

Mortgage market in the Netherlands

Group Economics

September 2012

Main conclusions

- The strong asset base of Dutch households and the full tax deductibility of interest payments are the primary reasons for the relatively high mortgage debt levels in the Netherlands.
- From 2013 onwards, it is expected that tax deductibility will only apply to amortising mortgage loans. Existing mortgage borrowers will be excluded from this change and continue to benefit from the existing tax regime.
- The upcoming elections could change the landscape in the housing and mortgage market. Most political parties are in favour of a larger overhaul and want to sober the tax deductibility of mortgage interest payments beyond the current proposals.
- House prices in the Netherlands have declined further. In July this year, the price of existing houses dropped by 8.0% yoy. This is 15% below the peak value of August 2008. 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. House prices are likely to decline further.
- Foreclosures rates are very low, especially in international comparisons. Although the weak economic climate is likely to result in an increase in the foreclosure rate, the resilient structure of the economy and the mortgage market will prevent a sharp increase in mortgage defaults.

Authors

Ruben van Leeuwen, CFA
Fixed Income Research
+31 20 3422036

Philip Bokeloh
Economist
+31 20 3832657

Introduction and management summary

Concerns about public debt burdens are dominating financial markets. The level of private debt also draws a lot of attention. In times of deleveraging a high debt burden is clearly not an advantage for a government, corporation or an individual. For a typical household, a mortgage loan is the prime debt exposure. A mortgage loan is generally a good thing. It smoothes consumption over time and enables individuals to buy a house on future income. The potential negative side is uncertainty over the future. If income is no longer sufficient to cover the mortgage servicing costs, the mortgage can be a significant burden. The higher the debt burden, the higher the risk.

The Netherlands scores high in terms of mortgage debt. In fact, with a mortgage debt stock equalling 108% of gross domestic product, the Netherlands ranks number one in the European Union. On the basis of this high debt burden, risks to the Dutch mortgage market are perceived to be elevated. However, conclusions based on these international debt comparisons are often too simplistic. Each domestic mortgage market is driven by its own local dynamics and conditions, which have to be incorporated in the analysis for debt sustainability.

In the Netherlands, two local factors are important to consider. First, Dutch households own a significant amount of assets. Like the debt burden, the level of assets also ranks high in international comparisons. For each euro in debt, there is EUR 1.76 in non-financial assets (mainly real estate) and EUR 2.41 in financial assets. The lion's share of the latter consists of sizeable pension and insurance reserves. The second explanation for the high debt burden is the Dutch tax system. Mortgage interest payments are fully deductible from taxable income. With high marginal income tax rates up to 52%, the government subsidises a large part of the mortgage servicing costs. There is not only a strong incentive to obtain a high mortgage loan, but also to delay repayment of the principal over the length of the mortgage loan until maturity.

The strong asset base and the tax deductibility are factors that explain a large part of the relatively high level of mortgage debt. Tax deductibility combined with lenient mortgage regulation explain why loan-to-value (LTV) ratios are also relatively high in the Netherlands. LTV-ratios exceeding 100% for first-time buyers are quite common. Despite the concerns about the level of mortgage debt, the foreclosure rates on Dutch mortgages belong to the lowest in Europe. This

underlines the fact that the relationship between the debt burden and the associated risks is not that straightforward.

Tax deductibility and the level of assets are minor explanations for the low foreclosure rate. More important factors to consider are the low level of unemployment, multiple sources of income in typical multi-person households, the generous social security system, the full recourse on delinquent mortgage borrowers, the strict and austere personal insolvency law and the fact the rental sector is often not cheaper for home-owners. In other words, the structure of the economy, the housing market and the mortgage system are all strong in the Netherlands. But those elements do not imply that the Netherlands is free of any problems. The system is affected not only by cyclical factors, but also by institutional change.

From a cyclical point of view, the Netherlands is currently facing headwinds. The economy has just left a mild recession, but economic growth is still weak. Uncertainty prevails among consumers and therefore also among (potential) home buyers. Moreover, in times of deleveraging, the negative aspects of debt predominate. People are not only less willing to increase their debt burden, but the financial system is also stricter in providing loans. Mortgage lending standards have tightened significantly in recent years. From an institutional point of view, the tax deductibility of mortgage interest payments is under pressure. From January 2013, it is expected that tax deductibility will only apply to amortising or linear mortgage loans¹. Debt reduction will clearly get more priority in this new tax treatment.

