch Central Bank to verify this, CRR recognition may be deleted from the register. If the covered bonds at a later stage meet the CRR requirements again, recognition in the register will be restored.

The Dutch Central Bank can decide to deregister the issuer, if the bank no longer complies with the relevant additional regulation with respect to the contractual features specified for a category of covered bonds or the risk management procedures employed. Deregistration is also an option if the bank fails to meet its regulatory reporting obligations. We understand that deregistration of an issuing entity will not be used lightly considering that it will not only affect the bank but also the covered bondholders. The Dutch Central Bank may more likely impose a penalty or fine if an issuer fails to meet its obligations. A deregistered issuer is not allowed to issue further covered bonds under an existing category of registered covered bonds. However, deregistration of the issuer will not necessarily affect the registration of the covered bonds themselves.

If an issuer applies for registration again within five years after deregistration of the issuer or the covered bonds, the Dutch Central Bank may refuse to register the issuer or the
category of covered bonds. The Dutch Central Bank is unlikely to reregister an issuer or a category of covered bonds shortly after deregistration, unless it is convinced that sufficient measures were taken to prevent a repeat of the reasons for deregistration.

### Asset encumbrance restrictions

The Dutch covered bond rules do not provide for hard asset encumbrance restrictions, specifying a maximum percentage with respect to the covered bonds that can be issued, or the assets that can be pledged. That said, the covered bond rules do make sure the issuer will not erode the claim of other creditors by unlimitedly pledging (higher quality) cover assets for the purpose of the covered bondholders. As under the current covered bond rules, the Dutch Central Bank will continue to ensure that a sound relationship is maintained at all times between the nominal value of the covered bonds outstanding and the consolidated balance sheet total of the issuing bank. In contrast with the current covered bond rules, explicit reference is no longer made to the requirement of a sound relationship between the covered bonds outstanding and the assets securing them. This will implicitly still be one of the factors to be taken into consideration in the assessment of the sound balance between the covered bonds versus the balance sheet of the issuer. The minimum overcollateralization and substitution assets are additional assurances that sufficient cover assets are pledged to secure the registered covered bonds.

The Dutch Central Bank will assess on a discretionary basis the going-concern interests of the bank in terms of stability and the need for an efficient combination of funding instruments, as well as the relevant post-bankruptcy interests, including those of other unsecured creditors. The financial position of the bank, its risk profile, the cover assets and the risks associated with these assets, as well as the position of other unsecured creditors will all be taken into consideration. Upon registration, the Dutch Central Bank will typically determine an issuance ceiling for the category of covered bonds, by taking into account the applicable standards for a sound relationship. However, also in the case of covered bond issuance within the boundaries of the issuance ceiling the maintenance of a sound relationship will continue to be checked. Issuance limits can consequently be adjusted post-registration if required. We consider it a strength of the Dutch covered bond rules that no hard asset encumbrance limits are specified by law and that the issuance ceiling is determined on an issuer-by-issuer basis. It gives the opportunity to take at all times both issuer as well as market specific characteristics and circumstances into consideration.

If the Dutch Central Bank is of the opinion that a sound relationship no longer exists, it can prohibit the bank from issuing any further registered covered bonds. The Dutch Central Bank may also decide to reject a request for registration on these grounds. Although in practice it is likely that the Dutch Central Bank will consult with the issuer first before making such a decision, consultation is not specifically required by the regulation. Also with respect to the asset encumbrance restrictions discussed here further details may be specified at a later stage by a ministerial regulation.

### Removal minimum covered bond rating requirement

One of the key improvements to the Dutch covered bond rules, in our view, is the removal of the minimum AA-equivalent rating requirement for Dutch covered bonds. Under the current covered bond rules, the issuer is no longer allowed to issue new covered bonds if a programme loses its minimum AA-equivalent rating from a second best ratings perspective. The Dutch regulatory framework was the only covered bond legislation with such a minimum rating requirement for covered bonds, which is a refinancing risk negative as it prevents issuers from refinancing maturing covered bonds with new covered bonds if the rating of the covered bonds falls below the regulatory minimum.
This can particularly be a problem under more difficult market or issuer specific circumstances when issuer ratings and covered bond ratings move down the rating scale, while at the same time access to unsecured funding is restricted. Both NIBC Bank’s old soft bullet covered bond programme, as well as SNS Bank’s covered bond programme, for a period of time failed this minimum rating requirement.

### Reporting requirements

Although the current covered bond rules already facilitate strict reporting requirements towards the Dutch Central Bank, additional regulatory reporting criteria will be introduced for the purpose of the covered bondholders. The Dutch covered bond rules no longer oblige issuers to maintain an administration as this requirement will essentially be covered by the reporting requirements of the issuer.

The issuer has to provide the Dutch Central Bank with sufficient information to assess that the registration requirements are met and that the registered covered bonds fulfil the CRR requirements for preferential risk weight treatment. Via a ministerial regulation more detailed reporting criteria can be specified, which can expected to be relatively similar to the currently applicable reporting requirements.

Under the current covered bond rules the issuing entity has to demonstrate on a quarterly basis that the registered covered bonds fulfil the requirements for registration, by providing reports on the assets. Furthermore, the Dutch Central Bank has to be reassured on an annual basis that adequate strategies and procedures are in place to guarantee that sufficient assets have been transferred to the Covered Bond Company, considering the nature of the cover assets, overcollateralization, applicable risks and stress tests. The issuer also has to provide the Dutch Central Bank with the annual reports for the Covered Bond Company within six months after the end of each reporting year. The bank furthermore has to inform the Dutch Central Bank on material changes made to the covered bond programme or if there are any circumstances that cause the covered bonds to no longer fulfil the registration requirements.

With the amended covered bond rules, the issuer is furthermore obliged to provide the covered bondholders with information on the assets securing the registered covered bond, to give them better insight in the development of their investment. Details on these reporting requirements will be specified in a ministerial regulation.

We note that for CRR eligible programmes, it is already implicitly required that investors in the registered covered bonds receive portfolio information at least on a semi-annual basis on at least the value of the cover pool and the outstanding covered bonds, the geographical distribution of the cover pool, loan size, interest rate risks and currency risks, the maturity structure of the cover assets and the covered bonds, and on the percentage of loans past due for more than 90 days.\(^\text{10}\)

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\(^{10}\) Article 129(7)(a) of the CRR
Weighing the Dutch regulation on a European scale

The key purpose of changing the Dutch covered bond legislation, is not only to strengthen the regulatory supervision on the covered bonds, but also to improve investor confidence in the product and to reduce the funding costs for Dutch banks in order to enhance the funding opportunities for the Dutch economy. It was decided to maintain a principle-based legal framework, rather than a rules based regulatory regime to assure sufficient flexibility for the Dutch banking sector to take advantage of new developments and to minimize the administrative burden. However, in light of the recommendations by the EBA on the preferential capital treatment of covered bonds and on best practices under EU covered bond frameworks, the awaited conclusions of the European Commission on the liquidity coverage ratio (LCR) treatment of covered bonds, and considering the proposed ESMA criteria to exempt covered bonds from central clearing, we would not rule out that the Dutch covered bond legislation ends up moving closer towards a rules-based rather than a principle-based regulatory regime than initially advocated. The strengthening of the regulatory framework in line with international standards is after all one of the main premises for the upcoming regulatory changes.

In the following subparagraphs we discuss how well Dutch covered bonds are positioned due to the regulatory amendments to meet the potential future requirements for LCR eligibility, preferential risk weight treatment and to be exempted from central clearing obligations. We also give an overview of the parts that require further detail via a ministerial regulation to meet all of the EBA’s best practice requirements. For this purpose a distinction is made between the amended legislation and the features already provided for via the existing covered bond programme documentation.

LCR eligibility recommendations

In December last year, the EBA concluded that based upon its empirical approach EEA covered bonds "with an AA- or better rating with a minimum size of €0.5bn, subject to stringent covered bond regulations, designed to reduce the credit risk faced by bondholders and to provide standardized and transparent information to prospective issuers" were of Extremely High Quality and Liquidity (i.e. level 1 worthy). Only covered bonds for which the requirements in Figure 3 apply would qualify as level 1 assets:

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**Fig 3  EBA’s LCR criteria for covered bonds of extremely high quality and liquidity (Level 1)**

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Amended legislation</th>
<th>Programme documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCITS 52(4)/CRR Art 129(4) or (5) eligible covered bonds</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>A special license is required from the supervisor for issuing covered bonds, subjecting the issuer to strict risk management requirements compared to general banking supervision regimes</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Additional supervisory reporting or transparency/disclosure requirements regarding the cover pool, beyond the requirements of regular banking supervision regimes</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mandatory minimum overcollateralization requirement</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Exposure to market and liquidity risk is reduced by law/contract</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Covered bondholders are protected against claims from other creditors via preferential treatment in the creditor ranking and with respect to access to the assets in the underlying cover pool</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Special LTV limits are used for calculating collateralization rates for the cover pool</td>
<td>✓*</td>
<td>✓</td>
</tr>
</tbody>
</table>

*There is no explicit LTV limit under the Dutch covered bond rules, but this is an implicit requirement for programmes categorized as CRR eligible

Source: EBA, ING

We understand that the European Commission is considering the recognition of covered bonds as Level 1 assets subject to a 7% haircut if they are AA- or better rated and have at least a €0.5bn size and if part of the additional aforementioned EBA criteria are met. The covered bonds have to be UCITS 52(4)/CRR Art 129(4) or (5) compliant, meet the
transparency requirements of CRR Art 129(7) and fulfill a 2% minimum overcollateralization requirement. Covered bonds with a A- rating or better or with a smaller size of at least €0.25bn are eligible as Level 2a assets, if they are UCITS 52(4)/CRR Art 129(4) or (5) compliant, meet the transparency requirements of CRR Art 129(7) and fulfill a minimum overcollateralization requirement of 7% (or 2% if they are AA- or better rated). Following the implementation of the proposed regulatory amendments, Dutch covered bonds are expected to fulfill these criteria for Level 1 recognition.

**EBA’s recommendations on preferential risk weights**

On 1 July 2014, the EBA published its opinion on the preferential capital treatment of covered bonds and on EU covered bond frameworks. In relation to Article 503 of the CRR, the EU Commission had requested the EBA’s advice on the preferential risk-weight treatment of covered bonds. Under Article 503 of the CRR the European Commission has, upon consultation with the EBA, to report by the end of this year to the European Parliament and to the Council on whether the preferential risk weights laid down for covered bonds in Article 129 of the CRR and the own funds requirements for specific risk in Article 336(3) of the CRR are adequate for all (covered bond) instruments that qualify for these treatments. This report also has to discuss whether the criteria in Article 129 are appropriate. More specifically the European Commission has to report on:

- Whether the current regulatory capital requirements for covered bonds sufficiently distinguish between the differences in credit quality of covered bonds and their underlying collateral, including the existing differences between member states.
- The transparency of the covered bond market and the extent to which it facilitates investor analysis of the credit risk of the covered bonds and the collateral against which they are secured and the asset segregation in case of issuer insolvency.
- The extent to which covered bond issuance impacts the credit risk to which other creditors of the issuing institution are exposed.

The European Commission furthermore has to report by the end of the year, after consulting the EBA, on whether aircraft loans and guaranteed home loans can under certain conditions be considered as eligible assets. By the end of 2016, the European Commission has to review the appropriateness of the derogation of the 10% cap on the inclusion of senior securitization notes in the collateral pool.

**Fig 4  EBA’s criteria for covered bonds to qualify for preferential risk weight treatment**

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Amended legislation</th>
<th>Programme documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A regulatory minimum overcollateralization level is recommended</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Liquidity buffers should be in place to cover total net outflows</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Details on supervision, pre-establishment of a programme, during the programme term and post-issuer insolvency should be specified</td>
<td>V (partly) *</td>
<td>V (partly)</td>
</tr>
<tr>
<td>Disclosure criteria should be clarified via binding technical standards</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Aircraft loans should not receive preferential risk weight treatment</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Guaranteed home loans are eligible subject to additional criteria</td>
<td>V (partly)</td>
<td>V</td>
</tr>
<tr>
<td>Inclusion senior securitization notes should be capped at 10%</td>
<td>V</td>
<td>V</td>
</tr>
</tbody>
</table>

* Expected to be regulated via a ministerial regulation

**Source:** EBA, ING

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12 EBA, EBA Report on EU Covered Bond Frameworks and Capital Treatment, 1 July 2014

13 Article 336 of the CRR refers to the own funds requirement for net trading book positions in non-securitization debt instruments. Covered bonds that qualify for preferential 10% risk weight treatment under Art 129, i.e. AA- or better rated covered bonds (or if unrated issued by 20% risk weighted AA- or better rated financial institutions), are assigned half the applicable specific risk own fund requirement for debt securities that would otherwise receive a 20% or 50% risk weight under the standardised approach, which includes BBB- or better rated senior unsecured exposures to financial institutions. Specific risk own funds requirements for these covered bonds consequently become 0.125% for securities with a final maturity of six months or less, 0.5% for securities with a residual maturity greater than six months by less than two years, and 0.8% for securities with a residual term of more than two years.
The EBA’s requirements for preferential risk weight treatment require further detail

Figure 4 gives a summary overview of EBA’s criteria to qualify for preferential risk weight treatment. Pending further details to be specified via a ministerial regulation, among others with respect to the disclosure criteria, the amended Dutch covered bond rules fulfil these criteria for CRR eligible covered bonds. Further details are probably also required on the supervision post issuer insolvency. The eligibility criteria for guaranteed home loans are more applicable to the French covered bond market. We furthermore note that reserve fund requirements under the current Dutch programme documentation only cover interest payments due over a period of three months and typically have to be established if certain rating requirements are no longer met. Also pre-maturity tests in the case of hard bullet covered bonds are subject to rating triggers. These, in our view, do not fulfil this EBA requirement.

EBA’s best practice recommendations

The EBA’s best practice recommendations in response to the recommendation by the ESRB on the funding of credit institutions, are suggestions on what the EBA considers to be best practice in the area of covered bonds. The EBA specifically urges regulators to give recognition to these best practice suggestions in the case of future considerations regarding changes to national or EU-wide covered bond legislations. Figure 5 lists the EBA’s best practice recommendations. In several areas a ministerial regulation has to provide for further details to make the Dutch covered bond legislation fully compliant with all of the EBA’s best practice recommendations. We highlight the following:

Fig 5  EBA’s best practice recommendation

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Amended legislation</th>
<th>Programme documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investors have a priority claim on a pool of assets and a remaining pari passu claim with unsecured investors on the issuer (dual recourse)</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Segregation of assets is assured via a cover register or a transfer of the assets to a specialist entity or special purpose entity</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Post-issuer default, regulators should not require payment acceleration on the covered bonds (bankruptcy remoteness)</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Post-insolvency an independent administrator has to manage the pool</td>
<td>V</td>
<td>v</td>
</tr>
<tr>
<td>Cover pools should consist of one unique asset class, while mixed residential and commercial pools should remain relatively stable</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Geographical scope asset eligibility to be restricted to EEA countries, otherwise Art 208(2) CRR should be met</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Regulatory soft-LTV limits should be in place</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Properties have to be valued (indexation) on an annual basis</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>A minimum legal overcollateralization requirement has to be in place</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Regulations should prevent termination of derivative contracts upon issuer default</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Mitigants to liquidity risk should be in place</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Regulatory stress-test requirements are best practice</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Regulator must require the appointment of a cover pool monitor</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Tasks of the supervisory authority should be specified, a.o. with respect to license requirements</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Details on the role of the supervisory authority post-issuer default have to be in place</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Data disclosure requirements have to be regulated</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Disclosure has to take place at least on a quarterly basis</td>
<td>V</td>
<td>V</td>
</tr>
</tbody>
</table>

*Expected to be regulated via a ministerial regulation

Source: EBA, ING

Asset segregation

Under the amended Dutch covered bond legislation, in order to secure cover assets in favour of the covered bondholders, the assets have to be transferred to a separate legal entity, ie, the Covered Bond Company (CBC). However, other issuance and asset segregation models are not ruled out if, as a consequence of market innovations, an alternative safe structure is considered to adequately secure the cover assets for the purpose of covered bondholders. According to the EBA’s best practice recommendations,
the identification and segregation of the cover assets has to be ensured by registration of the cover assets in a cover register, as in the case of on balance sheet universal credit institution models, or via a transfer of the assets to specialist credit institutions or a special purpose vehicle.

**Post-insolvency administration**

In the EBA’s view the regulatory framework for covered bonds has to provide for the independent management of the covered bond programme in the preferential interest of the covered bond investor post issuer default or resolution. The EBA says that ex ante legal clarity should be given over the powers and duties of the post-issuer’s insolvency administration, to ensure that an administrator can take all actions necessary in the best interest of the covered bondholders. The Dutch legal framework does not specify criteria on this yet. It is currently practice that issuers themselves perform the tasks of servicer and administrator under Dutch covered bond programmes, where a default on their obligations (which is likely to rise post issuer default) will lead to a replacement.

**Cover pool composition**

Under the amended Dutch covered bond legislation, banks can opt to issue covered bonds against one type of primary cover assets, or against multiple types of primary cover assets. As an example of the latter, the Dutch regulator refers to a combination of residential and commercial mortgage loans in the pool. However, issuers are not allowed to add commercial real estate assets to the collateral pool if they indicated that the pool would only contain residential mortgage loans. The EBA is of the opinion that cover pools should be composed of one unique primary asset class. Cover pools consisting of mixed residential mortgage loans with commercial mortgage loans should not materially change throughout the life of the covered bond. A percentage limit on the amount of commercial mortgage loans within the residential mortgage pool is referred to as an available best practice option in this respect. However, the EBA does not specifically require regulatory provisions in this respect, suggesting that contractual arrangements on the level of the covered bond programme are considered sufficient. Therefore, the amendments to the Dutch covered bond regulation do not necessarily conflict with this best practice recommendation, although further details may be specified.

**Geographical scope**

Under the current Dutch covered bond legislation, assets securing Dutch covered bonds have to be located in an EU member state, the US, Canada, Japan, Korea, Hong Kong, Singapore, Australia, New Zealand or Switzerland. The Dutch regulator could decide to amend this scope via a ministerial regulation, aligning it with EBA’s best practice recommendations to restrict asset eligibility to EEA jurisdictions.

**Regulatory soft-LTV limit**

Although issuers can choose to meet the CRR requirements for preferential risk weight treatment, which implicitly means they have to comply with the related valuation (LTV) criteria for the cover assets, the Dutch covered bond rules may explicitly specify LTV limits for residential and commercial mortgage loans via a ministerial regulation.

**Indexation**

The EBA recommends that legal covered bond frameworks should support that the value of properties securing a mortgage loan, and the corresponding regulatory LTV limits considered for the purpose of the asset coverage requirements, are monitored and updated at least on an annual basis for both residential and commercial properties. This can be done via indexation or other statistical methods. The Dutch covered bond rules do not explicitly provide for indexation requirements. A ministerial regulation may cover this.
Derivative contracts
Covered bond regimes should in the EBA’s view specify that derivative instruments are allowed in covered bond programmes exclusively for risk hedging purposes. The regulatory regime should also make sure that the derivative contracts, entered into by the covered bond issuer with a derivative counterparty and registered in the cover pool, cannot be terminated upon issuer insolvency. Further details would have to be specified by the Dutch regulator in a ministerial regulation to fulfil this best practice requirement.

