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Facts and figures on the Dutch current account surplus

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1 Introduction

In this document we summarise the most relevant empirical and stylised facts related to the Dutch current account. We present the general outlook of the Dutch current account and its evolution in the recent past, the main components at both the financial and the trade sides and some Dutch-specific characteristics that can be considered structural to the surplus. We then summarise the main factors that explain the relatively large and persistent surpluses.

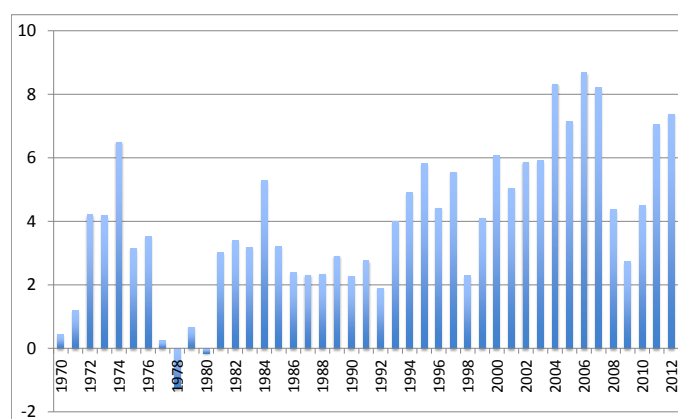
To guide our presentation we start with historical time series and international comparisons, and then we use the national accounts and balance of payment accounting equations. The current account (CA) is important because it provides a summary of the external transactions of a country. Positive changes in the current account are associated with net positive exports or "importing" foreign demand. The current account is also important because it informs about the size and direction of international borrowing. A CA surplus increases the country's net foreign wealth position or following the IMF definition: the Net International Investment Position (NIIP).

The main purpose of this paper is to provide clear statistics that can help determine the relative importance of the different factors influencing the persistent and large current account surplus in the Netherlands.

2 The Dutch current account in historical and international perspective

We start by presenting the current account balance as a share of GDP since 1970. From Figure 1 we observe that the Netherlands –with few exceptions– has experienced a persistent current account surplus since the 1970s. Moreover, since 1981 onwards the surplus has usually been around 2% or higher.

Figure 1: Netherlands, current account balance, as percentage of GDP

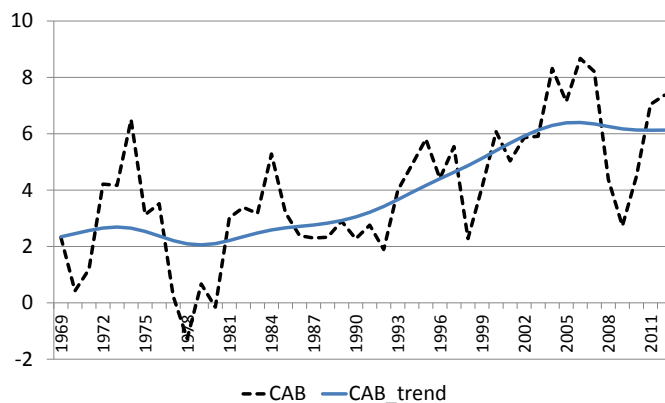


Source: CBS Statistics Netherlands, SNA-1993 series.

Applying an Hodrick-Prescott filter to the data we find that the trend value of the series has been steadily increasing from an average of around 2 p.p. in the 1970s to around 6 p.p. in the 2000s (see Figure 2).

There are, however, different sources for the CAB data (see Figure 3). The two main sources for current account statistics are the CBS (Statistics Netherlands) and the Dutch Central Bank (DNB). With the implementation of the new system of national accounts (SNA-2008), there has been a break in the historical series provided by the old CBS series that used the SNA-1993 methodology. Likewise, the balance of payment methodology (BPM6) substitutes the previous BPM5 used by the DNB. Even though there are some significant yearly differences between some of the sources, all the series show the same persistence in the Dutch surplus, as well as the same trend as in Figure

Figure 2: Netherlands, current account balance with trend value, as percentage of GDP

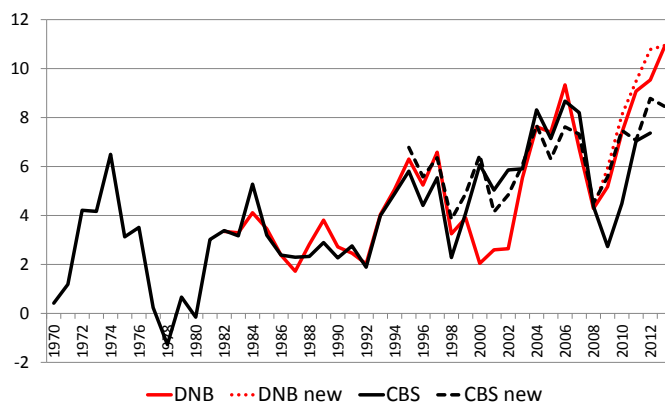


Note: The trend series is estimated using a Hodrick-Prescott filter ($\lambda=100$).

Source: CBS Statistics Netherlands, SNA-1993 series.

2. In order to include longer time series in this paper we use the CBS data according to SNA-1993.

Figure 3: Netherlands, current account balance using all available series, as percentage of GDP



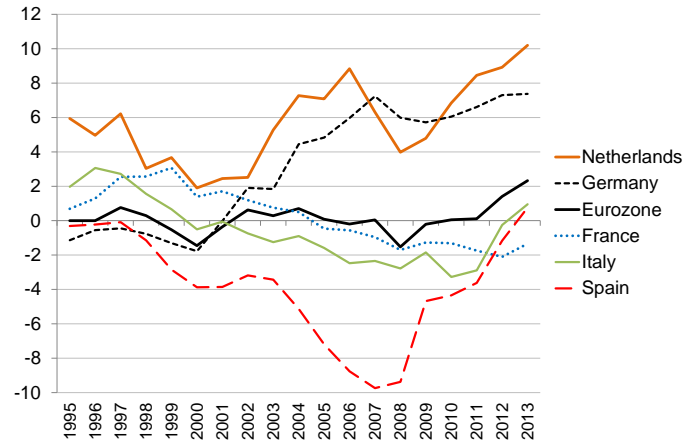
Notes: The CBS old is the SNA-1993 series, CBS new is from the SNA-2008 series.

Source: CBS and DNB.

At the international level, we compare the Dutch case with other Eurozone countries and the major world economies. Figure 4 presents the CAB for the main Eurozone countries. Here we observe that the persistent Dutch current account is

comparable to the German surplus regarding Eurozone countries.¹ Even though The Netherlands has been the only surplus country for the period after 1995, and it has had the largest surplus for most of the period.

