CPB Financial Stability Report 2013

Risk report for the Dutch House of Representatives
CPB Communication

To: The Dutch House of Representatives

Date: 
Subject: CPB Financial Stability Report 2013

1 Introduction

The Dutch House of Representatives, following recommendations by the De Wit Committee, requested CPB Netherlands Bureau for Economic Policy Analysis and the Dutch Central Bank (DNB) to report, at least once a year, on international and national macroeconomic developments related to the financial sector. Last year, the first of these reports was presented to the House of Representatives. For the current report, CPB has based its share on findings related to financial market developments as described in its Central Economic Plan (CEP) of 2013. The analysis has been limited to a description of the main risks to the Dutch economy.

Main findings

For the last months of 2012 and the first months of 2013, financial market indicators showed a slight increase in confidence on financial market. The monetary policy of the European Central Bank (ECB), the resolution to supervise a large share of the banking sector on a European level, new European fiscal rules and regulations, and the gradually forming adjustment process in weaker countries all have contributed to this increasing confidence. Downward risks nevertheless remain substantial.

The European debt crisis continues to pose an important risk to the Dutch financial sector and the Dutch economy. Political alliances for individual countries are fraught with implementation risks. In many European countries, combinations of ‘efficiency fatigue’ and ‘aversion to reform’ represent a risk factor that may lead to the loss of political support in some Member States. In addition, there is a lack of agreement on a European resolution mechanism, one of the essential elements of a banking union, while banking supervision on a European level (the
Single Supervisory Mechanism (SSM)) yet has to become operational. Agreement is still pending, as this resolution mechanism, which would document the manner in which problem banks would be resolved or restructured, requires choices to be made on how costs would be distributed over shareholders, creditors and governments. In addition, the problem of legacy assets (problematic loans granted in the past) must be resolved before banks could participate in a European guarantee scheme.

For economies, the cumulative consequences of spending cuts and private debt reduction appear large. Adjustment following a financial economic crisis in which deficits and debts are reduced to a sustainable level is a painful and lengthy process, because governments, supervisory bodies and financial institutions often operate under procyclical policies. In the short term, economic growth is under pressure, due to the higher financial burden for citizens, reductions in government spending in order to cope with deficits, the more stringent credit terms for businesses, the stricter requirements for mortgage extensions, and a reduction in banking leverage. Lower growth and increased unemployment reduce the paying capacity of households, businesses and government, while consumption declines further as households try to reduce their debts.

Banks in the Eurozone again may experience difficulties. European banks are not out of the danger zone yet. It is assumed that some banks have not fully recognized losses. In the transition towards a banking union, there should be clarity on the health of the banks’ balance sheets. In particular banks' recognition of losses on their balance sheet will effectively boost the confidence in their calculations of risk-weighted assets. Therefore, prior to the transference of supervision to the European level, a thorough investigation into the quality of bank assets, known as Asset Quality Review (AQR), is important. Furthermore, new, stringent and credible stress tests would contribute to strengthening the confidence in banks. A faster reduction in liquidity support by the ECB would not help, as markets do not know exactly which banks are healthy and which are not. New problems may damage the already weak confidence in the European financial institutes even further. A rapid establishment of a banking union would reduce this risk.

Economic and political developments may lead to new problems for GIIPS and/or other countries. The Italian Government is performing a balancing act, trying to keep spending cuts and reform on course. In Spain, according to the European Commission, the reform agenda is still incomplete, and additional measures will be needed to reduce the high national government debt and unemployment level. In Ireland, unions have adopted a critical stance with respect to its reform agenda. Countries such as Malta and Luxembourg have a large

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1 Currently, there are two EU directory proposals: (1) for a Bank Recovery and Resolution framework and (2) for Deposit Guarantee Schemes. Agreement on these proposals must be achieved by June 2013. They will lead to harmonisation on a national level, but this would not provide a European resolution mechanism. Over the course of 2013, the European Commission will present a proposal for a Single Resolution Mechanism for participants in the Single Supervisory Mechanism (SSM).
2 In its Overview of Financial Stability in the Netherlands of 2013, the DNB indicates that ‘Investors are possibly assuming that some unknown losses still need to be absorbed’.
3 Link to the speech by Jörg Asmussen, Member of the Executive Board of the ECB, of 18 April 2013.
4 GIIPS = Greece, Ireland, Italy, Portugal and Spain
5 See the Draft public service agreement of the Labour Relations Commission on public sector reform. Currently, discussions are ongoing between the unions and the Irish Government.
banking sector that is strongly dependent on foreign financing, which makes them susceptible to liquidity problems. Although the financial sector in Slovenia is relatively small, the financial health of the banks is under pressure. A deterioration of the European debt crisis affects the Dutch Government, not only through impacts on economic growth and the financial sector, but also as a result of guarantees and support measures. This concerns guarantees that result from the European Stability Mechanism (ESM) as well as guarantees for financial and non-financial sectors, such as the housing market. Current guarantees and deposit guarantee schemes provided by the national government amount to around 260 and 246 billion euros, respectively.

