Globalisation and financialisation in the Netherlands, 1995 - 2020

Joan Muysken and Huub Meijers

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Maastricht Economic and social Research institute on Innovation and Technology (UNU-MERIT)
email: info@merit.unu.edu | website: http://www.merit.unu.edu

Boschstraat 24, 6211 AX Maastricht, The Netherlands
Tel: (31) (43) 388 44 00
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Joan Muysken\textsuperscript{a} and Huub Meijers\textsuperscript{b}

Abstract:

The Dutch economy is a small open economy. Due to its persistent large current account surplus, the Dutch net foreign assets have been increasing over time. The financial sector is dominated by special purpose vehicles created for tax reasons. The financial assets and liabilities of these vehicles are issued or held abroad, amounting to around 500 per cent of GDP. The remaining part of the financial sector has almost doubled in size relative to GDP over the past 25 years. While the growth of the banking sector stagnated since the financial crisis, the financial sector continued to grow because of the presence of a funded pension system. We analyse these developments using insights from stock flow consistent models for the Dutch economy that we have developed earlier. This analysis also enables us to highlight the role monetary policy played in facilitating and stimulating the growth of financialisation.

JEL Code: E44, B5, E6, F45, G21, G32

Key words: globalisation, financialisation, quantitative easing, stock-flow consistent modelling

\textsuperscript{a} Department of Economics, SBE, Maastricht University; UNU-MERIT, CoFEE-Europe.
\texttt{j.muysken@maastrichtuniversity.nl}

\textsuperscript{b} Department of Economics, SBE, Maastricht University; UNU-MERIT.
\texttt{huub.meijers@maastrichtuniversity.nl}
1. Introduction

Total assets of the financial sector in the Netherlands increased over the past 25 years from 600 per cent of GDP in 1995 to over 1400 per cent in 2020. This size is large compared to international standards. Moreover, there are specific features of the Dutch economy that caused the financial sector to continue to grow strongly after the financial crisis. Two outstanding features are the continued growth of net trade surplus, and the presence of a funded pension system with defined benefits.

We want to analyse the growth of the financial sector in more detail below using balance sheet data from the national account statistics. The advantage of using national account data is that these are comprehensive and international agreed upon. Moreover, they are consistent with the flow data, for instance income data and GDP, and they can be compared relatively easy across countries. There is a big problem, however, when using this kind of data. While data are available on balance sheet totals and incomes of various sectors and subsectors, the transactions between the sectors are not documented. For instance, the amount of loans that banks, other financial institutions and foreign have provided in a certain year are reported, as well as the amount of loans households, firms and foreign received in that year. But which sector issued loans to which sector – f.i. which loans to firms were issued by banks, by other financial institutions or by foreign – is not reported. This problem complicates the analysis of the data considerably and requires a theoretical background. Such a background is also important to better understand the reasons for the growth of the financial sector.

In our analysis we use the tradition of stock flow consistent modelling as a background. The stock flow consistent approach, summarized in Godley and Lavoie (2007), promises a very interesting way to model the interaction between the monetary and the real sphere in a coherent framework. The explicit role of balance sheets and portfolios of financial assets of the various sectors in the model, together with the detailed impact of wealth effects on expenditure, enables us to identify the impact of financial sector operations in detail. We used this approach in Meijers, Muysken and Sleijpen (2014, 2015 and 2016) to analyse several features of the position of the financial sector in the Dutch economy, as we elaborate below for the position of the funded pension system, the deposit financing gap of banks and the financialisation of firm savings, respectively. Moreover, in Meijers and Muysken (2016) we used this approach to model the impact of quantitative easing on the Dutch economy. In the present paper, we employ the insights from our earlier analyses to construct a coherent data set from the national account data and to use these data to analyse the growth of the financial sector in the Netherlands over the past 25 years in a descriptive way. To our best knowledge, this is the first time that such a coherent overview has been presented, consistent with national account data.

