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In-depth review for the NETHERLANDS

in accordance with Article 5 of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL AND TO THE EUROGROUP

Results of in-depth reviews under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances

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The Netherlands is *experiencing macroeconomic imbalances, which deserve monitoring and policy action.* In particular, macroeconomic developments regarding private sector debt and deleveraging pressures, also coupled with remaining inefficiencies in the housing market deserve attention. Although the large current account surplus does not raise risks similar to large deficits, the Commission will also continue monitoring the developments of the current account in the Netherlands.

More specifically, rigidities and distortive incentives have built up over decades to shape house financing and sectorial savings patterns. Balance sheets of financial institutions became heavily geared towards housing finance, as households leveraged up against housing wealth reducing the pool of domestic savings not earmarked for pension savings. In parallel, since the mid-1990s non-financial corporations moved into a structural savings surplus. This has resulted in a substantial and persistent current account surplus going hand-in-hand with a high level of both gross household debt and household assets. At the current juncture, feedbacks from the housing market to the real economy, notably through negative wealth and confidence effects, are weighing on economic activity.

EXECUTIVE SUMMARY AND CONCLUSIONS

This In-Depth Review (IDR) takes a broad view of the Dutch economy in line with the scope of the surveillance under the Macroeconomic Imbalance Procedure (MIP). The main observations and findings of this analysis are:

- **The Netherlands' current account has been persistently in surplus for over three decades.** Rigidities and policy incentives have built up over time to shape house financing and sectoral savings patterns. Households leveraged up against housing wealth and reduced the pool of domestic savings not earmarked for pension savings. In parallel, from the mid-1990s, nonfinancial corporations moved into a structural savings surplus. This has contributed to the emergence of a substantial and persistent current account surplus going hand in hand with a high level of both gross household debt and gross household assets.

- **Although it increased rapidly after the turn of the century, the Dutch current account surplus position does not seem to point to emerging risks.** It reflects rather a combination of strong competitiveness, structural determinants of savings-investment balances, cyclical factors, and possibly some statistical discrepancies related to the measurement of cross-border flows. Recently, valuation effects in the wake of the crisis helped improve the net international investment position.

- **The competitiveness and export performance of the Dutch economy appears to be benign overall**. The loss of global market share for exports of goods and services is limited in comparison with most other mature Western European economies. The loss in market share does not appear to be rooted in unfavourable domestic price and cost developments, as the indicators for these have been growing broadly in line with the country's main trading partners and the real effective exchange rate has not shown any particular trend.

- **Structural funding patterns of Dutch assets and liabilities have made the Dutch economy dependent on swings in international capital markets.** At the aggregate level, financial flows show simultaneous capital outflows and net borrowing from abroad, with an uneven distribution across sectors. This increases the sensitivity of balance sheets of some sectors of the economy to portfolio shifts, flight-to-quality, and write-downs on foreign investments.

- **Notwithstanding mitigating circumstances, the high level of private-sector debt, in particular household indebtedness, warrants attention.** Long-standing tax incentives and financial sector developments have encouraged households to become highly indebted in mortgage debt, even allowing for the different composition of balance sheets, and also had a particularly stark impact on housing prices. The increase in gross household debt is a source of vulnerability, though mitigated by broadly commensurate increases in net household assets. Substantial financial buffers with corporations provide further cushion.

- **The leveraging of household balance sheets implies risks for both mortgage borrowers and lenders.** Financing trends have heightened the sensitivity of the Dutch economy, and especially of leveraged households, to negative shocks, such as a fall in house prices, weak economic growth or a real interest rate shock. Financial institutions are still readjusting to altered market conditions and changes in regulations; the global economic and financial crisis hampered the ability of Dutch banks to borrow in wholesale markets. Given the importance of securitised funding, this pushed up domestic lending rates especially for

housing finance. Basel III banking regulations underscore the importance of larger buffers to absorb losses and to restore confidence and secure market access.

- **In addition, current housing policies have implications for public finances**, notably in terms of foregone tax revenues and of the implicit liabilities stemming from housing-related guarantees.

The IDR also discusses the policy challenges stemming from these developments and what could be possible ways forward. A number of elements can be considered:

- **The imminent policy challenge will be to contain balance sheet adjustments, restore confidence, and harness growth while simultaneously stabilising public finances.** Profitable segments of the economy with a strong competitive edge can help to underpin domestic purchasing power. Aggregate profitability of firms has remained high, albeit with marked differences across firms and industries. Exploiting the space in the institutional framework for pursuing wage differentiation and lower pension contributions, particularly in the second pillar, may help vulnerable households restore their balance sheets, while also cushioning domestic demand.

- **Recent sluggish productivity increases and the low value added of re-exports underline the importance of focusing on fostering innovation and competitiveness.** Sufficient public spending on fundamental research, knowledge and education is important to support the long-term growth potential of the Dutch economy. Cyclical effects, finance bottlenecks, unusually high uncertainty and the impact of (expected) balance sheet adjustments all seem to play a role in the relatively low domestic rate of capital formation, yet there may also be a structural element at play. For firms, rethinking the balance between home and foreign investments seems advisable. A balanced adjustment should have a beneficial effect on the domestic investment climate, hence, on economic prospects in the long term.

- **As regards private debt, comprehensive and appropriately timed and sequenced reforms in the housing market would reduce vulnerabilities of households, financial institutions and the government.** Such reforms would also improve the allocation of capital, thus supporting the long-term growth potential of the Dutch economy. With respect to housing, initiatives that eliminate fiscal incentives for taking on debt and/or encourage mortgage loan repayments are warranted. Long-run gains could even be larger if, after successful fiscal stabilisation, a part of budgetary savings were channeled back into the economy. Recently announced measures by the government in this area appear to go in the right direction, but will need to be assessed in detail. In the current situation, smaller asset buffers on the part of households also amplify the feedbacks from the housing market to the real economy, through negative wealth and confidence effects. Moreover, loan conditions in the financial sector have tightened in the wake of the crisis, furthering adjustment. This implies any measures would have to be phased in gradually and predictably over a prolonged but not too extended time horizon. In this way, both households and lenders will have time to adapt and substantial and abrupt adjustments in the housing market and in finance can be avoided.

- **Moreover, measures are required to correct rigidities in the housing market, including those that have prevented the emergence of a functioning private rental market of appropriate size.** Measures to advance the operation of the housing market by improving the functioning of the private rental market and reducing the inefficiencies and

dead-weight losses associated with the operations of social housing corporations may help to get the market afloat. However, this will take time and should be done while duly protecting the segment of dwellers in need of social housing. Any measures taken in this area will also have to be assessed in detail.

1. INTRODUCTION

On 28 November 2012, the European Commission presented its second Alert Mechanism Report (AMR), prepared in accordance with Article 3 of Regulation (EU) No. 1176/2011 on the prevention and correction of macroeconomic imbalances. The AMR serves as an initial screening device, which helps to identify Member States that warrant further in depth analysis to determine whether imbalances exist or risk emerging. According to Article 5 of Regulation No. 1176/2011, these country-specific "in-depth reviews" (IDR) should examine the nature, origin and severity of macroeconomic developments in the Member State concerned, which constitute, or could lead to, imbalances. On the basis of this analysis, the Commission will establish whether it considers that an imbalance exists and what type of follow-up it will recommend to the Council.

For the Netherlands, the AMR suggested a need to look more closely at whether the country is exhibiting macroeconomic imbalances of an external and internal nature. On the external side, the AMR highlighted a long series of large current account surpluses, which coincided with a loss in market shares in recent years. On the internal side, the high level of private debt was identified as a potential concern, mainly since household indebtedness had built up in the context of past increases in house prices. Recent years have witnessed falling house prices, with an impact on the real economy through negative wealth and confidence effects. Despite signs of stabilisation, household indebtedness remains very high. This IDR takes a broad view of the Dutch economy in line with the scope of surveillance under the Macroeconomic Imbalance Procedure (MIP).

Against this background, Section 2 of this in-depth review looks into developments covering the external and internal dimensions. Section 3 focuses specifically on the current account balance and on household debt developments. Section 4 discusses policy considerations.

2. MACROECONOMIC SITUATION AND POTENTIAL IMBALANCES

2.1. Macroeconomic scene setter

The Dutch economy was deeply affected by the global financial and economic crises, leading to a severe contraction in 2009. Since then, the recovery has been gradual at best. Economic growth fell back sharply into negative territory at the end of 2011, reflecting a pronounced weakening of both internal demand, whilst on the external side Dutch exports were adversely affected by the slowdown in global trade. Whilst gross domestic product (GDP) in 2011 still grew by 1.2% over the year as a whole, in 2012 it is estimated to have shrunk by 0.9%, despite a short-lived recovery in the first half of the year. Looking forward, prospects for 2013 and 2014 remain uncertain and the recovery sluggish.

Several factors account for the slow pace of the recovery. However, the most important factor is weak domestic demand. The weakness in household consumption has been driven by negative wealth effects arising from declining house prices and falling share prices; the pro-cyclical behaviour of pension premiums; a deteriorating labour market situation; confidence indicators near historic lows; uncertainty about domestic policy plans regarding fiscal consolidation and the housing market. While exports have fared better, they are being held back by the loss of momentum in relevant world trade. Despite overall low interest rates, domestic investment remains weak on the back of depressed construction activity and the uncertain outlook as regards the recovery and global demand prospects.

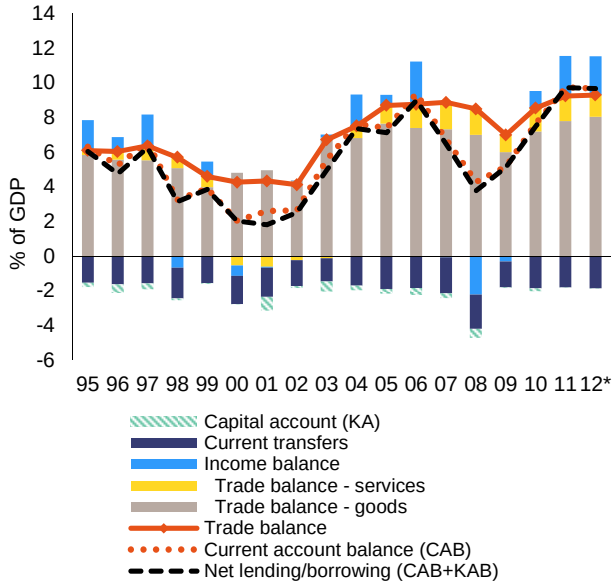
The general government deficit is expected to have improved from 4.5% of GDP in 2011 to 4.1% in 2012, in light of consolidation measures that mainly increased revenues (notably a 2-pp increase in the standard VAT as of October 2012). Against a background of weak economic activity, the deficit is expected to improve only gradually to 3.6% of GDP in 2013 despite substantial additional consolidation measures, once again mainly on the revenue side. The debt ratio is expected to increase steadily from 70.8% of GDP in 2012 to 73.8% in 2013. On unchanged policies, the situation of public finances in the Netherlands in the years remains challenging.

2.2. External position

The Netherlands has persistently recorded current account surpluses for over three decades and currently has one of the highest current account surpluses as a percentage of GDP in the euro area[1]. The surplus on the current account, which had averaged around 5% of GDP during the 1990s, increased to some 6% of GDP during the 2000s, reaching 9.4% of GDP in 2006. The surplus declined thereafter but has shown a renewed upswing in the wake of the economic and financial crisis. In 2010, in line with growing trade volumes, the Dutch current account balance increased to EUR 45 billion (7.7% of GDP) and reached a record in 2011 of EUR 58 billion or 9.7% of GDP (Graph 1). The Commission services Winter 2013 Forecast indicates a broad stabilisation of the current account surplus on the basis of rising household savings and a continuously high savings balance of the non-financial corporate sector. Apart from a component stemming from natural gas (about 0.5 to 2%), the positive current account balance has increasingly mirrored the contribution of re-exports (currently another 2%). Moreover, the profit and pay-out policy of Dutch multinationals, although counterbalanced by pension funds receiving dividends, have created an upward bias on the current account[2].

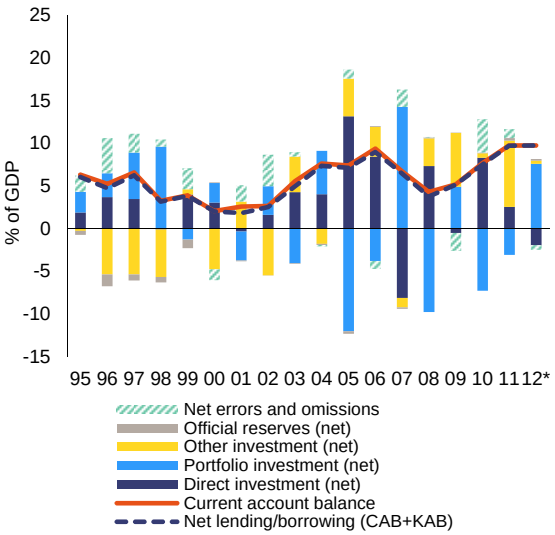
[1] According to the MIP Scoreboard Headline indicators, the 3 year average of current account balances over 2010 – 2012 was 7.5% for both the Netherlands and Luxemburg and 6.9% for Sweden in 2011.
[2] De Nederlandsche Bank estimates the net effect of both directions at approximately 2% of GDP in the years 2006 to 2008, afterwards reversing to -0.5% of GDP.

Graph 1: Current account decomposition



*Note: * indicates estimated figure using quarterly data; Balance of Payments definitions.*
Source: Eurostat.

Graph 2: Financial account decomposition



*Note: * indicates estimated figure using quarterly data; Balance of Payments definitions.*
Source: Eurostat.

About four-fifths of the total current account balance is accounted for by the trade balance, in particular on goods. The trade surplus of natural gas averages around 1% of GDP, although this is only the lower bound of the overall effect of natural gas provisions. Because part of natural gas production is domestically consumed, domestic gas reserves reduce imports of energy products. The overall effect can be approximated with reference to the value added of natural gas production, which has been around 2.5% of GDP in recent years. This suggests that the trade surplus would be around 2.5 percentage-points lower when natural gas reserves are depleted, which is expected to happen in around 30 to 40 years. Since the net effect of the gas balance captures both changes in production and consumption patterns, as well as changes in prices, energy prices (which have more than doubled over the last decade) have also played a role in pushing upwards the surplus on the goods balance.

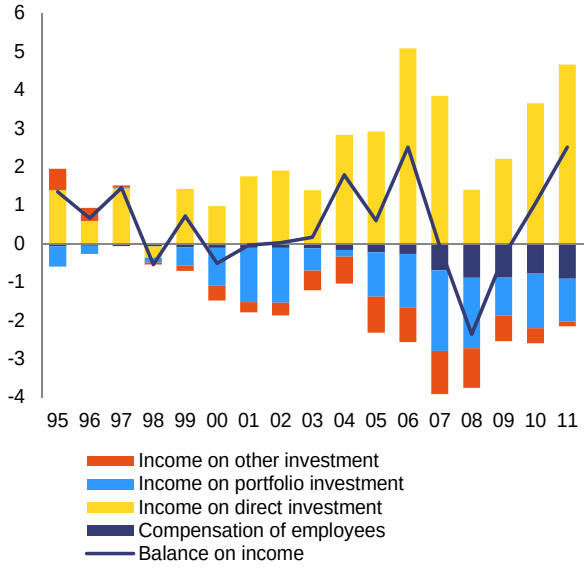
Apart from the structural component stemming from the country's natural gas resources, the positive goods balance is increasingly driven by re-exports[3], i.e. goods that have been imported and leave the country again after no -or virtually no- further processing and hence with relatively low added value[4]. Re-exports now account for roughly one half of the Dutch goods balance compared to one third in 1995. This increase is a result of on-going globalisation, accentuated by the specific geographical position of the Netherlands (with the port of Rotterdam being the effective trade gateway primarily to Germany but also to other EU economies) and a competitive transport and logistics sector.

[3] According to the definition, to count as re-exports the goods in question also have to be owned by a Dutch resident at some point and subsequently by a foreign based person or company. If there is no transfer of ownership at any stage, the goods are deemed to be in transit. Goods are counted as domestically-produced exports if they undergo some processing. Other important re-exporting countries include Singapore, Belgium and Germany.
[4] 8% versus 54% for domestic output produced.

The import content of Dutch exports has increased over time, illustrating the growing importance of 'global production chains' in which the Dutch economy is closely integrated. This notwithstanding, in 2009, the average import content of Dutch exports (34.8%) stood only somewhat above the EU average of 32%, indicating a relatively high share of domestic value added, despite the country's strong intermediary function in trade.

