Covered Bonds in the Netherlands

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Main conclusions

- Covered bonds are relatively new in the Netherlands. The first issue was launched in 2005 and overall covered bond legislation was introduced in 2008. All Dutch covered bond programmes limit their cover pool assets to residential mortgage loans. There are currently five issuers with benchmark covered bonds outstanding.

- The Dutch covered bond framework has strong roots in the ‘structured’ approach. The issuer’s individual documentation and the requirements as set by rating agencies still fulfil a very important role. The Dutch covered bond legislation is relatively light, although it allows for strong supervision of registered covered bond programmes.

- The role of covered bonds as a funding instrument for Dutch mortgage loans has grown over the last years, but by international comparison, the size of the Dutch covered bond market remains small. Unsecured debt and RMBS are currently more important funding instruments for financial institutions in the Netherlands. Because of changing regulations, such as Basel III, the outlook for Dutch covered bonds is positive.

- LTV-ratios of newly originated mortgage loans are generally high in the Netherlands and are not automatically compatible with more conservative European requirements for covered bonds. As a result, most Dutch covered bond issuers cap the value of mortgage loans in their cover pools at 80% LTV. This results in relatively high levels of nominal over collateralisation.

- Mortgage debt is high in the Netherlands. The strong asset base of Dutch households and the full tax deductibility of interest payments are the primary reasons for this.

- House prices are declining in the Netherlands. Headwinds to the economy, a very low level of consumer confidence and structural changes to the housing and mortgage market are making people reluctant to buy a house. Foreclosure rates remain, however, very low, especially compared to other European countries.

- The upcoming elections (12 September 2012) could change the landscape in the housing and mortgage market. Several steps have already been taken to favour repayment of principal and to decrease LTV-ratios of mortgage loans. A new government could impose a greater overhaul. The changes could affect house prices, but will likely favour the credit quality of mortgage loans in the long run.

Introduction

The Dutch have a long history of securing their assets. A vast network of marine defence engineering works protects people, land and structures from the ever present risk of flooding. The Dutch have also a long history of finance. Many of today's financial markets have origins in 17th century Holland. A covered bond combines both elements: finance and asset protection. The history of the debt instrument indeed has some roots in the Netherlands, but covered bonds, as used today, are far from being a Dutch invention. In contrast, the history of Dutch covered bonds is much more recent. The first benchmark was issued by ABN AMRO Bank in 2005. But it was only in 2008 when the market really took off, that specialised covered bond legislation was enacted.

Before 2008, RMBS was the most important funding tool to finance Dutch residential mortgage loans. The crisis made this way of funding more problematic in many ways. Covered bonds emerged as an alternative funding tool, especially when unsecured funding also became more difficult. In many ways, covered bonds are more secure than RMBS and fit the current risk-averse environment better. Changing regulation is likely to strengthen the role of covered bonds even further. The future of Dutch covered bonds looks bright.

But there are also question marks. Dutch residential mortgages are characterised by high loan-to-value ratios, which are not automatically compatible with more conservative European standards. Moreover, after years of continuously rising prices, the Dutch housing market is currently in decline. Increasing doubts about the tax deductibility of mortgage interest payments only add to the uncertainty. On the issuance side there are also questions. The issuance of covered bonds is limited by the regulator in order to ensure over collateralisation, but asset encumbrance is also an issue.

The questions above illustrate that covered bonds are a typical 'macro credit' asset class. In analysing the debt instruments, a bottom-up approach from the issuer's balance sheet and the cover pool cannot be ignored. But in our view, a top-down analysis of covered bonds is more important, especially when describing the covered bond market of a specific country. Ultimately, the strengths and weaknesses of the economy, housing and mortgage market determine the quality of covered bonds to a large extent. Current developments in Spanish *cédulas* clearly illustrate this point.

This publication provides a bird's eye perspective on the Dutch covered bond market. Following a top-down approach, the Dutch economy will be described first. After a brief overview of the Dutch housing market, the mortgage market will be discussed in detail. The next chapter focuses on the funding of mortgage loans. Covered bonds are already part of this description, but the Dutch covered bond framework will be dealt with at length in the subsequent chapter. The focus will then narrow further to the issuer programmes and their cover pools. Finally, the Dutch covered bond market will be described, taking account of developments on the primary and secondary sides.

Where applicable, comparisons with other European countries will be made. This applies not only to the covered bond framework and legislation, but also to the economy. As will be clear, the distinguishing features of the Dutch housing and especially mortgage market are important considerations in analysing Dutch covered bonds. This publication will discuss all Dutch covered bond programmes, but for compliance reasons, ABN AMRO Bank's own covered bond programme is excluded from the analysis.

Economy

The domestic economy is closely linked to the housing and mortgage market and therefore plays an important role in the analysis of covered bonds. In our view, the strength of the domestic economy is one of the most important factors in assessing the credit quality of the issuer and the cover pool. The strength or weakness of the economy is subject to cyclical developments, but structural economic factors are also important. Particular attention will be paid to the labour market, the social security system and the distribution of wealth, since these elements are directly related to mortgage servicing risks. Finally, the cyclical outlook for the Dutch economy will be presented.

Structure

With a nominal gross domestic product (GDP) of EUR 602 billion (2011), the Netherlands ranks as a middle-sized economy within Europe. Compared to neighbouring Germany though, the Dutch economy has a relative size of roughly one quarter. In terms of population, the country is also medium-sized in Europe. The Netherlands currently has 16.7 million inhabitants. Combining GDP and population reveals a GDP per capita of EUR 36,054, which translates to an internationally comparable USD 42,478 (2010) on a PPP-basis. Based on this measure, the Netherlands is one of the wealthiest nations in the European Union. The most distinguishing feature of the Dutch economy is its openness to international trade. Exports equal 78% of GDP and imports account for 71% of GDP. These external trade percentages are very high in comparison to other countries. The resulting surplus on the current account (7.8% of GDP) reflects a high national savings rate. This is a considerable benefit, because it generates a surplus of capital. The openness to international trade has one major drawback: the economy is highly dependent on the business cycle of global trade.

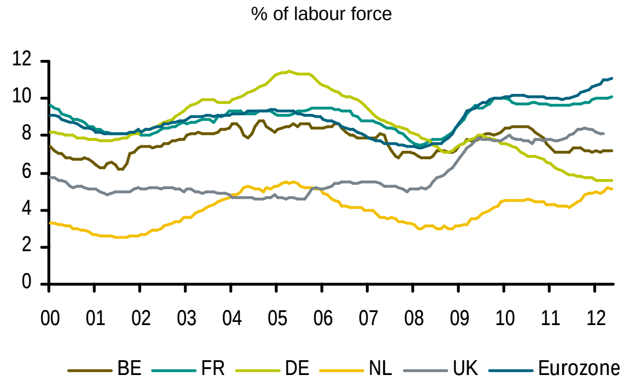
Labour market

In international comparisons, the Dutch labour market is characterised by a relatively low unemployment rate (currently 5.1% according to international definitions[1]) and a relatively high labour participation rate (80.1% of the population). Part-time work is very common. According to the national statistics office (CBS), roughly 40% of all employees are working part-time (less than 35 hours a week). In this way, a typical multi-person household has two sources of labour income.

[1] According to the national definition the unemployment rate is currently 6.3%. This means everyone working less than 12 hours per week is classified as unemployed, whereas the international standard does not apply this requirement.

The institutional framework of the labour market is relatively rigid, but there is a prevailing bias in favour of future liberalisation. Employment protection schemes and collective wage bargaining are both losing foothold.

Unemployment



Source: OECD

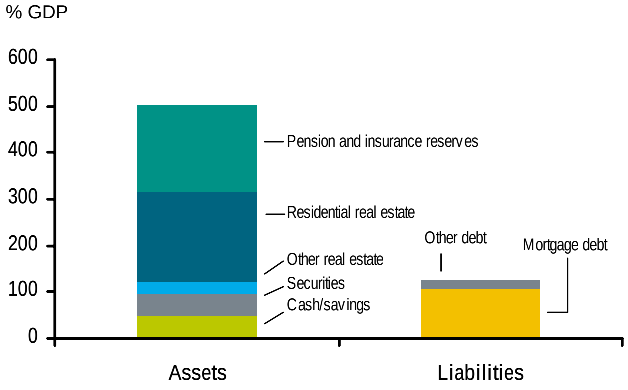
Social security

This does not yet apply to social security. For the unemployed, the social security system is relatively generous. Unemployment insurance is mandatory for all employees. For those who lose their jobs, the system ensures a benefit payment of 70-75% of the last wage, subject to a cap equalling roughly 110% of the average wage. The benefit duration is dependent on the employment history, but it could run up to 38 months. Active job-seeking is mandatory and is monitored. Unemployment benefits are, however, not means-tested. According to a study by the OECD, the Netherlands grants generous unemployment benefits in comparison to other countries. Moreover, the maximum benefit duration is relatively long. Once the unemployed are no longer entitled to receive unemployment benefits, the social security system entails another form of income support, called the ‘bijstandsuitkering’ (assistance support). This assistance consists of a fixed benefit which ensures an absolute minimum standard of living. Assistance support is means-tested, although even home owners are entitled to receive this benefit under certain strict conditions.

Wealth

A look at aggregate household balance sheets reveals that the Dutch are relatively wealthy. According to the national statistics office, financial assets amounted to EUR 1,828 billion in 2011. Non-financial assets, including real estate, had an estimated value of EUR 1,327 billion. On the other side of the balance sheet, the total debt stock of households amounted to EUR 756 billion. This implies that for each euro in debt, there is EUR 2.41 in financial assets and EUR 1.76 in non-financial assets.

Aggregate household balance sheet (2011)



Sources: CBS, DNB, calculations ABN AMRO

By international comparison, both the assets and liabilities of Dutch households are relatively high[2]. But in times of deleveraging, it is especially the debt side that draws a lot of attention. The bulk (86%) of the debt burden consists of mortgages, which have an aggregate value of EUR 652 billion (2011). This translates into a mortgage debt ratio of 108% of GDP. According to the European Mortgage Federation, the mortgage debt ratio is the highest in the European Union. The level of other debt, such as consumer credit, is relatively low by international standards.

Looking solely at debt ratios is not sufficient to conclude whether a country has a problem with debt. The asset side of the balance sheet has to be taken into account. In the Netherlands, this side of the balance sheet is heavily shaped by the so-called 'three-pillar pension system' (see box below).

Three-pillar pension system

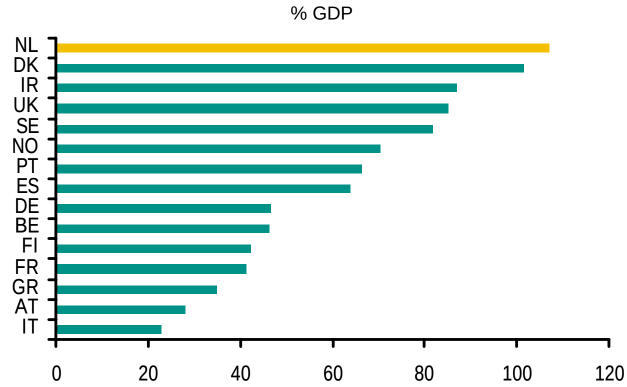
Pillar I: State level
- Mandatory
- State-run pension system
- Pay-as-you go
- Defined benefit, fixed amount

Pillar II: Employer level
- Mandatory (if available)
- Funded system
- Contributions by employers and employees
- Defined benefit or defined contribution (or mix)

Pillar III: Private level
- Voluntary
- Private funded accounts
- Savings/insurance plans

The accumulated reserves in pension fund and insurance plans (Pillar II and III combined) have an estimated value of EUR 1,112 billion (2011). In total, financial assets of households equal roughly 300% of GDP. The high amount of cumulated savings in pension and insurance reserves gives Dutch households less need to save money. As a result, the deposits held in cash and savings accounts are rather low in the Netherlands. As will be discussed in the chapter on funding, this fact has implications for the financial system in general. Non-financial assets of Dutch households consist mainly of residential real estate. The value of this exceeds the level of mortgage debt by a factor of roughly two.

Mortgage debt (2010)



Source: EMF

For households there are two problems with the asset side of the balance sheet. First, the majority of the assets are not liquid. Potential problems with debt servicing are therefore harder to mitigate by selling (financial) assets. Second, the asset side of the balance sheet is subject to market developments, whereas the liability side is generally not. Low or even negative returns on pension plan assets and declining house prices have led to a deterioration of the net wealth position of Dutch households in recent years. Still, the asset side provides such a large cushion, that the relatively high indebtedness of households is not a problem from a balance sheet perspective.

Cyclical developments

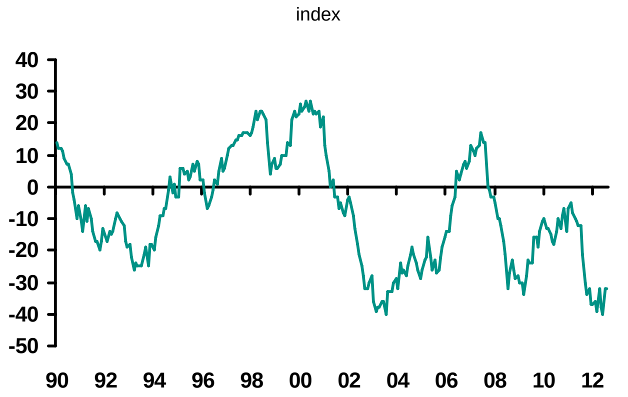
The developments on the asset side of a household's balance sheet are more important from a cyclical perspective. Wealth losses could have consequences for economic growth, but it is especially the uncertainty about the future wealth position that hurts the economy significantly. As a result, consumer confidence has dropped to very low levels. The Euro crisis and the domestic political uncertainty have not helped either, although some modest rebound in confidence is visible in recent months. Consumer spending is still falling. Measured in real terms, consumption has now fallen back to 2003 levels. Weak consumption has resulted in an underperformance of the Dutch economy versus peers in the Eurozone, but the economic environment in many other peer countries has also deteriorated recently. To the surprise of many, the Dutch economy has recorded modestly positive economic growth

[2] See ABN AMRO Dutch Economy in Focus, April 2012

rates in the first half of 2012. The recession in Q3 and Q4 was only mild and short.

