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Balance of payments of the Netherlands

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Statutory Declaration

I hereby declare that the thesis “Balance of payments of the Netherlands” is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material, which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution. All literature, references and other sources, which were used, are listed at the end of the thesis.

Prague, 28.10.2015.....Bidana Mussina

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Abstract

The aim of the paper is to investigate the qualitative aspects of factors determining current account imbalances in Netherlands and to find out if it is a problematic area, and means to sustain it. Series of explanatory variables were considered that referred to the sectorial contribution of Dutch current account and could have significantly contributed to the surplus development in the past decades. The trade balance, in particular for goods, by far accounted for the largest part of the persistent and substantial Dutch current account surplus, additionally contribution of the savings and investment behavior of multinationals and pension funds were adding up to current account surplus.

Key words

The Netherlands, balance of payments, current account surplus, export, re-export, multinational companies, foreign direct investment, pension funds, households' indebtedness, global imbalances.

JEL classification

E21, E22, F18

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Introduction

When I had my exchange year at one of the universities in Netherlands, I became fascinated with this country economic and social wellbeing. The Netherlands is widely considered a pleasant place to live, and the high productivity of Dutch workers has given it one of the highest per capita incomes of any country in the European Union. Exports benefited greatly from increased demand in the euro area and improved price competitiveness. Dutch economic competitiveness has been helped by improvements in the macroeconomic and business environment, along with technological innovation. It is an export oriented economy and is noted for its stable industrial relations, low unemployment rate, and a sizable current account surplus.

In my paper I want to focus on balance of payments of the Netherlands and specifically on current account. The current account balance may seem to be an esoteric economic concept. But in countries that are spending a lot more abroad than they are taking in, the current account is the point at which international economics collides with political reality. When countries run large deficits, businesses, trade unions, and parliamentarians are often quick to point accusing fingers at trading partners and make charges about unfair practices. Tension between the United States and China about which country is primarily responsible for the trade imbalance between the two has thrown the spotlight on the broader consequences for the international financial system when some countries run large and persistent current account deficits and others accumulate big surpluses. The Netherlands' current account has been constantly in surplus for over three decades. The current account surplus is traceable to fundamental features of the Dutch economy, such as energy exports, goods re-export and the main vehicle of multinationals, foreign direct investment. From the perspective of savings and investments the surplus also reflects the ongoing and necessary deleveraging of households (i.e. low investment) and multinational companies (i.e. high savings). The thesis also studies the “mirror image” of the current account, the financial account, in order to signal a potential accumulation of macro-financial vulnerabilities.

The aim of this paper is to identify economic, financial and other factors of what drives imbalance in current account. Is it benign or if not, is it sustainable?

This paper is organized as follows: first a glance to balance of payments and national accounting where I would describe usage of both national income identity and savings and investment

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perspectives, and net lending and borrowing position of the Netherlands; second, I will review Dutch balance of payments from historical and international perspective; third, trade balance as significant component of Dutch current account; fourth, contributions to current account balance throughout multiple sectors such as: households, non-financial corporations, financial institutions and general government; lastly the global current account surpluses and macroeconomic imbalances.

1 Balance of payments and national accounting

National accounting is the accounting for measuring the economic activity of a nation in a complete and consistent form. It has developed conjoint with macroeconomics from the 1930s with its relation of aggregate demand to total output through interaction investment and consumption, which are considered as major expenditures. Data for national accounts may be presented differently in each economy, however should follow the System of National Accounts standards. The Netherlands annually publish official overview statistics of the Dutch economy named “National accounts of the Netherlands”¹.

This chapter will be taken as theoretical part with intention to clearly understand the relation between main components of national accounts and balance of payments, particularly current and financial account, gross domestic product, savings and investment. Hereby, national accounts’ relation is observed as balance of payments from perspective of national income identity and balance of payments from perspective of savings and investment.

Formulas in this chapter based on studies from Paul Krugman and Maurice Obstfeld “International Economics: Theory and Policy” and Vojtech Spěváček “Makroekonomická rovnováha české ekonomiky v letech 1995 až 2005”.

1.1 Balance of payments from perspective of national income identity²

The Balance of payments (BoP) is a statement that summarizes economic transactions between residents and nonresidents during a specific time period (5th Manual of Balance of payments). Transactions are either marked as a credit or a debit and it is important to keep in mind that despite the name „balance of payments“ the data is not related to actual payments made and received by a country. Transactions are categorized under three different account balances: the current account balance (CAB), the capital account balance (KAB) and the financial account balance (FAB). In a theory, the sum of all credit entries is equal to the sum of debit entries, and the balance of payments is zero. However, in practice, the accounts frequently do not equalize. The difference will be due to different sources for calculation data for balance of payments, as a result there is net errors and omissions item.

¹ “National accounts of the Netherlands 2013” Statistics Netherlands, 2014.

² This chapter is written based on 5th Manual of Balance of payments.

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$$\text{CAB} + \text{KAB} + \text{FAB} + \text{errors \& omissions} = \Delta \text{FX reserve} \quad [1]$$

Most practitioners, as well as P. Krugman and M. Obstfeld, include the financial account into the capital account for simplification. In this paper capital and financial accounts will be distinguished as it is given in IMF manual and this will be also proper in case of Dutch balance of payments' analysis.

- A. Current account is given by the sum of the trade balance, balance of services, balance of income (NY) and current transfers (NCT):

$$\text{Trade balance} = \text{Export of goods} - \text{Import of goods} \quad [2]$$

$$\text{Balance of service} = \text{Export of services} - \text{Import of services} \quad [3]$$

$$\text{Trade balance} + \text{Balance of services} = \text{Net export (NX)} \quad [4]$$

$$\text{CAB} = \text{NX} + \text{NY} + \text{NCT} \quad [5]$$

Positive Net export ($X - M > 0$) contributes increasing Current account and Gross domestic product. The payment for exported goods and services also represents an inflow of funds into the economy that stimulates consumer spending. High import ($X - M < 0$) has an opposite effect. Negative net export represents outflow of funds from an economy to the economies where the import comes from.

Net income balance (NY) is the difference between international income receipts and payments. It covers international compensations of employees paid to non-resident employees or received from non-resident employers and investment income accrued on external financial assets and liabilities. The main types of investment income are dividends and repatriated profits from foreign direct investment, portfolio investment and etc. Net income used to be not significant item in the Dutch balance of payments because it was fluctuating around zero before the crisis, however after the crisis it starts to increase.

Net current transfers balance (NCT) records one-sided transactions where the originator provides real resource or financial item and does not receive something with economic value in return. This is particularly transaction such as donations, grants, foreign aid, tax payments and workers' remittances.

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- B. Capital account records capital transfers and acquisition or disposal of non-produced and non-financial assets. This is a minor account for some countries and particularly for the Netherlands.
- C. Financial account records international flows of capital. It contains the following components:
 - 1. Foreign direct investment (FDI) is a type of international investment where investor must own at least 10% or more of the voting stock or ordinary shares of the company that it is investing to;
 - 2. Portfolio investment refers to purchase or sale of shares where investor own less than 10% in a company and debt securities;
 - 3. Financial derivatives;
 - 4. Other investment mainly includes cross-border bank loans;
- D. Foreign reserves (FX reserves)³ covers currency, commodities and other financial capital held by monetary authorities. These assets should be readily available for direct financing of payment imbalances or for indirect regulation through currency manipulation⁴.

When foreign citizen invests in domestic asset it brings capital to the domestic economy. Contrariwise, when domestic citizen acquires foreign asset it loans to foreigners. Thereby this represents an outflow of capital from the domestic economy.

$$FAB = F_{\text{inflow}} - F_{\text{outflow}} \quad [6]$$

To sum up above conditions, we can get simplified equation of balance of payments. It is assumed that there are no recorded errors and omissions and capital account plays non-significant role. Also for simplification net income and transfers are omitted from current account balance, so it is assumed that current account is equal to net export ($CAB \approx NX$).

$$CAB + FAB = \Delta \text{FX reserves} \rightarrow X - M + F_{\text{inflow}} - F_{\text{outflow}} = \Delta \text{FX reserves} \quad [7]$$

If monetary authorities will not intervene in a foreign currency market and thus exchange rate will move in pure floating regime, then current account will equal to financial account.

³ Foreign reserves (FX reserves) are part of financial account from 6th edition of manual of Balance of payments. Before FX reserves were separated.

⁴ FX reserves have a minor significance in case of the Netherlands.

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$$\text{CAB} = - \text{FAB} \quad [8]$$

Gross domestic product (GDP) is the most frequently used indicator in the national accounts, which is defined as *all the output (or production) carried out by all the firms, non-profit institutions, government bodies and households in a given country during a given period, regardless of the type of goods and services produced, provided that the production takes place within the country's economic territory* (Lequiller and Blades, 2006)⁵.

$$\text{GNI} = \text{GDP} + \text{NY} = \text{C} + \text{I} + \text{G} + \text{NX} + \text{NY} \quad [9]$$

Gross domestic product identity says that in an open economy GDP is the sum of private consumption (C), total investments (I), public government consumption (G), overall Net export of goods and services (X - M) and they are all considered as sources of income⁶. At the same, this national income can be spent on consumption (C), taxes (T) or can be saved (S). The equation above can be rearranged into:

$$\text{GDP} = \text{C} + \text{I} + \text{G} + \text{NX} = \text{C} + \text{T} + \text{S} \quad [10]$$

$$\text{Source of income} = \text{C} + \text{I} + \text{G} + \text{NX} \quad [11]$$

$$\text{Uses of income} = \text{C} + \text{T} + \text{S} \quad [12]$$

1.2 Balance of payments from perspective of savings and investment

More in-depth approach to analysis of balance of payments' components is savings and investment perspective. Rearranging the formula of National income identity and remembering

⁵ „Domestic“ has an opposition as „national“. Therefore the indicator Gross national income (GNI), which is the “new” denomination for Gross national product (GNP), measures the total income of all economic parties residing within the national border. The basic equation for output is also called National Income Identity, which is explained by the fact, that the national product of any economy should be equal to the national income.

⁶ Some authors use GNI, the others GDP. Also, some omit balance of income and balance of transfers and use current account and net export (of goods and services) interchangeable. Although IMF exactly distinguished between capital account and financial account in the nineties (5th Manual of Balance of payments), many authors have not caught this change and use the term “capital account” for “financial account” nowadays. On the one hand these simplifications are very useful and help us to understand the logic of national accounting in (open) economy. On the other hand, it is quite demanding to catch all simplifications and construct “one” unified approach to this issue. Moreover, last year the 6th Manual was put into practice and it brought a lot of changes as well.

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the above-mentioned simplified equality of current account balance and financial account balance (CAB = - FAB), the equation⁷ can be rewritten to:

$$I = S + T - G - NX \quad [13]$$

National savings (S) can be considered as the amount that is left after consumption and government expenditures⁸:

$$S_{\text{national}} = GDP - C - G \quad [14]$$

Meanwhile national savings should be split into private (S_{private}) and public (S_{public}) savings. Private savings is calculated as disposable income ($GDP - T$) reduced by consumption (C)⁹. "T" here is taxes that is paid by consumers and become the government's revenue. This government's revenue (T) reduced by government expenditures gives the public savings.

$$S_{\text{private}} = GDP - T - C \quad [15]$$

$$S_{\text{public}} = T - G \quad [16]$$

Net export (NX) is considered as a portion of national savings that is not used to finance domestic investment. In case of net export surplus, national savings are exceeding domestic investment (I_d). Hence domestic citizens have a capital for foreign investment (I_f):

$$(X - M) > 0 \rightarrow S_{\text{national}} - I_d = I_f = \text{NX surplus} = \text{CAB surplus} \quad [17]$$

The initial equation will be developed further:

$$\text{a. } I_d = S + T - G - NX = S_{\text{private savings}} + S_{\text{public savings}} + \text{FAB} \quad [18]$$

$$\text{b. } S_{\text{national}} = I_d + I_f \quad [19]$$

This says, that in an open economy domestic investment (I_d) can be financed with either national savings or foreign capital (FAB) and national savings (S_{national}) can be used both for domestic

⁷ Calculation: $I_d = GDP - C - G - NX = (C + T + S) - C - G - NX = S + T - G - NX$. Here for simplification the Net export is considered as a main component of current account balance ($NX = CAB$).

⁸ For reasons of simplifications mentioned above, net income (NY) and net current transfers (NCT) are omitted due to its low importance, therefore it is considered that gross domestic product is equal to gross national disposable income ($GDP = GNDY$).

⁹ Private savings can be used in domestic capital (I_d), purchase wealth from foreigners (I_f) and purchase newly issued government bonds ($G - T$): $S_{\text{private}} = I_d + CA + G - T$.

and foreign investments (only if $CA > 0$). Hereby positive CAB associates either with an increase in national savings or an increase in investments abroad¹⁰.

1.3 Net lending and borrowing position

Another key terminologies in national accounts important to mention is net lending or borrowing position of the country, which determines whether the economy as whole is a providing financial resources to the rest of the world or the opposite. In other words, net lending, the positive value, is the amount of excess funds available for lending for other counterparts with consideration of acquisition and disposal of financial assets and also incurrance and repayment of liabilities. A negative value, net borrowing, shows that the economy has a necessity to find financing through borrowing.

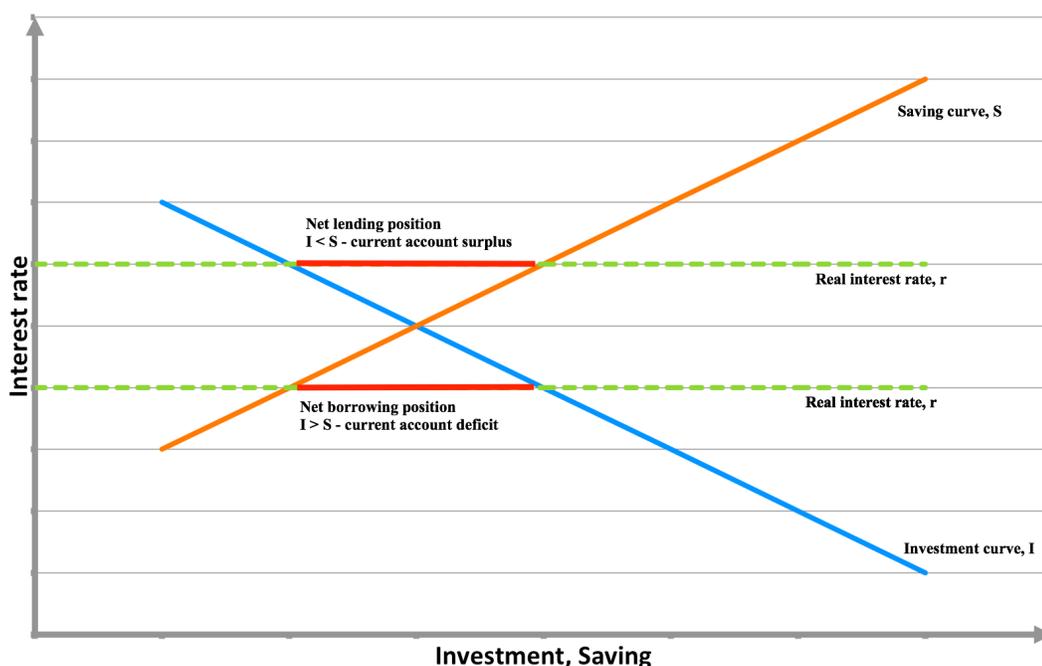


Figure 1: Saving and Investment curves in a large open economy

Source: own construction based on Gunther Schnabl (2011)

The table below presents the summary understanding of the relation between components of national accounts and balance of payments¹¹:

¹⁰ Increase in foreign investment (from the perspective of Balance of payments, i.e. flow) will increase the value of foreign assets (i.e. stock). Foreign assets are also known as “net international investment position”.

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Current account balance: $CAB = NX + NY + NCT$

Gross domestic product: $GDP = C + I + G + NX$

Gross national product: $GNP = GDP + NY$

Gross national disposable income:

a. $GNDI = GDP + NY + NCT$

b. $GNDI = G + C + S$

$$G + C + S = GDP + NY + NCT$$

$$G + C + S = G + I + G + NX + NY + NCT$$

$$S = I + CA$$

$$S - I = CA$$

If $CA > 0 \rightarrow$ CA surplus $\rightarrow S > I$

Country saves more than investment needs, it is in a net lending position.

Box 1: Relation between components of national accounts and balance of payments

Source: Vojtech Spěváček “Makroekonomická rovnováha české ekonomiky v letech 1995 až 2005”

¹¹ In the earlier rules of national economic accounting system, the production factors such as capital and labor was measured between countries, so GNP used to be indicator of economic. However nowadays GDP is used much more than GNP because of the development of economic globalization and GNP does not accurately measure a certain area of the total production. GDP uses “territorial principle” and does not matter whether foreigners or citizens created value to the domestic product.

2 The Dutch balance of payments in historical and international perspective

This chapter will be focused on analyzing balance of payments in historical and international perspective in the economy of the Netherlands. The System of National Accounts (SNA) adopted by the United Nations Statistical Commission standardizes national accounts. It is an international standard for compilation of national accounts' statistics and used for international reporting of comparable national accounting data. The latest update of the SNA was implemented in 2008. International Monetary Fund Statistics department prepares guideline for the balance of payments statistics. The sixth edition of Balance of Payments and International Investment Position Manual (BPM6) was released in 2009 and was drafted based on the SNA-2008 in order to retain consistency between two systems¹². Depending on availability of comparable sources all data here will be presented as a share of GDP since 1995.

The analysis of current account is important to indicate an economy's health, or to be more precise, it reflects a country's net borrowing needs. A country with a positive current account balance has a saving surplus, which means that the country has an excess of resources that can be provided to other economies¹³. The opposite view is a negative current account balance, when a country borrows more than it saves. In this case a country builds up foreign debt and runs down monetary amount of saved funds and assets¹⁴. The gap between saving and investment is reflected by transactions that finance them. Hence the "mirror image" of current account balance is the financial account balances. This will be visual in following figures 2 and 3 (Current account balance and Financial account balance).

The Netherlands has experienced a persistently increasing current account surplus since 1990s. From the figure below we observe the trend line, which has been gradually increasing from 5.92% of GDP in 1995 to 11% of GDP in 2014¹⁵. In recent years it outstrips a record surplus reached in 2006 (14.84% of GDP). The decline after 2006 was due to the financial crisis. The Netherlands ranks among the most open OECD economies. The country is highly integrated in

¹² SNA-2008 and BPM6 are updated versions of SNA-1993 and BPM5 respectively. Current account balance and financial account balance data in this chapter is presented regarding BPM5, for BPM6 see figures in appendix. This paper does not cover explanation of differences.

¹³ See figure 1 – Saving and investment curves in a large open economy.

¹⁴ It is focused only on one specific year, i.e. has not been taken into account the net financial asset position from previous years.

¹⁵ <http://www.tradingeconomics.com/netherlands/current-account-to-gdp>

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the global economy through international trade and foreign investment. As we see in a figure 2 (Current account balance) the current account surplus mostly owing to the balance of goods. Rapid growth of export from the beginning of 2000s is related to intra-EU and world trade expansion. The balance of services had been relatively low two decades ago and even experienced negative balance for a few years before turning positive in 2004. Chapter 3 deals with net export more in depth. The main contributor of this growth is non-financial sector, which importance is growing in last decade. In particular services such as air and sea transportation, royalties and license fees, which charged by parent company to its foreign subsidiary in exchange for intermediate services, and miscellaneous services that is difficult to specifically categorize as services elsewhere weigh almost 90% of net services. Balance of income shows an increase since mid-2000s and about 80% of it originates in direct investment¹⁶. During the observed period net current transfers balance has been constantly negative.

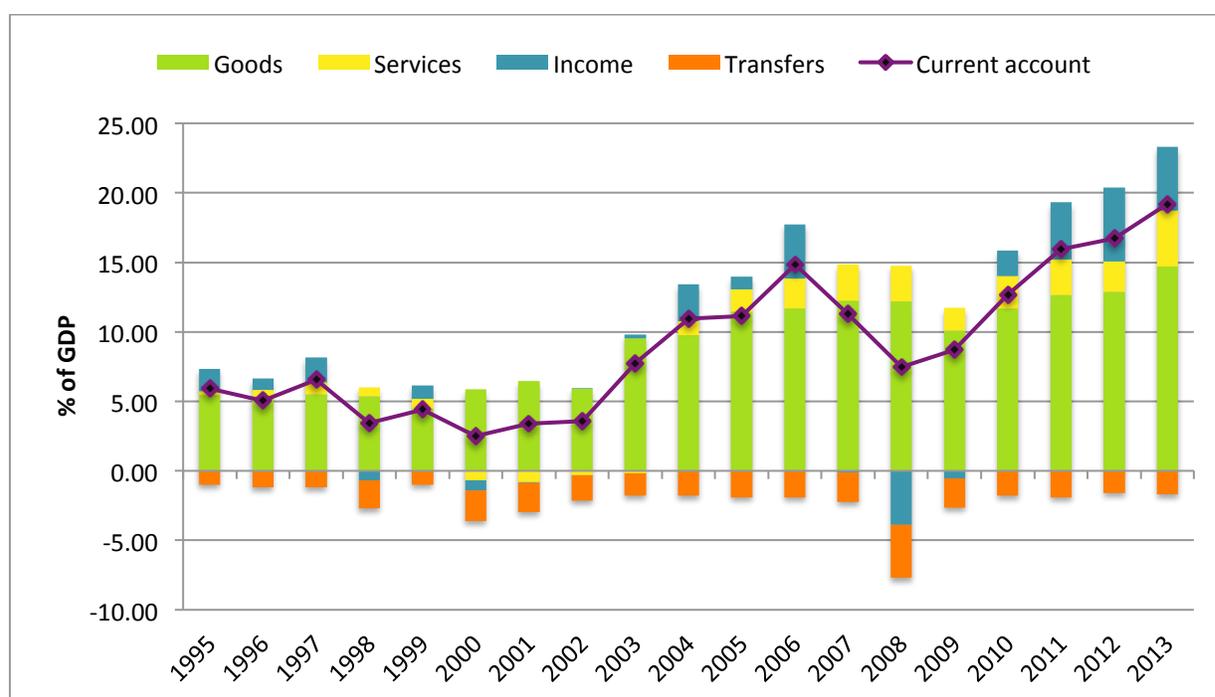


Figure 2: Current account balance, as percentage of GDP

Source: European Commission (Eurostat), Balance of Payments Manual 5

¹⁶ The decrease in 2008 is due to financial crisis. More analysis about foreign direct investment (FDI) will be further mentioned in this chapter and in Chapter 4.2 – Non-financial corporations.