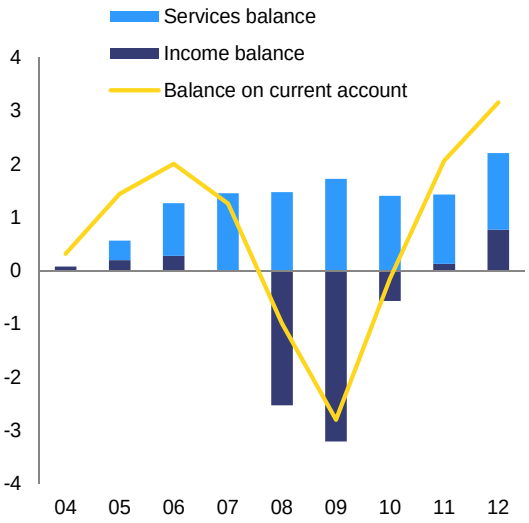
The balance on services had been negative for a few years before turning positive in 2004, thus adding to the trade surplus. This positive trend can be attributed to the on-going growth of business service provision in some industries, notably in air and sea transportation, but also to a very attractive tax climate for multinational companies, which channel royalties and license fees charged by parent companies to their foreign affiliates in exchange for intermediate services. Also, other business services were buoyant.[5] Other services displaying strong growth dynamics in this field include IT, legal, accountancy and intra-company services driven by an intensifying international division of labour by multinational companies.

Graph 3: Income balance decomposition
(% of GDP)



Source: De Nederlandsche Bank.

Graph 4: Cumulative changes in income, services and current account balances since 2004 (% of GDP)



Source: De Nederlandsche Bank.

At the same time, investment income has become an increasingly important contributor to the current account surplus due to improved (though very volatile) profits repatriated by foreign subsidiaries of Dutch enterprises (increasing from 1.1% in 2004 to 4.7% of GDP in 2011) (Graph 3). A large share of total cross-border profits are earned by Dutch listed multinational companies. Dividend payments by these companies to foreign investors, which reduce the balance on the income account, have remained broadly constant since 2007 (around 0.8% of GDP). Graph 4 shows that, since 2004, the income account balance, together with the services balance, to a very large extent have driven the current account balance.

Current transfers show a stable negative balance reflecting the Netherlands' position as a net contributor to the EU budget and an aid donor at global level. The Dutch capital

[5] Including "miscellaneous services" between related resident and not-resident enterprises that cannot be specifically classified as services elsewhere; although on net these services do not weigh extremely heavily, they accounted for about 14% of total exports and 15% of total imports in 2010 (CBS: Statistics Netherlands).

account typically records small outflows of about 0.1% of GDP and therefore does not have any significant impact on the external balance of the country.

As a mirror image of the current account surplus, the financial account has recorded net outflows since 1995. The analysis of the financial account is complicated by the high volatility of gross cross-border flows. As Graph 2 shows, since 2005, financial flows from the Netherlands have typically been channelled through foreign direct investment, in the form of either direct acquisitions of companies abroad or lending to foreign subsidiaries.[6] Owing to its geographical location, historical ties and a sound and credible institutional setting, with a favourable tax system, the Netherlands has become a hub for international capital flows. Via entities in the Netherlands, non-financial corporations (mostly multinationals) channel FDI and "route" income flows between a company in one country and subsidiaries or affiliates in other countries. Portfolio investment has likewise expanded since the end of the 1990s. Apart from high private investments associated with the open nature of the Dutch economy, savings channelled through the mandatory second pillar occupational pension scheme account for this.

In the near to medium run several factors might lead to a further increase of the high Dutch current account surplus. Dynamics initiated in the wake of the crisis, such as changes in risk attitudes, the on-going deleveraging in the global banking sector, the adoption of more careful funding strategies by non-financial corporations, and, finally, a risk of a persistent downward shift in the economy's growth path, may all reinforce accumulation of corporate savings.[7] As these developments coincide with sluggish productivity increases and given the low value added of re-exports, current efforts at fostering innovation and competitiveness seem to go in the right direction. Profitable segments of the economy with a strong competitive edge can still help to underpin domestic purchasing power, but with the Netherlands going through what is likely to be a prolonged spell of balance sheet adjustments in the wake of the global crisis, economic dynamics is likely to be sluggish in years to come. All this suggests that a rapid decrease in the overall current account surplus is unlikely. On the other hand, as the Dutch population matures and the baby-boom generation moves into retirement, the country is expected to gradually move from saving to dissaving, pushing down the surplus in the longer run.

2.3. Market share

The Netherlands is one of the most open economies in the euro area. Its trade openness (measured as the sum of imports and exports relative to GDP) increased steadily from 74% of GDP in 1980 to 161% in 2008 (compared to the euro-area average of 89% recorded in 2008).

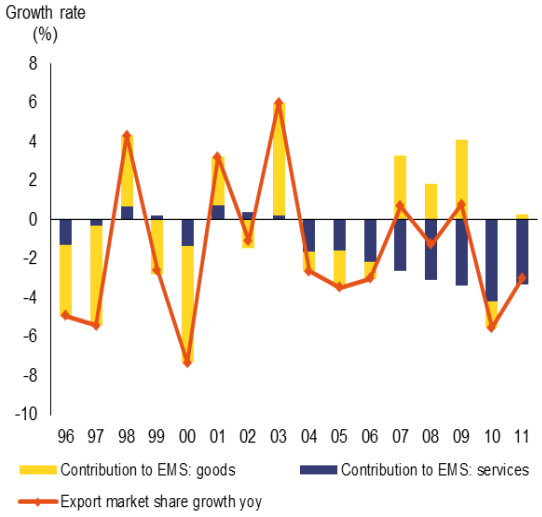
The overall share of Dutch exports of goods in world trade fell from about 3.9% in 1995 to 3.1% in 2011 (Graph 5). The Dutch share of world exports of services fell more rapidly from 3.7% in 1995 to 2.5% in 2011, but remains relatively high. Losses occurred mainly in the share of transportation; by contrast, "other services" gained share (see above). On balance, the share of the Netherlands in global exports of both goods and services has fallen since 1995 from 3.9% to around 3.0% in 2011. The corresponding five-year average indicator in the scoreboard indicates that this loss occurred over the 2005-2010 period. The gradual loss in global market share for exports of goods and services is not worse than for the majority of

[6] Only in 2007 did the Netherlands record a net FDI inflow, which can be explained by the take-over of ABN-AMRO by a consortium of Spanish, British and Belgian banks. Due to the subsequent nationalisation in 2008, the total net FDI turned positive once again.

[7] Ruscher and Wolff, 2012.

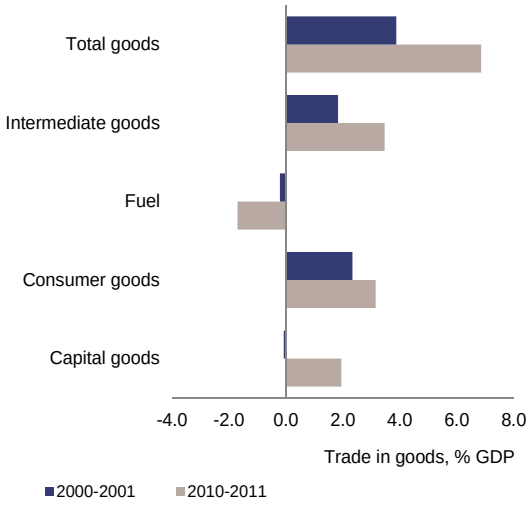
other mature western European economies and reflects mainly the integration of fast-growing export-oriented economies, notably in Asia, into the world economy.

Graph 5: Export-market-share (EMS) growth (% yoy)



Source: Eurostat.

Graph 6: Trade Balance contributions by Broad Economic Category (% of GDP)



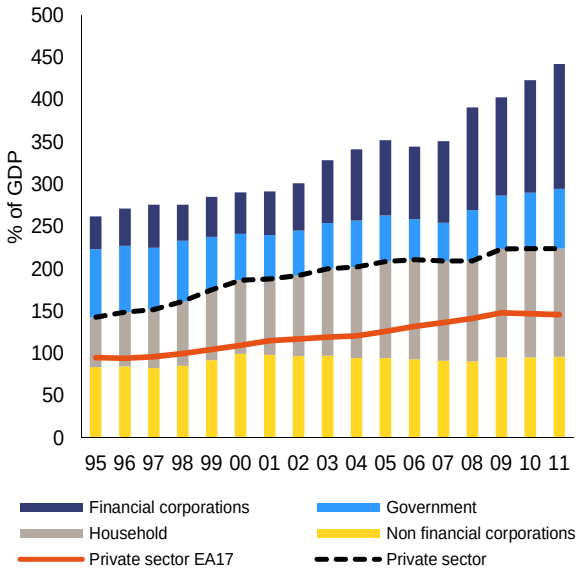
Source: COMTRADE, Commission services.

2.4. Private sector indebtedness

Gross private debt levels increased appreciably over the last decade (from 186.5% to 223.7% of GDP between 2000 and 2011). This increase is entirely accounted for by households (**Error! Reference source not found.**). The share of the non-financial corporate sector in total gross private debt fell considerably over the last 15 years. To complete the picture, financial corporations also contribute significantly to the country's outstanding gross debt. The doubling of financial corporate debt from 2002 onwards was matched to a large extent by growing assets, reflecting mainly the expansion of the activities of Dutch banks abroad[8].

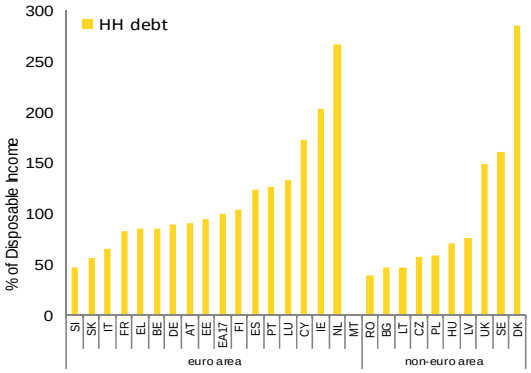
[8] Dutch public debt remained relatively constant over the years 2000 around 50% of GDP on average, until 2008, when, due to the crisis, gross public debt started increasing to 68.8% of GDP in 2012. This increase mainly reflects persistent deficits, bilateral loans to programme countries, EFSF and ESM disbursements and a modest economic outlook.

Graph 7: Decomposition of debt, consolidated (% of GDP)



Source: Eurostat.

Graph 8: Indebtedness of EU27 countries, 2011, households (% of gross disposable income)



Note : non-consolidated figures. Debt includes loans and securities other than shares. Data for BE, CY, SK, BG, LV, LT, HU, RO and the UK are available only up to 2010. For LU, only 2009 data are available. No data are available for MT.

Source : Commission services, Eurostat.

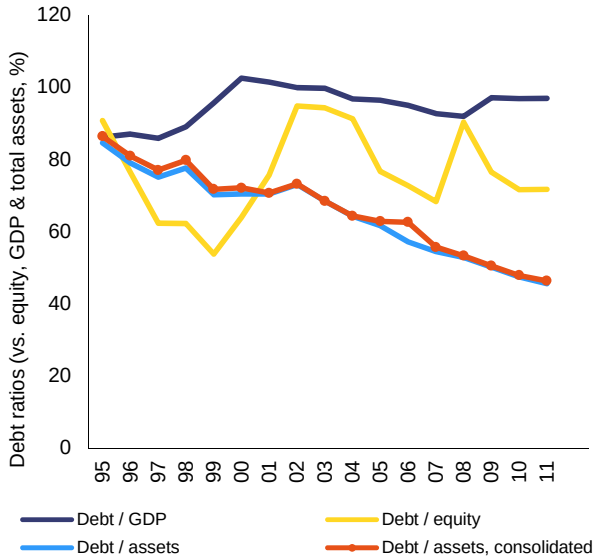
The strong rise in gross household debt has levelled off. Household debt reached an all-time high of 128.5% of GDP (or 266% of disposable income) in 2010, mainly driven by the rapid expansion of mortgage debt (Graph 8). Compared to other euro-area members, the Netherlands has relatively high levels of leveraged housing wealth, reflecting incentives in the institutional set-up of the Dutch housing market. Notably, the tax deductibility of mortgage interest payments for primary residences encouraged mortgage borrowing and discouraged repayments for many years. Also, financial innovations gave households easier access to credit as financial institutions developed mortgage instruments, such as interest-only mortgages, which allowed households to benefit maximally from the mortgage interest deductibility scheme. The easier availability of credit has led to distorted pricing in the housing market, increased vulnerabilities among homeowners, mismatches in the funding model of banks and concurrent refinancing risks, and a risk exposure for the Dutch government via the National Mortgage Guarantee scheme that runs to more than 20% of GDP (see also 3.2).

Until now, mortgage servicing costs seem manageable and the vast majority of households should be able to honour their obligations to the banks. Nevertheless, a high gross debt burden and some increased frequency of interest rate resets have increased the sensitivity of households to income and interest rate shocks. This is mitigated by the stacking of interest rate resets, the linking of mortgage interest rates to maturity benchmarks extending over the yield curve, and the overall low credit spreads to which the Netherlands is exposed.

Moreover, the build-up in household debt has been matched by a similar accumulation of assets, meaning that the net worth of households has not deteriorated. However, as the largest share of household assets consist of housing wealth (with a share increasing from 31% in 1993 to 39% in 2010), a fall in house prices would have a larger impact on household balance sheets than similar fluctuations in the stock market. This means that households could

start reining in their spending to rebuild their balance sheets, with negative wealth effects on GDP growth and employment. In view of that risk, a closer look at private-sector debt as well as housing market developments seems warranted (see section 3.2).

Graph 9: Leverage ratios, non-financial corporations



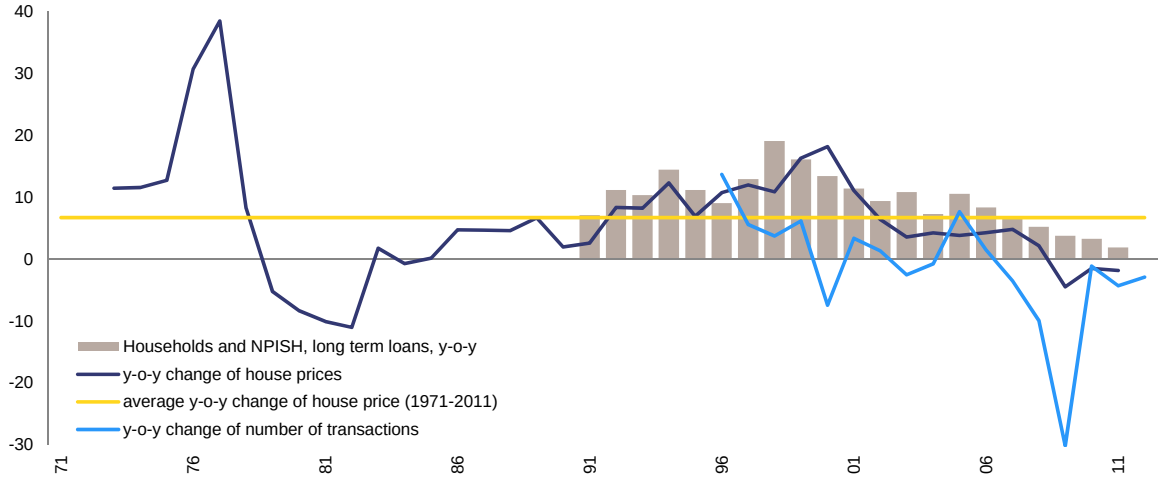
*Note: * indicates estimated figure using quarterly data.*
Source: Eurostat.

As regards the non-financial corporate sector, various indicators of the financial wealth of Dutch corporations do not point to any significant sustainability risks (Graph 9). The debt-to-equity ratio has declined from 90.7% to 71.7% between 1995 and 2011 and is currently below the average for the euro area (77.9%). It should also be noted that there has been a significant downward adjustment in the corporate debt level over the past three years, with the debt-to-equity ratio correcting by some 18 percentage points, due to contracting credit to non-financial corporations. The debt-to-asset ratio was (substantially) below the euro-area average for both consolidated (47.9%) and non-consolidated data (45.6%) in 2011, having almost halved for both measures over the last 15 years. The debt-to-GDP ratio of Dutch corporations has gradually declined from 102.5% in 2000 to 96.9% in 2011.

2.5. House price developments

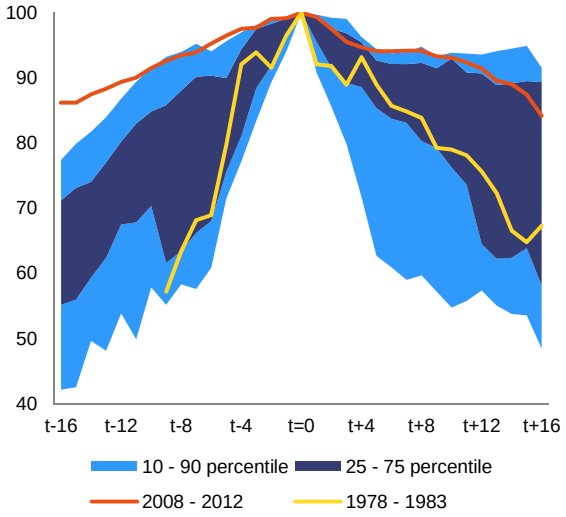
House price developments in the Netherlands over the last decades have been moderate, both by historical and international standards (Graph 10). House price increases in the long expansion that started in the mid-1980s were not nearly as strong as in the build-up phase of the previous major house price cycle in the late 1970s (Graph 11), and not as strong as in some other EU countries that experienced a sustained boost ahead of the financial crisis (Graph 12).