Main recent changes in housing and mortgage market

Changes to the tax system:

- Tax deductibility on mortgage interest payments is expected to be conditional on amortising mortgage loans from January 2013¹. In this new system, interest-only (I/O) mortgage loans do no longer qualify for favourable tax treatment.
- All mortgages originated prior to this will benefit from old tax regime of full tax deductibility¹.
- Transaction 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% (at the moment of writing unclear when)¹
- Interest-only mortgage loans maximum 50% LTV
- Stricter regulations for non-compliance (on a compliance or explain basis)

Changes in NHG mortgage guarantee:

- Maximum purchase has been lowered EUR 320,000 and is scheduled to decrease further back to EUR 265,000

¹ These measures have been announced in the latest fiscal consolidation plans that are being backed by a majority in Parliament. Despite the fact that most political parties back the current proposal to limit tax deductibility on mortgage interest payments, the election results on 12 September 2012 could lead to changes in housing market policies. Most political parties are in favour of a greater overhaul on the housing/mortgage market, including further possibilities for tax deductibility of mortgage interest payments.

Even while current mortgage borrowers are excluded from most of these changes (i.e. they will still benefit from the full tax deductibility), this change will have consequences for the housing market in general. First-time buyers will be hit by lower affordability and will be less able and willing to buy a house. Uncertainty is already plaguing the housing market since 2008. Since this year, house prices are slowly declining. In our view, this process is likely to continue in the coming years, although a stronger economy and more clarity about the future (tax) structures could stabilise the housing market. The latter will be addressed after the elections when a new government will be formed. Most political parties are aware that a new policy package has to be broad and definite, such that the element of uncertainty will disappear among home buyers.

Recent mortgage borrowers in particular are facing increasing risks. Negative housing equity (higher mortgage than current value of house) is already emerging and this process will continue as long as house prices decline further. Still, the structure of the economy, the housing market and even the mortgage market are able to mitigate these risks well. Given the headwinds facing the economy, a somewhat higher foreclosure rate is not unlikely, but by international comparison, this rate will remain low. The mortgage debt burden itself is poised to decline in the long run, although debt dynamics will prevent this in the coming years.

This publication will zoom in further on the issues and reasoning above. It does not aim to provide different conclusions than mentioned above, but it will give more detailed background information. The purpose of this publication is to put the issues into context. A top-down approach will be followed, by first discussing the economy, then the housing market and finally the mortgage market. Where appropriate, international comparisons will be made, highlighting the key differences between the Netherlands and other countries.

Economy

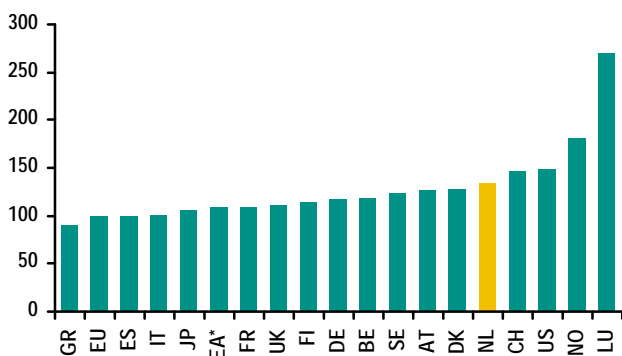
The domestic economy is closely linked to the housing and mortgage market. In fact, economic conditions usually determine the demand on the housing market and the strength of the mortgage market. The relationship can easily turn, especially when the housing markets creates its own dynamics. A bubble on the housing market could translate into severe economic trouble. Recent developments in the US, Spain and Ireland have clearly shown this. Fortunately, economic developments in the Netherlands have been less negative. But before discussing the cyclical outlook for the Netherlands, it is worth talking about the structure of the economy as well. After stating the main facts and figures, particular attention will be paid to the labour market, the social security system and to the wealth position of households. These factors are not only important for the mortgage market, but for debt sustainability in general.

Structure

Based on a relatively small area of land, most Dutch regard their country as quite tiny. In economic terms this feeling is not justified. 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 living in almost 7.5 million households. 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.