The cyclical outlook is one of continuous improvement, but a spectacular economic recovery is unlikely for two reasons. First, fiscal consolidation will be stepped up. Due to the high cyclical sensitivity of public finances, a substantial budget deficit has occurred in recent years. In 2011, the deficit equalled 4.7% of GDP. In order to comply with the new Euro-Plus pact, the budget deficit has to be brought back to 3% of GDP by 2013. The current caretaker government, backed by a majority in Parliament, has introduced additional fiscal tightening measures to achieve this goal. The outcome of the elections on 12 September 2012 could easily lead to changes in the consolidation plans, but the commitment to keep public finances in check is unlikely to disappear. The second reason why a strong recovery is unlikely is related to the problems in the Eurozone as a whole. The Netherlands is highly dependent on intra-Eurozone trade. All problems related to sovereign stress are hurting this dependency. Muddling-through is our main scenario regarding the Euro crisis, but risks are clearly skewed to the negative side.

Consumer confidence



Source: CBS

Taking all factors together, we expect to see moderate economic growth going forward. Unemployment will likely rise further, but the overall level will remain low compared to other countries. The table on the right shows the main economic figures and the outlook (as of August 2012).

Key figures for the Dutch economy

	2010	2011	2012	2013
		% changes		
GDP	1.6	1.0	-0.4	0.5
Private consumption	0.3	-1.0	-1.1	-0.3
Government consumption	0.7	0.1	0.9	-0.5
Investments	-7.2	5.7	-3.0	1.5
Exports	11.2	3.9	3.4	4.4
Imports	10.2	3.6	2.9	4.0
Consumer Prices (CPI)	1.3	2.3	2.4	2.3
Wages	1.0	1.4	1.7	2.0
		levels		
Unemployment, national definition (% labour force)	5.4	5.4	6.4	7.1
Current account balance (% GDP)	7.0	8.5	8.8	8.5
Budget balance (% GDP)	-5.1	-4.7	-4.2	-2.9

Estimates: ABN AMRO Group Economics, August 2012

Housing market

The housing market is important in the analysis of Dutch covered bonds. Bond investors have an indirect (and ultimate) exposure to Dutch residential real estate since this serves as collateral for the mortgage loans in the cover pool. In contrast to the economy, which is highly synchronised internationally, the Dutch housing market has merely its own domestic dynamics. Before discussing the current developments on the housing market, a background is needed on the structure of the market in general.

Demand side

The most important long-run driver of housing demand is the growth in the number of households. The country has currently 16.7 million inhabitants, who live in almost 7.5 million households. Annual population growth totalled 0.5% during the last 20 years, whereas annual household growth was 1.0% in the same period. This marked difference can be explained by a steady decline in the number of persons per household. The average household included 3.7 persons in 1960, whereas it was only 2.2 in 2011. There are two reasons for the decline in household size. First, the average number of children per household is slowly decreasing. This is caused by a lower birth rate in general and by the fact that people have children at a later age. Second, there is a steady but sizeable increase in single-person households. During the last 20 years, the number of one-person households has risen by almost one million. In 2011, more than a third of all households consisted of only one person. According to projections by the national statistics office, the number of households will keep increasing, to 8 million by 2020 and to 8.5 million by 2040. This growth will result in ongoing demand for housing.

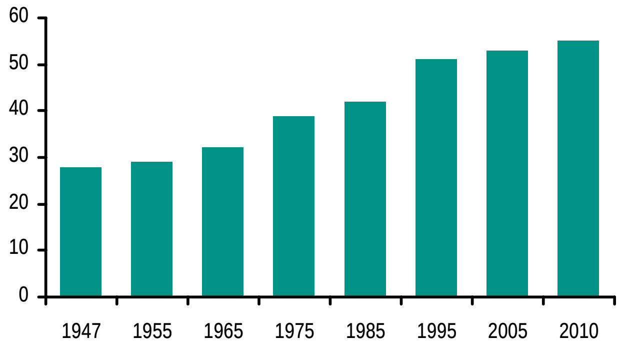
The government intervenes heavily in the demand side of the housing market. Home owners enjoy the combination of tax deductibility (extensively discussed in the next chapter) and only a modest tax regime on rental income. A transaction tax (stamp duty, currently 2%) for house purchases is present to limit speculation. Meanwhile this tax also deters people from moving house. OECD research shows that the Netherlands occupies a middle position when it comes to housing mobility. Government intervention in the rental segment consists of imposing maximum rents in the public housing sector and rent allowance to low income households.

Supply side

The government is even more present on the supply side of the housing market. The supply of housing is severely restricted due to strict spatial regulations. This is the main factor that makes building plots expensive. Building costs as such are not low either due to strict uniform quality requirements. As a result of this legislation Dutch housing quality has reached an internationally high standard. Yet, supply is slow in reacting to changes in demand. International comparison confirms that the housing market is one of the most inelastic within the OECD countries. This results in a limited housing stock and hardly any vacancies.

Home ownership

% of total housing stock



Sources: CBS, Boelhouwer

The housing stock can be analysed on the basis of ownership. 56% of all residential dwellings are owner-occupied, 32% are owned by (public) housing corporations and the remaining 12% comprise rental properties in private ownership. The home ownership ratio is still low by international comparison. However, historically, this ratio is close to its peak. From WW II to the beginning of the 1970s the home ownership ratio was stable at close to 30%. From then onwards the ratio started to increase to 40% in the 1980s and 50% in the 1990s. Wealth improvements and home ownership-stimulating government policies promoted this shift.

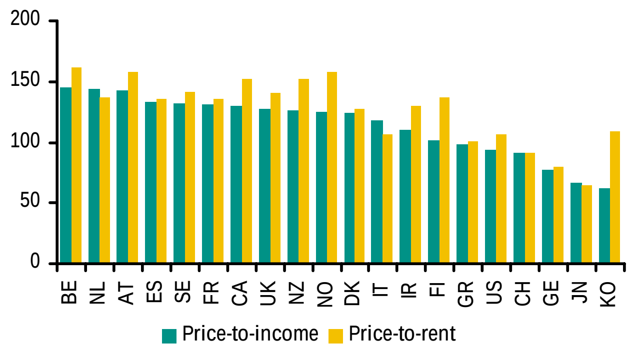
Notwithstanding the shift towards increased home ownership, the rental sector remains large. The rental sector is dominated by public housing corporations. As these corporations serve income policy aims, their rents tend to be below market levels. This explains the abundant demand for social rental housing. Waiting lists tend to be long, particularly in popular cities. The private rental sector on the other hand is small. Strict rental regulations deter investors. Unlike housing corporations, private landlords tend to demand rents based on market forces. Their rents are in line with the mortgage servicing costs of home owners. In that sense the choice between buying or renting a home is small.

Current developments

In recent years there has been intense discussion about the future of the housing market. Insecurity about the sustainability of the tax deductibility of mortgage interest payments in combination with uncertainty as a result of the economic crisis harms confidence in the housing market. House prices have declined for three years in a row. The housing value indicator of the land registry (Kadaster) is roughly 15% below its peak of August 2008. The Market Indicator of Vereniging Eigen Huis, a homeowners' association, was still close to its historical low in August. The lack of confidence suggests that house prices will continue to decline and that transaction levels will remain low for the near future. The number of transactions fell by a third in 2009 and kept falling in the two years after, albeit at a lower pace, to 120,000 in 2011 - 90,000 fewer transactions than at the peak in 2006.

Price to income and rent ratios (2011)

House price / Disposable income



Source: OECD

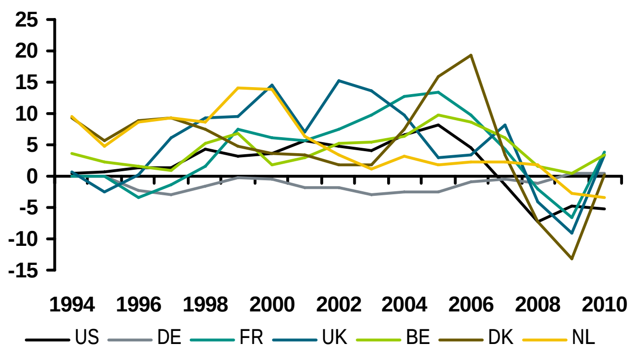
Outlook

First-time buyers are still cautious on account of the high price level. House prices are slowly decreasing, but in comparison with other countries, they are still high in the Netherlands. International comparisons by the OECD demonstrate that valuations are rather elevated in the Netherlands. The country ranks 10th on the basis of the price-to-rent ratio and 2nd on the basis of the price-to-income ratio. According to the OECD, prices need to come down 24% from 2011 levels to reach the 30-year average long term price-to-rent ratio and 29% to reach the average long term price-to-income ratio. This suggests that house price ratios should adjust by another 25-30% to reach the fundamental price level.

However, a closer look indicates that the historically elevated price level is explained by a range of structural factors. To begin with, the quality of the stock of houses has improved throughout the years. The current composition of the housing stock justifies a price boost of 2.5 percentage points. Furthermore, spatial planning limits the availability of building plots, which are on average up to four times more expensive than in neighbouring Belgium. Given that a fifth of the price of newly built houses is determined by the value of the building site, spatial planning controls may explain up to 15 percentage points of the divergence in price level. On top of this, real interest rates have dropped over time, accounting for 7.5 percentage points in price. All in all, quality improvements, spatial planning and the drop in real interest rates explain 15-25 percentage points of the current price divergence.

Real house prices

% yoy (house price change – inflation rate)



Source: OECD

As these three factors will continue to prevail in the future, the price level may adjust by a maximum of 15% over the coming years in our view. This percentage corresponds with the total upward price effect of current fiscal policies that favour home ownership, which add up to a yearly stimulus of EUR 15 billion. There is debate on changing fiscal policy and restricting mortgage tax relief. The measures that the caretaker government has in store will curtail fiscal stimulus by about a third, thus theoretically pushing prices down 5%.

Yet, chances are that fiscal adjustments will be even more comprehensive after the elections. This corresponds with our current stress projection that prices may drop 6% in 2012 and 8% in 2013. In the years beyond our forecasting horizon house prices are expected to stabilize first and then rise on the back of the economic upturn. The large drop in 2013 reflects the shock effect of the fiscal policy adjustments that the government has in store and includes a relatively unfavourable economy. The level of transactions will move in line with house prices and recover steadily after an initial drop to 100,000 sales in 2013, less than half the peak in 2006. Purchasing a house will prove attractive again beyond 2013 as valuations will be low, particularly in real terms.

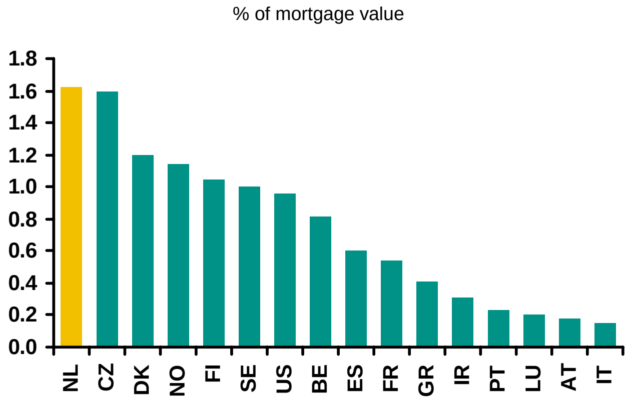
Mortgage market

The Dutch housing market has its domestic dynamics, but the mortgage market has an even larger local flavour. In comparison with other countries, the Dutch mortgage market is rather complex. Plain-vanilla amortising mortgages are rare in the Netherlands, whereas this mortgage product is very common in other countries. The tax system and the Mortgage Code of Conduct are the most distinguishing factors for Dutch covered bonds. These factors will be discussed first.

Tax deductibility

The Dutch tax system allows for a full deduction of mortgage interest payments on taxable income. This beneficial treatment has been in place for a long time (since the end of 19th century) and is based on the reciprocity of tax on interest income. For a long time, the tax deduction was unconditional. But over the last two decades, the conditions for deduction have been tightened in several steps. Currently, households are only allowed to deduct interest payments on the mortgage of one (owned) residential property, up to a maximum period of 30 years. Interest payments resulting from mortgage equity withdrawal cannot be included in the deduction, so the mortgage loan has to be used for financing of the dwelling only. Still, this tax system is very generous to home owners.

Yearly tax advantage on mortgage



Source: OECD

Also by international standards, the Dutch tax system is very generous to mortgage borrowers. An OECD study found that, on average, the Dutch tax system effectively subsidises 1.6% of the mortgage value per annum. Not a single country exceeded this percentage. The tax deductibility of interest payments leads to three interesting observations. First, mortgage financing is very attractive since net interest costs are clearly lower. It is therefore very straightforward to finance the purchase of a house with a mortgage loan. The system therefore stimulates home ownership. Second, the system does not constrain mortgage lending. In contrast, the tax deductibility incentivises high mortgage borrowing. Even if a mortgage is not needed (e.g. due to substantial wealth), it is often beneficial to have a mortgage in order to achieve income tax savings. The tax system is therefore the main reason why mortgage debt is relatively high in the Netherlands. Third, the tax system reduces the incentive to pay back the principal for the duration of the mortgage. Instead, a lump-sum repayment of principal at maturity results in maximum tax deductibility over time. The tax system allows for untaxed accumulation of capital through dedicated savings accounts or insurance products, on condition that this is used for principal repayment on maturity of the mortgage. Other tax-friendly possibilities for building up savings are restricted, because the Netherlands applies a wealth tax system to capital accumulation.

The tax system is a major advantage for mortgage borrowers, but for society as a whole there are substantial costs involved. The need for structural reform on the housing market, and the need for fiscal consolidation, has led to increasing challenges to the tax deduction system.

In fact, the tax system is expected to change as of January 2013. The fiscal consolidation plan (as agreed by a majority of Parliament in the end of April) includes an important change to tax deductibility. From 2013, the tax relief will be conditional on at least annual mortgage redemption. In this way, debt reduction will get more priority. The future concerning the new measures is far from certain, since it is a very hot political issue. The election results on 12 September 2012 are crucial in this respect and could change the situation drastically.

Main recent changes in housing and mortgage market

Changes to the tax system:

- From January 2013, tax deductibility on mortgage interest payments is expected to be conditional on amortising mortgage loans.
- All mortgages originated prior to this will benefit from the old tax regime of full tax deductibility.
- Property transfer tax on purchases of existing homes has been lowered from 6% to 2%, first temporarily, now permanently.

