Analysis

Retained Earnings and the Current Account

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Executive summary

The current account is a key macro-economic indicator for policymakers to track economic developments and international vulnerabilities in today's interconnected global economy. However, methodological issues exist regarding the most suitable definitions for compiling the current account. In the current definitions, income resulting from direct investments is defined more broadly compared to income resulting from portfolio investments. The former includes retained earnings, whereas the latter does not.

This creates several complications regarding the economic interpretation of the resulting figures. First, the current account balance can be structurally impacted in countries with large international investment positions, in a way that can be considered to be less intuitive from an economic perspective. Second, the relocation of multinational enterprises' (MNEs) legal headquarters can cause the level of the current account to change over time, even though little has changed economically, thus complicating the interpretation of time series. Third, the level of the current account can be impacted by level and method of profit distribution by MNEs - dividends are recorded as income, but share buy-backs are not. These complications can decrease the usefulness of current account figures for policymaking purposes.

In this paper we compile an alternative measure for the current account which neutralizes the mentioned interpretation issues. This alternative measure follows the suggestion by international policymakers to extend the definition of investment income to include retained earnings on portfolio investment, making the definitions equal between direct investment and portfolio investment. To compile the measure for the Dutch economy, we combine granular information on securities held and issued internationally with company-level profit figures for the time period 2013-2023.

We find that the alternative measure records substantial additional income flows compared to the official definitions. This finding is in line with expectations, given the substantial international assets and liabilities of the Dutch economy. For the years 2013-2020, the additional income flows on Dutch international portfolio equity assets and liabilities mostly balance out, and our alternative measure for the current account is on average slightly higher than the official measure. We do however find sectoral shifts in the net income received by different types of economic agents. Dutch institutional investors receive more net income under the alternative measure, as they hold a large part of international portfolio assets. Dutch multinational enterprises receive less net income, given their substantial international portfolio liabilities.

For the period 2021-2023, our alternative measure registers a lower current account surplus than the official current account figures. The three-year average under the alternative measure amounts to 7,5% of Dutch GDP, whereas the official figure is 8,8%. This reflects that during this period, the additional income recorded on Dutch international liabilities under the alternative measure is larger than the additional income recorded on Dutch international assets.

Our analysis shows that the definition of income used can have a substantial effect on the balance of the Dutch current account. The presented alternative measure provides insights to policymakers with respect to the underlying factors driving the Dutch current account surplus. It also presents an additional reason why the Netherlands has been building up less external assets since 2021 than would be expected based the official measure of the current account.

1. Introduction

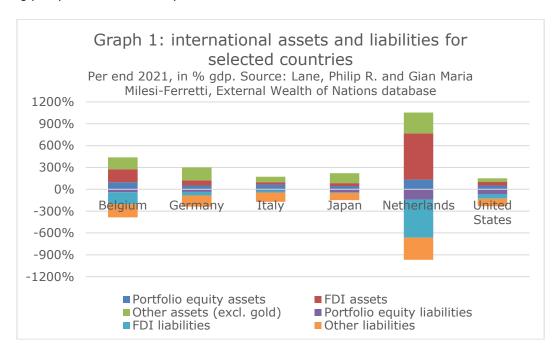
The current account is a key macro-economic indicator to track economic developments in a country, and is widely used for monitoring and analysis. The current account is compiled as part of the national accounts and balance of payments statistical frameworks. Its headline indicator is the current account balance, which is defined as the difference between a country's savings and its domestic investments. The current account is used by policymakers and academics for a variety of policymaking and research purposes. In Europe, for example, the European Central Bank (ECB) uses the current account to interpret economic developments and determine monetary policy within the euro area (Emter et al., 2023). The European Commission (EC) uses the three-year average of the current account as a risk indicator for the macroeconomic imbalance procedure, with thresholds of -4 to +6 percent of gross domestic product (European Commission, 2011). In the Netherlands, the Ministry of Finance (2023) analyzes current account data on income flows to monitor the effects of measures against tax avoidance.

In an increasingly financially interconnected global economy, the current account balance continues to be an important indicator for international macro-economic vulnerabilities. Current account deficits and surpluses are not necessarily macroeconomic imbalances, but can imply a misallocation of resources and a build-up of imbalances and vulnerabilities in both surplus and deficit countries (European Commission, 2012). A deficit on a country's current account signals that its domestic savings are insufficient to finance domestic investments, which leads to a reliance on capital from abroad for investments. Particularly in the case of structural and large deficits, this dependence on foreign capital can be a potential vulnerability. Conversely, a country running a structural surplus on the current account exports goods, services and capital to the rest of the world, presenting a potential vulnerability regarding demand from other markets for consumption and economic growth, and regarding the value of its international investments. The deepening and integration of international financial markets since the 1970's has increased the potential for the existence of such imbalances, For instance, current account imbalances rose to high levels in the period preceding the global financial crisis of 2008, leading to a painful period of adjustment during the crisis especially for countries that had run structural current account deficits (Lane and Milesi-Ferretti, 2012). Even though the monitoring of gross financial flows has become more important for financial stability purposes, the current account balance continues to be a policy-relevant variable to monitor imbalances (Obstfeld, 2012).