GDP per capita (2010)

Index, 100 = average European Union



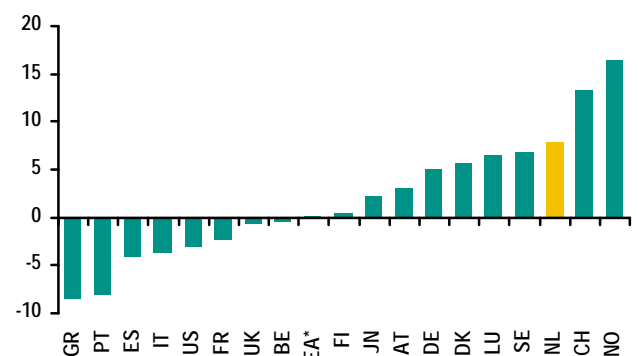
Source: Eurostat

* EA = Eurozone

A breakdown of the economy reveals what is generating this wealth. The economy is well diversified. Like every developed economy, the largest economic value is added by the services sector (75%). The largest private sectors are trade, transport, business services and financial services. These business sectors characterise the very important role of 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 also one major drawback: the economy is highly dependent on the business cycle of global trade.

Current account balances (2011)

% GDP



Source: OECD

* EA = Eurozone

Labour market

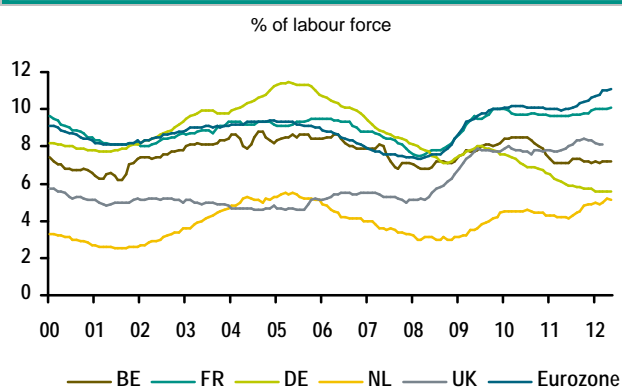
The Dutch labour market is characterised by a low unemployment rate (currently 5.1% according to international definitions²) and a high participation rate (80.1%). By international comparison, the former percentage is low, whereas the latter is high. The low unemployment and high participation can be explained by a sound demand for labour, but also by a very high proportion of part-time jobs. According to the national statistics office, 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.

The institutional framework of the labour market is highly centralised. Employer federations and trade unions make labour agreements on a national level. On industry level, agreements on wages and other labour conditions are made.

² 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.

80% of all labour contracts are affected by this centralised bargaining system. In general, wage growth has been moderate under this system, to the benefit of a low level of unemployment.

Unemployment



Source: OECD

Employment protection is generally high in the Netherlands, especially for employees with permanent labour contracts. Lay-offs are possible and do occur, but are often subject to substantial severance payments. New court rulings have capped severance payments however, especially for young workers. Employment protection for temporary workers and fixed term contracts are less strict and often non-existent. Future labour market reforms (some have already been announced) will target employment protection schemes. Employment protection is a risk reducing factor in mortgage loans, but improved labour market flexibility implies that finding a new job will become easier in case of unemployment.

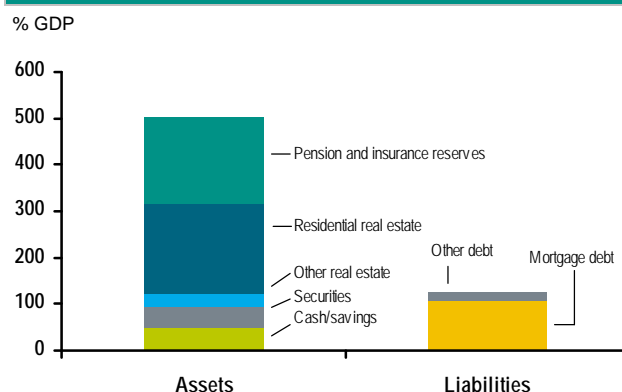
Social security

For the unemployed, the social security system is relatively generous in the Netherlands. 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 conditions. This is for example the case if renting another house would entail similar or higher costs than servicing the mortgage. Assistance support is subject to very strict requirements, including active job-seeking. The duration of the assistance support is not limited.