Stricter Mortgage Code of Conduct:

- Maximum LTV of 104% + transaction tax (2%)
- Future LTV-limit of 100%
- Interest-only mortgage loans maximum 50% LTV
- Stricter regulations for non-compliance (on a compliance or explain basis)

Changes to NHG mortgage guarantee:

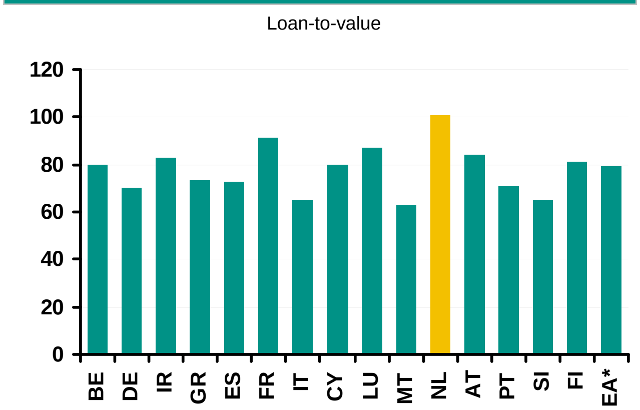
- Maximum purchase amount scaled back from EUR 350,000 to EUR 320,000 per 1 July 2012, scheduled to decrease gradually to EUR 265,000

It is important to stress that the currently proposed change to more limited tax deduction will apply only to new mortgages (originating in or after 2013). All mortgage loans prior to this date will continue to benefit from the old tax regime. In the case of mortgage transfer or refinancing, the old tax regime will remain applicable to the 'old' mortgage amount. The new tax regime will then apply to any additional mortgage loan. Existing mortgage holders will not be affected by the change in the tax system. Directly hit by the new tax system are first-time buyers, although a yet undisclosed transitional regime will apply. Nevertheless, first-time buyers will face higher mortgage servicing costs. This will reduce their ability and willingness to buy a house.

Mortgage Code of Conduct

Another important feature of the Dutch mortgage market is the Mortgage Code of Conduct, which regulates underwriting standards. The code is officially a form of self-regulation among banks and other mortgage originators. But increasingly, regulatory pressure has led to tighter underwriting standards and (much) stricter compliance with the code. The code is designed to prevent ‘overlending’ to consumers, but increasingly it also results in a level playing field in which non-price based competition is being eliminated. Virtually all mortgage lenders adhere to the code. The stricter compliance has led to ongoing tighter mortgage lending standards in recent years. The code was enacted in the early 1990s, but until 2007 it offered merely guidance. Since 2007, compliance with the code is significantly less voluntary. Deviations are still possible, but they have to be explained. This is for example the case if parents are willing to guarantee a part of the mortgage. The scope for deviations has, however, been significantly restricted. According to research by Fitch Ratings, the number of deviations from the code (i.e. non-compliance) has fallen from 30% of all mortgage originations in 2007/2008 to only 5% in 2010.

Typical LTV-ratios for first-time buyers



Source: ECB *EA = Eurozone

A recent change (2010) is a strict loan-to-value limit of 104% plus applicable transfer tax. The LTV-limit is scheduled to decrease further to 100% in the future. Before 2010, loans with higher LTV-ratios were possible. The LTV-ratios are relatively high in comparison with other countries, especially for first-time buyers. Even while existing home-owners typically have lower LTV-ratios, initial down payments with buyers' own money are not common due to the current system of tax deductibility. Another important change (2010) is the constraint on interest-only (I/O) mortgage loans. These products are still allowed, but up to a maximum of 50% of the property value (LTV).

Mortgage guarantee (NHG)

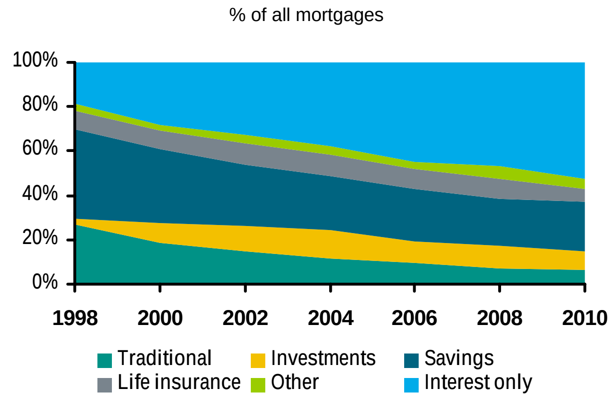
The lending standards in the Mortgage Code of Conduct are derived from the requirements of the National Mortgage Guarantee fund (NHG). NHG is a voluntary mortgage guarantee system run by the public foundation Homeownership Guarantee Fund (WEW). WEW manages the guarantee fund and sets requirements for the NHG itself. The foundation is backed by local governments. Ultimately, an exposure to the NHG is to the Dutch state. NHG offers credit protection to the borrower in case of unforeseen circumstances (unemployment, death, divorce, etc) that result in the sale of the home. The main purpose of the NHG system is to stimulate home-ownership by reducing the risk of debt overhang. NHG is fully funded by mortgage holders. A mortgage holder has to pay a lump-sum fee of 0.7% of the value of the mortgage upfront. In the event that the NHG fund should run out of money, the government offers an explicit (loan) guarantee to the system itself. The requirements for NHG used to be much stricter than for the Mortgage Code of Conduct. But in recent years, the tightening of standards in the Code of Conduct has led to almost identical requirements. The main difference with the Mortgage Code of Conduct is the cap on mortgage amount. The maximum mortgage for an NHG guarantee amounted to EUR 265,000. But in order to stimulate the housing market, the WEW has raised this limit temporarily to EUR 350,000. Since 1 July 2012, the maximum amount has been lowered to EUR 320,000 as scheduled. The maximum amount will be lowered further to the old value of EUR 265,000 in the future. The market share of NHG guaranteed mortgage loans has increased markedly in recent years. On one hand, this increase is the result of the higher maximum guarantee amount and the more cautious buyer stance. On the other hand, the stricter Mortgage Code of Conduct has resulted in a greater convergence of lending standards. Relatively, NHG protection has become more attractive.

NHG loans are present in most cover pools of Dutch covered bonds, but the guarantee gives only a minor credit enhancement in the covered bond rating frameworks of the rating agencies. In transactions involving residential mortgage backed securities (RMBS) however, the NHG guarantee is a significant credit enhancement. For this reason, banks tend to place NHG loans in RMBS tranches rather than in asset pools of covered bonds. But since new originations are more biased towards NHG, the share of NHG guaranteed loans in covered bond cover pools is poised to increase.

Mortgage products

The mortgage product mix is rather complex in the Netherlands. Most products have been engineered in such a way that optimum use is made of the beneficial tax system ('bullet' repayment of principal at maturity). It should be noted that most mortgages in the Netherlands are a combination of two or more products. For example, a typical mortgage originated in 2010 may consist of a bank savings part and an I/O part. Although each originator has its specific product lines, the following mortgage products are distinguished in general:

Mortgage product mix (1998-2010)



Source: Dutch Association of Insurers

Interest only (I/O) mortgage loans

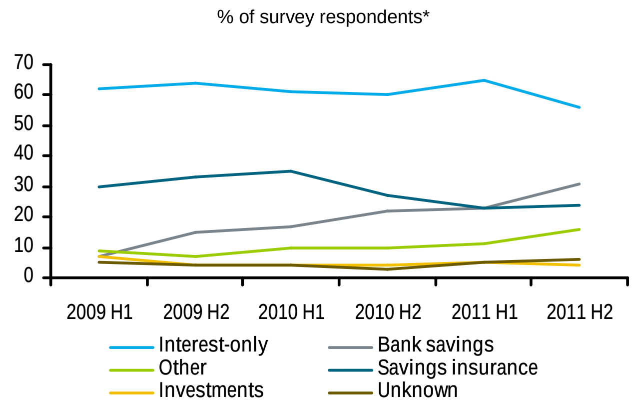
As the name implies, these mortgages do not include any repayment of the principal, except at maturity. There is no mechanism attached to the mortgage that allows for the build-up of principal. This form of mortgage is currently the most popular mortgage product, with a market share of roughly 50%. Interest only mortgages have become popular for two reasons. First, because there is no principal repayment, the debt servicing costs are lower than in other mortgage products. This has led to higher affordability of mortgage financing and in the end, of owning a house. Second, these mortgages offer full and easy tax advantages. In general, young people (first-time buyers) use I/O mortgage loans to reduce costs, whereas older home-owners mainly use I/O mortgage loans to enhance tax efficiency.

NHG requirements have always limited I/O mortgages to a maximum of 50% of the total mortgage. The Mortgage Code of Conduct has been applying the same constraint since 2010. Before this period, it was possible to get an I/O mortgage for a higher LTV, but typical mortgage lenders restricted the usage of I/O loans to a certain degree. Looking ahead, the origination of I/O mortgage loans will decline because of the change in the tax system. From 2013 onwards, new I/O mortgage loans will likely not benefit from tax deductibility on interest payments.

Bank savings mortgage loans

The second-most popular product is currently a bank savings mortgage loan. This mortgage product is similar to an I/O mortgage with a bullet repayment of principal at maturity, but with the major difference that capital (dedicated for principal repayment) is accumulated in a dedicated and linked bank savings account. The product is designed in such a way that a full repayment of principal occurs while achieving the maximum tax deductibility over the length of the mortgage. Mortgage interest payments are constant over time. The savings rate typically equals the interest rate on the mortgage. The cost structure is much more transparent than is the case with insurance linked mortgage products. Life insurance is not automatically present, although it can be still applied on a stand-alone basis. These mortgage products have been very popular in recent years. After a change in the tax system in 2007, capital accumulations in the dedicated bank savings accounts became eligible for favourable tax treatment. Before then, only insurance products offered the tax benefit. The current market share of bank savings mortgage loans is roughly 20-25%. In the future, bank savings mortgage loans are poised to lose market share given the proposed change in the tax system.

Survey of mortgage products 2009-2011



Source: AFM *sum exceeds 100% due to mortgage combinations

Savings insurance mortgage loans

This product is similar to the bank savings mortgage loan, except for the fact that the capital is not accumulated in a bank savings account, but instead in a life insurance product. Capital is generated by paying life insurance premiums. The life insurance is linked to the mortgage, i.e. the capital can only be used to repay mortgage debt at maturity, or, in the case of the death of the insured. If the mortgage borrower is a couple, partners are often cross-linked insured to each other's death. The life insurance product has many characteristics of a savings account. The interest rate in the life insurance product often equals the interest rate on the mortgage loan. Returns on the insurance product are guaranteed. Savings insurance products used to be very popular in the past decade, but the higher transparency and lower cost structure of bank savings mortgage loans has led to a decline in market share recently. Current market share is roughly 10-15%.

Life insurance mortgage loans

This mortgage product was the pioneer in mortgage innovation with the bullet repayment of principal at maturity. In a separate life insurance product, capital is generated by insurance premiums and investment returns. The major difference with the savings insurance is that capital returns are dependent on the investment returns in the insurance pool. Those returns are not always guaranteed. The market share of these products has been slowly declining in recent years and now accounts for 5-10% of all mortgages.

Investment mortgage loans

Interest payments in this product are also constant over time and principal repayment is delayed until maturity of the loan. In a separate account, capital is generated by means of investments in one or more mutual funds. Investment returns are however not guaranteed. Life insurance is often taken out as a risk reducing factor. Current market share is around 5%.

Classical mortgage loans

These products are the linear and annuity mortgage loans that are the norm in most other countries. Principal is repaid for the duration of the mortgage and interest payments gradually decline over time. The structure is safe and simple, but due to the tax system these mortgages are not popular in the Netherlands. Current market share is around 5%. This is likely to increase substantially in the near future, when tax deductibility will be calculated on an annuity basis.

Interest rate fixing and prepayments

In general, Dutch mortgages have interest rates that are fixed for a long period, typically between 5 and 10 years. Statistics from the Dutch central bank (DNB) indicate that 99% of all existing mortgage loans have an interest rate that is fixed for 5 years or longer. This stock of mortgages is relatively static, however. More variation is visible in new mortgages. The number of variable rate mortgages (fixed period shorter than 1 year) is currently 23%. Longer term fixings are still more usual, although the popularity of fixed rates longer than 5 years shows a decreasing trend in recent years. With a popularity of 40%, longer term fixed rates are still the most commonly used interest rate period. 37% of all new mortgages have an interest rate with a 1-5 year fixed period. In comparison to other countries, the number of variable rate mortgages is clearly lower. This is a risk-reducing factor in terms of mortgage servicing. Since 30-year fixings are very rare in the Netherlands, there is still interest reset rate risk present over the full duration of the mortgage.

Set-off risks in Dutch mortgage products

Set-off refers to the risk that mortgage borrowers could net their debts against their assets in an insolvency proceeding. Broadly spoken, this risk could materialise in two instances:

Deposit set-off
In the Dutch deposit guarantee scheme, current and savings account balances up to EUR 100,000 are guaranteed in the case of a bank default. When using the deposit guarantee, the creditors have no rights to net the remaining balance of debts and deposits. However, if the guarantee is not used, netting of debts and deposits may occur in case of a bank insolvency proceeding.

Because Dutch mortgage products often have the full lump-sum repayment of principal at maturity, deposit set-off is an important risk to consider. The risk is highest for bank savings mortgages, since the accumulated savings are often deposited at the same bank.

Product set-off
This set-off risks concerns mortgage products with a linked insurance product (e.g. savings, life). If the insurance company goes bankrupt, there might be a risk that the mortgage borrower can recover its losses in the mortgage loan. For example, if the life insurance balance is EUR 50,000 and the insurance company goes bankrupt, the mortgage borrower could attempt to lower its mortgage balance by the same amount. This risk is highest when the mortgage borrower has not explicitly chosen the insurance company.

The mortgage amounts in cover pools of Dutch covered bonds are adjusted for set-off risks in the asset cover test (ACT).

Duration

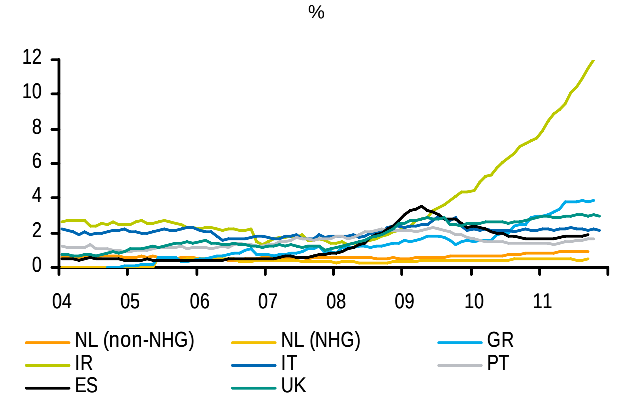
The typical legal duration of a mortgage is 30 years. This length is equal to the period of tax deductibility for interest payments. In comparison to other European countries this duration is fairly long. The actual duration of the mortgage is often much shorter, because mortgage borrowers have the option to refinance the mortgage without a penalty if the interest rate fixing period has been reached. When refinancing takes place, a prepayment occurs. Prepayments before the end of the interest fixing period are limited by penalties. Most mortgage products allow a 10% prepayment without penalty.