Figure 4: Current account balance as percentage of GDP, selected Eurozone countries



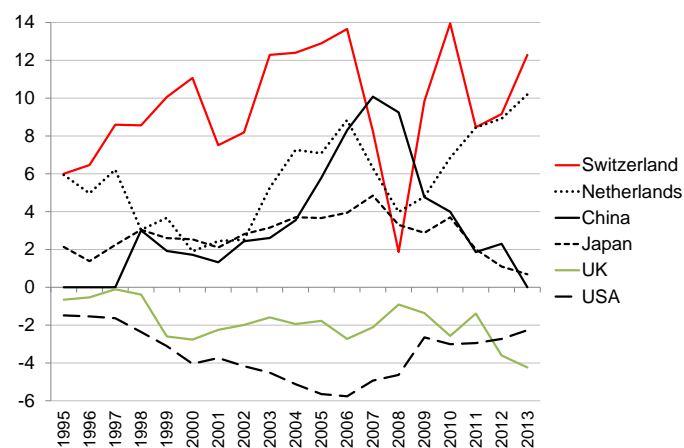
Source: OECD.stat.

Comparing the Dutch surplus with non-Eurozone countries we find that the Netherlands is not an isolated case. Figure 5 presents the CAB for a selected group of OECD countries. The most comparable case is Switzerland, who has had also persistent and even larger current account surpluses than the Netherlands. China and Japan have also experienced persistent and sometimes relatively large surpluses, but these have declined in both countries in recent years. Finally, the US and UK are the economies with the largest and more persistent deficits.

In Figure 6 we show the average CAB for the 1995-2013 period for a selected number of OECD countries. We observe that, even when the Dutch surplus has been large, its average is still smaller than other OECD country surpluses –i.e. Norway, Switzerland and Luxembourg– and close to that of Sweden.

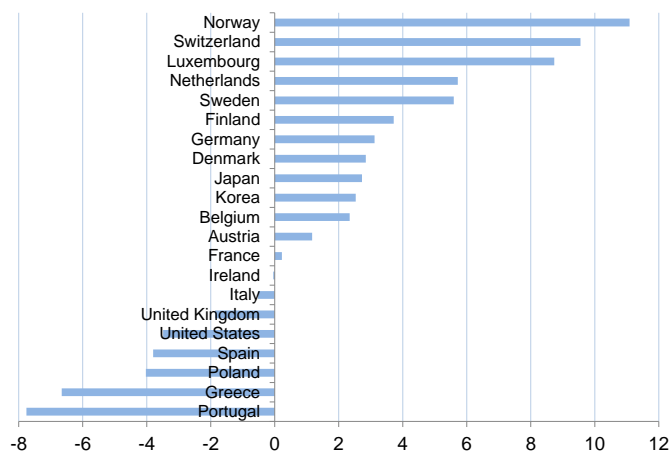
¹ It is also comparable to the Austrian surplus, which is not shown in the figure. Austria follows a similar path as Germany with an initial current account deficit that turned into a persistent surplus in the 2000s. Moreover, Belgium (also not shown) follows the path of France, with an initial surplus that has steadily declined to a deficit in recent years.

Figure 5: Current account balance as percentage of GDP, selected countries



Source: OECD.stat.

Figure 6: Current account balance as percentage of GDP, averages for selected OECD countries in the period 1995-2013



Source: OECD.stat.

3 National accounts and the current account balance

In this section we present the main components of the national accounts and balance of payments, and how they relate to different decompositions of the overall CAB.

3.1 Trade and income transfers

We start with the national income identity:

$$GDP = C + I_d + G + (X - M) \quad (1)$$

where GDP is gross domestic product, C is private consumption, G is public government consumption, I_d is total domestic investment, $X - M$ is the overall trade balance.

The trade balance is (usually) the most important component of international transactions. It is the difference between exports X and imports M . Where X comprises both exports of goods (merchandise) and services and M are the imports of goods and services.²

The current account balance (CAB) is defined as:

$$CAB = (X - M) + NI \quad (2)$$

where NI is the net income: the difference between international income receipts and payments. This net international income is divided in two main components ($NI = PI + SI$):

- Net primary income (PI): the balance between the receipts minus the payments of international interests on foreign/domestic investment portfolios, dividend payments on foreign/domestic shares, profits of domestic/foreign own firms operating abroad/home and the compensation of employees),
- Net secondary income (SI): the net current international transfers –e.g. government current international cooperation, remittances, payments/claims of non-life insurance, payment/receipt of taxes and other current (non-capital) transfers.³

Note that net income NI also defines the differences between gross domestic and national production: $GNP = GDP + NI$, such that:

$$GNP = C + I_d + G + (X - M) + NI.$$

² Note that exports and imports of services include several international transactions such as tourist expenditure abroad and in the country and the payment and receipt of shipping fees.

³ Note that all capital and wealth transfers go to the capital account in the balance of payments, so only *current* transfers are included in the net income account.

To sum up, the CAB summarises all the international transactions of the economy: the net trade balance between the export and import of goods and services, and the net income from international payments and receipts.

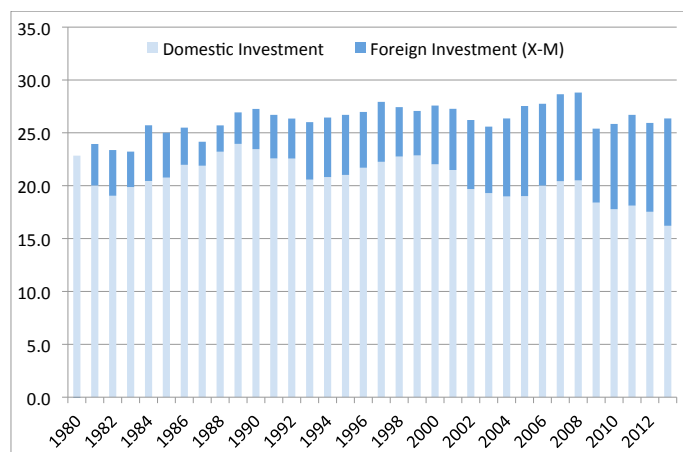
3.2 Overall savings and foreign investments

The CAB is also associated with domestic savings and foreign investment. Total domestic savings are: $S_d = Y - C - G$. In a closed economy, where there is no trade and $X = M = 0$, domestic savings must equal domestic investment: $S_d = I_d$. But in an open economy with international trade flows ($X, M > 0$), then domestic savings can be used for both domestic and foreign investments:

$$S_d = I_d + I_F. \quad (3)$$

Following the basic accounting equations presented in Equation 3, Figure 7 shows that overall Dutch savings have remained at steady but relatively high levels (around 26%) for the last 25 years. It also shows that the CAB increase is directly related to an increase in foreign investments.

Figure 7: Netherlands, total savings by foreign and domestic investment, as percentage of GDP



Source: Own estimations using the OECD.Stat database.