Aggregate household balance sheet (2011)



Sources: CBS, DNB, calculations ABN AMRO

Wealth

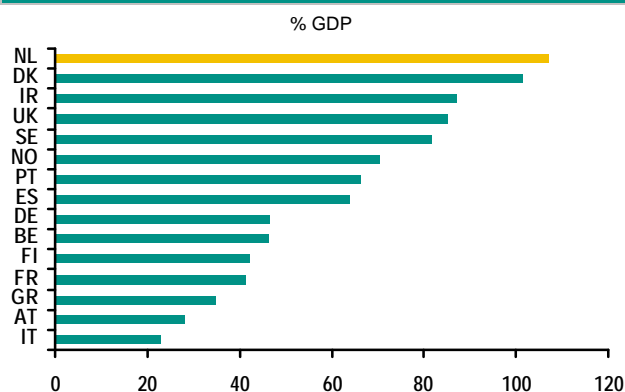
A look at aggregate household balance sheets reveals that the Dutch are relatively wealthy. According to the national statistics office, financial assets amounted to EUR 1,828 billion in 2011. Non-financial assets, including real estate, had an estimated value of EUR 1,327 billion. On the other side 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.

By international comparison, both the assets and liabilities of Dutch households are relatively high³. But in times of deleveraging, it is especially the debt side that draws a lot of attention. The majority (86%) of the debt burden consists of mortgages, which have an aggregate value of EUR 652 billion. This translates into a mortgage debt ratio of 108% of GDP. International comparisons are available for 2010, in which the Netherlands had a mortgage debt stock equal to 107% of GDP. According to the European Mortgage Federation, this debt ratio is the highest in the European Union (see graph on next page). The level of other debt, such as consumer credit, is relatively low by international standards.

³ See ABN AMRO Dutch Economy in Focus, April 2012

Solely looking 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 this respect, the Netherlands scores relatively well. Non-financial assets consist mainly of real estate, which had an aggregate market value of EUR 1,157 billion. A quick calculation reveals a current loan-to-value (LTV) ratio of 56.4% on a national level. This is not a major cause for concern in itself. Moreover, financial assets are not yet included. This asset base, equalling roughly 300% of GDP, consists mainly of pension and insurance assets, which have combined estimated value of EUR 1,112 billion (2011). 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. This fact has implications for the financial system in general. Because the deposit base is rather low, Dutch banks have a relatively large reliance on capital markets for funding.

Mortgage debt (2010)



Source: EMF

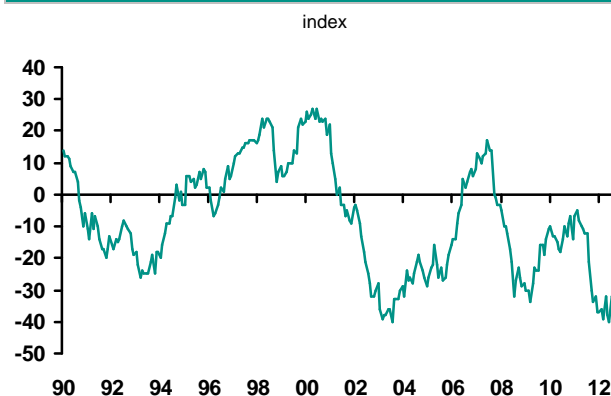
For households there are two problems with the asset side of the balance sheet. First, the bulk of the assets is not liquid. Potential problems with debt servicing are therefore harder to mitigate by selling (financial) assets. Second, the asset side of the balance sheet is subject to market developments, 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 the last 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 rates in the first half of 2012. The recession in Q3 and Q4 was only mild and short.

Consumer confidence



Source: CBS

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.

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 below shows the main economic figures and the outlook (as of August 2012).

Budget deficit



Source: CPB

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 cyclical outlook is not very auspicious for the Dutch housing market. In fact, the housing market has been subject to modest price declines since 2008. Before discussing the current developments, a background is needed on the structure of the market in general. As will be clear, the particular features of the Dutch housing market give more insight into current developments.

Supply at a glance

Housing is by nature a supply-driven market. Due to the high durability of dwellings, additions to the housing stock are typically marginal. In the Netherlands, growth in the housing stock is slowly decreasing. The average growth rate amounted to 2.5% in the 1970s, 2.0% in the 1980s, 1.2% in the 1990s and only 0.8% between 2000 and 2010. The total stock of residential dwellings was 7,270,000 units in 2011, which is almost twice the level of 1970.