The heavy burden of Dutch household debts and declining house prices, together with an increasing unemployment level, has a strongly negative impact on consumption and, thus, on economic growth. Declining house prices have a strong negative impact on consumption as this causes consumers to build up their savings, which, in turn, reduces economic growth. Increasing unemployment increases income uncertainty and people’s ability to carry their housing burden. Although, on an aggregate level, high debts are counterbalanced by large capital, this capital mostly consists of non-liquid assets such as pensions, while there are large differences between the financial positions of households. Young, double-income households in the large cities, in particular, are faced with mortgage debts that are higher than the current execution value of their homes. If the economy continues to falter and unemployment rises further, these households may run into difficulties, which in turn would have a negative impact on banks.

Dutch financial institutions will not remain unaffected by the strong decline in real estate prices and the growing numbers of defaulting or bankrupt businesses. Last year’s CPB risk report discussed the market situation for commercial real estate in detail, and also this year the situation in this sector remains a matter of concern. The decline in property value had a central role in the problems of the Dutch SNS bank, which was nationalised on 1 February 2013. The degree to which other banks have written off or marked down their real estate portfolios is unclear. Furthermore, the number of business bankruptcies also is increasing. Although the percentage of bank loans that are in default is relatively low, their number did increase over 2012. This growing credit risk means that banks need to make larger provisions, at the expense of the build-up of their own capital.

Credit to households and businesses remains under pressure due to the lowering of the leverage of Dutch banks. Despite their high risk-weighted capital ratio, Dutch banks, from an

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7 See the *Financial Stability Report 2012* and the *Budget Memorandum 2013*. The total amount in government-issued credit guarantees has increased over 2012, compared to the previous year. Guarantees issued to the financial sector on interbank loans are slowly reduced, whereas those related to emergency funds have increased by over 35 billion euros with the establishment of the European Stability Mechanism (ESM). In addition to these guarantees, there are the deposit guarantee schemes – officially the responsibility of the financial sector itself. However, when problems become too large, the ultimate financial burden falls to the government in case one of the three Dutch large banks would experience difficulties, as such a burden could not be shouldered by the Dutch banking sector itself.
8 See the address by the Dutch Minister of Finance on the *Financial Annual Report of the Kingdom 2012* (full report in Dutch: *Financieel Jaarverslag van het Rijk 2012*).
9 See CPB Memorandum *The Dutch housing market - mortgage interest rates, house prices and consumption*.
10 See also the *Overview Financial Stability, Spring 2013* by the DNB.
international perspective, continue to have relatively high leverage (ratio between borrowed and own capital).\textsuperscript{11} Lowering this leverage is important, in order to meet future Basel III regulatory standards and increased market confidence. At the same time, reducing this leverage by shrinking the balance sheet\textsuperscript{12} may cause rationing of credits to households and businesses.\textsuperscript{13} The issuing of new share capital, as currently is being done by certain European banks, is a substantially better way of reducing leverage.

*Dutch banks have a relatively large amount of wholesale financing, which makes them more susceptible to liquidity risks.* This dependence on wholesale financing is due to the fact that the Dutch banking sector is large relative to GDP, while the amount of consumer savings is comparable to that in other European countries. The size of the Dutch banking sector is mostly connected to the large number of foreign assets. In addition, Dutch banks have relatively many mortgage loans on their balance sheets. Markets, however, do not consider the risk for Dutch banks to be higher than for comparable foreign banks. Market financing rates remain relatively low for Dutch banks, from both a historical and an international perspective.\textsuperscript{14} This is possibly due to the implicit guarantees by the Dutch Government that, thus, also carries the liquidity risk.

*Competition could become less on markets offering banking services, such as mortgage markets and those providing credit to small and medium-sized enterprises (SMEs).* In order to reduce their leverage, certain Dutch banks may grant fewer loans, while foreign banks have withdrawn from the Dutch market.\textsuperscript{15} This last fact may in part be due to pressure from foreign supervisors to balance assets and liabilities on a national level. These developments could lead to reduced competition which, in turn, causes higher tariffs for consumers and businesses. Moreover, higher interest rates cause a greater decline in house prices and slow down business investments.

*Finally, there are also risks outside Europe.* Since 2009, credit provision in China has increased in order to stimulate economic growth.\textsuperscript{16} However, if its economic growth continues to slow down, the increasing number of bad loans will pose a risk to the Chinese banking sector and, thus, to China’s entire economy. During the last 15 years, Japan has been experiencing deflation and lagging economic growth. Its government debt of currently over 230% of GDP is the highest of all OECD countries.\textsuperscript{17} Its economic situation has worsened, as export trade has been affected by the continuing economic crisis in Europe and the United States, and the slowing down of the Chinese economy. The country has relaxed its monetary policy in order to stimulate the economy and put an end to inflation. Also in the United States there are risks