Stress testing
The legal framework should require covered bond issuers to carry out a stress test exercise on the calculation of the coverage requirements taking into account at least the following factors: shifts of the interest rate curves based on the historical performance, shifts of the currency pairs based on historical performance, stresses on the credit quality of the underlying assets based on the historical performance, stresses on the repayment behaviour of the underlying assets based on the historical performance and stresses on the liquidation price of the underlying assets based on the historical performance. The Dutch regulator may specify such stress testing requirements by a ministerial regulation.

Cover pool monitor
The legal framework should provide that at the establishment of a given covered bond programme a cover pool monitor is appointed. This cover pool monitor has to be an internal or external entity other than the ordinary auditor of the issuer. The legal framework should also provide for the eligibility criteria for the appointment of the cover pool monitor, its main duties and powers including the monitoring of the coverage requirements. However, where similar tasks are directly carried out by the competent authority the appointment of a cover pool monitor may not be necessary. The cover pool monitor or the issuer should regularly report to the competent authority. The programme documentation of Dutch issuers does foresee in the appointment of an asset monitor. The Dutch covered bond legislation may make more explicit reference to the role of a cover pool monitor via a ministerial regulation.

Supervision post-issuer default
The regulatory framework has to provide a sufficiently detailed description of the powers and tasks of the supervisory authority with respect to the covered bond programme as well on the administration of the programme in the case of an issuer default. The regulatory amendments do not provide for such a detailed description yet.

Reporting requirements
The EBA is of the opinion that the regulatory framework for covered bonds should require issuers to disclose aggregate data on credit risk, market risk and liquidity risk characteristics of the cover assets and the covered bonds, as well as other relevant information. This includes information on the counterparties involved in the programme and on the levels of contractual and voluntary overcollateralization. The information must provide sufficient details to enable investors to carry out a comprehensive risk analysis. The EBA recommends regulatory disclosure requirements on a quarterly basis. The amended Dutch legislation foresees in reporting requirements to the supervisory authority and to investors. Via a ministerial regulation more detailed reporting criteria will be specified, which can be expected to be in line with these best practice requirements.

ESMA’s criteria for clearing exemption
On 11 July 2014, the European Securities and Markets Association (ESMA) published a consultation paper on the clearing obligations under EMIR. There are several issues related to the central clearing of derivative contracts under covered bond programmes. Because of the difficulties to distinguish between derivatives related to the cover pool and those of the issuer, central clearing could result in a termination of a swap contract in the case of issuer insolvency. Typically however, contracts related to covered bond
programmes would not be terminated post issuer default to assure that risks related to the programme remain hedged after a default of the issuer. Also the EBA’s best practice recommendations advocate that regulations should prevent termination of derivative contracts upon issuer default. Covered bond derivative contracts are also often not standard contracts. Furthermore, the cover pool may not consist of sufficient eligible collateral to fulfil margin requirements. In the case of issuer insolvency it would become problematic for the issuer to fulfil these margin requirements. Consequently, ESMA proposes to exempt derivative contracts related to covered bond programmes from central clearing if several conditions as highlighted in Figure 6 are met.

**Fig 6 ESMA’s criteria for covered bonds to be exempted from central clearing**

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Amended legislation</th>
<th>Programme documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swap contracts are not terminated in the case of default of the covered bond issuer</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>The counterparty to the contracts, which is not the cover pool or the covered bond issuer, ranks at least pari-passu with the covered bondholders</td>
<td></td>
<td>(partly)</td>
</tr>
<tr>
<td>Swap contracts are registered in the cover pool of the covered bond programme in accordance with the national covered bond legislation.</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Swap contracts are used only to hedge the interest rate or currency mismatches of the cover pool</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>The covered bond programme to which they are associated meets the requirements of Article 129 of the CRR</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>The covered bond programme which they are associated is subject to a legal collateralisation requirement of at least 102%</td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

*Expected to be regulated via a ministerial regulation

Source: ESMA, ING

A ministerial regulation will have to provide for further details related to derivatives

Under the current legislation derivative contracts are explicitly allowed to assure that the assets would remain sufficient to cover coupon and redemption payments on the covered bonds. However under the proposed regulatory amendments, explicit reference to derivative contracts is very limited. There is nevertheless the requirement that proper risk management tools have to in place. We expect that further details will be provided via a ministerial regulation to fulfil both the ESMA and the EBA requirements with respect to derivative contracts. The existing derivative contracts under current Dutch covered bond programmes already seem to fulfil most of these requirements. The programmes are CRR eligible and the amendments to the Dutch covered bond legislation will provide for a minimum overcollateralization of at least 2%. Considering that both the EBA and the ESMA require that regulations should prevent termination of derivative contracts upon issuer default, it can be expected that a ministerial regulation will make sure this requirement is fulfilled under the Dutch covered bond regulation. The second requirement however, may create exemption problems as it suggests that in-house derivative contracts would disqualify. Counterparties to Dutch derivative contracts are typically in-house counterparties. Payments on derivative contracts do generally rank ahead of payments to covered bondholders (see Figure 8 and Figure 9 on page 24).
Programme characteristics

Asset segregation

Under all Dutch covered bond programmes the eligible assets for covered bond issuance are transferred to a separate Covered Bond Company (CBC) by means of a guarantee support agreement. Under this agreement, the mortgage originator passes on eligible receivables to the Covered Bond Company via an undisclosed or silent assignment. The legal ownership of the mortgage loans is in that case transferred to the Covered Bond Company via a deed of assignment, or in the case of NIBC Bank a deed of sale and assignment with the tax authorities, without notifying the debtors of the receivables. Debtors will only be notified of a transfer if an (assignment) notification event occurs. Notification typically takes place if the credit rating of the issuer falls below a certain level, if a notice to pay is served on the issuer and the Covered Bond Company or if the latter defaults. Other grounds for notification are if the originator defaults on its payment obligations, has become subject to liquidation or dissolution proceedings, its assets are taken under administration, or if it enters into emergency regulations or goes bankrupt.

Notification may address commingling risks,…

14 ABN AMRO Bank: Baa1 (long-term) (Moody’s), BBB (long-term) (S&P), BBB+ (long-term) (Fitch). ING Bank: Baa1 (long-term) (Moody’s), BBB+ (long-term) (S&P), BBB+ (long-term) (Fitch). SNS Bank removed the rating trigger for notification from its programme documentation after the issuer was downgraded below Baa1 at Moody’s. SNS Bank, the CBC and the Security Trustee at that time agreed that a rating trigger for notification was no longer required due to the measures implemented by the issuer to reduce commingling risk, such as the new structure of the collection foundations. Consequently no notification took place after the rating triggers were breached. NIBC Bank also has no notification event trigger ratings, with a collection foundation account addressing commingling risks.
receive the proceeds from the transferred assets for its own benefit. Following a notification, borrowers no longer make payments on their mortgage loans directly to the originator under ABN AMRO Bank and ING Bank’s covered bond programmes. Instead, they will make payments to a separate account maintained by the Covered Bond Company with an eligible account bank. The requirement to make payments to a separate account post notification addresses the risk that payments received by the issuer on the cover assets will be commingled with the insolvency estate of the issuer post issuer bankruptcy (commingling risk).

**Addressing commingling risks: collection foundation accounts**

Under the covered bond programmes of SNS Bank and NIBC Bank, commingling risk is addressed via a passive bankruptcy remote entity, the collection foundation, which maintains a separate collection foundation account with a foundation account provider. All payments made on the mortgage receivables are paid into the collection foundation account, to be distributed to the Covered Bond Company. The collection foundation account can also be used for other (mortgage) collections to which the originator is entitled vis-à-vis the collection foundation. In the case of SNS Bank, the collection foundation in turn will distribute the amounts received on the cover assets to the issuer. The amounts received will only be distributed to the Covered Bond Company after an assignment notification event or a notice to pay is served. The foundation administrator will perform these payment transaction services on behalf of the collection foundation.

If the collection foundation account provider no longer meets the minimum required ratings, the collection foundation has to take remedial action within 30 days. This includes a) the transfer of the collection foundation account to an alternative bank that meets the minimum rating requirements, b) the assurance that the payments received on the mortgage receivables on the collection foundation account will be guaranteed by a guarantor that fulfils these rating requirements, or c) the implementation of other actions acceptable or agreed upon with the rating agencies.

While NIBC Bank uses an external collection foundation account provider, SNS Bank uses in-house collection foundation account providers that no longer fulfil the minimum rating requirements. SNS Bank has the option to take the following remedial actions: a) post sufficient additional collateral (which is currently provided for via Y2 under the Asset Cover Test), b) make sure sufficient funds are posted on the reserve fund or reserve account, c) guarantee an amount equal to the additional collateral or funds reserved via an eligible counterparty, or d) ensure that payments on the mortgage receivables will be made directly to the accounts of the CBC. Alternatively, SNS Bank can decide to transfer either the amounts standing to the credit of the collection foundation accounts, or the collection foundation accounts themselves, directly to a third party collection foundation account provider.

In the case of SNS Bank and NIBC Bank all payments made by the borrower are, irrespective of notification, paid into a separate bank account maintained by a bankruptcy  

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15 The account bank needs to be rated at least P-1 (short-term) (Moody’s), A-1 (short-term)/A (long-term) (S&P) and F1 (short-term)/A (long-term) (Fitch). Otherwise an AIC/GIC/CBC Account Agreement needs to be opened with a financial institution that fulfils these rating requirements or the existing account bank needs to obtain a guarantee from a financial institution that fulfils them.  
16 NIBC Bank: F1 (short-term) and A (long-term) (Fitch), A (long-term) S&P. SNS Bank: F1 (short-term) and A (long-term) (Fitch), Baa1 (Moody’s). If the covered bonds would have been rated at S&P, an A-2 (short-term) and BBB (long-term) rating requirement would have been applicable at this rating agency.  
17 ABN AMRO Bank is the collection foundation account provider for NIBC Bank. SNS Bank and RegioBank are the collection foundation account providers for SNS Bank, with the programme facilitating the option to transfer the collection foundation accounts to Rabobank.
remote collection foundation (see box on collection foundation accounts). Notification does not necessarily address set-off risks. Even after notification a borrower can still invoke set-off, if his claim vis-à-vis the originator results from the same legal relationship as the eligible receivable.

Issuer events of default

- A default by the issuer for a period of more than 7 calendar days on redemption payments, or a default for a period of 14 calendar days or more on the payment of interest on the covered bonds.
- A default by the issuer for more than 30 calendar days in the performance of other material obligations under the transaction documents related to the covered bond programme to which the issuer is a party.
- An order is made for the dissolution or winding up of the issuer. This excludes a dissolution or winding up for the purpose of a reconstruction, amalgamation and merger or following a transfer of the assets of the issuer, which has been approved by an extraordinary resolution of the covered bondholders. ¹⁸
- Liquidation procedures were started in relation to the issuer or its assets, or the issuer initiates judicial procedures related to its bankruptcy.
- The issuer is found bankrupt, or emergency regulations in the interest of all creditors were imposed on the issuer.

In the case of an issuer event of default an issuer acceleration notice may be served by the Security Trustee. This is a notice from the Security Trustee in writing to the issuer that, against the issuer (but not against the Covered Bond Company), the covered bonds will become immediately due and repayable at their early redemption amount plus accrued interest. Before serving an issuer acceleration notice, the Security Trustee has to inform the issuer that one of the aforementioned events in its opinion is harmful to the interest of the covered bondholders. A failure by the issuer to make a payment in respect of the covered bonds will not automatically result in the service of an issuer acceleration notice. The Security Trustee is only obliged to serve an issuer acceleration notice upon request by the covered bondholders.

Following the service of an issuer acceleration notice, the Security Trustee will also serve a notice to pay on the Covered Bond Company under the Guarantee. The Covered Bond Company will subsequently be required to make payments of the guaranteed amounts when they are due and payable. Hence, the covered bonds do not accelerate post issuer default. Nor will a maturity extension (in the case of soft bullet covered bonds) or a pass-through of payments (in the case of conditional pass-through covered bonds) be triggered by a default of the issuer.

All amounts (excess proceeds) received by the Security Trustee from the issuer, or any administrator, liquidator or trustee appointed in relation to the issuer, following the service of an issuer acceleration notice and a notice to pay, may be paid by the Security Trustee to the Covered Bond Company. These excess proceeds discharge the issuer of obligations in respect to the covered bonds for an amount equal to these proceeds. However, the Security Trustee is not required to pay these amounts to the Covered Bond Company and the excess proceed receipts by the Security Trustee will not reduce the obligations of the Covered Bond Company under the Guarantee.

¹⁸ An extraordinary resolution is subject to a 2/3 majority vote at a meeting of covered bondholders where at least 75% of the covered bonds outstanding are represented. It has to be distinguished from a programme resolution, which is a written resolution by covered bondholders not representing less than 25% of the principal amount outstanding of all covered bonds issued. However, programme resolution can also be used as an alternative term to make reference to an extraordinary resolution.
The Covered Bond Company guarantees to make interest and principal payments

The Covered Bond Company guarantees in return to pay interest and principal on the covered bonds to the investors if the issuer defaults (asset-backed guarantee). The obligations of the Covered Bond Company are unsubordinated and unguaranteed obligations, secured indirectly through a parallel debt, by a pledge by the Covered Bond Company of the transferred assets to the Security Trustee.

Covered Bond Company events of default

- A default by the Covered Bond Company for a period of more than 7 calendar days on redemption payments, or a default for a period of 14 calendar days or more on the payment of interest on the covered bonds.
- A default by the Covered Bond Company for more than 30 calendar days on other material obligations under the transaction documents related to the covered bond programme to which the Covered Bond Company is a party.
- An order is made for the dissolution or winding up of the Covered Bond Company.
- The Covered Bond Company ceases to carry on its business.
- Liquidation procedures were started in relation to the Covered Bond Company or its assets, or a conservatory attachment or an executory attachment is enforced upon the assets, or the Covered Bond Company initiates judicial procedures related to its bankruptcy or a suspension of payments.
- The Covered Bond Company is found bankrupt, or emergency regulations in the interest of all creditors were imposed on the Covered Bond Company.
- The Covered Bond Company claims the guarantee is not in full force and effect.
- The Amortisation Test is not satisfied. This only constitutes a CBC event of default under the regular Dutch covered bond programmes, not under NIBC Bank’s conditional pass-through covered bond programme.

The inability of the Covered Bond Company to pay redemption amounts on the intended maturity date, will not constitute a CBC event of default in the case of soft bullet or conditional pass-through covered bonds. It merely triggers the maturity extension feature. Only a failure by the Covered Bond Company to make these redemption payments on the extended due for payment date will result in a default. In the case of a CBC event of default a CBC acceleration notice may (or in the case of a programme resolution will) be served. This is a notice from the Security Trustee in writing to the Covered Bond Company, with a copy to the issuer, that the covered bonds will become immediately due and repayable against the issuer and the Covered Bond Company (i.e. the covered bonds accelerate) at their early redemption amount together with accrued interest. Before serving a CBC acceleration notice, the Security Trustee will inform the Covered Bond Company that the CBC event of default, in its view, is harmful to the covered bondholders’ interest.

The recourse of the covered bondholders against the Covered Bond Company under the Guarantee (or the Security Trustee after enforcement of the Security) is limited to the right of recourse in respect of the secured property. They have no recourse to any of the Covered Bond Company’s other assets. If the Security Trustee confirms that the Covered Bond Company has insufficient funds to pay all its obligations to the covered bondholders, the covered bondholders will have no further claim against the Covered Bond Company or the Security Trustee in respect of the unpaid amounts. The secured parties may still have an unsecured claim versus the issuer for the shortfall. The covered bondholders typically are also not entitled to proceed directly against the issuer or the Covered Bond Company unless the Security Trustee fails to do so within a reasonable time.
If the issuer defaults on his obligations, the Security Trustee may serve an *issuer acceleration notice* to the issuer and a *notice to pay* to the Covered Bond Company in line with the guarantee. As such the covered bonds do not accelerate in the case of a default event of the issuing bank, while the bondholders have full recourse to the assets of the Covered Bond Company. Any proceeds received by the Security Trustee from the issuer following a default will be paid to the Covered Bond Company, which will hold these amounts on a GIC/AIC account for the purpose of making payments on behalf of the covered bondholders.

**Security enforcement by the Security Trustee**

The Security Trustee is a special purpose entity that solely performs Security Trustee tasks for the purpose of the covered bond programme. It acts for the benefits of the secured creditors in administrating and enforcing the security, and distributes the proceeds from the security in accordance with the applicable priority of payments.

With respect to the obligations of the Covered Bond Company towards the Security Trustee, typically a distinction is made between the so called *principal obligations*, and the obligations pursuant to the *parallel debt*. Under the trust deed, the Covered Bond Company commits to paying the Security Trustee amounts owed to the covered bondholders under the guarantee and amounts owed to other secured creditors under the transaction documents (the *principal obligations*). The *parallel debt* represents the Security Trustee’s own claim to receive payment under the parallel debt from the Covered Bond Company, provided that the amounts due under the parallel debt will never exceed the amounts that may become due under the principal obligations to the secured creditors. The amounts payable by the Covered Bond Company under the parallel debt will be decreased by the payments made by the Covered Bond Company to the covered bondholders and other secured creditors to reduce the principal obligations. The principal obligations on the other hand will be reduced to the extent that the Covered Bond Company has paid any amounts to the Security Trustee under the parallel debt.

The parallel debt is secured by security rights granted by the Covered Bond Company to the Security Trustee, via a) a first ranking right of pledge over the *transferred receivables*, b) a first ranking right of pledge over the *substitution assets*, c) a first ranking right of pledge over all monetary claims of the Covered Bond Company versus the account bank, and d) a first ranking right of pledge over the Covered Bond Company’s present and future rights versus debtors under any *transaction document*, other than the management agreement.

Following the service of an issuer acceleration notice or a CBC acceleration notice, the Security Trustee may at any time enforce the provisions of the *trust deed*, the covered bonds and the coupons against the *issuer* or the *Covered Bond Company*, but does not have to take these enforcement procedures, unless it has been directed to do so by a programme resolution, and has been indemnified and/or secured to its satisfaction. The Security Trustee can also at any time enforce the provisions of the *security documents* against the *Covered Bond Company*, and may after the security has become enforceable take steps to enforce the security. The Security Trustee does not have to take these steps unless: a) it has been directed to do so by a programme resolution, b) it has been directed in writing to do so by the secured creditors, and c) it has been indemnified and/or secured to its satisfaction.
The covered bonds may accelerate if the CBC defaults. The Security Trustee in that case may deliver a CBC acceleration notice to the Covered Bond Company (with a copy to the issuer) whereupon the covered bonds immediately become due. If, after the service of a CBC acceleration notice, a default in the proper performance of the secured obligations takes place, an enforcement event occurs. The Security Trustee can in that case enforce the Security, including selling the cover assets, or take other necessary steps.