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As it was mentioned before, financial account balances are the “mirror image” of the current account balance since the flows of goods, services and factor payments have to be somehow financed. From the figure below (Financial account balance and “mirror image” of current account balance) we observe that foreign direct investment flow largely contributes to the Dutch financial account balance. Especially it has expanded from the beginning of 2000s due to the goals of multinationals to enhance their market shares by increasing their FDI abroad. However several years are recorded with a positive FDI balance. This can be explained by the takeover of ABN-Amro by a banking consortium of Royal Bank of Scotland Group, Santander Group and Fortis in 2007¹⁷, which was subsequently nationalized by the Dutch government along with Fortis Bank Nederland in 2009¹⁸. In 2012 declined direct investment abroad is mainly due to reduced FDI activity with some traditional partners. This reduce is not only specific for the Netherlands, but also for all members of European Union (EU-27)¹⁹. Portfolio investment also has considerably expanded from the beginning of 2000s. Huge portion of investment abroad is performed by pension funds. Pension funds hold a significant amount of assets from compulsory contribution to the second tier of pension scheme. Since turnover of accumulated contributions do not determined in advance, pension funds can decide by their discretion the investment plan²⁰.

¹⁷ ABN-Amro is one of tree major banks in the Netherlands. Another two are ING Group and Rabobank. Royal Bank of Scotland Group, Santander Group and Fortis are British, Spanish and Belgian banks.

¹⁸ <http://vorige.nrc.nl/international/article2008873.ece>

¹⁹ <http://ec.europa.eu/eurostat/statistics-explained/index.php/Foreigndirectinvestmentstatistics>

²⁰ Pension scheme of the Netherlands will be mentioned more detailed in chapter 4.

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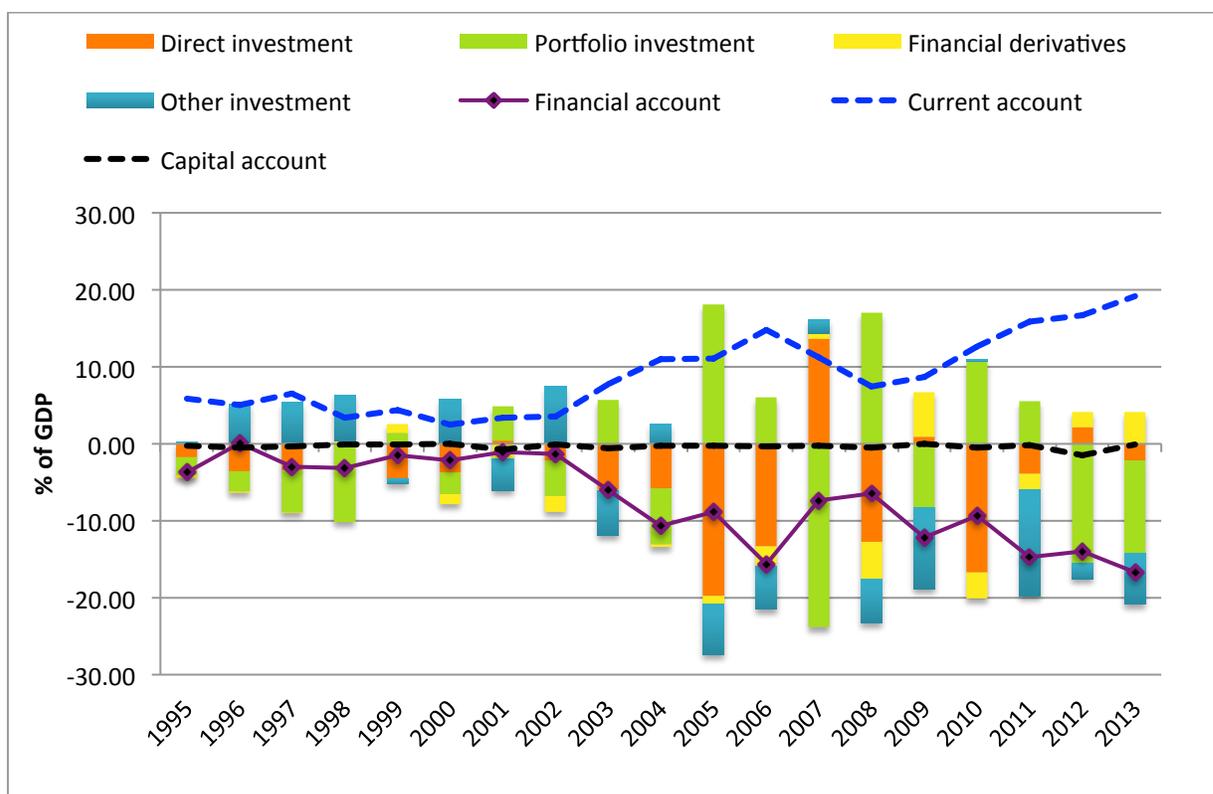


Figure 3: Financial account balance and “mirror image” of current account balance, as percentage of GDP

Source: European Commission (Eurostat), Balance of Payments Manual 5

Based on basic accounting equation of savings and investment ($S_{\text{national}} = I_d + I_f$) presented in Chapter 1, total investment remained stable but relatively²¹ in a higher level – around 26%. However domestic investment is gradually decreasing while foreign investment is increasing. This can be explained, as there are limited investment opportunities in the Netherlands especially after the crisis. The Netherlands hosts a lot of multinational companies, which are active in industries that require the investment of large sums of money. This limits domestic investments. Hence the companies started to invest large amounts abroad and that is the reason for balance of income growth (current account increase).

²¹ Compared with European Union member countries.

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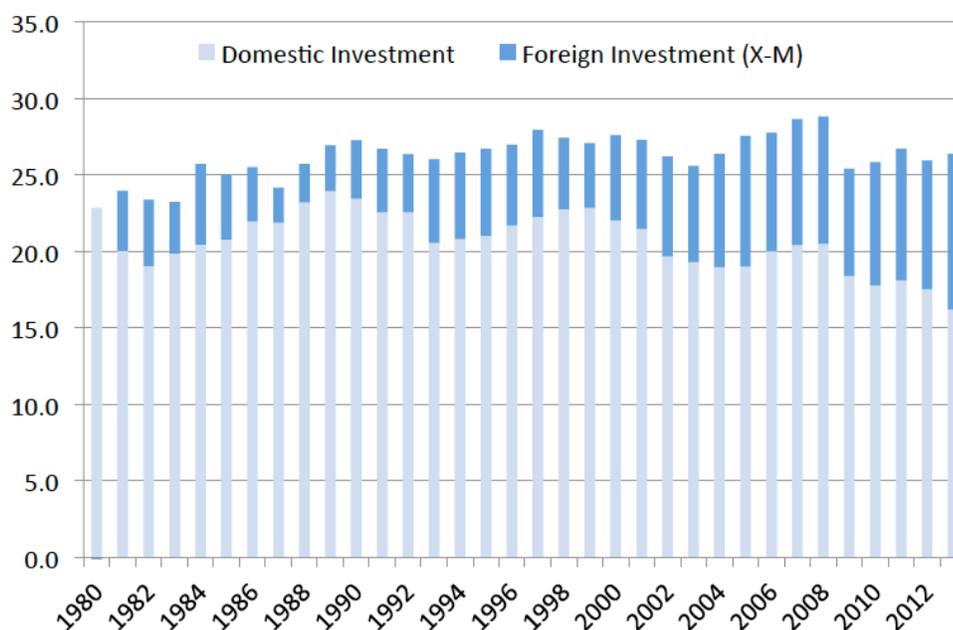


Figure 4: Total savings by foreign and domestic investment, as percentage of GDP

Source: Cees Jansen based on OECD stats.

Current account together with Net international investment position data are important for national and international policy formulation. Current account summarizes country's economic transactions with the rest of the world for a specific time period. The Net international investment position (NIIP) can meanwhile considered as nation's balance sheet at a specific time period, which could be defined as the value of overseas assets owned by Dutch residents minus the value of domestic assets owned by foreigners (sometimes uses the term foreign liabilities). Accordingly the definition implies that current account is a flow and NIIP is a stock²²:

$$CA \approx \Delta NIIP$$

However, in practice there is one effect that obstructs the accurate measure of the NIIP – valuation effect. It includes capital gains or losses due to cross-border external assets' and liabilities' revaluation, exchange rate fluctuation and also to a certain extent statistical measurement complicity. These valuation changes are not regarded as transactions, so they are not recorded and thus they are not observable in a statistical data for balance of payments.

²² Current account is taken as approximate change in net international investment position due to price fluctuation (e.g. dwelling and stock prices).

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Thereby, the change of net international investment position of the country affected by current account balance and also by valuation changes (VC):

$$\Delta \text{NIIP} \approx \text{CA} + \text{VC}$$

The difference between current account surplus and change in the NIIP is consequence of valuation changes. The importance of this effect has been substantially increasing for the Netherlands (Boonstra, 2009)²³. First of all, the Dutch guilder and later euro had appreciated resulting annual exchange rate losses around 0,4%. Secondly, foreign investors had higher return on Dutch equities than contrariwise because Dutch stock exchange in many years outperformed other stock markets.

In the NIIP, assets are divided into direct investment, portfolio investment, financial derivatives, other investment and reserve assets, which include foreign currencies, gold and special drawing rights. Liabilities are assigned with the same classification, except for „reserve assets“, because it has no equivalent on the liabilities side. The Netherlands as an open economy performs huge inflow and outflow of capital in the form of direct investments and portfolio investments.

Over the decades, the Dutch saving surplus helped to build up moderate positive NIIP. Capital outflows were much larger than inflows and the Netherlands had positive net foreign asset position peaked 27,3% of GDP in 1988. But since 1996 the NIIP turned negative value and the Netherlands became the net debtor in spite of a persistent current account surplus. The figure bellow shows that NIIP reached its bottom in 2002 (-26,51% of GDP) and turned positive again only in 2004 and 2006 by less than 1% of GDP.

²³ The valuation changes were negative for over a decade and thus this phenomenon was named the “Dutch black hole”. It is beyond the scope of this thesis to describe the “Dutch black hole” in more detail.

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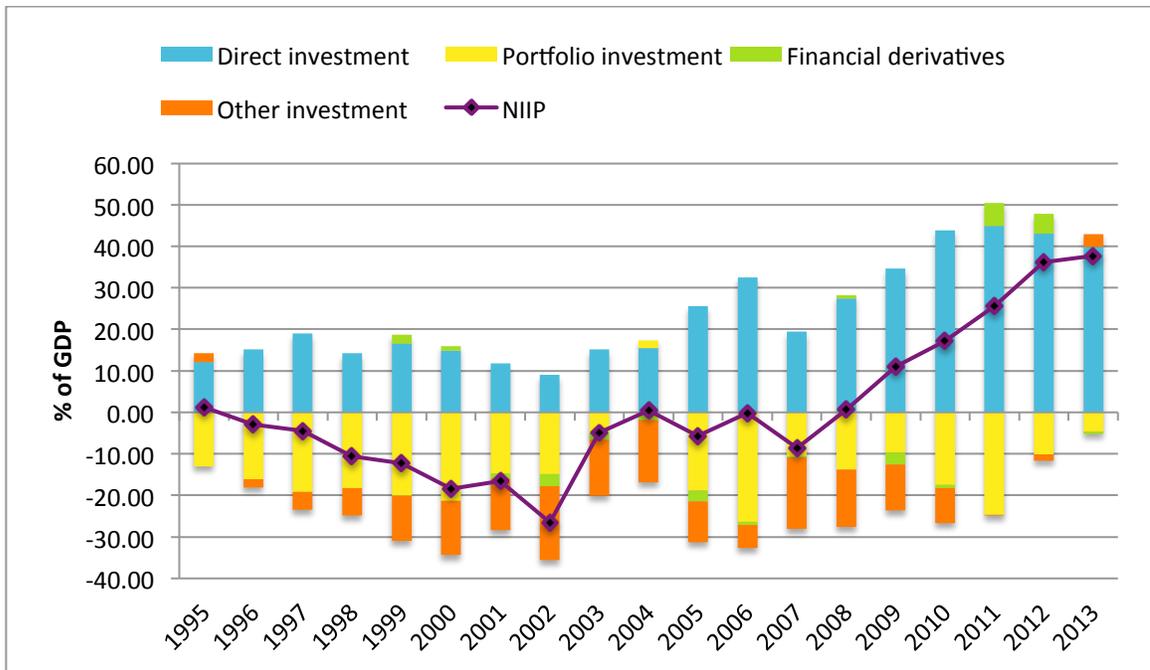


Figure 5: **Net international investment position, as percentage of GDP**

Source: European Commission (Eurostat), Balance of Payments Manual 5

3 Net export as an important component of current account balance

As mentioned in chapter 2, current account surplus was driven mainly by continuous increase in net export. It is therefore essential to examine the trade balance and balance of services, in order to understand the catalyst of current account surplus. The reason I have omitted other components of current account is that they are no significant player in the Dutch current account equation (refer to Figure 2). The balance of income has always been a minor and also fluctuating component²⁴, and current transfers are negatively impacting current account balance, thus non-relevant for analyzing current account surplus.

Although a small country in terms of surface area and population, the Netherlands is one of the world's leading economies, with a progressive trade sector and a business climate that is highly conducive to Foreign Direct Investment. Due to its strategic location in Europe and excellent transport and logistics infrastructure, the Netherlands is among the top-ranked exporting and importing nations. In 2014, for example, the Netherlands was the eighth largest exporter of goods in the world according to CIA Fact book²⁵. The Netherlands' import activities are also telling. In 2014, the country was eleventh largest importer of goods in the world (CIA Fact book, 2015). It is one of the most open economies among the OECD member countries. The large gross trade flows in goods and services is firmly connected with favorable geographical position, which makes the Netherlands to become a transshipment center with the 4th busiest harbour in the world²⁶. High-quality infrastructure and the production and export of natural gas are substantial determinants as well. Rapid growth of the Dutch trade surplus starts at the beginning of the 2000s and associates with the expansion of intra-Eurozone bilateral trade²⁷. The figure below highlights the importance of net export to the growth of Dutch GDP with exception of negative development in 2009 due to the crisis. Berger and Nitsch state that the positive development of intra-Eurozone trade surplus is related to the introduction of the euro (Berger, 2010), however it is difficult to define a precise volume of impact.

²⁴ However its importance is increasing in post crisis period.

²⁵ <https://www.cia.gov/library/publications/the-world-factbook/geos/nl.html>

²⁶ According to the American Association of Port Authorities, the 4th busiest harbour in total cargo volume and the 11th busiest harbour in container traffic is located in Rotterdam.

²⁷ It is a cross border transactions that occurs between two countries based on bilateral trade agreements. Such agreements often substantially reduce barriers to trade such as duties, custom procedures and quotas.

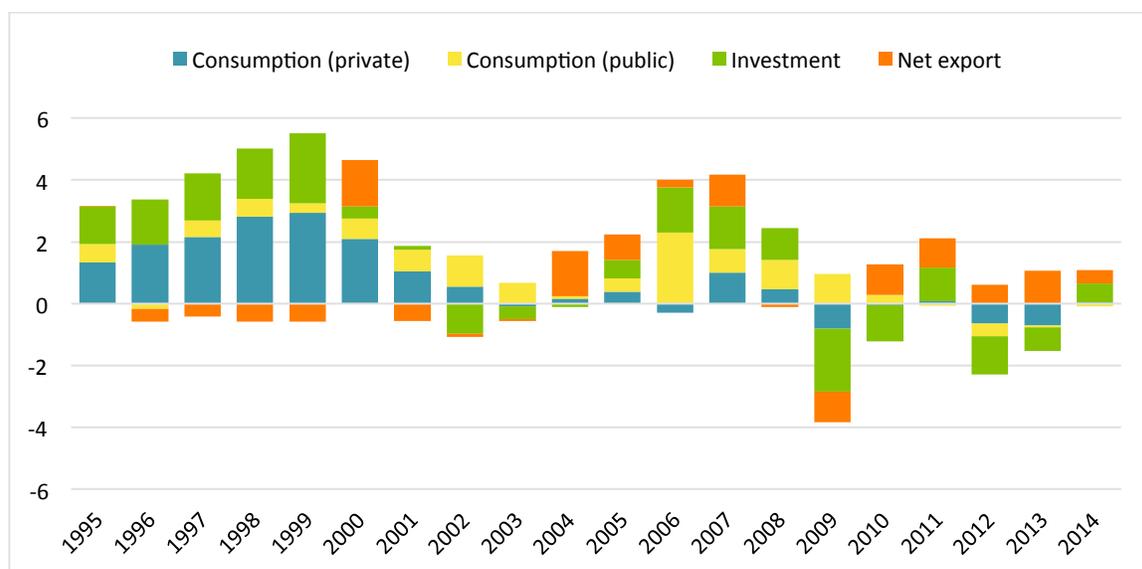


Figure 6: Contribution to GDP

Source: AMECO

3.1 Balance of goods

Traditional statistical approach for measuring trade records was gross trade method, where flows of goods and services are registered every single time they cross a border. This creates “multiple counting” problem. For example, intermediate product could be exported several times until it will become part of component of final product. The Trade in Value-added approach (TIVA) avoids this multiple counting issue and traces only the value added by each industry and country in the production chain and assigns the value-added to the specific steps of supply chain. The positive trade balance in goods has increasingly mirrored the contribution of re-exports, which have grown spectacularly due to a combination of the on-going globalization and the rise of global supply chains. From the figure bellow we observe that the Dutch gross trade surplus is highly concentrated with EU partners however TIVA approach shows that part of the flows refer to intermediate inputs that go through the Rotterdam²⁸ harbour to other countries, so Dutch actual value-added is small. According to Rojas-Romagosa from Netherlands Bureau of Economic Policy Analysis, the relatively large overall Dutch trade surplus is mainly explained by its large surplus with EU27 countries and that this pattern is confirmed by both traditional gross and value added trade statistics. However, the bilateral trade surplus with the rest of the EU is substantially

²⁸ <http://www.cbs.nl/en-GB/menu/themas/verkeer-vervoer/publicaties/artikelen/archief/2015/china-domineert-containervervoer-naar-rotterdamse-haven.htm>

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lower (between half and one-third) in value added than in gross terms. This result highlights the role of the Netherlands as a net importer of intermediate inputs from outside the EU that are later exported within the EU (Rojas-Romagosa, 2015). In bilateral trade context Dutch exports are strongly focused on Europe. Trade with European countries is leading to growing surpluses. At the same time, trade with countries outside Europe is leading to bigger deficits. Germany, Belgium and the United Kingdom are the most important trading partners of the Netherlands for a long time period. Export to recent EU members is growing as well, but still new members account only for a small part of Dutch export, half of the exports to those new 12-member states account for Poland and Czech Republic. However, countries outside of EU are gaining momentum, since many of them are having higher economic growth rate. Outside of EU, China is gaining a substantial market share in recent decades.