\textsuperscript{11} Also see Figure 6 in the CPB Financial Stability Report 2012.
\textsuperscript{12} Credit provision to the business sector has declined since 2009. This decline has been due to a combination of fewer credit applications and more stringent credit standards. Van der Veer estimates that the latter, since mid 2009, has caused a 1 to 3 percentage points decrease in the Dutch annual increase in commercial credits. See K. van der Veer (2013) *Banks limit commercial credit provision (only in Dutch; Banken beperken zakelijke kredietverlening).* ESB, 98 (4651), pp. 10–12.
\textsuperscript{13} Banks, for example, tighten their credit standards for loans to SMEs, see the *DNBulletin of 22 May 2013.*
\textsuperscript{14} See CPB Communication *The Dutch housing market - mortgage interest rates, house prices and consumption.*
\textsuperscript{15} See the recent study by the Authority for Consumers & Markets on ‘Competition on the mortgage market; update of margin developments since early 2011’ (available only in Dutch: Concurrentie op de hypotheekmarkt - Een update van de margeontwikkelingen sinds begin 2011).
\textsuperscript{16} See the *analysis* by FitchRatings.
\textsuperscript{17} See European Economic Forecast, Winter 2013 of the European Commission.
because of the increasing government debt and the government's inability to effectively address this problem. Furthermore, the relaxed monetary policies that central banks are forced to pursue also carry a certain amount of risk, as this may lead to new 'bubbles' when policies are not retightened on time.

2 The European debt crisis

Since the summer of 2012, important policy decisions have been taken that have contributed to slightly restore market confidence in the Eurozone. The ECB announcement on 6 September 2012 about support purchases of secondary government bonds via the Outright Monetary Transactions (OMT) programme caused a strong decrease in risk premiums on government bonds, see Figure 2.1. In the most recent auction, the Spanish Government managed to reduce the financing costs of 10-year government loans from 4.9% (in the March auction) to 4.6% in April this year, while also reducing the 3-monthly, 9-monthly and 5-year interest rates.¹⁸

![Figure 2.1 Risk premiums (CDS spreads) of government bonds in the EU](image)

Source: Thomson Reuters

The segmentation of the European interbank market, reflected by the claims and liabilities under the TARGET-2 system, also shows improvement. The TARGET-2 system enables the direct transfer of funds within the Eurozone. TARGET-2 balances are accounting claims and liabilities of the central banks within the Eurozone vis-a-vis the ECB, from the TARGET-2 payment system. Although TARGET-2 balances are large, they have been decreasing since 1 July 2012, as is illustrated by Figure 2.2. This also illustrates a slightly higher confidence in countries on the periphery. In addition, since October 2012 the spread between LIBOR (London Interbank Offered Rate) and the Overnight Indexed Swap rate is at its lowest level since early 2008, which is another indication of the increased confidence between banks.

¹⁸ See the results of the 18 April 2013 auction.
Policy decisions regarding supervision of the banking sector, the introduction of a macroeconomic imbalance procedure and the implementation of new European budgetary regulation may have contributed to the further reduction in financial stress. With respect to budgetary regulation, a series of measures have been taken, such as the EU Economic governance ‘Six Pack’ and ‘Two Pack’, and the European semester and the Treaty on Stability, Coordination and Governance (TSCG), also known as the European Fiscal Compact (see the text box on New European budgetary regulation). These measures have placed more emphasis on ex-ante budgetary discipline. The TSCG specifies a balanced budgetary rule and an automatic correction mechanism. EU Member States are obliged to include the requirements under this treaty into their national legislation before 1 January 2014. Another significant indication is the fact that wage costs in countries such as Spain and Portugal have decreased compared to those in Germany, and that the imbalance in Spain is declining, while the bail-in of bondholders in Cyprus, contrary to the fears of some, has not led to a flight of capital or deposits from other countries on the periphery.

With respect to banking supervision and the creation of a banking union, European politicians are taking the first steps towards addressing the underlying causes of the Eurozone crisis. The banking union will operate according to the European supervision of banks, a European resolution mechanism, including a European resolution authority, and a European deposit insurance system. The first two components are the most important, in the short term. Agreement has been reached on two regulations that award prudential supervising tasks to the ECB, and on the modification of the existing regulation on the European Banking Authority (EBA). The European Parliament formally still has to vote on the matter of these regulations, which will bring over 80% of all bank assets under direct European supervision.

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19 Where costs per unit of labour in Germany increased by 2.9% at the end of 2012 compared to the year before, they decreased in Spain by 3.4% (see Eurostat). See Figure II.9.1 in the European Economic Forecast, Winter 2013, by the European Commission, for the net external position of Spain.

20 This places the responsibility for supervision of the banking community at the European level. The large European banks (those with a balance total of more than 30 billion euros or with one that comprises more than a fifth of their national economy - or, if no national banks meet this requirement, the three largest banks per country) will be placed under direct ECB supervision, while the other, smaller banks will remain under existing national supervision.

21 See the Speech by Benoît Coeuré, Member of the Executive Board of the ECB of 7 February 2013.
The Single Supervisory Mechanism (SSM) will consist of the European Central Bank and the national supervisory authorities. The establishment of the SSM means that supervision will be less influenced by national or sectoral interests. In addition, it is a precondition for the European Stability Mechanism (ESM) to, where necessary, contribute directly to the recapitalisation of banks in distress, instead of via the national government concerned.22

No agreement, however, has yet been reached about other components of the banking union. An incomplete banking union poses a risk, as it cannot break the vicious cycle of government debts and banking risks. A European Resolution Authority is desirable because individual countries take too little account of the cross-border effects of resolution (the settlement of problem banks) and put too much weight on national ‘champions’. This then creates tensions between decisions taken by the European supervisor and the national resolution authorities that have to deal with the resulting consequences. It is important that a clear seniority of claims is recorded, such as in the Federal Deposit Insurance Corporation Improvement Act

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22 To date, no agreement has been reached on the option of direct recapitalisation.
(FDICIA) in the United States. In June 2012, the European Commission presented a draft framework of recovery and resolution plans and bail-in authorisations. A European safety net will divide the risk over countries with a healthy financial sector that will be able to pay for those with a weaker financial sector.