However, methodological issues exist regarding the most suitable definitions for compiling the current account, especially for so-called financial center countries. One particular methodological issue relates to how investment income should be recorded in the current account. In statistical guidelines, the investment income on direct investment (DI) is currently defined more broadly than on portfolio investment (PI). This creates several complications in the economic interpretation of the current account, which we explain in section 2 of this paper. Especially for countries with large international assets and liabilities – the so-called financial centers – these factors can lead to a substantial impact on the current account (Di Nino, Habib and Schmitz, 2020), thus decreasing its usefulness for policy purposes. Coutinho, Turrini, and Zeugner (2022) attempt to improve current account assessments by better taking into account the corporate financial center status of countries, and note that work in this direction should continue. Given this context, the Balance of Payments Manual suggests compiling and using alternative current account measures for certain analyses (IMF, 2009; IMF, 2025). Fisher et al. (2019) calculate such an alternative

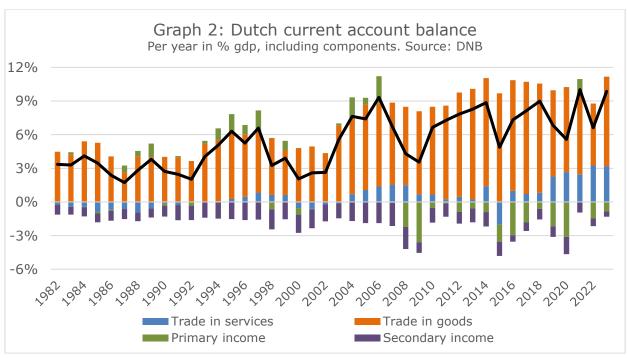
measure using macro data and find that this alternative treatment strongly affects the current accounts of financial centers especially.

These methodological issues are relevant for the Netherlands, given that the Dutch economy is highly financially interconnected with other countries (see graph 1). This interconnectedness has several major components. First, the Netherlands is home to a relatively large number of listed MNEs. These MNEs have an international economic footprint, and their shares are to a large degree held by foreign investors. This is reflected in substantial international liabilities. Second, substantial Dutch savings stemming from pre-funded pension schemes are invested internationally by Dutch pension funds, insurers, and investment firms. This is reflected in substantial international assets. Finally, non-resident MNEs regularly establish so-called Special Purpose Entities (SPEs) in the Netherlands as part of their international corporate structure, which is reflected in substantial international assets and liabilities. As a result, the Netherlands has large international assets and liabilities compared to other countries (Bijlsma et al., 2024). These international positions give rise to large income flows on the current account. Eggelte et al. (2014) provide an assessment of how to best interpret the official figures for the Dutch current account. Given the methodological issues, they conclude that the current account balance should only be used as a starting point for further analysis, and that policymakers should look closely at the underlying developments instead of drawing policy conclusions directly from the mere size of the balance.



The Netherlands has had a surplus on the current account of the balance of payments for decades, mainly due to net exports in goods and services. Since 1980, the Netherlands has had a significant surplus on the current account every year, which has further increased in recent years (see graph 2). In the first decade of this century, the surplus averaged 4.8% of gross domestic product (GDP), in the second decade 7.5% of GDP, and in the years 2020-2023 8.0%. The current account surplus is to a large extent the result of net exports of goods and services. The balance of primary income, which mainly records

cross-border income from labor and capital, has been alternately positive and negative over the years. However, large gross income flows underlie this balance, which means that small percentage changes in the gross flows can significantly affect the current account balance.



In this analysis, we use granular data to compile an alternative measure for the Dutch current account, and show that the way income flows are recorded can have a significant impact. We use granular securities data on cross-border holdings and corporate profits to calculate the impact of the alternative measure. To our knowledge, we are the first to use this type of granular data source for this purpose. We undertake this work against the background of ongoing discussions about the interpretation of the surplus on the current account in the Netherlands, and the nearly completed global process for the revision of the guidelines for national accounts and balance of payments. The new balance of payments guidelines encourage the release of this type of supplementary information, and note that the current treatment of retained earnings for direct investment may be expanded to portfolio investment in future versions of the Manual (IMF, 2025). In Europe, the new guidelines are expected to come into effect in 2029.

Our goal is to provide policymakers with insights for the interpretation of the current account, and to contribute towards a methodology for structurally compiling the alternative measure. To achieve this, our analysis is structured as follows. Chapter 2 describes the methodological issue regarding the registration of investment income in more detail. Chapter 3 describes our data and methodology. Chapter 4 presents the results of our analysis, and Chapter 5 concludes. In the remainder of this paper, for simplicity, we will refer to the current account in the context of the balance of payments framework given its central goal of describing international economic relations. However, the same definitions apply to the national accounts in its registration of transactions and positions with the Rest of the World.