### Source: Programme documentation

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#### Fig 8  Priority of payments under regular Dutch covered bond programmes

<table>
<thead>
<tr>
<th>Issuer event of default</th>
<th>CBC event of default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post issuer acceleration notice &amp; notice to pay</td>
<td>Post CBC acceleration notice</td>
</tr>
<tr>
<td>1  Trustee</td>
<td>1 Trustee</td>
</tr>
<tr>
<td>2  Tax authority</td>
<td>2 Paying agent or registrar</td>
</tr>
<tr>
<td>3  Paying agent or registrar</td>
<td>3 Servicer</td>
</tr>
<tr>
<td>Calculation agent</td>
<td>Administrator</td>
</tr>
<tr>
<td>4  Servicer</td>
<td>Account bank</td>
</tr>
<tr>
<td>Administrator</td>
<td>Managing director and Security Trustee’s director</td>
</tr>
<tr>
<td>Account bank</td>
<td>Total return swap provider</td>
</tr>
<tr>
<td>Managing director and Security Trustee’s director</td>
<td>Structured swap provider</td>
</tr>
<tr>
<td>Post issuer acceleration notice &amp; notice to pay</td>
<td>Calculation agent</td>
</tr>
<tr>
<td>Post issuer acceleration notice &amp; notice to pay</td>
<td>Issuer (if subject to insolvency proceedings)</td>
</tr>
<tr>
<td>Post issuer acceleration notice &amp; notice to pay</td>
<td>Originator (not subject to insolvency proceedings)</td>
</tr>
<tr>
<td>5  Total return swap provider</td>
<td>5 Interest rate swap provider</td>
</tr>
<tr>
<td>6  Interest rate swap provider</td>
<td>6 Structured swap provider</td>
</tr>
<tr>
<td>Structured swap provider (non principal related)</td>
<td>Interest and principal due on covered bonds</td>
</tr>
<tr>
<td>Interest due on covered bonds</td>
<td>(Remaining) swap termination amounts</td>
</tr>
<tr>
<td>Structured swap provider (principal related)</td>
<td>8 Issuer (if subject to insolvency proceedings)</td>
</tr>
<tr>
<td>Principal due on covered bonds</td>
<td>7 Structured swap provider (principal related)</td>
</tr>
<tr>
<td>Deposit (of 1-7) for next payment date</td>
<td>9 (Remaining) swap termination amounts</td>
</tr>
<tr>
<td>(Remaining) swap termination amounts</td>
<td>10 Indemnity amounts to transferors</td>
</tr>
<tr>
<td>Indemnity amounts to originators</td>
<td>11 Issuer (if subject to insolvency proceedings)</td>
</tr>
<tr>
<td>Costs and indemnity amounts asset monitor</td>
<td>12 Originator (not subject to insolvency proceedings)</td>
</tr>
<tr>
<td>Issuer (if subject to insolvency proceedings)</td>
<td>13 Swap counterparties</td>
</tr>
</tbody>
</table>

### Source: Programme documentation

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#### Fig 9  Priority of payments under NIBC Bank’s CPT covered bond programme

<table>
<thead>
<tr>
<th>Issuer event of default</th>
<th>CBC event of default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post issuer acceleration notice &amp; notice to pay</td>
<td>Post CBC acceleration notice</td>
</tr>
<tr>
<td>1  Trustee</td>
<td>1 Trustee</td>
</tr>
<tr>
<td>2  Tax authority</td>
<td>2 Paying agent or registrar</td>
</tr>
<tr>
<td>3  Paying agent or registrar</td>
<td>3 Servicer</td>
</tr>
<tr>
<td>Calculation agent</td>
<td>Administrator</td>
</tr>
<tr>
<td>4  Servicer</td>
<td>Account bank</td>
</tr>
<tr>
<td>Administrator</td>
<td>Directors</td>
</tr>
<tr>
<td>Back-up administrator</td>
<td>Asset monitor</td>
</tr>
<tr>
<td>Account bank</td>
<td>Swap counterparties</td>
</tr>
<tr>
<td>Directors</td>
<td>Interest due on covered bonds</td>
</tr>
<tr>
<td>Asset monitor</td>
<td>5 Principal due on covered bonds</td>
</tr>
<tr>
<td>Swap counterparties</td>
<td>6 (Remaining) swap termination amounts</td>
</tr>
<tr>
<td>Interest due on covered bonds</td>
<td>7 Interest subordinated loan</td>
</tr>
<tr>
<td>6  Replenishment reserve account</td>
<td>8 Principal subordinated loan</td>
</tr>
<tr>
<td>7  Principal due on covered bonds</td>
<td>9 Deferred purchase price instalment for transferors</td>
</tr>
<tr>
<td>8  Deposit (for 1-7) for next payment date</td>
<td>10 Indemnity amounts to transferors</td>
</tr>
<tr>
<td>(Remaining) swap termination amounts</td>
<td>Costs and indemnity amounts asset monitor</td>
</tr>
<tr>
<td>11  Interest subordinated loan</td>
<td>11 Issuer (if subject to insolvency proceedings)</td>
</tr>
<tr>
<td>12  Principal subordinated loan</td>
<td>12 Swap counterparties</td>
</tr>
<tr>
<td>13  Deferred purchase price instalment for transferors</td>
<td>13 Swap counterparties</td>
</tr>
</tbody>
</table>

### Source: Programme documentation

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...but may accelerate if the Covered Bond Company defaults
Collateral

The majority of Dutch covered bonds are solely covered by Dutch first ranking residential mortgages. Non-Dutch eligible € mortgage loans can be included in the cover pools as well under most programmes upon approval by the rating agencies and Security Trustee. Loan sizes are capped at €1,500,000 (ABN AMRO Bank and SNS Bank) or €1,000,000 (ING Bank). NIBC Bank does not provide for a loan size cap under its programme documentation, but in practice has no loans in the pool that exceed the size of €750,000.

Types of mortgage loans in Dutch collateral pools

**Interest only loans** form the vast majority in Dutch covered bond collateral pools. These loans are not amortized until their due date. Until that date only interest is paid on the loans. Due to their non-amortizing character, monthly payments on the loans are relatively low, although the interest burden on these loans remains high. The loans granted before 2013 benefit from maximum interest rate tax deductibility. Since there are no savings accrued against these loans, the risk of residual debt if property prices fall is relatively high. Borrowers are not prohibited however from making loan repayments during the term of the loan. In general, these repayments can be made free of charge up to a maximum of 10% to 20% per annum.

A **bank savings loan** is an interest only loan combined with a blocked bank savings account with the bank that is connected to the bank savings loan. The borrower can either opt for a loan where the interest rate received on the savings account is not linked to the interest rate payable on the loan, or for an alternative where the two are linked. In the first case, the borrower makes fixed monthly payments. In the latter case, the monthly payments will be adjusted to make sure that the amount on the bank savings account (monthly payments plus accrued interest) is equal to the principal amount due by the borrower at maturity. A bank savings loan does not have an investment part and is not connected to a mixed insurance policy. If the amount on the bank savings account is insufficient to repay the mortgage loan the borrower has to make up the shortfall.

An **(insurance) savings loan** is an interest only loan linked to a savings insurance policy that combines a risk and a savings element (mixed insurance policy). The savings insurance policy due by the insurer matches the principal amount due by the borrower at the end of the loan term. If the proceeds are insufficient, the borrower makes up the shortfall. In the absence of an investment part, and due to the savings insurance policy, the risk of residual debt is limited, also at decease of the borrower.

**Life loans** or life insurance loans are interest only loans linked to a life insurance policy. Under the life insurance policy a borrower pays a premium consisting of a risk and capital component (mixed insurance policy). The borrower can opt for a **traditional** life insurance policy under which the amount to be paid out depends upon the performance of investments chosen by the insurance company with a guaranteed minimum yield. Alternatively, the borrower can opt for a **unit-linked** life insurance policy under which the borrower chooses the investment funds out of a selection provided by the originator. The insurance proceeds will be paid out at the death of the borrower or at the maturity of the life insurance policy. If the proceeds are insufficient, the borrower has to make up for the difference. Hence the risk of residual debt is also not fully removed with this type of loan.

**Amortizing loans** are either linear amortizing or annuity loans. A **linear loan** consists of a constant principal repayment component during the term of the loan.
The interest component is based upon the remaining loan balance and as such declines after each successive principal repayment. **Annuity loans** pay a fixed period amount consisting of an interest and principal component. During the course of time, the interest component falls (due to the loan amortisation), while principal repayment rises. Since 2013 only new amortizing loans are tax deductible.

**Investment loans** are interest only loans that are linked to an investment account. The mortgage loans are not repaid until their due date and as such loans granted before 2013 benefit from maximum interest rate tax deductibility. However, borrowers pay either upfront or an a regular basis a certain amount to a securities account with an investment firm or bank that is invested in various investment funds of that institution (not connected to a mixed insurance policy). The borrower has the option to combine his investment account with a savings account and is, in that case, allowed to switch between investments and savings. If the investment/savings proceeds are insufficient to fully repay the mortgage loan at the end of the loan term, the borrower has the make up the shortfall. Hence there is risk of residual debt if property prices fall.

A **combination mortgage** is a mortgage loan that combines any of the aforementioned types of mortgage loans. A **hybrid loan** is an example as it is a combination of a life loan and a savings loan. The loan combines an interest only loan with an insurance policy consisting of a risk and an investment part (mixed insurance policy). The borrower has the right to invest the life insurance premiums in investment funds as with life insurance loans or in a savings part as with a savings insurance policy or to switch between the two alternatives. The insurance proceeds are due at the maturity of the loan or at the death of the borrower. The borrower makes up any shortfall.

**Credit mortgages** are revolving consumer loans (such as a **revolving credit loan**), with property as collateral. Amortisation of the loans occurs at the borrower’s discretion. The borrowing can also make at any time drawings up to the agreed maximum amount or borrow again amounts that have already been repaid. The interest rate deductibility on these loans was limited in 2001.

Dutch covered bond issuers apply, in general, a 125% loan-to-foreclosure value (LTFV) limit on mortgage loans that do not benefit from a national mortgage guarantee (Nationale Hypotheekgarantie or NHG). Mortgage loans with a LTFV between 125% and 130%, can be included, however under most programmes, only up to a maximum of 5% of the cover pool. In the case of NIBC Bank such an increase is possible if the 5% above the 125% is used for an upfront premium for the payment of protection insurance. The foreclosure value (FV) is 85% to 90% of the market value (MV) of the property under Dutch covered bond programmes (see Figure 10). Hence at an 85% FV/MV ratio, the LTMV cap of 106.25% to 110.5% under ABN AMRO Bank’s programme, is comparable with the 125% and 130% LTFV caps seen under the other Dutch programmes. ING Bank furthermore caps the LTFV ratio for interest only loans at 100%, while ABN AMRO Bank has a comparable 85% cap on interest only loans on a LTMV basis.

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19 The national mortgage guarantee (Nationale Hypotheekgarantie or NHG) is an amortizing guarantee issued by the Stichting Waarborgfonds Eigen Woningen (WEW). It covers principal, accrued interest and any disposal costs related to the mortgage loan. The WEW in principle funds itself. Borrowers under the scheme pay a one-time 100bp charge against their mortgage loan balance. If the WEW is not able to meet its obligations under the guarantee, the Dutch government and municipalities will provide the WEW with subordinated interest rate free loans to make up for the difference. The maximum amount that can be borrowed under the NHG is €265,000 per 1 July 2014. For NHG loans, the maximum LTV amount is set under the NHG requirements at the time of origination.
### Fig 10  Dutch covered bond programmes

<table>
<thead>
<tr>
<th>Type</th>
<th>ABN AMRO Bank</th>
<th>ING Bank</th>
<th>SNS Bank</th>
<th>NIBC Bank</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
</tr>
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<td>Aaa</td>
<td>Aa2</td>
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<td>S&amp;P</td>
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<td>AAA</td>
<td>AAA</td>
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<td>AA+</td>
<td>AAA</td>
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<td>BBB- Neg</td>
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<tr>
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<td>BBB- Neg</td>
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<td>P-3</td>
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<td>A-3</td>
<td>A-3</td>
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<td>Fitch</td>
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<td>F3</td>
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<td>Transfer</td>
<td>Transfer</td>
<td>Transfer and sale</td>
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<td>Guarantor</td>
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<td>ING Covered Bond Company</td>
<td>SNS Covered Bond Company</td>
<td>NIBC CPT Covered Bond Company</td>
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<td>Subordinated loan provider</td>
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<td>Collateral</td>
<td></td>
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<td>Dutch residential mortgage loans</td>
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<td>Max 97%, Committed 77%</td>
<td>Committed 75%</td>
<td>Committed 93.5%</td>
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<td>Max LTFV*</td>
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<td>(100%</td>
</tr>
<tr>
<td>Max LTMV**</td>
<td>106.25%</td>
<td>106.25%</td>
<td>106.25%</td>
<td>106.25%</td>
</tr>
<tr>
<td>(max 5%)</td>
<td>(max 5%</td>
<td>(max 5%)</td>
<td>(max 5%)</td>
<td>(max 5%)</td>
</tr>
<tr>
<td>FV versus MV</td>
<td>85%</td>
<td>90%</td>
<td>87.50%</td>
<td>85%</td>
</tr>
<tr>
<td>LTMV cut-off</td>
<td>80% non NHG, 80% NHG</td>
<td>80%</td>
<td>80% non NHG, 80% NHG</td>
<td></td>
</tr>
<tr>
<td>Market value</td>
<td>Original market value</td>
<td>Based on Automated Valuation Model</td>
<td>Original market value</td>
<td>Original market value</td>
</tr>
<tr>
<td>Indexed value</td>
<td>Land Registry house price index</td>
<td>Land Registry house price index</td>
<td>Land Registry house price index</td>
<td>Land Registry house price index</td>
</tr>
<tr>
<td>Indexation</td>
<td>85% increase, 100% decrease</td>
<td>90% increase, 100% decrease</td>
<td>100% increase, 100% decrease</td>
<td>90% increase, 100% decrease</td>
</tr>
<tr>
<td>Matching</td>
<td>Nominal, interest rate, currency</td>
<td>Nominal, interest rate, currency</td>
<td>Nominal, interest rate, currency</td>
<td>Nominal, interest rate, currency</td>
</tr>
<tr>
<td>Substitute collateral</td>
<td>Yes, non gov max 10%</td>
<td>Yes, non gov max 10%</td>
<td>Yes, non gov max 10%</td>
<td>Yes, non gov max 10%</td>
</tr>
<tr>
<td>Maturity</td>
<td>Hard bullet (HB)</td>
<td>HB (SB possible) Pre-maturity test (12 months)</td>
<td>HB (SB possible) Pre-maturity test (12 months)</td>
<td>SB (HB possible)</td>
</tr>
<tr>
<td>Soft bullet (SB)</td>
<td></td>
<td>Extendible maturity (12 months)</td>
<td></td>
<td>CPT</td>
</tr>
<tr>
<td>Conditional pass-through (CPT)</td>
<td></td>
<td>Extendable maturity (32 years)</td>
<td>Extendable maturity (32 years)</td>
<td>Extendable maturity (32 years)</td>
</tr>
<tr>
<td>Maximum maturity covered bond</td>
<td>45yr</td>
<td>30yr</td>
<td>40yr</td>
<td>16yr (47yr extended)</td>
</tr>
<tr>
<td>Covered Bond Label Compliant</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>UCITS 52(4) Compliant</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CRR Compliant</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Risk weight CRR</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

*For SNS Bank and NIBC Bank for loans originated before August 2011
** For SNS Bank and NIBC Bank for loans originated after August 2011
Source: Programme documentation
Following the introduction of the new Code of Conduct by the Dutch banking industry on 1 August 2011, new mortgage loans granted after that date are capped at a loan-to-market-value (LTMV) equal to 104% plus the transfer tax of 2%. Considering the aforementioned FV/MV ratios, this LTMV limit of 106% was not that much stricter than the LTFV limits previously adhered to (125% LTFV equivalent at a ratio of 85% or 118% LTFV equivalent at a ratio of 90%). However, since 1 January 2013 until 2018 the Dutch government will gradually lower the LTMV cap for new mortgage loans by 1% per year to 100% (including transfer tax). For 2014 a cap of 104% is applicable for new loans. Only in the case of energy saving investments an LTMV of 106% remains possible.

LTV ratios are marked-to-market via the Land Registry (Kadaster) housing price index. A decrease in the house price index fully translates into a lower property value under all covered bond programmes, while conservatism in terms of acknowledging rising house prices differs. One programme recognizes house price rises for only 85% in the calculation of the indexed market value of a loan, while another programme recognizes them for the full 100%. The other two Dutch programmes consider 90% of the house price rise (see Figure 10 on the previous page). Most programmes compare the indexed market value of the loan with the original market value of the loan. Only ING Bank compares the indexed market value with the actual market value of the loan based upon an automated valuation model. The automated valuation model is a valuation model of an independent external provider. It is a statistically based computer programme that uses real estate information such as comparable sales, property characteristics, tax assessments and price trends to estimate the value for a specific property. This estimate is never older than 18 months.

Dutch registered covered bond programmes all apply an 80% LTMV cut-off percentage under the asset coverage test, in line with the EU Capital Requirements Regulation (CRR) requirements for a preferential risk weight treatment. The mortgage loans can still be transferred to the Covered Bond Company in full, but will only be recognized as collateral up to 80% of the property value under the Asset Cover Test. For CRR purposes, this 80% cut-off percentage also applies to mortgage guarantee (NHG) loans.

Substitution assets that fit the collateral requirements of the CRR and the minimum rating agency requirements can be included in the cover pool under all programmes up to 20% of the covered bonds outstanding.

Asset Cover Test

Under the asset monitor Agreement between the issuer, the administrator, the Covered Bond Company and the Security Trustee, and under the guarantee support agreement, the assets pledged under Dutch covered bond programmes must at all times fulfil the Asset Cover Test (ACT). This test makes sure that the amount of eligible cover assets in relation to the covered bonds outstanding is at a sufficient level, as long as no notice to pay, issuer acceleration notice or CBC acceleration notice has been served. To that purpose, the adjusted aggregate asset amount under the Asset Cover Test, as discussed in detail in the following sub-paragraph, should be at least equal to the euro equivalent of the principal amount outstanding of the covered bonds. For NIBC Bank’s conditional pass-through covered bond programme, the Asset Cover Test has two parts:

- As with the other Dutch programmes, the Covered Bond Company and the issuer must first of all make sure that at the end of each calendar month, the adjusted aggregate asset amount exceeds the € equivalent of the covered bonds outstanding.

20 The transfer tax was temporarily reduced from 6% to 2% on 15 June 2011 until 1 July 2012 to stimulate the Dutch housing market, but this measure was made permanent per 1 July 2012.
i.e. the amount of credit support must exceed 100%. The (current) asset percentage of 93.5% for this particular programme is of relevance for this test.

- On top of that, the net outstanding principal amount of all mortgage receivables (i.e. nominal overcollateralization), excluding defaulted receivables, but including the market value of the substitution assets and the amounts on the CBC transaction accounts (excluding swap collateral and the balance of the construction account), must at least be equal to 115% of the covered bonds outstanding.

The 15% minimum overcollateralization requirement excludes set-off risk adjustments related to deposits and saving mortgage receivables (if no savings participation agreement is in place), or for loans in arrears for more than three months. Hence it cannot be compared one-on-one with the overcollateralization commitments derived from the maximum asset percentages (varying from 92.5% to 97%) under the two hard bullet Dutch covered bond programmes. We will prove later in Figure 12 that even for NIBC Bank’s programme the 15% overcollateralization requirement under the second part of the Asset Cover Test is not necessarily stricter than the amount of collateral required to pass the first part of the Asset Cover Test.