Graph 10: Nominal house price developments and transactions, 1971 – 2011



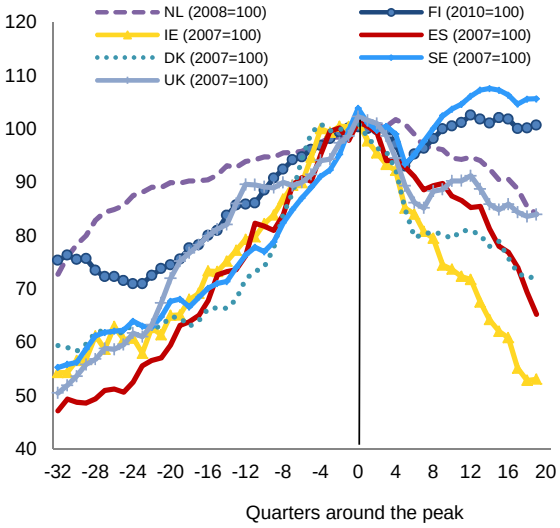
Source: ESTAT, OECD.

Graph 11: House price developments around turning points (quarterly data)



Source: De Nederlandsche Bank (2012).

Graph 12: House price cycles across countries



Source: Commission Services.

House price developments over the past three decades have been driven by a combination of macroeconomic factors on both demand and the supply side, as well as by fiscal incentives, the regulatory environment and financial innovations (see section 3.2.1 below). Following a strong slump in the late 1970s, Dutch house prices started a very long expansionary phase in the mid-1980s. House prices peaked together with shortages on the labour market in the second half of the 1990s. The labour participation rate of women steadily increased (from around 40% in 1983 to over 70% currently), leading to expectations (and realisations) of higher household income over the life cycle. This was reinforced by the (expected) rise in the value of their assets. Other supportive factors included demographic trends, lower and less volatile inflation, economic growth, and, most importantly, the rapid trend in financial innovations giving households much easier access to credit. The downward trend in interest rates, coinciding with a phase of heightened globalisation and EU market integration boosted by monetary union, supported the trend towards higher household financial leverage.

It is very difficult to assess if and to what extent prices in the Netherlands were misaligned during the period of sustained increases. Estimates of equilibrium house prices are fraught with methodological difficulties. For the Netherlands, institutional and geographical limitations of supply elasticity are important in this respect. Most studies that did attempt an estimate provided evidence of no or only limited overvaluation and suggest that Dutch house prices have developed in line with fundamentals. The Netherlands' Bureau of Economic Policy Analysis (CPB, 2005) reported an overvaluation of 10 % in 2003.[9] Using data up to 2004, an IMF country report (2005) concluded that there was no significant deviation from fundamentals.[10] The OECD (2006) arrived at a similar conclusion, arguing that the probability of Dutch house prices reaching a peak and starting to decline in 2006 was low.[11]

The modest-yet-accelerating slump in the housing market since the outbreak of the financial crisis, is evidenced both by the fall in prices and, even more clearly, by the much sharper drop in the number of transactions. Transactions have fallen by approximately 45% since its 2006 pre-crisis peak. The slump in the housing market reflects clouded economic prospects amidst a fall in disposable income, the anticipation of a progressive tightening of interest-rate-deductibility rules and of banks' mortgage lending standards, a moderate increase in unemployment and consumer confidence hovering around historic lows. By the end of 2012, nominal house prices had fallen from their peak at end-2008 by 16.6%, which corresponds to a decrease of 4.1% per year on average, however slightly accelerating in the last year (-8% in 2012).

While the slump was triggered by the crisis and the related falls in activity and confidence, it is also a result of the gradual yet progressive build-up of vulnerabilities in the Dutch housing market (see 3.2.1 below). The slump in house prices is therefore likely to be protracted. Even in the presence of a policy response targeted at the tax deductibility of mortgage interest payments, it will take time to unwind the rigidities in the housing market and the extension of household balance sheets, which have built up over many years. This can explain the relatively moderate pace of recent house price declines compared to other European countries that experienced sharp house price increases in the run up to the crisis.

3. IN-DEPTH ANALYSIS OF SELECTED TOPICS

3.1. The current account surplus

The merchandise trade balance traditionally has been the main driving factor behind the large current account surplus. As illustrated in section 2.2, the relative importance of exports of goods has even increased considerably over the last decade. It is therefore essential to examine the trade balance, in order to understand the persistent character of the current account surplus.

Apart from the product and geographical structure, the relatively stable performance of Dutch exports is largely explained by the country's strong overall competitiveness. This is illustrated by the market share analysis in the next section (3.1.1). To complement this analysis section 3.1.2 provides an assessment of Dutch competitiveness through an examination of relative competitiveness (or real effective exchange rate) indicators whereas

[9] CPB (2005) Document No. 81.
[10] IMF (2005) Country Recommendation No. 05/225.
[11] OECD (2006) Working Paper No. 488.

sections 3.1.3 and 3.1.4 focus on the sectoral composition of the current account balance and the Dutch NIIP.

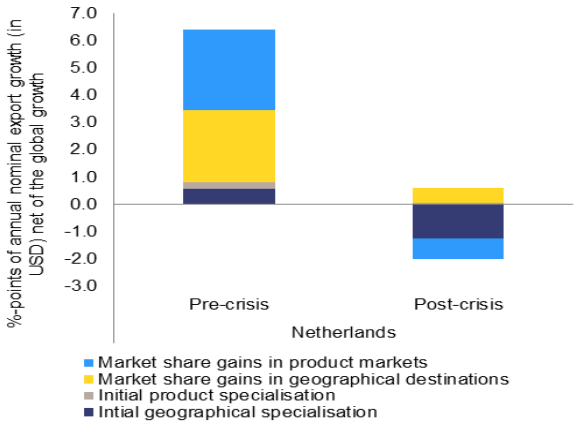
3.1.1. Market share analysis

Exports of goods are concentrated in a few categories notably "machinery and transport equipment" (30.2%), "chemicals and related products" (17.8%), and "crude materials" (13.3%). The high share of crude materials (largely food and oil and gas) can be explained by the fact that the Netherlands is a producer and an exporter of gas, an importer of crude oil and an exporter of refined oil products.

Unsurprisingly, the total share of exported goods going to the EU is high, reaching 80% in 2011 (of which almost 60% went to the rest of the euro area, notably Germany 24.3%). The gross trade balance is significantly in surplus and rising with respect to the rest of the EU (16% of GDP), while it is in deficit with respect to non-EU countries (-10% of GDP), mainly China. The largest share of total Dutch imports comes from the EU (61.8%, of which some 40% originated from euro-area countries in 2010). As for the re-exported goods, most originate in the USA and Asia, in particular China, and are primarily oriented towards the rest of the EU[12], which illustrates the role of the Netherlands as a major transit country for global trade and supply chains.

The Netherlands increased its export market share in goods before the crisis, but lost some ground since then (Graph 13). Although the country still benefits from a small positive effect of the product structure of its exports on its market share, the geographical composition, which had a positive effect before the crisis, started to act as a drag on the export market share as the cycle entered a downward leg. However, relatively strong competitiveness effects have had a significant cushioning effect, and redirection towards more dynamic geographical destinations has mitigated the loss.

Graph 13: Market share gains in product markets and geographical destinations



Source: COMTRADE, Commission services.

In contrast to the improvement of the relative export performance of re-exports, the recent performance of domestically-produced exports of manufactures has been

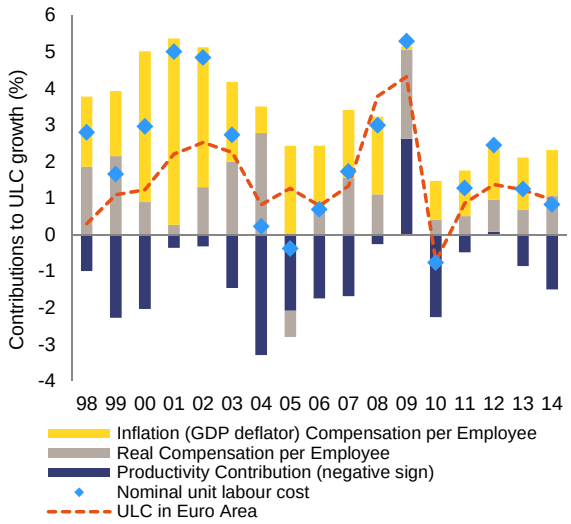
[12] The markets for domestically-produced exports and re-exports are broadly the same.

decreasing in the last few decades.[13] An important explanatory factor for the relative underperformance of Dutch domestically produced exports can be found in the very different product mix of domestically-produced exports versus that of re-exports. Domestically-produced exports are dominated by agricultural products, foodstuffs, chemical products, rubber and plastics, machinery and transport equipment. By contrast, computers and electronic equipment account for nearly half of re-exports and re-exports account for around two thirds of the total exports of machinery and transport equipment. Since global demand for agricultural products and foodstuffs tends to grow less rapidly than the world markets for electronic equipment and telecommunications, the overall percentage share of Dutch domestically-produced exports in world trade is falling. Second, and even more importantly, many of the Dutch exports markets are saturated, especially for some products, such as foodstuffs; increasing profits can only come from an increase in market share, not from growing demand. Venturing into new markets is necessary if global export market shares are to be maintained.

3.1.2. Cost, price and other competitiveness indicators

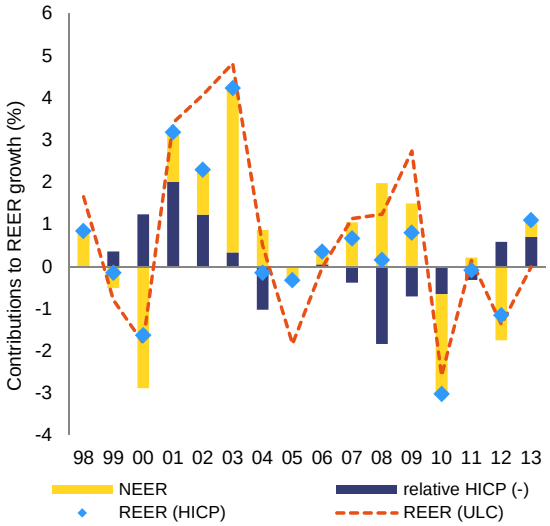
Developments in unit labour costs follow a cyclical pattern and do not pose a significant problem. Low or negative productivity growth pushed up nominal unit labour costs in the 2007-09 period. Subsequently, productivity growth rebounded and unit labour costs fell in the 2010-11 period. This is the same pattern as observed in the previous cycle, where unit labour costs shot up in 2001-02, as productivity slowed while costs and inflation increased, only to fall back to virtually zero in 2004 as the labour market cooled down and companies rationalised their operations (Graph 14). Exporters' profit margins (approximated by the relative development of export prices and unit labour costs) decreased slightly over the 2000-2010 period (due to a pricing-to-market strategy).

Graph 14: Decomposition of ULC developments



Source: AMECO.

Graph 15: Decomposition of developments in REER



Source: AMECO.

Measured against cost developments in trading partner economies, Dutch price and cost competitiveness indicators do not point to any serious competitiveness challenge. Broad

[13] Market performance correlates the volume trend of domestically-produced exports to that of domestically-produced exports in other countries or to export market growth for Dutch manufactures (CPB).

competitiveness indicators based on various price and cost measures, such as consumer prices, export prices and unit labour costs do not point to major divergences between the Netherlands vis-à-vis a group of 36 industrialised countries or the euro area. Overall, most cost and price competitiveness indicators appreciated from 1997 to 2002, pointing to decreasing competitiveness, and have stabilised since then (Graph 16).

Graph 16: Real cost- and price- competitiveness indicators (1999 = 100)

Source: Commission services

Observed differences in unit labour costs measured against cost developments in trading partner economies appear to have resulted mainly from differential trends in compensation of employees rather than from differences in productivity. Since it is difficult to increase productivity through the implementation of new policy measures, at least in the short run, policy makers tend to plea for wage moderation when competitiveness needs to be improved. In the Netherlands they have done so during the 1980s, following the Wassenaar agreement[14], and, to a lesser extent, at the beginning of the 1990s. From the mid-1990s on, the growth of nominal compensation per employee in the Netherlands has been

[14] The agreement reached in 1982 between employers' organizations and trade unions implied restrained wage growth in return for the adoption of policies to combat unemployment and inflation, such as reductions in working hours and the expansion of part-time employment.

relatively high compared to its main trading partners; over the period from 2000 to 2010, unit labour costs rose by around 24% in the Netherlands, which is somewhat above the 22.5 % increases in France and Belgium, but markedly above the 4% increase in Germany over the same period. However, on the whole, labour cost dynamics do not appear to have been causing very strong losses in Dutch external competitiveness when measured over a longer period given the preceding period of relative wage moderation since the early 1980s.

While wage moderation may have favourable effects on employment in the tradable sectors, it may well result in some downward pressure on real disposable income, which is the main driver behind private consumption. Given its potentially dampening effect on domestic demand, wage moderation alone may not be a promising long-term strategy, all the more so if sectoral specialisation and possibly adverse effects, such as induced innovation, are taken into account.[15] This has given rise to a longstanding debate on whether or not wage moderation in the Netherlands has had long-term negative consequences for total factor productivity growth. Arguably, even if the impact of wage moderation on productivity or innovation was not damaging, one may still surmise that the induced skewness in the distribution of national income (with a higher profit share falling to enterprises) may have brought about dynamic inefficiencies in terms of the returns on profits generated (see below). Indeed, as a result of relatively subdued wage developments, wage shares have had a tendency to decline, while corporate margins and savings increased.

Taking a broader perspective on competitiveness, other factors may have played a role in explaining the relatively stable performance of Dutch exports in spite of the deterioration of the real effective exchange rate vis-à-vis a group of 35 industrialised countries. The World Economic Forum's Global Competitiveness report ranks the Netherlands very high, coming in fifth in the 2012-13 edition (out of more than 140 countries). Among the Netherlands' strengths are: the quality of its institutions and infrastructure, its health and education level, the goods market efficiency and its technological readiness (all ranked 5 to 9), whereas it scores lower on macroeconomic stability, financial and labour market efficiency, market size and also financial market development (all ranked in the 17 – 41 bracket).

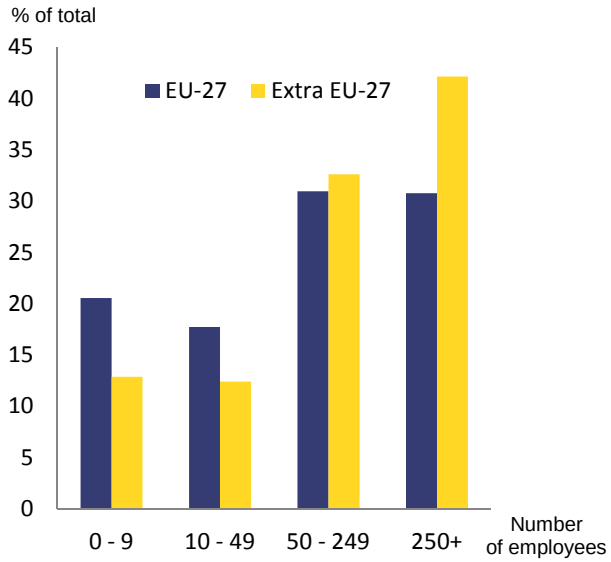
Geographical conditions and trade frictions, i.e. how accessible the country is to international competition, and at the same time, how accessible foreign markets are for domestic producers and exporters, are also an important determinant of non-price competitiveness. Regarding the latter, the Netherlands has made significant investment in key destinations and shifted production facilities abroad. Depending on the purpose of the engagement in FDI and the stage of the investment, this can lead to higher or lower exports.

Losses or gains in export market share may therefore not necessarily be due to developments in price competitiveness, but rather to the internationalisation of production. Using FDI destination countries as export bases would lower home production and thus Dutch exports. The opposite holds if unfinished products are imported back and exported after only minor processing.[16] In this respect, the good trade performance of the Netherlands can partly be explained by the relatively large share of exports accounted for by

[15] Kleinknecht, 1994.
[16] Di Mauro et al., 2008.

medium-sized firms (50-249 employees), contrary to many other countries. Medium-sized firms seem to account for a similar share of exports to closer-to-home destinations (EU27), although larger firms (+250 employees) still weigh stronger in exports to distant extra-EU markets (Graph 17).

Graph 17: Distribution of exports by size class, 2010



Source: Commission services.

Against this background, it appears that, despite declining export-market shares for domestically-produced exports, the Netherlands does not exhibit serious problems regarding its competitiveness or export performance. The positive trade balance reflects the increasing links of the Dutch economy into global production chains and the benefits from locational factors, but also a competitive edge from adding even a small percentage of value added to the large flows of goods channelled through the Dutch territory. By contrast, relative market shares for domestically produced exports, originating notably in industries such as foodstuffs and chemicals, have developed less favourably, pointing to a possible challenge with respect to the competitiveness of domestically-produced exports.

3.1.3. Sectoral contribution to the current account balance

The current account not only provides information about a country's net exports and its remittances. As part of the general balance of payments equation, it is also the counterpart of the financial account (and the capital account which is of much smaller size). Moreover, in national account terms, a current account surplus implies an excess of savings over investment aggregated across institutional sectors. Therefore, this section takes a closer look at the sectoral savings balances in order to examine to what extent savings and investment decisions of households, firms and the government have been driving the current account surplus.