The outlay of the paper is as follows. In section 2 we identify the open nature of the Dutch economy. This is reflected in the large part foreign trade plays in this economy: exports increased from almost 60 per cent of GDP in the mid-1990s to over 80 per cent of GDP nowadays, and imports followed a similar pattern, albeit at a somewhat lower level. We show how this led to an increase in national wealth, accompanied by expanding foreign assets and liabilities – exacerbated by the nature of the Netherlands being a conduit country. The expansion of financial assets and liabilities is a broader phenomenon as we demonstrate in section 3, where we also highlight the role of the pension funds. We claim in section 4 that the monetary policy pursued by central banks all over the world provided an important impetus for the expansion of the financial sector. Concluding remarks are presented in section 5.
2. Net Export surplus and accumulating national wealth

Although the importance of foreign trade for the Dutch economy is widely recognised, the consistent and increasing surplus on the balance of trade is not often mentioned as an important issue. Net exports increased from around 6 per cent of GDP in the mid-90s to around 10 per cent recently.\(^1\) Next to trade, also incoming and outgoing primary income flows are substantial. This is due to the nature of the Netherlands as a conduit country (Suyker and Wagteveld, 2019). For instance, retained earnings of foreign subsidiaries of multinationals are counted as income receipts, even though these earnings are reinvested abroad. Also, the Netherlands hosts a huge amount of Special Purpose Vehicles (SPVs) created for tax reasons, leading to earnings earned abroad which do not remain domestically. Therefore, net income flows are small, but fluctuating.\(^2\)

![Figure 1](image1.png) ![Figure 2](image2.png)

The current account balance of the Dutch economy is dominated by the trade balance and increases steadily over time, in particular after 2008. This was accompanied by a decrease in net foreign wealth from a foreign debit position of around 100 per cent of GDP in the mid-1990s to a credit position of around 100 per cent nowadays (Figure 1). Thus, over the past 25 years, foreign liabilities increased by 200 per cent of GDP relative to foreign assets.

The development of foreign assets and liabilities over time has three interesting features. First, there is a huge expansion of both foreign assets and liabilities over time due to the abovementioned creation of Special Purpose Vehicles (SPVs) for tax reasons. As can be observed from Figure 2, domestic liabilities of SPVs towards foreign, hence foreign assets, were around 175 per cent of GDP in the mid-1990s and peaked at 600 per cent of GDP in 2017 – they decreased slightly afterwards. The liabilities of foreign sectors that are held by domestic SPVs, hence domestic assets, follow a similar pattern over time, albeit at a somewhat lower level.

The second feature is that the remaining financial foreign assets and liabilities (excluding SPVs) also increased over time, as is illustrated in Figures 3 and 4, respectively. From Figure 3 one observes that foreign direct investments from abroad in domestic firms are relatively stable around 300 per cent of GDP, with a slight upward movement after 2008. Next to that, banks hold an increasing share of assets borrowed from the foreign sector in their portfolios, amounting from 50 per cent of GDP in the mid-

\(^1\) A substantial share of imports is re-exported (excluding transit): this share increased from about 35 per cent of total imports in 1995 to almost 45 per cent in 2020.

\(^2\) A considerable part of net primary income is primary income from pension funds and investment funds since most of their assets are invested abroad. This is compensated by ‘other income’ transfers, for instance due to foreign aid.

\(^3\) SPVs are measured from the national accounts by identifying the ‘special financial institutions’ that exclusively have foreign assets or liabilities.
1990s to 150 per cent of GDP in recent years – this leads to the deposit funding gap, as we discuss in the next section. Finally, other financial institutions (OFIs) play a small role.

Figure 3  
![Foreign financial assets (domestic sector liabilities)](source: CBS, national accounts)

Figure 4  
![Foreign financial liabilities (domestic sector assets)](source: CBS, national accounts)

In Figure 4 we observe that investments of domestic firms abroad are lower than foreign direct investments, albeit still at a level of about 200 per cent of GDP and increasing after 2008. This implies that domestic firms have a large portfolio of both foreign assets and foreign liabilities, with a net borrowing position vis-à-vis the foreign sector. Banks also hold lower foreign liabilities relative to foreign assets, although the foreign liabilities are at a substantial level of around 75 per cent of GDP in recent years. An interesting phenomenon is a strong growth in foreign liabilities held both by pension funds and OFIs, relative to GDP – this is the main explanation for the growth of foreign liabilities relative to foreign assets. Together these liabilities held by pension funds and OFIs amount to almost 300 per cent of GDP in recent years. Moreover, the pension funds outsourced part of their foreign investments to OFIs since 2008 as we elaborate below – this explains the diverging gap between pension funds and OFIs in Figure 4.