Demand at a glance

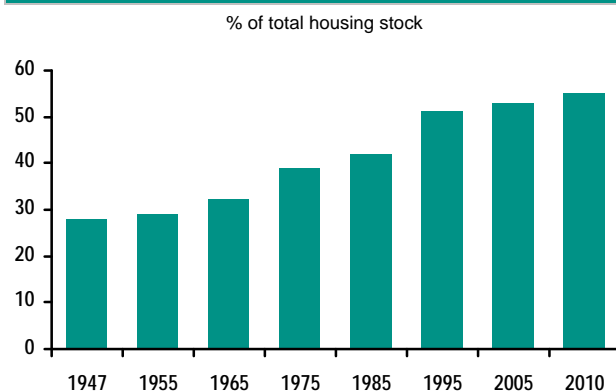
The population and the number of households are still increasing. The Netherlands currently has 16.7 million inhabitants, who live in almost 7.5 million households. Annual population growth totalled 0.5% during the last 20 years, whereas annual household growth was 1.0% in the same period. This marked 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.

Structure of the market

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.

Home ownership



Sources: CBS, Boelhouwer

Notwithstanding the shift towards increased home ownership, the rental sector remains large. The rental sector is dominated by housing corporations, which aim to provide cheap housing for low income households. As housing corporations serve income policy aims, their rents tend to be below market levels. This explains the abundant demand for social rental homes. 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 diffuse.

Long term trends

Owner-occupied housing has strongly increased since the 1980s. Mortgage provisioning on the basis of a dual income household is the main reason for this increase. Also the decrease in mortgage interest rates has been an important factor, because it led to an rise in mortgage affordability. Ongoing increases in house prices have also played a role. As will be discussed later in this chapter, current price developments have reversed and caution prevails among (potential) buyers.

Market distortions

The Dutch housing market is heavily regulated and is characterised by numerous explicit and implicit subsidies. The government tries to enforce quality and affordability. Several instruments are being used to achieve these objectives.

Supply side

The government steers the supply side of the housing market. This influence is exercised by way of spatial planning. Government plans the use of building plots and the zoning of the environment. This way the authorities attempt to stimulate agglomerations and find a balance between built-up and non-built-up areas. As town and country planning determines the availability of building plots, it is of great influence on house prices. The government also regulates construction. Legislation on safe and healthy working conditions and environmental regulation are of great influence on building costs, and thus house prices. Moreover the state enforces minimum quality restrictions for buildings. As a result of this legislation Dutch housing quality has reached an internationally high standard. Yet, supply is reacting slowly 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.

Demand side

State intervention also prevails on the demand side of the market. Both home owners and the rental sector are affected. The most important interference for home owners consists of the fiscal support by the combination of tax deductibility and a modest tax on rental income. The favourable fiscal treatment of home ownership is often justified by the more elevated investments in maintenance and the beneficial effects of home owners on the liveability of their neighbourhood. The government also affects the market by way of the transaction tax (stamp duty), which is currently 2%. This tax was introduced to limit speculation. Meanwhile it also deters people from moving house. OECD research shows that the Netherlands occupies a middle position when it comes to housing mobility.

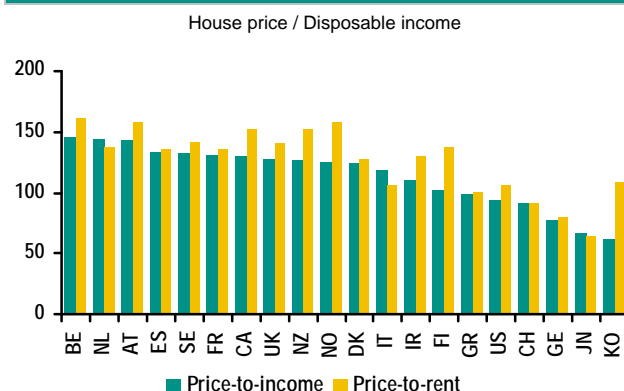
Rental market

Government intervention in the rental segment consists of three elements. Firstly, rents for most rental houses are bound to a maximum. The state determines a maximum appropriate rent for the social housing sector and regulates the yearly rent adjustment. Consequently, tenants generally pay rents below market level. Secondly the government influences the rental sector by obliging housing corporations to guarantee affordable but quality housing for low income households. The corporations can perform this task thanks to subsidies, guarantees and a healthy capital position, which is due to publicly accumulated wealth. Thirdly, the government hands over rent allowance to low income households.