Default risk

The main risks in mortgage loans are late payments and ultimately foreclosure. Late payments are generally managed well. Virtually all mortgage payments are automatically debited from current accounts. Payment failures are quickly discovered and notices are sent out usually within days. Statistics from various rating agencies show that mortgage arrears are very low in the Netherlands, although a modest rising trend is visible. The same conclusion holds for foreclosure rates.

By international comparison, both late payment and foreclosure rates are among the lowest in Europe. This good payment behaviour is probably surprising given the risks associated with the high level of mortgage debt. There are three explanations why this perceived correlation does not hold in the Netherlands.

RMBS Prime 60+ days delinquency rate

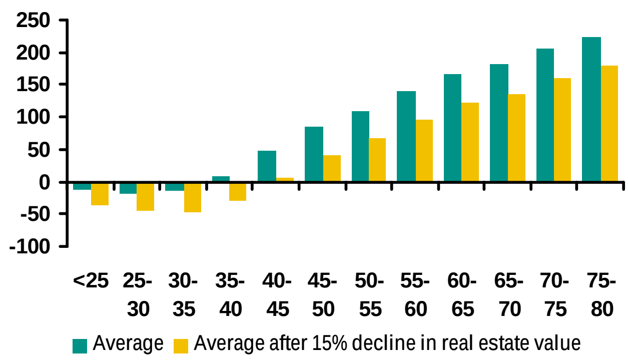


Source: Moody's Investors Service

First, the mortgage lender has full recourse to the borrower. The dwelling acts as collateral and in case of foreclosure it will be auctioned, usually at a discounted price (foreclosure value). The residual debt does not automatically involve a loss for the mortgage originator or owner. Under Dutch insolvency law, the holder of the mortgage loan has full recourse to other assets of the borrower. Even claims on future income of the borrower may be included. The personal insolvency law in the Netherlands is very strict and austere. Just handing over the keys to the bank is not attractive at all. Second, the structure of the economy is important. Unemployment is low, there are often multiple sources of income in a household and the social security system is generous. Third, the structure of the housing market plays a role. People who are facing hard times in servicing mortgage debt, often have no easy alternative available than to just pay up. Selling the house and switching to the rental sector often does not lead to any cost savings, because they typically do not qualify for the (lower rent) housing corporations. Instead, they have to rent at much higher prices in the private sector. Overall, the conclusion applies that the high level of mortgage debt is not necessarily a risk factor, but more the result of incentives by the tax system. Problems concerning foreclosures are therefore mostly the result of unexpected life events, such as long term unemployment, disability, death and most importantly, divorce. In such cases, the loan-to-current value of the mortgage does matter. If the amount of mortgage debt is higher than the current value of the collateral, a residual debt burden will remain if the property is sold. In particular, recent first-time buyers are vulnerable to this risk. Many divorces or other relationship terminations occur in the first years of living together. Second and more importantly, recent buyers have bought a home around the peak in house prices, with a typical LTV on their mortgage exceeding 100%. As a result of the decline in house prices, this group now has negative housing equity. The graph below illustrates that young people (aged under 35) are vulnerable in this respect. By applying a scenario of further cumulative decline in house prices of 15% (ceteris paribus), the number of households with negative housing equity will increase further. In this simulated case, the negative equity could run up to roughly EUR 50,000 per household.

Net housing equity per age group (2011)

Current residential real estate value -/- mortgage debt, EUR thousands



Sources: CBS, calculations ABN AMRO

Some observations should be made concerning these figures. First, accumulated capital for the repayment of mortgage principal (e.g. bank savings or insurance reserves) are excluded from these numbers. The real equity picture is therefore less severe. Second, the problem is concentrated among younger households. While this group certainly does not face a benign financial situation, they still have a long period of earnings ahead of them. Research conducted by DNB showed that high-income households in particular are experiencing negative housing equity. Third, the negative equity does not necessarily affect foreclosure behaviour. As already stated, negative housing equity is not a reason in itself for foreclosure. Only in the case of unexpected life events, might the foreclosure rate (and the associated losses) be influenced by negative housing equity. Fourth, the NHG guarantee covers those unexpected events. First-time buyers generally have an NHG-guaranteed mortgage loan, especially if originated in recent years. The market share of NHG has risen significantly, particularly since the increase in the eligible mortgage amount to EUR 350,000. Another aspect to consider is the long term transfer of wealth over generations. The (very) positive housing equity of the older generations will ultimately be transferred to the younger generations via inheritance.

Mortgage origination and funding

The Dutch mortgage market is sizeable, not only from a relative, but also from an absolute perspective. The previous chapter described the characteristics of Dutch mortgage loans and provided explanations why mortgage debt is so high in the Netherlands. The supply side of the mortgage market is also significant. This chapter will zoom further in on the origination and funding side of mortgage loans.

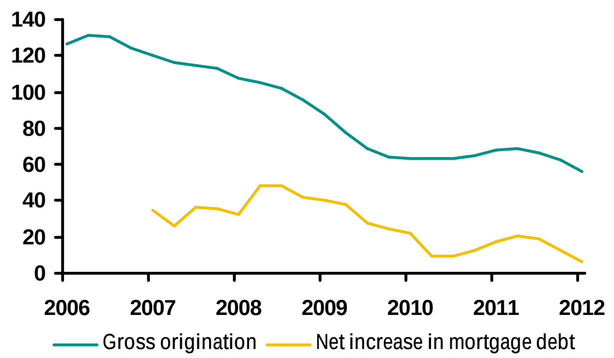
Origination

Developments

In line with developments on the housing market, the origination of new mortgage loans in the Netherlands has slowed considerably since 2006. According to data from the land registry, aggregate origination slowed to EUR 56 billion in the year through Q1 2012. In Q2 2006, the same figure equalled EUR 131 billion. These origination numbers are gross: they include both new mortgage lending and refinancing of existing mortgage loans. The latter is common in the Netherlands. For all variable rate mortgage loans, and for fixed rate mortgage loans at the interest rate reset date, penalty-free refinancing is often possible. This is often also the case when moving to a new house. Since mortgage interest rates have decreased over the last years, the incentive to refinance has been quite high. This was especially the case in the period just prior to the crisis, in 2007 and 2008.

Mortgage lending

EUR billion (12-month moving sum)



Source: Land Registry, DNB, ABN AMRO

Net mortgage lending is more difficult to determine. It is not equal to the increase in total mortgage debt, since this equation is also dependent on the repayments of mortgage loans. It is however a good proxy for net mortgage lending. This figure has likewise shown quite a decline in recent years. In the year through Q1 2008, the net increase in mortgage debt amounted to EUR 48.3 billion. The most recent reading (Q1 2012), showed an increase of only EUR 6.2 billion.

Demand

Lower demand for mortgage loans is an important factor behind the decline in mortgage origination. The adverse development on the housing market has resulted in three important developments. First, activity on the housing market has slowed markedly. The land registry recorded up to 216,000 house sales at the peak in 2006. Since then, this number has gradually declined, to only 118,000 transactions in July 2012. Second, the average mortgage loan is smaller in size. This reflects the decline in house prices. At the peak of the housing market in 2008, the average mortgage loan amounted to EUR 304,000. The latest reading (July 2012) was an average mortgage loan of EUR 251,000. The third reason is related to the decline in house prices, which affects the value of the collateral. This makes refinancing of mortgage loans more difficult, especially for late-buyers.

Supply

Not only demand weakness explains the decline in mortgage origination. The supply side is also clearly under pressure. Driven by regulatory change, such as the stricter Mortgage Code of Conduct, but also by the more risk-averse environment, challenging funding requirements and an overall drive towards deleveraging, mortgage originators have tightened their mortgage lending standards visibly in recent years.

Bank lending survey: residential mortgage loans

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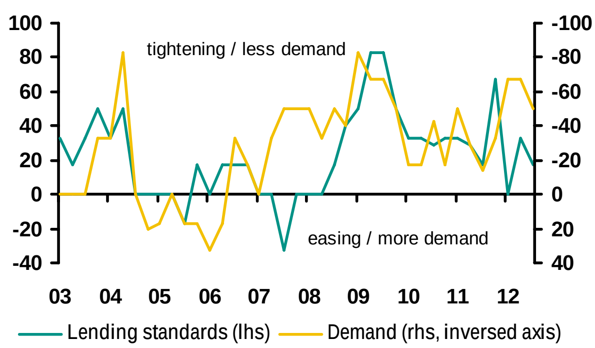


Source: DNB

Market structure

The process of mortgage origination is managed either from a bank's local branch or via a specialised mortgage intermediary. Virtually all final originators are directly linked to either a bank or insurer. The competitive environment on this supply side of the mortgage market has changed as well in recent years. Nowadays, nearly all originators are domestically based. This used to be different before the crisis, when foreign market participants also issued Dutch residential mortgages. The aftermath of the crisis is now resulting in a new 'home bias' in the banking sector. Most foreign originators have left the Dutch mortgage market in the last few years, exceptions being BNP Paribas and the Belgian bank/insurer Argenta. Market shares are currently volatile, but the largest Dutch banks are firmly present at the top. Including all subsidiaries and white label companies, Rabobank has the largest market share in mortgage origination, of roughly 25-30%. ING follows with a share of 20-25%, while ABN AMRO has a market share of about 20%. SNS Bank used to have a market share of approximately 5%, but recent developments show a big decrease. Of the other covered bond issuers, Achmea has only a minor market share. NIBC Bank uses intermediaries to originate mortgage loans, but has also a minor market share. Apart from the smaller new entrants on the mortgage market, there appears no drive among market leaders to increase market share explicitly. Bottom line is that that competitive pressures in mortgage origination have declined since the crisis.

Funding

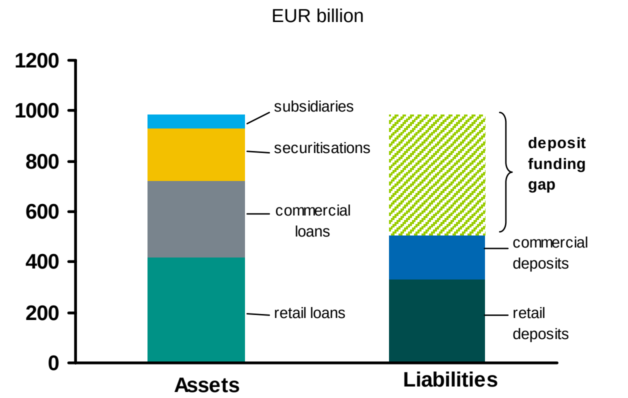
The funding side of mortgage origination is not easy to analyse. Besides the vast arsenal of funding instruments, the balance sheets of originators are characterised by many flows. New originations, repayments, refinancing and interaction with other lending and deposits are all important to consider. Moreover, balance sheets are increasingly managed in anticipation of future loan supply and market circumstances. The complexity is further enhanced by off-balance sheet financing, such as residential mortgage backed securities (RMBS). Despite all the complexities involved, some general conclusions do apply with respect to the different ways of funding of mortgage loan portfolios.

Deposits

The classical method of loan funding for a bank is via its deposit base. In many ways, it is the most stable way of funding, especially if mass retail deposits are involved. In times of crisis and uncertainty, there is a strong preference for deposit based funding of mortgage loans. Unfortunately, the deposit base is rather small in the Netherlands. According to a study by DNB, retail and commercial deposits covered only 51% of the outstanding loans of domestic banks in the Netherlands in Q2 2011. The remainder is a gap on the balance sheet, totalling EUR 487 bn, that has to be filled by other sources of funding. Dutch banks have a generally high dependence on market funding, also in international comparisons. Within the eurozone, only Irish banks have a greater reliance on financial markets for funding.

The deposit funding gap is a direct result of the three-pillar pension system. Since households automatically save a substantial amount of money for retirement via their pension funds, there is less incentive to save money in other ways, such as deposits. Pension funds have a strong preference to invest internationally because of diversification benefits. The result is that Dutch banks rely greatly on international investors for their funding, despite the huge surplus on the capital account of the Netherlands' balance of payments.

Aggregate domestic banks balance sheet (Q2 2011)



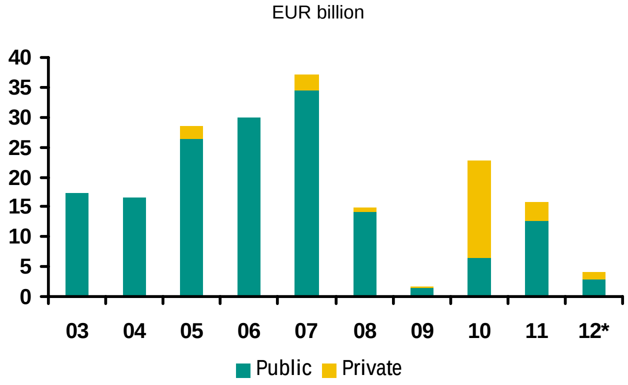
Source: DNB

RMBS

Securitisation of mortgage loans was one of the drivers that enabled the expansion of mortgage debt in the Netherlands over the last 15 years. Especially since the start of this millennium, RMBS issuance has been a very important funding source for Dutch banks. According to our estimates based on statistics from DNB, 16% of the total outstanding mortgage exposure was securitised in 2003. Four years later, this percentage was already 26%. Dutch banks were not as active in securitisation as foreign originators, but the bias towards this funding tool is clearly visible over time.

Issuance of RMBS by Dutch banks to external investors equalled EUR 17.2 billion in 2003, but it gradually rose towards EUR 37.1 billion in 2007. The crisis almost killed the RMBS market completely. Issuance to investors dropped to EUR 14.1 billion in 2008. 2009 was the worst year, with only EUR 1.8 billion in non-retained issuance. The following years showed some recovery, but the pre-crisis issuance volumes were no longer reached. However, retained RMBS issuance, where the RMBS is directly bought back by the issuer, became much more important.