Figures 3 and 4 illustrate on the one hand that the involvement of the financial sector in holding financial assets and liabilities has increased over time. On the other hand, the figures demonstrate that next to banks on the liability side, OFIs and pension funds have become more important over time as participants in the financial sector. We analyse these developments more in detail in the next section.

The third feature regards the development of the prices of the foreign financial assets and liabilities in Figures 3 and 4 (i.e. excluding SPVs). The development of these prices since the mid-1990s is such that in 2008 the value gains of both assets and liabilities fall short of GDP price development and are clearly influenced by the financial crises in 2000 and 2008. However, from 2009 onwards the prices of assets and liabilities increase almost consistently relative to GDP, resulting in value gains of 6 and 13 percentage points, respectively, relative to GDP – cf. Figure 5. We will point out a connection with the QE policies of central banks world-wide after 2008 in section 3.

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4 On average over the past 25 years, firms used 22 per cent of their net savings (retained earnings) for investment in capital goods. The remaining part was invested in financial assets abroad (or used for share buy-backs). This is further analysed in Meijers, Muyssen and Sleijpen (2016).

5 Asset prices are identified in the national accounts by subtracting the transactions made in a certain year from the change in the total amount of assets in that year. The resulting ‘other’ changes are identified as value changes due to price changes till 2012. From 2012 onwards, these ‘other’ changes are subdivided in ‘value changes due to price changes’ and ‘changes for other reasons’. Thus, the identification of prices from 2012 onwards is more precise than prior to 2021. However, the ‘changes for other reasons’ after 2012 are usually very small compared to the ‘value changes due to price changes’. For that reason we interpret the ‘other changes’ prior to 2012 as stemming from price changes.
3. The expanding financial sector

We mentioned already that, next to banks, the financial sector also consists of other financial institutions (OFIs) and of pension funds. Banks are under the supervision of the central bank and issue deposits. OFIs consist of investment funds, financial intermediaries and special financial institutions. Pension funds are financial institutions that manage the funded pension system – they also include insurance companies, which are dominated by life-insurances who have the same function as pension funds. In Figure 6 we show the development of the assets for each of these sectors over time, relative to GDP. Since liabilities show a similar development, we do not present these.

The growth of the financial sector is also summarised in Table 1, to emphasise how each of the three subsectors of the financial sector has developed in a different way over time. The banking sector has grown relative to GDP till 2012, OFIs mainly did grow relative to GDP in the period 2004 – 2012, and pension fund assets have increased consistently relative to GDP, accelerating after 2007.

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6 The special financial institutions or 'captive financial institutions and money lenders' subsector consists of all financial corporations and quasi-corporations which are neither engaged in financial intermediation nor in providing financial auxiliary services, and where most of either their assets or their liabilities are not transacted on open markets. We have subtracted from these the SFIs that have exclusively foreign assets and liabilities.
Table 1  Share of total assets in GDP of the financial sector

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2004</th>
<th>2012</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>2.00</td>
<td>2.97</td>
<td>4.02</td>
<td>3.26</td>
</tr>
<tr>
<td>OFIs</td>
<td>1.44</td>
<td>1.46</td>
<td>2.71</td>
<td>2.41</td>
</tr>
<tr>
<td>Pension funds</td>
<td>1.25</td>
<td>1.55</td>
<td>2.18</td>
<td>2.73</td>
</tr>
<tr>
<td>Total</td>
<td>4.69</td>
<td>5.97</td>
<td>8.91</td>
<td>8.40</td>
</tr>
</tbody>
</table>

Source: CBS, national accounts

With respect to banks, the main growth in assets and liabilities took place in the period prior to the financial crisis in 2008 – cf. Figures 7 and 8. On the asset side, the growth of household assets was due to mortgages, which doubled in size relative to GDP and stabilised at a level around 100 per cent of GDP – we elaborate on the impact of quantitative easing on this development below. Next to that loans to firms also increased over time. Foreign assets increased initially relative to GDP, but are relatively stable after the financial crisis. The substantial share of the OFIs in bank assets reflects mainly financial intermediation. On the liability side, both deposits held by domestic sectors (dom) and OFIs are stable over time. However, foreign liabilities increased strongly relative to GDP till 2011, then stabilised a few years, and subsequently decreased from 200 per cent of GDP in 2016 to 150 per cent in 2020.