Combining these relations with the national account identity (Equation 1) we obtain that the trade balance ($X - M$) equals foreign investment (I_f):

$$X - M = S_d - I_d = I_f \quad (4)$$

A country with a trade balance surplus, therefore, has domestic savings that are higher than its domestic investments. Expanding Equation 4 to include net income we obtain:

$$CAB = I_f + NI \tag{5}$$

If we neglect the net income component, then a positive CAB is directly associated with an increase in investments abroad –i.e. an increase in the value of the foreign assets.⁴ This is why the CAB is sometimes referred to as "net lending": the difference between savings invested abroad and domestically.

The net lending concept is different from overall savings: the CAB can increase with overall savings being constant when the share of domestic and foreign investments is changing. As shown in Figure 7, this has been the case in the Netherlands in recent years where the CAB surplus is related to a decrease in the domestic investments and increasing foreign investments.

Following Jansen and Ligthart (2014) the main implications of the lower domestic investment are:

- When corrected by price changes (i.e. ICT prices) the decrease is less pronounced.
- Despite the decrease in domestic investment, there has been an increase in productivity growth. In addition, this has not led yet to negative developments in relative capital stocks, innovation and competitiveness.

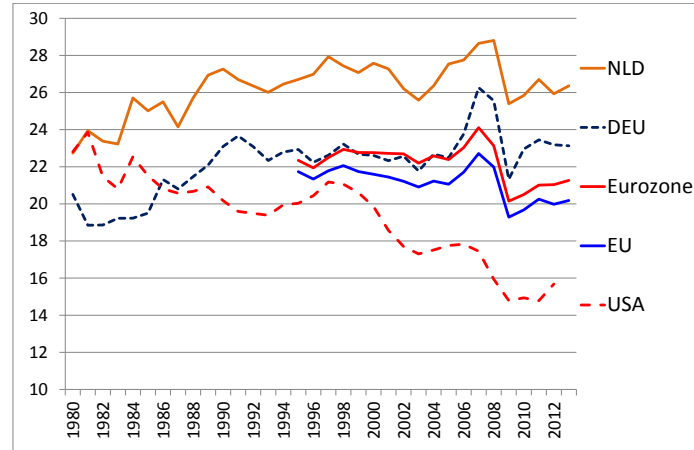
In international terms, the Dutch overall savings is also relatively high. Figure 8 shows that the Dutch saving rates have been consistently higher than other EU countries and the USA. This points to structural factors in the Dutch economy that yield relatively high saving rates.

The relatively large share of foreign investments with respect to total investment in the Netherlands also stands out when compared with other countries. Figure 9 shows that the Dutch share of foreign investment has been relatively high and increasing for most of the period. The USA has net inflows of investments (i.e. negative foreign investments) and thus, a negative ratio for most of the period. This also applies for Germany until the mid-1990s.

Therefore, international trade provides the option to save either by building up the capital stock (by internal or external investments) and/or by accessing foreign wealth (either acquiring or borrowing international assets). This is why a current account surplus is also referred to as net foreign investment. Moreover, a current account surplus

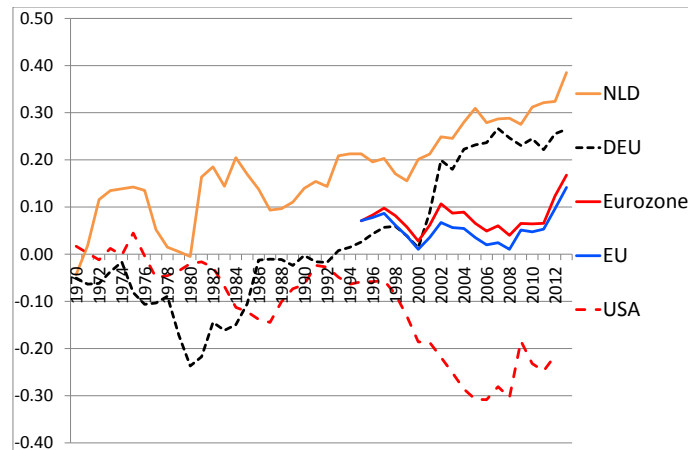
⁴ As shown below, the *NI* component of the CAB is not significant for the Netherlands in the medium run: there are years where $NI \neq 0$ but in the last 10 years $NI \approx 0$.

Figure 8: Overall saving as percentage of GDP for selected countries



Source: Own estimations using the OECD.Stat database.

Figure 9: Foreign investments as a share of total investments for selected countries



Source: Own estimations using the OECD.Stat database.

tells us how much a country is borrowing to the trading partners with which it has a trade surplus. Finally, one can also interpret the CA as inter-temporal trade where a current account surplus is exporting present consumption and importing future consumption (Krugman and Obstfeld, 2003).

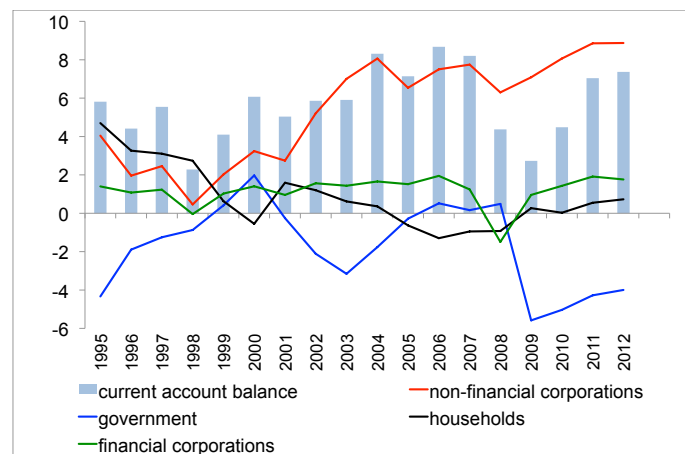
Using the national income identity we can also separate total savings (S) between private savings ($S^p = Y - T - C$) and the public savings (S^g), which is also the government budget balance: $S^g = T - G$. In both relations taxes (T) are included –as

taxes paid by the households and deducted from their total income, and collected by the government. We can then state that a country's private savings can be used in three ways: invest in domestic capital (I), purchase wealth from foreigners (CA), and purchase newly issued government debt ($G - T$): $S^p = I + CA + G - T$.

4 Institutional decomposition of the Dutch surplus

The CAB can also be decomposed by the net lending of different institutional agents. Figure 10 shows the institutional breakdown of the CAB. The main observation is that the surplus has been driven by an increase in the net lending of non-financial corporations (NFCs), which are as high as 8% of GDP. These NFCs and have substituted households net lending –that have been on average around zero in the 2000s– as the main source of the domestic surplus since the end of 1990s. The government net lending has been generally negative (i.e. net borrowing) and those of financial institutions have been around zero to 2 percent of GDP.