The most striking development in the sectoral breakdown of the Dutch current account is the switch from a significant savings' surplus emanating from households towards a savings' surplus of non-financial corporations from approximately 1999 onwards (as illustrated in Graph 18). For many decades Dutch households have recorded a sizeable saving surplus. This was mainly due to significant occupational pension savings, which, although managed by pension funds, are part of households' savings, leading to a near-term savings

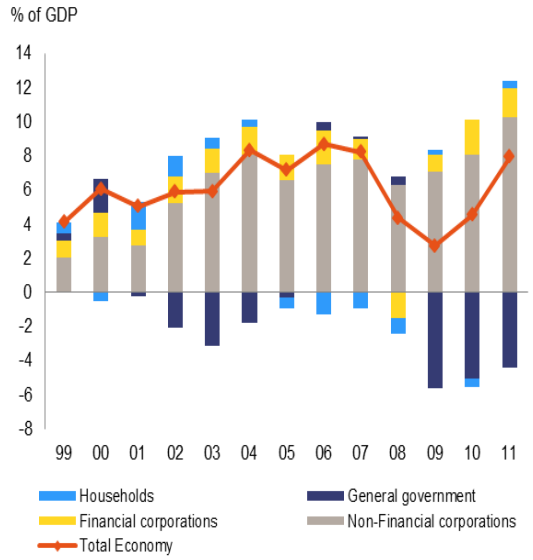
bias that will fade out as ageing progresses. The importance of the second pension pillar is much higher in the Netherlands than in other countries with pension funds of which the assets constitute an ever-larger part of total accumulated savings in the country[17]; they have grown from approximately 70% of GDP in 1990 to 136% of GDP in 2010. However, since 2002, even if the mandatory second pillar occupational pension contributions and the third pillar contributions are taken into account, total savings of Dutch households have been below the euro area average[18]. Therefore, the often heard reasoning that the national savings surplus is due to the high households' pension savings, may have held until the mid-1990s but no longer applies. From 2005 onwards, the household net lending position turned into a trend deficit (allowing for cyclical influences). One important explanatory factor for this shift is the increase in financial leverage of households, largely reflecting trends in housing and mortgage markets (see below).

The positive saving-to-investment balance of non-financial corporations can be mainly explained by high aggregate corporate profitability going hand in hand with substantive capital exports. Corporate net lending has been around 8% of GDP on average over the last decade (Graph 18). The excess of gross corporate saving over fixed investment amplified between 1998 and 2004, mirroring a roughly equivalent rise in gross saving and fall in gross fixed capital formation starting around the turn of the century (Graph 19). A trend fall in the domestic investment ratio seems to have occurred also across other euro-area countries, possibly partly related to capital-saving biases in new technologies. Moreover, residential investment has dropped to particularly low levels, especially in light of the strong increase in housing demand and mortgages in the decade prior to 2008.

[17] The Netherlands has a long-standing funded second pension pillar (dating back to the 1950s), on top of a public first pillar for every Dutch citizen of 65 years or older organized as a PAYG system. The second pillar, the supplementary pension, which is also mandatory, and in which in principle every employee has to participate, is the most important part of the system. The third pension pillar, which is relatively modest in size, consists of additional private savings, for instance, through tax-preferred pension accounts.

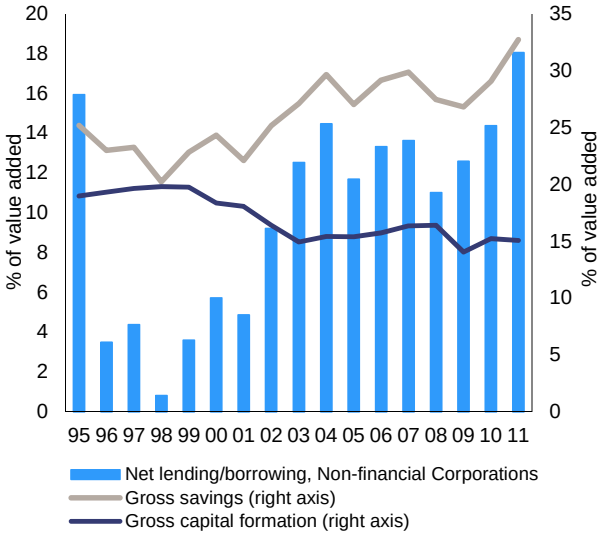
[18] In 2011 households gross savings rates were 11.6 % in the Netherlands vs. 16.5 % in Germany, 13.1 % for the euro area and 11 % for EU27 (Eurostat National Accounts).

Graph 18: Net lending and borrowing by sector



Source: Eurostat.

Graph 19: Savings and investment of non-financial corporations



Source: Eurostat.

To an important extent, the emergence of a persistent savings' surplus in the non-financial corporate sector is a result of the increasing importance of globalisation and financial integration in shaping corporate balance sheet adjustments. The increase in corporate savings has been accentuated since the crisis by cyclical weakness in domestic investment and the slump in the housing market weighing on housing investment. The mirror image of sluggish domestic capital formation has been the increase in foreign direct and portfolio investments since 2000. Non-financial corporations have used direct investments to penetrate new markets or to achieve efficiency gains through splitting the value chain of the production[19]. FDI inflows also expanded, seemingly attracted by the favourable geographical location and historical ties of the Netherlands, but also due to its reliable institutional setting and legal framework. It is not clear to what extent these capital flows are genuine investment from one country to another or whether they represent "round-tripping" of capital. In this sense, part of gross FDI inflows and outflows could be considered merely as a statistical discrepancy and may to a large extent be attributed to the strong presence of multinational companies residing in the Netherlands, channelling FDI and redirecting income flows to and from subsidiaries or affiliates in other countries through so-called Special Financial Institutions (SFIs).[20] Since SFIs do little else than channel funds, their external claims and

[19] Financial flows are classified as direct investment when a foreign investor possesses at least 10% of the total equity capital or voting rights or the equivalent thereof. Therefore, portfolio investment data and FDI data are closely related. FDI can be categorized into three components: equity capital (for example, mergers and acquisitions), reinvested earnings (i.e. undistributed profits imputed to the direct investor) and intra-company loans. What is important is that the investor acquires a permanent interest in the company and can exert a substantial influence in the companies' management board.

[20] An SFI is a subsidiary - sometimes little more than a letterbox or an anonymous office - of a foreign parent company that receives or borrows funds from abroad and transfers them to the parent or to other group companies, often to reduce global tax exposure. SFIs are particularly active in the field of direct investment (participating interests and intercompany financing). SFI's are generally set up with foreign capital only, which is usually also brought back in there again under the semblance of 'foreign' investment. The aggregate balance sheet of all SFIs was over EUR 2300 billion (in 2009), almost half of the total Dutch external claims (EUR 4700 billion, more than nine times GDP). More than four-fifths of their assets (EUR 1900 billion at the end of 2009) are in external investments. On the liabilities side of the 'Dutch SFI balance sheet' the share of investments is smaller. Because the amount that SFIs transfer is so huge they are not included in the 'overall' balance of payments statistics and, since 2003, they are registered on a separate sheet. SFI's FDI positions account for no less than three quarters of total FDI from the Netherlands.

obligations nearly cancel each other out. This is why they are of little significance to the *net* external asset position of the Netherlands and to the measured flow of the current account balance.

As FDI outflows have increased, investment earnings in the form of profit remittances[21] received from foreign operations have also grown substantially, clearly affecting the balance of payments.[22] This trend appears to have been supported by the favourable tax treatment of repatriated foreign income in the Netherlands. One of the factors that make the Netherlands fiscally attractive is the so-called 'participation exemption' that exempts business profits (dividends as well as capital gains) from subsidiary companies abroad from corporate income tax levied in the Netherlands.[23] A second factor is the large Dutch Double Taxation Treaty (DTT) network that substantially reduces withholding taxes on dividends, interests and royalty payments between Treaty countries and the Netherlands. A third factor is the "advance tax ruling" system whereby, contrary to many other countries, the Netherlands offer the possibility to discuss tax positions in advance with the Dutch tax authorities. These discussions can be formalized in agreements binding both the taxpayer and the tax authorities. Something that should be duly taken into account when interpreting FDI data is the fact that to avail of such tax treatment, transactions generally take place via intra-company channels. These intra-company transfers often reflect shifting profits between countries (notably in multinational companies).

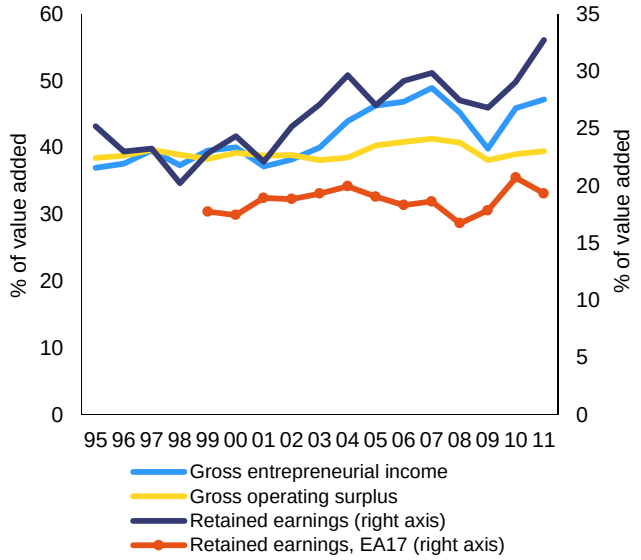
Dutch multinational companies make a large contribution to the Dutch current account surplus as registered in the official data because a large part of their earnings are retained and reinvested, rather than being paid out as income to foreign portfolio investors, thus driving measured corporate savings (Graph 20). The Netherlands is relatively sensitive to this effect because the presence of multinationals in the country attracts many foreign investors (Dutch shares in foreign hands amounted to 55% of GDP in 2011 versus only 20% in Germany and 15% in the United States). All of their profits (both distributed and non-distributed profits or reinvested earnings) realised abroad through foreign subsidiaries are counted entirely as income for the Netherlands. As a result, the more profits Dutch multinationals make and the less is paid out, the higher the effect on the current account.

[21] Profit remittances on FDI not only cover payments of direct investment income, which consist of income on equity dividends, branch profits, and reinvested earnings, but also income on the intercompany debt (interest). Some of these profits do not derive from physical goods, but from, for example, royalties on intellectual property, which makes it easier to shift them to a tax haven.

[22] The *net* impact on the balance of payments of outward FDI results from subtracting the FDI outflow from all the positive flows associated with the outflow, mainly repatriated profits, dividends and interest (on the income account), and net receipts of royalties and license payments (on the services account).

[23] Traditionally, this participation exemption on cross-border intra-firm dividend payments has been a major attractor of companies to the Netherlands. It implies that when transnational companies repatriate affiliate income, or in other words, pay themselves dividends from abroad, the tax treatment of this income is not subject to domestic taxation. Although this system is applied in most EU countries, with the exception of Greece, Ireland, Spain and the United Kingdom, the extent to which income is fully or partially exempted varies across countries and is affected by the provisions of bilateral tax treaties.

Graph 20: Profit margins of non-financial corporations



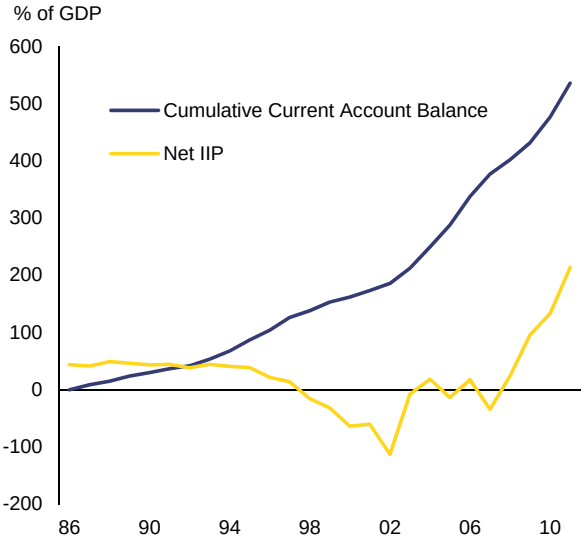
Source: Eurostat.

Dutch pension funds, by far taking the lion's share of Dutch shareholders' interests in foreign companies, counterbalance this upward effect on the current account, since only the profits (generated by the foreign company) that are distributed as dividends to the Dutch shareholder are counted as revenue in the Netherlands (given the investors' interest of below 10%).

3.1.4. The net international investment position

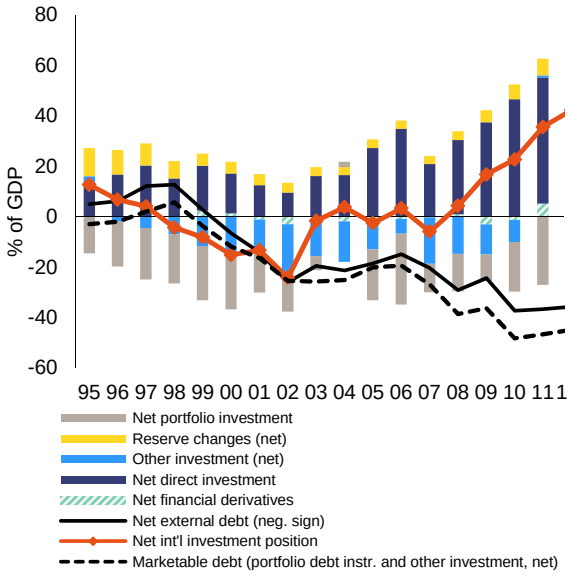
According to official statistics, the Netherlands has had a poor track record in terms of building up a solid net international investment position (NIIP), despite generating persistent and large current account surpluses. Graph 21 shows that the external assets and liabilities position of the Netherlands has been subject to persistent significant negative valuation effects which have contributed to dampening the effect of the current account surpluses on the NIIP. Over decades, the Dutch net savings surplus initially did translate into a small positive NIIP. In 1998, for the first time, the country became a net debtor. In 2002, finally, the NIIP reached a low of minus EUR 113 billion (24.4% of GDP) despite a history of persistent current account surpluses. The net external position only turned positive again in 2004 and 2006 by a mere EUR 2 billion (less than 1% of GDP). In recent years, sharp swings in asset valuation in response to the economic and financial crisis in 2008-2010 have clouded longer-standing trends: paradoxically, the Dutch NIIP improved markedly during these crisis years.

Graph 21: Cumulative sum of current account balances vs. NIIP (% of GDP)



Souce: De Nederlansche Bank.

Graph 22: NIIP by instrument



*Note: * indicates estimated figure using quarterly data.*
Source: Eurostat.

The Netherlands relied on FDI as a vehicle to invest its excess savings abroad (Graph 22). The stocks of FDI abroad have clearly exceeded direct investment by foreign investors in the home economy. At the end of 2011, the net positions in FDI were very high in the Netherlands (51% of GDP) compared to other countries. These figures might give a somewhat distorted picture, since an important part of direct investments takes place because of tax optimisation strategies of multinational companies through so-called special purpose vehicles (SPVs). This is also apparent in the very high stocks of inward and outward investment, which are largely composed of intercompany loans and/or undistributed (and reinvested) profits. This role of the Netherlands as an international financial intermediary is also highlighted by the geographical composition of the NIIP (mainly outside the euro area and EU-27) (see above).

In contrast, the Netherlands has had a negative net stock of portfolio investment. This means that the stocks of domestic portfolio debt and equity owned by foreign investors exceed the gross holdings of foreign portfolio assets by residents. This can be explained by the relative attractiveness of Dutch corporate and government bonds for foreign investors, in particular those from outside the EU, as safe investment instruments, but also to a lesser extent of private equity. Other investment mainly consists of cross-border loans (to a large part inter-bank and intra-bank loans) but also comprise official loans and intra-Eurosystem balances.