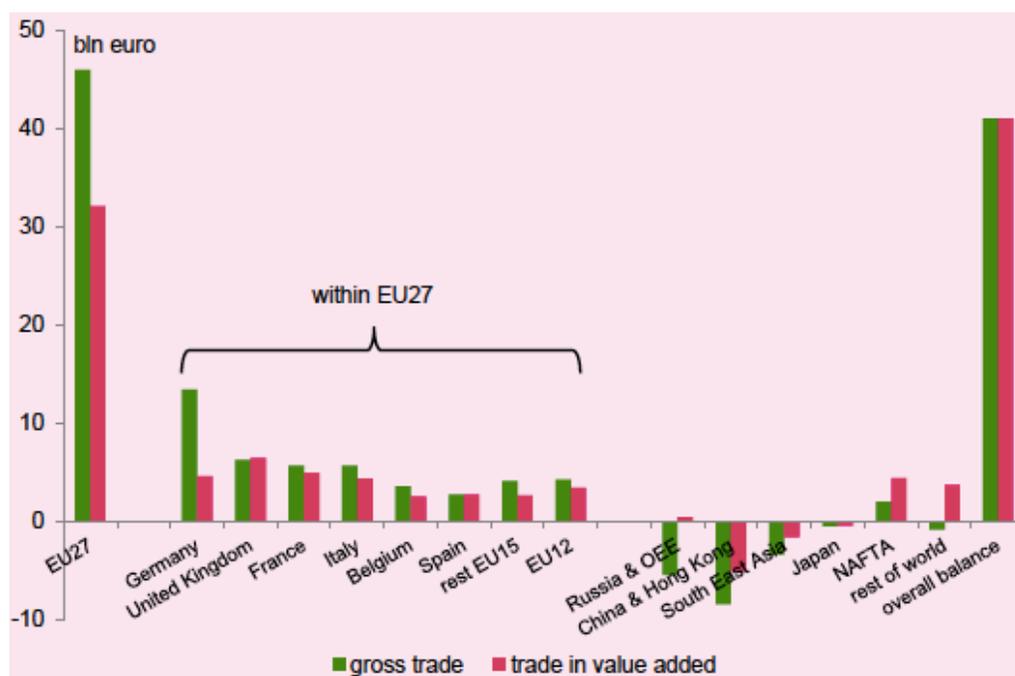


Figure 7: Bilateral trade balance of the Netherlands by main trading partners (2007)

Source: CPB Netherlands Bureau for Economic Policy Analysis, author's own calculation based on GTAP database

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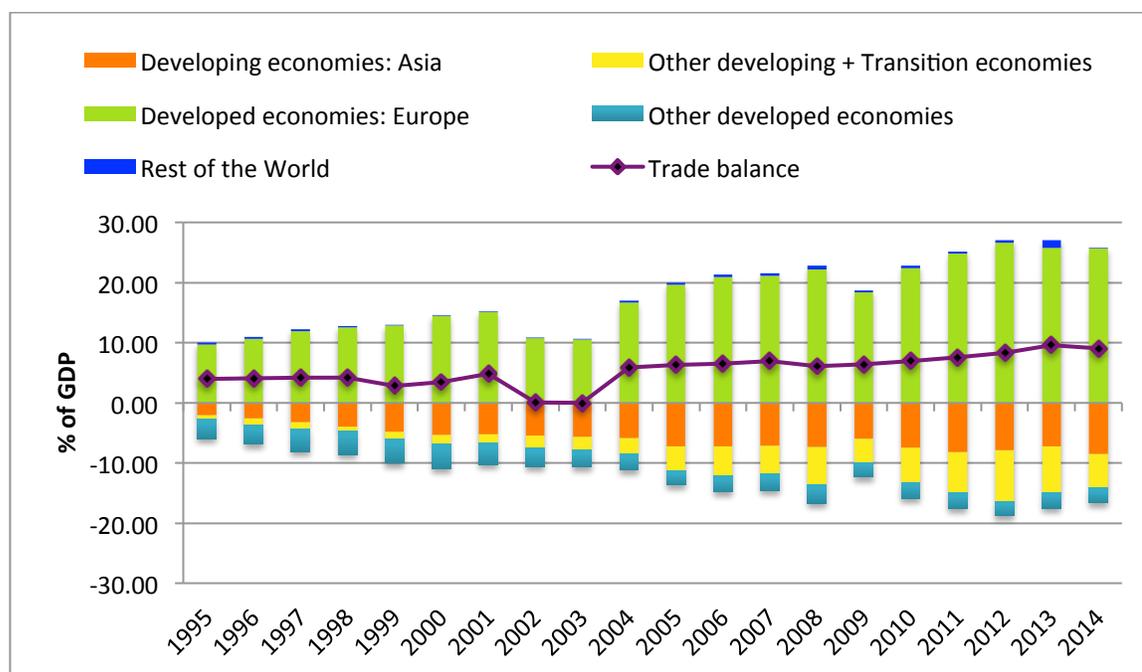


Figure 8: Trade balance by geographic direction, as percentage of GDP

Source: UNCTADstat

Between 1992 and 2011 bilateral trade increased by 31% (from EUR 1.2 billion to EUR 37.3 billion)²⁹. Most of the Dutch imports from China include office, telecommunications and electrical equipment. Dutch exports to China include agricultural and chemical products, manufacturing goods (steel/iron, paper/cardboard), machinery and transport equipment, electro-technical materials and raw materials for recycling. However the Netherlands has a large trade deficit with China. First of all the trade deficit with China basically resulted from the function of the Netherlands as a logistic center for products destined to the European market. While countries outside the EU, especially those in the high growth category, are increasingly being targeted by Dutch exporters, the Netherlands is still more EU-oriented than other member countries. An influencing factor is that a considerable proportion of Dutch exports are re-exports or ‘transit’ exports shipped from various parts of the world to different European destinations via the Port of Rotterdam. Even if these re-exports were not taken into account, the Netherlands is still more EU-dependent than other EU members. The generally concentrated nature of the Netherlands’ trade is evidenced in the fact that in 2012, 19 export partners and 21 import partners accounted

²⁹ <http://china.nlabassade.org/binaries/content/assets/postenweb/c/china/zaken-doen-in-china/trade-relations-nl-and-cn-may-2013.pdf>

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for 80% of the country's exports and imports, respectively³⁰. Statistics Netherlands defines re-export as “*Goods transported via the Netherlands, which are temporarily owned by a resident of the Netherlands, without any significant industrial processing*”. In practice, each good is assigned a six-digit code every time it cross the border and if the code does not change that good is counted as re-export. Re-exports now account for roughly one half of the Dutch goods balance. The spectacular growth of re-exports has been mainly due to a combination of the ongoing globalization and the rise of “global production chains”. Secondly if exports and imports are shown in terms of value added, proportion of the Dutch value added to re-exported goods estimated only about 2.3% of GDP³¹. Base on Kuypers and Lejour domestically produced Dutch export have value added in average 59 cent per euro, whereas the value added of re-exported good is in average 7.5 cent per euro. This noticeable difference shows very small changes of goods after it have been imported to the Netherlands. In case if the Netherlands does not add any value to the product, the total Dutch trade surplus does not change, but only the geographical distribution of its surplus. From this perspective, the Dutch trade deficit with China and trade surplus with countries such as Germany and Belgium would be much smaller, due to involvement of re-exports and TIVA approach.

The following figure presents a breakdown of gross export by product group. We can observe that export particularly concentrated on “mineral fuels” (17.8%), “chemical related products” (17.74%) and “machinery and transportation equipment” (26.47%). The high share of these groups of products can be explained by the fact that the Netherlands is both producer and an exporter. In addition, the Netherlands has become an important node in the intra-European gas trade. However, it should be noted that there is a gradual depletion of domestic reserves and in order to mitigate the sensitivity to gas production-related earthquakes, natural gas production is reducing in a recent years (Boersma, 2015). Considering also the fact of global oil and gas prices decline³², the Netherlands will face gradual but significant trade surplus decline in short run. Reducing domestic oil and natural gas production drives up the share of import. Russia is currently the largest importer of crude oil and related products to the Netherlands.

³⁰ <http://www.msm.nl/resources/uploads/2014/09/MAASTRICHT-SCHOOL-OF-MANAGEMENT-LR-Netherlands-Export-Opportunities-2014.pdf>

³¹ Statistics Netherlands' estimation for 2013.

³² <http://www.bbc.com/news/business-29643612>

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Food	<u>12,49%</u>
<i>Meat</i>	2,6%
<i>Dairy</i>	1,9%
<i>Vegetables and fruits</i>	3,8%
<i>Coffee, tea, cacao, spices, etc.</i>	1,2%
Beverages and tobacco	1,91%
Crude materials, inedible, except fuels	4,85%
Mineral fuels, lubricants and related materials	17,80%
<i>Mining and quarrying</i>	0,4%
<i>Oil and natural gas</i>	12,8%
Animal and vegetable oils, fats and waxes	1,11%
Chemicals and related products	17,74%
<i>Organic chemicals</i>	4,5%
<i>Medicinal and pharmaceutical products</i>	4,3%
Manufactured goods	8,86%
Machinery and transport equipment	26,47%
<i>Office machinery and automatic data-processing machines</i>	7,6%
<i>Telecommunications and sound-recording and reproducing apparatus and equipment</i>	4,4%
<i>Electrical machinery, apparatus and appliances</i>	4,5%
<i>Road vehicles (including air-cushion vehicles)</i>	3,1%
Other	8,77%
<i>Clothing and footwear</i>	1,7%
TOTAL	100%

Table 1: Average gross export by product group (SITC) for the period 2009-2014, as percentage of total

Source: own calculation based on UNCTAD data

3.2 Balance of services

Contribution of balance of services to the Dutch current account surplus had remarkable increase during last decade. Since 2009 the import have increased by 21% and export by 34%. The leading trading partners on the import side are the United States, Bermuda, Germany and the United Kingdom. Most of the Dutch export of services is going also to Germany, the United States, the United Kingdom and also Ireland.

Transport services and royalties and license fees mainly drive the surplus on balance of services. The net export of transport services records 1.4% of surplus and it is also related to the geographical location of the Netherlands. Extensive trade and transition of goods creates new volume transactions. Another 1% of surplus is driven by the net export of services related to

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royalties and license fees, because a number of international companies have subsidiaries in the Netherlands and Ireland for reasons of tax optimization.

Nevertheless the Netherlands also experiencing the negative net export of traveling services, about 0.6% of GDP. Dutch people use more traveling services abroad than foreigners use in the Netherlands. The Dutch business services sector has grown in a stable manner, especially the export side, resulting in a greater contribution to the Dutch trade surplus of 1.8% in 2010 versus 1.0% in 1996. The IT era (1996-2001) boosted volume growth of business services in that period. Since 2001, imports of services have not grown in volume terms, but exports have. Intra-company and IT services take the lion's share. Intra-company, legal and accountancy services dominate exports and, to a lesser extent, imports of business services. Growth in intra-company flows between affiliated companies (e.g. management fees and overhead costs) outpaced export growth of legal and accountancy services between 1996 and 2010. The Dutch IT services sector largely consists of software developers and related services. These IT services have seen their share in business services exports grow from 19% to 21%. Despite a slight decrease in their contribution to business services exports, engineering firms have become increasingly dependent on exports. The share of foreign sales in total production grew from 18% in 1996 to 23% in 2010 (ING, 2015).

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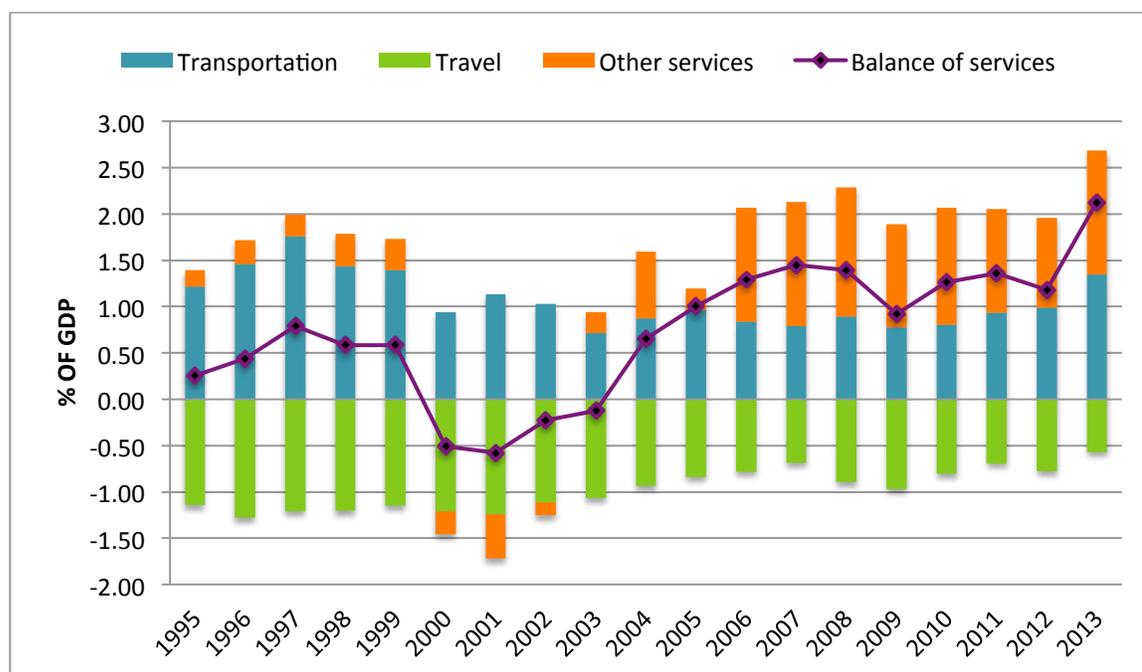


Figure 9: Balance of services, as percentage of GDP

Source: European Commission (Eurostat), Balance of Payments Manual 5

% of GDP (average)	1995 - 1998	1999 - 2007	2008 - 2013
Communications services	0,00	0,02	0,10
Construction services	0,36	0,28	0,09
Insurance services	-0,14	-0,08	-0,05
Financial services	-0,01	-0,04	0,00
Computer and information services	0,02	0,03	0,12
Royalties and license fees	-0,12	-0,04	0,19
Other business services	0,16	0,18	0,57
Personal, cultural and recreational services	-0,01	-0,01	0,00
Government services	0,00	0,09	0,20
Other services (total, net)	0,26	0,36	1,20

Table 2: Components of other services, as percentage of GDP

Source: European Commission (Eurostat), Balance of Payments Manual 5

4 Sectorial contribution to the current account balance

The previous chapter explained the surplus of current account mainly from perspective of the trade balance by giving the information about Dutch net export. However, following the second notion in national account terms, a current account surplus denotes an excess of savings over investment aggregated across institutional sectors (Lequiller and Blades, 2006). Therefore, this chapter offers an alternative view on Dutch surplus from the perspective of institutional sector balances by questioning, “to what extent savings and investment decisions of households, business and the government have been driving the current account surplus?”

The Netherlands has been performing net lending position to the rest of the world for several decades. The figure below (Net lending/borrowing by sector) shows institutional breakdown of Dutch net lending and borrowing position. The main observation is that the corporate net lending has been around 8% of GDP on average and substituted households net lending that have been on average around zero over the last decade. Net lending by the financial institutions has always been relatively low as a percentage of GDP. The government generally performs net borrowing position on average around 2%.

When an economy saves more than invests domestically, it results on net lending position of the country to the rest of the world. Accordingly, if the country saves more than it invests, the total consumption with total savings must be larger than total consumption with total investment. In other words, the sum of the goods and services the country creates and supplies is greater than what it absorbs in total, and so the country must export also excess production (and the excess savings). By exporting the excess savings, the country is providing the funding to foreigners to purchase excess production. That is why the current account and financial account become up to zero so the balance remains³³.

³³ <http://www.economonitor.com/blog/2013/05/excess-german-savings-not-thrift-caused-the-european-crisis/>

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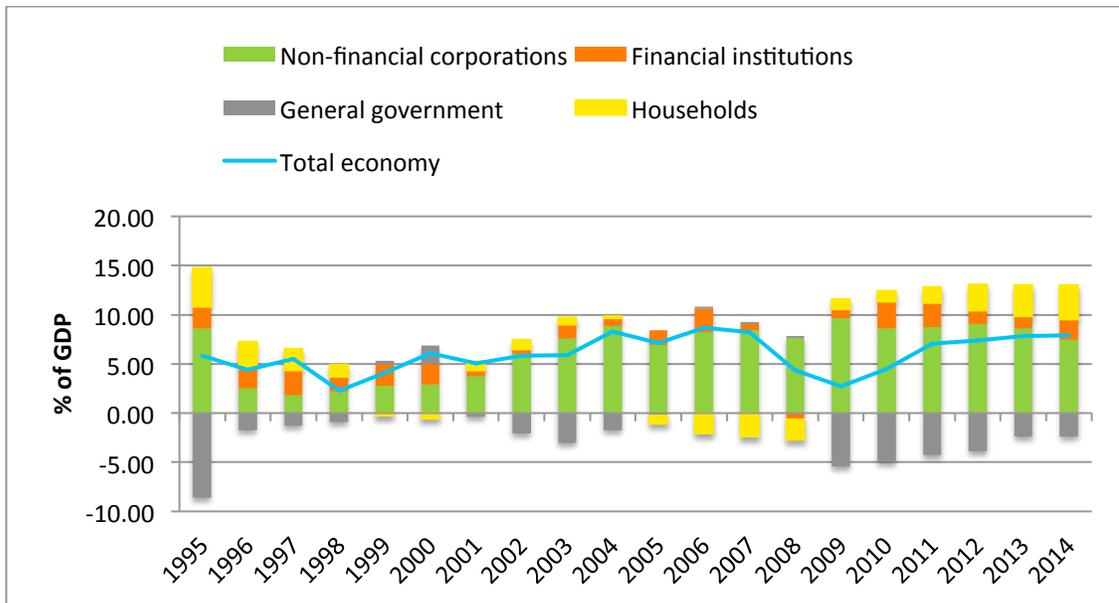


Figure 10: Net lending / borrowing position by sector, as percentage of GDP

Source: OECD National Accounts at a Glance, 2014

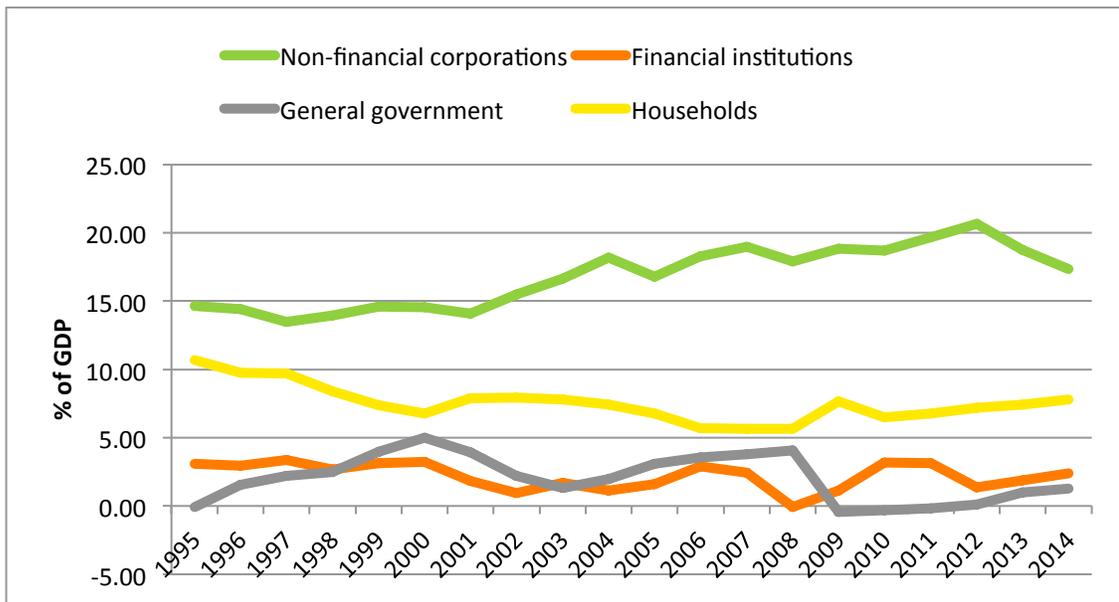


Figure 11: Saving per sector, as percentage of GDP

Source: European Commission (Eurostat)

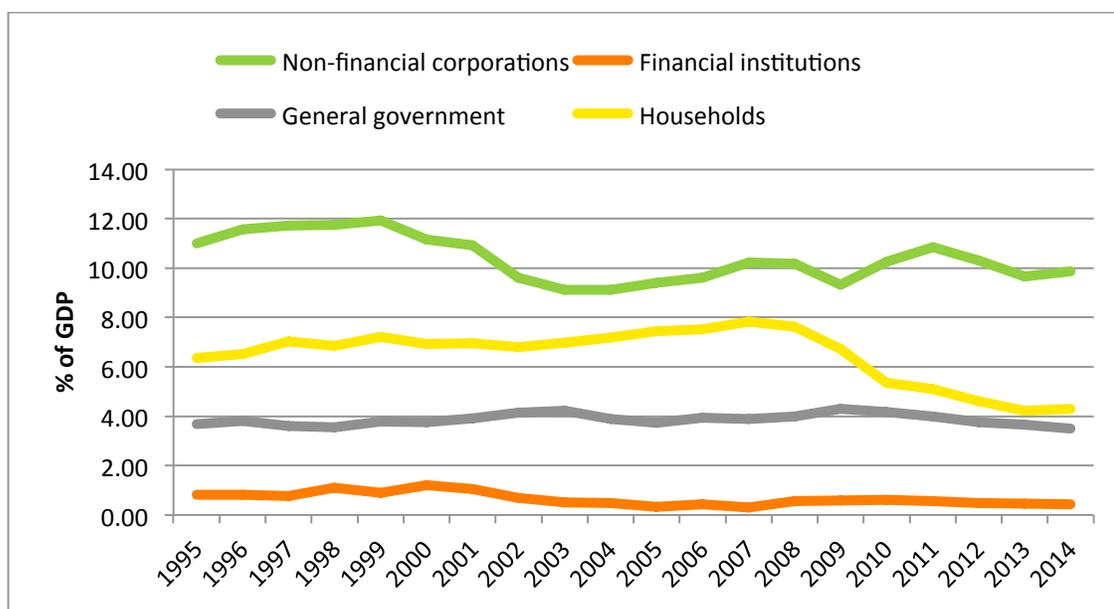


Figure 12: Investment per sector, as percentage of GDP

Source: European Commission (Eurostat)

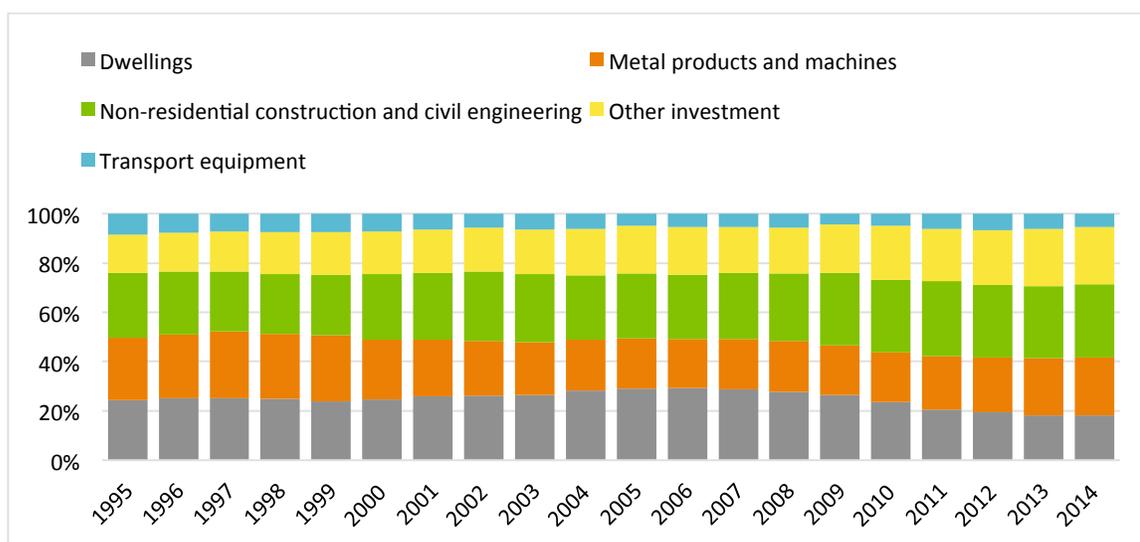


Figure 13: Components of investment

Source: AMECO

4.1 Households

For a prolonged period till start of 1990s the Netherlands had been experiencing sizeable saving surplus on households' account. However, there has been a reversal trend in 2000 and during pre-crisis period. In 2014, net lending position of households increase to 2.4%. This is the record

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level seen over the past decade, although it is still below the levels observed in the pre 1990 period. The development of these trends can be first associated with growing residential investments before the crisis, and secondly, with fall in savings rates.