Dutch RMBS issuance (excluding retained)



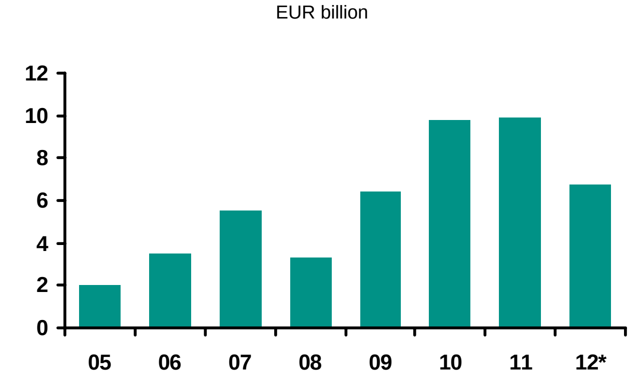
Source: Concept ABS *issuance until July 2012

Issuance of retained Dutch RMBS securities totalled EUR 64.3 bn in 2007. In 2010, the issuance of retained RMBS rose to EUR 102 bn, a record high. Reasons for retained RMBS have little to do with capital relief. Instead, the securities are used as collateral to obtain central bank's liquidity. Despite the fact that RMBS as a funding tool to external investors has become much more difficult, the share of securitised mortgage loans has risen to 35% of all outstanding Dutch mortgages (Q1 2011). Ultimately, when systematic liquidity support from the central bank is no longer needed, the share of securitisation is set to decline in the future. Upcoming legislation, such as Solvency II, is likely to fundamentally disadvantage the investments in RMBS to other debt instruments, such as covered bonds. From this perspective, it is unlikely that RMBS issuance will fully recover to pre-crisis levels. Since the outstanding amount of RMBS securities remains large in the Netherlands, it is too early to dismiss the importance of this funding instrument for Dutch banks. Most mortgage originators in the Netherlands have RMBS funding programmes in place.

Covered bonds

Like RMBS, Dutch covered bonds are specific funding instruments for residential mortgage loans. Covered bonds in the Netherlands have a more recent history than RMBS. The first Dutch covered bond funding programme was introduced by ABN AMRO Bank in 2005. Covered bonds are an alternative to RMBS funding. Demand from foreign investors for more asset protection was an important reason to establish the covered bond market in the Netherlands. Funding diversification became much more important during the crisis, when RMBS and unsecured funding became more difficult. The graph on the right illustrates the development of the covered bond market in the Netherlands over time. Whereas the issuance of benchmark covered bonds[3] was only marginal before 2008, the market really took off in 2009. The crisis is an important transition point in the Dutch covered bond market, but the enactment of covered bond legislation in 2008 helped as well. Issuance of benchmark covered bonds reached almost EUR 10 billion in 2010 and 2011. In terms of issuance, this year to date has been good as well, but the outlook for the remainder of this year is one of less issuance.

Dutch covered bond benchmark issuance



Sources: Bondradar, ABN AMRO *issuance until July 2012

Despite the fact that the covered bond market in the Netherlands has grown in size over the last number of years, the overall funding levels remain on the low side. In comparison to other more established covered bond markets, such as Germany, France and Spain, the Dutch covered bond market is relatively small. Also compared to other funding instruments of Dutch banks, such as RMBS and the issuance of unsecured debt, covered bonds have not grown into a funding instrument of major importance. Despite the fact that RMBS funding is more difficult, the issuance of non-retained (public) RMBS even exceeded that of benchmark covered bonds in 2011.

There are three explanations for the relatively small covered bond market in the Netherlands. First, covered bonds are not those cheap funding instruments that spread levels might suggest. Since Dutch mortgages are characterised by high LTV-ratios and European CRD regulations cap the LTV for covered bonds at 80%, Dutch issuers have to include more mortgage loans in their cover pools compared to other European issuers. In other words, the Dutch covered bond programmes impose a relatively great burden on the assets on the balance sheet of the issuer. Second, the supervisor (DNB) of registered covered bond programmes requires a 'healthy ratio' (see box on page 18) between the covered bond programme and the size of the balance sheet. Although these ratios are not being disclosed, the requirements functions as an implicit cap on the size of the Dutch covered bond market.

[3] Issuance in Euro, minimum size of EUR 500 million and fixed coupon

Third, not all originators use or can use covered bonds as a funding tool. Currently, there are five covered bond issuers: ABN AMRO Bank, ING Bank, SNS Bank, Achmea Hypotheekbank and NIBC Bank. Rabobank, the largest originator, is the main bank without a covered bond programme. Insurers are not allowed to issue covered bonds, although in theory they could use their banking-arms to issue covered bonds (as Achmea does).

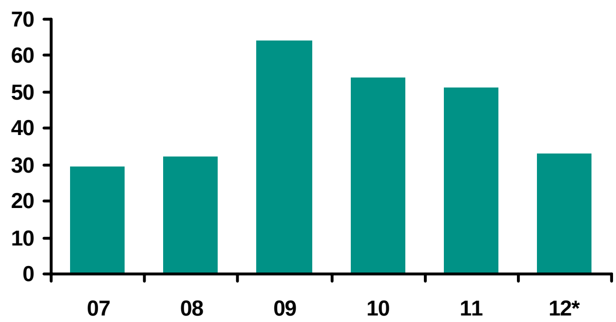
The outlook for covered bonds is positive. Other ways of funding are plagued by changing regulation. RMBS are likely to be allocated substantially higher risk weight requirements under Solvency II, whereas unsecured (senior) funding is subject to bail-in discussions. Covered bonds will likely continue to enjoy their status as low-risk instruments. Moreover, the regulators will likely aim to reduce the reliance on short term funding of banks in the money market. Long term funding will be the preferred strategy. Taking account of all these considerations, it appears that the future for covered bonds is rosy. We expect that the Dutch covered bond market will grow further in size, although the future issuance is unlikely to match the sizes recorded in recent years.

Alternative funding opportunities

Originators have many more funding tools at their disposal, although none of them is directly linked to residential mortgage loans as collateral. Senior unsecured debt is currently the main funding tool of Dutch financial institutions (including insurance companies), with issuance up to EUR 50 bn in 2010 and 2011. Issuance of unsecured debt in 2009 was even higher, helped by the state guaranteed funding opportunities. All major banks, with the exception of Rabobank, made use of this facility. In times of difficult market access, there is a clear trade-off between covered bond and senior unsecured funding.

Issuance of Dutch senior financial debt

EUR billion



Sources: Dealogic, ABN AMRO *issuance until July 2012

With the virtual absence of the RMBS funding, it might be the case that the issuance of unsecured debt has been more muted in 2010 and 2011 because of covered bond issuance. The issuance of subordinated debt is only loosely linked with covered bond issuance. The same conclusion applies to short term funding on the money market, which is quite important to Dutch financial institutions. This funding source is currently very cheap, but upcoming regulatory change is likely to give preference to long term funding. The final source of funding that is currently very cheap is financing through the central bank's liquidity windows. Most of this takes place on a (very) short term basis, but the introduction of the Long Term Refinancing Operations (LTRO) has clearly functioned as an alternative for both longer term unsecured and covered bond funding. Of the five covered bond issuers, SNS Bank and Achmea Hypotheekbank have made use of the second LTRO (LTRO2) financing opportunity.

Covered Bond framework

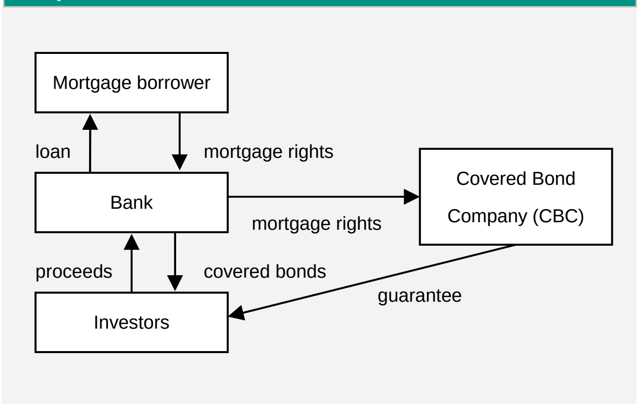
Background

The covered bond framework is relatively new in the Netherlands. In 2005, when the first issue was launched, the Dutch covered bond framework was solely of a 'structured' nature. Asset protection occurs through legal separation of the cover pool from the issuer, as described by the issuer's documentation on an *individual* level. Additional requirements on the cover pool, such as eligible assets and over collateralisation (OC) are also parts of this documentation. In 2008, covered bond legislation was introduced on a *national* level.

Framework

To accomplish the legal transfer of assets, the issuer has constructed an independent legal entity, called the Covered Bond Company (CBC). The diagram below shows the basic setup of the structure. For simplification reasons, the assumption is that the bank is issuer of the covered bonds, originator of the mortgage loan, servicer and administrator.

Simplified covered bond structure



Key feature of the CBC is that is truly independent from the issuer. The *legal* ownership of the cover assets is transferred via a 'silent assignment' to the CBC, where the mortgage borrower is not notified of the new owner of the mortgage rights. The *economic* ownership of the cover assets remains with the bank on an going concern basis. The mortgage borrower continues to make loan servicing payments to the bank. If the mortgage borrower fails to do so, the loan is in default and removed from the cover pool. Losses are incurred by the bank itself.

On a going concern basis, the bank continues to fulfil its obligations directly to covered bond holders. This is the first recourse of the covered bond holder: to the issuer directly on a senior basis. The second recourse consists of a guarantee on the covered bonds, explicitly given by the CBC. The transferred cover assets are used to provide this guarantee.

This second recourse is only used in the case of default by the bank or in the case of a severe credit rating downgrade of the bank. If this occurs, the guarantee will be used to provide coupon and principal payments. Covered bonds do not accelerate if the sponsor bank gets into difficulties: the CBC will take care of coupon and principal payments. If the cover assets in the CBC are not deemed to be sufficient, the bond holders even hold a senior (though unsecured) claim on all other assets of the bank. If the CBC cannot meet its obligations to the covered bond holders, acceleration of the notes will occur[4].

The legal structure around the CBC is rather complex due to the involvement of several trust companies and the fact that covered bond law is not superior to normal insolvency law in the Netherlands. It goes beyond this publication to discuss all legal aspects of the CBC structure. Since both rating agencies and the supervisor monitor the bankruptcy remoteness of the CBC extensively, we assume that the current structure achieves a sufficient degree of asset segregation.

The CBC is specifically designed as a bankruptcy-remote vehicle. As a result, it does not employ any people. The trust which manages the CBC can however hire external expertise to manage the vehicle when required. The CBC does not have an official banking license either. On an ongoing basis, this is not a problem. But if the sponsor bank fails, it could constitute an obstacle for refinancing, since the CBC cannot generate liquidity through borrowing at the central bank's liquidity window.

Legislation

Until 2008 national covered bond legislation was missing in the Netherlands. Irrespective of the framework and composition of the cover pools, Dutch covered bonds could not qualify for favourable risk weights and limits as defined in UCITS[5] and/or CRD[6] directives. This situation changed in July 2008, when specific covered bond legislation was introduced. This enactment removed the disadvantage of Dutch issuers and ensured a European level playing field in covered bond funding. The latter is clearly the most important goal of the covered bond legislation. In fact, the legal texts do little more than meet the UCITS requirements. As a result of this, covered bond legislation in the Netherlands is relatively light, especially

[4] A meeting of covered bond holders can decide to earlier acceleration of the covered bonds in case of default of the issuer.
[5] Directive in Undertakings for Collective Investments in Transferable Securities (UCITS), 2009/65/EC, Article 52(4).
[6] Capital Requirements Directive (CRD), 2006/48/EC, paragraph 68, Annex VI

in comparison to other covered bond legislations in Europe such as the German *Pfandbrief* Act. The Dutch legislation on covered bonds is not a dedicated law but is part of the Dutch Financial Supervision Act (FSA). This FSA, and therefore also the covered bond legislation, is 'principle based'. It provides broad definitions and establishes supervision by the Dutch central bank (DNB), but it is lacking in detail and rules for practical implementation. The latter two elements are achieved in an ongoing dialogue between regulator, supervisor and the issuers. In this interchange, the documentation of the issuer fulfils a very important role. It not only stipulates further detail and (stricter) requirements as set by rating agencies, but it is also subject to close official supervision. This principle based approached offers some degree of flexibility to the issuers, but the close monitoring by the supervisor and rating agencies limits the interpretation leeway considerably. Strict compliance is therefore still guaranteed.

According to the legislation, a bond has to meet six requirements to qualify as covered bond:

1. Issued by a Dutch bank
2. Constitute a senior claim
3. Constitute a secured claim, obtained through legal transfer of the cover assets to an independent legal entity (the covered bond company)
4. Over collateralisation is present
5. Cover assets are governed by law from any EU member state, the US, Canada, Japan, South Korea, Hong Kong, Singapore, Australia, New Zealand and/or Switzerland.
6. The issuer has no equity/control over the covered bond company

Most of these requirements are rather straightforward, but some are worth further explanation. Requirement 4 stipulates over collateralisation (OC), which has to be present any time until maturity of all covered bonds. A specific minimum ratio is lacking in the legislation: OC has to be higher than zero. This is different from other covered bond legislations in Europe, which often stipulate a strict minimum OC requirement. OC is addressed solely in the prospectus of the issuer, although the supervisor also conducts tests on OC to determine compliance with the requirement. Requirement 5 is also broadly defined and specifies the eligible cover assets. It limits eligible cover assets only by governing law. This distinction is sufficient to meet the relevant UCITS requirements. Covered bond requirements in CRD regulations however, require more specific conditions such as asset type and LTV-ratios. This is not addressed in the legislation itself. Again, these requirements can be met in the individual prospectus of the issuers (all covered bond programmes limit the cover assets to residential mortgage loans).

Furthermore, the legislation makes an explicit distinction between covered bonds and *registered* covered bonds. Only the latter instruments are subject to special supervision by DNB and are therefore UCITS compliant. The register of DNB functions as a kind of permit/license system. In order to be included in the register, the issuer must apply and fulfil the following requirements:

1. Provide all documentation, including the prospectus, of the covered bond programme
2. Obtain an independent legal opinion on the bankruptcy remoteness of the cover assets
3. Provide a written declaration by the members of the managing board of the issuer that the debt instruments fulfil the covered bond requirements
4. Obtain a minimum credit rating of AA-/Aa3/AA- by an approved rating agency, subject to further assessment by DNB
5. Ensure that there exists a 'healthy ratio' between the covered bond programme and the size of the issuer's balance sheet (see below)
6. Show solid management capabilities of the covered bond programme

Other requirements in the legislation all relate to official reporting towards DNB, both on an ongoing basis (at least quarterly) and if changes in the programme or prospectus should occur. All issuers provide investor information about the cover pools on a monthly basis.

The 'healthy ratio' requirement

The Dutch covered bond legislation implicitly restricts the issuance of covered bonds up to a non-specified degree. Registered covered bonds require a 'healthy ratio' between the size of the cover bond programme and the balance sheet of the issuer. The requirement has been installed to ensure over collateralisation at all times, but asset encumbrance could be another reason from a prudential supervisory perspective. The legal text itself is not that specific and could be subject to a large degree of interpretation. In reality, DNB and each issuer make a specific individual agreement on the ratio. By defining this ratio per issuer individually, DNB takes a stressed environment into account which results in a higher degree of over collateralisation (resulting in a larger claim on the balance sheet). The healthy ratio is not being disclosed. All prospectuses define a maximum size of the bond programme, but this is not linked to the healthy ratio. If the healthy ratio is exceeded, no new covered bonds can be issued in the programme.