The composition of assets and liabilities of banks implies that the outstanding mortgages and loans to firms of about 150 per cent of GDP are only covered by domestic deposits around 100 per cent of GDP. The remaining gap of 50 per cent of GDP is covered by foreign liabilities. This gap is identified in the literature as the ‘deposit financing gap’ (Meijers, Muysken and Sleijpen, 2015) – it was considered as a dangerous development by the supervising central bank DNB (Jansen et. al., 2013) and the IMF (IMF, 2013). The reason is that foreign liabilities are very volatile, whereas domestic deposits are considered to be stable. Surprisingly the central bank DNB nowadays is silent about the problem of the deposit financing gap, although the problem persists.

The foreign orientation of banks reflects first of all the open nature of the Dutch economy –the many international contacts are reflected in the financial contacts. This does hold for both assets and liabilities. Next, banks want to diversify their portfolio’s. Since the Dutch economy is a relatively small economy, this implies that banks will look beyond the national borders to find sufficient means, i.e.

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7 In both figures we ignore the small contribution of the central bank and miscellaneous items.
8 In recent years an increasing share of mortgages, 16 per cent in 2020, is financed by pension funds and insurance companies.
liabilities, to finance their loans and mortgages. Finally, the increase of financial liabilities was facilitated by new financial instruments, amongst which securitisation of mortgages and other loans. These instruments are mainly traded abroad.

An important reason for the stabilisation of the growth of the banking sector is the bailing out by government after the financial crisis. Out of the four large banks in the Netherlands, three were effectively nationalised after the financial crisis – two are still under control of the Dutch state. 9 Next to that, the use of financial instruments is restricted due to tightened regulation – for instance, the securitisation of mortgages dropped from almost 45 per cent of GDP in 2009 to below 20 per cent in 2020. Banks nowadays have around 10 per cent securitised mortgages on their balance sheets and increasingly substitute these by covered bonds, which are also 10 per cent of GDP.

While the growth of banks relative to GDP stabilised after 2008, pension fund assets and liabilities continued to grow. It is important to understand that the Netherlands has a funded pension system with defined benefits. This implies that employees are mandatory members of a pension fund and have to pay a mandatory contribution, which is withheld from their wage. In return, they receive a monthly benefit after retirement, which is related to their average lifetime wage. As a consequence, each pension fund has to have enough financial assets to cover future claims. These claims are discounted at a predetermined rate, which implies that a drop in the discount rate leads to an increase in claims. Total claims will also increase when longevity increases. Finally, there is an increasing number of flexible workers – about 28 per cent of the workforce – who have no pension rights, and hence pay no mandatory pension contributions.10

Figure 9

![Graph showing assets of pension funds as a percentage of GDP (cumulated)](chart1)

Source: CBS, national accounts

The total assets of the pension funds are presented in Figure 9 and are more or less equal to the total claims.11 The growth prior to 2008 is mainly due to ageing – pension claims increased due to an increasing longevity after 1970. However, after 2008 this development was exacerbated due to the fall in the interest rate as the reaction of the central banks to the financial crisis – this led to a lower predetermined discount rate and hence higher claims. In order to cover the growth in liabilities, the

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9 Only the largest bank, RABO, survived without bail-out. The third largest bank ING repaid its last debt in 2014, the second largest bank ABN/AMRO is still owned by the Dutch state for 56%, and the fourth largest bank SNS (Recently renamed to Volksbank) is now fully owned by the Dutch state. The four banks taken together cover at least 90 per cent of the Dutch market.

10 Some self-employed have life insurances. These are included in the national accounts under pension funds.

11 The mandatory pension contributions are such that when the claims increase relative to the available assets, the contributions increase. Only in very exceptional circumstances do the benefits decrease – albeit that they are regularly not corrected for inflation. The contributions of households, net of benefits, imply each year forced savings amounting to 6.5 per cent of net disposable household income, according to the national accounts.
assets had to grow proportionally. From Figure 9 one observes that while prior to the mid-1990s pension funds had to finance their assets domestically, asset management was liberalised in the late 1990s. As a consequence pension funds started to invest increasingly abroad in order to diversify and to obtain higher returns. In that context one should realise that the sheer magnitude of assets required to match the liabilities can hardly be found in a small economy like the Netherlands, thus expansion abroad is required.