### Fig 11 Asset cover test Dutch covered bond programmes

<table>
<thead>
<tr>
<th></th>
<th>ABN AMRO Bank</th>
<th>ING Bank</th>
<th>SNS Bank</th>
<th>NIBC Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal amount outstanding mortgages</td>
<td>37,136,423,742</td>
<td>42,549,628,913</td>
<td>6,118,749,692</td>
<td>1,693,375,306</td>
</tr>
<tr>
<td>A = sum of current balances</td>
<td>26,553,176,517</td>
<td>32,681,658,988</td>
<td>4,466,918,977</td>
<td>1,417,988,088</td>
</tr>
<tr>
<td>B = principal receipts</td>
<td>28,314,576</td>
<td>32,681,658,988</td>
<td>4,466,918,977</td>
<td>1,417,988,088</td>
</tr>
<tr>
<td>C = cash collateral account*</td>
<td></td>
<td></td>
<td></td>
<td>28,314,576</td>
</tr>
<tr>
<td>D = substitution assets**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E = cash in pre-maturity ledger</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X = supplemental liquidity reserve ledger</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y1 = amount to cover for deposit set-off</td>
<td>4,239,250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y2 = amount to cover for commingling risk***</td>
<td></td>
<td>70,549,476</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z = amount to cover for negative carry or interest reserve required amount****</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted aggregate asset amount: A+B+C+D+E-X-Y1-Y2-Z</td>
<td>26,553,176,517</td>
<td>32,681,658,988</td>
<td>4,392,130,250</td>
<td>1,446,302,664</td>
</tr>
<tr>
<td>Outstanding bonds</td>
<td>25,489,079,061</td>
<td>31,414,056,293</td>
<td>4,352,500,000</td>
<td>1,000,000,000</td>
</tr>
<tr>
<td>Pass/fail</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>ACT Ratio</td>
<td>104.17%</td>
<td>103.78%</td>
<td>100.91%</td>
<td>144.63%</td>
</tr>
<tr>
<td>Nominal overcollateralization</td>
<td>145.70%</td>
<td>135.45%</td>
<td>140.58%</td>
<td>169.34%</td>
</tr>
</tbody>
</table>

*In the case of NIBC Bank, under the ACT no separate recognition is made for cash amounts from principal receipts, or other cash collateral (including interest receipts). Consequently the amount we have included under C in this figure, is reported under B in NIBC Bank’s ACT report.

**Transferred Collateral in Substitution Assets would be reported under C in the case of NIBC Bank’s ACT report.

***SNS Bank is the only issuer that makes a reservation Y2 for commingling risk

****Under NIBC Bank’s ACT, Z represents the interest reserve required amount.

Source: Investor reports (closing date 30 June 2014), ING

### Understanding the Asset Cover Test

**A = the Sum of Current Balances**

Under the Asset Cover Test, (A) is the lower of the sum of all Adjusted Current Balances of the transferred mortgage loans (A(a)), recognizing the mortgage loan only up to 80% of its indexed market value adjusted for certain set-off risks, or the Asset Percentage times the sum of the (set-off risk adjusted) Current Balance of the mortgage loans (A(b)).

\[
A = \min [A(a) ; A(b)], \text{ in which}
\]

\[
A(a) = \sum \min [CB - \alpha ; 0.8 \times IMV - \beta]
\]

\[
A(b) = \text{ asset percentage} \times \sum (CB - \alpha), \text{ with}
\]

\[
CB = \text{ current balance, IMV = indexed market value, } \alpha = \text{ Gross set-off and } \beta = \text{ Net set off.}
\]
...adjusted for certain set-off risks

The gross set-off α adjusts the current mortgage loan balance of the loans in the cover pool for the adjustments stated in the following box.

### Set-off risk adjustments under A

Products that have no deduction risk include:

- Products with no savings, no investment part and no mixed insurance policy (Category 1), such as interest only, amortizing or revolving credit loans.
- Products with an investment part but no mixed insurance policy (Category 2), such as investment mortgages. These mortgages are not subject to set-off risks as the investment accounts linked to the loans are usually held with bankruptcy-remote special purpose vehicles.

Products that have deduction or set-off risk include:

- Products with a mixed insurance policy where the borrower selects the insurer (Category 3), such as life loans. These products are typically not expected to be subject to set-off risks as the borrower selects the insurer himself and as such should be aware that he has entered into two separate relationships. However, deduction risk cannot fully be excluded if there are circumstances giving the borrowers the wrong impression that he did not enter into two separate relationships, such as via sales material or via a reference to the originator in the insurance conditions.
- Products with a mixed insurance policy and no switch element where the originator pre-selects the insurer (Category 4), such as (insurance) saving loans and life loans. With a saving or life insurance mortgage the borrower can try to set-off the savings accrued against the mortgage loan if the bank or insurer becomes insolvent. Set-off risk rises if there is a link between the two products. This can be the case if the mortgage loan and saving or life insurance product were sold as a single product, such as in the case of a savings loan if the interest base applicable to the savings loan is linked to the interest base applicable to the savings account, or if the mortgage and savings provider or life insurer are part of the same group or represented by the same representative.
  
  If a master sub-participation agreement or insurance savings participation agreement is in place, no set-off adjustments related to the paid-in savings premium amounts need to be made under the Asset Cover Test for saving loans.  
  
  Under a master sub-participation agreement, the savings deposit provider transfers all savings receivables to the Covered Bond Company in return for a participation in the loan. The participation is reduced by the set-off amount if a borrower were to set-off.
- Products with a mixed insurance policy and switch element between the savings and investment part where the originator pre-selects the insurer (Category 5) such as hybrid loans. Set-off risks for hybrid loans will be accounted for in the Asset Cover Test unless the insurer has transferred the insurance agreements and underlying savings and investments to a bankruptcy remote special purpose entity that reinsures the risk element of the insurance with the insurer. Deduction risks can also be covered by a transfer of the savings and investments to a special purpose entity that accepts liability for the obligations to the borrower.
- Products with a savings part, but no investment part or mixed insurance policy (Category 6) such as bank savings loans.

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21 For life loans set-off risks may be recognized in full under the ACT. With category 4 life loans the originator must in general confirm that the life insurance and mixed insurance policy were not sold as one product and that the guaranteed yield on the capital component is not linked to the interest base applicable to the mortgage loan.

22 Bank savings loans are Category 1 loans under ING Bank’s covered bond programme.
amounts standing to a bank savings account will, if certain conditions are met, by law be set off against the related bank savings loan. To mitigate set-off risk related to bank savings receivables a master sub-participation agreement or bank savings participation agreement is entered into. If a participation agreement is in place no set-off risk adjustment has to be made as the participation is already deducted as part of the definition of the net outstanding principle balance.

Set-off risks for life loans, saving loans or hybrid loans in the Asset Cover Test are calculated on the basis of a methodology notified to the rating agencies.

Furthermore:

- **Defaulted loans** are not recognized under the Asset Coverage Test (0% weight). A loan is in default if it is overdue for more than 90 days (ABN AMRO Bank), or 180 days (ING Bank, SNS Bank, NIBC Bank). A receivable is furthermore in default if it is declared irrecoverable by the originator, or if legal proceedings have been started for its recovery, or if the borrower is bankrupt, has been granted a suspension of payments or has entered into a debt rescheduling arrangement.

- **Loans in arrears for more than 3 months** are not recognized in the case of NIBC Bank, and are only recognized for 30% in the case of ING Bank and SNS Bank.

- **Loans used to fund construction deposits** are not recognized as assets.

- **Loans in breach of mortgage receivable warranties** are also not recognized.

- Set-off risk in relation to revolving credit loans can rise due to, for example, non-compliance of the loan originator with its obligations under the applicable loan agreement. Consequently, although under ING Bank’s covered bond programme, revolving credit loans are classified as Category 1 loans (no set-off risk), an amount related to the maximum amount that can be drawn under the loan agreement will be deducted to account for this set-off risk.

- NIBC Bank is the only issuer that accounts for deposit set-off risks under A. If the issuer’s rating falls below A-1 (short-term) at S&P, or F1 (short-term) at Fitch, an additional amount for possible set-off risk (deposit amount) will be deducted, equal to a) the amount deposited with the issuer for mortgage loans issued by NIBC Direct Hypotheken, or b) a lower amount if this will not adversely affect the covered bond ratings.

The net set-off $\beta$ is calculated as $\beta = \min[0.8*IMV ; \alpha - L]$, in which

- $L = 0$ if $CB - 0.8*IMV < 0$
- $L = \alpha$ if $CB - 0.8*IMV > \alpha$
- $L = CB - 0.8*IMV$ otherwise

With the three scenarios worked out in the following box we show that, if there are no set-off risks to consider ($\alpha=0$), a loan will always be included as 80% of the indexed loan-to-market value under A(a) as long as the loan-to-market value ($CB/IMV$) exceeds 80%.

---

Loans in arrears for more than three months are not recognized or only for 30%

---

23 These conditions include, an activation of the Deposit Guarantee Scheme (DGS) if in respect of the bank by the Dutch Central Bank, or if the bank is subjected to emergency regulations or is declared bankrupt. Other conditions for set-off may be if notification of the assignment of the mortgage receivable to the CBC has not been made or if other services (such as investment advises) related to the loan are provided by the bank to the borrower.

24 The net outstanding principal balance in relation to a transferred receivable is the gross outstanding principal balance, less the participation amount if it is a participation receivable.
Three scenarios for \( L \)

In order to find how a single loan \( i \) is included in \( A(a) \), we work out three scenarios for \( L \) with different boundary conditions:

**Scenario 1:**
- Condition 1a: \( 0.8 \times \text{IMV} > \text{CB} \)
- Condition 1b: \( 0.8 \times \text{IMV} > \alpha \)
- Condition 1c: \( 0.8 \times \text{IMV} < \alpha \)

From condition 1a we get that \( L = 0 \), leaving \( \beta = \min \{0.8 \times \text{IMV} ; \alpha\} \), which is reduced by condition 1b to \( \beta = \alpha \). Substituting this into the formula for \( A(a) \) and using condition 1a we get
\[
A(a)_i = \text{CB} – \alpha.
\]
Condition 1a combined with condition 1c, for obvious reasons, results in the loan being disregarded (\( A(a)_i = 0 \)).

**Scenario 2:**
- Condition 2a: \( \text{CB} > 0.8 \times \text{IMV} \) or \( \text{CB} – 0.8 \times \text{IMV} > 0 \)
- Condition 2b: \( \text{CB} – 0.8 \times \text{IMV} < \alpha \)

From the two conditions we get \( L = \text{CB} – 0.8 \times \text{IMV} \), so the net set-off \( \beta = \min \{0.8 \times \text{IMV} ; \alpha – \text{CB} + 0.8 \times \text{IMV}\} \). Substituting the net set-off in the formula for \( A(a) \) we get
\[
A(a)_i = \min \{\text{CB} – \alpha, \max[0, \text{CB} – \alpha]\} = \text{CB} – \alpha.
\]

**Scenario 3:**
- Condition 3a: \( \text{CB} > 0.8 \times \text{IMV} \)
- Condition 3b: \( \text{CB} – 0.8 \times \text{IMV} > \alpha \)

From condition 3b we get \( L = \alpha \), so the net set-off \( \beta = \min \{0.8 \times \text{IMV} ; 0\} = 0 \). Using this result and condition 3a it follows that
\[
A(a)_i = 0.8 \times \text{IMV}.
\]

However, with approximately still 40% to 45% of the mortgage loan receivables of the regular Dutch covered bond issuers having an LTV of less than 80%, and with the asset cover percentage in most cases below 80%, \( A(b) \) (i.e. the sum of the current balance times the asset percentage) tends to determine the balance \( A \) that is incorporated for Asset Cover Test purposes. This is different for NIBC Bank’s conditional pass-through covered bond programme. The asset percentage applicable under \( A(b) \) is much higher at 93.5%, while due to the high percentage of NHG loans in this pool, the issuer reports for 78% of the assets in its pool average current loan to indexed market values above 80%. Hence for this particular programme \( A(a) \) is leading to determine the balance \( A \).

---

**Fig 12  Estimating the credit enhancement (CE) advantage of conditional pass-through issuance**

<table>
<thead>
<tr>
<th>Actual ACT ratio</th>
<th>ABNANV</th>
<th>INTNED</th>
<th>SNSSNS</th>
<th>NIBCAP</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Calculated ACT ratio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( A(a) = A )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB (AP = 75%)</td>
<td>122.6%</td>
<td>119.0%</td>
<td>119.3%</td>
<td>147.8%</td>
<td></td>
</tr>
<tr>
<td>HB (AP = 75.1%)</td>
<td>105.1%</td>
<td>101.6%</td>
<td>103.7%</td>
<td>127.4%</td>
<td></td>
</tr>
<tr>
<td>HB (AP = 77%)</td>
<td>107.9%</td>
<td>104.3%</td>
<td>106.5%</td>
<td>130.7%</td>
<td></td>
</tr>
<tr>
<td>CPT (AP = 93.5%)</td>
<td>131.0%</td>
<td>126.6%</td>
<td>129.7%</td>
<td>158.1%</td>
<td></td>
</tr>
<tr>
<td><strong>CE Difference</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPT (AP = 93.5%) vs bullet (AP = 75%)</td>
<td>25.9%</td>
<td>25.1%</td>
<td>26.0%</td>
<td>30.7%</td>
<td>26.9%</td>
</tr>
<tr>
<td>CPT (AP = 93.5%) vs bullet (own AP)</td>
<td>25.8%</td>
<td>22.3%</td>
<td>26.0%</td>
<td></td>
<td>24.7%</td>
</tr>
<tr>
<td><strong>CE adj. for dominance A(a)</strong></td>
<td>8.4%</td>
<td>7.7%</td>
<td>10.4%</td>
<td>10.3%</td>
<td>9.2%</td>
</tr>
<tr>
<td><strong>Actual CE advantage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPT vs bullet (AP = 75%)</td>
<td>17.5%</td>
<td>17.4%</td>
<td>15.6%</td>
<td>20.5%</td>
<td>17.7%</td>
</tr>
<tr>
<td>CPT vs bullet (own AP)</td>
<td>17.4%</td>
<td>14.7%</td>
<td>15.6%</td>
<td></td>
<td>15.9%</td>
</tr>
<tr>
<td><strong>AP crossover A(b) vs A(a)</strong></td>
<td>87.5%</td>
<td>87.8%</td>
<td>86.1%</td>
<td>87.3%</td>
<td>87.2%</td>
</tr>
<tr>
<td>% indexed LTV over 80%*</td>
<td>55.8%</td>
<td>60.5%</td>
<td>61.1%</td>
<td>77.9%</td>
<td></td>
</tr>
</tbody>
</table>

*For NHG loans no indexed LTV distributions are reported, which means this number may overstate the actual percentage of loans with an LTV above 80%.
Source: ING
Estimating the credit enhancement advantage of CPT issuance

In Figure 12 we give an overview of the estimated advantage for issuers from conditional pass-through issuance in terms of potential lower credit enhancement (CE) requirements. The calculations are based upon the indexed loan-to-value distribution statistics provided by each issuer for the end of June. The calculated ACT ratios differ from the actual ACT ratios reported due to the fact that a) no set-off risk adjustments have been made for calculation purposes and b) we have taken the mid of the LTV distribution ranges. Actual indexed LTV ratios per range may differ.

The figure confirms that in the case of conditional pass-through issuance A(a) becomes dominant over A(b) for the purpose of determining A under the Asset Cover Test as reflected by the lower ACT ratio for A(a) compared to A(b). This is caused by the LTV cut-off of 80% that has to be made on higher LTV loans under A(a). Hence differences in the asset percentages applied (reflecting the overcollateralization requirements of the rating agencies) for bullet versus conditional pass-through structures, tend to overestimate the actual credit enhancement advantage that can be realised with conditional pass-through issuance. Depending on the applicable asset percentages, current cover pool sizes and compositions and covered bonds outstanding, we estimate a credit enhancement (or overcollateralization) advantage of 16%-18% rather than 25%-27% for conditional pass-through issuance for Dutch programmes.

For NIBC Bank’s conditional pass-through covered bond programme this also shows that the second part of the Asset Cover Test performed under this programme, where the issuer commits to a 15% nominal overcollateralization, is with the current composition of the collateral pool not necessarily stricter than the commonly used first part of the Asset Cover Test for Dutch covered bond programmes. Irrespective of the fact that a 93.5% asset percentage equates to 7% nominal overcollateralization when we ignore (differences in) set-off risk adjustments under both legs, the dominance of A(a) over A(b), due to the programme’s commitment to an 80% LTV cut-off, would add around 8% to 10% to this percentage under the first part anyway.

As a rule of thumb, we estimate that 87.2% is currently the average asset percentage below which A(b) becomes dominant over A(a) under Dutch Asset Cover Tests (the AP crossover point for A(b) to A(a) referred to in Figure 12).

The asset percentages applied for the purpose of the Asset Cover Test are in line with rating agency requirements to maintain sufficient credit enhancement for current rating levels. The asset percentages are obtained from the rating agencies in the last month of each quarter. Otherwise the Covered Bond Company or the administrator on its behalf will in that month calculate or obtain the calculation of the weighted average foreclosure frequency (WAFF) and the weighted average loss severity (WALS) for all transferred receivables or for a random sample of the transferred receivables. These WAFF and WALS numbers will be used as input in one or more cash flow models provided or approved by the rating agencies, to test the required credit enhancement and the asset percentage needed to provide the credit enhancement under various cash flow scenarios.

These committed percentages do vary from time to time and currently range from 75% to 93.5%. Although, SNS Bank and NIBC Bank make no reference to a maximum asset percentage in their programme documentation, ING Bank and ABN AMRO Bank cap their asset percentages at a maximum of 97% and 92.5%. Any increase in the asset

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25 SNS Bank initially used to have a maximum asset percentage of 94%.
percentage under these programmes is also subject to rating agency confirmation. SNS Bank and NIBC Bank may request the Covered Bond Company to increase or decrease the asset percentage as well. However, the Covered Bond Company will only accept a request for an increase if none of the rating agencies (after being notified of such a request) communicates that this will have a negative effect on the current ratings of the covered bonds. In addition, SNS Bank specifically states that the asset percentage applied is always sufficient to maintain an Aaa rating at Moody’s on an expected loss basis, irrespective of the fact that its covered bonds are rated Aa2 or otherwise.

\[ B = \text{Principal receipts on transferred mortgage receivables up to the end of the immediately preceding calculation period} \]

\[ C = \text{Transferred cash collateral} \]

\[ D = \text{Mark-to-market value of eligible €-denominated substitution assets in line with the EU Capital Requirements Directive and rating agencies requirements.} \]

**CRR eligible substitution assets**

- 0% risk weighted exposures to central governments, central banks or international organisations
- 0% risk weighted exposures guaranteed by public sector entities, regional governments or local authorities
- exposures to institutions that qualify for a 10% risk weight
- exposures to institution that qualify for a 20% risk weight up to maximum 10% (or 20% for NIBC Bank) of the covered bonds outstanding
- liquid AAA equivalent rated RMBS (and CMBS notes for ING Bank) up to 10% (or 20% for NIBC Bank) of the covered bonds outstanding

*The EU CRR caps exposures to AA- or better rated institutions (20% risk weight) at 15% of the covered bonds outstanding. Eligible senior securitization notes are capped at 10%, but can exceed this percentage until the end of 2017.*

**Rating agency requirements**

*Moody’s minimum short-term/long term rating requirements*
- exposures maturing within 30 days: P-1/A2
- exposures maturing within 1-3 months: P-1/A1
- exposures maturing within 3-6 months: P-1/Aa3
- exposures maturing over 6 months: P-1/Aaa

Substitution assets may not exceed 20% of the covered bonds outstanding

*S&P minimum short-term/long term rating requirements*
- exposures maturing within 30 days or 60 days: A-1 or A-1/ A
- exposures maturing within 1-12 months or 2-12 months: A-1+/AA or A-1+/AA-
- exposures maturing over 1 year: AAA

A-1 rated substitution assets may not exceed 20% of the covered bonds

*Fitch minimum short-term/long term rating requirements*
- exposures maturing within 30 days: F1/A
- exposures maturing within 1-12 months: F1+/AA-

In line with these requirements, Dutch covered bond programmes allow for the inclusion of substitution assets up to 20% of the outstanding covered bonds. Furthermore, the covered bond programmes of ABN AMRO Bank and ING Bank restrict exposures other
than to 0% risk weighted central governments, central banks or international organisations, to 10% of the total cover assets.