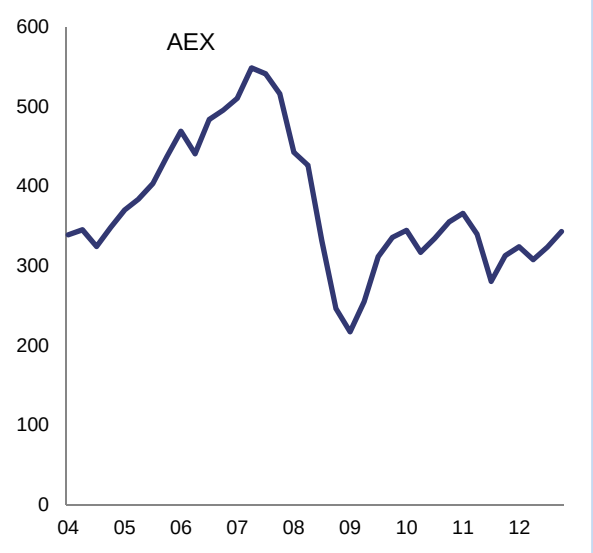
Box 1: Valuation effects

The discrepancy between the cumulative sum of current account balances and the NIIP can be explained by a number of economic factors and accounting methods used to value various categories of assets. Apart from the recorded volume of transactions in the current account, a change in the NIIP also includes capital gains (or losses) due to exchange rate fluctuations occurring during the year, shifts between financial instruments, and revaluations of cross-border external assets and liabilities. The fact that Dutch assets abroad are less marked to market than foreign assets in the Netherlands also plays a role. The changes in the outstanding amounts also include other adjustments (e.g. sectoral reclassifications, or exceptional events). Since these valuation changes do not concern transactions, they are neither recorded, nor observable in the flow statistics of the balance of

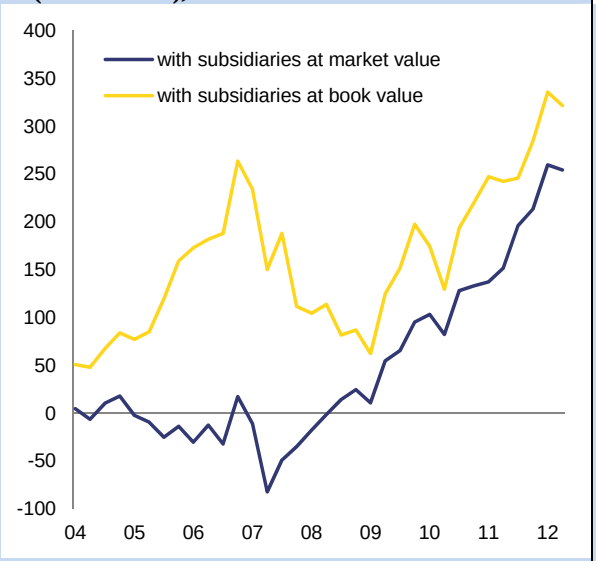
payments.

The Dutch net losses are the result of a combination of these factors. First, the steady appreciation of the guilder and, subsequently, the euro, has reduced the value of foreign-currency denominated assets and liabilities.[24] Boonstra (2008) and Lane and Milesi-Ferretti (2004) estimate a negative exchange rate effect of some 0.4% per year in the period 1987-2006[25]. Second, foreign direct investments in the Netherlands have outperformed Dutch direct investments abroad in terms of return, causing foreign holdings in the Netherlands to rise more sharply in value. Also, Dutch foreign assets have tended to be largely in FDI, whereas Dutch liabilities vis-à-vis foreigners have been more heavily directed towards portfolio equities, which tend to have higher returns. These 'performance' and 'composition' effects presumably played an important role in the 1990s. In addition, apart from exchange rate and asset price effects, one of the main other economic factors that influence the net external position of the Netherlands concerns write-offs on paid goodwill (reflecting lower than expected future profits of the company that has been taken over), leading to a lower value of direct investment. Finally, accounting methods used to value various categories of assets play an important role in explaining the discrepancy between the cumulative sum of the current account balances and the NIIP. For example, foreign subsidiaries are recorded at book value (the value entered in the books of the Dutch parent company), whereas the stocks that foreign investors hold in Dutch stock-market-listed companies are rated against market value (the value recorded at the end of the year). Accordingly, an increase in stock prices will lead to an increase of foreign liabilities, whereas the book value of foreign participations does not change, even if their market value increases, and, consequently, the net external position is underestimated. A similar story holds for the valuation of immaterial assets (e.g. human capital, market accessibility of the company in question, brand value, etc.). Graph 23 illustrates that these underestimations have been very significant for the Netherlands. In the period 2004-2011, the difference was often higher than EUR 100 billion, sometimes twice this amount. At the end of 2011, the country was more than EUR 70 billion richer according to the market-value figures of both outgoing and incoming participations (estimations by De Nederlandsche Bank (2012b), in addition to the usual figures). Stock market conditions played an important role in this respect: the more optimistic the investors, the greater the price effect, i.e. the greater the gap between market and book value.

Graph 23: AEX index and distortion of net external assets (billion euro), 2004 – 2011



Source: De Nederlandsche Bank.



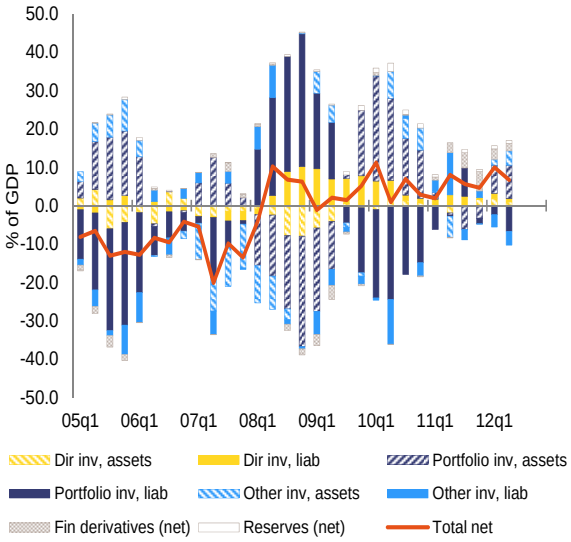
Source: De Nederlandsche Bank.

While valuation effects are not new, two factors at play in recent years have contributed to making them both more important and more volatile. First, with an increasing size of gross external assets and liabilities relative to GDP (2.5 times the Dutch GDP in 2011), a given differential in rates of return across assets and liabilities has an increasing effect on the

[24] Depreciation of a country's currency results in gains on its holdings in foreign currency denominated assets and vice versa. On the other hand, such a depreciation may also translate in an increase in value of it foreign liabilities.
[25] This is a rough approximation, as the currency composition of most asset and liability categories is not known.

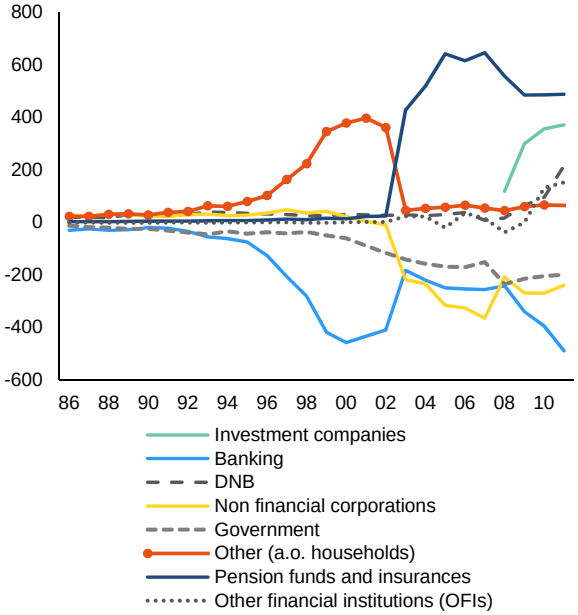
dynamics of the net position. As a result, valuation effects have become more important for the external position of countries than the current account flows. Second, the relative importance of direct and portfolio investments in international portfolios has increased, and these instruments have on average higher and more volatile returns than debt instruments. In these high risk categories the return usually comes in the shape of capital gains or losses, and adjustments in the book value of FDI, which do not result into measured cross-border cash flows and therefore fall outside the scope of the balance of payments (but affect the net IIP through valuation changes). In the low risk categories (debt instruments, loans, interbank positions), the yield comes in the form of interest income, which is recorded on the income account of the balance of payments, but these all carry relatively minor weight[26]. The volatility of returns is illustrated by the crisis, which brought about sign changes in returns on equity, indicating a reversal of fortune in the prices of foreign equity assets versus liabilities (Graph 24). In this sense, the improvement of the Dutch NIIP since 2008 appears to have been driven largely by relatively larger declines in the value of equity liabilities owed to foreigners compared to those in the value of equity assets. In other words, it is to a sizeable extent driven by a worse performance of the Dutch stock market than the average of global indices.

Graph 24: Valuation effects



*Note: * indicates estimated figure using quarterly data.*
Source: Eurostat.

Graph 25: Sectoral contribution to the Dutch external net lending or borrowing (% of GDP)



Source: De Nederlandsche Bank.

Pension funds and insurance corporations by far hold the largest stocks of net foreign assets[27], followed by investment companies and 'other financial institutions'[28] (Graph 25). In 2010, the net external assets of these three sectors combined showed an increase, mainly as a result of revaluations, to EUR 838 billion, or 142% of GDP[29]. The external asset position of pension funds and insurances deteriorated in 2008 and 2009, caused by the fact that pension funds shifted a substantial proportion of their investments abroad to (domestic) investment

[26] Lane and Milesi-Ferretti (2004).
[27] The data on pension funds were included into the 'other/households' category until 2002; from 2003 on they are registered apart in a 'pension funds and insurances' category, explaining the break in continuity between 2002 and 2003.
[28] Including a.o. investment funds, financial holding companies, special purpose vehicles (SPVs) and special financial institutions (SFIs).
[29] De Nederlandsche Bank; commission services' calculations.

funds, but also due to the losses they suffered as a result of a strong decline in equity prices (mainly stocks) as well as market interest rates. At the end of 2008 and 2011, this led to a fall of coverage ratios[30] below the statutory minimum of 105% and in some cases even below 100%, compared with 144% at the end of 2007.

Other institutional sectors, such as the Dutch government, non-financial corporations and the Dutch banking system, all have a net external liability position. In 2008, negative valuation effects implied a strong decline in foreign obligations of non-financial corporations, due to the fact that the large majority of stocks issued by these corporations are quoted on the stock exchange, whilst on the asset side they mainly hold non-quoted stocks.

3.2. Household indebtedness

This section analyses in greater detail the nature of household debt and the factors underlying its build-up as well as the possible risks that the high level of household debt may entail for the economy, given that debtors are vulnerable to shocks, e.g. interest rate increases and house price declines, and any deleveraging pressures would negatively impact on growth.

3.2.1. Factors underlying the build-up in household debt

Household debt has increased strongly over the last decade and reached an all-time high of 128.5% of GDP (or 266% of disposable income) in 2010, before decreasing afterwards to 127.6% in 2011. The bulk of household borrowing has taken the form of mortgage debt: outstanding residential mortgage debt amounted to EUR 640 billion - corrected for securitization[31] - in 2011, or 106% of GDP.[32] In view of this, a closer look at housing market developments is warranted.

3.2.1.1. Housing market policy framework

The Dutch housing market has been largely shaped by government policies. A range of policy interventions and incentives were originally aimed at stimulating home ownership and providing affordable good quality housing to low income classes. They encompass direct and indirect government subsidies and fiscal incentives, controls of the supply of housing through zoning restrictions and rent regulations, and financial guarantees.

In response to public policies, the Dutch housing market has shifted towards higher owner-occupancy over the past three decades. Today, around 60% of the 7.4 million dwellings are owner-occupied, up from 42% in 1980 but still comparatively low on a European scale. By contrast, nowhere else in Europe does social housing dominate the housing market as it does in the Netherlands. Social housing represents 33% of total dwellings. More than three-quarters of all tenants rent a dwelling from a social housing corporation, non-profit organisations that have to act on a commercial basis but are required to use their profits for the provision of good and affordable housing. Social corporations were formally separated from the public sector in the 1990s and now form part of the non-financial

[30] The Financial Assessment Framework, which is part of the new Pension Act for the 2nd pillar, sets out the requirements for the financial position of a pension fund, which is largely reflected by the coverage ratio (i.e. the relationship between the fund's assets and the pension fund liabilities). In addition a pension fund must hold enough financial buffers (equity) to be able to cope with setbacks, such as interest rate developments, increasing life expectancy and financial markets turmoil. The pension fund's investment results as well as the liabilities are valued at market price.

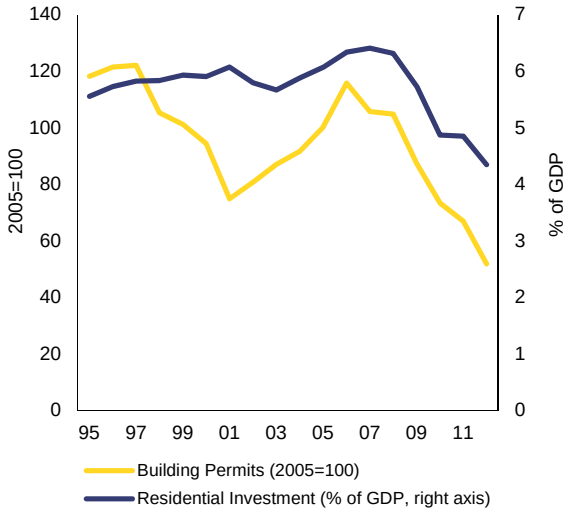
[31] De Nederlandsche Bank.

[32] 40 % of GDP in 2007 for the euro area as a whole. Mortgage debt as a share of disposable income increased from 151% in 2000 to 250% in 2010, according to Eurostat, one of the highest shares recorded of any advanced economy and the highest in the euro area, which had an average ratio of 99% in 2010 .

business sector, even though their core mandate is to pursue a public function and to this end they are heavily regulated. The expansion of the social housing sector up to the mid-1990s was accompanied by a sharp fall in private renting, which currently accounts for a mere 7% of the total housing stock.[33]

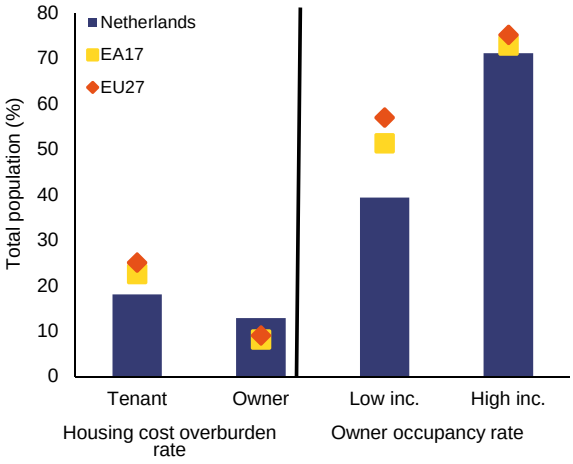
However, collectively, these interventions have become costly and inefficient in achieving their aims, with a gradual build-up of distortions and rigidities in the housing market, which carry an economic efficiency cost in the wider economy, inter alia, in terms of capital misallocation toward housing, disproportionately favoring high-income taxpayers, budgetary costs, redistribution of wealth, and having ambiguous effects on housing tenure and labour force mobility due to high transaction costs. The institutional set-up also stoked house price rises.[34]

Graph 26: Residential investment and building permits



Note: 2012 estimated figure using quarterly data.
Source: Eurostat.

Graph 27: Structural housing features (average 2008 – 2011)



Source: Eurostat.

Box 2: The 1901 Housing Act and the 1994 grossing and balancing operation

The foundations of the strongly regulated Dutch housing supply and planning were laid in the Housing Act (*Woningwet*) of 1901, which responded to the often poor housing conditions prevailing at the time and obliged municipal governments to develop and enforce formal zoning plans. Government involvement in housing supply was further boosted in the aftermath of the Second World War. In the course of the 1980s, the political agenda changed, and the sense of urgency with respect to housing construction waned as outright shortages had been overcome.[35] Since then, a process of decentralisation has been underway, and, today, providing social housing is seen less as a task of central government than a responsibility of the regional and local levels, with municipalities, housing corporations and households as the main players. Municipalities can develop their own regulations, as long as they comply with the 1965 law for spatial planning (*Wet Ruimtelijke Ordening*) the aim of which is to concentrate people in urban areas, to preserve landscapes and townscapes and to take into account the special topography of the Netherlands. Spatial plans in conformity with the law provide very detailed regulations affecting the environment, air quality and urban aesthetics, as well as detailed urban

[33] CBS (2011).
[34] Vandevyvere and Zenthöfer (2012).
[35] Vermeulen and Rouwendal (2007).

development criteria on the types of dwellings that can be built, often including a very restrictive maximum height of houses, limiting the possibility to increase living space on a given lot. This has led to constraints on land supply in suburban areas in a period of growing housing demand and may have been a factor causing house prices to rise. Building regulations and administrative procedures arguably restrict housing supply and led to a supply that is quite inelastic to house price changes.[36] At the same time, in a densely populated country such as the Netherlands spatial planning processes have arguably helped manage competing claims on scarce land.

A major change in the Dutch housing policy occurred in the 1990s, when most of the subsidies on housing construction were abandoned, and housing corporations became, after many years of deregulation, financially independent at the end of 1994, although still subject to government supervision; they work hand in hand with local authorities to roll out policy initiatives. They are also granted an exemption from corporate tax and can buy public land at reduced prices for the purpose of building social housing. Since then, on top of the rents from their tenants, housing corporations mainly raise funds through activities in the non-social housing sector (renting to people with higher income, construction and selling of homes) and can raise capital from selling dwellings which are recorded on their books at values far below market values. The government offers housing corporations various cost-reducing facilities, mainly through the Guarantee Fund for Social Housing (*Waarborgfonds Sociale Woningbouw*, or WSW). Social housing corporations can also obtain loans at favourable conditions from the Bank of Dutch Municipalities (*Bank Nederlandse Gemeenten*, or BNG), a special purpose public bank with an exceptionally good credit rating, which only lends to municipalities and housing corporations and the Nederlandse Waterschapsbank (NWB). Although the BNG has a limited liability, its top rating can only be sustained under the implicit assumption that the government would support the bank in case of financial problems[37]. Finally, social housing corporations receive support from the Central Housing Fund (*Centraal Fonds voor de Volkshuisvesting*, or CFV), which redistributes funds from financially healthier housing corporations toward weaker ones, to the extent that the need arises on the part of the latter.