2. Income from capital

Income from capital is recorded in the primary income account of the balance of payments, both for direct investment and portfolio investment. Primary income is defined in the balance of payments as income generated by contributions to the production process, mainly labor, or by making financial assets available. This second category includes for instance interest and dividends. The difference between direct investment and portfolio investment is made in the balance of payments based on the degree of control in a company. An investment is classified as a direct investment when the investor holds at least 10% of the voting rights in a company. Below this threshold, holdings are considered portfolio investment. Direct investment is typically characterized by the motive to obtain a long-term relationship and significant influence in the enterprise invested in, while portfolio investment is typically characterized by the motive of capital gains.

There is one key difference between the recording of primary income on direct investment and portfolio investment. Retained earnings are included in the former, but not the latter. For both direct investment and portfolio investment, distributed profits in the form of dividends on shares and interest on loans are considered as income for the investor. For direct investments, an additional component is added to the recorded income by including 'retained earnings on foreign direct investments'. This is essentially an imputed income flow, assigning profit to the investor that is not distributed but retained in the company invested in. Think of it as income that you could have received but then decided to reinvest. The idea that there is an actual decision made here – even though it is implicit – seems plausible. After all the investor could have forced distribution of these profits, given the degree of control it has in the company invested in. For portfolio investors, the absence of this type of control is an important reason to exclude retained earnings from the definition of income in the current account. That is not to say that the retained earnings don't impact the balance of payments as a whole. Retained earnings are likely to be reflected in the increase in the company's value, from which the investor – ceteris paribus – benefits through capital gains. In the balance of payments, this capital gain is recorded as a valuation change in the financial account.

As a result, the retained earnings of listed MNEs often end up as income in the country where the legal headquarters are located, even if real economic activities in that country are very limited.

The corporate structure of these multinationals consists of direct investment relationships, in which the retained earnings of (foreign) subsidiaries are ultimately attributed to the country where the MNEs legal headquarters are located. In the case where MNEs are listed on the stock market and their shares are held by portfolio investors, only the actually distributed income (dividend) is recorded as an income flow towards the domestic and foreign investors in the MNE. Given that corporate profits in general exceed distributed income in the form of dividends – i.e. the dividend payout ratio is less than one – part of the corporate income is attributed to the country where the legal headquarter is located. This recording method is not influenced by the extent to which the MNE engages in production or other real economic activities in the country of the legal headquarter, which need to be no larger than a holding company with little or no economic substance.

This creates complications in the economic interpretation of the current account. First, its level can be structurally impacted in countries with large international investment positions. In countries with a large listed MNE presence, the dynamic described above can attribute substantial income to the country. This increases the level of the current account balance and gross national income (GNI). In

other words, the suggestion is that the country in question has become 'richer'. This outcome can be considered to be less intuitive from an economic perspective, especially when the MNEs have a limited physical presence in the country and are largely owned by foreign portfolio investors. These investors do after all receive a capital gain from the retained earnings in the form of a higher stock price, which is subsequently reflected as an increase of the claim by foreigners on the MNEs home country which lowers its net international investment Position (IIP). Reasoning from the perspective of the MNEs home country, if you receive income that comes with a corresponding increase of your foreign liabilities, would you really consider it to be your income? Conversely, it can be considered that countries' current account is biased downwards when they hold large international portfolio investments. After all, the retained earnings of the companies invested in is not recorded as income, but the valuation increase caused by the retained earnings does increase the country's international investment position.

Second, the relocation of MNE legal headquarters can cause the level of the current account to change over time, even though little has changed economically. This dynamic is described by Avdjiev et al. (2018) and by the IMF in several recent Article IV consultations (IMF, 2024). Changes in the population of listed MNEs can change the size of the abovementioned effect and thus the level of the current account. Such changes can take place instantly in the case of the international relocation of MNE's legal headquarters. In the past decade several MNEs, such as Stellantis N.V. and Universal Music Group N.V., have relocated their headquarters to the Netherlands (van Loon, 2023). Given the dynamic described in the previous paragraph, such relocations generally increase the Dutch current account surplus. Conversely, the relocations of Shell plc and Unilever N.V. from the Netherlands to the United Kingdom had a dampening effect on the Dutch current account surplus.

Third, the level of the current account can be impacted by the level and method of profit distribution by MNEs - dividends are be recorded as income, but share buy-backs are not. If the dividend payout ratio for MNEs in a given country fluctuates over time, this creates changes in the level of the current account as only dividends are recorded as income for portfolio investors. This interpretation issue is further increased by the fact that different types of income distribution are treated differently. Share buy-backs by MNEs are not considered to be dividends and thus do not generate income on the current account, even though they are in practice a common alternative to dividend distributions.