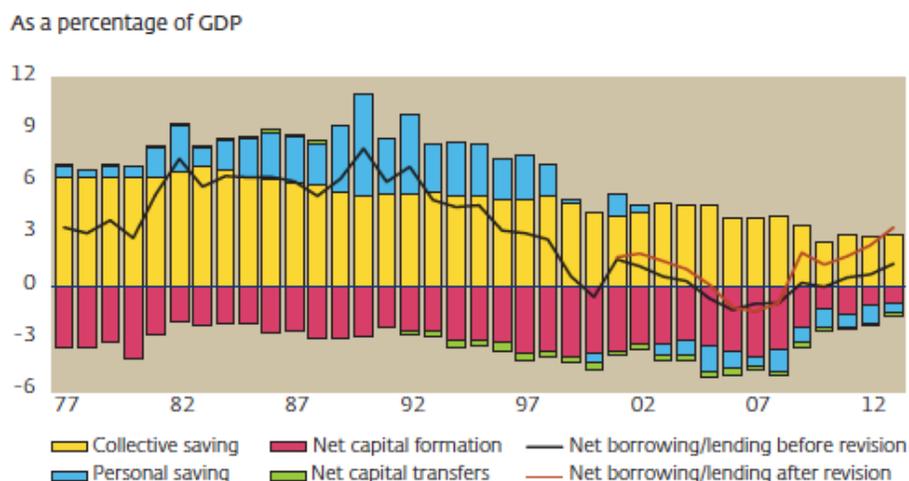


Figure 14: Net lending / borrowing position of the Dutch households 1977 – 2013, as percentage of GDP

Source: De Nederlandsche Bank, author's own calculation based on data from Statistics Netherlands

During the 1990s household investments have been gradually rising and this trend was firmly related to substantial boost of the Dutch housing market, and in particular the owner-occupied housing market. Related transactions such as property tax, legal and estate agent fees are also considered as investments. However, financial crisis in 2008 hit the housing market and there has been an abrupt decrease in housing transaction volume. First of all because Dutch owner-occupiers have been mostly dependent on mortgage financing, and in the mean time banks financed mortgages through the international financial market. In addition, consumer confidence in the housing market dropped to its lowest level, so many potential homebuyers postponed their purchase.

Based on the national accounts' definition, households' savings are calculated by deduction household consumption expenditures from household disposable income and also adding the change in net equity of households in pension funds. So the total households' savings can be divided into two groups: individual and collective savings. Individual savings are funds that households hold on their own balance sheet, for example bank deposits, life insurance policies and other saving products in bank. Collective savings are funds contributed for pension purposes

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and accumulated in special institutions. In case of the Netherlands most household savings are in form of collective savings and they are channeled through pension funds.

The figure below shows types of households' financial transactions, where we observe that loans have considerably increased for a long time period, reaching its highest level in the end of 1990s due to the sharp increase in mortgage debts and additional loans of homeowners for home improvements. From 2000 the volume of taken loans slightly decreased and stabilized because banks toughen the conditions for obtaining loans. After the crisis it's volume halved until 2013, when loans have been fully repaid for the first time in many years reaching the positive values. These repayments were partly funded by households' deposits and partly by National Mortgage Guarantee system. At the same time, sizable volume of collective savings for the pensions went down since 2000. Employees' pension contributions have risen, but on the other hand pension funds have also spend more on pension benefits as amount of pensioners is gradually rising. In addition, lower collective savings ratio can be explained by the fact that pension funds started to receive less interest income due to lower interest rates. This is visible in the figure 16 (Collective saving by household sector). As a consequence, this all factors led to a gradual increase in net lending position of the households in the past few years³⁴.

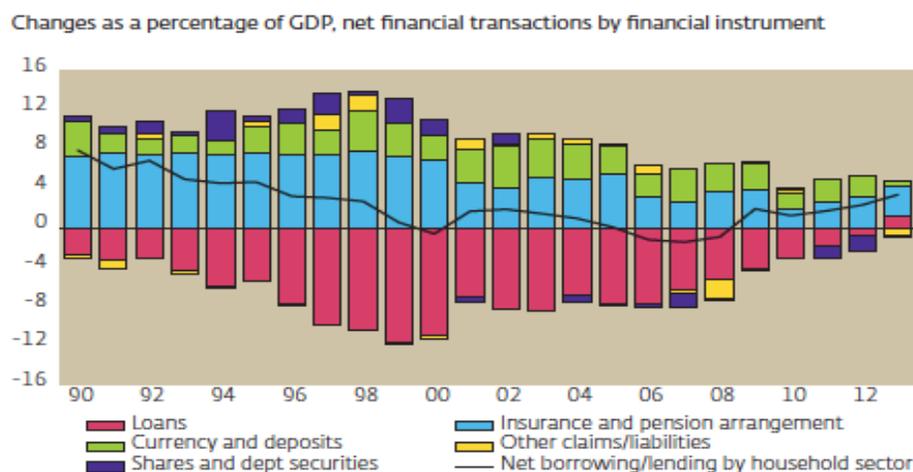


Figure 15: Financial transactions by the households 1990 – 2013, as percentage of GDP

Source: De Nederlandsche Bank, author's own calculation based on data from Statistics Netherlands

³⁴ <http://www.dnb.nl/en/news/news-and-archive/dnbulletin-2014/dnb309964.jsp>

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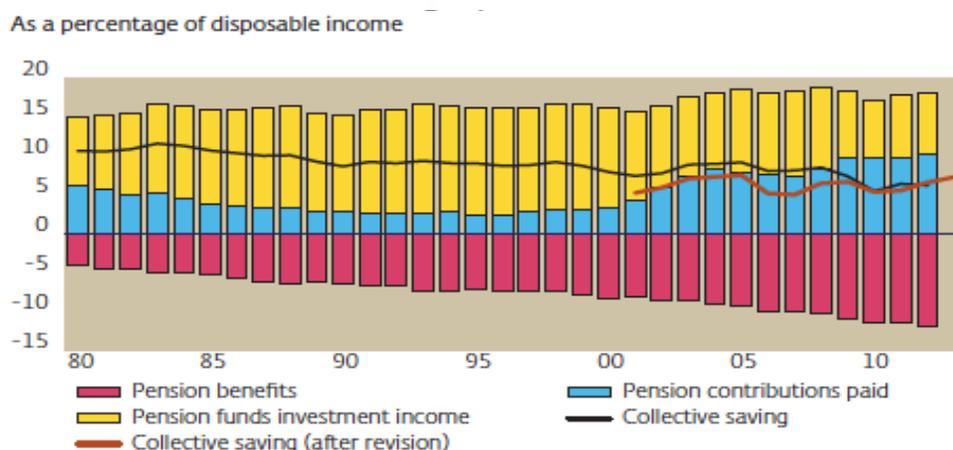


Figure 16: Collective saving by household sector 1970 – 2013, as percentage of disposable income

Source: De Nederlandsche Bank, author's own calculation based on data from Statistics Netherlands

In addition to the figure described above, it would be relevant to give some introduction to the Dutch pension scheme, which consist of three pillars. The first pillar is a basic old age state pension under statutory insurance scheme, called also AOW, to which everyone aged 65 and older is entitled. Its amount depends on statutory minimum wage, therefore married couples and couples living together each receive about 50% of the minimum wage³⁵. The gross amount is recalculated depending on the number of years the person has resided in his or her adult life in the Netherlands. In addition, the first pillar takes into consideration situation of pensioners who are living alone, people who have income below a certain level or have no income at all and underage children who have lost one or both parents. All these beneficiaries get supplementary allowance covered by the Dutch Surviving Dependents Act (ANW). State old age pensions are financed according Pay as you go system (PAYG). This means that today's contributions from taxpayers will be distributed to beneficiaries at once according to their current entitlement, so there is no any fund for pension accumulation. Contributors hereby rely on solidarity between generations. Accordingly, PAYG system is very sensitive to demographic and productive ability development of future contributors and disregards future capital gains. In case of shortage, state pensions are financed by contributions accumulated in the second pillar.

The second pillar is occupation-linked pension plan that consists of the collective pension scheme administrated by pension fund or by insurance company. Pension benefits are financed from

³⁵ Approximately 700 euro gross per month.

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accumulated contributions paid in the past and its return on investment. Amount of contribution is fixed and proportional to employee's salary³⁶ and more than 50% of the total amount paid by employer. This contribution does not depend on age, sex and income. More than 90% of employees belong to an occupational pension fund. Collective pension scheme takes important part of Dutch economy as contribution capacity is taking ever-larger part of total accumulated savings of the Netherlands. Proportion of collective savings to GDP has grown from approximately 70% in 1990s to over 150% in 2013³⁷.

The third tier is individual and not compulsory pension saving scheme for anybody who do not participate in a collective pension scheme, mainly, for self-employed parties. This scheme helps to make extra savings using the advantages from tax benefits.

The remarkable aspect of the Dutch pension scheme is the combination of a state-run pay-as-you-go plan with occupation-linked plan in the second pillar. Since in the first pillar younger generations contribute part of their human wealth for a claim on the human capital of retired generations, this enforces younger people to invest more in equity. Thus, pension funds of the Netherlands tend to invest less conservatively compared to other countries and have one of the highest returns on investment (Heeringa, 2008). In 2013 Dutch pension funds allocated 37% of total investment in equity and 43% in bonds.

³⁶ Around 16 – 20% of gross income.

³⁷ <http://www.oecd.org/pensions/>

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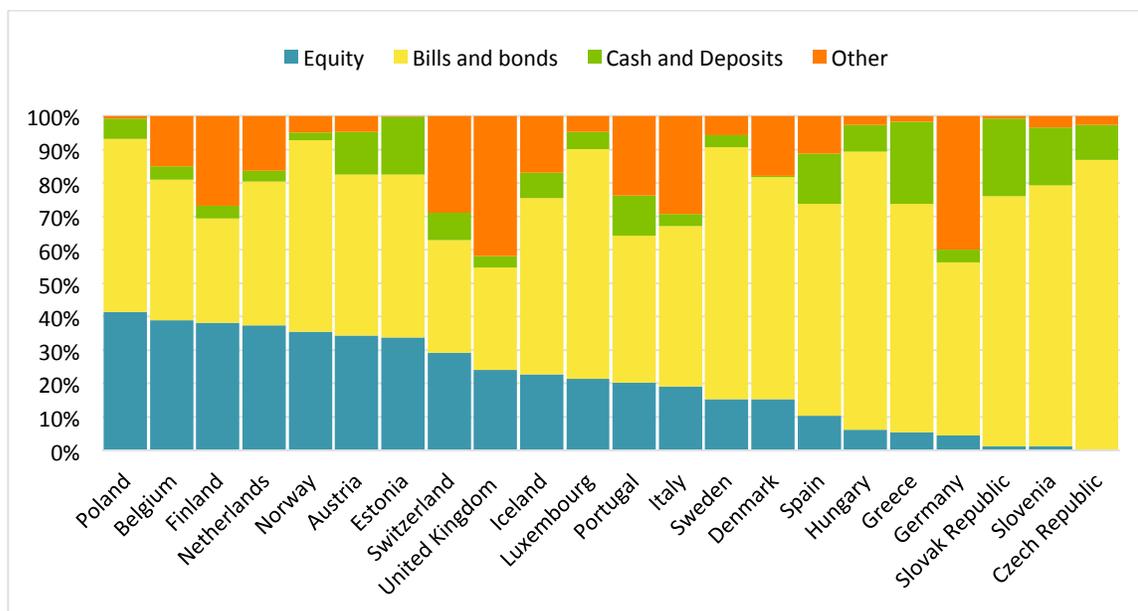


Figure 17: Investment of pension funds, 2013

Source: OECD

Another important aspect of Dutch pension scheme that assets managed by pension funds have grown strongly and have been increasingly invested abroad. In the mid 1990s Dutch pension funds used to invest only some 23% of their assets abroad, currently this figure has now increased to around 81% (Reid, 2014).

4.1.1. Dutch housing market

The growth of investments by household in dwellings has been supported by number of targeted government measures that have also contributed to build-up of household debt. The main target of the government was to stimulate home ownership and to create affordable good quality housing for low-income classes.

Home ownership was stimulated by:

- The tax-deductibility of mortgage expenses (i.e. interests) from taxable income;
- Low interest rate (interest rate for 5-10 years fixed interest mortgages varied about 4-5%);
- High loan to value (LTV) ratio (mortgages exceeding the value of the property were permitted in order to finance additional costs, such as taxes and renovation);
- Opportunity to purchase property through interest-only loans (monthly payments of interest, represent almost 60% of total mortgages in the Netherlands);

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- National Mortgage Guarantee system (risk insurance scheme in case of default),
- Supporting first-time buyers.

These stimulations pushed to growing demand for mortgages. From the mid-1990s, this initiated the development of Dutch mortgage crisis.

In a current time the Dutch housing market consists of 7.3 million houses, 60% of which accounting for owner-occupied homes. This rate is below average in the Euro-zone. The low share of the owner-occupied segment in itself acts as risk filter, since access to ownership is restricted to households with a good risk profile.

32% of total dwellings are owner by social housing associations. They are non-commercial organizations that provide accommodations and acts on a commercial basis but are required to use own profit for provision of a good and affordable housing. However this becomes costly and therefore the government applies the rent regulation reforms such as maximum rent level, annual rent adjustment and tenant protection.

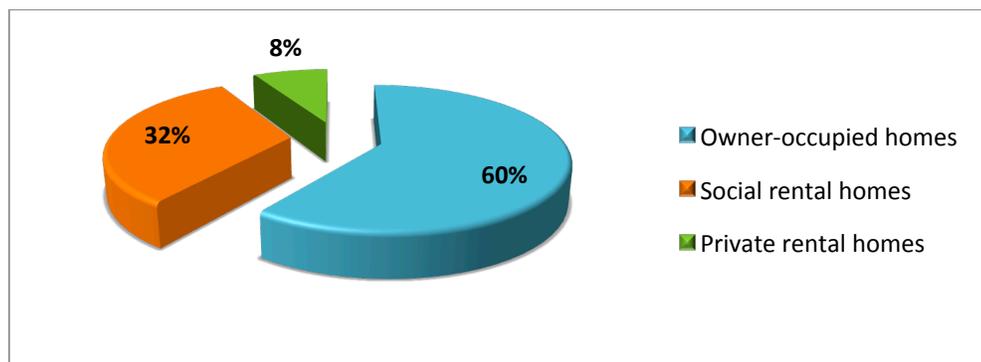


Figure 18: Housing stock, 2012

Source: own construction based on Dutch Housing Survey, Ministry of the Interior

The growth of households' indebtedness was due to enormous borrowings in form of mortgage debt. The Netherlands becomes the second (after Ireland) debt-burdened households in the Eurozone.

The price of dwellings was gradually increasing and reversed in 2009 by the financial crisis that resulted in a significant decrease in housing investment. However it is worth to note that the decline of house prices was smooth compared with other EU countries.

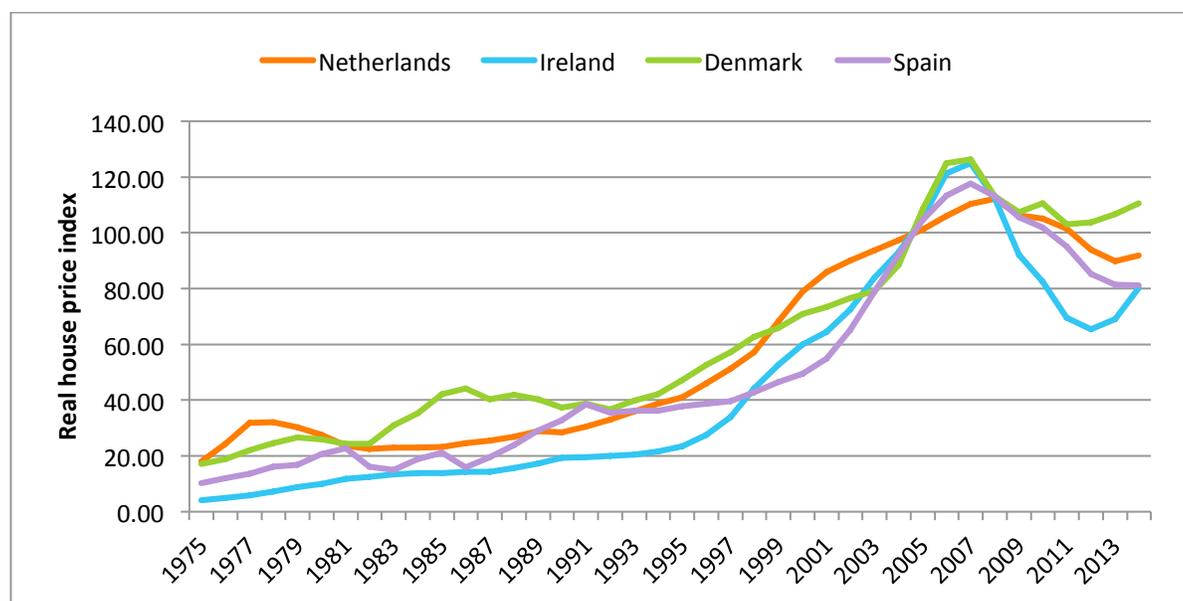


Figure 19: International house prices

Source: Federal Reserve Bank of Dallas

The following figure shows the main items of households' balance sheet. Households on average have assets that significantly exceed their debt (i.e. mortgage), however but both their composition and distribution reveal that they cannot easily be used to repay debt. First of all, the substantial part of the assets formed by pension entitlements and they are not taken as liquid financial assets of households, which could be used when negative shocks hit income or wealth. So when pensions are excluded, assets exceed debt only marginally. Secondly, young and prime-age households are particularly exposed to adverse developments in the housing market, as opposed to older borrowers, and risks have increased since the beginning of the crisis. Disposable income is low for the young and the opposite for seniors. Old-age pension replacement rates are amongst the highest across the OECD, at over 90%, irrespective of the earnings level. Therefore with a high level of pension wealth resulting from these high replacement rates the cost of housing should not be an issue³⁸.

³⁸ <http://www.oecd.org/els/public-pensions/OECD-PensionsAtAGlance-2013-Highlights-Netherlandsengfinal.pdf>

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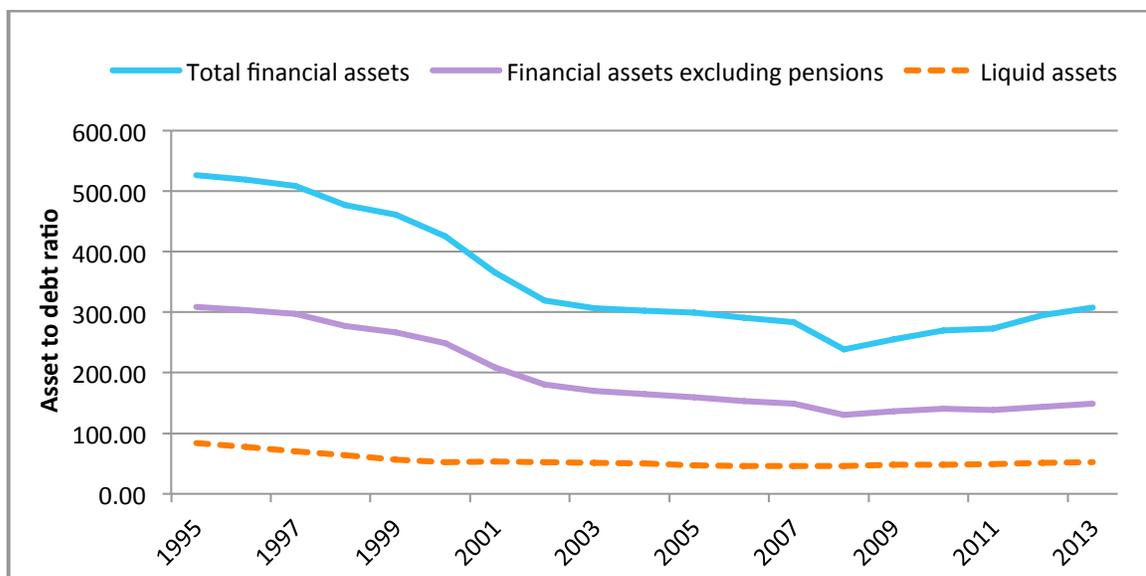


Figure 20: Ratio of financial assets to mortgage debt

Source: OECD Economic survey (2014)

Household debt peaked in 2010 at an all-time high of 290,67% as a percentage of net disposable income and has since been slightly decreased for about 5 percentage points. Based on the published statistics by the Dutch central bank³⁹ the total amount of outstanding residential mortgage debt amounted to about 630 billion euro at the end of 2014 (160% of GDP).