This policy change led to a substantial decrease in the construction of social housing. While the total amount of social sector dwellings has remained constant since 1995, their share in the total housing stock has slowly decreased from a peak of 39% in 1998 to 33% at present.

The rent regulation is based on three key elements: a maximum rent level, annual rent adjustments, which are capped by the government, and tenant protection. The rent ceiling is regulated by a point system[38], depending on the quality of the dwelling (size and facilities) and the surrounding area (availability of shops, schools, public transport, etc.). Tenants also benefit from caps to the annual rent increase, which is set by the parliament and linked to inflation. In the Netherlands, 15% of the population receive cash allowances for rents, the third highest value in the OECD.[39]

In 1993, the Dutch government set up the National Mortgage Guarantee system or *Nationale Hypotheek Garantie (NHG)*) to stimulate home ownership. Homebuyers may insure their risk of default as a result of unemployment, divorce and health circumstances by paying a small insurance premium (0.7% of the mortgage loan in 2012, increasing to 0.85% from 1 January 2013). Mortgages up to the ceiling of EUR 320.000 are guaranteed. The facility also reduces the credit risk for banks arising from mortgage loans (see below). For mortgages not covered by the NHG, lenders have to write off the remaining debt should the debtor be unable to pay the residual debt after selling the property. Because of this implicit subsidy, banks urge homebuyers to obtain a guarantee by offering lower interest rates when taking a NHG facility. Ultimately, the Dutch government underwrites the scheme in the event

[36] OECD (2011).
[37] BNG (2010).
[38] The points system is a score card according to which property characteristics are graded: square meters, facilities, type of heating etc. score points. Within the point system local scarcity does not play a role. However, as of 1 October 2011, 25 additional "housing points" for property value (WOZ) were awarded to rental homes in areas of particular scarcity.
[39] Andrews et al. (2011).

the guarantee fund should prove inadequate.[40] Public guarantees totalled EUR 782 million at end-2012, implying a capital coverage ratio of 0.52%.[41] The government thus assumes the risks of households and financial institutions stemming from mortgage debt and acts as indirect guarantor for a growing proportion of the Dutch housing market. On 31 December 2012, the NHG scheme was guaranteeing mortgage loans up to a value of EUR 122 billion, or around 20% of GDP.

Among the housing market policy interventions the generous mortgage-interest-rate-deductibility (MID) scheme stands out as particularly conducive to debt accumulation. Private home ownership has been encouraged by allowing home owners to fully deduct interest payments on their mortgage loan from their taxable income, a policy that has been in place since 1893. This has been an important benefit especially for higher income households, given the relatively high marginal rates of income tax. For mortgages on primary residences, the interest payments are income-deductible for a maximum period of 30 years. Consequently, paying off mortgages is often postponed until the loan matures and a large fraction of bought homes is fully financed by borrowed capital. This latter point is evidenced by the high average loan-to-value (LTV) ratio (the amount borrowed relative to the value of the collateral) for mortgages in an international comparison. Apart from influencing the amount of mortgage debt taken up by households and the number of households with mortgage debt, this subsidy also had implications for the types of loans involved, like interest-only loans (see below).

Policy measures proposed (and partly adopted) since April 2012 aim at unlocking the Dutch housing market, by stimulating investment, providing more support to (first-time) buyers, and addressing rental market distortions while protecting vulnerable groups. Box 3 provides a summary.

Box 3 Policy measures in the housing market

- The mortgage interest rate deductibility scheme is maintained. However, new mortgage loans (i.e. those initiated in 2013 and beyond) must take an annuity or linear form in order for mortgage interest to be deductible (adopted measure). From 2014 onwards, the maximum deduction rate of 52% (for the highest income tax bracket) will fall to 38% in steps of half a percentage point per year (over 28 years). Only the highest earners will be affected at first. The reform will be applicable to new as well as existing mortgage loans.
- On top of this, it will be possible to take another loan for repayment of the first loan. With each repayment on the first loan, a second interest-only loan builds up (it starts at zero to reach a maximum of 50% of the value of the property after 30 years). The interest rate on the second loan cannot be below that of the principal loan, but is not tax deductible. On the one hand, this allows buyers to lower their monthly interest payments, on the other hand, it allows them to build up residual debt (after 30 years).
- More funding will be made available for providing loans to first-time buyers, to support the ailing housing market. The already existing *Housing Stimulation Fund Dutch municipalities (SVn)* will receive funding of EUR 50 million.
- Prospective home buyers face more restrictive lending conditions, mainly in the form of lower LTV-ratios, which will gradually decrease from 106% in 2012 to 100% in 2018 (adopted measure).

[40] The NHG is an insurance provided by the *Stichting Waarborgfonds Eigen Woning (WEW)*, a fund that receives the onetime premiums paid by home buyers and which is used to cover any future losses. However, since the liabilities of the fund are guaranteed by the government, any large increase in defaults would ultimately have to be covered by the government. If the funds of WEW are depleted, it can request an interest-free loan from the government.
[41] Kwartaalcijfers Stichting Waarborgfonds Eigen Woningen, 4e Kwartaal 2012.

- There is a new approach concerning residual debt from the sale of a former property: from 2014 onwards, the interest payment of residual debt will become fiscally deductible for a maximum of 5 years (under certain conditions).

- According to the announced measures in the rental market, for tenants in the social housing sector, maximum rent increases will become income-dependent. Tenants with a household income of less than €33,614 would pay up to 1.5 pp above the inflation rate, for tenants with and income between €33,614 and €43,000 the difference to inflation will be 2 pp, and those with incomes above €43,000 face rent increases up to 4 pp above inflation. Landlords will be allowed to differentiate the rent increases among their properties, while tenants experiencing income decreases can obtain rent decreases, and lower-income households are partly compensated with rent subsidies for possible losses in purchasing power.

- Social housing corporations should focus more on their prime task of constructing and managing social housing and will be brought under the control of municipalities. The additional rental income of corporations resulting from the rent increases will be skimmed by increasing the property tax levy, amounting to an additional €50 million in 2013, and rapidly rising to €1.7 billion by 2017 (0.3% of GDP). The adjustment of the remuneration of directors of housing corporations is accelerated through a law on normalization of top incomes. Rules for selling part of the social housing corporations' property will be loosened.

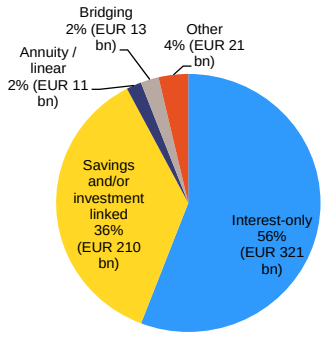
3.2.1.2. Housing finance arrangements

Lending policies of credit institutions, considerably expanding the credit scope of households in the 1990s, magnified the effects of government policies on the build-up of debt. Moreover, since 1993, a second household income can be fully taken into account when applying for a mortgage loan in the Netherlands. Liberalisation and increased competition between lenders contributed to the availability of more diversified and lower cost credit instruments, with longer maturities (typically extending to 30 years) and on more flexible terms, i.e. lower amortisation requirements and higher loan-to-value ratios.

Mortgage products have been designed to fully benefit from the tax deductibility of mortgage interest by deferring loan redemption until maturity. These include "interest-only" mortgages, which typically involve only monthly payments of interest and represent almost 60% of total mortgages in the Netherlands (Graph 28). This enabled households to take on ever larger loans, especially as interest mortgage rates have declined at the same time. However, it is not clear that households will be able to repay the principal at the maturity date, even though in practice interest-only mortgages can still involve some capital accumulation (households do build up earmarked savings and/or partially repay the principal earlier). Very recently, with the Code of conduct for mortgage loans (*Gedragscode Hypothecaire Financieringen*) agreed in 2011, which, however, is not legally-binding, banks have taken steps to reduce new issuance of this type of loan. Interest-only mortgages are now encouraged not to exceed 50% of the market value of the home. However, this does not necessarily affect gross mortgage debt, since the class of amortisation-free mortgages also includes savings, investment and endowment mortgages, which involve capital accumulation in a separate vehicle (often through insurance companies) intended to clear the mortgage at maturity.[42] With such a cheap source of finance readily available, it is not surprising that households have increasingly put their savings into those products (which they hope will bring higher returns and provide increased diversification of their portfolio) rather than amortising the mortgage.

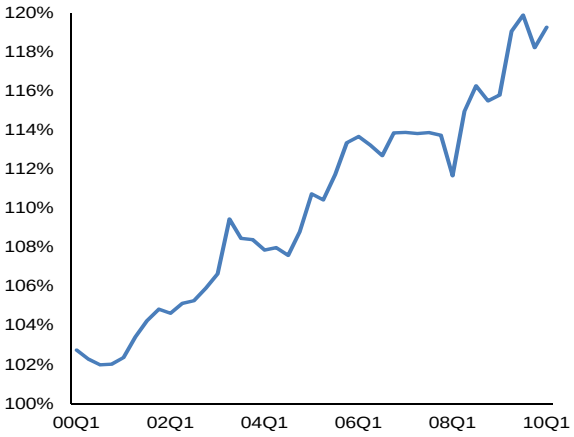
[42] Savings-based loans are essentially a fiscally-advantaged way of saving money; they include a separate account, where monthly payments are accrued and used to clear the mortgage at maturity. The returns on investment-backed loans depend, of course, on the type of investment selected. Given the development of the stock markets over the past decade, however, the realized returns on many of such products are likely to have been below those on savings-based loans. In the 1998–2007 period, more than half of all newly sold asset-backed mortgage products were investment-based.

Graph 28: Type of outstanding mortgage amounts, 2010 Q2 (% of total)[43]



Source: DNB Financial Stability Overview, April 2011.

Graph 29: Average LTV-ratio of Dutch home purchases 2000 – 2010 (in %)



Source: Het Kadaster Kwartaalbericht in: Overview of Financial Stability in the Netherlands May 2010.

The notional average LTV-ratio (or the average value of the loan relative to the purchase price or value of the property) increased from 79% in 1970 to 100% around the 2000s and even rose further to reach 120% at the end of 2009 (Graph 29). Survey results show that the total number of households with an LTV-ratio above 100% quadrupled between 2002 and 2008.[44] The uptrend in LTV-ratios in recent years has a number of causes. Undoubtedly, it reflects an underlying increase in new mortgage volumes. In addition, due to the high number of amortisation-free mortgages, the LTV-ratio of an average mortgage decreases less rapidly during the life of the mortgage than it would have for example ten years ago. However, the LTV-ratio figures are taken from the cadastre (the only comprehensive national data source available) and have to be interpreted with caution. Such ratios are to some extent overestimated and probably increasingly so in recent years with the onset of the crisis. The loan amount registered in the notarial contract is usually higher than the actual loan to allow the bank and mortgagee the possibility for future increases without involving additional costs for a new notarial agreement.[45] Moreover, often voluntary interim redemptions on the mortgage are not registered in the cadastre.

3.2.2. Risks related to high household indebtedness

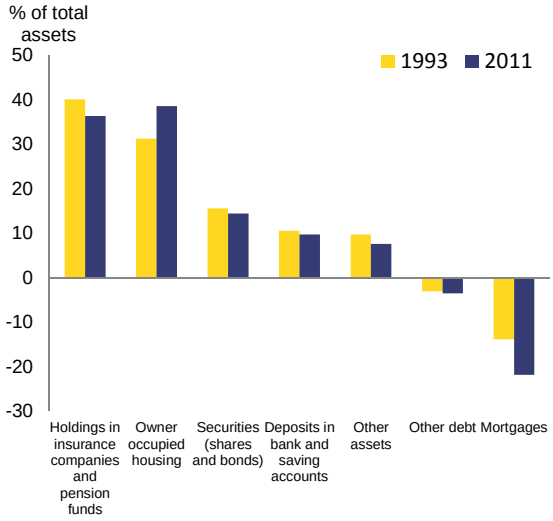
Notwithstanding a number of mitigating factors, the high level of household indebtedness warrants close attention. Indeed, the high debt level implies a heightened risk to the Netherlands' macroeconomic stability by making households' net worth more sensitive to negative shocks, such as swings in interest rates, significant drops in house prices, or a prolonged period of low or negative economic growth. Therefore, it is essential that households start repaying more and thus gradually reduce their mortgage debts.

[43] A borrower with an annuity/linear mortgage repays both monthly interest and a portion of the loan amount so that the loan is repaid on its maturity. Bridging mortgages are temporary loans that bridge the gap between the sales price of a new home and a home buyer's new mortgage, in the event the buyer's home has not yet been sold.
[44] DNB Household Survey 2003 to 2009, in: DNB (2010).
[45] Anecdotal evidence suggests that the Kadaster LTV-ratios are distorted by around 10 percentage points upwardly. The current average LTV is likely to be even lower than 110% given the maximum LTV-ratio of 106% in the 2011 code of conduct and the fact that the supervision has been tightened.

3.2.2.1. Wealth effects

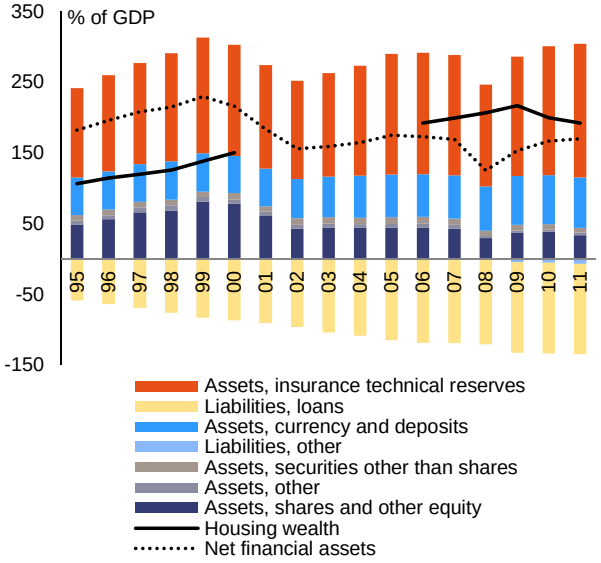
From a balance-sheet perspective, the strong overall wealth position of Dutch households mitigates their relatively high indebtedness. Much of the build-up in mortgage debt has been mirrored by even steeper increases in household wealth,[46] meaning that the net worth of households has not deteriorated (Graph 30). Households have capitalised on high and rising house prices, as shown in Graph 31: the total value of the owner-occupied housing stock was estimated at 192.1% of GDP in 2011.[47] The share of housing in total household wealth rose from 31% in 1993 to 39% in 2011, thus becoming the most important asset in households' portfolios. Gross financial assets roughly equal 300% of GDP, consisting mainly of pension and insurance assets, with an estimated value of EUR 1116 billion in 2011.

Graph 30: Household assets (including insurance companies and pension fund savings) and liabilities (% of total assets)



Source: CBS.

Graph 31: Household assets and liabilities, housing wealth and net financial assets[48] (% of GDP)



Source: Eurostat.

Moreover, Dutch households have a relatively low ratio of risky to non-risky assets[49], thanks to relatively high currency and deposits positions, and relatively low asset positions in shares and other equity (Graph 32).

Nevertheless, as the bulk of assets is tied in pensions and homes, the liquid assets buffer for absorbing direct income or asset shocks of Dutch households is relatively modest

[46] Household wealth is defined as the value of financial assets (which include equities, bonds and bank deposits, and indirect holdings in insurance companies and pension funds) plus real assets (principally housing) after the deduction of financial liabilities (which are dominated by mortgage borrowing).

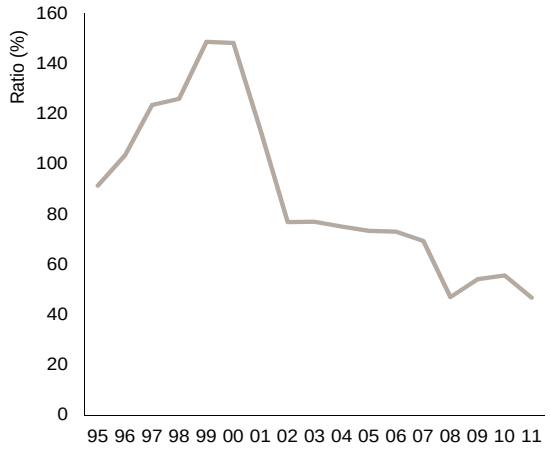
[47] Also important are holdings in insurance companies and retirement savings in pension funds of EUR 1117 billion in 2011. Other financial assets include deposits in banks and savings accounts (EUR 332 billion in 2011). Households also possess bonds and equities to the tune of EUR 200 billion. Total household assets (including housing, financial and other assets, but not holdings in insurance companies and pension funds) reached EUR 1952 billion in 2011, or 324% of GDP (including pension funds: EUR 3068 billion or 510% of GDP) CBS (2012).

[48] Households' net financial assets include pension and life insurance arrangements, shares, securities and currency and savings deposits, minus households' debt. Note that the value of own real estate property is not included in the net financial assets position of households, while mortgage debt is deducted from the financial assets.