In certain countries, a vulnerable financial sector continues to pose a risk to the financial stability of the EU. There is a considerable heterogeneity in the leverage (the ratio between own capital and borrowed capital) of European banks, with the leverage of large European banks being far greater than that of large US banks. European banks, thus, are less well-capitalised.

**Figure 2.3** The leverage of the largest European and US banks in 2011

![Graph showing leverage of banks](image)

Source: Annual Reports

Figure 2.4 shows the correlation of CDS spreads of the two largest banks in Spain and Italy with CDS spreads of the government. Although both spreads are on a substantially lower level since the announcement of the Outright Monetary Transactions (OMT) programme, there is still a strong correlation between the risk premium of the government and that of the two largest banks per country. The connection between the health of countries and that of banks, therefore, has not been severed yet.

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23 See CPB Policy Brief 2011/04 - A binding framework for banking supervision (only available in Dutch).
24 See [this proposal](#) by the European Parliament and the European Council. The bail-in tool enables resolution authorities to write off claims from uninsured creditors of failing institutions and to turn debt claims into own capital. The bail-in framework is expected to be implemented before 1 January 2018.
The number of corporate bankruptcies increased between 2007 and 2011 in many European countries. As is shown in Figure 2.5, this increase was relatively limited for the Netherlands, although it was higher than in Germany, Belgium and France. Increases in the number of bankruptcies pose a risk to the balance sheets of European banks.

The policy of full allotment by the ECB has led to a liquidity surplus for banks on an aggregated level and to lower financing costs. Although financing conditions have improved for many banks and deposit flows have stabilised, the differences between countries remain large, as can be seen in Figure 2.6 which shows the average CDS spreads weighted according to size of bank balance sheets. CDS spreads of the Dutch banking sector, for example, are low compared to those in other European countries. Financing costs, particularly for banks in peripheral countries, remain relatively high.

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25 This concerns CDS spreads for the two largest banks per country.
26 See the publication on Insolvencies in Europe 2011/2012.
The risk of continuing high financing costs and increasing write offs for banks in weaker countries is that banks are forced to shrink their balance sheets, thus incurring losses on important profitable assets, in turn resulting in limitations on the credit they are able to provide to businesses and private households.

Figure 2.7 shows how the gap in financing costs between smaller and larger businesses has not returned to the pre-crisis level. The differences in these financing costs reflect the less favourable conditions for smaller businesses, particularly in the peripheral countries. Moreover, smaller businesses depend more heavily on banks for their financing and they face more stringent credit conditions than those applying to larger businesses that have access to international financial markets. This difference is markedly larger in the Netherlands than in countries such as Germany and France. In the period of early 2009 to mid 2010, it was even

\[\text{Weighted according to assets.}\]
larger than in Spain. Here, reduced competition and a more rapid decrease in leverage by Dutch banks could have played a role.

A combination of high and further increasing government debts, weak and sometimes disappointing economic growth (see Figure 2.8) and a delayed implementation of structural reform could lead to new problems for individual countries, which may cause the debt crisis to flare up again.

Figure 2.8 Government debt as percentage of GDP (left) and economic growth (right) compared between GIIPS countries, the Netherlands and the rest of the Eurozone.

The European Ministers of Finance reached an agreement, on 25 March of this year, on a support programme for Cyprus, the fourth such programme in the Eurozone. Because of the agreed restructuring of the two largest banks in Cyprus, the size of their banking sector will be diminished. This will have large consequences for the Cypriot economy that in the past has depended on its banking sector, which provided an added value of 9% to GDP. The current rescue package may still prove to be insufficient. The sustainability analysis for Cyprus by 'the Troika' has been based on economic growth returning by 2015.

Portugal is facing a new challenge after the Portuguese Constitutional Court rejected the planned austerity measures (wage cuts in the public sector and the lowering of pension payments) as it deemed these measures to be unconstitutional. The spending cuts were part of the programme that was agreed by the Troika in exchange for the emergency loan of 78 billion euros provided in 2011. Portugal needs to come up with a new package of measures to fund a budget deficit of 1.3 billion euros. Incidentally, the ministers of the Eurozone have already agreed to extend the earlier agreed loan repayment period for Portugal.

Spain already has implemented a number of important reform measures. Nevertheless, the European Commission found the Spanish reform agenda to be incomplete, stating that additional measures would be required to reduce the high government debt and unemployment level.28

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28 See the in-depth review for SPAIN by the European Commission.
Slovenia has to contend with a banking crisis. The country's banks have relatively many bad loans, together comprising 19% of GDP. To address this problem, a 'bad bank' has to be set up, into which all bad loans will be transferred (see OECD Economic Surveys Slovenia). The precise set up of this bad bank and the transfer of the bad financial assets pose a challenge to the Slovenian banking sector. Recapitalisation of existing banks must be addressed with determination and considering all options. This may also include a bail-in of bondholders.