The pension funds also outsourced part of their foreign investments to investment funds (OFIs in Figure 9) from 2009 onwards. This outsourcing can also be observed in Figure 10, depicting the assets of OFIs – we mentioned earlier that OFIs consist of investment funds, intermediaries and special financial institutions. From Figure 10 we observe both a jump in the total assets of OFIs relative to GDP, and a relative increase in the importance of investment funds, towards which the pension funds have outsourced their investment.

The observations above explain why not only the assets of pension funds continued to grow relative to GDP, while the growth of banks relative to GDP stabilised after 2008, but also why OFIs assets and liabilities continued to grow relative to GDP till 2014. Since the balance sheets were multiplied by two, this resulted in a strong growth of the total assets and liabilities of the financial sector.

After 2014 asset growth of pension funds stagnated relative to GDP. Since the predetermined discount rate did meet a zero lower bound, liabilities did no longer increase due to a decrease in the interest rate, which explains the stagnation in assets relative to GDP. The subsequent increase in assets in 2019 and 2020 is mainly due to an increase in asset prices, as can be seen from Figure 11.

Even when no transactions take place, but prices of financial assets increase relative to the price of GDP, the share of assets and liabilities will grow relative to GDP. This is illustrated in Figure 11 for the prices of the assets of pension funds and investment funds. One observes that in particular after 2008 prices of financial assets of both sectors increased systematically relative to the GDP price. Since 2008 GDP price increased from 1 to 1.15, while the funds’ price increased from 1 to almost 2.3. This implies that since 2008 the share of fund assets in GDP increased by 200 percentage points due to price changes only. The development of prices of firm liabilities and houses (Figure 12) will be discussed in the next section.

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12 The assets of the special financial institutions are mainly held by households (in special entities) and the assets of financial intermediaries are held partly by banks (Figure 8).

13 The price of total assets and liabilities of banks hardly increased over time, hence not all financial asset prices increased.
The better performance of fund assets relative to pension fund assets also explains why the pension funds have outsourced their asset investment. However, the outsourcing comes at a high cost (Bezemer, 2022). While the direct returns on pension fund assets increased by about 250 per cent over the period 2009 – 2020, the managing costs increased by more than 1000 per cent. 14 In 2020 almost half of the direct returns are absorbed by managing costs.

4. The impact of monetary policy

Till the last decade, monetary policy used its deposit rate to influence the economy, with a special aim to keep inflation under control. In the period 1995 – 2008 inflation was low and the long term interest rate was falling. As can be observed from Figure 13, the ECB managed the economy by fluctuating its deposit rate (dep) around 2 per cent and setting the rate on advances (adv) slightly higher. Following the reaction of central banks around the world, the ECB dropped the deposit rate sharply in reaction to the financial crisis in order to stimulate the economy, from 3 per cent in 2008 to almost zero in 2009. The rate remained low till 2014 and even became negative thereafter – with no apparent positive effect on the economy. The negative interest rate induced central banks around the world to resort to unconventional means to stimulate the economy, dubbed as quantitative easing – amongst others this involved buying government bonds.

Figure 13

Figure 14

When implementing quantitative easing, the ECB delegated the responsibility for buying and holding bonds and other selected financial assets to the national central banks in the Eurozone. Therefore, we consider the amount of bonds held by DNB in Figure 14. This amount increased from around 4 per cent of GDP in 2011, which is already twice the usual amount held relative to GDP prior to the financial crisis, to above 12 per cent in recent years. We analyse the impact below.

The monetary policy, and in particular the low interest rate policy, influenced the Dutch economy in several ways. First, the impact of the policy is an increase in both house prices and prices of financial assets. This is well recognised in the literature – see Mersch (2020) and the references therein. This impact might also explain the relative increase since 2009 of financial asset prices of the foreign sector in Figure 5, of pension funds and investment funds in Figure 11 and firm liabilities in Figure 12. 15 One also observes in Figure 12 that house prices decreased initially after the financial crisis, but that was due to the mortgages crisis (Meijers and Muysken, 2016). The house prices recovered strongly after

14 Source: Statistics DNB. Relative to total assets, the costs increased from 0.1 per cent in 2006 till 0.35 per cent in 2020.