**E = Pre-maturity liquidity ledger plus supplemental liquidity reserve ledger**

In order to mitigate liquidity risks for hard bullet covered bonds the issuer has to conduct a pre-maturity test twelve months (with all three rating agencies) ahead of the final maturity date of a hard bullet covered bond if the issuer’s short-term credit rating falls below a by the rating agencies specified minimum (supplemental liquidity event).

- S&P < A-1 (short-term): bonds maturing in 12 months
- Moody’s < P-1 (short-term): bonds maturing in 12 months
- Fitch < F1+ (short-term): bonds maturing in 12 months

If the pre-maturity test is failed the Covered Bond Company will notify the Security Trustee and the originators. The originators must make sufficient liquidity available via the pre-maturity ledger to repay the bonds maturing, taking into account all other covered bonds that mature ahead of these bonds. This can be done by selling or refinancing selected receivables, the transfer of eligible collateral to the Covered Bond Company, a guarantee for the issuer’s obligations satisfactory to the rating agencies, a covered bond takeout credit facility agreement (CBTF agreement) or a combination of these measures.

A failure of the pre-maturity test has to be fixed within 10 business days after notification of the failure. Otherwise it will form a breach of the pre-maturity test. A breach of the pre-maturity test does not constitute an issuer event of default, nor does it prevent the issuer from issuing further covered bonds unless it coincides with a breach of the Asset Cover Test. That said, the Security Trustee is also in the case of a breach of the pre-maturity test entitled to serve a notice to pay under the Guarantee. If solely a notice to pay is served under the guarantee, without an issuer acceleration notice (as with an issuer default), the Covered Bond Company is not obliged to start making payments under the Guarantee. Only a failure by the issuer to repay the amount due at maturity of a covered bond will result in an issuer event of default and service of an issuer acceleration notice. A service of a notice to pay does mean that the Amortisation Test has to be performed.

ABN AMRO Bank and ING Bank are the only two issuers that have issued Dutch covered bonds in hard bullet format. Both are not in breach of the required minimum ratings and consequently have no amounts standing to the credit of the pre-maturity ledger. As both programmes have removed their selected asset required amount (SARA) clause and the supplemental liquidity reserve amount (SLRA), E also no longer represents the supplemental liquidity reserve ledger (SLRL) for these two programmes. Only SNS Bank still has a SARA clause and related supplemental liquidity reserve amount in place. This issuer has only issued soft bullet covered bonds. Consequently for this issuer E only represents the supplemental liquidity reserve ledger explained below.

**X = Supplemental liquidity reserve amount**

To reduce liquidity risks related to the mismatch between the maturity of the assets in the cover pool and the maturity of the covered bonds, Dutch covered bond issuers, such as ING Bank, ABN AMRO Bank and SNS Bank initially introduced a supplemental liquidity reserve amount (SLRA).

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26 With the amendments made to ABN AMRO Bank’s and ING Bank’s programme documentation in December 2013 and February 2014 respectively, the minimum rating requirement at S&P was changed from A-1+ (short-term) to A-1 (short-term), while at the same time the coverage period for this rating agency was expanded from six months to 12 months. Consequently at their current short-term rating of A-1 at S&P, both issuer no longer have to set aside sufficient liquidity under the pre-maturity ledger to cover redemption payments in the coming six months.
Prior to a service of a notice to pay the SLRA is calculated on the basis of a method notified to the rating agencies in connection with the funding of the supplemental liquidity reserve ledger (SLRL). This currently equates to 0% of the aggregate outstanding notional balance of the cover assets for SNS Bank, but may be a different percentage. ABN AMRO Bank and ING Bank, which issue hard bullet covered bonds and perform a pre-maturity test, used to apply 5%. If a notice to pay is served, the SLRA is reduced by the amount of assets sold or refinanced to fund or replenish the Supplemental Liquidity Reserve Ledger.

The SLRA serves to moderate the impact of selected assets required amount (SARA) clauses. To reduce the risk of time subordination of longer maturity covered bondholders, SARA clauses put limitations on the amount of assets that can be sold to repair a failure of the pre-maturity test or to repay maturing covered bonds after a default of the issuer. The aggregate current balance of the selected assets that the Covered Bond Company is allowed to sell cannot exceed the so called required current balance amount. The latter roughly restricts the amount of assets that can be sold to the redemption amount of the covered bond maturing as percentage of all covered bonds outstanding times the total assets in the cover pool. SARA clauses thus essentially allocate the assets available on a pro-rata basis to the covered bonds outstanding. Rating agencies tend to require more overcollateralization for covered bond programmes with SARA clauses than for covered bond programmes without these clauses. SLRAs mitigate the additional overcollateralization consequences of SARA clauses.

**Y1 = Coverage for deposit set-off**

Covered bond issuers that are also deposit taking institutions can be subject to set-off risk. Upon bankruptcy of the issuer, mortgage borrowers may be able to net (set-off) deposits with their mortgage loan. This deposit set-off risk is accounted for under Y or Y1 in the Asset Cover Test. If an issuer no longer fulfils the minimum required ratings, additional assets need to be pledged to make sure that sufficient assets are available in the pool to fulfil the claim of covered bondholders plus potential set-off amounts of the mortgage borrowers. The minimum rating requirements are as follows:

- S&P: A-1 (short-term) or A (long-term)
- Moody’s: P-1 (short-term)
- Fitch: F1 (short-term) and A (long-term)

The deposit amount (Y for ABN AMRO Bank and ING Bank) is typically defined as an additional amount calculated on the basis of a method notified to the rating agencies for set-off risks related to deposits, other than deposits linked to bank savings loans. The latter will be accounted for under the set-off risk adjustments (α) under A if no participation agreement is in place. SNS Bank is the only issuer that specifically defines the deposit amount (Y1) under its Asset Cover Test as deposits that are not covered by the Deposit Guarantee Scheme (DGS):

27 The required current balance amount is the adjusted current balance amount x A/B, in which A is the current balance of all receivables and other transferred assets minus the supplemental liquidity available amount. The supplemental liquidity available amount is a) prior to a notice to pay, the SLRA minus assets sold or refinanced to fund the supplemental liquidity reserve ledger, or b) following a notice to pay, the SLRA. B is the required redemption amount of all covered bonds outstanding minus the required redemption amount provided for in cash. The required redemption amount is the amount outstanding for each covered bond x (1+ (0.005 x (days to the final maturity date (for hard bullet covered bonds) or extended maturity date (for soft bullet covered bonds))/365). Hence to further mitigate time subordination longer maturity covered bonds have more weight than shorter maturity covered bonds in the calculation of the selected assets required amount.

The adjusted current balance amount is a) in the case of a breach of the pre-maturity test, the required redemption amount for a hard bullet covered bond minus the amount on the pre-maturity liquidity ledger, or b) following a notice to pay and issuer acceleration notice, the required redemption amount for the earliest maturing covered bonds less the amounts on the GIC or AIC account, authorised investments and substitution assets.

28 Until December 2013 and February 2014, this used to be A-1+ (short-term) under ABN AMRO Bank’s and ING Bank’s covered bond programmes.

29 For SNS Bank the requirement that these ratings at Fitch should not be on rating watch negative (RWN), has been removed.
\[ \Sigma \min \{D - D_{\text{dgs}} ; MR\} \]

where

\[ D = \text{deposit amount held by the borrower of the mortgage receivable with the originator}, \]
\[ D_{\text{dgs}} = \text{the deposit amount claimable under the Deposit Guarantee Scheme and } MR = \]
\[ \text{outstanding principal amount of the mortgage receivable}. \]

The deposit amount under all programmes is always at least zero, and is reduced by \( \Delta(b) - \Delta(a) \) if \( \Delta(b) \) exceeds \( \Delta(a) \), or by the excess credit enhancement if \( \Delta(b) \) is lower than \( \Delta(a) \). \(^{30}\) NIBC Bank is the only issuer that fully accounts for deposit set-off risks under \( A \).

**Y2 = Coverage for commingling risk**

In the case of SNS Bank the mortgage loan originators and the foundation account providers are the same entities. Therefore, there is still a risk that amounts related to the cover assets standing to the credit of the collection foundation account will form part of the bankruptcy estate of the originator (commingling risk). Consequently, at the end of April 2014, SNS Bank introduced an additional reservation for commingling risk under the Asset Cover Test via \( Y2 \) as a commingling remedial action to mitigate this risk.

If the issuer’s credit ratings fall below P-1 (short-term) at Moody’s, or below F1 (short-term) or A (long-term) at Fitch, an additional amount in connection with commingling risk has to be made available. This amount equals the original principal amount of all mortgage receivables on the last day of the preceding month, multiplied by the average monthly payment percentage for the twelve calendar months preceding the calculation date, \(^{31}\) multiplied by 1.5. No reservation has to be made under the Asset Cover Test if the issuer is not in breach of the minimum rating criteria or has taken alternative measures to reduce commingling risk.

**Z = Coverage for negative carry**

The Asset Cover Test also covers for the negative carry that may rise between the GIC or AIC rate and the coupon on the covered bonds after a default of the issuer. The coverage for negative carry is zero if a total return swap, or standby total return swap, is in place, as is the case with all regular Dutch covered bond programmes.

If there is no total return swap in place, but a portfolio test is performed or an alternative hedging methodology is in place, the coverage for negative carry equates to the weighted average maturity (WAM) of the covered bonds outstanding multiplied by the principal amount of the covered bonds multiplied by a percentage \( P \). \( P \) represents the negative carry factor and is defined as the weighted average margin of the outstanding covered bonds minus the GIC or AIC margin/rate, defined in the GIC or AIC Account Agreement. \(^{32}\) The negative carry factor is typically 0.5% for covered bond programmes that do not have a total return swap in place.

In the case of NIBC Bank’s conditional pass-through covered bond programme,

\[ Z = \text{the interest reserve required amount} \]

\[ Z = \max \{0 ; \ (U + V - W)\} \]

where

\[ U = \text{interest payable on the covered bonds until their maturity date}, \]
\[ V = (i) \times (ii) \times (iii), \]
\[ (i) = \max \{0 ; \ \text{WAL}_{\text{assets}} - \text{WAL}_{\text{covered bonds}}\}. \]

\(^{30}\) The excess credit enhancement is the difference between \( \Delta(b) \) based upon the Asset Percentage notified to the rating agencies and the actual outcome of \( \Delta(b) \).

\(^{31}\) Principal and interest payments made on the mortgage loans in a month, divided by the outstanding principal amount of all mortgage receivables at the end of the preceding month.

\(^{32}\) The GIC or AIC Account Agreement requires the Covered Bond Company to hold a GIC/AIC Account with an eligible account bank in which the amounts it receives on its cover assets will be paid. The account bank pays interest on the amount of money standing on the AIC Account agreed upon in the AIC Account Agreement. The AIC rate is 1m Euribor minus the AIC margin. The minimum rating criteria applied for the account bank are P-1 (short-term) at Moody’s, A-1 (short-term) at S&P and F1/A (short-term/long-term), or alternatively F1+ RWN / A+ RWN, at Fitch.
(ii) = the principal amount outstanding on the covered bonds  
(iii) = the WA interest rate on the covered bonds after maturity  
\[ WAL_{\text{assets}} = \text{weighted average remaining life of cover assets}, \quad WAL_{\text{covered bonds}} = \text{weighted average remaining life of the covered bonds until maturity} \]

\[ W = \text{the estimated interest income on the cover assets} \]

The interest reserve required amount under NIBC Bank’s conditional pass-through covered bond programme essentially requires the issuer to pledge additional collateral if the expected interest payments due on the covered bonds were to exceed the expected interest income from the cover assets until the expected extended maturity date.

**A breach of the Asset Cover Test**

A breach of the Asset Cover Test does not constitute an issuer event of default, and consequently does not trigger soft bullet or pass-through extension features. Following a failure of the Asset Cover Test the originators have to transfer sufficient eligible receivables to restore the breach, otherwise no further covered bonds can be issued. If the Asset Cover Test is not restored by the end of the next calculation date, the Security Trustee can serve a notice to pay, or in the case of NIBC Bank a breach of asset cover test notice, on the Covered Bond Company. Under NIBC Bank’s programme, the Covered Bond Company is not allowed to make any payments to the issuer and subordinated loan provider as long as the Asset Cover Test is not repaired. However, the mere service of a notice to pay or breach of asset cover test notice, without an issuer acceleration notice (as in the case of an issuer event of default) or a CBC acceleration notice (following a CBC event of default), does not oblige the Covered Bond Company to start making payments under the Guarantee. The Covered Bond Company is only required to make payments if a notice to pay is served in combination with an issuer acceleration notice. In that case the Covered Bond Company is also required to sell or refinance receivables if covered bonds mature within twelve months. Until the Asset Cover Test is remedied, the Amortisation Test has to be performed.

**Amortisation Test**

Following the service of a notice to pay but prior to a service of a CBC acceleration notice, an Amortisation Test is performed to make sure that the amount of cover assets in relation to the covered bonds is at a sufficient level. The Covered Bond Company has to notify the Security Trustee if the Amortisation Test is breached, which in turn is then entitled to serve a CBC acceleration notice. Under the Amortisation Test, the Amortisation Test Aggregate Amount, \( A + B + C - X - Z \), needs to be at least equal to the amount of covered bonds outstanding, or in the case of NIBC Bank’s conditional pass-through covered bond programme at least 115% of the covered bonds outstanding. This is where NIBC Bank’s conditional pass-through covered bond programme still commits to a minimum 15% overcollateralization level, while for the other programmes \( A(a) \) (as applicable under the Asset Cover Test) will become leading. This may reduce the required credit enhancement under these programmes by 16% to 18% at the current pool composition and 80% LTV cut-off applied (see Figure 12 on page 32).

\[ A = \text{the Amortisation Test Current Balance} = \Sigma \min \{ CB - \alpha ; 0.8*IMV - \beta \}, \text{with} \]

\[ CB = \text{current balance}, \quad IMV = \text{indexed market value}, \quad \alpha = \text{Gross set-off and} \quad \beta = \text{Net set off.} \]

Furthermore,

\[ B = \text{cash on the GIC or AIC or CBC accounts, including interest and principal receipts} \]

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33 A notice to pay under this programme can only be served if an issuer event of default occurs and results in the service by the Security Trustee of an issuer acceleration notice on the issuer. A failure by the issuer to make a payment in respect of the covered bonds will not automatically result in the service of an issuer acceleration notice. The Security Trustee is not obliged to serve an issuer acceleration notice unless this is specifically requested by the covered bondholders.
C = the mark-to-market value of substitution assets

X = the supplemental liquidity reserve amount

Z = the coverage for negative carry, which is zero if a total return swap is in place

or in the case of NIBC Bank

Z = the interest reserve required amount

**A breach of the Amortisation Test**

A breach of the Amortisation Test will in the case of all the regular Dutch covered bond programmes constitute a CBC event of default, entitling the Security Trustee to service a **CBC acceleration notice**, meaning that the covered bonds will accelerate. Only in the case of NIBC Bank’s conditional pass-through covered bond programme a breach of the Amortisation Test will not result in a CBC event of default. The Security Trustee here is entitled to serve a **breach of amortisation test notice** (i.e. not a CBC acceleration notice) on the issuer and the Covered Bond Company. However, under this particular covered bond programme, if the Amortisation Test is breached, following an issuer event of default and Service of a notice to pay on the guarantor, all covered bonds become pass-through with a 32 year legal final maturity extension period. All available funds for repayment will in that case be divided pro rata to all covered bonds. For covered bonds with a shorter maturity date it may then take longer before they will be repaid, while for covered bonds with longer maturity dates repayment may occur earlier than expected. A CBC event of default does take place however if the pass-through covered bonds have not been repaid in full by the end of the 32 year extended due for payment date.

**Matching**

Under the covered bond programmes, interest rate risks that arise due to the mismatches between the mortgage payments received and the covered bond payments due are mitigated via various swap contracts. Via a **total return swap (TRS)** the Covered Bond Company swaps the mortgage payments received for a 1m floating rate. If applicable, the basis risk between the floating rate payments received under the TRS and the fixed rate payments due on the covered bonds is hedged via **interest rate swaps**. The Covered Bond Company will also enter into a **structured swap** if a covered bond is issued in another currency than the Euro, which covers interest rate and currency mismatches. Counterparty risks to the swap contracts are mitigated via minimum rating requirements for the swap provider (or alternatively a guarantor) or otherwise additional collateral postings. In addition, to reduce the risks inherent to intra-group swap counterparties, SNS Bank has back-up swap facilities in place. NIBC Bank has no swaps under its conditional pass-through covered bond programme, but the issuer’s programme documentation makes reference to the option to use swaps to hedge certain risks. NIBC Bank does commit to a minimum 3% interest rate upon inclusion of a mortgage loan in the pool.

**Portfolio test**

As an alternative to a total return swap the issuer can opt to perform a **portfolio test** which will be carried out by the administrator. Under the portfolio test the **net present value (NPV)** of future cash flows on the transferred receivables and other balances related to the covered bond programme (i.e. cash balances, substitution assets or the

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34 The minimum rating criteria are: ING Bank: P-1 (short-term) and A2 (long-term) (Moody’s) (or A1 (long-term) if there is no short-term rating), A (long-term) (S&P), F1 (short-term) and A (long-term) (Fitch). ABN AMRO Bank: P-2 (short-term) and A3 (long-term) (Moody’s), (A-1) (short-term) and A (long-term) (S&P), F3 (short-term) and BBB-(long-term) (Fitch). SNS Bank: P-1 (short-term) and A2 (long-term) (Moody’s) (or A1 (long-term) if there is no short-term rating), F1 (short-term) and A (long-term) (Fitch). NIBC Bank: A-1 (short-term) and A (long-term) (S&P), F1 (short-term) and A (long-term) (Fitch).
mark-to-market value of structured and interest rate swaps) need to exceed the NPV of the covered bonds by a certain amount (x) subject to rating agency requirements. More specifically and as an example, under a portfolio test:

\[ \Sigma [A + B + C + D + E + F + G] - [NPV of the covered bonds] \geq x, \text{ where} \]

A = NPV of future cash flows on the transferred receivables
B = the receipts on the transferred receivables in the preceding calculation date that were not applied in accordance with the trust deed
C = the principal balance of any transferred collateral other than substitution assets
D = the NPV of future cash flows from the substitution assets
E = other cash and deposits held with the Covered Bond Company
F = the mark-to-market value of structured swap agreements
G = the mark-to-market value of interest rate swap agreements

In addition, the difference in basis point duration between the cover assets and covered bonds may not exceed a specified percentage (y), i.e. \[ \text{Dur} \Sigma [A + B + C + D + E + F + G] - \text{Dur} [NPV of the covered bonds] \leq y\% \]

Finally, the difference in basis point duration between the cover assets for that term point and the covered bonds may not exceed a specified percentage, where term points can be defined as:

1-3, 4-6, 7-9 and 10-12 months; and
2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 20, 25 and 30 years.