To make the impact of retained earnings on the current account visible, the IMF suggests publishing supplementary information on this if possible. In a world where capital gains from investments are in practice an important way for investors to generate income, it is important for policymakers and other users to also gain insight into its impact on the current account. As part of the current revision process for the Balance of Payment Manual and System of National Accounts, the assigned expert group concluded that there might be a conceptual preference for the extension of the recording of retained earnings to all equity investments – both direct and portfolio investments. However it recommended, at least for practical reasons, that this treatment for now be applied only in supplementary information (IMF, 2021). Balance of payments compilers are encouraged to provide this information. Furthermore it is noted that the feasibility of compiling information according to such an alternative method still needs to be investigated.

3. Data and method

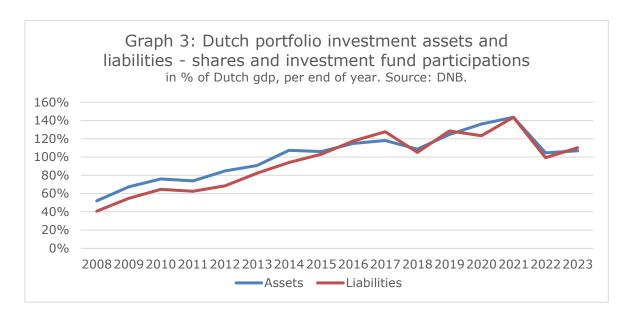
Following up on the IMF's suggestion, we present an alternative measure for the current account which neutralizes the mentioned effects of MNEs and relocations. This alternative measure follows the economic reasoning in that corporate income, whether distributed or retained, ultimately belongs to the shareholders of the MNE, even if they individually each hold less than ten percent of the voting rights. Following this logic, we seek to compile an alternative measure for the current account which includes retained earnings for portfolio investment in the primary income balance. This method de facto makes the full income of MNEs 'transparent' towards their final investors and their country of residence. As a result of this, the alternative measure takes away the three mentioned interpretation issues that currently arise in the official measure of the current account.

In order to compile the alternative measure, we follow a roughly similar methodological approach as Fischer et al. (2019), using more detailed data. In a nutshell, we estimate the unobserved information – the retained earnings on portfolio investments – and add them to the official current account figures to arrive at the alternative measure (see table 1). Fischer et al. compile estimates for retained earnings using a macro method, estimating retained earnings from dividend payments observed in the balance of payments in combination with dividend payout ratios for leading national market indices. Because we focus on the Dutch economy and have access to detailed information regarding the holdings of individual securities, we are able to first estimate retained earnings at the individual enterprise level and then attribute these earnings based on the actual residence of its shareholders.

Primary income components	Direct Investment	Portfolio investment
Current account	Dividends + Retained earnings	Dividends
Alternative measure	Dividends + Retained earnings	Dividends + Retained earnings

Table 1: Primary income account components for equity in direct investment and portfolio investment

In our estimation process, we align with the assets and liabilities for portfolio investment (shares) in the Dutch international investment position. The scope of our estimation process concerns portfolio investment in shares, given that debt securities do not carry retained earnings. This also includes non-publicly traded shareholdings, which form a relatively small minority of the shareholdings with 0.5 percent of the liabilities and about 5.5 percent of the assets. Also, contrary to Fischer et al. (2019), we do include shares in investment funds – we will touch on this in more detail later. Graph 3 shows the evolution of the stock of these assets and liabilities over time in relation to the Dutch GDP. Since 2008, both assets and liabilities have increased significantly, thus increasing their potential to impact gross income flows. The main sources of liabilities are the holdings of stock by foreigners in Dutch listed MNEs; the main sources of assets are the international assets held by Dutch pension funds and life insurers. In total, the assets and liabilities position are roughly equal over time, which could potentially mitigate the effect of adding retained earnings on the net flow of income. In our analysis we take care to align our results back to these macro totals to provide comparability to the official balance of payments and international investment figures as published by DNB.



To calculate the retained earnings on these securities, we enrich the underlying granular securities data with an additional data source on the earnings of institutions. The Dutch balance of payments data on the assets and liabilities in portfolio investment is almost entirely constructed from granular information at the level of individual securities that DNB has available. These securities are often provided with a unique identifier in the form of the so-called ISIN code, which can be used to link the data to additional data sources. Through this identifier, we link the data to information from data provider Refinitiv on the total earnings per share of the company that issued the securities. The combined dataset allows us to estimate retained earnings and provides the basis for calculating macro totals using the alternative measure.