15 The price of firm assets did not increase, but the poor relative performance of firms’ direct investment abroad relative to foreign direct investment is well recognised in the Dutch literature (Eggelte et al., 2014).
2014, increasing by almost 50 per cent in the last 5 years. What is not well recognised in the literature and the policy debate is that the increase in house prices and asset prices stimulated wealth inequality, since only house owners and owners of financial assets profit from this consequence of monetary policy (Alves and Siva, 2021; House of Lords, 2021, pp. 21 -23). Also, there is a danger that the increase in asset prices might induce a bubble with negative consequences (Blot et al, 2020).

An important second consequence of the low interest rate policy is that pension claims increased strongly, as we discussed above. Amongst others, this implies higher mandatory pension contributions for employees, while flexible workers do not have to pay contributions (but also don’t receive pensions). This development created social tensions in the pension system which induced reforms for both regular and flexible workers that will be implemented in the coming years.

The third influence of monetary policy on the Dutch economy is more evasive. It is related to the attitude that rules that held prior to the financial crises should no longer be followed too close – some lenience should be allowed to enable individual banks to survive and to enable central banks to influence the economy directly since the low interest rate policy is no longer effective. An example of the former is that Dutch banks have systematically lowered eligibility requirements for mortgages in recent years to compete on the market for mortgages. DNB (2020) identified this development as an important determinant of the increase in house prices. An example of the latter is that central banks, including the ECB, resorted to ‘unconventional monetary policies’, resulting in quantitative easing. Amongst others, this resulted in the developments presented in Figure 14 above.

To illustrate the pervasive and elusive workings of the financial sector, we look in more detail at the impact of quantitative easing on the Dutch economy. The result of the unconventional monetary policies can be observed from Figure 15, which shows how DNB assets more than tripled relative to GDP after the financial crisis. Initially, this was driven by the increase in Target2 balances – the main component of advances to banks issued by DNB (the orange line in the figure). This increase is due to capital flight from Southern Europe – see also DNB (2016). Effectively the foreign sector transferred money to the domestic banks, increasing their positions in those banks, at the expense of increased liabilities towards DNB, which appear as increased advances (“Target2”) on the asset side of DNB’s balance sheet. The domestic banks in turn increased their deposits at DNB (or paid back advances), which appear as liabilities on the balance sheet of DNB – this explains why deposits and advances go hand in hand over the years 2011 - 2013.

The reason why banks hold deposits at DNB to such a large extent, despite the negative interest rate, can be understood from the analysis of Asriyan et al. (2021) who emphasize the role of money as a store of value. They argue that money provided by central banks provides a viable alternative to assets backed only by their expectations of future value (unbacked assets). This explains why both in the US and in the Euro Area the monetary base grew approximately fivefold in the aftermath of the financial crisis.

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16 It is also emphasized in the Dutch debate that the recent surge in house prices also led to a considerable distortion of the housing market, prohibiting newcomers to enter.
17 Asriyan et al. (2021) provide a more nuanced view, emphasizing that bubbles may have a cleansing effect on the economy.
18 In the mandatory pension system, defined benefits have been replaced by qualified defined contributions. Next to that, flexible workers must accept some aspects of a mandatory pension system.
19 The underlying current account imbalances between Northern and Southern Europe are analysed in Holinsky, Kool and Muysken (2012).
After the situation calmed down in 2014, the ECB started its QE operations. DNB began to buy government bonds to stimulate the economy. In Figure 15 we observe a new surge in Target2 balances, accompanied by a growing gap with deposits of domestic banks from 2015 onwards – this gap corresponds to the amount of government bonds acquired by the DNB. In Meijers and Muysken (2016) we explain these developments as resulting new wave of capital flight from Southern Europe. Pension funds and other asset holders in the South sell their domestic bond holdings to DNB and replace these by positions held at the domestic banks. Moreover, domestic banks again deposit their proceedings at the central bank. That is the reason why we observe in Figure 15 that the deposits banks hold at DNB during 2014 – 2019, equal Target 2 balances plus government bonds held by DNB.