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 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 10% below its peak of August 2008. The Market Indicator of Vereniging Eigen Huis, a homeowners' association, was close to its historic trough in July, although the August reading showed some modest improvement. The low 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)



Source: OECD

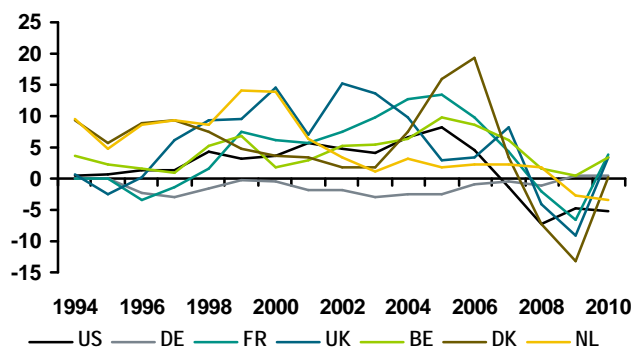
Outlook

First-time buyers are still cautious on account of the high price level. 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. 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 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 in the course of 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 throughout the years, accounting for 7.5 percentage points. 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 continue to prevail in the future, the price level may adjust by a maximum of 15% over the coming years. 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 relief. The measures that the caretaker cabinet has in store will curtail fiscal stimulus by about a third, thus 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. Recent data on house prices are compatible with this forecast: in July 2012, house prices dropped by 8.0% yoy, bringing the average change in 2012 to -4.9%. 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 transactions 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

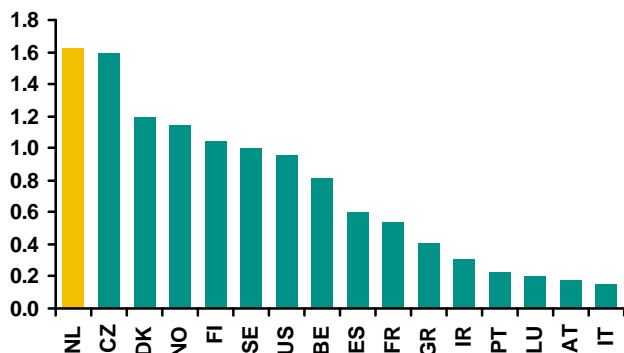
The Dutch housing market has its domestic dynamics, but the mortgage market has an even larger local flavour. In comparison with other countries, the Dutch mortgage market is rather complex. Plain-vanilla amortising mortgages are rare in the Netherlands, whereas this mortgage product is very common in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

Yearly tax advantage on mortgage

% of mortgage value



Source: OECD

By international standards, the Dutch tax system is also very generous. 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.

Example of tax deductibility

An example clarifies the effects of the tax deductibility even better. A gross income of EUR 45,000 has a marginal tax rate of 42%. Suppose a 5% fixed rate mortgage of EUR 250,000, so that gross interest payments (payable to the bank) equal EUR 12,500 per annum. This latter amount is fully deductible from taxable income, resulting in a tax advantage of $42\% \times \text{EUR } 12,500 = \text{EUR } 5,250$. Net interest payments are therefore $\text{EUR } 12,500 - \text{EUR } 5,250 = \text{EUR } 7,250$. The tax benefit is not constrained, i.e. the higher the mortgage, the higher the interest payments, the higher the deduction. Moreover, there is an even higher tax bracket of 52%, implying that the tax subsidy could run up to more than half of actual interest payments.

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 in 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.

It is important to stress that the change 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.