As a first step, we compile a granular database of cross-border holdings of Dutch and foreign individual shares, both assets and liabilities. DNB has various sources at its disposal for this. The Centralised Securities Database (CSDB) of the European System of Central Banks (ESCB) contains information on the securities issued by Dutch MNEs. DNBs Monthly Securities Report (MSR) dataset contains granular information on the holdings of securities by Dutch residents. We determine Dutch holdings of foreign shares by selecting the foreign shares held by Dutch residents as recorded in the MSR. We determine the foreign holdings of Dutch shares by subtracting the Dutch shareholdings as recorded in the MSR from the total outstanding value in the CSDB – an approach also known as the residual approach. As we are interested in foreign portfolio investment, we furthermore substract known FDI positions from the liabilities.

An analysis of the investor base of the largest listed Dutch MNE's confirm that foreign portfolio investors hold a substantial share of their stock. Graph 4 illustrates this by showing the largest listed Dutch MNEs by market capitalization, including an estimate of the share of investment in the MNE that is attributable to foreign portfolio investment. This share is estimated using the above procedure, with 'other investors' denoting all other investment types such as foreign direct investment and domestic direct and portfolio investment. Several of the largest listed Dutch MNEs are not originally Dutch; and almost all are owned to a large degree by portfolio investors located outside the Netherlands.



We link the information on cross-border holdings to the Refinitiv data on the earnings per share, aligning as closely as possible with the concept of income used for direct investments. By linking the datasets, a dataset with information on holdings and profit at the level of each individual share is created. For determining the earnings per share (EPS), we use the basic earnings per share excluding extraordinary items, as this best approximates the income measure used in direct investment. However, it remains an approximation. Accounting profit concepts as prescribed in, for example, IFRS and US GAAP can differ from the statistical concept of profit as prescribed in the balance of payments manual, especially regarding profits and losses arising from price changes such as exchange rate changes, impairments or book profits/losses on the sale of assets.

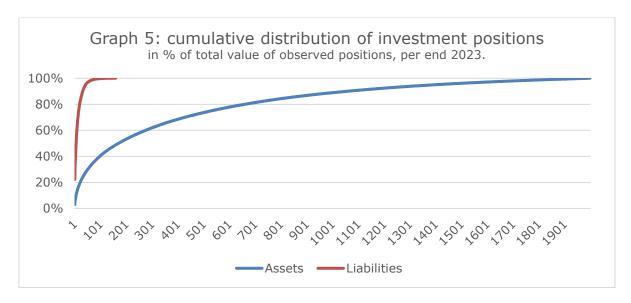
To bring the quality of the dataset to an adequate level for this analysis, we perform various quality controls on the resulting dataset. To ensure that the data on profits contains plausible values, we investigate outliers by selecting high and low ratios between earnings and corresponding position and correct these data where necessary. We also manually correct for specific circumstances such as stock splits, which would otherwise lead to incorrect outcomes in the data.

The resulting dataset contains the holdings of shares and the earnings per share for individual companies at the end of the year on an annual basis from 2013 to 2023. In this analysis we use holdings of shares at the end of the year as an approximation for the shareholdings during the year. Because calculating an average holding per company during the year brings significant additional complexity, we assume in this analysis that cross-border investments are constant throughout the year. An additional analysis of the shareholdings over the years shows that this assumption does not introduce significant

¹ We do not use the price-earnings ratio in our analysis due to the shortcoming that it is not suitable in the case of negative profits.

deviations in the result, except in one specific case concerning a large corporate relocation at the end of the year. In this case we apply a correction to the dataset.

The dataset shows that foreign shareholdings in Dutch listed MNEs (liabilities) are much more concentrated than Dutch shareholdings in foreign MNEs (assets). This is not surprising, as the Dutch stock market is more concentrated than the global stock market. Graph 5 shows that the ten Dutch publicly traded companies with the largest holdings by foreign portfolio investors cover about 70 percent of the total investment value in 2023, a percentage that is reasonably stable over time. The ten largest investments in foreign institutions account for about 10 percent of the total holdings in 2023. Given the differences in concentration, we achieve a different coverage when it comes to observing corporate profits. For the liabilities we achieve almost full coverage, given the concentrated nature of the market. For the assets we are able to quality check and use the data of the 2,000 companies in which Dutch investors hold the largest shareholdings, measured by value. These holdings cover 88% of the total value of listed direct Dutch shareholdings.



As the next step, we calculate a profit ratio on the analyzed shares by summing the profits per held share and dividing by the total value. We calculate this average profit ratio (PR) on the share portfolio for both assets and liabilities. For each MNE in each year, we multiply the EPS by the number of shares to arrive at total profits. Next we divide the sum of profits for all MNEs in a given year by the total market value of the outstanding shares in a given year. Note again that in the cases of liabilities, the value and shares are defined as the part that is held by foreign portfolio investment:

$$PR_Assets_{t} = \frac{\sum_{k}^{n} EPS_{k,t} SharesAssets_{k,t}}{\sum_{k}^{n} ValueAssets_{k,t}}$$

$$PR_Liabilities_{t} = \frac{\sum_{k}^{n} EPS_{k,t} SharesLiabilities_{k,t}}{\sum_{k}^{n} ValueLiabilities_{k,t}}$$