If all requirements are met, DNB will include the issuer in its covered bond register. While the legal texts are limited only in length, the actual requirements for registration of the covered bond programme are very elaborate. Outside expertise is required through independent legal opinion on the structure and through the requirement of an external credit rating by at least one of the credit rating agencies. In this way, all relevant information on the covered bond programme is automatically acquired by the supervisor. The final assessment is made by DNB itself. Four out of five covered bond programmes (ABN

AMRO Bank, ING Bank, SNS Bank and NIBC Bank) are included in the register of DNB and qualify as *registered* covered bonds. As a result, they all are UCITS compliant. CRD compliancy is optional and relates more to the composition of the cover pool itself. All four covered bond programmes above are also CRD compliant. The covered bond programme of Achmea Hypotheekbank N.V. is not (and never was) included in the DNB register. This programme is still ‘structured’ and is neither UCITS nor CRD compliant. Deregistration, although considered unlikely, automatically results in failure to comply with UCITS (and therefore CRD) requirements. In other words, risk weights/limits of the covered bonds could change once deregistration occurs.

Prospectus

The documentation of each issuer, as summarised in the prospectus, continues to fulfil a very important role in Dutch covered bond framework. Fortunately, all covered bond programmes are highly synchronised, so the prospectuses show a large degree of uniformity. Rating agencies determine the most important quantantive parameters in the programme, such as the asset percentage. The rating methodologies will not be described in this publication and neither will all details in the prospectus. Instead, the most important details are highlighted below.

Eligible cover assets

All programmes restrict the eligible cover assets to residential mortgage loans. All issuers use prime Dutch mortgage loans - only a part of NIBC Bank’s cover pool consists of German mortgage loans. Additional to mortgage loans, the prospectuses allow for cash and substitution assets (up to 10%). The latter is conditional on very strict liquidity and risk requirements, in line with CRD requirements. Currently, no issuer makes use of this option: the cover pools consist only of cash and residential mortgage loans. On an ongoing basis, defaulted mortgage loans are removed from the cover pool. Loans in arrears can be included, subject to discounts in the asset cover test (ACT).

Loan-to-value requirements

In order to comply with European CRD regulations, nearly all issuers include mortgage loans in their cover pools up to 80% LTV[7]. This cut-off is implicit: a mortgage loan with a higher LTV ratio (e.g. 110%) can be included, but it only counts for 80% LTV to the collateral pool. Any collateral above the implicit cut-off (e.g. 110-80=30%) is used as extra collateral in the cover pool. The implicit cut-off percentage is used in the asset cover test (ACT, see box), which corrects the nominal amount in the cover pool to an LTV-eligible adjusted amount. Since Dutch mortgages tend to have generally higher LTV-ratios than 80% at origination, Dutch covered bond issuers have to include more mortgages in their cover pools in comparison to their European peers. In this respect, nominal OC levels in Dutch covered bonds are automatically higher than most other European covered bonds. An exception is the (non-registered) programme of Achmea Hypotheekbank. It uses a different implicit cut-off rate of 125% LTV. An explicit cut-off is generally also applied: loans with a foreclosure value of 125% or higher at origination are mostly not eligible at all in the cover pool.

[7] Some programmes allow for higher implicit cut-off rates for NHG guaranteed mortgage loans (e.g. 100%).

Testing the cover pool

The prospectus stipulates different tests that have to be conducted in order to show that the covered bond programme complies with all requirements.

Asset cover test (ACT)

This is the most important test, which has to be conducted on a monthly basis. The test checks whether the amount of cover assets exceeds the amount of outstanding covered bonds to a sufficient degree. In our view, the ACT is a solid test to determine the true size of cover pool on an ongoing basis, including current collateral values. Unfortunately, the calculations used are rather complex.

The mortgages in the cover pool are first corrected for the (indirect) repayment of principal. The resulting balance is adjusted for specific risks, such as set-off. More important, a general hair-cut applies in order to ensure that the mortgage loans are only included up to a specified LTV-ratio (80% in most programmes). This amount in the cover pool serves as an absolute minimum level. A higher (corrected) amount is often possible if the adjusted balance of mortgages is multiplied by a general asset percentage. Issuers use this asset percentage method first in order to steer the level of OC in the cover pool. The asset percentages are highly dependent on the requirements set by rating agencies. Since the calculation method is slightly different than under the straight LTV-cut off method, these asset percentages cannot be directly viewed as LTV levels. However, since the direct 80% cut-off will always function as an absolute minimum, corresponding LTV-ratios will always lower than 80% when the asset percentage method is applied.

When the eligible amount of mortgage balances is determined, the presence of several credit enhancement facilities increase the amount of cover assets, whereas some triggers related to credit ratings and going-concern assumptions lead to discounts. Finally, the amount of cover assets is compared to the amount of outstanding covered bonds. If the cover assets exceed the amount of bonds, the test is ‘passed’. All issuers publish the exact result of the ACT. The higher the percentage, the higher the OC.

Pre-maturity test

This test addresses repayment risks and ensures enough funds are available for the payment of principal of covered bonds that mature soon (within 12 months). The test is only conducted when the issuer short term credit rating falls below a specified level (e.g. A1+/P1/F1+). Risks can be mitigated by issuing extendable soft-bullet bonds or by installing a dedicated pre-maturity liquidity facility.

Portfolio test

This test ensures sufficient coupon matching between assets and liabilities in the short run. The test has only to be conducted if a total return swap (which achieves the same goal) is not present.

Amortisation test

This test, which only is conducted if the issuer is unable to fulfil its obligations, ensures that the amount of outstanding assets is at least equal to the amount of outstanding covered bonds at all times. Basically, this test is a (slightly adjusted) version of the asset cover test, which applies on an going concern basis.

The asset cover test is dynamic in its LTV calculations over time, i.e. changes in the value (V) component are reflected in the current LTV. All programmes use the current market value as the relevant LTV ratio. This ratio is adjusted each month by the change in the price level of the underlying real estate collateral (either by a house price index or an automatic model valuation). In this way, the cover pool is a true and timely reflection of developments on the housing market. Generally, increases in the house price level are indexed more conservatively than price declines, but the specific indexation factors differ per covered bond programme.

Matching

There is no direct pass-through of mortgage loans to covered bond holders. In other words, there is a mismatch present between Dutch covered bonds and the assets in the cover pool. Currently, all covered bond programmes use swap structures to match the assets in the cover pools with the outstanding covered bonds (the liabilities). First, the coupon mismatch is addressed by a total return swap. The fixed coupons on the mortgage loans are swapped to a short term interest rates, such as EURIBOR. Second, interest rate swaps and structured (currency swaps) are used to match this short term interest rate with the coupon (rate and currency) of the covered bonds. The legal ownership of these swaps is part of the covered bond company. According to the prospectuses, swap providers rank senior to the holders of covered bonds. Rating agencies provide strict guidelines to the counterparty exposure in the swap structures.

Hard versus soft bullet structures

Hard bullet structures are often preferred by covered bond investors, since this reduces the uncertainty of the timing of cash flows considerably. Rating agencies however, have a preference for extendable structures (soft-bullet), because this reduces the refinancing risk for the covered bond programme. Especially if the sponsor bank fails and the CBC has to fulfil the obligations of the covered bonds, an extendable maturity could prove valuable. All programmes allow for the issuance of soft bullet structures. ABN AMRO Bank does not make use of this option. ING Bank can issue both hard and soft bullets, but has only hard bullet bonds outstanding. SNS Bank, Achmea Hypotheekbank and NIBC Bank only issue soft bullet bonds. Maturities of those covered bonds are extendable by 12-18 months. In hard bullet structures, the refinancing risk can be mitigated by installing a pre-maturity liquidity facility. This is a cash balance that is transferred to the CBC prior to a bond maturity and is thus part of the structure.

Strengths and weaknesses

The Dutch covered bond framework has several advantages compared to other covered bond jurisdictions in Europe. One of the strongest points is that the legal ownership of the cover assets is already transferred to the independent covered bond company. In this way, the Dutch framework goes beyond ‘ear-marking’ of assets on the balance sheet, although the economic ownership of the cover assets still remains with the issuer. The Dutch covered bond framework is therefore different from the German *Pfandbrief*. It is neither equal to the French covered bond frameworks, where specialised covered bond funding vehicles are also the issuers of the programme. The CBC is not the issuer, but only provides the explicit guarantee on the covered bonds. Another strong element of Dutch covered bonds is that only residential mortgage loans are eligible cover assets. Although this cover asset type is not specified by the legislation itself, all prospectuses of the different issuers exclude any other type of collateral (apart from cash and substitution assets). Many other European covered bond frameworks allow for additional cover asset types, such as prime RMBS (e.g. in France), commercial mortgage loans, public or government guaranteed loans, ship and aircraft loans (e.g. in Germany). Of those asset types, residential mortgage loans are the most safe, uniform and transparent asset class in our view. Transparency is another key feature of the Dutch framework. The prospectus of each issuer stipulates a reporting regime. The results of the ACT and the structure of the cover pool have to be published to investors at least on a monthly basis. Full loan look-through like RMBS is not present, but this is not needed in our view since the cover pools are not static over time. In comparison to other countries, the transparency of the cover pools is one of the highest. The prospectuses of issuers provide more advantages. Assumptions used in the tests are rather strict and conservative. LTV-calculations are not uniform on a European level, and covered bond requirements differ substantially between countries. The Dutch approach, where the LTV is determined on the basis of the indexed current market value, is relatively conservative in comparison to many other European covered bonds. Even more conservatism is used by the scaling factors for the indexation of the value components: house price declines are often 100% indexed, whereas house price rises are often 85-90% indexed. Another advantage is the implicit LTV cut-off of 80%, which results in a relatively high degree of (nominal) over collateralization. While this extra OC is subject to a higher risk factor, it is also a stabilisation factor if house prices are declining. Recovery is nearly always present in defaulted mortgage loans, so the extra OC (which has to be inserted as house prices are declining), is able to absorb possible losses to a great extent.

The Dutch covered bond framework also has some weaknesses. Primary weakness is the light covered bond legislation itself on a national level. Principle-based regulation has its advantages, but in times of stress it might be difficult to put into practice. Since the legislation is not superior to normal insolvency law, all legal defences in the structure will be put to the test. Although safe from a legal and theoretical standpoint, the legal structure has never been subject to any court ruling. This is the other main weakness of the Dutch framework: it is relatively new and it has never been tested in practice or under a stressed environment. The fact that the CBC has no employees and does not hold a banking license could be a potential obstacle if the issuer should become insolvent. Another shortcoming of the Dutch covered bond legislation is the absence of strict requirements for OC. Issuers make commitments to certain OC levels (through setting the asset percentages in the ACT) as required by the rating agencies, but in a stressed environment, this commitment may be breached. Another weakness relates to the prospectuses of the different issuers. There is a high degree of harmonisation present, but there are differences in assumptions, test parameters and in the issuance of securities as such. Moreover, there is no standard reporting template available, so comparisons between issuers are difficult to make[8]. Another weakness is the light operational structure of the independent covered bond company.

The following pages zoom further in on the Dutch covered bond programmes. Before comparing the programmes and their cover pools, the individual programmes will be briefly described. For compliance reasons, the covered bond programme of ABN AMRO Bank is not included in this description or comparison.

[8] The Dutch Association of Covered Bond Issuers (DACB) is addressing this weakness and is working on a standardised reporting template. Introduction is expected in January 2013.

ING Bank N.V.

Bloomberg ticker: INTNED

Issuer description

ING Bank is the banking arm of ING Group N.V., the largest financial services group in the Netherlands. ING is a listed company, active in banking and insurance. It serves 85 million clients worldwide, ranging from mass retail to specialised institutional clients. In 2011, the group had a total balance sheet size of EUR 1279 bn, to which roughly EUR 900 bn belongs to the banking division. ING Bank encompasses retail, commercial and investment banking. The retail bank is specialized in 'direct banking' and is active in a number of countries. The crisis hit ING hard in 2008-2009, partially due to a considerable exposure to Alt-A mortgage loans in the US. The Dutch government provided an explicit guarantee for this exposure, but further capital injections followed. Moreover, ING made use of government guaranteed funding opportunities. Despite the fact that ING paid a high price for this government support, the European Commission ruled that the group had to divest a considerable part of its operations. ING has decided to split off its insurance business. Furthermore, a significant number of foreign operations have been sold or will be sold in the future. According to ING, the separation of the banking and insurance business is on track. ING is committed to paying off all forms of government support as soon as possible.

Credit rating overview

	Standard & Poor's	Moody's	Fitch
Long term issuer rating	A+	A2	A+
Outlook	Stable	Negative	Stable
Short term issuer rating	A-1	P-1	F1+
Covered bond rating	AAA	Aaa	AAA
Outlook	Stable	Negative	Stable

Sources: Standard & Poor's, Moody's Investor Services, Fitch ratings

Covered bond programme

ING Bank runs two covered programmes: under its own name in the Netherlands and under the flag of its subsidiary ING DiBa in Germany (*Pfandbrief*). The (Dutch) covered bond programme of ING Bank has only Dutch residential mortgage loans in its cover pool. All loans are originated by subsidiaries of the ING Group. ING launched its first benchmark covered bond in 2008. The programme allows for the issuance of both soft and hard bullet structures, but all outstanding bonds have only hard bullets. The maximum program size is EUR 30 bn. Currently, the size is estimated at EUR 26.9 bn.