Although the macroeconomic imbalances in France and Italy are not excessive, these countries are also spurred on to implement reform. France is dealing with a gradually diminished competitive position as well as an inflexible labour market. Because of disappointing economic growth, France is also unlikely to bring its budget deficit below the 3% norm. The European Commission has agreed to extend France's deadline by 2 years. In Italy, the new government is faced with the challenge of having to continue the necessary spending cuts and reform. In these countries, the possible standstill of reform poses a risk for the medium term.

The reduction in bank positions in the peripheral countries (Spain, Italy, Portugal, Ireland and Greece) has not yet come to a standstill, as measured according to the foreign assets of banks in those countries reporting to the Bank for International Settlements (BIS) (see Figure 2.9). Positions from the Netherlands show a relatively large decline. Reducing foreign investments cause a further reduction in economic growth in those countries.

**Figure 2.9** Assets of banks in peripheral countries, according to origin (left, billion euros) and development position (right)

Source: Table 9 of the BIS Quarterly Review (2013); CPB calculations.

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29 See the OECD Economic Surveys, Slovenia, April 2013.
30 See the EC reports on Macroeconomic imbalances - France, Macroeconomic imbalances - Italy and Results of in-depth reviews under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances.
31 See also the European Economic Forecast, Winter 2013.
3 House prices, consumer debts, and unemployment

Since the financial crisis of 2008, house values in the Netherlands have dropped by 2.0% in 2010, 2.3% in 2011 and 5.9% in 2012 (see Figure 3.1). This decline is larger than the EU average.

Figure 3.1 House price developments in the Netherlands since 1995

Declining house prices pose a risk to the Dutch economy in various ways. In the first place, such a decline causes consumption levels to drop and, therefore, lead to lower economic growth, as home owners try to reduce their debts. According to the asset-related approach to consumption, the permanent income hypothesis, consumption patterns are based on the expectations consumers have about their total current and future income. If this decreases then so will consumption, as households, in those cases, will increase their savings to compensate for the decline in property value. Changes in property value, thus, have a direct impact on consumption levels, in both the short and medium term. Figure 3.2 shows the correlation between the decline in real house prices and consumption levels, per capita, for various countries.
Since the turn of the century, a fair amount of research has been done into the impact of house prices on consumption. Comparisons between countries as well as research based on micro-data have pointed to a positive relationship between property capital and consumption level. On the basis of a cross-country analysis, the IMF (2012) concludes that a falling housing market, preceded by a strongly increasing consumer debt level, involved a more substantial and lengthy decrease in consumption. Micro-data on the United States between 2007 and 2009 have shown that, for home owners with high debts, consumption levels decreased more than for other home owners, and that this effect was larger than would be expected on the basis of income effects.

In the Netherlands, consumer debts are relatively high (250% of the total disposable income and 111% of GDP in 2011) and mainly consist of mortgage debts. These debts, since the mid-1990s, have increased more rapidly in the Netherlands than, for example, in the United Kingdom, Spain or France. Figure 3.3 presents the developments in total mortgage debt as a percentage of GDP, and the total consumer debt as a percentage of disposable income. The strong increase has been driven by a combination of factors. New mortgage types that did not require any repayment of the principal sum until at the end of the mortgage term enabled optimal utilisation of mortgage interest deductions. Mortgages were granted on the basis of double incomes. This way, households were able to afford higher mortgages and therefore more expensive homes. Furthermore, the supply of houses only follows the demand to a limited degree (it is inflexible). This led to an upward pressure on house prices and a rise in mortgage debts.

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34 Since 2011, the increase in mortgage loans has been reducing. The stagnating housing market has contributed to a decrease in the demand for mortgages and to more stringent mortgage conditions.
On an aggregate level, the debts of Dutch households are matched by substantial assets, such as property capital, pension reserves, savings and investments (see Figure 3.4). In addition, households also have capital assets in mortgage-related savings insurances. These assets, however, mostly consist of housing or retirement capital and could not be turned into liquid assets in the short term.

Another risk refers to the fact that declining house prices have led to a situation in which a substantial number of people are faced with a mortgage debt that is greater than the value of their property. In particular, young people, including higher educated and unmarried couples, who have bought their home at some time during the past ten years, have high loan-to-value

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35 If, for 2010, the debts of Dutch households would be balanced against their assets, a positive net capital would result that is four times GDP (see the Dutch Budget Memorandum 2013 (details only available in Dutch)).
36 The exact size of the amount is unknown, but is thought to be around 30 billion euros.
37 Other assets consist of monetary gold and drawing rights, stocks (except shares), loans, life insurance reserves and other claims/debts.
(LTV) and loan-to-income (LTI) ratios (see Figure 3.5). \(^{38}\) Furthermore, the percentage of homeowners with negative equity is greatest in the large cities.

**Figure 3.4** LTV (left) and LTI (right) ratios, according to age category

As people are faced with negative equity, they will be less likely to move, as selling their home would leave them with a remaining mortgage debt. Moreover, interest paid on this leftover mortgage debt would be only partly tax deductible. \(^{39}\) This also means that it is even more difficult for the housing market to pick up again. In addition, the continued high unemployment level may lead to households with negative equity falling into arrears, ultimately leading to the restructuring of debts. Particularly the combination of declining house prices and reduced paying capacity due to unemployment or divorce carries an increased risk of default and forced sales. This risk increases the longer the labour market takes to recover.