A breach of the portfolio test does not constitute an issuer event of default. However, the issuer is not allowed to issue further covered bonds until the portfolio test is restored. A breach of the portfolio test needs to be remedied by the following calculation date, otherwise the Security Trustee may serve a notice to pay on the Covered Bond Company under the guarantee. The documentation for NIBC Bank’s Conditional Pass-through Covered Bond programme does not foresee in the option of a portfolio test.

**Refinancing risk mitigants**

The Covered Bond Company is a special purpose entity that has no banking license. As such it cannot attract central bank funding for the purpose of refinancing covered bonds that mature after the issuer has defaulted. However, Dutch covered bond programmes do have other refinancing risk mitigants available in their programme structures. These include the pre-maturity test for hard bullet covered bonds, the maturity extension features in the case of soft-bullet and conditional pass-through covered bonds and the commitment to establish a reserve account or a reserve fund if the issuer’s credit rating falls below a certain level.

**Pre-maturity test**

ABN AMRO Bank and ING Bank have issued covered bonds in hard bullet format, that are backed by a pre-maturity test to provide for sufficient liquidity to cover redemption payments due on the covered bonds within twelve months if the credit ratings of the issuers fall below a certain level (a failure of the pre-maturity test). A failure of the pre-maturity test has to be restored within 10 business days, by selling receivables or by posting additional collateral via the pre-maturity liquidity ledger, of through a guarantee or

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The **basis point duration** is the percentage change in the net present value of a financial asset due to the change in the relevant interest rate by one basis point.
covered bond takeout facility (CBTF). Otherwise a breach of the pre-maturity test occurs. The Security Trustee may then serve a notice to pay on the Covered Bond Company, in which case no longer the Asset Cover Test but the Amortisation Test must be performed.

**Soft bullet maturities**

SNS Bank’s covered bonds have soft bullet maturities. In the case of a soft bullet covered bond, if the Covered Bond Company has insufficient funds available to make redemption payments following an issuer event of default, this obligation is automatically deferred to the extended due for payment date, one year after the maturity date. If the Covered Bond Company has sufficient moneys available to pay redemption amounts due in part, these partial redemption payments have to be made on any monthly interest payment date during the extension period. Payments of unpaid amounts are deferred until the extended due for payment date.

A failure by the Covered Bond Company to pay redemption amounts prior to the extended due for payment date does not constitute a CBC event of default. However, if the CBC fails to pay the final redemption amount on the extended due for payment date, this will constitute a CBC event of default. If a covered bond’s extended due for payment date falls within twelve months, the Covered Bond Company is required to sell or refinance selected mortgage receivables for the best terms available but at least for the required redemption amount. If the receivables are not sold for the required amount six months prior to the extended due for payment date, then the Covered Bond Company can sell or refinance them for the best terms, even if this is less than the required amount.

**Conditional pass-through feature**

NIBC Bank is, up until now, the only bank entity that has issued conditional pass-through covered bonds with a 32 year maturity extension period. The maximum term of the underlying mortgage loans is 30 years. In the case of pass-through covered bonds, the risks run by the mismatch between the maturity of the covered bonds and the assets underlying them is for the account of the investor. A pass-through of payments to covered bondholders, if the Covered Bond Company, post issuer default, has insufficient funds available to fully repay the covered bonds on their maturity date, removes market risks involved with a potential fire sale of the cover assets at an unfavourable price. Mortgage loans will only be sold to repay the pass-through covered bondholders if the sales proceeds are sufficient to redeem the bonds. If the mortgage receivables cannot be sold for the required amount, the covered bonds will be redeemed to the extent funds are available. The Covered Bond Company will however make its best efforts to sell mortgage receivables every six months to repay the covered bondholders. This reduces the extension risk involved with the pass-through covered bonds. A failure to sell or refinance these assets prior to the extended due for payment date will not lead to a CBC event of default. Only a failure by the Covered Bond Company to make these final redemption payments after 32 years on the extended due for payment date will constitute a CBC event of default.

**Reserve fund**

In the case of the regular bullet Dutch covered bond programmes, the Covered Bond Company will be required to maintain a reserve fund on the AIC/GIC account (reserve fund ledger), if the issuer’s credit rating falls below the minimum required ratings:

- S&P: A-1 (short-term) or A (long-term)
- Moody’s: P-1 (short-term)
- Fitch: F1 (short-term) and A (long-term)

As a consideration for the Covered Bond Company assuming the guarantee, the issuer will credit an amount equal to the reserve fund required amount to this account, covering three months of interest payments and third party expenses.
If the rating trigger is no longer breached, the amounts on the reserve fund ledger will be repaid to the issuer. If a notification event occurs or after notice to pay or CBC acceleration notice has been served on the Covered Bond Company, the Covered Bond Company is no longer required to maintain a reserve fund:

- **Three months after a notification event**, when the borrowers have been notified of the transfer of the mortgage receivables and have been instructed to make payments on the mortgage receivables directly to the Covered Bond Company.

- After the date that the Covered Bond Company demonstrates that the **borrowers pay** the required amounts on their mortgage loans to the Covered Bond Company.

The amounts standing to the credit of the reserve fund will then be added to the other income of the Covered Bond Company and will be used to make payments under the covered bond programme in line with the relevant priority of payments.

<table>
<thead>
<tr>
<th>Reserve fund required amount</th>
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<tbody>
<tr>
<td>If no interest rate or structured swap is in place: the aggregate scheduled interest on the covered bonds due in the following three months.</td>
</tr>
<tr>
<td>If there is an interest rate or structured swap with an external counterparty: the aggregate interest component due by the Covered Bond Company under the interest rate swap or structured swap in the coming three months.</td>
</tr>
<tr>
<td>If there is an interest rate or structured swap with an internal counterparty: the higher of a) the aggregate scheduled interest due and b) the interest component due by the Covered Bond Company under the interest rate swap or structured swap on the covered bonds for the coming three months.</td>
</tr>
<tr>
<td>The anticipated aggregate amount payable in the next three months to the Security Trustee, tax authorities, the agents and registrar, the servicers, the administrator, the account bank, managing director and Security Trustee’s director and the asset monitor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reserve account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under NIBC Bank’s covered bond programme, the Covered Bond Company is required to open a reserve account with the account bank that will be credited by the Covered Bond Company from the proceeds of the subordinated loan up to the reserve account required amount. The reserve account required amount covers the interest payments due on the covered bonds over the next three months, plus 0.03% of the principal amount outstanding of the covered bonds plus a fixed amount of €62,500.</td>
</tr>
</tbody>
</table>

If the interest receipts and the principal receipts on the cover assets are insufficient to meet the payments due related to the covered bond programme, all amounts credited to the reserve account will be available to meet the interest payments on the covered bonds and third party expenses due. If during an interest period, a notice to pay is served on the Covered Bond Company, the amount of scheduled interest due on the covered bonds in this period will be paid directly from the reserve account.

---

**Fig 13  Amounts standing to the credit of the reserve fund ledger or reserve account (€)**

<table>
<thead>
<tr>
<th></th>
<th>ABN AMRO Bank</th>
<th>ING Bank</th>
<th>SNS Bank</th>
<th>NIBC Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Fund</td>
<td>12,860,367</td>
<td>8,835,103</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Investor reports, ING

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36 If this had been applicable under NIBC Bank’s covered bond programme, also amounts payable by the Covered Bond Company under swap agreements entered into would have to be covered for the coming three months.
Monitoring

Servicer
A servicer is appointed to service the transferred mortgage receivables on a daily basis, which includes collecting principal and interest payments. The servicer will among other things prepare the monthly investor reports for the Covered Bond Company and assist the administrator in the preparation of the monthly asset cover report. Issuers typically perform the role of servicer themselves, but are allowed to sub-contract their servicing role to a third party servicer. The Covered Bond Company and the Security Trustee may terminate the servicing agreement with the servicer, if the latter defaults on its payment obligations or other obligations under the agreement, goes bankrupt or is no longer licensed. The servicer may itself terminate the agreement upon a twelve months’ notice. A licensed substitute servicer with the proper experience in administrating mortgage loans will have to be appointed in that case. Yet, any delays in such an appointment could negatively impact the ability of the Covered Bond Company to make timely payments on the covered bonds post a default of the issuer. Note that not the servicer, but a custodian is responsible for the management of substitution assets.

Administrator
The administrator is appointed to monitor compliance with the Asset Cover Test, Amortisation Test, pre-maturity test (in the case of hard-bullet covered bonds) and portfolio test (if implemented as alternative to a total return swap), and offers administration and cash management services to the Covered Bond Company on a day-to-day basis. The administrator also has to prepare the monthly Asset Cover Test reports. The Covered Bond Company and the Security Trustee may terminate the administration agreement with the administrator, if the latter defaults on its payment obligations or other obligations under the administration agreement, or goes bankrupt. The administrator may itself terminate the agreement upon a twelve months’ notice. Issuers typically perform the role of administrator themselves. In the case the administration agreement is terminated, a substitute administrator has to be appointed. With the amendments made to SNS Bank’s programme documentation at the end of April, the issuer transferred its role of administrator retroactively per January 2012 to a third party administrator. NIBC Bank has already appointed a back-up administrator as substitute administrator in the case the appointment of the bank itself as administrator were to be terminated.

Asset Monitor
Prior to a notice to pay, the asset monitor monitors on a yearly basis the calculations of the administrator in respect of the Asset Cover Test. Following a notice to pay, the asset monitor will verify on a monthly basis the calculations of the administrator in respect to the Amortisation Test. The monitoring of the calculations will be more frequently if the rating of the issuer/Administrator falls below certain levels, or if material errors are found in the calculations of the administrator. The findings of the asset monitor on the arithmetic accuracy of the administrator’s calculations will be sent to the administrator, the Covered Bond Company, the Issuer, the Security Trustee and the rating agencies. If mistakes were found in the calculations, the correct results will be provided by the asset monitor report. The role of asset monitor is performed by independent accountancy firms.

37 The Servicer is subject to minimum rating requirements under the covered bond programmes of ING Bank: Baa3 (Moody’s), BBB+ (S&P) and BBB- (Fitch), and ABN AMRO Bank: Baa3 (Moody’s), A-2 (short-term) and BBB (long-term) (S&P) and BBB- (Fitch). A third party servicer has to be found within 60 days if these rating criteria are no longer met.

38 Calculations have to be verified on a monthly basis if the issuer/Administrator ratings fall below the following levels: ABN AMRO Bank: Baa3 (Moody’s), BBB- (S&P) and BBB- (Fitch), ING Bank: A3 (Moody’s), A-(S&P) and F1 (short-term) or A (long-term) (Fitch), and SNS Bank: Baa3 (Moody’s) and BBB- (Fitch). The SNS Bank and NIBC Bank programme documentation furthermore stipulate that material errors in the arithmetic accuracy resulting in a failure of the Asset Cover Test failed where the administrator recorded it as being satisfied, or a misstatement of the adjusted aggregate asset amount or amortisation test aggregate asset amount by more than 1%, leads to an increase in the monitoring frequency to a monthly basis for a period of four consecutive months.

The servicer services the transferred receivables and prepares investor reports

The administrator monitors compliance with the ACT...

...while the asset monitor verifies the accuracy of the administrator’s calculations
The Covered Bond Company may, subject to Security Trustee approval, terminate the appointment of the asset monitor upon a 30 days prior written notice. Termination will not take place unless a replacement asset monitor is found within this time. The asset monitor may in turn decide to terminate its appointment upon a 60 days prior written notice, subject to the requirement that the asset monitor will identify a replacement if the Covered Bond Company has not found one within this period.
Cover pool resilience

Dutch mortgage market developments

The Dutch housing market is slowly recuperating from the price correction that started at the end of 2008 and lasted for almost five years. Although the broad set of policy measures implemented with respect to the Dutch housing market in the past number of years removed part of the uncertainty with respect to the favourable tax treatment of mortgage interest payments in the Netherlands, they have also been a hindrance to housing price developments, by reducing the affordability of new homes to borrowers.

Fig 14  Dutch house prices are back at Q3 2001 levels

With the introduction of the revised Code of Conduct (Gedragscode Hypotecaire Financieringen (GHF)) by the Dutch Banking Association per 1 August 2011, the Dutch banking sector agreed to limit the loan-to-market-value ratio of mortgage loans to 106% (104% plus the transfer tax of 2%). The temporary reduction of the transfer tax from 6% to 2% (per 15 June 2011 to 1 July 2012) to support the Dutch housing market was subsequently made permanent by the government per 1 July 2012. However, since 1 January 2013 until 2018 the Dutch government gradually lowers the LTMV cap for new mortgage loans by 1% per year to 100% (including transfer tax). For 2014 a cap of 104% is applicable for new loans. Only in the case of energy saving investments an LTMV of 106% remains possible.

As of 2013 only new amortizing mortgage loans that will be repaid in full within 30 years (at least in annuity form) will qualify for tax deductibility. New interest only loans no longer benefit from this tax advantage since. However, if in the case of a full amortization, the monthly payment burden becomes temporarily too high, a mortgage borrower can opt for a combination mortgage. This mortgage type consists of two loans: the first loan is a fully amortizing (annuity) loan with mortgage interest payments that are fully tax deductible; the second loan is a loan capped at 50% of the value of the first loan, which can be used to (partly) repay the first loan. Interest payments on the second loan part are not tax deductible. This is effectively similar to a cap of 50% on interest only loans. As part of the introduction of the revised Code of Conduct in 2011, the Dutch banking industry already decided to limit the interest only part of new mortgages to 50% of the original amount.

The maximum tax rate against which mortgage interest payments can be deducted will gradually be reduced for the highest income tax bucket by 0.5% per year during a period of 28 years from 52% to 38%. The government has also taken some
additional measures to alleviate the pressure on Dutch house prices from the gradual reduction of the tax advantage on Dutch mortgage loans in the Netherlands. These include looser mortgage conditions per 1 January 2013, for first time home buyers which are expecting to see their income rise within the coming months or years. Also the interest payments and costs related to residual debt on houses that are sold at a loss in the period 29 October 2012 until 31 December 2017 are temporarily tax deductible for a period of 10 years. Since the beginning of this year residual debt related to NHG loans can also be funded via a new guaranteed (NHG) mortgage loan. Interest payments on mortgage loans related to houses up for sale, also remain tax deductible for three years if the new house was bought in 2011, and for two years if it was bought in 2012 or 2013.

Despite the modest price rises in recent months, house prices in the Netherlands are still 19.6% lower than they were around their 3Q08 peak (see Figure 14). It was not before the final quarter of last year that house prices finally started to show some first signs of a recovery, to experience their most promising month in years in June when house prices advanced by 2.3% YoY. Our economists expect that house prices will continue to rise in the coming year, supported by a pickup in demand on the back of stronger consumer confidence and improved affordability due to a combination of lower house prices and the low mortgage interest rate environment.

Collateral pool developments

The house price declines of the past number of years in the Netherlands have not missed their impact on Dutch loan-to-value ratios. Since house prices peaked in 3Q 2008, indexed LTV ratios of Dutch collateral pools have deteriorated on average by 22% to 25% points. Hence, as a rough estimate, for each 10% decline in Dutch house prices, LTV ratios have risen by 12% points (Figure 15). Only towards the end of 2013 we have seen a bit of stabilisation in the LTV ratios, reflecting the gradual improvement in the Dutch housing market conditions. The noteworthy exception is the pool backing NIBC Bank’s conditional pass-through covered bonds, which saw a significant increase in the LTV ratios beginning of this year, after the issuer decided to add a relatively chunky amount of NHG loans to its pool that typically have higher LTV ratios.

Figure 16 shows that the indexed loan-to-market value of the mortgage loans in Dutch collateral pools is on average above 80%, ranging from 82.5% to 88.5%. Unsurprisingly, the indexed loan-to-value ratios are now higher than the original loan-to-value ratios of

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39 The break in the LTV development for ING Bank around January 2010 can be explained by the fact that, beginning of 2010, this issuer started reporting loan-to-market values rather than loan-to-foreclosure values.
the mortgages in all Dutch collateral pools. ING Bank does not make a good reference in this figure, as the original loan-to-value ratios for this particular issuer are indexed via automated valuation models (AVM), while the indexed loan-to-value ratios reflect the interim discrepancy between the original loan-to-market value based upon automated valuation models and the, for Land Registry price developments, monthly adjusted AVM loan-to-market values. Hence all levels shown for this issuer are indexed levels.

These LTV ratios do not reflect the savings or investment balances that have been accrued against the mortgage loans. We estimate that recognition of accrued savings and investments could reduce the LTV-ratios of Dutch collateral pools by approximately 7% points versus current levels. These calculations are a rough estimate, based upon the current seasoning of the cover pools and assuming a linear accrual of savings and investments (without any recognition of the actual current value of these investments) over a period of 30 years against the non-interest only and non-amortizing mortgage parts in Dutch collateral pools.

A comparison between Figure 16 and Figure 17 shows that more seasoned pools, such as NIBC Bank’s collateral pool, do not necessarily coincide with lower loan-to-indexed market values. This is mainly due to the fact that the original loan-to-value ratios for this particular pool are a tad higher than for other Dutch issuers. However, to assess the impact of the house price declines on LTV ratios, one has to compare the level of the indexed loan-to-market value with the original loan-to-market value of the pool. In that case we do find that on an indexed basis the rise in the loan-to-value ratio for NIBC Bank has been 6%, while it was 9% for ABN AMRO Bank and 10% for SNS Bank. Hence, the average seasoning of the pool is more of relevance in terms of explaining this difference.

The cover pool by year of origination, as plotted in Figure 18, is of even more relevance in our view. Dutch house prices have been subject to price declines since the 3rd quarter of 2008. Hence, loans originated in 2008 have been exposed to the strongest house price declines. SNS Bank has the largest percentage of loans originated in 2008 in its pool. House prices in the Netherlands are currently back at the levels seen in the third quarter of 2001, while our economists expect that by the end of 2015 prices will be back at their mid 2002 levels. This means that for a prolonged period of time, Dutch issuers will have a large majority of loans in their cover pools that have been affected by house price declines. ABN AMRO Bank and SNS Bank, have the smallest share of loans originated before 2002. For these pools 11% and 12% has not been impacted by house price declines. In the case of NIBC Bank and ING Bank, these percentages are 16% and 15%.

The combination of a high percentage of loans originated in 2008 and a smaller amount

We estimate a 7%-point lower LTV for Dutch mortgages if savings are considered

The impact of house price rises has been less for more seasoned pools...

Fig 17 Weighted average seasoning

![Graph showing weighted average seasoning](image)

Source: Investor reports, ING

...and for pools with less loans originated in peak housing price year 2008

![Graph showing cover pool by origination year](image)

Source: Investor reports, ING

The cover pool by year of origination, as plotted in Figure 18, is of even more relevance in our view. Dutch house prices have been subject to price declines since the 3rd quarter of 2008. Hence, loans originated in 2008 have been exposed to the strongest house price declines. SNS Bank has the largest percentage of loans originated in 2008 in its pool. House prices in the Netherlands are currently back at the levels seen in the third quarter of 2001, while our economists expect that by the end of 2015 prices will be back at their mid 2002 levels. This means that for a prolonged period of time, Dutch issuers will have a large majority of loans in their cover pools that have been affected by house price declines. ABN AMRO Bank and SNS Bank, have the smallest share of loans originated before 2002. For these pools 11% and 12% has not been impacted by house price declines. In the case of NIBC Bank and ING Bank, these percentages are 16% and 15%. The combination of a high percentage of loans originated in 2008 and a smaller amount
of loans originated ahead of 2002, are the reason that SNS Bank experienced the strongest rise in its LTV ratios.