Figure 10: Netherlands, current account balance by institutional composition, percentage of GDP



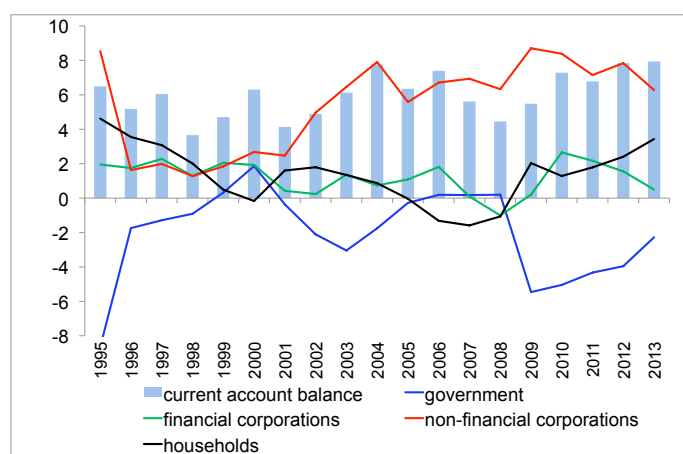
Source: CBS Statistics Netherlands.

The increasing importance of the net savings of NFCs can be explained by several factors (cf. Jansen and Ligthart, 2014). We explain each one in turn in the following sections.

4.1 New national accounts series

With the recent introduction of the the SNA 2008 series, the relative composition of net lending between agents has also changed. When using the new national account system (SNA 2008), the relative importance of the NFCs net savings is decreased. This also points to statistical issues concerning net lending measurements. For instance, for 2011 the difference between net lending of NFCs and households goes from around 8 p.p. using the old SNA 1993 series to around 5 p.p. using the new SNA 2008 series.

Figure 11: Netherlands, current account balance by institutional compositions, SNA 2008 series, percentage of GDP



Source: CBS Statistics Netherlands.

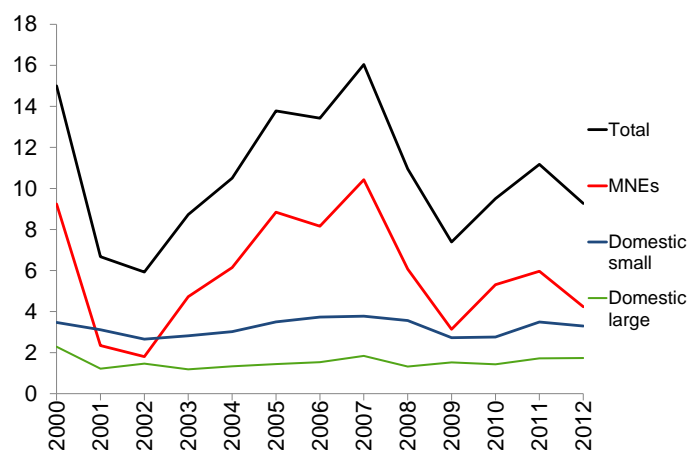
4.2 The role of MNEs

By their nature and relative size, MNEs are known for being –by a large margin– the main contributors to exports (in some cases as much of 90% of total exports) and as such, also provide the largest share of net exports to the CAB (cf. Helpman et al., 2004; Bernard et al., 2007; Mayer and Ottaviano, 2007). In addition, MNEs are the source of foreign direct investment (FDI) and are also involved in other types of foreign investment. Thus, MNEs are generally a crucial factor to explain large net foreign investment positions. This clear influence of MNEs at both the trade and the financial side of the CAB, explains why they can be determinant to explain current account surpluses.

In the Netherlands, total savings of NFCs is heavily driven by the savings of MNEs

(see Figure 12). Moreover, the most recent increase in the foreign investments of NFCs (non-financial corporations) is mainly due to the higher capital gains from foreign subsidiaries. This is in line with the strong increase in FDI from NFCs.⁵

Figure 12: Netherlands, gross savings of non-financial corporations by firm type as percentage of GDP



Source: Taken from Figure 2.4 in Jansen and Ligthart (2014).

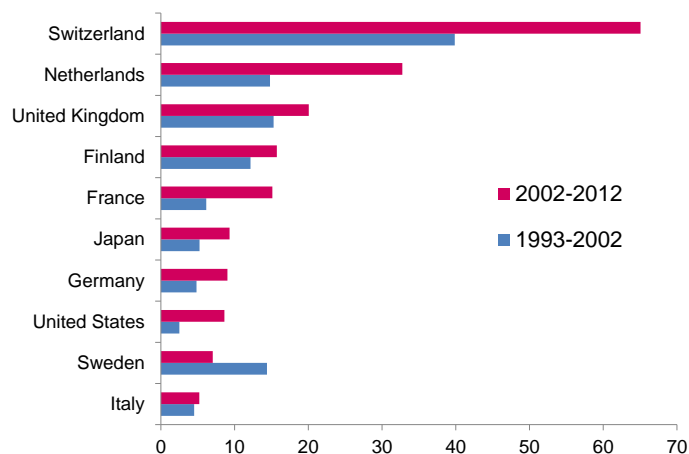
Figure 13 shows that the Netherlands is only second to Switzerland within the OECD countries, with a relatively high net FDI position –i.e. outward minus inward FDI. This reflects the relatively large share of MNEs head-quartered in the Netherlands relative to country size. In addition, Figure 13 shows that the average net FDI position more than doubled from 15% to 33% between both periods.

4.3 Dutch pension funds

The second factor explaining the relative importance of different agents net lending is the importance of the Dutch pension funds in overall net lending. This importance is revealed by looking at the composition of the overall household net lending. In Figure 14 we compare household net lending with total savings and domestic investment. The main observation is that the decline in net lending by households is mainly explained by the decline in overall household savings: the correlation between both variables is 0.95. Domestic investment by households (i.e. investment in dwellings) has been relatively stable throughout the period, until it experienced a sharp decline after the financial

⁵ Eggelte et al. (2014) also analyze the importance of NFCs and MNEs, and find similar conclusions regarding the significant role of MNEs to explain the Dutch surplus.

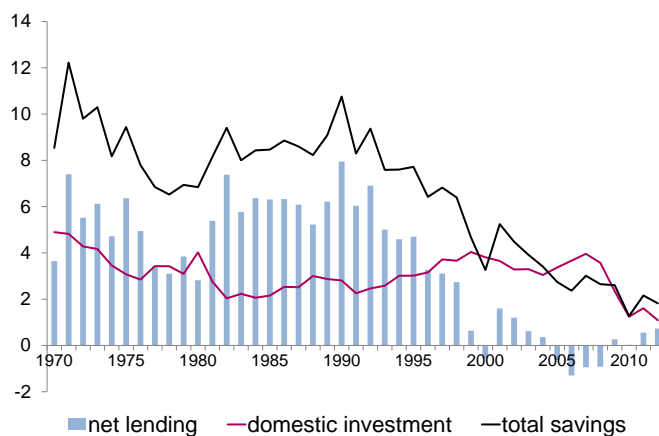
Figure 13: Net FDI position as percentage of GDP for selected OECD countries



Source: OECDstat.

crisis in 2008.