**Figure 3.5** Unemployment percentage from 2005 to 2012 (left), and unemployment development versus vacancy rate (right)

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Figure 3.6 shows that unemployment in the Netherlands, between 2005 and 2012, increased, while the vacancy rate decreased. Labour demand therefore was low, because businesses were doing badly, which in turn meant that prospects for those seeking employment were unfavourable.

\(^{38}\) Assets in capital insurance are excluded, due to lack of data on this subject. For this group, this is likely to be limited.

\(^{39}\) The tax department’s [information about negative equity](https://www.cbs.nl/nl/beleid/124611) (in Dutch).
In the Netherlands, there is no large-scale restructuring of consumer debts, as the level of arrears is low, from an international perspective (see data from Eurostat), although the number of people experiencing payment difficulties is increasing. In April 2013, according to the Dutch Credit Registration Office (BKR), 81,888 households in the Netherlands (around 1.6% of the total number of home owners) were in arrears on their mortgages by 120 days or more. In 2012, the number of households that, due to the forced sale of their homes, had to use the Dutch National Mortgage Guarantee scheme (NHG press release (in Dutch) increased to 3,549. In 2011, this number was only 2,004. This increase largely can be attributed to the continued decline in house prices, which leaves many households with a residual debt after the forced sale of their homes. The number of NHG claims, so far, has been relatively limited considering the total number of NHG guarantees issued (1,045,000 at the end of March 2013).

In cases where the risks materialize and consumers actually suffer serious payment difficulties, debt restructuring does not always take place in the most efficient way. Both home owners and banks wait too long to renegotiate mortgage debts, because of what is known as ‘holdout problems’. For example, people would be willing to move, but wait in the hope of being able to negotiate better conditions for their debt restructuring. Moreover, an NHG guarantee may ensure that falling into arrears followed by a forced sale becomes a more attractive option than a voluntary sale, for the bank as well as the home owner.40 Furthermore, a forced sale may cause a house to be sold under its market value (fire sale) which in turn causes a drop in the value of houses nearby.41

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40 Reimbursements of remaining mortgage debt depend on certain conditions being met.
41 See CPB background report on ’Reduction in consumer debt - what could be the government role?’ (Afbouw van consumentenschuld - welke rol voor de overheid?, available only in Dutch).
4 Risks to the Dutch banking sector

The financial crisis has clearly shown that policymakers are prepared to save certain banks from bankruptcy, as these banks are too-big-to-fail (TBTF) and their bankruptcy would cause an unacceptable amount of economic damage. To date, the Dutch banking sector still leans on such implicit government guarantees. Figure 4.1 presents the development in the financing advantage of Dutch banks, in percentage of GDP.

**Figure 4.1  Financing advantage of Dutch banks, in percentage of GDP (2008 – June 2012)**

Without such guarantees, Dutch banks would have to pay substantially more for their financing. On average, this concerns between 63 and 87 base points. This estimate is in line with other empirical results, discussed in the text box below.

Implicit government guarantees disrupt the level playing field when they lower the financing costs for the larger banks. This also encourages those banks to take higher risks, as the upward potential is for the bank and the downward risk is carried by the government. In addition, the guarantees also lower the costs of financial services, leading to an overconsumption of such services. At the same time, a sudden end to this implicit subsidy may diminish the banks’ health. Therefore, these guarantees not only pose a risk to the Dutch economy, but also do they disrupt the added value of the Dutch banking sector.

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42 The purple band depicts the uncertainty margin, with the black line representing the average.
The value of government guarantees for banks

Empirical research into the value of ‘too big to fail’ (TBTF) guarantees for banks can be divided into four types. The first type of research tries to identify the impact of a changed perception about a bank’s TBTF status. For 11 TBTF banks, a study by O’Hara and Show (1990) compares share prices both before and after the US Comptroller of the Currency found them TBTF in 1984. O’Hara and Show found an additional return of 1.3% for these banks. The second type of empirical research studies the impact of mergers and takeovers. The study by Penas and Unal (2004) analyses the consequences of merger announcements for the level of monthly return on bonds of both purchasing and purchased banks. The return on bonds for mega banks and small banks appeared not to be significantly higher following the announcement of a merger, because those banks either already were TBTF, or because they did not achieve TBTF status following a merger. The third type of research uses market prices to identify market disruptions caused by the implicit government guarantees. The study by Gandhi and Lustig (2012) looks at the way a bank’s size influences above-average returns on share investment. The efficient-market hypothesis states that shareholders of TBTF banks will accept a lower, risk-corrected return, as they thus run lower risks. For the largest commercial banks in the United States, this translates into an average saving of USD 4.71 billion per bank. The fourth type of research uses risk estimations by credit rating services to determine the value of implicit guarantees for banks. Bijlsma and Mocking (2013) use the credit ratings by Moody’s to estimate the financing advantage of TBTF banks. Moody’s provides a rating with and without all external support. The difference between the two ratings, the rating uplift, translates into a financing advantage for TBTF banks. This financing advantage may be calculated by estimating the relationship between the rating that includes support and the interest on loans that a bank has to pay on the market.