Figure 19 furthermore plots the distribution of loan balances for Dutch collateral pools against current original loan-to-value ratios. Only for ING Bank the data plotted are original loan-to-value statistics indexed via automated valuation models, explaining the higher LTV levels for this issuer. Average loan balances in Dutch pools vary from 154,000 for NIBC Bank to 190,882 for ABN AMRO Bank. However, the figure confirms that higher loan balances do not necessarily coincide with higher loan-to-value characteristics. Only when loan balances decline below 175,000 do we see LTV ratios decline. This does not necessarily mean that the size of the loan balance does not impact the riskiness of a pool or recovery prospects in case of a default on a loan.

A typical characteristic of Dutch mortgage pools increasing their relative riskiness is the high percentage of interest only loans in Dutch pools, which from a residual debt perspective makes the performance of the pools more exposed to house price declines. Figure 20 shows that SNS Bank has the largest share of interest only loans as collateral (77%), while in the case of NIBC Bank the percentage of interest only loans is limited at 51%. The figure furthermore highlights that despite the changed rules for tax deductibility, the percentage of amortizing loans in Dutch collateral pools remains very small.

That said, loans in arrears in Dutch collateral pools remain relatively low varying from 1.3% in total for NIBC Bank, to 3.2% for ING Bank (Figure 21). We note that loans in arrears for more than 90 days are not recognized under the Asset Cover Test in the case of NIBC Bank and ABN AMRO Bank. In the case of ING Bank and SNS Bank loans in arrears for more than 90 days are only recognized for 30% under the Asset Cover Test, while loans in arrears for more than 180 days are also not recognized under these two programmes. This means that for Asset Cover Test purposes, loans in arrears vary within a range of 1.1% for NIBC Bank to 2.8% for ABN AMRO Bank. Next to the on average smaller loan balance and lower percentage interest only loans, the lower percentage loan in arrears in the case of NIBC Bank, may also be attributable to the relatively high percentage of guaranteed mortgage loans in this particular pool (Figure 22).
Positives are the owner occupied and fixed rate character of the mortgages

Notwithstanding the pressure of house price declines on Dutch LTV ratios, it is a positive that mortgages in Dutch collateral pools are 100% owner occupied, which assures an optimal incentive for the mortgage holder to fulfil its mortgage obligations. Only NIBC Bank has a negligible 0.04% buy-to-let loans in its pool. The Netherlands also benefit from a relatively solid social security system, cushioning the average loan performance against a rise in unemployment rates. Furthermore, although the Dutch unemployment rate did peak in February this year at 7.3% it has declined again since (6.8% in June) and remains well below the 11.5% Eurozone average. In addition, the percentage of fixed rate mortgages in Dutch collateral pools is high within a range of 67% for SNS Bank to 91% for NIBC Bank (Figure 23). Fixed rate mortgage loans may give the issuers less opportunity to adjust their lending rates to higher funding costs, on the other hand they make mortgage takers less vulnerable to interest rate volatility.

Mortgage interest rates are above 4% despite the low interest rate environment

Figure 24 illustrates that despite the low interest rate environment, the average interest rates for Dutch collateral pools remain well above 4%, due to the dominance of fixed rate mortgages in the pool, with interest reset periods typically beyond four years. Only for SNS Bank, the remaining interest period is shorter at 2.6 years, but this issuer has up until now the highest weighted average coupon on its floating rate loans. Although NIBC Bank does not have swaps in place to cushion against the risk of changing mortgage interest rates versus covered bond funding costs on pool margins, this issuer has...
Regional distribution stats confirm a larger exposure to stronger performing regions

Dutch covered bonds August 2014

committed to only include loans in its pool with a minimum 3% interest rate. It also has a relatively long remaining interest period and high average rate on floating coupon loans.

Figure 25 finally gives an overview of the regional exposure of the Dutch collateral pools, while Figure 26 plots the housing price decline per region from the 2008 peak. Varying from -12.9% for Zeeland to -21.8% for Gelderland, house price declines per region have not been far off the -19.6% average. House price developments for the province of Groningen have been closest to the -19.6% with a drop of -19.4% versus their peak. The provinces plotted in the bar chart above the grey area representing Groningen have all experienced above average house price declines. This confirms that Dutch pools on average have more exposure to the stronger than to the weaker regions, with highest exposure to the provinces of Zuid-Holland and Noord-Holland. ING Bank, ABN AMRO Bank and NIBC Bank have the largest exposure to the above average performing regions with 70%, 69% and 68% respectively. SNS Bank is more exposed to the weaker performing regions, such as Noord-Brabant, but the overall share of the above average performing regions is at 63% not significantly lower than for the other Dutch issuers.

Source: Investor reports, ING

Source: CBS, ING
Rating agencies

Moody’s

Dutch covered bond programmes have a Timely Payment Indicator (TPI) of “Probable” at Moody’s. The combination of the issuers’ current credit rating and TPI only restricts the rating of the covered bonds of SNS Bank at Aa2, irrespective of the quality of the cover pool or overcollateralization provided for by this programme. The other Dutch covered bond programmes rated by Moody’s have an Aaa rating. NIBC Bank’s conditional pass-through covered bond programme is not rated at Moody’s. However, Moody’s stated in April this year, that the credit quality of a conditional pass-through covered bond can be de-linked from the rating of the bank if the credit risks related to the role of the bank supporting the covered bonds are sufficiently removed or protected against. If the credit quality continues to depend upon the supporting bank, the covered bonds will continue to have ratings that are constrained by Moody’s Timely Payment Indicator Framework. The rating may nevertheless still be higher than for hard bullet or soft bullet covered bonds.

Analysing NIBC Bank’s CPTCB programme on Moody’s criteria for de-linkage

According to Moody’s, de-linkage between the rating of a conditional pass-through covered bond and the rating of the issuer can be achieved if a programme sufficiently removes the risk of asset fire-sale. Switching to pass-through is not sufficient by itself. Moody’s also has to be assured that the programme would not accelerate if certain tests, such as the Amortisation Test, are breached if the level of the assets were to fall below the level of the liabilities. In the case of NIBC Bank, a failure of the Amortisation Test would not result in an acceleration of payments. Also additional transaction risks need to be sufficiently covered. Also here NIBC Bank’s conditional pass-through covered bond programme seems well positioned to fulfil Moody’s requirements: cash-flow disruptions are tackled via the liquidity reserve account, there is no swap counterparty risk to the programme and the programme foresees in the appointment of a back-up administrator. There are replacement rating triggers for the account bank and commingling risk is addressed via collection foundation accounts. The programme also accounts for set off risks under the Asset Cover Test or Amortisation Test, commits to minimum 15% overcollateralization and applies strict asset eligibility criteria, protecting it against the introduction of new credit risk.

The covered bonds of ABN AMRO Bank and ING Bank are Aaa rated at Moody’s, with a TPI Leeway of two notches and one notch respectively. ABN AMRO Bank is the only Dutch issuer that benefits from an anchor point uplift under the rating agency’s revised methodology on the back of the Bank Recovery and Resolution Directive. The ratio of an issuer’s senior unsecured and subordinated debt as percentage of the adjusted liabilities has to be at least 5% for a one notch anchor point uplift versus the issuer’s Baseline Credit Assessment (BCA) or Senior Unsecured Ratings (SUR), or at least 10% for a two notches uplift versus the issuer’s BCA. Only ABN AMRO Bank has a debt ratio in the 5% to 10% range according to Moody’s latest performance overview.

According to Moody’s most recent global covered bonds monitoring overview (Q4 2013), Dutch covered bonds have, of the core European jurisdictions, one of the highest cover pool loss characteristics with an average of 21.4%. However, despite the relatively high LTV characteristics of Dutch mortgage assets, the average collateral score and collateral risk of Dutch pools is among the lowest at 6.6% and 4.4% respectively. Only Finnish and
Swedish covered bonds score better in terms of collateral risk.\(^4\) Relatively favourable borrower default characteristics for the Netherlands contribute positively to these scores.

**Fig 27 Dutch covered bonds have weaker cover pool loss characteristics**

Dutch covered bonds have a relatively high market risk of 17%. Only Austrian, Italian, Spanish and Portuguese programmes run more market risk. The market risk reflects Moody’s estimated cover pool losses post issuer default as result of refinancing risks, currency and interest rate mismatches and certain collateral related legal risks such as deposit set-off risks. The high market risk score for Dutch covered bonds reflects the higher potential interest rate risks post issuer default according to Moody’s, due to the relatively high percentage of fixed rate mortgages in the cover pool.

SNS Bank has a better collateral score and lower collateral risk than the other Dutch covered bond programmes. The issuer’s average indexed LTV ratios are higher than for other Dutch issuers, but the dispersion of the loans across the different LTV buckets is more favourable according to Moody’s. SNS Bank runs on the other hand more market risk than ABN AMRO Bank and ING Bank, despite the soft bullet maturity of the bank’s covered bonds and novation agreement with back-up total return swap providers.

However, in Moody’s expected loss assessment, covered bonds are considered to be more exposed to refinancing risks if the credit rating of the issuer is weaker.

**Fitch**

With the revisions made by Fitch’s to its rating methodology earlier this year, also this rating agency gives recognition to the going-concern advantages of the bail-in tool for covered bonds. For covered bonds from jurisdictions with an advanced resolution regime, such as the EU, that includes a bail-in tool exempting covered bonds, Fitch may apply an uplift above the Issuer Default Rating (IDR) of up to two notches for programmes of issuers rated in the BB category and above. The IDR uplift depends on three factors: a) the relative ease and motivation for resolution methods other than liquidation, b) the importance of covered bonds to financial markets in a jurisdiction, and c) the level of an issuer’s senior unsecured debt available for bail-in. A two notch uplift will be granted if at least two of the aforementioned factors are present, while a one notch uplift will be granted if one of the three factors is present. ABN AMRO Bank, ING Bank and SNS Bank all benefit from an IDR uplift of two notches. All three banks are a) systemically important institutions in the Netherlands and b) fulfil 5% hurdle requirement for senior debt (excl.

\(^4\) Collateral risk is derived from Moody’s collateral score and combines the collateral score post haircut for eligible and ineligible assets in the cover pool. The collateral score in turn reflects the amount of risk-free enhancement needed to protect an Aaa rating from otherwise unsupported assets. The collateral score only looks at the credit risk of the assets and does not incorporate refinancing and market risks or certain legal risks such as set-off risks.
debts held by retail investors) as percentage of the assets adjusted for insurance assets and derivatives. The latter requirement is also met by NIBC Bank, which consequently benefits from a one notch IDR uplift under Fitch’s rating methodology.

### Fig 28  Rating agencies assessment Dutch covered bonds

<table>
<thead>
<tr>
<th>Moody’s</th>
<th>ABN AMRO Bank</th>
<th>ING Bank</th>
<th>SNS Bank</th>
<th>NIBC Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuer rating</td>
<td>Aaa</td>
<td>Aaa</td>
<td>Aa2</td>
<td></td>
</tr>
<tr>
<td>Adjusted BCA</td>
<td>baa2</td>
<td>baa1</td>
<td>ba1</td>
<td></td>
</tr>
<tr>
<td>CBA Anchor</td>
<td>SUR+1 notches</td>
<td>SUR+0 notches</td>
<td>SUR+0 notches</td>
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<tr>
<td>Debt Ratio</td>
<td>5-10%</td>
<td>&lt;5%</td>
<td>&lt;5%</td>
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<tr>
<td>TPI</td>
<td>Probable</td>
<td>Probable</td>
<td>Probable</td>
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</tr>
<tr>
<td>TPI Leeway</td>
<td>2 notches</td>
<td>1 notch</td>
<td>0 notches</td>
<td></td>
</tr>
<tr>
<td>Cover pool losses</td>
<td>21.0%</td>
<td>20.6%</td>
<td>22.4%</td>
<td></td>
</tr>
<tr>
<td>Market risk</td>
<td>17.1%</td>
<td>15.9%</td>
<td>19.0%</td>
<td></td>
</tr>
<tr>
<td>Collateral risk</td>
<td>3.9%</td>
<td>4.7%</td>
<td>3.4%</td>
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<tr>
<td>Collateral score</td>
<td>5.8%</td>
<td>7.0%</td>
<td>5.0%</td>
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<tr>
<td>Collateral score (excl. systemic risk)</td>
<td>5.8%</td>
<td>7.0%</td>
<td>4.7%</td>
<td></td>
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<tr>
<td>Committed OC</td>
<td>33.2%</td>
<td>29.9%</td>
<td>31.6%</td>
<td></td>
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<tr>
<td>Required Overcollateralization</td>
<td>12.0%</td>
<td>15.0%</td>
<td>12.0%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fitch</th>
<th>AAA</th>
<th>AAA</th>
<th>AA+</th>
<th>AAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term IDR</td>
<td>A+ Neg</td>
<td>A+ Neg</td>
<td>BBB+ Neg</td>
<td>BBB-</td>
</tr>
<tr>
<td>Uplift from IDR</td>
<td>2 notches</td>
<td>2 notches</td>
<td>2 notches</td>
<td>1 notch</td>
</tr>
<tr>
<td>D-Cap</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Uplift on a stressed recovery basis</td>
<td>2 notches</td>
<td>2 notches</td>
<td>2 notches</td>
<td></td>
</tr>
<tr>
<td>Cushion to IDR downgrade</td>
<td>4 notches</td>
<td>4 notches</td>
<td>2 notches</td>
<td>2 notches</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Minimal Discontinuity</td>
</tr>
<tr>
<td>Asset Segregation</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Very Low</td>
</tr>
<tr>
<td>Liquidity Gap &amp; Systemic Risk</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Minimal Discontinuity</td>
</tr>
<tr>
<td>Systematic Alternative Management</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Cover Pool Specific Alternative Management</td>
<td>Moderate</td>
<td>Low</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Privileged Derivatives</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Low</td>
<td>Very Low</td>
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<tr>
<td>Stressed expected loss</td>
<td>6.0%</td>
<td>8.8%</td>
<td>6.4%</td>
<td>3.2%</td>
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<tr>
<td>Break-even Asset Percentage</td>
<td>80.5%</td>
<td>77.0%</td>
<td>75.0%</td>
<td>93.5%</td>
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<tr>
<td>Break-even overcollateralization</td>
<td>24.2%</td>
<td>29.9%</td>
<td>33.3%</td>
<td>7.0%</td>
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<table>
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<tr>
<th>S&amp;P</th>
<th>AAA</th>
<th>AAA</th>
<th>AAA</th>
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<td>Issuer rating</td>
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<td>A Neg</td>
<td>BBB- Neg</td>
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<tr>
<td>Programme categorization</td>
<td>2.3%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>ALMM classification</td>
<td>Low=0%</td>
<td>Low=4.47%</td>
<td>Zero=0%</td>
</tr>
<tr>
<td>Maximum potential uplift</td>
<td>6 notches</td>
<td>6 notches</td>
<td>Unrestricted</td>
</tr>
<tr>
<td>Unused uplift</td>
<td>1 notch</td>
<td>1 notch</td>
<td></td>
</tr>
<tr>
<td>Asset default risk</td>
<td>8.1%</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td>WAFF*WALS</td>
<td>6.3%</td>
<td>4.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Target credit enhancement</td>
<td>28.4%</td>
<td>28.3%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Source: Moody’s, Fitch, S&P, ING

**The D-Cap for Dutch bullet covered bonds is 4...**

...and the maximum of 8 for conditional pass-through covered bonds

**Asset segregation risk is “Very Low” for NIBC Bank’s CPTCB programme...**

Fitch furthermore assigns a Discontinuity (D)-Cap of 4 to all Dutch bullet covered bond programmes, reflecting the rating agency’s “Moderate” discontinuity risk assessment for these programmes or likelihood that the covered bonds will default following an issuer default. This risk assessment is based upon the weakest component out of five discontinuity risk components under Fitch’s rating methodology, i.e. 1) asset segregation, 2) liquidity gap and systemic risk, 3) systemic alternative management, 4) cover pool-specific alternative management and 5) privileged derivatives. The risk assessment for NIBC Bank’s conditional pass-through covered bond programme is “Minimal Discontinuity”, allowing for a maximum D-Cap of 8, representing the potential of maximum eight notches uplift versus the, for the IDR uplift adjusted, issuer default rating on a probability of default basis, compared to four notches for the other programmes.

- Fitch assigns a “Moderate” risk assessment to the asset segregation component for all Dutch bullet covered bond programmes. This reflects the risk that limited set-off claims may arise in the future. The asset segregation risk component for NIBC Bank’s...
conditional pass-through covered bond programme is “Very Low” due to the collection foundation account structure in place for this programme, with the collection foundation account (in contrast with SNS Bank’s covered bond programme) held by a third party bank. The rating agency therefore is of the opinion that commingling risk is sufficiently mitigated, and considers it unlikely that claims would reduce the assets available to investors following a default of this issuer.

The systemic alternative management risk is “Low” for all Dutch programmes...

SNS Bank and NIBC Bank run “Low” and “Very Low” risk related to privileged derivatives

In order to determine whether the maximum notches of uplift versus the IDR, formed by the sum of the IDR uplift and D-Cap, can be achieved on a probability of default basis, Fitch also tests whether the overcollateralization is sufficient to assure that the cover pool can withstand the highest level of stress post issuer default. As a final step Fitch tests the recoveries from the residual pool in case a covered bond defaults post issuer insolvency. If these recoveries are 91% or higher an additional uplift of 2 notches is achievable if the covered bonds rating on a PD basis is in the investment grade area, which is the case for Dutch covered bonds.

We note that Fitch recently removed the negative outlook on its AA+ rating for the covered bonds of SNS Bank. Although the maximum number of uplifts achievable for this programme is now eight notches, ie, technically allowing for an upgrade of the covered...
bonds to AAA at the current BBB+ Neg IDR, Fitch refrained from upgrading the bonds as the two notches IDR uplift not more than offsets a potential downgrade of SNS Bank’s IDR to the issuer’s bbb- Viability Rating as a result of a weakening of state support.

S&P

S&P currently rates the covered bond programmes of ABN AMRO Bank, ING Bank and NIBC Bank. SNS Bank asked the rating agency to withdraw the ratings on its covered bonds in February 2010, after the implementation of S&P’s new covered bond rating criteria in December 2009.41

Under S&P’s five step covered bond rating process, Dutch covered bonds are classified in programme Category 2. The asset-liability mismatch (ALMM) is considered to be “Low” for the hard bullet covered bonds of ABN AMRO Bank and ING Bank, which means that the maximum number of uplifts from the issuer’s rating is six notches. Structural features such as the 32 maturity extension have removed the ALMM risk in the case of NIBC Bank’s conditional pass-through covered bonds according to S&P, allowing for a delinking of the covered bond rating from the issuer credit rating.