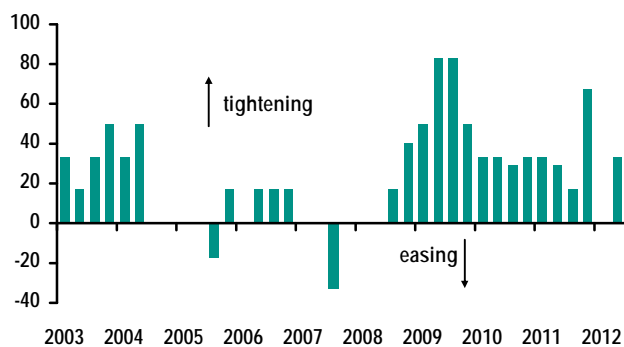
Other taxes

Home owners are also subject to specific housing taxes. At the purchase of a house, a special transaction tax is applicable to the purchase amount. This tax rate was 6%, but in order to stimulate the housing market the rate has been temporarily lowered to 2%. In the new budget agreement, the political parties have agreed to make this temporary reduction of transfer tax permanent.

On an annual basis, home ownership is subject to wealth taxes. The current value of a house is treated as a virtual asset and is taxed according to a progressive tax rate, which runs up to 0.6% of the real estate value⁴. In general, this special estate tax regime acts as a counter measure to the interest tax deductibility. However, the net tax effects for mortgage borrowers remain very positive.

Bank lending survey: mortgage lending standards

% of banks reporting tighter mortgage lending standards



Source: DNB

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.

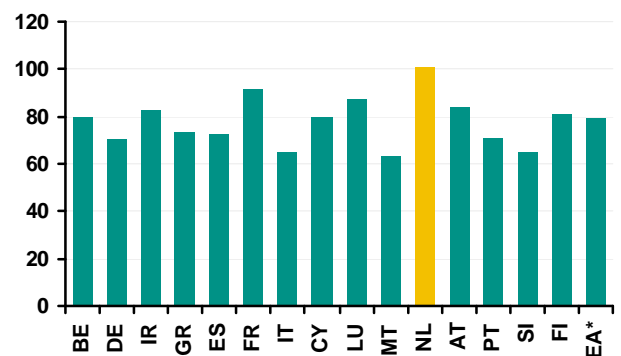
⁴ In addition, dwellings with a value exceeding EUR 1,040,000 (2011) are subject to a special marginal wealth tax rate of 1.3%

The code was enacted in the early 1990s, but until 2007 it offered merely guidance. Since 2007, compliance with 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.

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. At the time of writing, it was unclear when this limit will apply. Before 2010, loans with higher LTV-ratios were possible. The LTV-ratios are relatively high in comparison to 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).

Typical LTV-ratios for first-time buyers

Loan-to-value



Source: ECB

*EA = Eurozone

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. 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 the mortgage code of conduct. But in recent years, the tightening of standards in the mortgage code of conduct have 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 raised this limit temporarily to EUR 350,000. As scheduled, this limit has been lowered to EUR 320,000 in July 2012. The maximum amount will gradually be lowered back to the old value of EUR 265,000.

Despite the initial costs, the mortgage borrower benefits from several advantages of the NHG. In the first place, the mortgage is guaranteed and the associated risks of buying a home are reduced. Second, because of the enhanced credit protection, a discount factor, up to a full percent, can be achieved on the applicable mortgage interest rate. For the originator/owner of the mortgage loan, the NHG offers credit protection for both principal and interest payments. However, the NHG guarantee is applicable on an amortising basis, irrespective of the underlying mortgage. So, in case of non-amortising mortgage loans, a part of the loan is not covered by the guarantee.

Duration

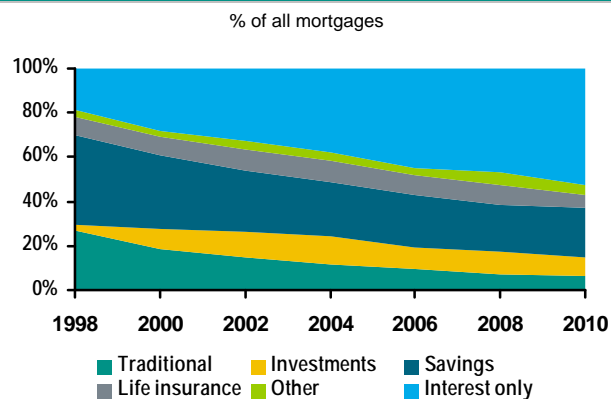
The typical legal duration of a mortgage is 30 years. This length is equal to the period of tax deductibility of interest payments. In comparison to other European countries this duration is fairly long. The actual duration of the mortgage is often much shorter, because mortgage borrowers hold to option 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 however a 10% prepayment without penalty.