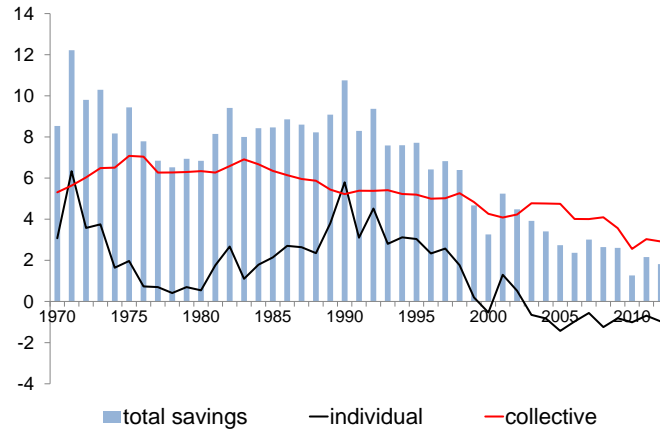
Figure 14: Netherlands, household net lending, domestic investments, and total saving as percentage of GDP



Source: Own elaboration using CBS Statistics Netherlands data.

Figure 15, moreover, shows that most household savings are channelled through the collective savings provided by pension funds. The sharp decline in household savings was less pronounced due to the role of collective pension fund savings. Moreover, around half of the total pension wealth is invested abroad (CBS, 2014).

Figure 15: Netherlands, individual and collective household savings, percentage of GDP



Source: Own elaboration using CBS Statistics Netherlands data.

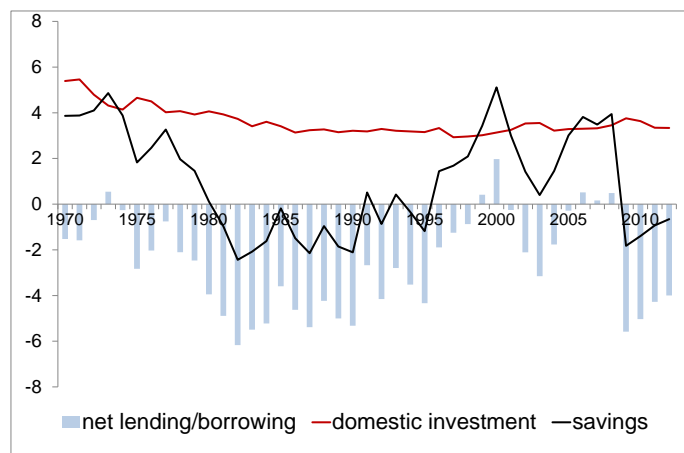
4.4 Public savings and investment

In Figure 16 we show the decomposition of the net lending/borrowing of the government. The negative domestic savings from the government can be explained by fluctuations in the overall savings, which are in turn related to the business cycle. For instance, in the 2000s the correlation between real GDP growth and government savings was 0.8. On the other hand, domestic public investment has remained constant at around 3.5% of GDP. Therefore, since public savings ($T - G$) are equal to the government's budget, the swings in the public savings and budget have been financed with foreign borrowing –i.e. net borrowing.

4.5 Accounting for unpaid dividends

Finally, a statistical issue related to unpaid dividends is crucial to explain the relative importance of different agents in net overall savings. The specific shares of NFCs and households in Figure 10 suffer from an important statistical issue. It is common practice for MNEs to retain profits and in recent years this has become a large share of overall profits (cf. Jansen and Ligthart, 2014). Unpaid dividends are a big share of overall profits and this contributes to higher corporate foreign investments. From an international perspective the Dutch have a relatively high share of unpaid dividends. These unpaid dividends can be a temporary issue to the extent that they are used to improve the capital position of Dutch companies. A structural factor is that profit

Figure 16: Netherlands, government net lending/borrowing, domestic investments, and total saving as percentage of GDP



Source: Own elaboration using CBS Statistics Netherlands data.

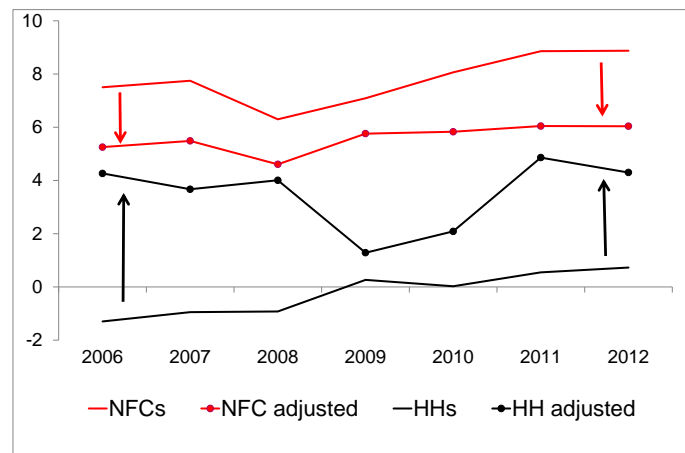
retention is stimulated by the current income taxation system (van 't Riet and Lejour, 2014).

The agreed statistical procedure in balance of payments accounting is to assign these retained profits to the shareholders. However, due to data limitations on the precise foreign owned structure of MNEs, most of these retained profits cannot be effectively assigned. In the Netherlands this statistical limitation is considerable and DNB (2013) found that up to 4 percentage points of the current account surplus correspond to retained profits by Dutch-based MNEs, which are owned in their majority by foreigners. However, this upward bias in the overall CAB is roughly compensated by the unassigned retained profits of MNEs abroad that are partly owned by Dutch companies. In particular, the Dutch pension funds have strong financial investments in foreign MNEs. When these MNEs retain profits that cannot be assigned to the Dutch pension funds (and other Dutch investors) this creates a downward bias in the CAB.

From the data collected by DNB on the effect of retained profits in the CAB we observe that even when this correction can create 1 or 2 p.p. differences in the surplus, in the medium-term the differences compensate –i.e. this statistical correction hardly affects the CAB surplus levels and trend. However, it does have an important implication for the relative contribution of MNEs and pension funds. In Figure 17 we correct for the unassigned retained profits issue and find that the contribution of NFCs (which to a large extent are MNEs) and households (which to a large extent are pension funds) are now in the same order of magnitude, even though the contribution of the

NFCs remains higher.

Figure 17: Netherlands, current account balance by institutional compositions adjusted for unpaid profits, percentage of GDP



Notes: NFC adj. stands for the net savings of NFCs once unpaid profits by MNEs are accounted for.
HH adj. stands for the net savings of households once unpaid profits by pension funds are accounted for.

Source: Own elaboration using CBS Statistics Netherlands and DNB data.