Figure 4.2 presents the added value of the Dutch banking sector, based on CBS data.43 In 2011, the gross added value of the Dutch banking sector, according to these data, even increased to 6% of GDP. Without the implicit support of the government, this added value of banks would be lower.44

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43 There are other reasons as well for why these figures do not provide an accurate representation of the added value of Dutch banks. One of which is that the risks taken by those banks are not included in the calculation of the added value. Risk-bearing investments that are expected to generate high returns contribute to the calculation as having a large added value, according to the definition, and these thus add to a bank’s added value. The higher returns are in fact compensation for the risks taken by these banks. Another example of risks that are not included in the calculation of added value is something known as system risks. See, for example, Basu, Inklaar and Wang (2008) The value of risk: Measuring the service output of U.S. commercial banks, Working paper series Federal Reserve Bank of Boston, No. 08-4.

44 This concerns the way in which the added value of the banking sector is being determined. Interest on money that has been loaned forms a bank’s main source of income. In the national accounts, a special calculation is made to attribute part of this interest income to the production of a bank — what is known as ‘financial intermediation services indirectly measured’ (FISIM). FISIM is calculated by comparing the interest that is actually received or paid by the bank with a reference interest, for example, the interbank interest. This is a measure for the margins achieved by a bank. When the bank loans money to a company against 4% interest and the interbank interest is 3%, the difference is considered to be the bank’s production. A decrease in interbank interest means an increase in FISIM, as the bank is still able to issue loans against 4% interest. A change in interbank interest, incidentally, does not affect a country’s GDP.
The added value, thus, is connected to risk-free interest. A sudden rise in the added value of the banking sector, therefore, appears to be largely explained by a decrease in the reference interest level.

Figure 4.2 Added value of the Dutch banking sector, in base points, 1969–2011 (left) and the added value compared to the three month Euribor (right)

Source: CBS (available only in Dutch), OECD.

A reduced dependence on implicit guarantees may be achieved by a further increase in the banks’ own capital. Based on risk-weighted supervisory capital, Dutch banks are relatively well capitalised, from an international perspective. However, when considered on the basis of their leverage (the unweighted relationship between external capital and own capital), a different picture emerges. As was also described in the CPB Financial Stability Report 2012, the leverage of Dutch banks in fact seems relatively high.

Figure 4.3 Leverage development of financial sectors in various European countries (2006 = 1)

Source: ECB, CPB calculations

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45 According to the Overview Financial Stability, Spring 2013, the risk-weighted core capital ratio (the so-called Core Tier 1 ratio) of the banking sector in 2012 increased from 9.5% to 10.2%.

46 See the CPB Financial Stability Report 2011, Figure 6.
In the Netherlands, but also in certain other European countries such as Germany and France, only a limited decrease in the banks’ leverage has been achieved, as can be seen in Figure 4.4. If this decrease in leverage would yet accelerate, this may have a negative impact on the economic growth in these countries.

The relatively high capital ratios of Dutch banks, therefore, can partly be attributed to the favourable risk-weighting of assets. Some European banks have enhanced their capital position over the past year by issuing new share capital. Dutch banks should follow suit, although this would be unappealing to existing shareholders, because more own capital is partly to the advantage of creditors and the government. For society as a whole, however, this would represent an increase in welfare. Incidentally, for banks such as Deutsche Bank, the share price even increased following the issuing of new share capital. Various publications by institutions such as BIS and EBA have shown that risk-weighting may vary considerably between banks and countries. Dutch banks would profit from an improved international comparability of internal rating models.

Bank profits are under pressure, as banks increasingly need to make provisions for credit losses, while the share of non-performing loans is at a historically, albeit stable, high level and commercial real estate has further declined in value. This last risk has become apparent from the most notable incident in the Dutch banking sector this year: the nationalisation of SNS REAAL on 1 February 2013, which was necessary to prevent the imminent bankruptcy of its subsidiary, SNS Bank. The problems at SNS Bank resulted from the overvalued real estate portfolio of SNS Property Finance, a subsidiary of SNS Bank that had been taken over from ABN AMRO. On the basis of estimations by real estate expert Cushman & Wakefield, 2.8 billion euros has to be written off on this portfolio that had been on the books for 9 billion euros in mid 2012. This caused the banks own capital to fall short.

The obvious question here is to which degree other Dutch banks have written off sufficient amounts on their real-estate portfolios. CPB Netherlands Bureau for Economic Policy Analysis does not have the data available to answer this question. SNS Bank probably postponed the write off because this would lead to bankruptcy. Based on the CDS spreads of SNS Bank presented in Figure 4.5, the market appears to have been aware of the problems at this bank. From late 2008 up to mid 2009, the SNS spreads were higher than those of other similar-sized Dutch banks, and from mid 2011 the spreads have also been rising compared to those of smaller banks. Postponing the write-down of impaired assets on bank’s balance sheets is an important risk in the aftermath of financial crises. It leads to banks remaining occupied with the strengthening of their balances over long periods of time, causing credit provision to come under pressure.