³⁹ Dutch Central Bank statistics, households, table T11.1

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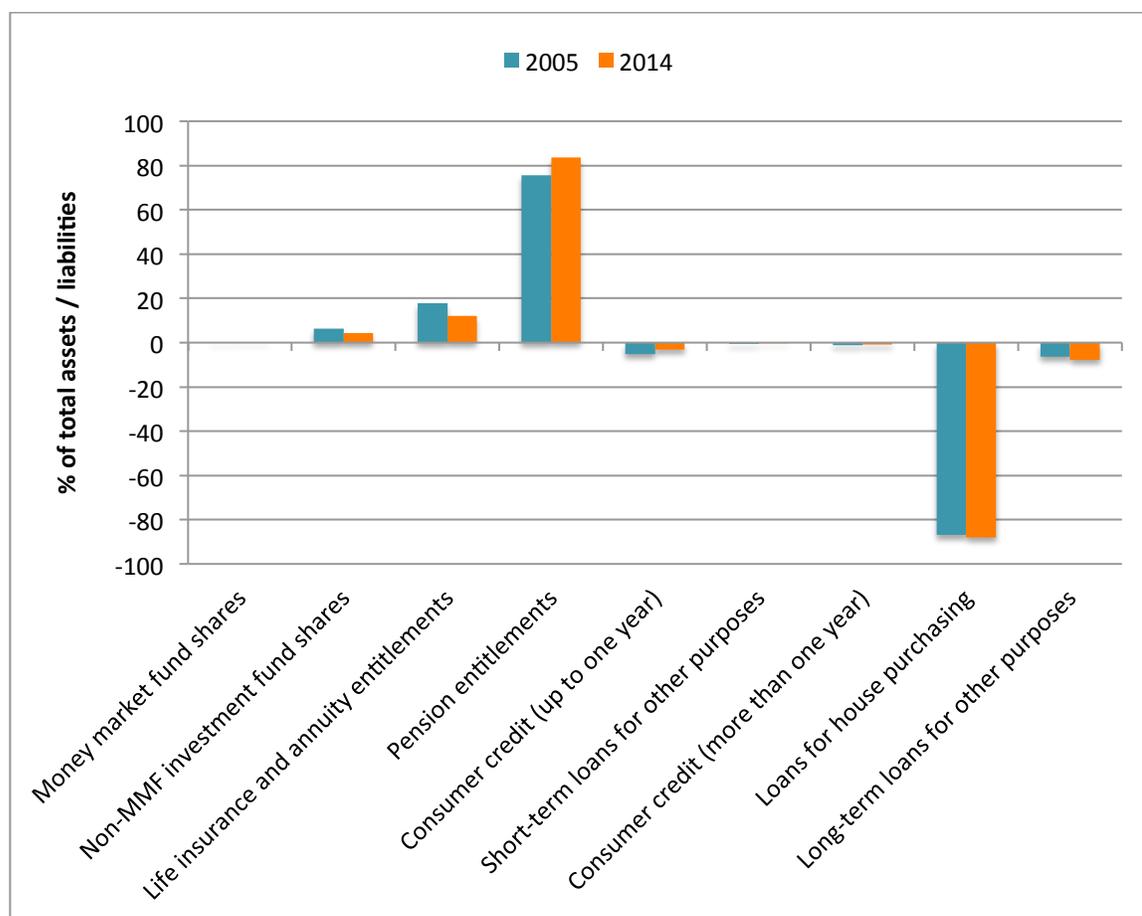


Figure 21: Household's balance sheet (main components)

Source: OECD stat (2005, 2014)

4.2 Non-financial corporations

Non-financial sector took over the role of households as strong savers in the second half of 1990s. Since the year 2002, net lending position of corporate sector has never been less than 6.5% of GDP and remains on average 8% of GDP. This sharp increase in saving surplus can be attributed partly to an increase in net corporate savings and partly to a drop in net investment. The difference between savings and investments is the funding that non-financial sector provides to other sectors.

Such tendency of growing surplus has been observed in many other industrial economies from the beginning of 2000s. First of all it was related to the Dot Com bubble burst in 2000 – 2001, which significantly deteriorated corporations' balance sheet. Subsequently, since 2002 Dutch non-financial corporations decided to embark on a deleveraging process in which the profit have

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been used to repay debt or acquire financial assets, rather than to finance new domestic capital investment or distribute dividends to shareholders. Thereby decreasing liabilities and limiting dividends payments contribute to the increasing net savings of Dutch non-financial corporations.

However, it should be noted that decisions of corporations were not only driven by stock market crash, but by a range of interrelated factors that are specific to the Dutch economy. Such factors include lower interest payments as nominal interest rate have fallen with inflation, higher profit received from abroad and lower taxable income due to favorable tax treatment.

The following table provides the balance sheet of non-financial corporations and changes in its items. Over the last decades it has significantly extended. The assets side shows that from the second half of the 1990s Dutch companies had a strong increase in shares and other assets, particularly foreign direct investments⁴⁰, and also strong cash accumulation. Non-financial assets did not change a lot. The financing side development shows that Dutch non-financial corporations started deleveraging and strengthening their equity position after the bubble burst and have also maintained this trend after the financial crisis. That led to a large decrease of debt ratio up to a present time. Currently large corporations have increased their equity share from about 37% of their balance sheet in 2002 to around 45% in 2013⁴¹. Small and medium-sized enterprises (SMEs) strengthened their equity ratio from 34% to 41% (European Commission, 2015). Issued share capital has doubled, but this was generally associated with sharp rise in share prices.

⁴⁰ Foreign direct investment is discussed further in this chapter.

⁴¹ Non-financial corporations are considered “large” if they have a balance sheet of min 40 million EUR at the end of the year.

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% Of GDP	1990	1995	2000	2007	2012	2000-07	2007-12
Assets				Changes			
1. Non-financial assets⁴²	NA	NA	192,2	189,3	182,9	-2,9	-6,4
2. Shares and other assets	29,5	33,6	42,5	49,6	87,3	7,1	37,7
3. Loans	43,4	49,3	76,3	81,5	92,2	5,2	10,7
4. Cash holdings	19,9	19,1	26,8	37,8	40,4	11,0	2,6
5. Total assets (1+2+3+4)	-	-	337,8	358,2	402,8	20,4	44,6
Liabilities and Equity							
6. Shares and other liabilities	77	95	160,3	135,7	141,1	-24,6	5,5
7. Debt	119	114,6	139,8	119,9	116,3	-19,9	-3,6
8. Balance (5-6-7)	-	-	37,7	102,6	145,4	64,9	42,8
9. Shareholder's equity (5-7)	-	-	198	238,3	286,5	40,3	48,2

Table 3: Balance sheet of NFC as percentage of GDP

Source: CBS Statistics Netherlands and own calculation

The table below provides information about components of the gross savings of non-financial corporations. It is adjusted for natural gas factor, since this sector distorts the image by strong price movements⁴³. The strong increase in savings, expressed as a percentage of GDP, for the period between mid-nineties and the beginning of the financial crisis in 2008 can be explained by the improvement in the gross operating surplus. However, after the outbreak of the financial crisis the operating surplus has been deteriorated. Development of gross profit after tax in the last two decades is indeed has been on significant increase, mainly due to higher levels of capital income⁴⁴. Likewise lower interest and tax payments also positively impacted up growth of gross profit.

⁴² Among non-financial assets are included fixed assets (dwellings, buildings, machinery, software, etc.), land and inventories.

⁴³ Increase of gross saving of natural gas during the period 2000-2012 1.3% of GDP is due to sharp increase in natural gas prices. This increase is entirely is due to government regulation in form of taxes, duties and dividends from public companies that operates gas fields.

⁴⁴ Capital income is income generated by an asset over time, rather than from work done using the asset.

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% of GDP	1990	1995	2000	2007	2012
Gross saving natural gas (+)	1,4	1,0	1,2	1,3	1,3
Gross operating surplus excl. natural gas (+)	19,5	19,3	20,2	20,9	18,4
Net interest paid (-/-)	3,2	2,7	1,7	1,5	0,7
Income receivable⁴⁵ (excluding interest) (+)	1,4	2,5	2,7	6,9	6,2
Net paid other current transfers (-/-)	0,1	0,1	0,2	0,2	0,3
Taxes on income (-/-)	2,4	2,2	3,0	2,1	1,3
Gross profit after tax (excl. natural gas)	15,2	16,8	18,0	24,0	22,3
Dividends paid (-/-)	4,7	3,8	5,3	8,3	6,1
Gross saving	11,9	14,0	13,9	17,0	17,5

Table 4: Composition of gross saving for NFC

Source: CBS Statistics Netherlands and own calculation

The reduction in net interest payments related to the restructuring of the corporate balance sheets and the decline in nominal interest rates. According to Eurostat, between 2000 and 2007 the effective corporate tax pressure for non-financial corporate considerably declined. Taxes on income decreased as effective tax rates were lowered. In addition, no corporation tax is due on dividends received from subsidiaries in order to avoid double taxation⁴⁶. Thus the share of profit attributable to foreign income has increased. Another far more important factor contributing to high corporate saving in the Netherlands is relatively low dividend payments. The profit of Dutch multinational enterprises⁴⁷ is retained within the company rather than being paid out as dividends. The first factor affecting this behavior is tax-optimizing incentives. Tax tariffs on realized capital gains are lower than on distributed income. Another contributing factor is Dutch traditional preference for dividend payment in form of additional shares, rather than regular cash payouts. This behavior can be partly explained by tax distortions occurred before tax reform in 2001, when distributed corporate income was taxed twice, once at the corporate level and once again in the households' personal income. Whereas stock dividends that are paid out in form of additional

⁴⁵ Property income is the income receivable by the owner of a financial asset or a tangible non-produced asset in return for providing funds to, or putting the tangible non-produced asset at the disposal of, another institutional unit.

⁴⁶ Participation exception.

⁴⁷ Multinationals headquartered in the Netherlands - enterprises that are situated in the Netherlands and whose decision-making is in Dutch hands, but also have groups abroad.

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stock shares of the issuing company will not be subject to 15% Dutch dividend withholding tax and hence will not generally be taxed on receipt by a Dutch corporate shareholder⁴⁸.

Dutch non-financial corporations can be divided into three types of companies: multinationals headquartered in the Netherlands, other large companies and small businesses. From the figure below it is visible that the savings of multinationals firmly explain the high savings rate of non-financial corporations. The Netherlands is an appealing market and favorable location for them, so number of companies, whose controlling interest is owned by foreigners, are headquartered here. Performance of the remaining large companies maintains low and stable on average 2% of GDP. The savings of small companies have been weakened by the crisis due to low domestic demand and a difficult economic climate (OECD, 2014).

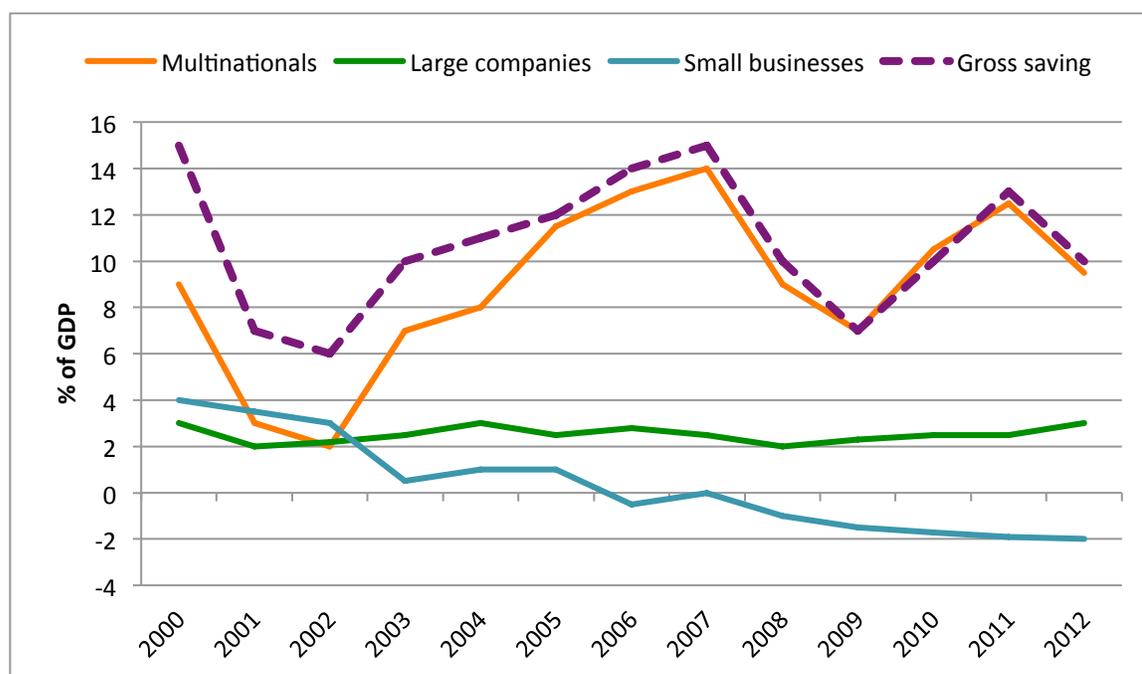


Figure 22: Gross savings of non-financial corporations by type of corporation

Source: CPB Netherlands Bureau for Economic Policy Analysis, (2014)

Since the late 1990s the Netherlands has been experiencing notable up growth of domestic capital formation and foreign direct investment, however the Dutch investment position in the rest of the world exceeds investment position of foreign investors in the Netherlands. Firstly this can be considered as foreign investors reduce their equity investments in the Netherlands because of

⁴⁸ <https://www.dsm.com/content/dam/dsm/cworld/enUS/documents/qa-optional-stock-final-dividend-2012-dsm.pdf>

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limited good investment opportunities. The market is occupied by number of multinational companies that are active in capital-intensive industries. Another consideration regards Dutch investors, in particular multinationals, which invest large amounts abroad.

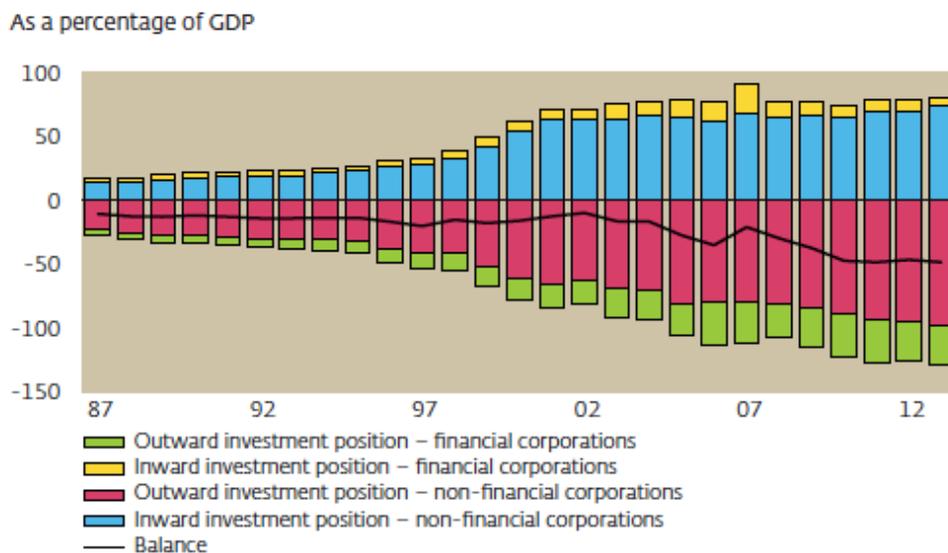


Figure 23: Direct investment position for the period 1987 – 2013

Source: De Nederlandsche Bank, author's own calculation based on data from Statistics Netherlands

As outward foreign direct investment have increased, investment earnings from foreign operations have also grown to a great extent and affect the income account. These investment earnings consist of repatriated profits, distributed dividends and interest payments. Received dividends contribute the most to the income account.

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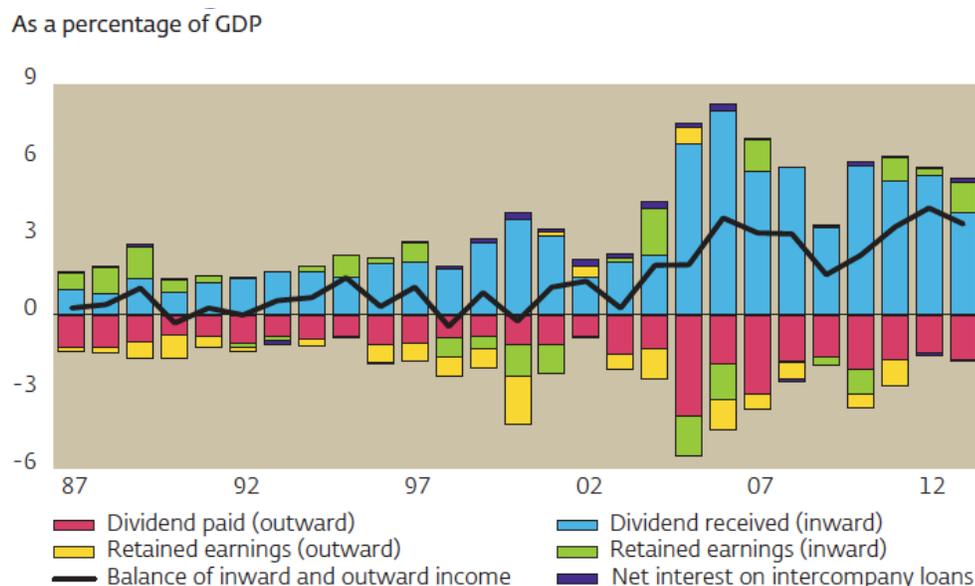


Figure 24: Income of non-financial corporations from FDI for the period 1987 – 2013

Source: De Nederlandsche Bank, author's own calculation based on data from Statistics Netherlands

Foreign direct investment comprises three components: equity capital, reinvested earnings and intra-company loans. Equity capital investment was the largest component of the outward foreign direct investment during the last decade.

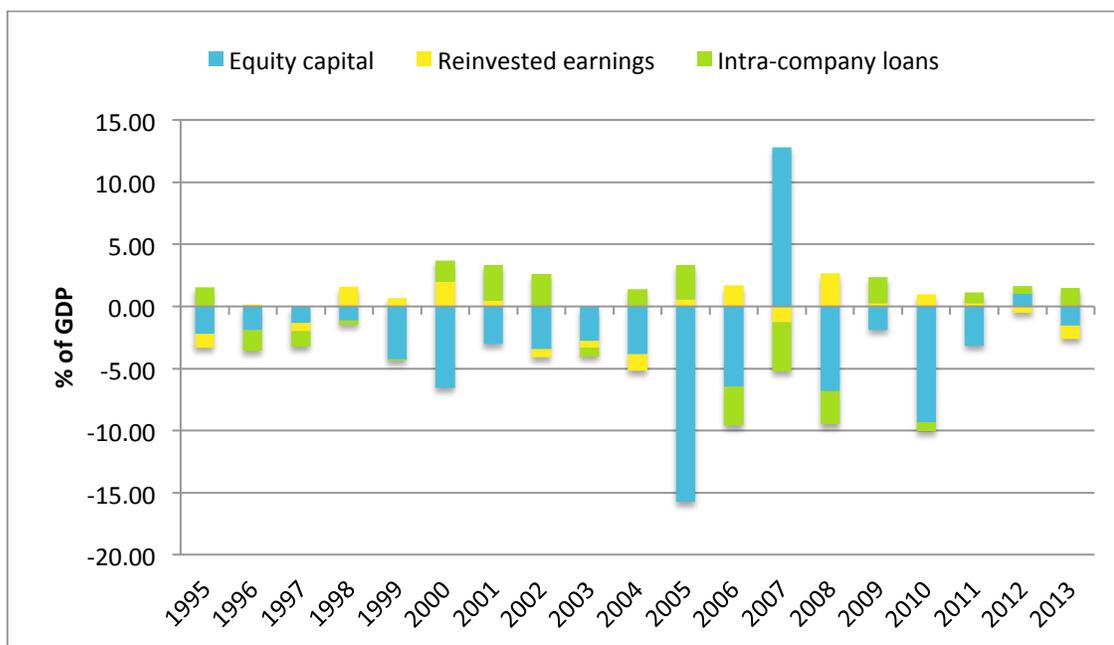


Figure 25: Detailed view to foreign direct investment, as percentage of GDP

Source: OECD stat

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The United States and the European countries, especially Belgium, Germany, Luxembourg, United Kingdom and Switzerland, are the main investors in the Netherlands and vice versa outward foreign direct investment stock is concentrated in these countries.

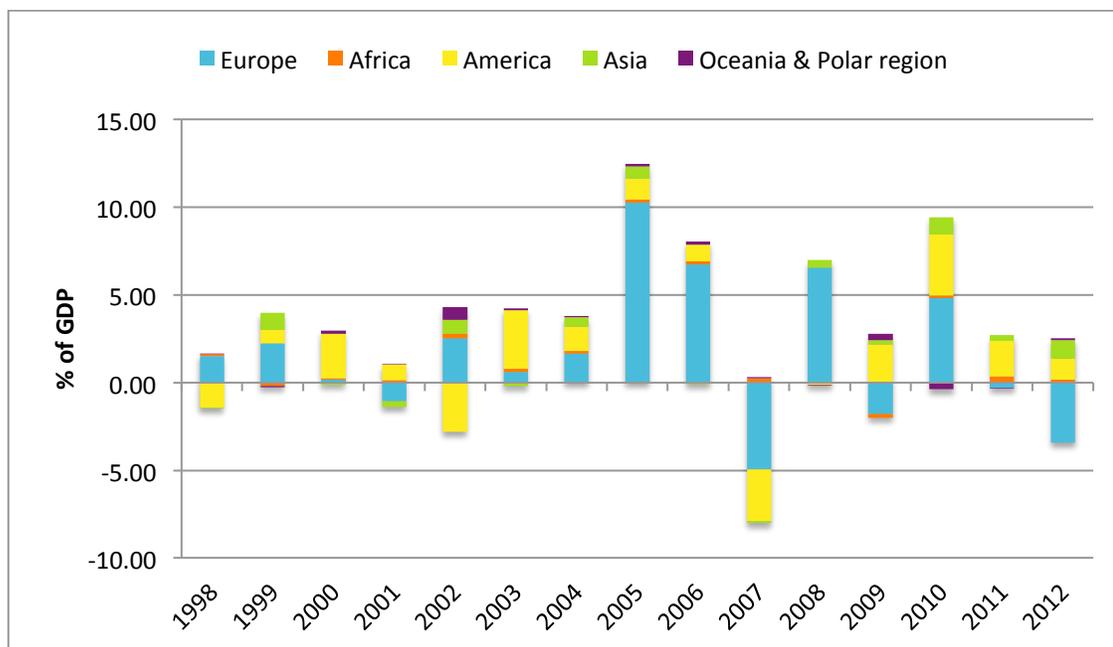


Figure 26: Foreign direct investment flows by partner, as percentage of GDP

Source: OECD stat

4.1.2. The role of multinationals in the savings surplus

Since multinationals mostly contribute to savings of non-financial sector their role in Dutch savings surplus is significant. The activities of multinational companies drive the world economic globalization process to a very large extent. The pace of globalization is depending on number of reasons such as expanding free trade, growing capital mobility that allows to corporations to invest abroad and also internalization of intellectual property transfer, in particular payments for royalties and licensing fees (Kleinert, 2001).