We calculate the retained earnings by subtracting the dividends recorded in the balance of payments from the profits calculated via the profit ratio. The retained earnings on the assets are the income that Dutch investors do not receive as dividends on their foreign shares. In the terminology of the current account, these are the credits. The retained earnings on the liabilities are the income that Dutch MNEs do not distribute as dividends to their foreign investors, i.e. the debits. We calculate the retained earnings (RE) for the assets and liabilities by applying the calculated profit ratio to the total portfolio equity assets (A) and liabilities (L) as observed in the balance of payments, and then subtracting the observed dividends (D). In doing this, we assume that the observed profit ratio on the assets is also representative of the share positions whose profit is not analyzed at the granular level in this analysis.

$$RE_credits_t = PR_Assets_tA_t - D_credits_t$$

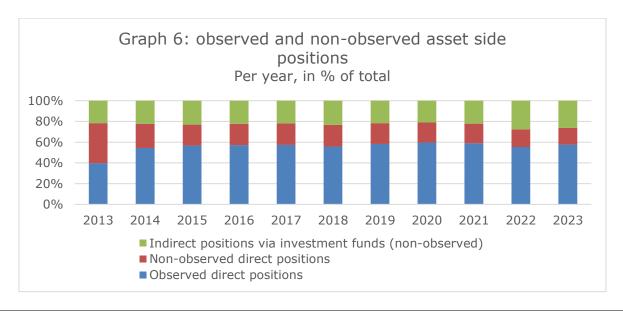
 $RE_debits_t = PR_Assets_tP_t - D_debits_t$

Finally we consider the issue of retained earnings on indirect shareholdings via investment funds, and include them in the scope of our alternative measure. The issue of whether to include or exclude these investments is particularly relevant for the asset side, as Dutch residents channel a significant portion of their portfolio investments through foreign investment funds. As per end 2023, such investments amounted to EUR 381 bn or 36% of portfolio investment assets in shares and investment fund participations. A substantial part of the investments by these funds is in shares that would be included in the above analysis if they were held directly. Fischer et al (2019) exclude investment funds from their alternative measure on the grounds that the retained earnings from investment funds are already treated as income flows that are deemed to be reinvested, similar to the treatment of direct investments. We take a different view given that this treatment is limited to specific items and crucially does not include the retained earnings of the companies that the investment fund invests in, unless the voting rights exceed the threshold of ten percent. The box below explains this in more detail. Our view is that when estimating the impact of attributing retained earnings on portfolio investment to investors, the impact of this estimation should be similar regardless of whether shares are held directly or through investment funds.

Given data constraints, we include a measure of the retained earnings on portfolio shares held via foreign investment funds via an approximation. First, we estimate the total amount of equity held by Dutch investors via foreign investment funds. To achieve this we perform a simple procedure where we assign different assumed percentages of equity held based on the name of the fund. For instance, we assign equity funds a percentage of 100%, mixed funds a percentage of 50%, and bond funds a percentage of 0%. By summing the assets of all funds weighted according to these percentages, we arrive at the estimate for equity held through foreign investment funds. For the year 2023 this figure amounts to EUR 235 bn, a substantial but lower figure than the EUR 381 bn in total holdings in investment funds. Secondly we estimate the retained earnings on these indirect shareholdings by using the profit ratio and dividend payout ratio of the observed investments.

Our method results in a more comprehensive granular data coverage for the liabilities side than for the asset side. In the above method we manage to observe the liabilities side almost fully through granular observations, as a result of its concentrated nature and data availability. For the asset side, our

granular data coverage is more partial and the calculated ratios for profits, dividends and retained earnings are then also applied to positions that we don't observe at the granular level – thereby assuming that the average ratio's from the observed positions will also be valid for the non-observed positions. Graph 6 provides an overview of the evolution of the observed and non-observed part of the asset side. The non-observed direct positions include the group of marginal holdings that we observe beyond the 2,000 companies in which Dutch investors hold the largest shareholdings, and unlisted portfolio equity positions. The indirect positions via foreign investment funds are the positions for which we described the estimation methodology in the previous paragraph.

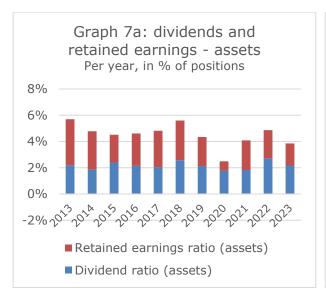


Box: Retained Earnings via investment funds

Experienced users of the balance of payments know that retained earnings of investment funds are already recorded in the balance of payments in the form of 'Retained earnings attributable to shareholders of collective investment funds.' These retained earnings of investment funds as included in the official balance of payments figures are limited to rental income, interest, dividend payments and retained earnings on direct investments that the fund itself receives but does not distribute to participation holders. This way of registration ensures that distributed profits from the companies that the fund invests in, are allocated to the investors in the fund regardless of whether the fund actually redistributes the profits. However, this treatment does not include the allocation of retained earnings on portfolio shares invested in by the fund. Similar to the treatment of direct portfolio investments, such retained earnings would – ceteris paribus – result in an increase of the fund's share price, which would be registered as a gain on the financial account for the investors in the fund. Therefore, allocating retained earnings to PI investors also calls for a correction similar to the one done for direct investments.