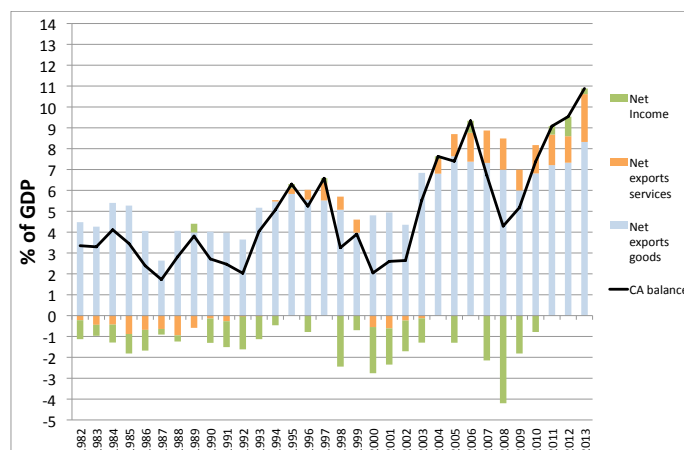
5 The importance of the trade balance

In the following section we analyse the CAB from the trade side. We first analyse the relative importance of trade in goods and services and net primary and secondary income in explaining the Dutch surplus. We then look at the bilateral trade balances of the Netherlands with its main partners, based on the differentiation between gross and value added trade.

5.1 Trade and primary income

Figure 18 shows the main components of the CAB for the Netherlands and its evolution since the 1980s. The first observation from this figure is that the CAB has been historically driven by the trade balance ($X - M$), with the exception of recession years (2006 to 2008) and the period 2000-2001.⁶ For instance, the correlation between the trade balance and CAB is 0.9. In addition, most of the trade balance is driven by a net export surplus in goods; and since the 2000s net services exports has also contributed, but with a much lower share. We observe that net income has been a minor component of the CAB and that it has mainly reduced the CAB.

Figure 18: Netherlands, current account balance and main components, as percentage of GDP



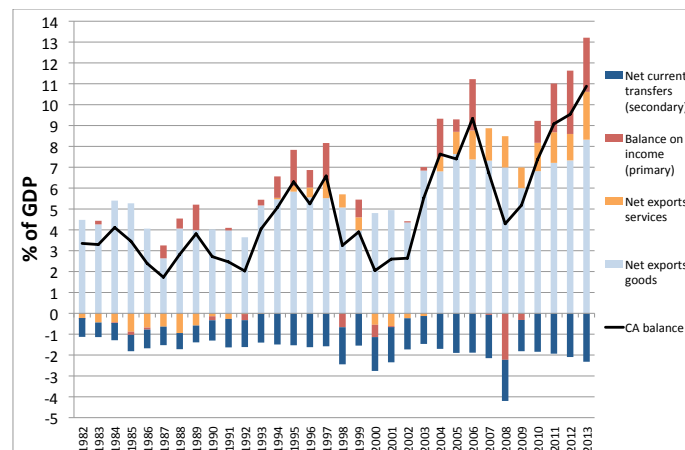
Source: DNB Balance of Payments Statistics.

When we decompose the net income into the primary and secondary accounts (see

⁶ This includes the exports of natural gas, which are a decreasing but still important factor that adds around one percentage point to the trade balance (Vandevyvere, 2012).

Figure 19) we find that net current transfers (secondary income account balance) has been negative in all the period. This is related to current governmental aid and remittances, which can be identified using disaggregate balance of payments data from DNB. On the other hand, the primary income balance –where income generated from foreign investment is the main driver– has had a more fluctuating behaviour, usually with a positive contribution to the CAB (with the exception of 2008, which is related to the foreign assets valuation losses associated with the international financial crisis). In more recent recent years, however, the primary income balance has had a more steady and significant contribution –of around 2 percentage points– to the CAB. Jansen and Ligthart (2014) show that this recent increase can be directly associated with the income gains from MNE foreign investments (e.g. royalties and license fees).

Figure 19: Netherlands, current account balance and main components with disaggregated net income, as percentage of GDP



Source: DNB Balance of Payments Statistics.

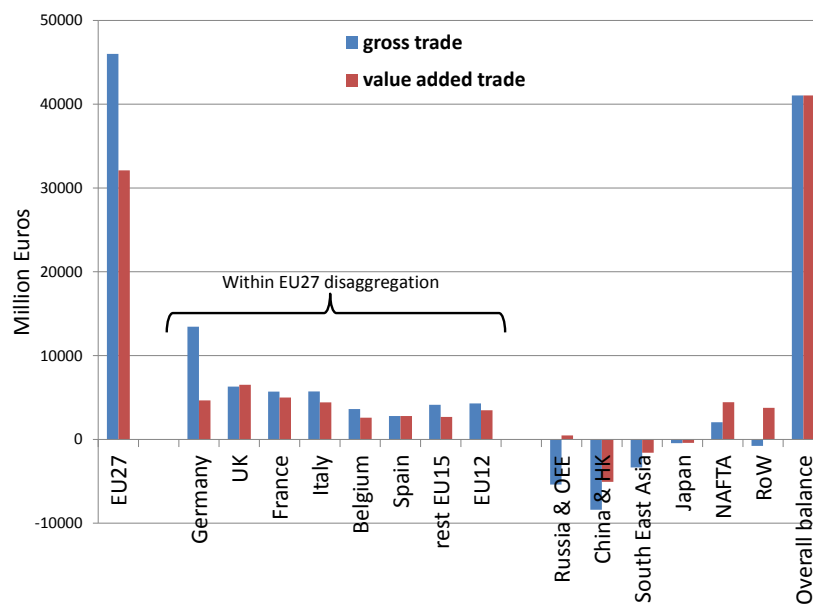
5.2 Bilateral trade in value added

The internationalisation of the supply chain into global value chains (GVC) has diminished the information power of traditional trade statistics. When intermediate inputs cross borders more than once, and even several times into many countries, there is a double-counting issue with traditional gross trade statistics (value added previously embedded in the intermediate input is counted every time there is a cross-border movement) and the value added composition of final exports does not reflect domestic value added (since an important share of the value added comes from third countries via

the intermediate inputs). The recent surge in the trade in value added (TiVA) literature is aimed at dealing with this statistical issues and to create trade variables that reflect the embedded value added in final exports (Johnson and Noguera, 2012; Koopman et al., 2014; Lejour et al., 2014)

Rojas-Romagosa (2015) decomposes the Dutch bilateral trade flows employing both gross and trade in value added terms. Using the GTAP and the WIOD databases, it is shown that the Dutch bilateral trade surplus with other EU countries dominates the overall trade balance, in both value added and gross terms. Figure 20 shows the results for 2007 using the GTAP database. Here we observe that the bilateral surplus with the EU27 is significantly reduced when using value added instead of gross trade, but nevertheless the EU27 remains the main source of the Dutch trade surplus. Using this decomposition we also see how the relative importance of the trade surplus with Germany is significantly reduced when using trade in value added, which is due to the large share of intermediates that flow from third countries into the Netherlands and then to Germany.