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48 See this study by BIS and this one by EBA.
49 Bijlsma, Eisenburg and Zwart, A binding intervention framework for banking supervision, CPB Policy Brief 2011/04 (in Dutch).
Another important risk for banks in general and for the Dutch banking sector in particular, is that of liquidity-risk. This discussion often is framed within the context of the financing gap, which is defined as the difference between loans to Dutch households and businesses on the one hand and deposits by Dutch households and businesses on the other. At the end of 2012, this difference totalled 452 billion euros.50

To accurately assess liquidity risk, however, it is important to consider the entire bank balance sheet, as there are also other bank activities that require financing. The size of national banking, over the past decade, has steadily grown to over four times the size of the economy. If foreign subsidiaries and branches would also be included, this size increases to 2900 billion euros.51 Figure 4.6 shows the bank activities that have contributed to the growth of bank balance sheet since the 1970s. This reveals a marked acceleration of the growth in the Dutch financial sector in the mid 1990s. Deregulation and liberalisation in the 1980s, financial innovation and the creation of one European financial market have played a role in this acceleration. Over the past decade, Dutch banks have become increasingly more active abroad.

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50 See DNB, Overview Financial Stability, Spring 2013.
51 The policy question determines which criterion would be important. DNB’s national banking (2,493 billion euros at the end of 2012) is relevant to the description of the Dutch financial sector. The consolidated bank is relevant regarding the risks to the Dutch tax payer.
The large Dutch banking sector, therefore, is not only the result of an increase in mortgages (around 15% of the balance), but also of international activities and increased interconnectedness (derivatives, loans to other financial institutions) within the financial sector. A large banking sector, per definition, leads to a situation whereby financing has to be obtained from sources other than Dutch deposits; see Figure 4.8. External assets, the ‘other’ category and assets of foreign branches, together, total over three times de amount in mortgage loans outstanding. From this perspective, the proposals by the Dijkhuizen Committee to finance part of the mortgage portfolio through government guarantees cover less than 7% of the total Dutch bank balance. Incidentally, an international spread of assets would also help to diversify country-specific credit risks.

Source: Bijlsma and Zwart, 2013.
Dutch banks are financing a relatively large share of their balances from both national and international deposits. Figure 4.9 provides an overview of the composition of the liability side of the balance sheets of three large Dutch banks (ING bank, Rabobank and ABN AMRO), on the basis of annual reports on 2011.\(^{52}\) The traditional way of financing from household and business savings forms the largest source of finance, followed by short- and long-term market financing, derivatives and loans from other banks. A comparison of balance compositions based on the consolidated annual accounts of large banks in several countries has shown that Dutch banks have a relatively large number of deposits and relatively little long-term financing.\(^{53}\)

\[\text{Figure 4.7 Liabilities of three large Dutch banks (billion euros, left) in 2011 and per country in 2010 (right)}\]

Source: Annual Reports 2011 and 2010.

The attracting of foreign deposits for activities that run via the Dutch main office has come under pressure since the crisis. National supervisors do not favour money flows from subsidiaries to the parent bank. This causes Dutch banks to depend more on money and capital markets for the financing of their bank balances. Certain sources of financing, such as short-term capital market financing, carry a larger liquidity risk than financing by way of local deposits. It is important, therefore, that Dutch supervisors keep a close eye on the financing mix, and that Dutch banks remain well capitalised.

Finally, there is the risk related to financial intermediation largely taking place outside the traditional banking system, through what is known as the shadow banking system. Supervisors only have a limited notion of the risks that exist within that system. According to the Financial Stability Board's statistics, the Netherlands is among the world's top three, based on the balance-sheet total of non-bank financial institutions. This would be an upper limit, according to the DNB, because of the broad definition used by the FSB. A large group within the sector of ‘other financial institutions’ that are categorised under the shadow banking system, in fact, have little to do with credit intermediation, but relate to group financing companies that do not provide credit outside their particular group.\(^{54}\) Although the activities of these institutions

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\(^{52}\) These figures differ from those in Figure 4.6, as the consolidated annual reports also include foreign assets. Moreover, there is a difference between the balances of three banks and the Netherlands’ total bank balance.

\(^{53}\) The 24 largest banks in the Eurozone were used in this comparison.

\(^{54}\) Group financing companies are not under DNB supervision, but the stocks issued by these institutions do fall under the prospectus obligation of the Netherlands Authority for the Financial Markets (AFM). The Netherlands is attractive as a home-country partly because this is fiscally attractive (e.g. due to the elaborate network of tax agreements with other countries,
take place via the Netherlands, the financial flows remain within the group. Therefore, they do not pose a risk to the financial stability of the Netherlands.

Nevertheless, the shadow banking system within the Netherlands is substantial, with a total of around 15% of the assets within the Dutch financial sector. In addition, a large part of shadow banking activities in the Netherlands consists of securitisations outside the balance (via so-called *special purpose vehicles* (SPVs)). The magnitude of Dutch securitisations of both Dutch and foreign banks, at the end of 2011, was around 317 billion euros (see [DNB](https://www.dnb.nl)). Of all European securitisations, around 20% originated from Dutch SPVs, which is related to the strong growth in residential mortgages in the Netherlands, between 1996 and 2007. Around one third of the Dutch mortgage debt in the Netherlands is estimated to be securitised (see [DNB](https://www.dnb.nl), available only in Dutch).