The recent surge in assets and liabilities of DNB is of a different nature. Previous expansions of DNB assets were substitutions of ownership of bonds from other bond holders (in particular from Southern Europe) to DNB, while government debt decreased relative to GDP. However, the expansion from 2020 onwards is accompanied by an increase in government debt from 48.5 per cent of GDP end 2019 to 54.3 per cent end 2020 in reaction to the COVID-pandemic. As can be seen from Figure 14, most of this additional debt has been bought by DNB. And, since this was bought on the secondary market according to ECB rules, bank deposits have increased proportionally. The use of quantitative easing to finance COVID debt is a contentious issue, since it might lead to inflation given the current bottle-necks in production and trade, together with rising energy prices. Moreover, quantitative easing nowadays also leads to many other distortions in the economy as is spelled out in the fascinating report “Quantitative easing: a dangerous addiction?” (House of the Lords, 2021). Next to the danger of inflation, the report mentions the credibility of monetary policy and the distributional consequences.

5. Concluding remarks

We analyse the question why total assets of the financial sector in the Netherlands increased over the past 25 years from 600 per cent of GDP in 1995 to over 1400 per cent in 2020. A first answer is found the nature of the Netherlands as a conduit country. The Netherlands hosts a huge amount of Special Purpose Vehicles (SPVs) created for tax reasons, and the assets of SPVs, increased from about 150 per cent of GDP in the mid-1990s to over 500 per cent in 2020.

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20 D’Acunto and Weber (2022) provide a balanced survey of the recent literature on danger of inflation, emphasising the role of expectations.
The growth of the remaining part of the financial sector is, prior to the financial crisis, mainly due to the growth in the banking sector relative to GDP. This is primarily driven by mortgages, expanding hand-in-hand with house prices, and to some extent also by an expansion in loans to firms and to foreign. During this period, foreign liabilities of banks increased strong relative to GDP, while domestic deposits remained stable. This led to the deposit financing gap, which was considered as a serious problem a decade ago, but surprisingly is ignored nowadays.

Due to the financial crisis, in which three of the four major banks in the Netherlands were bailed out, the growth of the banking sector stagnated after 2008. However, the assets of pension funds accelerated their growth relative to GDP. As a consequence of the low interest rate policy of the central banks after the financial crisis, pension funds liabilities increased dramatically, and assets followed. The sheer magnitude of assets required to match the liabilities can hardly be found in a small economy like the Netherlands, thus pension fund assets expanded abroad. Moreover, the pension funds outsourced part of their foreign investments to investment funds from 2009 onwards. This induced further growth in the financial sector.

Monetary policy after the financial crisis facilitated the expansion of the financial sector in three ways. First the low interest rate policy induced an increase in prices of financial assets and houses. This induced growth in the balance sheets of the pension funds and investment funds directly. Indirectly the house price growth induced growth in mortgages, which further enhanced house price growth – once the mortgage crisis after 2008 was under control. Second, the low interest rate policy led to a strong increase of the liabilities of the pension funds, and assets followed. Third, once central banks all over the world resorted to unconventional monetary policies, the rules on the financial sector started to loosen. This allowed for more risk taking and growth of the financial sector. We point out that these developments lead to increasing wealth inequality.

Finally, we use the quantitative easing program of the ECB to illustrate the pervasive and elusive nature of the financial sector. The large amount of government bonds bought by DNB was mostly provided by the Southern financial sector to smooth the results of current account imbalances between Northern and Southern Europe. There was no discernible impact on the Dutch economy – the resulting balance expansions remained within the financial sector.

Summarising, we observe that the growth of the financial sector in the Netherlands manifested itself foremost in the spectacular rise of Special Purpose Vehicles with only foreign assets and liabilities, created for tax reasons. Another reason is the growth of credit provided to households and firms by banks, not based on domestic savings, but borrowed from abroad. Next to that financial intermediation and specialisation contributed to the growth of the financial sector, enlarging the combined balance sheets without an increase in underlying real assets. Even more important is that liabilities of pension funds increased strongly due to the mandatory funded pension system, leading to a surge in assets mostly issued abroad.

Each of these aspects should be scrutinised more closely and should be evaluated how it contributes to well being of society. With our analysis here we hope to have provided a good starting point for such an evaluation. This evaluation might lead to proposals for reform of the financial sector, which we think are necessary, but that lies outside the scope of the present analysis.
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