Cash holdings by multinational companies

Cash holdings for the top 5,000 TNCs remained high in 2013, accounting for more than 11 per cent of their total assets, a level similar to 2010, in the immediate aftermath of the crisis. At the end of 2013, the top TNCs from developed economies had cash holdings, including short-term investments, estimated at \$3.5 trillion, compared with roughly \$1.0 trillion for firms from

developing and transition economies. However, while developing-country TNCs have held their cash-to-assets ratios relatively constant over time at about 12 per cent, developed-country TNCs have increased their ratios since the crisis, from an average of 9 per cent in 2006–2008 to more than 11 per cent in 2010, and they maintained that ratio through 2013. This shift may reflect the greater risk aversion of developed-economy corporations, which are adopting cash holding ratios similar to the ones prevalent in the developing world. Taking the average cash-to-assets ratio in 2006–2008 as a benchmark, developed-country TNCs in 2013 had an estimated additional amount of cash holdings of \$670 billion. Given the easy access to finance enjoyed by large firms, partly thanks to the intervention of central banks in the aftermath of the crisis, financial constraints might not be the only reason for the slow recovery of investments. However, easy money measures did not lead to a full recovery of debt financing to its pre-crisis level; in 2013, net debt issuance amounted to just under \$500 billion, almost a third less than the level in 2008. At the same time, corporations did increase share buy-backs and dividend payments, producing total cash outflows of about \$1 trillion in 2013. Two factors underlie this behavior: on the one hand, corporations are repaying debt and rewarding their shareholders to achieve greater stability in an economic environment still perceived as uncertain, and on the other hand, depending in which industry they operate, they are adopting a very cautious attitude toward investment because of weak demand (UNCTAD, 2014).

Box 2: Cash holdings by multinational companies

Source: UNCTAD

The removal of trade barriers between countries and aligning themselves through free trade agreements stimulates expansion of multinational companies, which bind producers and consumers located in different countries into a global system. Thereby multinational companies have an opportunity for international fragmentation of production. Moving part of production to location where it can be done with lower costs or efficient technologies, allows countries to specialize more in activities for which they have comparative advantage and therefore to increase trade flows. More detailed view on development of Dutch trade was discussed in a previous chapter “Trade balance as an important component of current account balance”.

Due to technological innovations that increased the possibilities of investors to conduct foreign investment activities, elimination of the exchange rate risk since introduction of the euro and

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favorable government terms and regulations that allow free movement of capital in the European Union the Dutch multinationals start to intensively use part of available funds on foreign direct investments. It should be noted that capital flows could be in form of genuine and round-trip foreign investment. So part of gross foreign direct investment inflows and outflows is attributed to multinationals that channeling foreign direct investment and redirecting income flows to and from subsidiaries in other countries through the so-called “letter box” companies in order to optimize their global group structure and financial flows (Lejour, 2013). Currently the Netherlands is hosting around 23 thousand “letter box” companies. These companies are officially called special financial institutions⁴⁹ (SFI or in Dutch BFI). Letterbox companies do not carry on any business operations and they are indeed established in the sole propose of avoiding taxation on potential income. For example, all income redistributed by SFI in the form of dividends, interest and royalty payments may not be subject to withholding tax thanks to the double-tax treaty⁵⁰. According to data from 2011 special financial institutions managed 8 trillion euro worth of transactions. Letterbox companies are very easy to set up, often only have a correspondence address, and although the primary requirements have been strengthened, their number remains stable. Therefore due to magnitude of amount of capital flows through “letter box” companies, their statistics are not included in the overall balance of payments statistics, but registered on a separate sheet.

In 2005 there was a sharp structural rise in retained earnings of foreign subsidiaries and received dividend. This increase is linked to a newly formed holding company - Royal Dutch Shell plc. that is ranked as forth-largest companies in the world in 2014, in terms of revenue, and the most profitable company in the Netherlands. Thus it has a significant influence on the savings of multinationals and hence the savings of non-financial corporations. The company was created by the merger of Royal Dutch Petroleum (Koninklijke Olie) with the British company Shell Transport and Trading and headquartered in The Hague. Prior to the merger in 2005, 40% of received dividend and retained earnings of foreign subsidiaries went to UK. Since 2005, earnings of subsidiaries are fully attributed to the Netherlands. In a long-term the average worldwide

⁴⁹ <http://ase.uva.nl/news-events/content/2014/09/baarsma-seo-eureka.html>

⁵⁰ Double-taxation agreement.

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Shell’s earnings amounted around 3% of GDP whereas more than half of this earnings retained within the country⁵¹.

Another important point that has been affected by favorable tax treatment is the corporate strategy of multinational companies to transfer intellectual property to subsidiaries in those countries where income from such property enjoys reduced withholding tax. In the figure bellow we can see the volume of upward contribution of royalties and license fees to the Dutch balance of services since 2003.

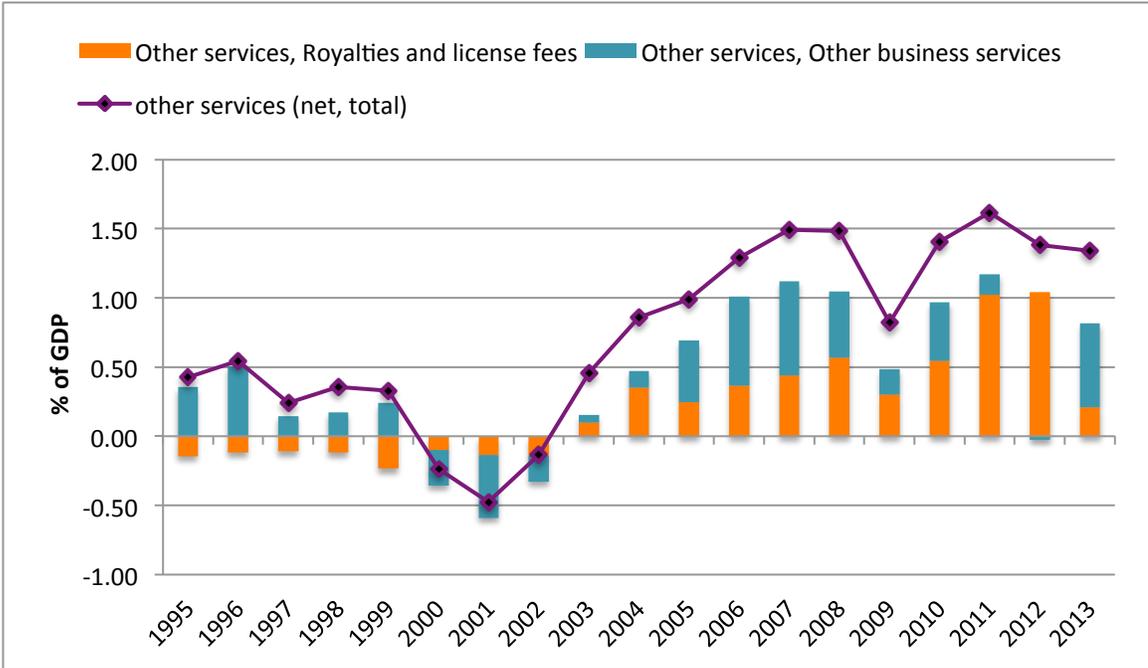


Figure 27: Other services of multinational companies

Source: European Commission (Eurostat)

4.3 Financial institutions

Financial sector comprises banks, pension and insurance funds. From the figure 10 (Net lending/borrowing by sector) we see that financial sector experiencing fluctuating but constantly positive saving position since 1990s. The only exception was in 2008 due to the shock from financial crisis. This comparably minor saving surplus is related to structural factors that are specific to the financial sector of any country.

⁵¹ According statistics from DNB around 10 billion euro per year.

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The size of Dutch banking system is relatively large, much larger than in Germany but still inferior than UK and France. Consolidated assets of a country's banks are calculated as a ratio to GDP, this ratio is almost five⁵² times the Netherlands' GDP (Schoenmaker, 2012). As it was mentioned in a previous subchapter, Dutch banks hold quite large mortgage portfolios, which amounts almost 90% of GDP. This is twice higher the average of the euro area. This leads to a high dependence on market funding due to partly funding ability through savings. A sizeable funding gap, due to large mortgage portfolio and small domestic deposits, is gradually decreasing after government regulation to reduce maximum loan-to-value ratio⁵³.

4.4 Government

Dutch government has been historically experiencing persistent net borrowing position averaging 3.5% of GDP until mid-1990s when it reached its highest budget deficit volume by over 8%. However in the ensuing period of 1996 – 2007 there was a sharp deficit decrease and the government sector displayed a relatively balanced financial position. This balanced development is firmly related with the introduction of euro (to fulfill the Maastricht treaty). Also, as previously mentioned, global trade boom contributed a lot to world demand and thus the Dutch export expansion. After the financial crisis the general government position has diminished showing again budget deficit of 5.4% of GDP. In order to recover from crisis the government tried to boost domestic economy by accelerating infrastructure programs, offering corporate tax benefits for employees to retain workers, and expanding export credit facilities. The government also injected billions of capital into financial institutions, to prevent further deterioration of this sector, as financial sector suffered the most from the crisis due to high exposure of some Dutch banks to US mortgage-backed securities. The stimulus programs and bank bailouts resulted in an improved budget deficit.

⁵² In 2011 asset/GDP = 4.2%.

⁵³ The loan must have a loan-to-value ratio (LTV) of less than or equal to 80%.

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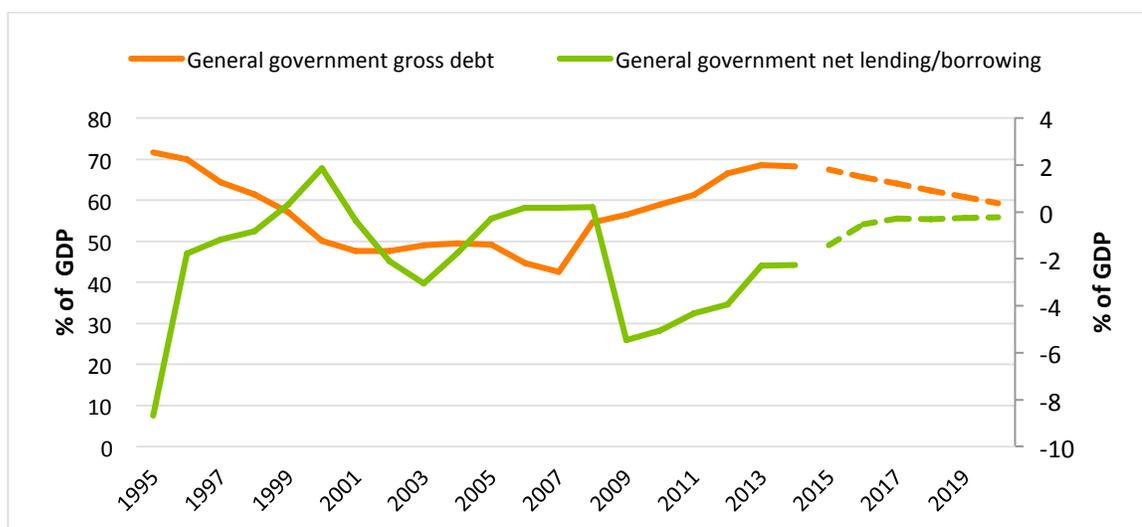


Figure 28: General government gross debt (left axis) and general government balance (right axis), as percentage of GDP

Source: Estimation from IMF staff

In addition to this chapter I would like to dwell on the Dutch government debt and long-term fiscal sustainability of the Netherlands. In the figure above we observe persistent growth of government debt after the financial crisis and currently reported 68.3% of GDP. It is above the 60% of GDP Maastricht Treaty threshold. However based on data estimated by International Monetary Fund staff the gross debt is expected to decrease slightly and can maintain the threshold in 2020.

The fiscal sustainability in Europe is gradually facing severe pressure due to population ageing and as I have mentioned above due to financial crisis. Since 1950 the total fertility rate has halved and at the same time life expectancy at birth has increased by 66%. Changing population age structure is affecting the economic growth of European countries and particularly affect on public pension and healthcare costs. Public pension scheme in many European countries is basically funded by social security contributions from the working population. Since population ageing strengthen the old age dependency ratio, there will be less people contributing and more people claiming healthcare services and pension benefits.⁵⁴ This trend may put upward pressure on government debt in case of insufficient resources of pension funds.

⁵⁴ <https://economics.rabobank.com/publications/2015/may/population-ageing-in-europe-risks-for-growth-and-fiscal-position/#95154bdc-3b5d-446a-972a-35c8510200e3>

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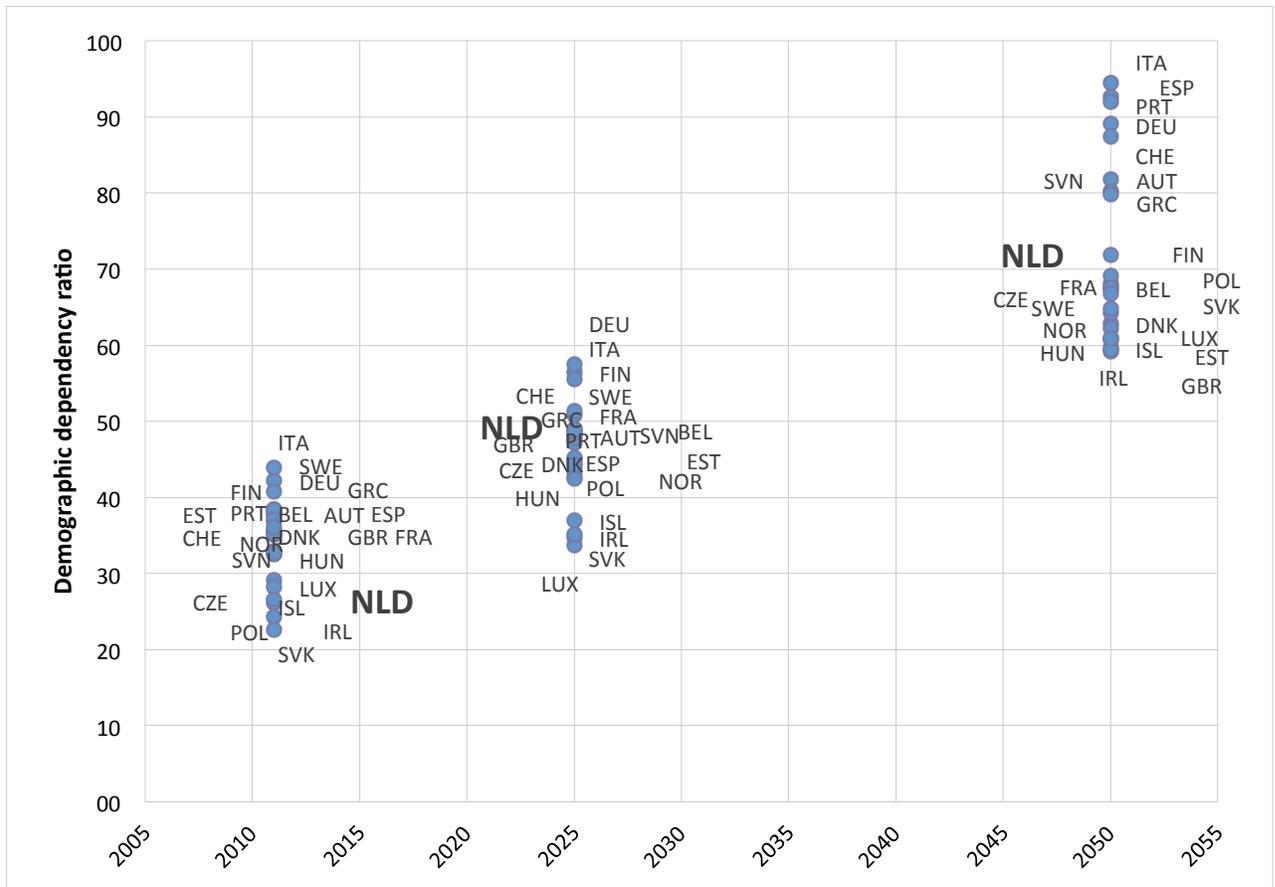


Figure 29: Demographic dependency ratios across OECD countries, 2011, 2025 and 2050

Source: OECD

The Netherlands is also following the population ageing trend however is on a fiscally sustainable path due to implemented and adjusted pension reforms. The figure below (Pension funds' assets and old age dependency ratio) shows that even the Dutch dependency ratio in 2013 is 25.94% the amount of assets on a balance sheet of pension funds is sufficiently high (166% of GDP) to finance the pension and healthcare costs. The pension funds in countries with low amount of assets are most probably need additional resources allocated from the government (OECD, 2014).

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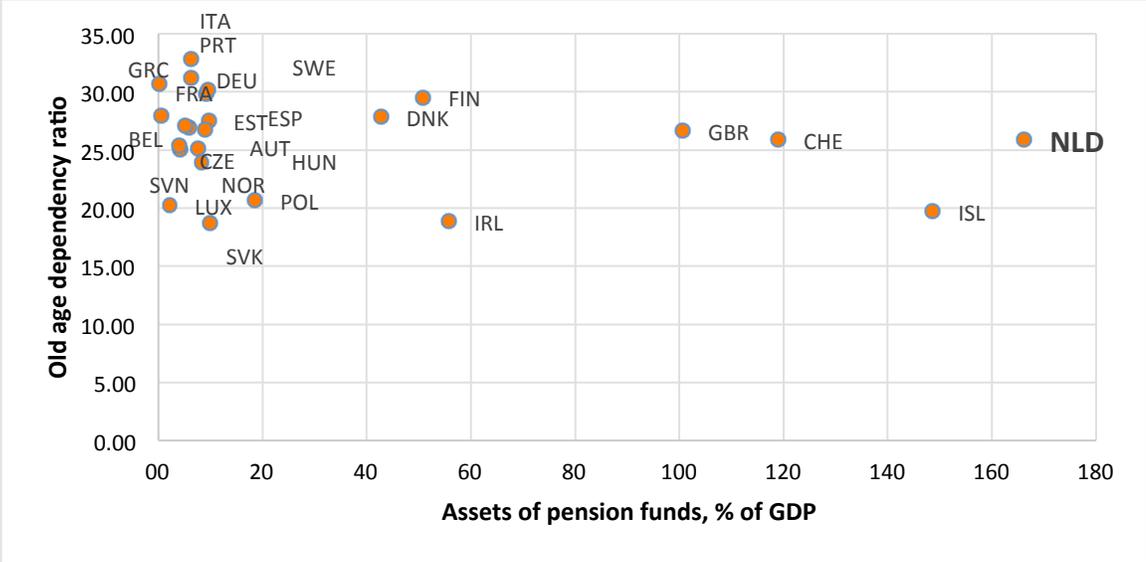


Figure 30: Pension funds’ assets and old age dependency ratio, as percentage of GDP (2013)

Source: AMECO

5 Global current account surpluses and macroeconomic imbalances

5.1 Current account surplus in the world

The development of growing and persistent global imbalances has been the focus of lively debate among policymakers and academic economists in recent decades. Most of that debate has focused on large United States' current account deficit and its major counterpart, the large current account surpluses of countries in Asia – China and Japan. The United States has persistent current account deficit averaging 3% of GDP over the post crisis period⁵⁵, whereas China and Japan have persistent surplus (around 3% of GDP)⁵⁶. It can be interpreted by the fact that China sought to stimulate its economy by purchasing U.S. treasury bonds as a way to “hoarding” FX reserves and to keep its own currency lower than the dollar. Thereby it underprices goods and increases its exports⁵⁷.

The important things that should be considered before analyzing the imbalances and comparing the surplus or deficit countries are country's size and structural development. The figure 31 (Average current account for the periods before and after crisis) illustrates “bottom 20” and “top 20” countries of the world without any selection that create imbalances in the world economy. We can notice that mostly small economies or countries with unstable economic and political situation create current account deficit, and countries that are highly dependent on oil export or financial flows, so called “financial hubs”, create surplus. Therefore analysis of global imbalances should be differentiated and concentrated among small group of peer countries. From the figure we see that the Netherlands is one of the “normal” economies that do not depend on specific economic conditions⁵⁸ thus it cannot be compared with most of the countries from the “top 20”.

⁵⁵ Before the crisis the imbalances between United States and China were more severe.

⁵⁶ Average current account deficit of the United States and surplus of China and Japan are taken for the period 2009 – 2013.

⁵⁷ <http://useconomy.about.com/od/deficit/i/deficitthreat.htm>

⁵⁸ The understanding of “normal” economy in terms of volatility and export diversification of the Netherlands' economy will be further mentioned in this chapter.