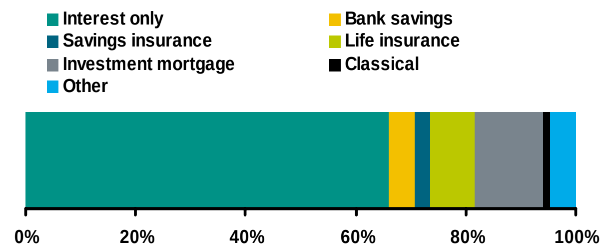
Key programme characteristics

Issuer	ING Bank N.V.
Guarantor	ING Covered Bond Company B.V.
Applicable law	Dutch
Programme size	EUR 30.0 bn
Covered bonds outstanding	EUR 26.9 bn (estimate)
Collateral	Dutch residential mortgages
LTV cut-off (implicit)	80%
Maximum LTV	125%
DNB registered	Yes
UCITS / CRD compliant	Yes / Yes
CRD(III) risk weight	10%

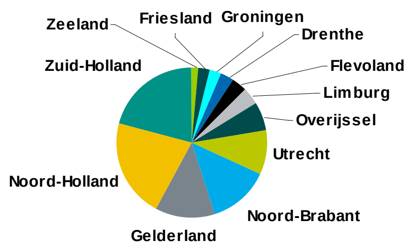
Sources: ING, ABN AMRO

Cover pool composition (June 2012)

Mortgage type



Regional exposure



Sources: ING, ABN AMRO

Outstanding benchmark issues (EUR)

ISIN	Coupon	Maturity	Amount (mln)	Bullet type
XS0353943540	4.25	3/19/2013	1000	Hard
XS0455122076	3	9/30/2014	2000	Hard
XS0537421736	2.25	8/31/2015	2000	Hard
XS0598250115	3.25	3/3/2016	2000	Hard
XS0497141142	3.375	3/23/2017	1850	Hard
XS0576072622	3.375	1/11/2018	1550	Hard
XS0368232327	5.25	6/5/2018	2400	Hard
XS0430609296	4.75	5/27/2019	1250	Hard
XS0479696204	4	1/17/2020	1250	Hard
XS0820867223	2	08/27/2020	2000	Hard
XS0671362506	3.625	8/31/2021	1750	Hard
XS0728783373	3.375	1/10/2022	1750	Hard

Sources: Bloomberg, ING

SNS Bank N.V.

Bloomberg ticker: SNSSNS

Issuer description

SNS Bank is the banking arm of SNS REAAL N.V., a listed insurance-banking group in the Netherlands. It is the fourth largest bank in the Netherlands. It focuses on traditional retail banking, insurance, pensions and real estate financing, all with a very strong focus on the Dutch market. The real estate financing part of the group with international exposure, SNS Property Finance, brought the group considerable trouble since the start of the crisis in 2008. SNS received a capital injection from the government and made use of government guaranteed funding. Adverse market developments continue to hinder SNS. Profitability has remained under pressure, the operational business model faces a challenging environment and credit ratings have been lowered. In the current environment, SNS could face difficulties in paying back its government support. In order to still achieve this aim, the company is exploring further opportunities to free up additional capital. Divestments, even from its core business, are not excluded. Total balance sheet size of the group is currently EUR 134 bn, of which SNS Bank has a share of EUR 83 bn.

Credit rating overview

	Standard & Poor's	Moody's	Fitch
Long term issuer rating	BBB+	Baa2	BBB+
Outlook	Negative	Stable	Stable
Short term issuer rating	A-1	P-2	F2
Covered bond rating	-	Aa2	AAA
Outlook	-	Stable	Stable

Sources: Standard & Poor's, Moody's Investor Services, Fitch ratings

Covered bond programme

SNS Bank issued its first benchmark covered bond in October 2009, although some smaller private placements already occurred in 2008. The programme is fully backed by Dutch residential mortgages, which have been originated within the own banking group. The downgrades of the issuer rating have resulted in a higher OC level to maintain the credit rating of the covered bond programme. Moody's TPI framework however, which caps the rating gap between covered bonds and unsecured ratings, has still resulted in a downgrade. The downgrade of the issuer rating has also triggered several changes in the programme. The account bank of the mortgage receivables is now external (Rabobank). Mortgage payments were already made to an independent collection foundation and no longer to the SNS Bank directly. Mortgage borrowers are aware of this collection foundation, but have not been notified that the mortgage rights are owned by the CBC. The maturity structure of the bonds is only soft bullet, so extension risk (12 months) is present in all its covered bonds. SNS Bank recently issued its fourth benchmark covered bond, after an absence in the primary market of nearly 2 years.

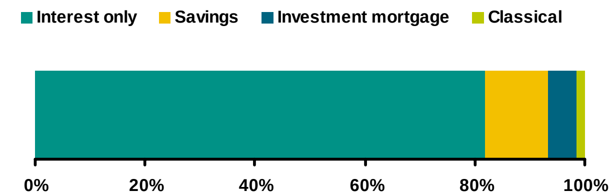
Key programme characteristics

Issuer	SNS Bank N.V.
Guarantor	SNS Covered Bond Company B.V.
Applicable law	Dutch
Programme size	EUR 15.0 bn
Covered bonds outstanding	EUR 4.4 bn (estimate)
Collateral	Dutch residential mortgages
LTV cut-off (implicit)	80%
Maximum LTV	125%
DNB registered	Yes
UCITS / CRD compliant	Yes / Yes
CRD(III) risk weight	10%

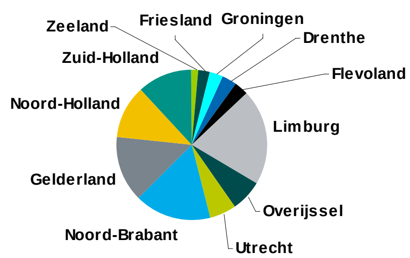
Sources: SNS Reaal, ABN AMRO

Cover pool composition (June 2012)

Mortgage type



Regional exposure



Source: SNS Bank

Outstanding benchmark issues (EUR)

ISIN	Coupon	Maturity	Amount (mln)	Bullet type
XS0460318495	3.5	10/27/2015	1000	Soft
XS0493713902	3.625	3/10/2017	1000	Soft
XS0822050125	2.125	8/30/2017	1000	Soft
XS0544664989	3.5	9/28/2020	1000	Soft

Sources: Bloomberg, SNS REAAL

Achmea Hypotheekbank N.V.

Bloomberg ticker: ACHMEA

Issuer description

Achmea Hypotheekbank is the mortgage funding vehicle of Achmea, the largest insurance group in the Netherlands. The company is not listed and has a cooperative character. 65% of the equity is owned by its members, while Rabobank holds a <30% stake in the insurer. Achmea Hypothekenbank provides residential mortgages under the labels of other Achmea subsidiaries, such as FBTO and Avéro Achmea. The bank has a license from DNB and has used state guaranteed financing opportunities during the crisis. The business model, with full exposure to the Dutch mortgage and housing market, is under pressure. Profitability of Achmea Hypotheekbank was negative in 2011, but the operating result continued to be in positive territory. The Achmea group also posted a net loss for 2011, although the insurer is regarded as relatively strong. Total balance sheet size of Achmea Hypotheekbank equalled EUR 16 bn in 2011.

Credit rating overview

	Standard & Poor's	Moody's	Fitch
Long term issuer rating	A	*Not published*	A-
Outlook	Stable	-	Stable
Short term issuer rating	A-2	-	F2
Covered bond rating	-	Aa2	AAA
Outlook	-	Negative	Stable

Sources: Standard & Poor's, Moody's Investor Services, Fitch ratings

Covered bond programme

The covered programme of Achmea Hypotheekbank allows for EUR 10 bn in issuance, but the current size is only EUR 3 bn. At present there is only one benchmark issue outstanding. The programme is different from other Dutch covered bond issuers. It is not included in the covered bond register of DNB, so it is not subject to special covered bond oversight. However, the issuer is subject to normal prudential banking supervision by DNB. Since the programme is not a *registered* covered bond, it does not meet UCITS or CRD requirements. The cover pool of the programme is different as well, since it allows for mortgages with higher LTVs. Moreover, the eligible loan parts are not capped at 80% LTV, but instead at 125%. The structure can only issue bonds with soft bullet maturities, although the prospectus already incorporates the possibility of hard bullets. The soft bullet covered bonds are extendable by 12 months. The last covered bonds of Achmea Hypotheekbank were issued in 2007.

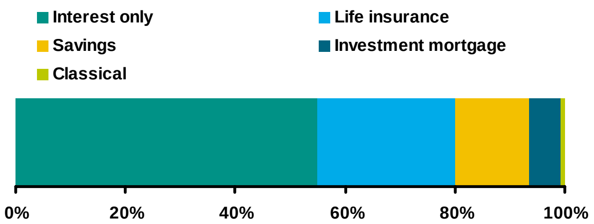
Key programme characteristics

Issuer	Achmea Hypotheekbank N.V.
Guarantor	Achmea Covered Bond Company B.V.
Applicable law	Dutch
Programme size	EUR 10.0 bn
Covered bonds outstanding	EUR 3.0 bn
Collateral	Dutch residential mortgages
LTV cut-off (implicit)	125%
Maximum LTV	125%
DNB registered	No
UCITS / CRD compliant	No / No
CRD(III) risk weight	20%

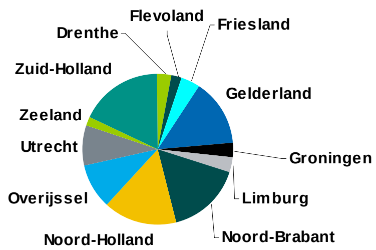
Sources: Achmea Hypotheekbank, ABN AMRO

Cover pool composition (June 2012)

Mortgage type



Regional exposure



Source: Achmea Hypotheekbank

Outstanding benchmark issues (EUR)

ISIN	Coupon	Maturity	Amount (mln)	Bullet type
XS0288133761	4.25	02/26/2014	1500	Soft

Sources: Bloomberg, Achmea Hypotheekbank

NIBC Bank N.V.

Bloomberg ticker: NIBCAP

Issuer description

NIBC is a relatively small Dutch bank that focuses on merchant, investment and retail banking. The bank was founded shortly after WW II in order to provide financing for the economic recovery of the Netherlands. The name originates from the 'National Investment Bank', which was originally a public bank like the German KFW still is today. NIBC went more commercial however, with an IPO in 1986. The largest pension funds in the Netherlands, ABP and PGGM took a big stake (85%) in the bank in 1999 and transformed the entity more towards investment banking activities. In 2005, a consortium of international investors, led by the private equity firm J.C. Flowers and Co., bought all outstanding shares. The crisis hit NIBC especially in its exposure to US mortgages. The investment bank had a large business in the issuance of RMBS and more exotic structures such as CDOs. J.C. Flowers attempted to sell NIBC to the Icelandic bank Kaupthing in 2007, but the huge financial problems of this buyer prevented the sale. The bank made use of government guaranteed funding opportunities. In order to enhance the funding side of the bank and to strengthen its business model, NIBC entered the (online) retail market for savings deposits in the Netherlands, Belgium and Germany. In 2011, NIBC had a balance sheet size of EUR 28.6 bn. The bank has not been very active in the mortgage market over the last few years. But recently, NIBC indicated that it is willing to enter the market for new residential mortgage loans in the Netherlands in the future.

Credit rating overview

	Standard & Poor's	Moody's	Fitch
Long term issuer rating	BBB-	Baa3	BBB
Outlook	Stable	Stable	Negative
Short term issuer rating	A-3	P-3	F3
Covered bond rating	-	A1	AAA
Outlook	-	Stable	Negative

Sources: NIBC, Bloomberg

Covered bond programme

NIBC Bank's covered bond programme has been installed in 2008, but the first (and currently only) benchmark issue followed in 2011. According to the programme prospectus, it can issue up to EUR 7 bn in covered bonds. Currently, the outstanding principal equals only EUR 500 mln. The cover pool is different than of other Dutch issuers, since it contains both Dutch and German residential mortgage loans.

Key programme characteristics

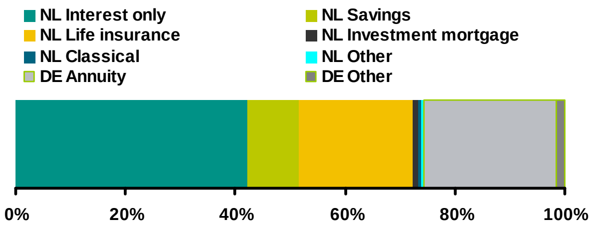
Issuer	NIBC Bank N.V.
Guarantor	NIBC Covered Bond Company B.V.
Applicable law	Dutch
Programme size	EUR 7.0 bn
Covered bonds outstanding	EUR 0.5 bn
Collateral	Dutch and German residential mortgages
LTV cut-off (implicit)	80%
Maximum LTV	125%
DNB registered	Yes
UCITS / CRD compliant	Yes / Yes
CRD(III) risk weight	10%

Sources: NIBC, ABN AMRO

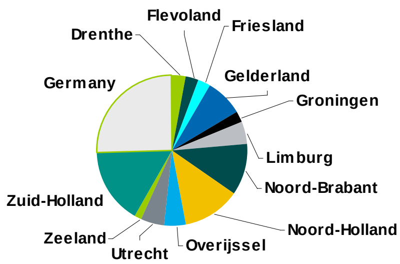
Since NIBC has no retail branches, all mortgages are originated via specialised intermediaries. Moreover, NIBC also buys mortgage loan pools from other (smaller) originators, directly or via funding agreements. The inclusion of German mortgage loans strengthens the credit quality of the cover pool, since most of those loans are fully amortising and the LTV-ratios are lower than Dutch mortgage loans.

Cover pool composition (July 2012)

Mortgage type



Regional exposure



Source: NIBC

Outstanding benchmark issues (EUR)

ISIN	Coupon	Maturity	Amount (mln)	Bullet type
XS0610215583	3.625	04/01/2014	500	Soft

Sources: Bloomberg, NIBC

Comparison of programmes

Issuer		ING Bank	SNS Bank	Achmea Hypotheekbank	NIBC Bank
Reporting date		8/20/2012	8/24/2012	7/26/2012	8/15/2012
Programme					
Programme size	EUR bn	30.00	15.00	10.00	7.00
Outstanding covered bonds	EUR bn	24.87*	3.36*	2.91	0.50
Cover pool					
Cover pool size (nominal)	*EUR bn*	40.98	6.39	3.28	0.70
Cover pool size (ACT)	*EUR bn*	29.30	4.91	2.97	0.54
OC (nominal)		64.8%*	90.0%*	12.8%	40.0%
OC (ACT)		17.8%*	45.8%*	2.2%	8.7%
Asset percentage (ACT)		80.2%	79.0%	75.0%	78.2%
LTV-cut off percentage		80.0%	80.0%	125.0%	80.0%
Mortgage loans					
Borrowers		240,211	37,666	19,120	4,841
Loan parts		438,834	68,575	42,172	10,957
Average mortgage balance	*EUR*	170,607	169,681	171,580	144,589
Weighted average interest rate		4.40%	4.62%	5.00%	4.63%
Weighted average LTV (indexed)		74.5%	79.0%	92.1%	na
Weighted average LTFV (indexed)		na	91.0%	na	80.0%
Seasoning	years	7.22	5.75	8.17	7.26
by product					
Interest only		67%	82%	55%	42%
Savings		7%	12%	13%	9%
Life insurance		8%	0%	25%	21%
Investment mortgage		12%	5%	6%	1%
Classical		1%	1%	1%	25%
Other		4%	0%	0%	2%
by interest rate type					
floating		13%	15%	14%	na
fixed		87%	85%	86%	na
by status					
NHG guaranteed		6%	18%	na	22%
by region					
Largest regional exposures		Zuid-Holland (21.46%)	Limburg (17.11%)	Zuid-Holland (18.12%)	Germany (25.51%)
		Noord-Holland (21.02%)	Noord-Brabant (16.68%)	Noord-Brabant (15.97%)	Zuid-Holland (16.40%)
		Noord-Brabant (12.89%)	Gelderland (14.86%)	Noord-Holland (15.76%)	Noord-Holland (12.35%)
Covered bond ratings					
Standard & Poor's		AAA	-	-	-
Moody's		Aaa	Aa2	Aa2	A1
Fitch		AAA	AAA	AAA	AAA
Remarks					
		*Latest benchmark issue (08/28/2028) not included	*Latest benchmark issue (08/23/2017) not included		

Sources: Issuers, Standard & Poor's, Moody's Investors Service, Fitch, Bloomberg, ABN AMRO

As is clear from the descriptions and overviews of the covered bond programmes on the previous pages, there are quite some differences per issuer.