Fig 29  Target credit enhancement Dutch HB covered bonds relatively high

Target credit enhancement levels are fairly high for Dutch hard bullet covered bonds

The target credit enhancement required for the Dutch hard bullet covered bonds at S&P to achieve the maximum potential ratings uplift is nevertheless among the highest of all non-distressed European covered bond programmes rated by the rating agency. This reflects the high mismatch between the weighted average maturity of the assets in the cover pool and the weighted average maturity of the bonds issued as a consequence of the low mortgage repayment rate in the Netherlands. Nevertheless, by removing the SARA clauses from their programmes the Dutch hard bullet issuers managed to reduce their target credit enhancement by 10% point to 28% on average (see Figure 29). S&P sets a higher credit enhancement target for programmes with a SARA clause than for programmes without a SARA clause. The target credit enhancement for NIBC Bank’s conditional pass-through covered bond programme is much lower at only 2.5%.

Within S&P’s rating methodology, the ALMM percentage is a measure of the riskiness of a covered bond programme’s asset-liability mismatch. It reflects the maximum stressed liquidity need on a rolling quarterly basis on the outstanding assets. Covered bond programmes with an ALMM percentage between 0% and 15%, such as the Dutch hard bullet covered bond programmes, receive an ALMM classification of ‘Low’. For the

41 S&P, Revised Methodology and Assumptions for Assessing Asset-Liability Mismatch Risk in Covered Bonds, 16 December 2009
purpose of the ALMM calculation, S&P stresses cash flows to tackle asset credit risks, such as asset default risks, operational risks and derivative counterparty risks. S&P assigns its first notch uplift above the issuer’s individual credit rating if the available credit enhancement covers this asset default risk.

Dutch covered bonds rank somewhere in the middle in terms of asset default risk (7% for Dutch hard bullet covered bonds) compared to covered bond programmes from other jurisdictions rated by S&P. The asset default risk is lower for ING Bank (5.9%) than for ABN AMRO Bank (8.1%). The potential loss associated with the pool, which is measured by the product of the weighted average foreclosure frequency (WAFF) and the weighted average loss severity (WALS), is lower for ING Bank. Both the WAFF as well as the WALS is less for ING Bank, reflecting the issuer’s lower LTV ratios compared to ABN AMRO Bank. Whole loan-to-value ratios that consider prior-ranking loans on the same property are an important component to S&P’s WAFF calculations. The link between whole LTV ratios and WAFF assumptions differs per country. In the case of Dutch covered bonds, the link is weaker than for other jurisdictions as the LTV ratios for Dutch covered bond programmes do not recognize offsetting savings against the, for interest rate tax-deductibility purposes, high Dutch mortgage loan balances. The LTV ratio is also the most important factor for determining the potential loss severity if a borrower defaults under S&P’s covered bond rating methodology.

Despite the lower asset default risk for ING Bank S&P considers the ALMM risk to be higher for the covered bond issued by ING Bank (ALMM percentage of 4.47%) than for ABN AMRO Bank (0%). ING Bank has a slightly higher maturity mismatch between the weighted average maturity on its assets versus the weighted average maturity on its liabilities (14.6 years) than ABN AMRO Bank (14.2 years) and around €1.2bn more redemption payments falling due in the coming three years. The target credit enhancement required to obtain the maximum notches of uplift versus the issuer’s credit rating is consequently relatively similar for both programmes, at 28.3% for ING Bank and 28.4% for ABN AMRO Bank. All Dutch covered bond programmes have sufficient actual credit enhancement to obtain the maximum achievable AAA rating at S&P.

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42 S&P, Global Covered Bond Characteristics and Rating Summary Q2 2014, 13 June 2014
43 S&P, Never Underestimate Credit Risk in Mortgage Covered Bonds, 12 September 2011
Supply and demand dynamics

Supply
The Dutch covered bond market nowadays has €62.7bn outstanding, of which €42.1bn has been issued in € benchmark debt. Since ABN AMRO Bank issued the first Dutch covered bond in 2005, the Dutch €-benchmark covered bond market has grown to become the sixth largest market in Europe. Only France, Spain, Germany, the UK and Italy have more €-benchmark bonds outstanding. The majority of the bonds outstanding are €-denominated (91%), but some issuers have also issued small amounts in CHF, USD, NOK or SEK denominated debt (Figure 30). ING Bank is the largest issuer with a 50% market share, followed by ABN AMRO Bank with a 41% share (Figure 31).

The first Dutch covered bonds issued were all structured. However, structured supply was fully replaced by regulatory issuance after the Dutch legal framework for covered bonds came into effect in July 2008. Achmea Hypotheekbank is the only Dutch issuer that was never registered under the Dutch legal framework. This issuer launched its first and last €-benchmark covered bonds in 2007 (two benchmark issues in total), of which the last one expired in February 2014. The only € benchmark covered bond outstanding under NIBC Bank’s soft-bullet covered programme matured in April this year. This issuer’s 2% share today fully represents the €1bn debt issued under the conditional pass-through covered bond programme of the bank.

Following peak year 2011, when Dutch issuers printed €14.1bn equivalent in covered bond debt, supply has slowed down to €4.5bn equivalent last year. YTD €3.7bn in covered bond debt was issued, of which €2bn in benchmark debt and €1.7bn via private placements (see Figure 32). The main reason for the slowdown in supply is the reduced funding need of Dutch banks. Furthermore, the minimum regulatory rating requirement of AA- equivalent or better, has in the past few years restricted issuers such as NIBC Bank (under its soft-bullet programme) and SNS Bank to issue additional covered bond debt. Typically around 24% of the funding in covered bonds is done via private placements. In the first half of this year 46% of the issuance was privately placed, which can be expected to come at the expense of public issuance in the second half of this year.

The slow supply conditions are not expected to change in the coming year, with the general funding need of banks expected to remain low until we see a stronger recovery in economic growth and bank lending conditions. The Bank Recovery and Resolution...
Directive in combination with the current tight spread environment furthermore continues to support a funding focus on subordinated and senior unsecured issuance. We question that the ECB’s TLTROs will have an impact on the funding by Dutch banks considering that this banking sector also hardly attracted funding via the ECB’s LTROs in the past. If any Dutch covered bond issuer were to decide to participate in the ECB’s TLTROs to fund its lending business to the non-financial sector, this would, if anything, negatively impact covered bond supply from an overall funding need perspective, despite the fact that loans to households for housing purchases are excluded from the TLTRO scope.

Redemptions in Dutch € benchmark covered bonds sum to €6bn this year, of which €4bn will be paid in the second half of this year. This illustrates that the net flow of funds equation will be even more supportive to Dutch covered bonds in the second half of this year, than it has been in the first six months of this year. Figure 33 shows that also next year, €6bn will be repaid to Dutch covered bond investors illustrating that the net flow of funds equation is expected to remain supportive if supply activity remains as subdued as it has been this year and last year. The figure also nicely illustrates that the maturity choice by Dutch issuers for the purpose of public issuance typically does not stretch beyond the 10yr area. The longer maturity buckets are targeted via private placements.

With respect to the issuance of conditional pass-through covered bonds, we do not expect existing issuers to set-up pass-through programmes for the funding of their mortgage lending business next to their existing bullet programmes. This may render the existing programmes inactive, which could have negative reputational or rating consequences. The only exception may be Achmea Hypotheekbank that only has €151mn in debt left outstanding under its current structured covered bond programme. If other new issuers were to enter the market, they might also opt for a conditional pass-through structure considering the advantages involved with this structure in terms of the transfer of refinancing risks to investors, maximum achievable covered bond ratings, rating stability, overcollateralization advantages and the (likely) absence of swaps under the structure. NIBC Bank’s conditional pass-through covered bonds confirm that there is no proven funding cost disadvantage to the issuance of these bonds. If anything, the bonds seem to be rewarded for their stable AAA equivalent rating, rather than being penalized for the full transfer of the refinancing risks involved to investors, although the Dutch conditional pass-through product is up until now untested under distressed market circumstances. That said, the conditional pass-through market is expected to remain small compared to the traditional bullet covered bond market in the Netherlands.
Dutch covered bonds in general see good interest from the European investor base. Placement statistics show that German & Austrian investors are the largest participants in Dutch covered bond transactions with a share of 45%. The search for alternatives for the shrinking German Pfandbriefe issuance forms an important explanation.

Benelux investors participate for 15% in Dutch covered bond transactions, indicating a decent home country demand, in part due to the reduced significance of the Dutch RMBS market (see Figure 34). Figure 35 furthermore confirms that investors more familiar with RMBS and pass-through covered bond structures, such as the Dutch, UK and Nordic investor base, also take up a larger share of the Dutch conditional pass-through covered bonds. The participation of German and French investors in conditional pass-through covered bonds is lower than in the traditional Dutch hard and soft bullet covered bonds.

Figure 36 shows that banks are the largest group of investors in Dutch covered bonds with a share of 40%, followed by fund managers with 31% and pension funds and insurers with 17%. The participation of insurers and pension funds significantly increases in the longer maturities (Figure 37). These real money investors participate for 24% in 10yr Dutch covered bond transactions, while their participation in 5yr and 7yr deals is 9% on average. Fund managers on the other hand buy more of the shorter maturity
transactions, taking a share of 40% in the 5yr issuance compared to 28% in the 10yr maturity covered bonds. Also banks take fewer longer maturity bonds, with a 37% participation in the 10yr deals versus 41% and 48% in the 5yr and 7yr deals.
Secondary performance

Performance considerations

The performance in Dutch covered bonds has been among the more impressive ones in the core European market this year. With a spread tightening of 15bp since the beginning of February, Dutch covered bonds outperformed French, UK, Belgian and German covered bonds by 6bp to 17bp. With a reading of 5bp, the iBoxx € Netherlands Covered index now trades 20bp through its beginning of July 2008 levels, when the previous lowest levels were recorded (which was around the starting date of this index). There are several reasons for this outperformance:

- Dutch covered bonds offer a more attractive pickup versus Dutch sovereign bonds than French or Belgian covered bonds do versus their sovereign alternatives. The same holds for German covered bonds. While Belgian covered bonds underperformed and French covered bonds moved sideways versus their sovereigns since the beginning of February, Dutch and German covered bonds consequently outperformed their respective sovereigns. The iBoxx Netherlands Covered index tightened by 10bp versus the iBoxx € Netherlands index in this period, while the iBoxx € Germany Covered index outperformed the iBoxx € Germany index by 6bp.

- Although the performance of Dutch covered bonds versus Dutch sovereign bonds has been relatively similar to the outperformance of German covered bonds versus German sovereign alternatives, German covered bonds continued to widen in asset swap terms since the beginning of February, where Dutch covered bonds tightened. This shows that part of the tightening in Dutch covered bonds has been related to the 5bp tightening in the iBoxx € Netherlands curve in this period.

- In the beginning of March, Moody’s changed the outlook on its Aaa government bond rating for the Netherlands to stable from negative. Reasons for the outlook revision were the diminished risks for the Dutch budget balance of further support to distressed European jurisdictions, the resumed positive direction of economic growth and house prices and the stabilisation of the fiscal strength in the Netherlands. Easing concerns with respect to downgrade risks for the Netherlands have been supportive to the performance of Dutch paper. With the Dutch government owning two Dutch covered bond issuers, this has positive spill-over effects on the view on Dutch banks.

Fig 38 Performance Dutch covered vs. other countries

![Performance Dutch covered vs. other countries](image1)

Source: Markit iBoxx, ING

Fig 39 Performance Dutch covered bonds by name

![Performance Dutch covered bonds by name](image2)

Source: Markit iBoxx, ING
<table>
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<tr>
<th>Announcement of the strengthening of the regulatory framework for the issuance of covered bonds in the Netherlands in March have been supportive to Dutch covered bonds. The introduction, of among others, a minimum regulatory overcollateralization level of 5%, a 180 days liquidity test and stronger guidelines on asset eligibility have improved investor comfort with the Dutch covered bond product. The expected amendments to the Dutch covered bond rules furthermore position the covered bonds for a potential level 1 recognition for LCR purposes.</th>
</tr>
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<tr>
<td>Rating developments have been supportive to Dutch covered bonds. In April Moody’s decided to upgrade SNS Bank’s covered bonds from A1 to Aa2. The rating action followed Moody’s upgrade of SNS Bank’s senior unsecured rating to Baa2 from Baa3. With the upgrade the covered bonds returned to the AA- or better equivalent rating bucket, from a second best rating perspective. This not only has positive risk weight and LCR consequences for the covered bonds, but also grants the issuer access to covered bond funding again under the current Dutch covered bond rules.</td>
</tr>
<tr>
<td>The revised rating methodologies by both Moody’s and Fitch on the back of the Bank Recovery and Resolution Directive (BRRD), have improved the covered bond rating cushion against potential issuer downgrades, in particular at Fitch. For that reason, Fitch decided to change its negative outlook on the AA+ rating for SNS Bank’s covered bonds to stable from negative on the 1st of August.</td>
</tr>
<tr>
<td>Since the final quarter of 2013, the Dutch housing market is showing more sustainable signs that it is bottoming out. In June house prices even advanced by 2.3% YoY. This has eased concerns with respect to the Dutch housing market. Furthermore, with the impressive revival in consumer confidence in the Netherlands this year and with the Dutch unemployment rate resuming a decline after its peak in 1Q14, the economic growth prospects for the Netherlands have improved.</td>
</tr>
<tr>
<td>The funding need of Dutch issuers has declined significantly. This has not missed its impact on covered bond supply. Last year’s supply in Dutch € benchmark covered bonds remained limited to €3.25bn compared to €7.25bn in 2012. YTD only €2bn has been issued. With €6bn in redemption payments made this year, the net flow of funds equation is supportive to Dutch covered bond spreads, in particular in the second half of this year, when €4bn of the total redemption payments are due.</td>
</tr>
<tr>
<td>Figure 39 plots the performance of Dutch covered bonds on a name-by-name basis. The figure confirms that SNS Bank and NIBC Bank covered bonds have shown the best performance this year. The demand for yield as well as the improved covered bond ratings for SNS Bank have been important reasons for the outperformance. Three months ago NIBC Bank and SNS Bank still traded at a premium of around 10bp versus Norwegian or Austrian covered bonds from issuer rating comparables, realise a better pickup for similar issuer credit risk. This spread has narrowed to 1bp.</td>
</tr>
<tr>
<td>Figure 40 gives an overview of all Dutch € benchmark covered bonds outstanding. ABN AMRO Bank and ING Bank covered bonds trade tighter than covered bond comparables from SNS Bank or NIBC Bank. However, spreads have narrowed significantly, with NIBC Bank currently trading only 13bp wider than ABN AMRO Bank in the 5yr area of the curve. This spread difference is broadly in line with today’s premium required by covered bond investors for additional issuer credit risk in other jurisdictions (see Figure 41). A one notch weaker issuer rating in the Netherlands is approximately worth 3bp. The same holds for Austrian covered bonds and French covered bonds, while Norwegian covered bonds, pay only half this premium for a one notch weaker average issuer rating. We draw the following performance conclusions from these charts:</td>
</tr>
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• The relatively tight trading levels of Dutch covered bonds versus issuer rating comparables from other jurisdictions in Figure 41 restricts the potential of Dutch covered bonds to further outperform covered bonds from other jurisdictions.

• With a one notch move down the issuer rating scale worth only 3bp, there is limited further convergence potential in covered bonds from weaker rated issuers versus covered bonds from stronger rated peers.

• However, the fact that up to the 5yr area, stronger rated Dutch issuers trade through the swap curve, while weaker rated issuers still offer a pickup over swaps, remains a performance positive for covered bonds of the weaker rated issuers at the front end.

Figure 40 shows that the conditional pass-through covered bonds of NIBC Bank trade 3bp through the SNS Bank curve in asset swap terms despite the issuer’s weaker credit rating set. Part of this can be explained by the lower coupon on the covered bonds of NIBC Bank and their closer to par trading levels. ABN AMRO Bank’s tighter 5yr spread versus ING Bank in Figure 41 can also be explained by coupon differences. While acknowledging the impact of coupon sizes on asset swap spreads, we think that the trading levels through SNS Bank at current issuer rating levels, will constrain the further performance of NIBC Bank’s covered bonds versus Dutch peers.

Figure 41 shows that the YTD performance of Dutch covered bonds coincided with a significant flattening of the curve. Figure 42 illustrates that the covered bonds of the two largest Dutch covered bond issuers currently trade at their tightest level this year across all maturity buckets. However, the YTD performance range has been significantly wider for the back end of the curve than it has been for the front end of the curve, confirming the much stronger performance of the back end. Figure 43 shows that while the 2yr area of the curve performed by 2bp YTD, the 2-10yr curve flattened by 11bp. Several factors have played a role here:

• Search for yield and the trading levels through swaps at the front end of the curve,
• Flattening of the underlying yield curve by 65bp YTD enhances the search for spread,
• Revised expectations on underlying interest rates and related comfort to buy duration,
• Limited supply pressure offsets the typically more front-end supportive redemptions,

Dutch covered bonds trade tight from an issuer rating perspective

Trading levels over swaps remain supportive for weaker rated issuers at the front end

Coupon differences explain the tighter trading levels of NIBC Bank versus SNS Bank

Dutch covered bond curves flatten on the back of the demand for yield...

Curve considerations

The YTD performance of Dutch covered bonds coincided with a significant flattening of the curve. Figure 42 illustrates that the covered bonds of the two largest Dutch covered bond issuers currently trade at their tightest level this year across all maturity buckets. However, the YTD performance range has been significantly wider for the back end of the curve than it has been for the front end of the curve, confirming the much stronger performance of the back end. Figure 43 shows that while the 2yr area of the curve performed by 2bp YTD, the 2-10yr curve flattened by 11bp. Several factors have played a role here:

• Search for yield and the trading levels through swaps at the front end of the curve,
• Flattening of the underlying yield curve by 65bp YTD enhances the search for spread,
• Revised expectations on underlying interest rates and related comfort to buy duration,
• Limited supply pressure offsets the typically more front-end supportive redemptions,
• Longer maturity Dutch covered bonds offered a better pickup opportunity over sovereign bonds than for example French or Belgian covered bond alternatives.

Although the aforementioned factors will remain supportive to the back end of the curve, we see good grounds for some re-steepening of Dutch covered bond curves:

• The YTD outperformance of Dutch covered bonds versus sovereign bond alternatives has been stronger at the back end of the curve. Consequently, the curve profile of Dutch covered bonds over sovereign bond alternatives is now also inverted beyond the 7yr area, making longer maturity covered bonds a less interesting purchase.

• Against a backdrop of the search for yield, senior unsecured bank debt offers a more attractive pickup over covered bonds further out the curve than at the front end.

• LCR driven bank demand for covered bonds will be more supportive to the front end.

• Dutch covered bond curves are at their flattest shapes since beginning of 2010.

• Most redemptions are due this year in 2H14, supporting the front end of the curve.

...but are expected to show some re-steepening

That said, the 7yr area remains, in our opinion, the most interesting part on the curve from a carry and roll perspective considering the flatness of Dutch covered bond curves beyond this area. The YTD supply in the 7yr maturity in € benchmark covered bonds has been half the issuance pressure seen in the 5yr maturity segment. Issuance in Dutch covered bonds focused on the 5yr and 10yr maturity buckets this year. Dutch covered bonds trade at a pickup of 21bp to 24bp versus Dutch sovereign alternatives in the 5yr to 7yr area of the curve. Beyond the 7yr area spreads versus sovereign alternatives tighten towards 13bp for the 10yr part of the curve. We do note that the 2019 area, i.e. the 5yr maturity bucket, is a maturity bucket with relatively limited covered bond alternatives outstanding compared to adjacent maturities, including 2021 (Figure 33). However, this area does not offer a pickup over swaps, whereas the 7yr area still does.
Disclosures Appendix

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