5. Results

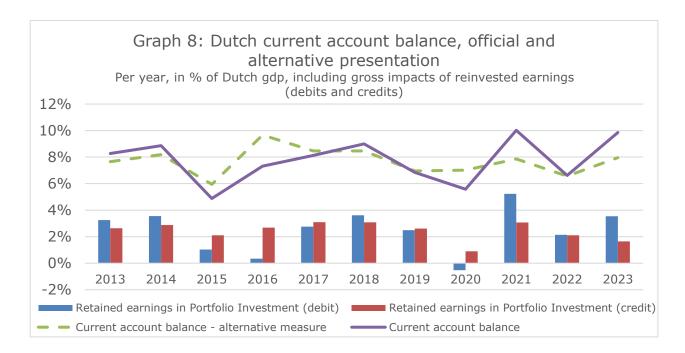
The calculated retained earnings are substantial, which is intuitive given the large gross positions in cross-border shareholdings. Graphs 7a and 7b show the dividend payouts and calculated retained earnings as a percentage of the total positions for assets and liabilities, respectively. The size of the calculated retained earnings varies from -0.6 to 4 percentage points of total positions. The level of retained earnings on the Dutch liabilities, which in this analysis are attributed to foreign investors, shows a relatively volatile trend. This is due to the previously mentioned highly concentrated population, where the results of a few large multinationals can be decisive for the outcome. The international assets held by Dutch investors have a much more diversified character in comparison.





When including retained earnings in the income concept for portfolio investment, incomes are on average twice as high, with significant variation between years. This confirms the expectation that only a portion of company profits is distributed as dividends. On the assets and liabilities side, different trends can be observed. On the liabilities side, the dividends paid out were relatively high compared to total profits up to and including 2020. The years 2021 to 2023 show relatively elevated profits in combination with slightly lower dividends, resulting in higher levels of retained earnings. This may partly be due to a composition effect; for example, with Shell plc's relocation to the United Kingdom, a share with a relatively stable and high dividend has disappeared from the population. In the more diversified assets, both dividends and retained earnings show a more stable trend.

When the current account is compiled according to our alternative measure, we find a significant effect on the Dutch current account balance, especially in recent years (graph 8). The measured effect varies over time. The balance according to this alternative measure method is 2.3 percentage points higher or up to 2.2 percentage points lower relative to GDP.



The results show that the outgoing and incoming retained earnings roughly balanced each other until 2021 for the Dutch economy as a whole – although not for individual sectors. For the period 2013-2020, the average level of the current account balance according to the alternative measure (7,8%) is slightly higher than the official current account balance measure (7,4%). The results for the debits in the year 2020 are mainly caused by Dutch companies paying dividends despite lower profits. It is worth noting there that even though the net effect for the Dutch economy as a whole is relatively small, the effects on individual sectors of the economy are likely not. After all, the debits are mostly outgoing income from Dutch corporations, while the credits are mostly incoming income for Dutch pension funds and life insurers, who ultimately invest on behalf of Dutch households. The alternative measure thus suggests a potential overstatement of saving by Dutch corporations and an understatement of saving by Dutch households, as is also previously pointed out in Eggelte et al. (2014).

From 2021 onwards, the alternative measure for the current account balance is lower than the calculation according to the balance of payments regulations. The driving factor behind this result is the increase in profits by Dutch firms, without a corresponding increase in dividends by Dutch firms. The resulting increase in retained earnings increases the alternative measure on portfolio investment for liabilities (the debits) relative to the corresponding measure for the assets (the credits). After all, the alternative measure attributes these increased retained earnings as income to the foreign shareholders, while the official measure does not. The structural shift observed between the period before and after 2020 may in part be attributed in part to the increased profitability of Dutch MNEs, including several MNEs that relocated their corporate headquarters to the Netherlands in the previous years. For the period 2021-2023, the average current account surplus according to the alternative measure is 7,5% compared to the official figure of 8,8%. This is still above, but substantially closer to the 6% threshold set by the European Commissions' MIP indicator for the current account.

6. Conclusions

This analysis shows that the definition of income used can have a substantial effect on the balance of the Dutch current account. Over the entire period examined, the additional gross flows according to the alternative measure are significant relative to Dutch GDP. Particularly from 2021 onwards, there is also a net effect on the Dutch current account balance. Because the retained earnings on the liabilities are significantly higher than the retained earnings on the assets, the current account balance according to the alternative measure is lower. In 2023 the three-year average of the current account surplus under the alternative measure amounts to 7,5% of gdp, whereas the surplus according to the official measure is 8,8% of gdp. The impact of this decrease also extends to Dutch Gross National Income, given that it also includes international income from investments.