Figure 20: Netherlands, bilateral trade balances by main trading partners in 2007, million euro

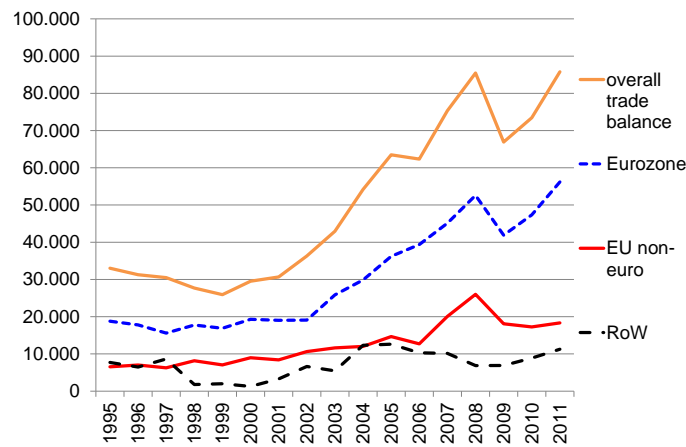


Source: Own elaboration using GTAP data.

When looking at the trend in the bilateral trade balances, Figure 21 shows that the increase in the Dutch trade surplus after 1995 has been mainly driven by intra-EU

bilateral surplus, and more specifically, on the bilateral surplus with other Eurozone countries.⁷ For the whole period, Eurozone trade explains –on average– two thirds of the total trade balance and other non-Eurozone intra-EU trade an additional 20%. These figures point to the very high importance of intra-Eurozone imbalances and other EU trade factors –e.g. the internal market.

Figure 21: Netherlands, trade balance by selected regions in value added terms, million euros



Source: Own estimations using WIOD database.

It is important to recall here the influence of MNEs on the trade side of the CAB. As explained above, MNEs are responsible for a majority of exports and as such, are critical to explain the Dutch surplus. In addition, MNEs –and export firms in general– are known for expanding their exports following a geographical pattern: exporting and/or servicing neighbouring countries –usually also with similar economic, institutional and cultural characteristics– and gradually expanding to further away countries. This stepping stone approach for reaching markets further away –physically and culturally– is theoretical developed in Eaton et al. (2011), with empirical evidence for France. Moreover, this expanding pattern is also reflected in higher shares of exports for these physically and culturally close countries.

In the case of the Netherlands, a similar expansion pattern is found and MNEs are shown to have a higher share of exports to close-by countries –i.e. within the EU (Creusen and Lejour, 2011; Lejour, 2013). Therefore, the large intra-Eurozone Dutch surplus is also related to MNE exports.⁸

⁷ For this figure we used the WIOD database, but similar results are found when using the GTAP data.

⁸ Further research, using firm-level data will be needed to assess the exact share of MNE exports in

6 Balance of payments and the Dutch black hole

A country's balance of payments follows the simple rule of double-entry bookkeeping: every international transaction automatically enters the balance of payments twice, once as a credit and once as a debit. If you buy something from a foreigner you must pay him in some way, and the foreigner must then somehow spend or store your payment.

The counterparts of the CAB are the capital account balance (KAB) and the financial account balance (FAB). The KAB records certain activities resulting in unilateral transfers of wealth (capital) between countries that are not recorded in the FAB. These include unilateral governmental transfers (international gifts of assets, a country forgiven debt), non-market activities, or the purchase/sale of non-produced, non-financial and also intangible assets (copyrights and trademarks). However, the KAB is usually statistically negligible, due to its relatively very small size.

The FAB records the purchases or sales of financial assets⁹, and it is related to the changes in the net lending/borrowing (*NLB*) such that:

$$FAB = A_f - A_d + \sigma = NLB = CAB + KAB \quad (6)$$

where A_f are current period changes in foreign assets held in the home country (increase +), A_d are current period changes in domestic assets held abroad (increase -), and σ is the statistical discrepancy (net errors and omissions), which assures that the zero-sum balance of payments condition holds: $CAB + KAB - FAB = 0$. This condition also provides the *financial* definition of the current account (Equation 7), where the CAB balance is directly related to the financing of the CAB by a positive net lending (if there is a current account surplus) or a positive net borrowing (if there is a current account deficit).

$$CAB = NLB - KAB \quad (7)$$

The final component of the balance of payments is the net international investment position (NIIP), which is a stock variable that accounts for all foreign assets and liabilities of the country at a given year.¹⁰ The changes in the NIIP are driven by two the intra-Eurozone surplus. Moreover, since FDI usually follows similar expansion paths as exports, it is possible that the same relation between FDI and intra-Eurozone imbalances is present. However, this hypothesis must be further researched using financial flow data.

⁹ An asset is any one of the forms in which wealth can be held, such as money, stocks, factories, or government debt.

¹⁰ However, a country's NIIP is very hard to measure accurately. The main limitations are the accurate information over international assets (gross values can be huge) and more importantly, how these assets are valued over time. It is expected that the new balance of payment methodology from the IMF (BPM6) is can better account for NIIP transactions and revaluations.

main effects:

1. The international transactions recorded in the financial account balance: the changes in foreign and domestic assets during the period; and by definition this is directly associated with changes in the CAB (since the KAB is usually relatively small).
2. Valuation changes (VC), which are capital gains and losses on gross external assets and liabilities. These include asset revaluations and other volume changes that are influenced by international financial markets, exchange rate fluctuations, and statistical measurement problems.

Thus, we have that NIIP changes over time not only by the CAB but also by these valuation changes, such that:

$$\Delta NIIP_t = NIIP_t - NIIP_{t-1} = CAB_t + KAB_t + VC_t \quad (8)$$

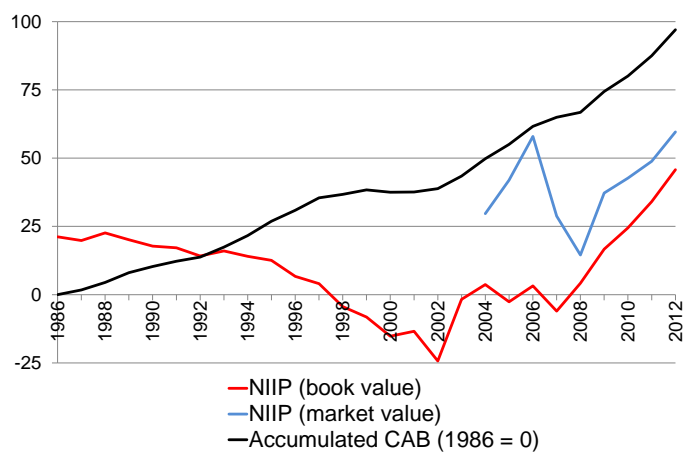
In theory, since these valuation changes affect both foreign and domestic assets, it is expected that $VC \approx 0$ over time and since $KAB \approx 0$, then we should have that $\Delta NIIP_t \approx CAB_t$. However, in practice the valuation changes of the $NIIP$ account for an important and increasing part of the dynamics of the net foreign asset positions of countries (Gourinchas and Rey, 2014). Since the 1990s these valuation effects have been substantial for the Netherlands, to the point where they were named the Dutch "black hole" (Boonstra, 2008, 2009; Mellens, 2009). The $NIIP$ valuation changes were consistently negative and high for over a decade. This created a "black hole" between the flow of foreign assets implicit in the CA-surplus and the actual $NIIP$, which is shown in Figure 22.¹¹ Although part of these recorded losses are attributed to statistical and booking issues –i.e. differences between the book and the market value of foreign assets– the sheer size of the valuation losses still point to high negative foreign assets valuations that have potentially high negative impacts on overall wealth and welfare levels (Vandevyvere, 2012).