[49] The ratio equals "shares and other equity" to "currency and deposits".

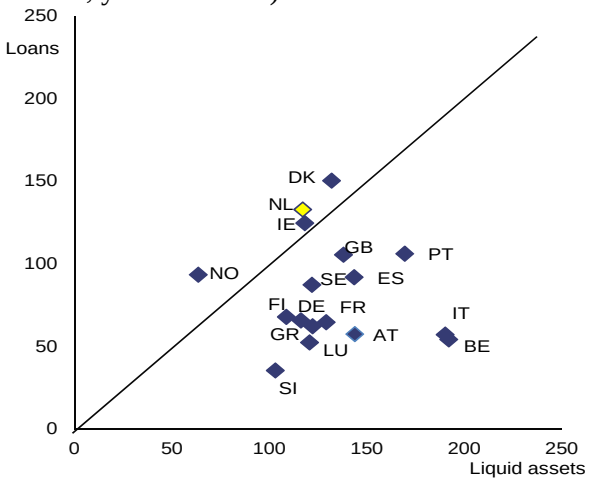
(Graph 33)[50]. Potential problems with debt servicing are therefore harder to mitigate by selling assets. On the one hand, relatively few households face acute financial problems, amid relatively low (though rising) unemployment and a still relatively contained 16.6% fall in house prices from the peak in 2008. On the other hand, however, household balance sheets are now more fragile than during earlier recessions. The rise in house prices has lengthened households' balance sheets in the run-up to the crisis, though substantial individual differences exist.

Graph 32: Ratio of risky to non-risky households assets



Source: Eurostat.

Graph 33: Financial assets of households (in % of GDP, year-end 2010)



Source: Eurostat.

In addition, in recent years, low or even negative returns on pension plan assets and declining house prices have led to a deterioration in the net wealth position of Dutch households. In principle, this trend affects all homeowners in the same way, but there are large differences in households' starting positions. Homeowners, who bought their dwellings long ago, have accumulated considerable home equity; on the other hand, given the fall albeit moderate in house prices since 2008, a number of first-time buyers, in the 25-35 age group, are now in negative home equity (where the loan balance exceeds the house value). The homes of an estimated 20% of Dutch homeowners are worth less than their outstanding mortgage loans which however does not necessarily imply foreclosure.[51]

3.2.2.2. Income and interest rate shocks

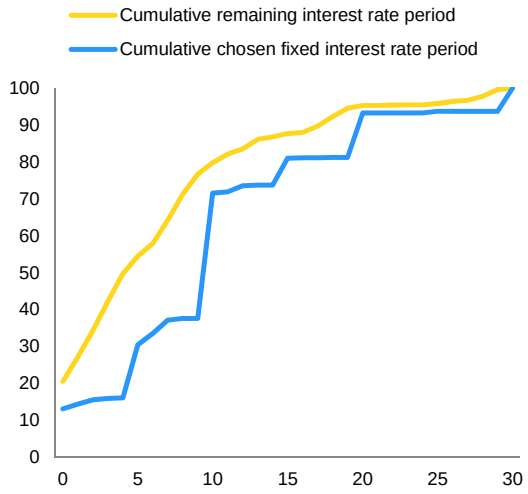
The main risk to service mortgage loans stems from repayments arrears, which have however remained very low by international standards so far. Similarly, household defaults are still very much contained; foreclosures in terms of the total housing stock in the residential property market still accounts for only 0.07% of homes[52], which is among the lowest in the EU. This is not only due to strong creditors' rights and a very strict and austere Dutch insolvency law, but also to the existence of an extensive and generous unemployment insurance system. The Dutch labour market is characterised by a low unemployment rate and a high participation rate, in an international context, which can be explained by a very high

[50] If the value of the both owner-occupied housing stock and holdings in insurance companies and pension funds is excluded, households have a liquid assets position (including currency and deposits, shares and other equity, and securities) of 117% of GDP in 2011.
51 DNB (2012a).
[52] CBS (2012).

proportion of part-time jobs and the prevalence of double-income households. Moreover, mortgage debt has mainly been incurred by those with higher incomes. A full 60% of all mortgages are held by the highest-earning fifth of households, whereas the lowest-earning fifth only hold about 3% of total debt. High-income earners usually face a lower risk of unemployment and income shocks and should thus be more able to take on debt. Problems concerning foreclosures are therefore mostly the result of unexpected life events, such as long-term unemployment, disability, death, and most importantly divorce.

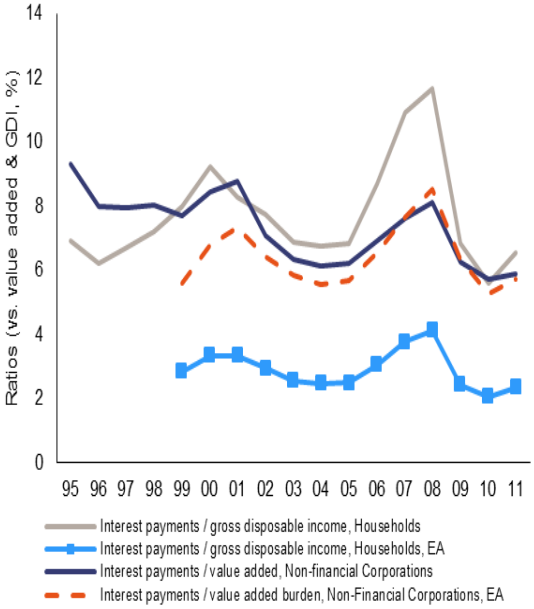
On a macro scale, the current distribution of refinancing profiles still provides protection against the pass-through of sudden increases in mortgage interest rates at the time of renewal. In 2009, about half of all mortgages had a remaining fixed interest period of 4 years or less, while one-fifth had a remaining fixed interest period of less than one year (Graph 34). Moreover, as real and nominal interest rates have declined, the rise in household indebtedness has been associated with a relatively limited debt service burden in many cases, with total interest expenditure as a share of disposable income currently at about the average level observed over the last decade (around 7%). A trend decline in mortgage rates has made it possible for households to service a growing debt stock without allocating a larger share of their budgets to debt servicing (Graph 35).

Graph 34: Cumulative distribution of fixed interest rate period and remaining fixed interest rate term in years (% of total number mortgages)



Source: DNB Household Survey 2008, in: Overview of Financial Stability in the Netherlands, November 2009.

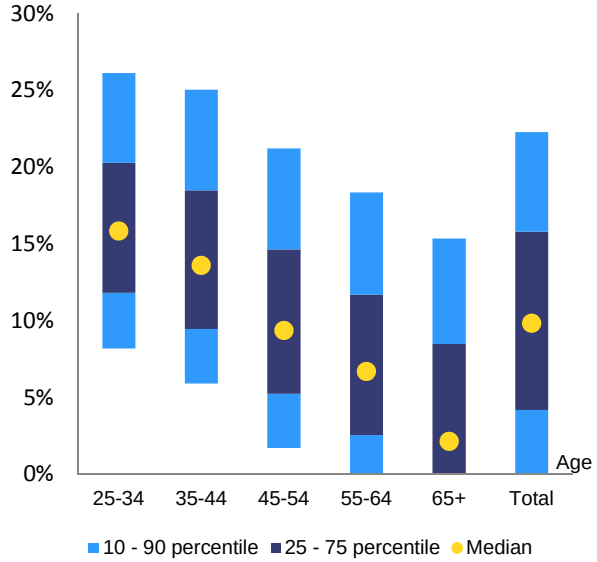
Graph 35: Interest Burden, Households



Source: Eurostat.

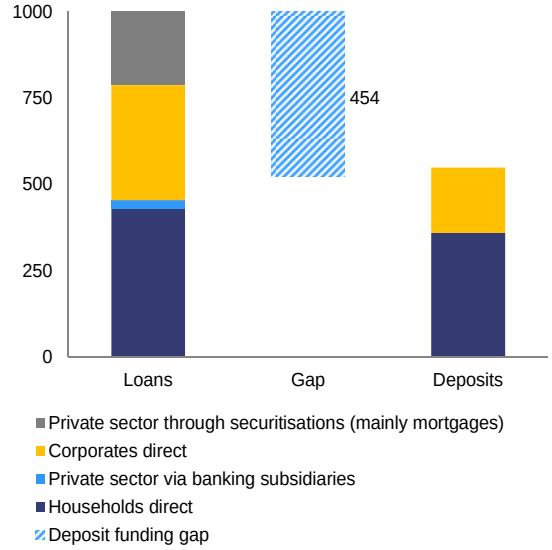
Nevertheless, relatively young households with an average to high income are currently particularly vulnerable. They have taken out high mortgages relative to their income, savings and the value of their home. Graph 36 shows that young people also spend a higher percentage of their gross income on interest charges, even with the current low interest rates. This, combined with their high level of debt and significant housing expenses, exposes them to heightened risks.

Graph 36: Interest charges by age category (% of homeowner's household income as at 1/1/2011)



Source: De Nederlandsche Bank.

Graph 37: Dutch banks' deposit funding gap 2011 (EUR billion)



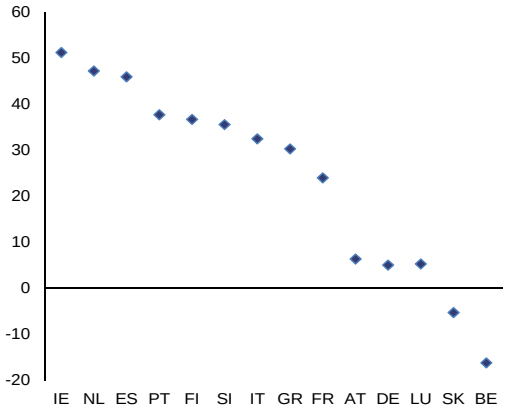
Source: De Nederlandsche Bank.

3.2.2.3. Financial sector balance sheet adjustments

Changes in the debt-to-asset position of Dutch households have highlighted the exposure of banks to longer-term mismatches on their balance sheets because of deposit funding gaps. As illustrated in Graph 37, the current total funding gap of Dutch banks is estimated to amount to some EUR 454 billion (or approximately 75% of GDP), larger than elsewhere in the EU (Graph 38), despite the national savings surplus. Dutch banks hold relatively large home mortgage portfolios compared to those in other EU countries, with a stable share of around 70%.[53] Simultaneously, banks have limited access to savings, as pension capital is not accrued in banks but rather in pension funds. Since 2008, the funding gap is narrowing slightly thanks to growth in savings, but remains large (Graph 39).

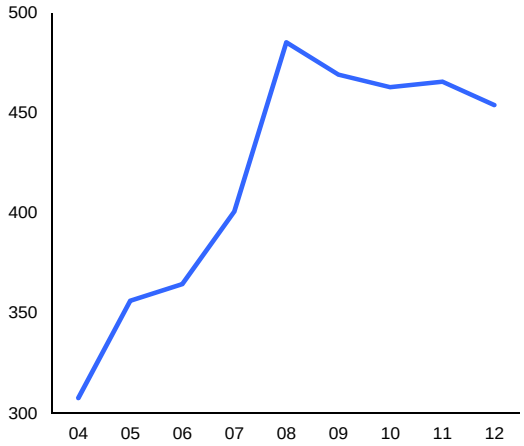
53 The Netherlands has a highly developed financial sector (with large banks, large pension and insurance funds, but also "special financial institutions"). The Dutch banking sector is large from an EU perspective, with the total value of bank balance sheets amounting to almost 500% of GDP, lower than the banking sector in the UK (650% of GDP), but much higher than that in France and Germany (350% and 250% respectively). Moreover, there is a high degree of concentration across three major players (Rabobank, ABN Amro and ING) which hold around half of total outstanding mortgage credit.

Graph 38: International comparison of deposit funding gap (% of loans not financed with deposits, end of 2011)



Source: De Nederlandsche Bank

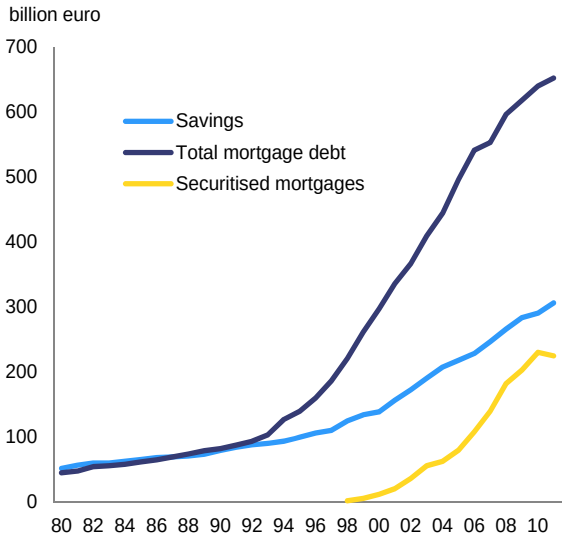
Graph 39: Development of the deposit funding gap



Source: De Nederlandsche Bank

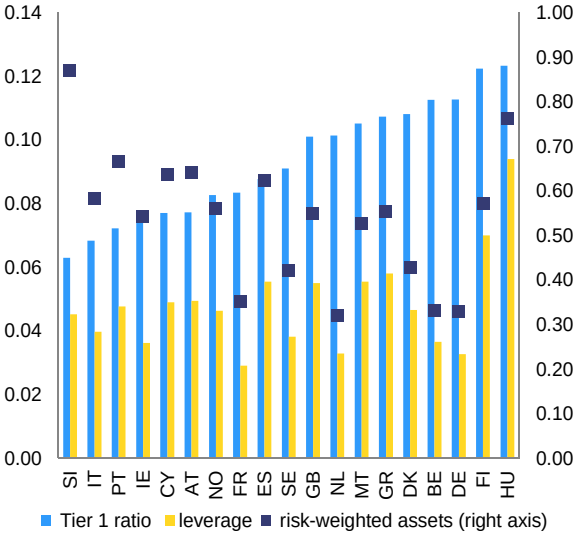
Dutch banks are under pressure to reconsider their funding model in the light of the altered market conditions and more stringent regulatory requirements, such as Basel III, which will require banks to reduce their dependence on market funding. In the wake of the crisis, the tendency of banks to fund mortgage portfolios via wholesale securitisation came under pressure (Graph 40). Since banks can only partly fund their large mortgage loan portfolios through savings deposits, they are dependent on market funding, which may dry up in periods of severe market unrest or uncertainty. Mortgage financing is generally issued with long maturity. If financing via the financial markets is geared towards short maturities, banks are exposed to higher refinancing risks.

Graph 40: Savings, mortgage debt and securitisation of mortgages since 1970



Source: Central Planning Bureau.

Graph 41: Tier 1 ratio, leverage and risk-weighted assets of European banks



Source: Central Planning Bureau.

While Dutch banks have a relatively high core tier 1 ratio in international comparison, the amount of core tier 1 capital as a percentage of total assets is nevertheless fairly low.

However, Dutch banks performed well in the latest round of EBA stress tests thanks to a favourable weighting of risk-weighted assets (including mortgage loans) and should be able to withstand a heightened level of defaults (Graph 41).

3.2.2.4. Household sector balance sheet adjustment

The urgency of balance sheet recovery for Dutch households or the immediate need for deleveraging seem less obvious than for other countries. The two most important reasons for this are the relatively favourable starting position of unemployment in the Netherlands and the relatively gradual and contained development of house prices so far.

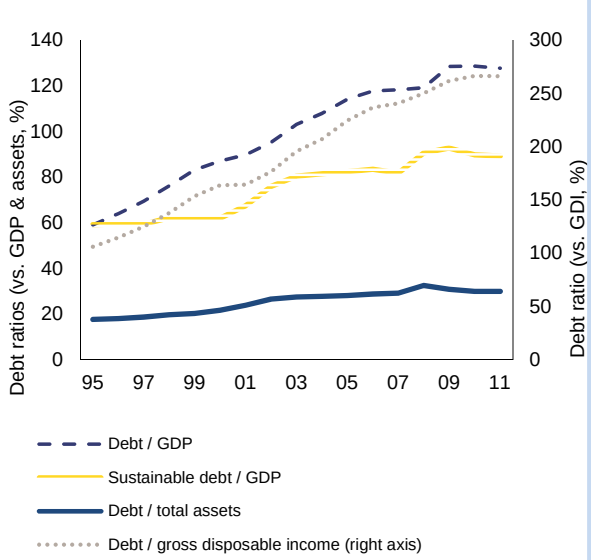
Given the high level of household assets, deleveraging pressures for the household sector are relatively contained. However, given the low degree of liquidity of these assets, Dutch households might be relatively sensitive to the impact of any balance sheet adjustments that do occur. Moreover, when considering assets adjusted for valuation effects, affecting both financial (mainly via prices of shares and other equity) and non-financial assets (mainly through house prices), the expansion of household balance sheets may have been more asymmetric than shown by headline ratios (Graph 42), implying deleveraging pressures (Box 4).

Box 4: Household debt sustainability

The assessment of the deleveraging pressures faced by Dutch households hinges on the definition of a benchmark against which to compare household debt dynamics. Private debt is considered "sustainable" whenever it implies stationarity in terms of notional leverage.[54] Deviations of the notional leverage ratio from a balanced path imply increasing deleveraging forces as debt effectively becomes less sustainable (meaning that deflated debt did not evolve in line with deflated assets).