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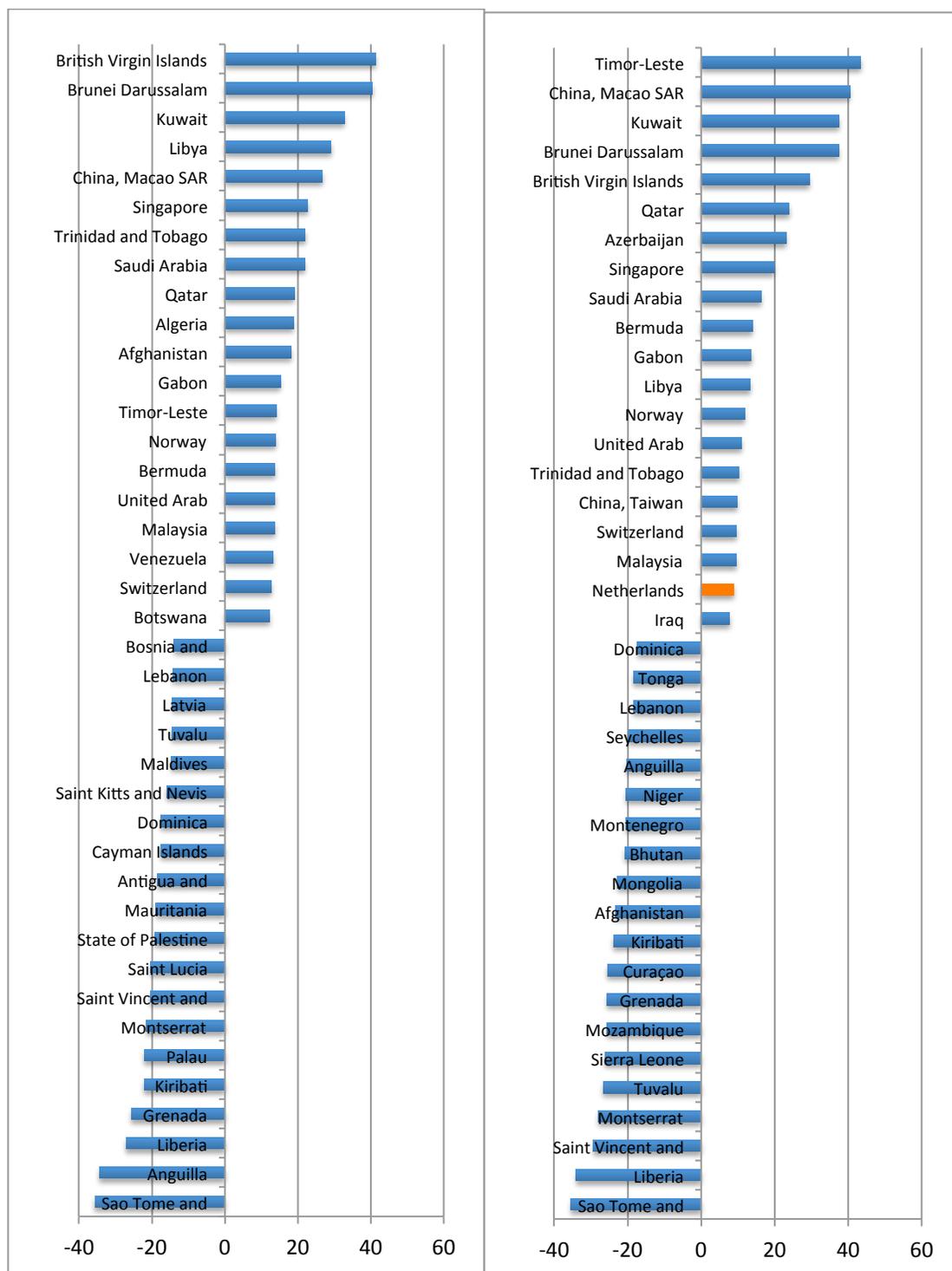


Figure 31: Average current account for the periods before (2003 - 2007) and after (2009 - 2013) crisis⁵⁹

Source: UNCTADstat

⁵⁹ After the crisis the Netherlands changed position from 34th surplus country to 19th.

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During the pre-crisis period there was a trend of increasing dispersions in current account surpluses and deficits in the world. A benign global financial environment can explain this behavior, firstly because of low risk aversion by borrowers and lenders secondly low volatility. In the wake of the financial crisis, current account imbalances become notably smaller with some reduction in surpluses and deficits because of the decrease in domestic demand and decrease of commodity prices (Lane, 2014). The tables bellow present current account balances of selected group of countries⁶⁰ during the pre crisis and post crisis periods. The current account sharply compressed in all groups of economies, however the Netherlands shows reverse development due to the reasons discussed in previous chapters (i.e. high savings, low investment due to limited investment opportunities in the Netherlands, etc.).

	Before crisis (2003-2007)	After crisis (2009-2013)
Netherlands	6,50	8,87
Selected exporters of petroleum	11,32	7,09
Selected exporters of manufactured goods	3,24	1,73
Selected exporters of manufactured goods and primary commodities	4,00	2,08
Selected exporters of agricultural products	0,65	-1,84
Selected exporters of minerals and mining products	1,61	-2,71
Major net food-exporting economies	-2,86	-1,85

Table 5: Current account of selected countries according to structure of export

Source: UNCTADstat

	Before crisis (2003-2007)	After crisis (2009-2013)
Netherlands	6,50	8,87
High-income developing economies	5,04	3,06
Middle-income developing economies	0,92	-1,85
Low-income developing economies	-2,59	-5,94
Lower-middle-income economies (World Bank)	1,04	-1,88
Upper-middle-income economies (World Bank)	2,57	1,00

Table 6: Current account of selected countries according to levels of income

Source: UNCTADstat

Europe has not attracted much attention in this debate of global imbalances, most likely because current account of European countries and the European Union as a whole remained relatively close to balance because some member states run deteriorating current account deficit and others increased current account surplus (Ahearne, 2005). Nevertheless, current account developments

⁶⁰ In a first table countries are divided according to structure of export, in a second table according to the income level.

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in Europe deserve attention because of current account imbalances within the European Union (EU) and, in particular, among the countries participating in European Monetary Union (EMU) have grown considerably especially before crisis.

Over the post crisis period Greece, Portugal and Spain have run sustained current account deficits by historical norms for industrial economies, averaging around 5% of GDP. On contrary, Germany, the Netherlands and Luxembourg have a surplus position averaging over 7% of GDP and outside of Euro area Switzerland, Norway, Denmark and Sweden run surpluses averaging 9% of GDP over the same time⁶¹.

There is a group of countries consisting of Austria and Germany (from 2000s), Belgium and Finland (till 2008 and 2010), the Netherlands, Luxembourg, Norway, Denmark and Sweden (long standing persistent surplus countries), which have relatively large surpluses over a long period with an average surplus of about 5% of GDP. Based on OECD statistics, Dutch current account development history is comparable to the Luxembourg (very financially-open economy), German (large exporter country) and Austrian current account balance within Eurozone countries. However Germany and Austria initially had experienced current account deficit that turned into a persistent surplus only from 2001 whereas Netherlands has been the only surplus country since 1981⁶² and therefore it has relatively the largest surplus for most of the period.

⁶¹ Average current account is taken for the period 2009 – 2013.

⁶² The Netherlands has consistently large saving rates compared with other EU countries. In addition it has consistently high and increasing share of foreign investment with respect to total investment from 1981 (see figure 4 – Total savings by foreign and domestic investment) while Germany has net inflow of foreign investments until the mid-1990s (see figure 5 in appendix - Foreign investment as a share of total investments). In 1990s Germany underwent the unification so Investment > Savings. Investment went to Eastern Germany.

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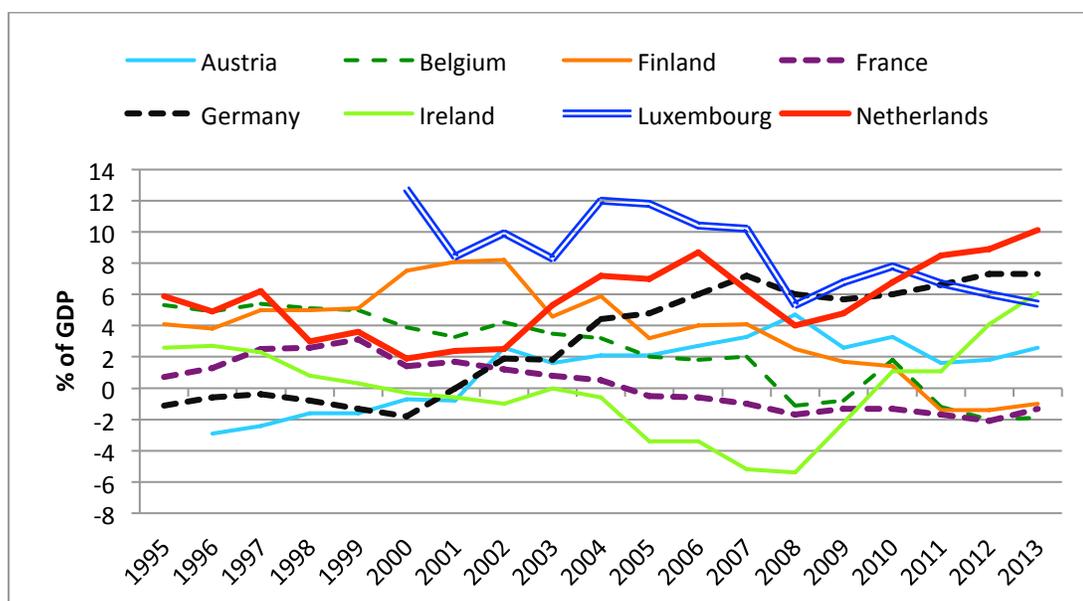


Figure 32: Current account balance as percentage of GDP, selected Eurozone countries

Source: OECD stat

As I have mentioned above, it is not relevant to compare, for example, all surplus countries between themselves, because most of the countries are highly dependent on some economic development (i.e. volatility of oil price, etc.). Therefore it is good to mention here the volatility of the current account. The tables below present the volatility ratio of the same group of countries divided according to structure of export and income level. Hereby the volatility of the Dutch current account is comparably low. This can be explained by the main fact that the Netherlands has a great potential of export diversification, both in terms of countries and products⁶³.

	St. Dev.	Coef of var
Netherlands	2,787	0,596
Selected exporters of petroleum	5,386	1,241
Selected exporters of manufactured goods	1,843	2,256
Selected exporters of manufactured goods and primary commodities	2,077	1,948
Selected exporters of agricultural products	2,069	0,977
Selected exporters of minerals and mining products	2,989	0,931
Major net food-exporting economies	0,699	0,388

Table 7: Volatility ratio of selected countries according to structure of export

Source: UNCTADstat

⁶³ The tables 1 and 2 in appendix presents the volume of export diversification of selected countries compared with the Netherlands. The data is calculated using Herfindahl index, where the index close to 0 indicates diversified economy and close to 1 means not diversified economy.

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	St. Dev.	Coef of var
Netherlands	2,787	0,596
High-income developing economies	2,281	1,495
Middle-income developing economies	1,505	0,991
Low-income developing economies	1,341	0,333
Lower-middle-income economies (World Bank)	1,566	1,065
Upper-middle-income economies (World Bank)	1,819	20,590

Table 8: Volatility ratio of selected countries according to levels of income

Source: UNCTADstat

The Dutch surplus becomes not so insulated case to comparison to non-Eurozone countries. In the next figure it is visible that the most comparable economies are Switzerland (“safe haven” within a small open economy and world financial center) and Norway (big oil and gas exporter), who also have persistent (in Switzerland even larger) current account surplus than the Netherlands. Switzerland and the Netherlands suffered significant reduction of current account surplus during the financial crisis in 2008, but they rapidly recovered within the subsequent few years. Asian economies such as China and Japan⁶⁴ have also experienced persistent and sometimes reasonably large surpluses. However these have declined in both countries in recent decade.

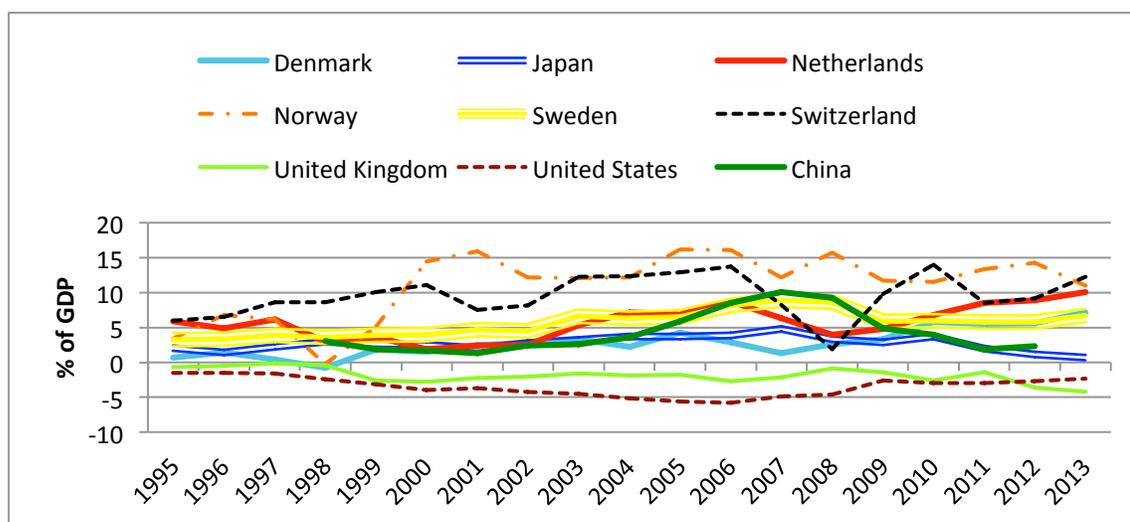


Figure 33: Current account balance as percentage of GDP, selected non-Eurozone countries

Source: OECD stat

⁶⁴ I am aware of Chinese macroeconomics imbalances. However, I don't focus on this in my thesis due to the lack of space. Moreover, compare to Dutch current account Chinese economic development attracts much more attention.

5.2 Econometric model

It is important to track the dynamics of current account balance. In other words, countries that have lost competitiveness run current account deficits, whereas countries that have gained competitiveness have current account surpluses. This could lead to a dangerous circle, because current account deficits lead to accumulation of net foreign liabilities and a country has to pay interest on its foreign debt. Moreover, if these interest payments are not offset by a trade flow, they further increase the level of foreign indebtedness. Consequently, this could lead to an unsustainable external debt position, which then can lead further into possible default. As Holinski, Kool and Muysken (2012) point out: *the only way out of this vicious cycle is via achieving a positive trade balance.*

There was an econometric model developed by Czech Academics from Mendel University Brno Klára Plecítá, Ladislava Grochová and Luboš Střelec (2013) who estimated current account norms (equilibrium) for a sample of 30 industrial countries⁶⁵ that represented European Economic Area and their main business partners over the time span of 18 years (1993-2011). As econometric model, panel regression analysis was used which encompasses time series and cross sectional analysis. Five determinants (observations) were used in the sample as they are related to current account formation: fiscal balance, demographics, Net international investment position, oil balance and per capita income. Authors did not use real effective exchange rate, they regarded it as short run effect, comparing to the other five that had medium and long run impact on current account in that time span of sample selection.

- a) Fiscal balance or government budget balance has a strong link with current account balance. A higher government surplus raises national savings, consequently increasing current account balance, whereas a larger government deficit reduces national savings thus lowering current account (i.e. Greece, Portugal) balance both are related to macroeconomic proposition called Twin deficits anomaly.
- b) Young households borrow against their future income, middle age households save for their debts and savings, and old age households spend. Therefore a higher portion of

⁶⁵ These IC30 countries are: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Lithuania, Luxembourg, Hungary, Netherlands, Austria, Poland, Portugal, Romania, Slovakia, Finland, Sweden, United Kingdom, Australia, Canada, United States, Japan, Norway, New Zealand, Mexico and Switzerland.

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economically inactive population reduces national savings and subsequently current account balances.

- c) Another way of evaluating the sustainability of current account balance is to consider net external assets and net external liabilities which are the components of Net international investment position which was described before⁶⁶ defined as the difference between the stock of foreign assets and foreign liabilities held by domestic residents. The effect of net international investment position on current account balance is arguable in some cases. A country with a positive net international investment position is a net borrower (investor); therefore it receives income on its foreign assets, which increases country's current account balance and its wealth and vice versa. Nevertheless, wealthier countries can afford to run (finance) current account deficits over the medium term. Both net borrowing and net lending were used in the sample.
- d) Oil production capacities and oil consumption needs of a country affects trade balance and thus current account balance. Higher oil prices therefore translate into current account surpluses for oil exporters and current account deficits for oil importers.
- e) As to per capita income, countries that have relatively high indicator tend to be at a higher level of economic development and lend or invest money abroad creating current account surpluses for their specific countries.

After testing their model they found out that actual current account positions and current account norms differ across the euro area countries. Luxembourg and Belgium have resulted in positive country-specific current account norms that are close to their actual current account positions, whereas current account surpluses of the Netherlands and Finland have consistently exceeded their norms. An exactly opposite can be observed on the one hand in Germany and Austria and on the other hand in France, Italy and Ireland. Germany and Austria used to have current account deficits, but since their euro area membership, they have been running current account surpluses that are greater than their current account norms. In contrast, France, Italy and Ireland have switched from current account surpluses to current account deficits after the introduction of euro. Another outcome can be observed in the case of Spain, Portugal and Greece. These three

⁶⁶ See chapter 2.

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countries have been running persistent current account deficits. After completion of results the authors of the model comment that current account surpluses are less problematic than deficits. Notwithstanding, current account surpluses may indicate a problem with weak domestic demand and slower economic growth, which does not seem to be the problem of the Netherlands. Persistent current account deficits exceeding their norms, on the other hand, represent a serious problem to macroeconomic stability since they result from competitiveness losses and resources misallocation, especially if affected countries have accumulated large net foreigner liabilities, as is the case of Greece and Portugal. Large net foreigner liabilities worsen risk profile of a country and may lead to a sudden stop of financing and to a severe economic downturn.

5.3 Short run effect

The introduction of the euro has changed the dynamics of trade balance adjustment in some of euro-area economies because it had reduced exchange rate risk. Moreover, any member of EMU does not have own monetary policy and currency. If a small economy (i.e. Greece) growth slowly than its peers from EMU (e.g. Germany and the Netherlands), it is unable to use its own monetary policy because Bank of Greece cannot lower interest rate because it does ECB. Also “Greek currency” should weaken, however this is almost impossible in a currency union (such as EMU) because common currency reflects not only the development in Greece but the whole EMU (i.e. in Germany and the Netherlands).

In paper by Blanchard (Blanchard, 2006), the author explains the increased dispersion of current account positions in countries under EMU that has been driven by trade flows, which reflect shifts in relative competitiveness within the euro area. According his interpretation aggregate demand was too strong in some countries and too weak in others. It means that in some countries (e.g. Greece and Portugal) the monetary policy of ECB was too expansionary. In case Greece (or Portugal) had had its own bank, the central bank would have raised the “Greek” (or “Portugal”) interest rate to combat the rising inflation. That results persistent differences in inflation rates between countries. In fact, the volume and persistence of inflation differentials at the national level is one of the most widely recognized and documented facts relating to the start of EMU. Due to persistent distinction in inflation between countries, euro area economies have experienced very sizeable shift in the real exchange rates in relation to their peers, as shown in Figure 34 (Euro area real effective exchange rate). In turn, the changes in competitiveness

Balance of payments of the Netherlands

associated with these movements in real exchange rates may have played a role in bringing about the large shifts in current account balances. The relationship between real exchange rate developments and current account balances presented in Figure 35 (Real exchange rate and current account balances) appears to confirm that countries that have gained (or lost) competitiveness relative to other euro-area countries during EMU are now running large current account surpluses (or deficits).

Germany performs strong export and by that gains in competitiveness associated with a rate of inflation that has been persistently below the euro area average⁶⁷. The Netherlands also has competitive advantage however in a smaller extend. In order to achieve balance deficit countries need fiscal austerities to slow down aggregate demand and that the surplus countries should encourage aggregate demand. However Germany and the Netherlands have small opportunity to manipulate with regard to fiscal policy and most of the adjustment would thus have to come from the deficit countries.

⁶⁷ Euro is too weak for German economy, so export is much more easy and “cheaper”.