In Figures 23 and 24 it is clear that the black hole appeared since the beginning of the 1990s, with persistent and significant negative yearly valuation changes between 5 and 10% until 2002. These accumulated valuation losses reached as much as 100% of nominal GDP in 2002, after which the valuation changes have stabilised.¹²

¹¹ Figure 22 shows both the book value of the $NIIP$ (as is the common practice in the BPM5) and the alternative market valuation of the $NIIP$, which provides a better fit with yearly asset values. Even though the $NIIP$ at market value significantly reduced the gap between the accumulated CAB and the $NIIP$ (from approximately 50 p.p. to around 20 p.p. in 2004), after the financial crisis in 2008 the gap (i.e. black hole) was again increased.

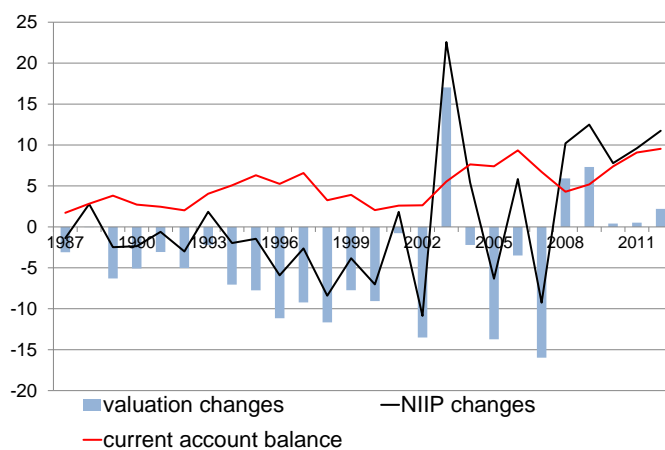
¹² Such accumulated valuation losses have also been common for other EU and Asian countries, while the main beneficiaries have been primarily the US and the UK, where the valuation effects have tended to be positive and economically large (Gourinchas and Rey, 2014).

Figure 22: Netherlands, NIIP and accumulated CAB, as percentage of GDP



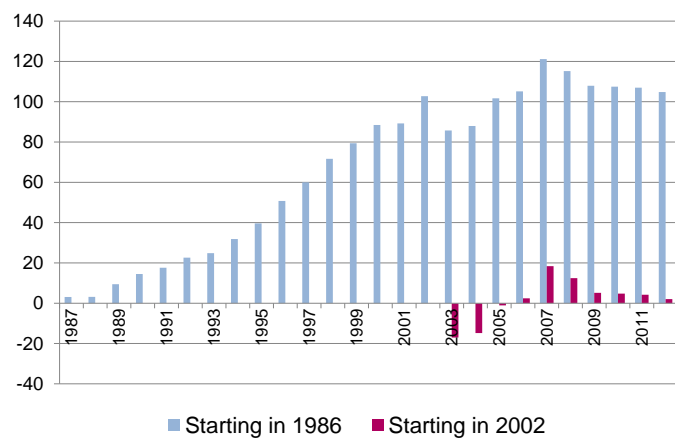
Source: DNB data.

Figure 23: Netherlands, current account balance with NIIP and valuation changes, as percentage of GDP



Source: Own estimations using DNB data.

Figure 24: Netherlands, accumulated valuation losses for different starting years, as percentage of GDP



Source: Own estimations using DNB data.

7 Conclusions

The CAB is the end-result of the inter-relation of several domestic macroeconomic variables: production, consumption, government finances, domestic investment and savings with international variables: trade in goods and services, international factor payments, lending and borrowing. As such, it can be analysed from its *trade* definition from Equation 2 or its *financial* definition from Equation 7. Both definitions are equivalent and they provide useful instruments to analyse the trends and main components of the current account surplus.¹³

There is no one reason for a high current account surplus in the Netherlands. From the CAB determinants identified by the theoretical and empirical papers in Ciocyte and Rojas-Romagosa (2015), we can see many factors that can create large and persistent current account surpluses: demographic trends, relatively high income, large net foreign assets, a globalised financial sector and a very open economy. However, combining the data trends presented above we can isolate some important factors that determine the Dutch CAB surplus:

1. Overall saving rates have remained fairly constant and high. This has been a persistent trend for the Dutch economy related to structural consumption and saving patterns. On the other hand, the decreasing domestic investment shares do not seem to have affected negatively productivity and growth (Jansen and Ligthart, 2014),¹⁴ while public investment shares have been constant over the last decades.
2. Relatively large share of multinationals headquartered in the Netherlands. From the financial side of the CAB, the surplus can be explained by the large amount of foreign investments from NFCs, especially from MNEs. Not only do MNEs invest heavily abroad, but more recently the share of primary income surpluses has also increased in recent years (Jansen and Ligthart, 2014). In addition, the relatively large share of MNEs also relates the trade to the financial surpluses: MNEs are known for contributing the largest share of net exports and are also heavily involved in FDI and other types of foreign investment.
3. Dutch pension funds. This is particular to the Netherlands because compared to other developed countries, the Netherlands has relatively large pension funds that

¹³Nonetheless, these accounting identities do not explain the endogenous interactions between the domestic and international macroeconomic variables, nor what is the causality between international investments and trade. These causal interactions are critical to analyse the policy options regarding external policies, and as such, are beyond the scope of this paper.

¹⁴This is in part due to the decrease in relative ICT prices that show that explain why real domestic investment has remained stable

- invest a significant share of their assets abroad.¹⁵
4. Statistical issues related to unpaid dividends by MNEs and the valuation of foreign assets are important to explain the composition of the CAB surplus but not the overall level. Correcting for unpaid dividends increases the contribution of the pension funds (i.e. household savings) and decreases the contribution of MNEs. The relative contribution of MNEs, however, remains higher than that of the pension funds.
 5. The Dutch surplus in goods and services is the main factor explaining the CAB surplus from the trade side and it is highly concentrated in the Eurozone (see Rojas-Romagosa, 2015). In value added terms intra-Eurozone bilateral surpluses represent around 70% of the total trade surplus.

¹⁵Dutch residents' foreign equity investments in 2011 ran to some 75% of GDP, while in Germany it was only 20% and the USA 30% (DNB, 2013).

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