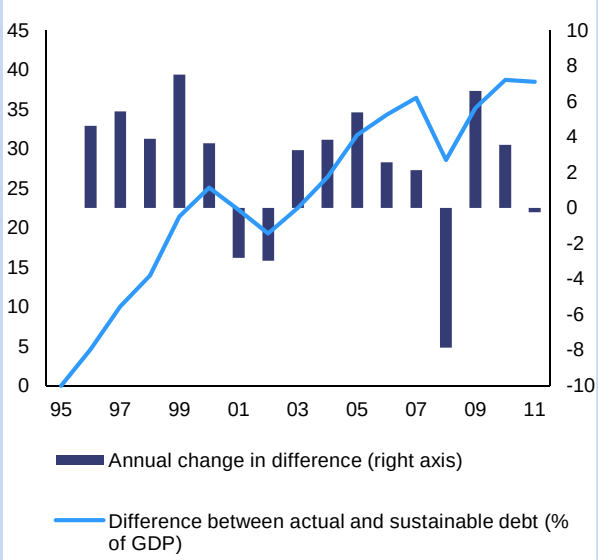
Graph 42 plots the evolution of different measures of household indebtedness (debt over GDP, debt over disposable income and debt over assets) and also reports the dynamics of an estimated sustainable benchmark. The ratio of household debt to GDP has increased from 59.1% in 1995 to 127.6% in 2011. The ratio of debt to gross disposable income followed a similar evolution. On the contrary, the change in leverage ratio was more moderate, from 17.6% in 1995 to 30% in 2011 (see 3.2.2.1) due to the concurrent increase in both asset prices and household debt. Adjusting for valuations effects, however, the measure used of notional leverage shows increases over the period considered. The gap between the actual and notional leverage opened up fairly rapidly from the second half of the 1990s and again halfway through the 2000s. Graph 43 shows tentative estimates of the annual deviations of the total gross household debt-to-GDP ratio from a synthetic measure of an underlying sustainable path (attempting to adjust for valuation effects). Using period 1995 to 2007 to calculate the cumulated increases in the estimated "excessive debt", it amounts to 38 percentage points.

Graph 42: Leverage ratios and balance sheet repair of Dutch households



Source: Eurostat, Commission Services.

Graph 43: Household sector balance sheet adjustment (difference between actual and sustainable debt, % of GDP)



Source: Eurostat, Commission Services.

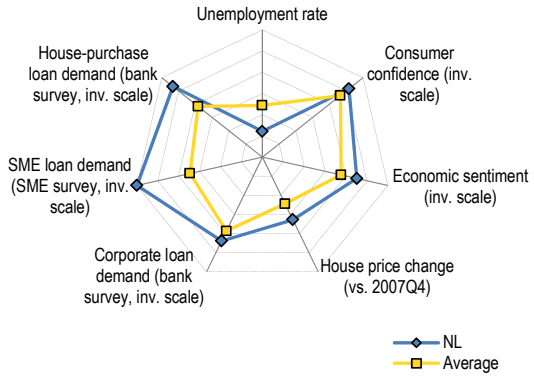
The rebalancing of household sector balance sheets towards a more sustainable level implies the closure of the gap between the actual and the balanced or sustainable debt ratios. This movement depends, on the one hand, on the actual level of debt to GDP going down (deleveraging efforts from households reducing their liabilities) and, on the other hand, on the benchmark going up (through corrections or negative valuation effects in asset prices, as houses prices and stock market adjust, allowing for an increase in the sustainable level of debt). The pace of the adjustment towards a more sustainable level of indebtedness and the associated impact on economic activity will crucially depend on the interaction between these two forces.

In the case of the Netherlands, the existing high share of financial assets (i.e. pension funds) mitigates the impact of negative valuation effects in non-financial assets (drops in house prices) as households have a more diversified asset portfolio than the average EU country.

[54] Notional leverage is defined as the deflated (i.e. corrected for valuation effects) ratio between debt and total assets (financial and non-financial).

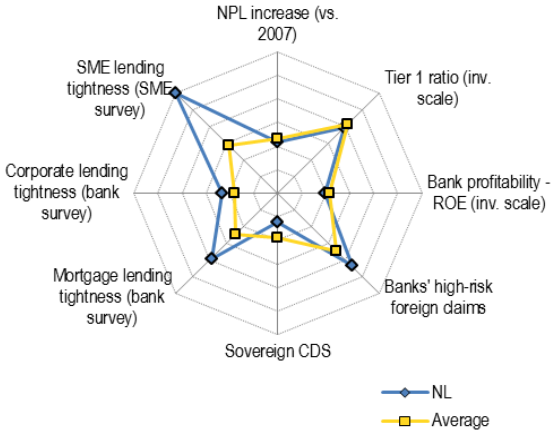
At the same time, heightened uncertainty about the economic outlook has reduced the incentives to leverage up against housing wealth. This is illustrated in Graph 44[55], which builds on survey data but should be taken with some caution as it benchmarks against the EU-27 and may not necessarily reflect a calibrated gauge of Dutch credit conditions allowing for long-run fundamentals. The depreciating value of financial assets and declines in house prices, along with increased income insecurity, have already prompted households to rein in their spending and step up saving in order to rebuild their balance sheets. Low confidence among economic agents and the pro-cyclicality of pension premiums and pay-outs tend to accentuate the drag resulting from housing-related wealth effects.

Graph 44: Credit demand conditions



Source: ESTAT, ECB, IMF, BIS, European Commission, Datastream, own calculations

Graph 45: Credit supply conditions



Source: ESTAT, ECB, IMF, BIS, European Commission, Datastream, own calculations

Moreover, by adopting stricter credit criteria banks could potentially speed up balance sheet adjustments. As their capital ratios have to be restored, banks' ability to accommodate demand for credit could potentially be reduced (Graph 45). Any pick-up in credit demand will exacerbate this tension. In recent years, banks have sharpened the credit conditions for corporate loans due to increased economic risks and capital and financing costs. Combined with decreased credit demand, this has dampened credit growth by 1 to 3 percentage points, affecting especially small and medium-sized enterprises (SMEs). Though currently Dutch banks are not yet scaling down their domestic activities, credit growth is below the long-term trend. This declining credit growth of course follows years of exuberant

[55] Graphs 45 and 46 present stress maps of credit demand and supply conditions. For each variable the range of the graph is given by the maximum and minimum observation among all Member States (MS) with available data. A weighted average of all available EU27 Member States is provided as a visual reference. Variables are plotted on a regular or inverted scale ensuring that a larger map corresponds to more adverse conditions. Credit demand-related data include the EC Consumer Confidence Indicator, the Economic Sentiment Indicator, the unemployment rate, the house price evolution relative to 2007Q4, the BLS changes in demand for (i) enterprises and (ii) house purchase loans, and the SAFE variable on External financing needs. Credit supply-related indicators include the change in overall non-performing loans relative to 2007, the banks' Tier 1 capital ratio, banks' return on equity, banks' exposure to high risk foreign claims as % of GDP, the sovereign CDS spread, the Bank Lending Survey (BLS) tightening of credit standards for (i) loans to enterprises and (ii) house purchase loans (trailing 4-quarter average), and the Survey on the access to finance of SMEs (SAFE) loan request failure rate (percentage of requests that did not receive all or most of the amount requested). Most recent available data are presented (2012 Q2, Q3 or Q4).

lending and cannot be seen separately from the weak economic recovery and the faltering housing market.

4. POLICY CHALLENGES

The analysis in sections 2 and 3 indicates that macroeconomic developments regarding private sector debt and deleveraging pressures, also coupled with remaining inefficiencies in the housing market, is the main challenge in the Netherlands. Although the large current account surplus does not raise risks similar to large deficits, the development of the current account also deserves attention.

It should be recalled that a relevant policy recommendation on the housing market was reflected and integrated in the country-specific recommendations issued for the Netherlands in July 2012. The assessment of progress in the implementation of this recommendation will take place in the context of the assessment of the Dutch National Reform Programme and Stability Programme under the 2013 European Semester. Addressing the structural problems underlying the key challenge outlined for the Netherlands requires a gradual redirection of policies, as embedded patterns need time to adjust.

Against this background, this section discusses different avenues that could be envisaged to address the challenges identified in this IDR.

The Netherlands has to a large extent been tapping financial flows from abroad in an original, yet potentially risky way which merits reorientation. Dutch household savings primarily end up with pension funds and insurance vehicles, which channel the bulk of these savings abroad. In recent years the net returns of these institutional investors have been disappointing and their buffers to be able to cope with financial setbacks have significantly decreased since 2008. Along with substantial pension savings, Dutch households took on substantial gross housing debt, in turn shaping the funding patterns of the financial sector. At the same time, profits received from foreign affiliates have spurred registered non-financial corporation's savings, creating a net savings surplus. Owing to its geographical location, historical ties, a traditionally strong competitive position and sound and credible institutional setting, the Netherlands has become a hub for international trade and capital flows. This allowed non-financial corporations (mostly multinationals) to channel FDI and "route" income flows, via entities in the Netherlands, between a company in one country and subsidiaries or affiliates in other countries. A partial and gradual reorientation of overall savings and funding flows towards more balanced patterns across sectors could help mitigate risks.

Profitable segments of the economy with a strong competitive edge can help to underpin domestic purchasing power. Aggregate profitability of firms has remained high in the aggregate yet with very marked differences across firms and industries. Especially SMEs oriented towards the domestic market have seen buffers diminish as labour hoarding has become costly in the presence of protracted weak domestic demand. In addition, exploiting the space in the institutional framework for pursuing differentiated wage increases and lower pension contributions, particularly in the second pillar, may help vulnerable households restore their balance sheets, while also cushioning domestic demand. Domestic demand is under pressure, with confidence indicators near historic lows, a deteriorating labour market situation, fiscal consolidation, and pressure on pension contributions and pay-outs. Lower pension contributions can also contribute to a rebalancing, although households will then have to revise their pension expectations.

Fairly sluggish productivity increases in the most recent period and the low value added of re-exports (the most buoyant segment of exports) illustrate the importance of focusing on fostering innovation and competitiveness. In this regard, public spending on fundamental research, knowledge and education can help support the long-term growth potential of the Dutch economy. Cyclical effects, finance bottlenecks, unusually high uncertainty and the impact of (expected) balance sheet adjustments all seem to play a role in the relatively low domestic rate of capital formation, yet there may also be a structural element at play. For firms, a critical reflection on how best to invest the proceeds of accumulated surpluses and how to rebalance home and foreign investments seems warranted. Balanced adjustment should have a beneficial effect on the domestic investment climate.

As regards private debt, comprehensive and appropriately timed and sequenced reforms in the housing market would reduce vulnerabilities of households, financial institutions and the government. They would also improve the allocation of capital, thus supporting the long-term growth potential of the Dutch economy. With respect to housing, initiatives that eliminate fiscal incentives for taking on debt and that encourage mortgage loan repayments are welcome. Recent measures by the government in this area appear to be steps in the right direction, but they still have to be assessed in detail. There are also obvious implications of the current housing policies on government finances, notably in terms of foregone tax revenues. Government measures recently taken only partly address these.

Moreover, measures are required to correct rigidities in the housing market, including those that have prevented the emergence of a functioning private rental market of appropriate size. Measures to advance the operation of the housing market by improving the functioning of the private rental market and reducing the inefficiencies and dead-weight losses associated with the operations of social housing corporations may help to get the market afloat. Of course, this should be done while duly protecting the segment of dwellers in need of social housing.

The imminent policy challenge will be to contain balance sheet adjustments, restore confidence, and harness growth while simultaneously stabilising public finances. Thus it is essential to strike an appropriate balance between adjustment needs and the desirability of supporting near-term activity. This implies any measures would have to be phased in gradually and predictably. In this way, both households and lenders will have time to adjust to the new circumstances and substantial and abrupt adjustments in the housing market and in finance can be avoided. Long-run gains could even be larger if, after successful fiscal stabilisation, part of the budgetary savings were to be channeled back into the economy by tax relief aimed at reducing the costs of labour, promoting investment, or a combination of such measures.

Although balance sheet adjustments initially would tend to dampen near-term economic activity, they can be expected to contribute to a sustainable recovery and the benefits should eventually outweigh the costs. Despite the restraining effect in the coming years on activity, the process of adjusting balance sheets and savings patterns should reduce the insecurity about financial stability. Within the overall fiscal constraints, efforts to promote innovation and to exploit fully differentiation opportunities in managing costs and financing opportunities will be key to a successful adjustment process. Balanced adjustment will have a beneficial effect on the investment climate and, hence, economic prospects in the long term. Managing the transition in the housing market at a sustainable pace will be a defining element of such a strategy.

REFERENCES

Boonstra, W. (2008), De betalingsbalans en de externe vermogenspositie. Over zwarte gaten, zwarte materie en goede statistieken, VU Uitgeverij, Amsterdam.

Conijn, J. (2011), De Vastgoedlezing 2011: Woningcorporaties op een Kruispunt, Amsterdam School of Real Estate.

Council for Socio-economic Affairs (2010), Naar een integrale hervorming van de woningmarkt, Commissie Sociaal-Economische Deskundigen: Sociaal-Economische Raad, Centraal Planbureau.

Centraal Planbureau (2012), CPB Financial Stability Report.

Centraal Planbureau (2010), Hervorming van het Nederlandse woonbeleid, Den Haag, *CPB Document*, No. 84.

De Nederlandsche Bank (2012a), Overview of Financial Stability in the Netherlands, Autumn 2012, No. 16.

De Nederlandsche Bank (2012b), Overview of Financial Stability in the Netherlands, May 2012, No. 15.

De Nederlandsche Bank (2012c), The Netherlands richer thanks to better figures, *De Nederlandsche Bank Statistical Bulletin*, 26 March 2012, http://www.dnb.nl/en/news/news-and-archive/dnbulletin-2012/dnb270308.jsp.

De Nederlandsche Bank (2009), Risico's op de hypotheekmarket voor huishoudens en hypotheekverstrekkers, September 2009.

De Nederlandsche Bank (2003), Recent developments at special financial institutions, *De Nederlandsche Bank Statistical Bulletin*, June 2003, pp. 21-24.

Di Mauro, F. & Foster, K. (2008), Globalisation and the competitiveness of the euro area, ECB *Occasional Paper Series*, No. 97.

European Commission (2010), The impact of the global crisis on competitiveness and current account divergences in the euro area, *Quarterly Report on the Euro Area*, Vol. 9, No. 1.

European Commission (2012), Current account surpluses in the EU, *European Economy*, Vol. 9, December 2012.

IMF (2010), Netherlands: 2010 IMF Article IV Consultation, *Country Report*, No. 10/34.

IMF (2008), Housing and the Business Cycle, Chapter 3: The Changing Housing Cycle and the Implications for Monetary Policy, *IMF World Economic Outlook*, April 2008.

Koning, P.W.C., van Leuvensteijn, M. (2010), De woningcorporaties uit de verdwijndriehoek, Den Haag, *CPB Document*, No. 202.

Kranendonk, H. & Verbruggen, J. (2008), Are houses overvalued in the Netherlands?, Den Haag, *CPB Memorandum*, No. 200.

Kusters, A. (1998), The 'black hole' bigger than ever before, *CPB Report*, Vol. 98, No. 2.

Lane, P. & Milesi-Ferretti, G.M. (2004), International investment patterns, *IMF Working Papers*, No. 134.

Mellens, M., Noordman, H. & Verbruggen, J. (2007), Re-exports: International comparison and implications for performance indicators, *CPB Document*, No. 149.

OECD (2006), Are house prices nearing a peak? A probit analysis for 17 OECD countries, *OECD Economics Department Working Papers*, No. 488, OECD Publishing.

Ruscher, E. & Wolff, G. (2012), Corporate balance sheet adjustment: stylised facts, causes and consequences, *European Economy Economic Paper* No. 449, Brussels.

van der Wal, D., Lub, H. (2009), Housing finance in the Netherlands – the impact of structural developments on households and banks, *in: Measuring financial innovation and its impact. Proceedings of the IFC Conference, Basel, 26-27 August 2008*, July 2009, BIS IFC Bulletin, No. 3.

Van Ewijk, C., Koning, M., Lever, M., de Mooij, R. (2006) Economische effecten van aanpassing fiscale behandeling eigen woning, Den Haag, *CPB Bijzondere Publicatie*, No. 62.

Vandevyvere, W. (2012), The Dutch current account balance and net international investment position, *European Economy - Economic Papers* No. 465, Brussels.

Vandevyvere, W. & Zenthöfer, A. (2012), The Housing market in the Netherlands, *European Economy - Economic Papers* No. 457, Brussels.

Verbruggen, J., Kranendonk, H., van Leuvensteijn, M., & Toet, M. (2005), Welke factoren bepalen de ontwikkeling van de huizenprijs in Nederland?, Den Haag, *CPB Document*, No. 81.

ZEW (2011), Housing Markets and Intra-Euro Area Macroeconomic Imbalances: Identifying Policy Instruments, Project for the European Commission Directorate General for Economic and Financial Affairs, No. ECFIN/C/2010/010.