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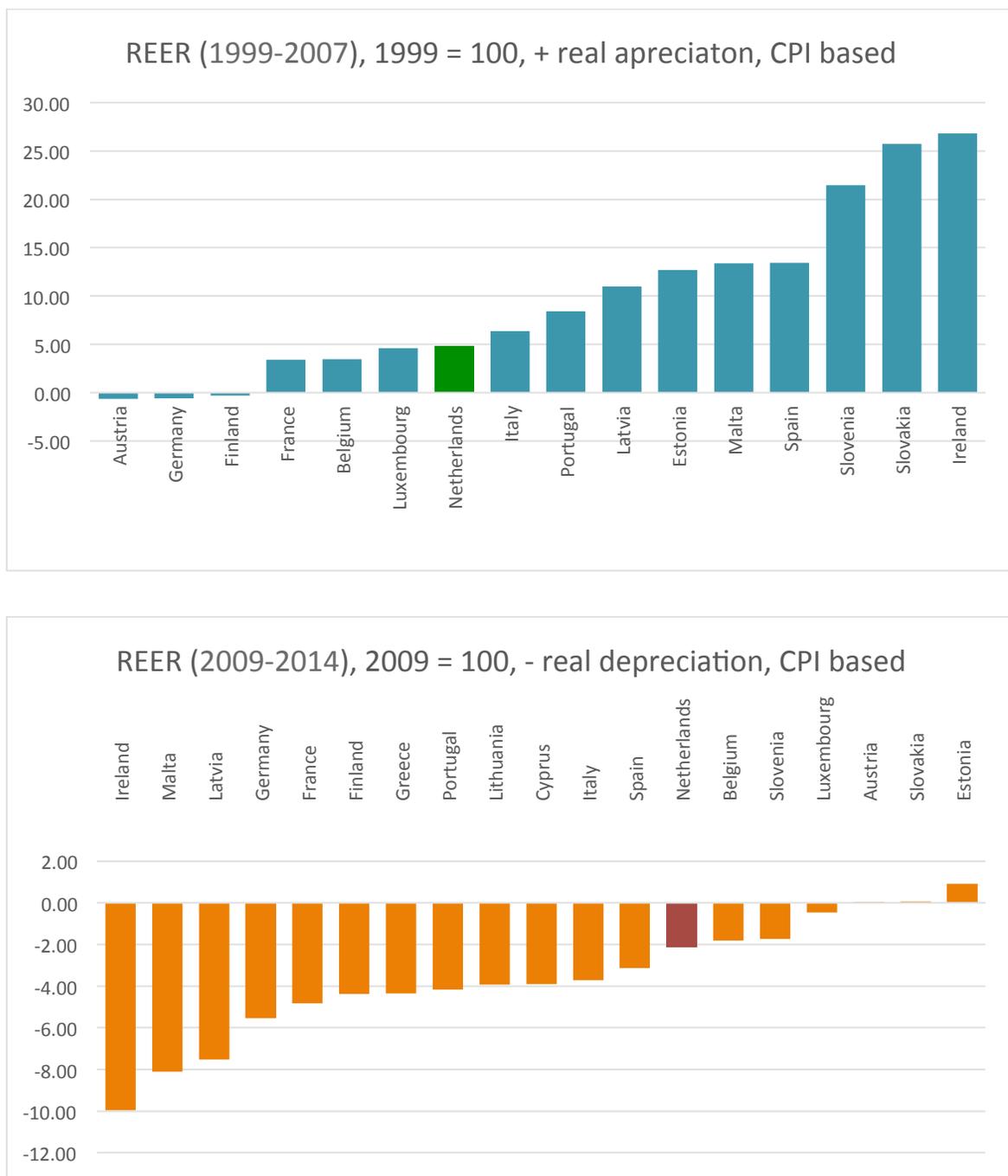
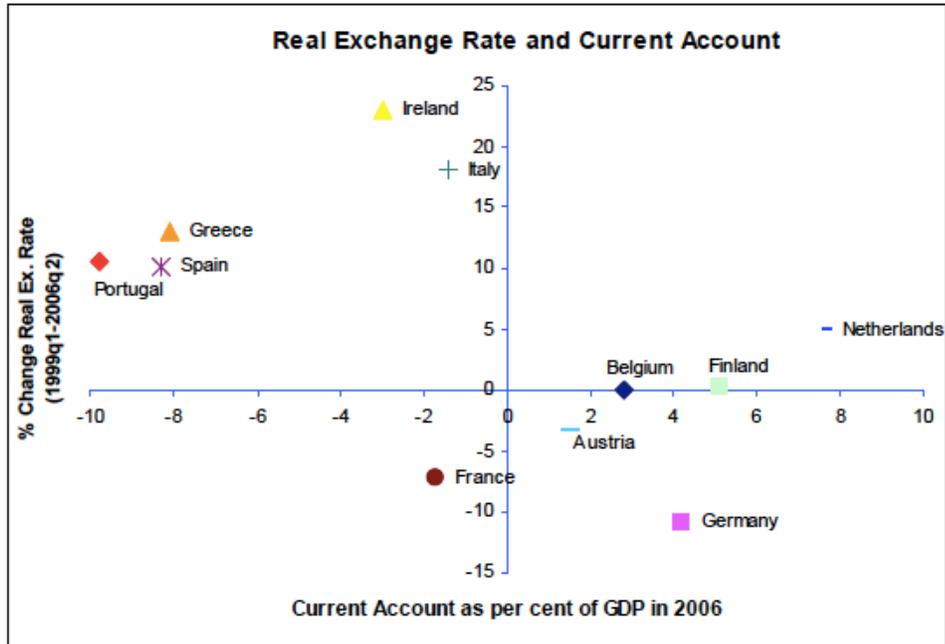


Figure 34: Euro area real effective exchange rate for the period before and after crisis

Source: UNCTADstat

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Source: Eurostat and IMF. Estimates for 2006 current account balances are from IMF WEO, September 2006.

Figure 35: Real exchange rate and current account balances

Source: Eurostat

Another impact of introduction of euro, it has promoted financial market integration and thus increased financial flows in the euro area due to reduction in transaction costs and also increased sustainability between different financial assets.

Conclusion

Most of the economists consider the Netherlands as a textbook-case of an open economy because it is a country that is highly consolidated with the world economy in terms of both trade and financial flows. It should be also noted that although it is a small country in terms of surface and population, the Dutch economy has a progressive and diversified trade sector and advantageous business climate for investments due to its strategic location in Europe, excellent transport and logistics infrastructure and favorable fiscal incentives. These all are fundamental reasons for persistent and large Dutch current account surplus. Therefore combining the data trends presented in this thesis it can be isolated some important factors that determine the Dutch current account imbalance and summarized as follows:

Firstly, the current account surplus mostly owing to the trade balance. Apart from favorable geographical position, which makes the Netherlands to become a transshipment center with the 4th busiest harbor in the world, the positive trade balance is connected with intra-Eurozone and world trade expansion and increasing integration of the Dutch economy into global production chains. According to traditional statistical approach “gross trade method” the Dutch export is highly concentrated with European Union partners and import with Asian partners, particularly China. However this method does not take into consideration the “multiple counting” issue of intermediate product. The trade in value-added (TIVA) approach avoids this indistinctness and shows that most part (between half and one-third) of the trading flows refers to intermediate input that go through the Rotterdam and create re-export. This highlights the role of the Netherlands as net importer of intermediate inputs from outside of Europe that are later exported within the European Union countries, so Dutch actual value-added is small. If exports and imports are shown in terms of value added, proportion of the Dutch value added to re-exported goods estimated only about 2.3% of GDP.

Secondly, total investment remained fairly constant and high compared with other European Union countries. However domestic investment is gradually decreasing while foreign investment is increasing. This can be explained by the fact that the Netherlands hosts a lot of multinational companies, which are active in industries that require the investment of large sums of money. Hence there are limited investment opportunities, especially after the crisis, and the companies

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started to invest large amounts abroad, largely in form of foreign direct investment (FDI)⁶⁸. This is the reason for balance of income growth. Substantial part of foreign direct investment flows is attributed to so-called “letter box” companies or officially called special financial institutions (SFI) that are established by multinational companies in order to optimize their global group structure and financial flows.

Third element that contributes to the Dutch current account surplus is the accumulation of high amount of households’ savings in pension funds. Compared to other developed countries, the Netherlands has relatively large pension funds that invest a major part of their assets abroad. In the mid 1990s Dutch pension funds used to invest only about 23 percent of their assets abroad, currently this figure has increased to around 81 percent. Another remarkable and distinctive aspect is that the Dutch pension funds tend to invest relatively more in equity and thus has one of the highest returns on investment. Dutch residents’ foreign equity investments in 2011 account around 75% of GDP, while the corresponding figure was 20% in Germany and 30% in the USA. Only if domestic investments become more attractive may pension funds begin to find it optimal to change their investment direction. Nevertheless it might be expected that in the next decades the household savings surplus (including pension fund reserves) will diminish gradually as accumulation of wealth will show a reversed trend, given the ageing of the population and maturing pension funds. With life expectancy set to rise further and the expected benefits from statutory pension insurance declining because of the shrinking proportion of young people in the total population, retirement savings are expected to rise compare to other savings (i.e. government’s savings, companies’ savings).

Fourthly, the Dutch multinational companies have low dividend payments. The first factor affecting this behavior is tax-optimizing incentives. Tax tariffs on realized capital gains are lower than on distributed income. Another contributing factor is Dutch traditional preference for dividend payment in form of additional shares, rather than regular cash payouts.

The high current account balance reflects an imbalance because of unique financial and economic structure of the Netherlands. Did surplus arise for bad reason? Econometric model developed by Czech Academics from Mendel University Brno Plecítá et al. (2013) found out that the

⁶⁸ However we should admit that companies are “hoarding” the cash (liquidity) in their balances and not invest enough – at least compare to pre-crisis period.

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Netherlands norms of current account surplus are higher than norm, and that it may indicate a problem with weak domestic demand and slower economic growth, however they state later that it does not seem to be the problem of the Netherlands. Surpluses can arise for bad reasons: lack of social insurance, driving up private saving; inefficient financial intermediation, leading to low investment; and other distortions, where again Netherlands is not a case. Surpluses can arise for “good” reasons: aging population accumulating saving for retirement or limited domestic investment opportunities, export-led growth strategy with high exports producing competitiveness of the country and jobs in export industry.

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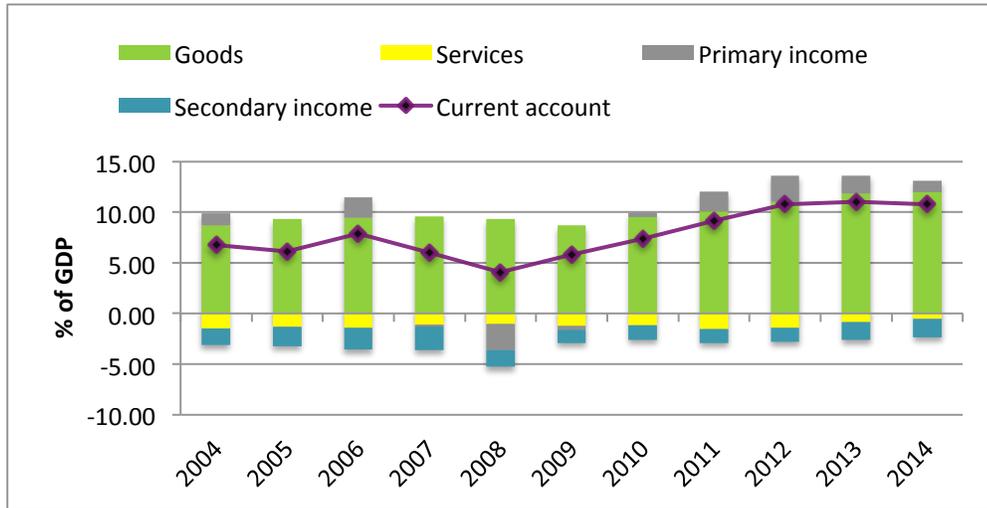
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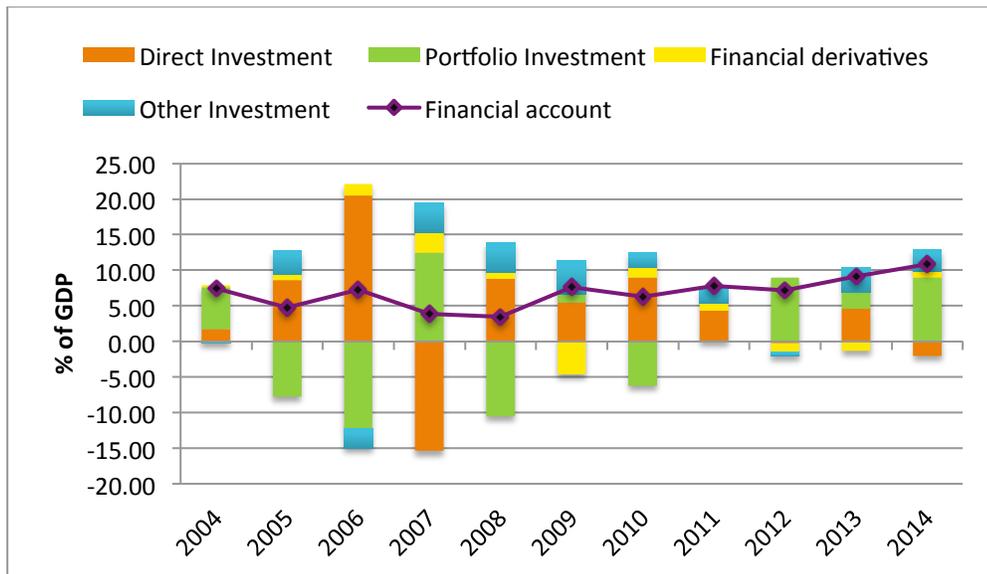
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Appendix



Appendix figure 1: **Current account balance, as percentage of GDP**

Source: Source: European Commission (Eurostat), Balance of Payments Manual 6

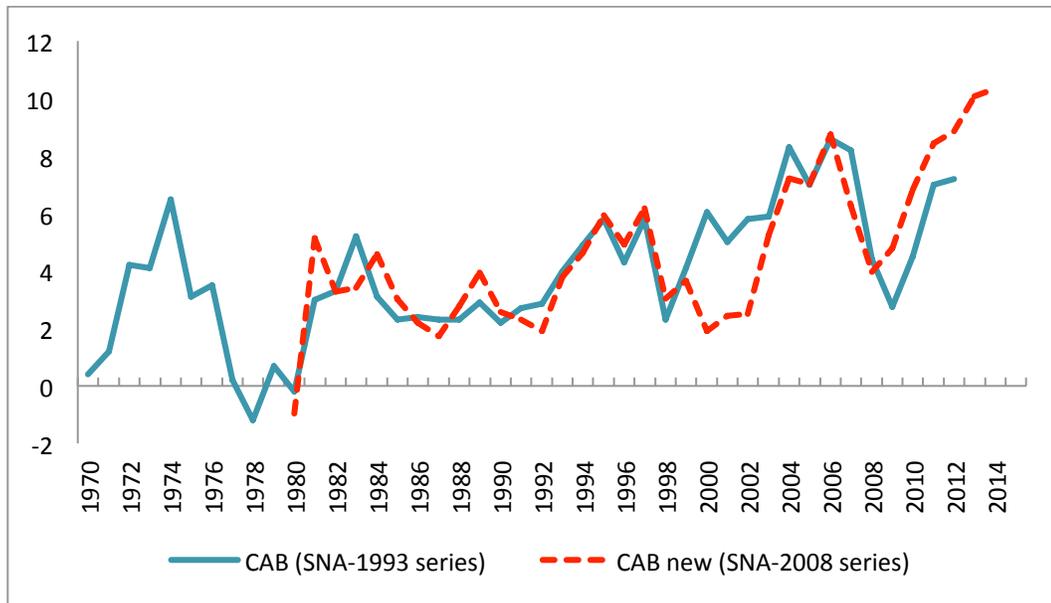


Appendix figure 2: **Financial account balance, as percentage of GDP**

Source: Source: European Commission (Eurostat), Balance of Payments Manual 6

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Even though the new series has some significant yearly differences, the overall pattern and level remain qualitatively similar. The following figure shows the same persistence in current account surplus before and after revision of SNA⁶⁹.

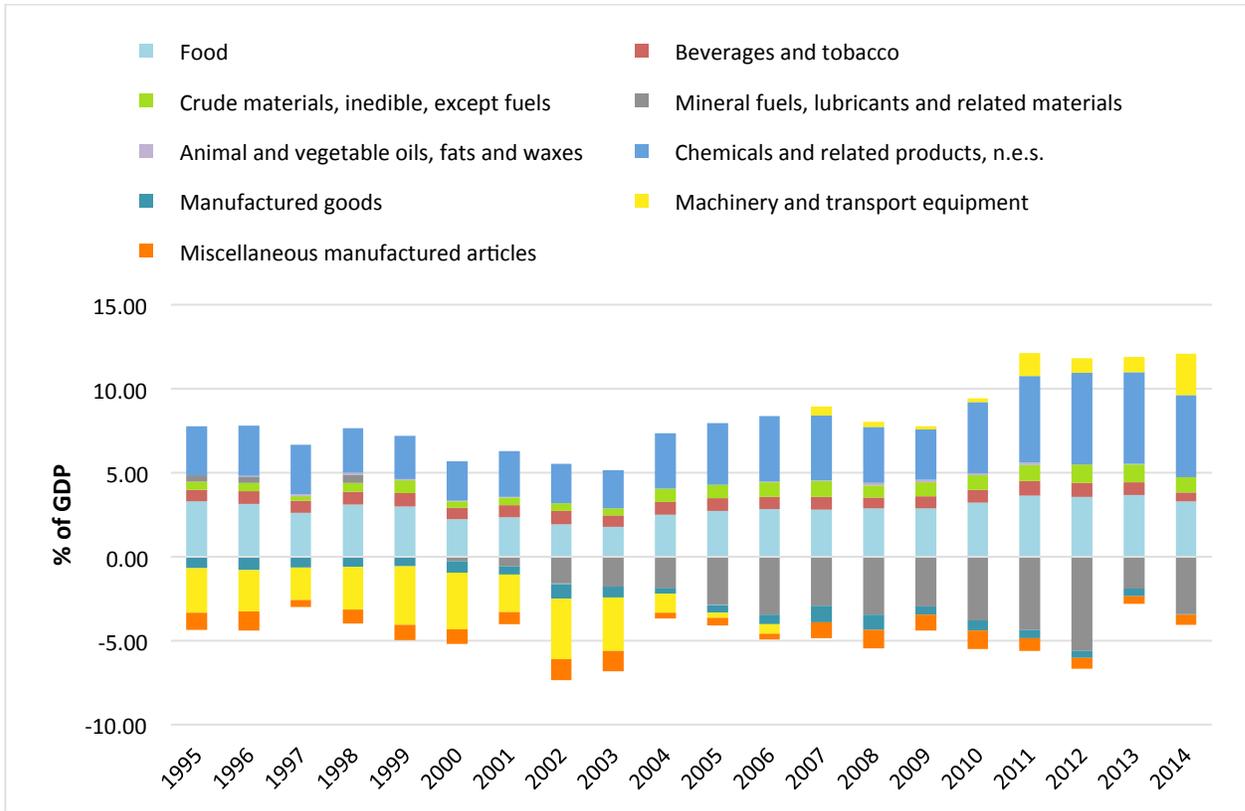


Appendix figure 3: **Current account balance before and after revision, as percentage of GDP**

Source: CBS Statistics Netherlands

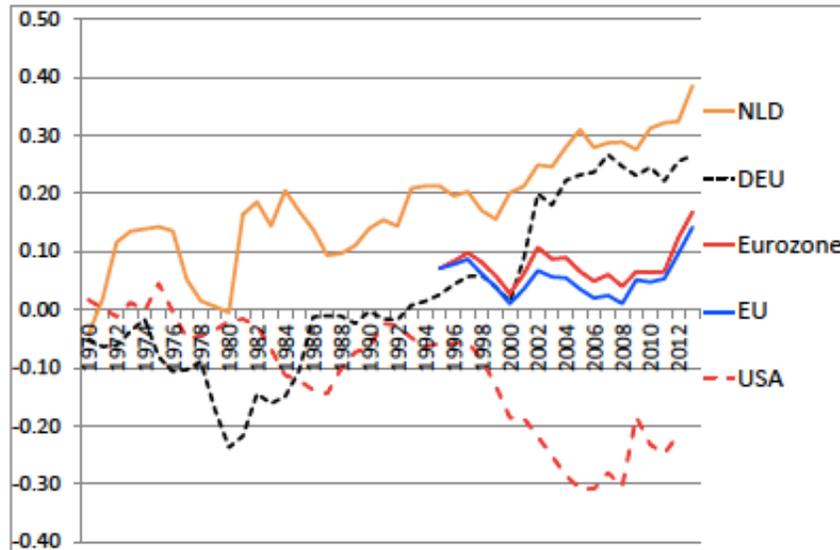
⁶⁹ SNA 2008; European Commission, IMF, OECD, United Nations, World Bank

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Appendix figure 4: Net export by product group (SITC), as percentage of GDP

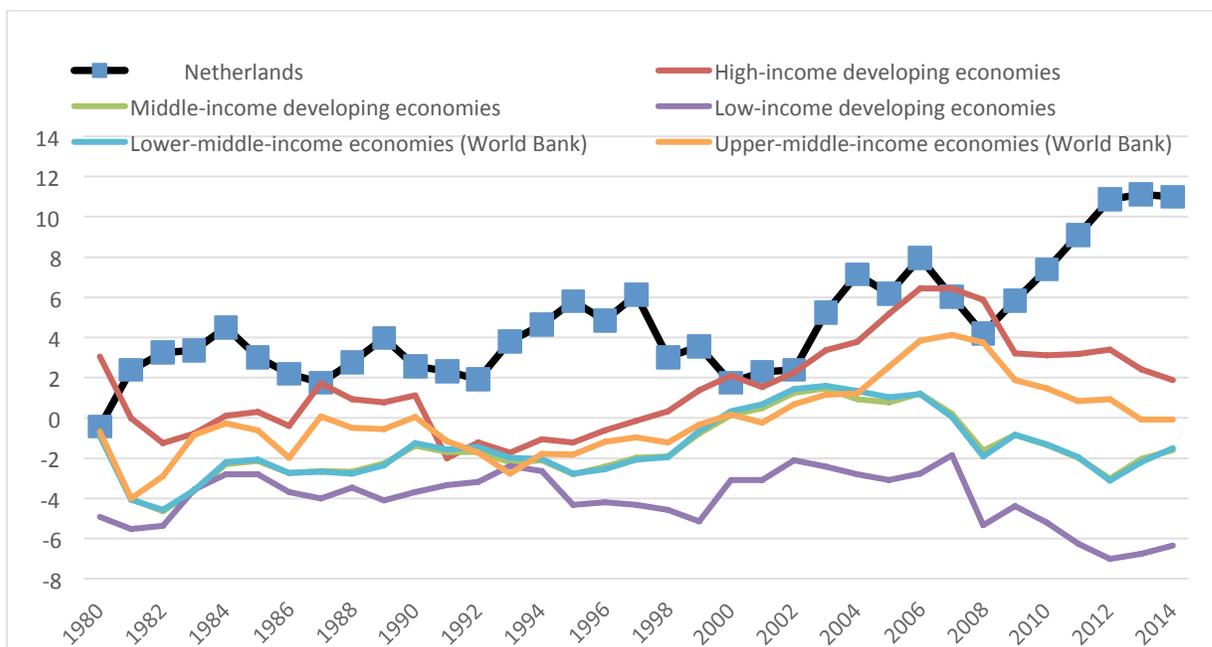
Source: UNCTADstat



Appendix figure 5: Foreign investment as a share of total investments for selected countries

Source: Author's own estimation using the OECD stat database

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Appendix figure 6: **Income level and current account, as percentage of GDP**

Source: UNCTADstat

	2003	2013
Netherlands	0,013	0,028
Selected exporters of petroleum	0,312	0,330
Selected exporters of manufactured goods	0,024	0,022
Selected exporters of manufactured goods and primary commodities	0,020	0,019
Selected exporters of agricultural products	0,025	0,026
Selected exporters of minerals and mining products	0,055	0,085

Appendix table 1: **Diversification of export of selected countries according to structure of export**

Source: UNCTADstat

	2003	2013
Netherlands	0,013	0,028
High-income developing economies	0,030	0,036
Middle-income developing economies	0,035	0,030
Low-income developing economies	0,038	0,040
Low-income economies (World Bank)	0,037	0,036
Lower-middle-income economies (World Bank)	0,031	0,027
Upper-middle-income economies (World Bank)	0,023	0,025
High-income economies (World Bank)	0,015	0,019

Appendix table 2: **Diversification of export of selected countries according to levels of income**

Source: UNCTADstat