The presented alternative measure has the advantage for policymakers that it is much less influenced by relocations and other company-specific choices. For policymakers and researchers, it is important to have a clear view of the effect of these definitions to make well-founded recommendations. Relocations, changes in dividend policy, and share buybacks can have a substantial effect on the current account balance in the Netherlands but have different economic implications than, for example, an increase in net exports. The associated policy recommendations aimed at for example national competitiveness, consumption or saving behavior, or monetary policy can therefore also differ. The alternative measure presented here is less sensitive to the aforementioned factors and thus offers policymakers the opportunity to better understand the underlying drivers of a surplus – or deficit – on the current account and make better-informed policy choices.

The alternative measure also provides insights on why the Netherlands has been building up less external assets since 2021 than the official measure of the current account suggests. The relationship between developments in the current account and external assets is of interest to economists and policymakers, especially in cases where a current account surplus (deficit) does not translate one-to-one into an increase (decrease) in external assets. The cause of this can largely be found in valuation and exchange rate effects, especially in countries with substantial international asset and liability positions such as the Netherlands (Boonstra, 2008). However the difference in the treatment of income also plays a role. Retained earnings on liabilities in portfolio investment do not manifest as an outgoing income flow on the current account, suggesting that the income is for the Netherlands to invest. However, the non-recorded outgoing flow does manifest itself as an increase in the claim of foreign shareholders on Dutch MNEs, lowering the Dutch net international investment position. The alternative measure presented here does record the outgoing flow into the current account, and thus provides a better picture of the extent to which the international income of the Netherlands can actually contribute to an increase in external assets.

For statisticians this analysis offers an initial, further refinable methodology for compiling supplementary information according to a broader income concept. This analysis shows the merits of using granular information on holdings and profits where possible, given the relevance of composition effects in the outcome of the analysis. Given the potentially concentrated nature of portfolio liabilities especially, individual companies can influence results in individual countries and these effects can also change over time due to corporate relocations. Because the methodology in this analysis is based on granular data, we are

better able to correct for these effects than when using estimates based on macro variables. However, there is still ample possibility to further refine our presented methodology – for instance regarding the approximations used for non-observed profits and investment funds, and potential differences between our profit measure and statistical guidelines. Therefore the figures for the alternative measure presented in this analysis should be considered as a preliminary, experimental result on which we welcome feedback from statisticians and economists alike. We hope that this paper can contribute to the discussion on how to proceed with the methodology to compile this alternative measure, so that it can in the future be made available on a more structural basis – in the Netherlands and elsewhere.

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Terminology

The following abbreviations and phrases are used consistently throughout this paper. For the descriptions, we made ample use of Eurostat's descriptions on their excellent <u>Statistics Explained</u> website.

Terminology	Description
Alternative Measure	The alternative measure for the current account that we compile in
	this analysis. In the alternative measure, retained earnings from
	Portfolio Investment are included in the income definition of the
	current account.
DI / Direct Investment	In the context of this analysis, this means Foreign Direct
	Investment. Foreign direct investment, abbreviated as FDI, is an
	international investment within the balance of payment accounts.
	Essentially, a resident entity in one economy seeks to obtain a
	lasting interest in an enterprise resident in another economy. A
	lasting interest implies the existence of a long-term relationship
	between the direct investor and the enterprise, and an investor's
	significant influence on the management of the enterprise. A direct
	investment enterprise is one in which a direct investor owns 10 %
	or more of the ordinary shares or voting rights (for an incorporated
	enterprise) or the equivalent (for an unincorporated enterprise).
Financial Center country	A Financial Center country is typically defined as an advanced
	economy with large international liabilities (and/or assets) in
	relation to its gdp.
MNE / MultiNational	A corporation that produces goods or delivers services in more than
Enterprise	one country. A multinational enterprise typically has its
	management headquarters in one country, the home country, while
	also operating in other countries, the host countries.
PI / Portfolio Investment	Portfolio investments are financial investments in assets such as
	stocks and debt securities. These investments are mainly motivated
	by the objective of capital gains and for this purpose are typically
	spread out and diversified. This is in contrast to Direct Investments
	which seek to obtain a lasting interest and long-term relationship
	with the enterprise invested in, resulting in a larger and more
/	concentrated holding.
SPE / Special Purpose	Also colloquially known as 'brass place companies', Special Purpose
Entity	Entities are entities with no or little employment, no or little
	physical presence, and no or little physical production in their host
	economy. SPEs are directly or indirectly controlled by nonresidents,
	and are often established to obtain specific advantages provided by
	the host jurisdiction. They transact almost entirely with
	nonresidents and a large part of their financial balance sheet
	typically consists of cross-border claims and liabilities.