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 used ('bullet' repayment of principal at maturity). It should be noted that most mortgages in the Netherlands are often 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 people 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.

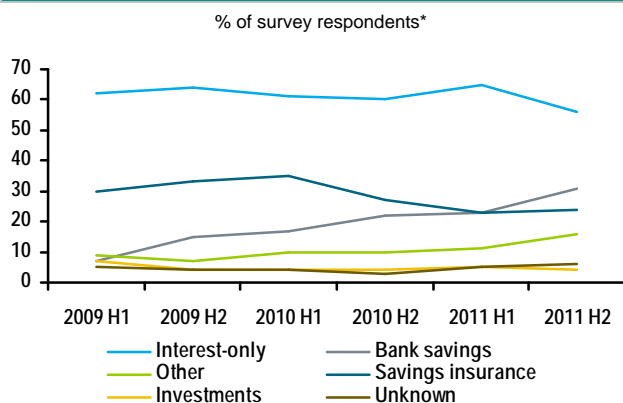
Looking forward, the origination of I/O mortgage loans will decline because of the change in the tax system. From 2013 onwards, new I/O mortgage loans will not benefit from tax deductibility on interest payments.

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 were allowed 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 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 in the insurance product are guaranteed. Savings insurance products used to be very popular in the last 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 during the length 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

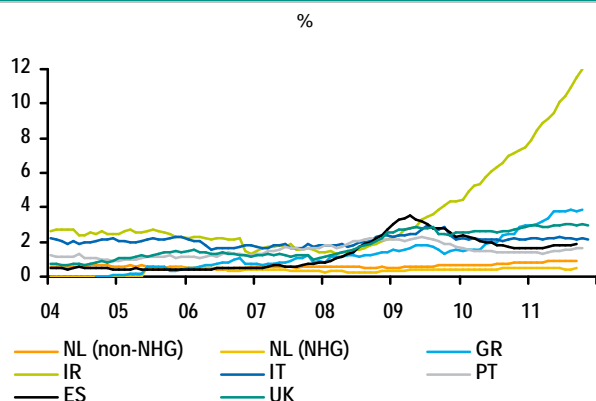
In general, Dutch mortgages have interest rates that are usually fixed for a long period, typically between 5 and 10 years. Statistics from the Dutch central bank DNB indicate that 99% of all existing mortgage loans have an interest rate that is fixed for 5 years or longer. This stock of mortgages is 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 of 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.

Depending on the exact mortgage conditions, prepayments of principal are free of costs at the interest rate reset date. Before this date, prepayments are typically subject to a penalty. In the new mortgage Code of Conduct, a cost-free 10% reduction of the principal per annum is, however, allowed.

Risks

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.

RMBS Prime 60+ days delinquency rate



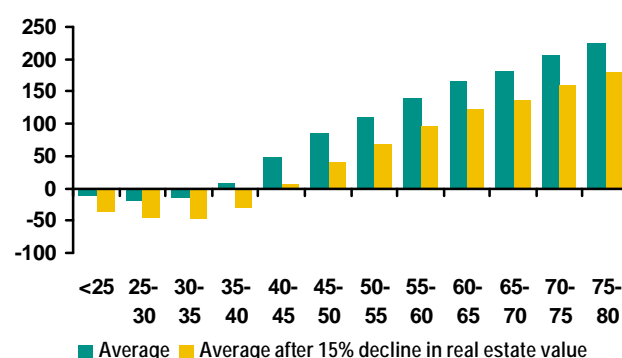
Source: Moody's Investors Service

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. 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 could 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. 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.

Net housing equity per age group (2011)

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



Sources: CBS, calculations ABN AMRO

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 above 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. Some observations should be made with 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.

Conclusion

The Dutch mortgage market is driven by specific domestic factors, of which the tax deductibility, the mortgage code of conduct and the NHG guarantee are most important. Mortgage debt and LTV-ratios are high by international comparison, but foreclosure rates are low. This deviation can be explained by the strong structure of the economy and the mortgage market. Despite the fact that the housing market is plagued by cyclical headwinds and is facing several structural changes, the expected further decline in house prices is unlikely to affect foreclosure behaviour significantly.

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