Size

ING Bank runs the largest covered bond programme in the Netherlands, which allows up to EUR 30 bn in issuance according to its prospectus. The current outstanding covered bonds amount to an aggregate notional of EUR 24.87 billion[9]. From this perspective, ING Bank's covered bond programme is almost satiated. The ING Bank's prospectus can be easily adapted to a higher programme size. The 'healthy ratio' requirement of supervisor DNB, although not disclosed, could limit further expansion of the programme however. The other issuers have smaller programmes. Moreover, they all are much further away from their maximum programme sizes.

Over collateralisation (OC)

Most Dutch covered bond programmes are characterised by a relatively high level of nominal OC. This is the direct result of the implicit LTV cut-off ratio of 80%. The only programme which does not apply this cut-off percentage is Achmea Hypotheekbank. Since it applies a higher cut-off rate (125% LTV), its nominal OC is much lower. The corrected amount of OC is obtained through the Asset Cover Test (ACT). On this basis, ING Bank has currently an OC of 17.8%. SNS Bank has, by far, the highest ACT-based OC (45.8%). There is a caveat here. Both issuers have recently launched two new benchmark covered bonds which are not yet reflected in the investor reports on the cover pool. The amount of outstanding covered bonds is now larger, and conditional on an unchanged cover pool composition, this has resulted in a lower OC. If the benchmarks are included, the ACT-based OC level for ING Bank equals 9.0% and for SNS Bank 12.5%. In this respect, OC fulfils a buffer function. If the issuer plans to launch a new covered bond shortly, it can already increase the cover pool to accommodate the new collateral of the new issue. The OC level is however primarily used to steer the rating of the covered bond programme. In methodologies of rating agencies, OC is an important factor that determines rating uplift. Since the issuer rating SNS Bank has been subjected to downgrades, the higher OC level is a signal that more rating uplift is being created for its covered bond programme.

Cover pool assets

All programmes use prime residential mortgage loans as cover assets. Most issuers use only Dutch residential mortgage loans which have been originated under the umbrella of its own banking and/or insurance group. The cover pool of NIBC Bank is an exception to this. It includes not only Dutch mortgages, but also (prime) German residential mortgage loans. Moreover, not all mortgages have been originated within NIBC Bank itself. While the latter is a potential credit weakness, the exposure to Germany in the cover pool of NIBC Bank is a credit positive. The German residential real estate market is currently more stable than the Dutch market. Moreover, German mortgage loans have generally lower LTVs.

Loan-to-value

This is also visible in the low average LTV ratio of NIBC Bank's cover pool. Although this issuer only reports the average indexed loan-to-foreclosure value (LTFV, currently 80.0%), its loan-to-market value is likely to be in the low 70s region. ING Bank's indexed loan-to-(market)-value of 74.5% comes close to this figure. SNS Bank's average indexed LTV of 79.0% is clearly higher, but not like that of Achmea Hypotheekbank. Since this issuer applies a much higher hair-cut (of 125%), its indexed LTV level is high (92.1%), which implies it has the most credit risk compared to the other issuers. In terms of seasoning in origination and in the weighted average interest rate, the differences between the programmes are very small. The same conclusion applies for the shares of variable and fixed interest rate mortgage loans.

Mortgage product mix

A more interesting picture is revealed by distinguishing the cover pools by mortgage products. As is clear from the table on the previous page, all programmes include a fairly high share of interest-only mortgage loans. This is not a major surprise, since this product has by far the highest market share of recent years. From an LTV-perspective however, those loans are the most risky, since repayment of principal does not occur automatically over time. In SNS Bank's programme, the share of interest-only loans amounts to 82%. On the other side of the spectrum, NIBC Bank has an exposure of 42% to interest-only mortgage loans. Again, this is the consequence of the inclusion of German mortgages, which are mostly amortising. This also explains NIBC Bank's fair share of 'classical' mortgage loans (25%). The exposure to life insurance mortgage products is the largest in Achmea Hypotheekbank's cover pool. This is not surprising, since the bank is the funding vehicle of an insurance group. NIBC Bank's high share of life insurance linked mortgage products is the result of external origination. Other differences between the issuers are fairly small. One final consideration is the relatively high share of investment mortgages in ING Bank's cover pool (12%). Investment returns have been moderate

[9] The latest benchmark issue of ING Bank (EUR 2 bn) in August is not included yet in this figure.

over the last number of years and have likely lagged in terms of scheduled performance. The result is that borrowers have built-up fewer accumulated investments to repay the principal at the mortgage's maturity. In essence, this could be more risky than interest-only loans. In the latter product, the borrower is aware of this risk. By contrast, in an investment mortgage, the surprise may come at a later stage. The share of NHG-guaranteed loans is highest in SNS Bank's cover pool (22%), although NIBC Bank follows closely (21%). This is a credit enhancement to the cover pool, although rating agencies do not place much value on this in dynamic cover pools.

Regional exposures

Differences in regional exposure are not large. Most programmes have high concentrations in the provinces of Zuid-Holland and Noord-Holland. These provinces are the most populated areas in the Netherlands. Gelderland and Noord-Brabant follow. SNS Bank is a bit of an exception with a large exposure in Limburg, the Netherlands' most southern province. The exposure likely follows from its concentration of local bank branches in the province. Regional economic differences in the Netherlands are present. The housing market in Limburg has been subject to a larger downward price correction than the national average. This exposure of SNS Bank's programme to Limburg is therefore a weakness, but the share of 17% should not be exaggerated.

Issuer

The most important risk of a covered programme is not the cover pool, but the likelihood that the issuer will become insolvent. In this way, the credit rating of the issuer is very important to consider. This publication does not provide an in-depth bottom-up analysis per issuer. Current credit ratings and their outlooks are a good reflection of the strength of the issuer in our view. Besides, the systemic importance of the issuer has to be considered. ING Bank is a systemically important bank, both in Europe and in the Netherlands. SNS Bank has been identified by DNB as a domestic system bank. NIBC Bank and Achmea Hypotheekbank are not system banks.

Conclusion

Taking all elements together, we conclude that ING Bank has both the strongest programme and the strongest cover pool. The only weakness is related to the relatively high exposure to investment mortgage loans. The weakest programme is that of Achmea Hypotheekbank in our view. Both nominal and ACT-based OC levels are low, whereas the LTV ratio is high. In contrast to all other Dutch covered bonds, the programme of Achmea Hypotheekbank is neither UCITS nor CRD compliant. By comparing the programmes of SNS Bank and NIBC Bank, we have a slight preference for the latter. Due to the inclusion of German mortgage loans, the credit strength of NIBC's cover pool is better than of SNS Bank. A drawback of NIBC Bank is that the issuer has not been identified as 'systemically important' by the regulator, whereas SNS is a (domestic) system bank. Also the small size of NIBC Bank's programme relative to SNS Bank is an issue.

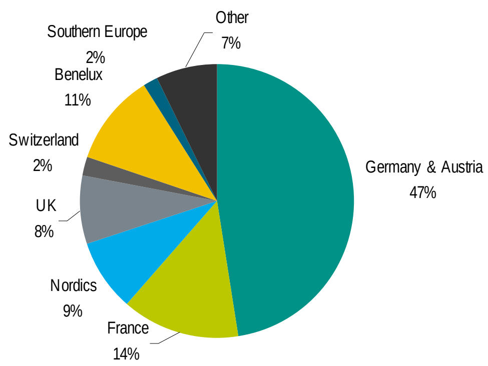
Market for Dutch covered bonds

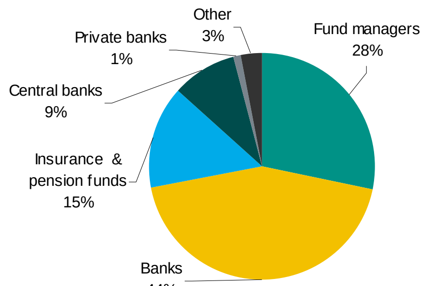
Primary market

The primary market for Dutch covered bonds in recent years is the terrain of two main issuers: ABN AMRO Bank[10] and ING Bank. ING Bank issued three benchmarks per year in 2010 and 2011, in sizes between EUR 1.3-2.0 billion. In the current year, two benchmark covered bonds have been issued by ING Bank. The other covered bond programmes have been much more passive in primary market. SNS Bank just launched a new EUR 1 bn benchmark in August 2012, after it had been idle for almost 2 years. NIBC issued its last (and only) benchmark issue in 2011, while Achmea Hypotheekbank issued its last benchmark in 2007.

Investor distribution Dutch covered bonds (primary)

Weighted average on basis of 11 benchmark deals since 2011, %





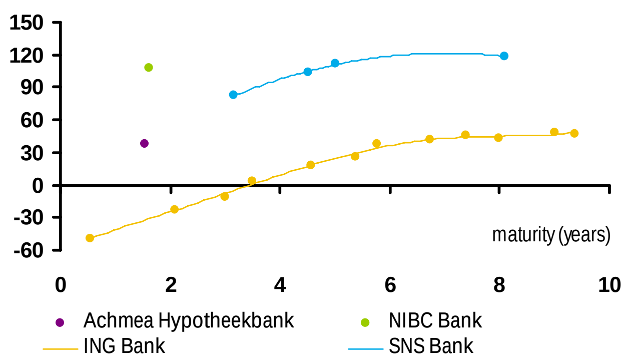
Sources: ABN AMRO, Bondradar, Bloomberg, The Cover

As illustrated in the graphs above, German and Austrian investors have the largest appetite for Dutch covered bonds in the primary market. In the last 12 benchmark deals since 2011, they bought 47% of the paper. French investors followed with 14%, whereas domestic (Benelux) investors bought 11%. The latter share is perhaps on the low side, but given the fact that international funding is of high importance to Dutch financial institutions, it is not very surprising. Moreover, most Dutch financial institutions, such as banks and insurers, have normally already high exposures to the Dutch mortgage market in general and are therefore generally not very interested in Dutch covered bonds. Nordic and UK-based investors are also regular buyers of Dutch covered bonds. The distribution to investor types shows a large average distribution to banking institutions (44%). Fund managers follow with 28%, whereas insurance companies and pension funds together have a 15% distribution share. Distribution to central banks equalled 9% on average, but its share has been rising. The covered bond purchase programmes of the ECB play an important role in final distribution currently. The allocation to private banks is generally very low. It underlines the fact that covered bonds are merely an institutional asset class, where favourable risk weightings and risk limits play an important role.

The outlook for primary issuance is mixed. The programmes of the largest issuers are approaching their maximum sizes. Although this size can be adapted in the prospectus, it is unclear whether DNB will allow this with respect to the 'healthy ratio' requirement. Further growth in covered bond issuance will therefore be more difficult. Refinancing of maturing benchmark issues will likely gain more importance as a factor driving the supply of new covered bonds. The other Dutch covered bond issuers have ample room to increase covered bond issuance. Achmea Hypotheekbank's programme has been dormant since 2007 in new supply. Its only benchmark issue matures in 2014, but the lack of registration at DNB could be an obstacle to new issuance. NIBC Bank's only benchmark likewise matures in 2014, but this issuer has more possibilities to increase supply. Its programme has full registration at DNB and is UCITS/CRD compliant. Moreover, NIBC indicated that it is willing to restart new mortgage origination in the Netherlands. SNS Bank could also issue more covered bonds, because this is currently an easier obtainable (and cheaper) funding tool than unsecured funding.

Dutch covered bonds ASW levels (31 August 2012)

ASW (Generic Bloomberg Mid pricing)



Sources: Bloomberg, ABN AMRO

[10] In 2010 and 2011, ABN AMRO Bank issued two benchmark covered bonds per year of EUR 1.5-2.0 billion in size. In the current year, two similar benchmarks have been issued so far.

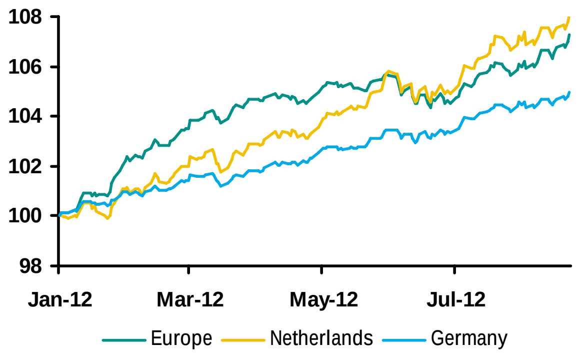
Secondary

Pricing of Dutch covered bonds in the secondary market reflects the differences in programmes and in ratings. In general, the covered bonds of the largest issuers trade at lower spread levels than those of other Dutch issuers. The 12 benchmark issues of ING Bank do form a nice curve, whereas SNS Bank's curve consists of 4 covered bonds. The other issuers, Achmea Hypotheekbank and NIBC Bank, have each only one benchmark bond outstanding, both maturing in 2014. Market liquidity in those bonds is very limited, so true pricing and spread levels are hard to determine. Still, it is obvious that NIBC Bank's benchmark is trading at much higher spreads than the covered bond of Achmea Hypotheekbank. Although SNS Bank's curve commences in 2015, we assess that the benchmark of Achmea Hypotheekbank is trading slightly below the virtual/extended curve of SNS Bank.

All Dutch covered bonds have performed this year to date. The iBoxx EUR Netherlands Covered Bond Index showed a total return of 8.1% this year to 23 August 2012. This is higher than the 5.1% recorded in the iBoxx EUR Germany Covered total return index and slightly higher than the 7.3% performance in the overall (European) iBoxx EUR Covered Bond index.

iBoxx EUR Covered total return indexes

Index (2 January 2012 =100)



Sources: ABN AMRO, Bloomberg, Markit

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