Towards a better view of Dutch net foreign assets

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1. Introduction

Once every quarter, DNB calculates the amount of Dutch net foreign assets. The IMF has laid down that such calculations must be based to the extent possible on up-to-date figures at market value. Where Dutch subsidiaries abroad and (foreign owned) subsidiaries in the Netherlands are concerned, this requires the use of estimates, because in general only book values are available, which are usually much less up-to-date than market values. When these (in most cases) lower book values are raised to the level of market values, it becomes clear that the Netherlands is richer than one would conclude from the usual figures, in which holdings of equity capital in subsidiaries are included at book value. Over the past decades, the difference repeatedly exceeded EUR 100 billion, sometimes even EUR 200 billion. At the end of 2011, the difference amounted to EUR 70 billion. The present article focuses on the factors determining the difference and on the procedure used by DNB to estimate this difference in order to be able to publish net foreign asset figures at market value. An insight into these issues is all the more important now that European countries have agreed to monitor each other´s financial position much more closely using a so-termed macro-economic scoreboard. The scoreboard features not only the current account balance, but also such quantities as a country´s net foreign assets.

Traditionally, the Netherlands is a country with considerable net external (net foreign) assets. The country's external assets consist to a large extent of portfolio investments, loans and deposits as well as subsidiaries of the many multinationals having their head office in the Netherlands. At the end of 2011, Dutch external assets totalled EUR 2,898 billion (Chart 1). In large measure, these external assets are offset by external liabilities, totalling EUR 2,673 billion at end-2011. The difference between the two constitutes the country's net external assets, which amounted to EUR 224 billion in 2011.

The level of a country's net external assets depends among other things on the method used for determining the value of assets and liabilities. In the calculation of net external assets, most external assets and liabilities are included at their current value; for instance, for investments in equities and bonds, current stock exchange prices are available. However, net external assets also include assets and liabilities for which no current market value is available. Thus, foreign subsidiaries of Dutch multinationals are included at their – usually lower – book value. This also holds, of course, for Dutch subsidiaries of foreign multinationals. As a result, measured in euro, liabilities and notably the assets (being the largest of the two) are understated. This has considerable consequences for Dutch net external assets, as cross-border participating interests – interests of 10% and more – represent substantial amounts.

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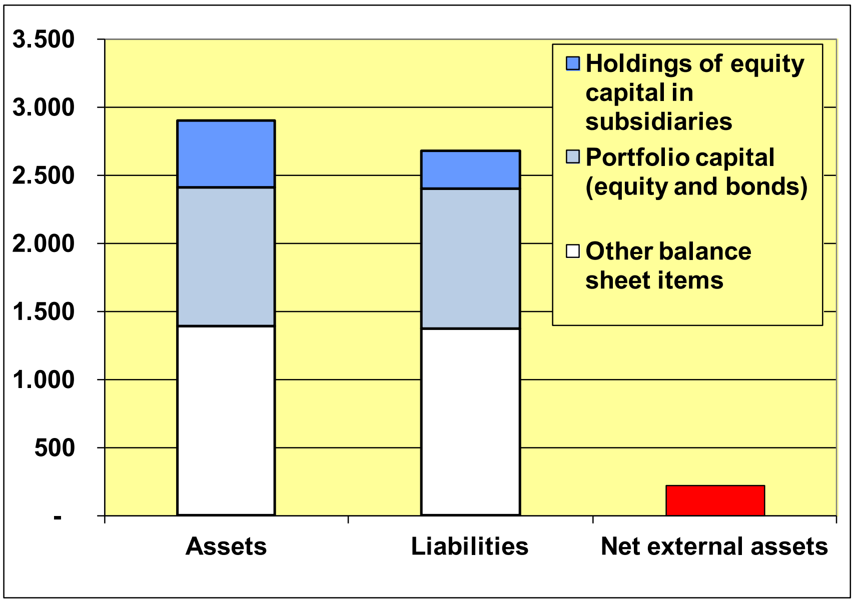
Chart 1

External assets and liabilities on the Dutch balance sheet (EUR billion, end-2011)



DNB calculates the country's net external assets in accordance with internationally agreed rules, but it is far from simple to do so from the market's perspective as prescribed by the IMF with a view to obtaining the most up-to-date and realistic results.[3] This is because the value according to the market is simply not known for all external assets or liabilities, a problem which is also faced by DNB's sister institutions abroad. Where the current value of equities is concerned or the value of a multinational group as a whole, stock exchange prices could provide a clue, but even then it is not known how "the market" would value specific companies within such a group, such as Canadian subsidiaries of a Dutch multinational enterprise. Hence, DNB complies with international practice and derives the relevant amounts for the subsidiaries from the accounting systems of the groups and the subsidiaries themselves. As in other countries, it is thus accepted that, for lack of better information, such book values are usually lower than the corresponding market values. After all, as a rule, book values are determined on the basis of prudent accounting principles. In addition, contrary to stock exchange prices, book values do not reflect any (positive) earnings expectations prevailing in the market.[4]

As a result, the different *entities* of a multinational enterprise are included in external assets at a lower amount than the amount by which they contribute to the stock exchange value of the group *as a whole*. This practice leads to underestimation of outward and inward participations in the equity capital of individual entities). Using both book value and market value does not help to obtain a sound insight into Dutch net external assets. This may also

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[3] In principle, this is also true of the many special financial institutions (SFIs) established in the Netherlands, being "empty" subsidiaries of foreign groups of companies and acting as financial pivots between third countries. In this case, however, departures from the rules work out in a neutral fashion for net external assets. To the extent that the capital and reserves on the balance sheets of SFIs, that is, their external *liabilities*, are not based on market value, the resulting divergences reflect equally large divergences for external *assets*. Consequently, SFIs are left out of consideration in the remainder of this article.

[4] Only in the event of a take-over by another company could the market value of a subsidiary be approximated by taking the amount that the new parent company was prepared to pay at the time of the take-over (and that it has entered in its own books).

be illustrated for individual groups, such as Royal Dutch Shell. Given that the shares in this group held by foreign investors are counted as Dutch liabilities at stock exchange value, whereas the foreign subsidiaries are counted at (much) lower book value, Dutch external assets are clearly understated.

How net external assets figures are distorted *on balance* differs from one country to the next. An additional problem in interpreting *developments* is constituted by the fact that the distortions are not constant, but depend notably on the stock exchange climate, since the more optimistic investors are, the larger will be the gap between market value and book value.

In the Netherlands, the assets, that is, the Dutch outward direct investment, are understated to a larger extent than the liabilities. This is caused by the fact that, for a large number of years, Dutch companies' outward direct investment has been much larger than inward direct investment (so that more or less equal distortions in percentage terms are, in euro terms, easily larger for assets than for liabilities). In 2011, Dutch outward and inward holdings of equity capital in subsidiaries totalled EUR 489 billion and EUR 271 billion, respectively. (book value, see Chart 1). Consequently, Dutch net external assets would be billions of euro higher (see below) if a more market-based valuation of capital participations were to be used.

The level of and the movements in Dutch net external assets depend heavily on the income earned by our country from external trade (section 2). In addition, net external assets depend strongly on the way in which assets and liabilities are valued. This is all the more true as the Netherlands has substantial external assets and liabilities, where a minor distortion in percentage terms would already have major consequences in terms of euro. This article discusses a method developed by DNB for translating book values into market values (section 3). Initial results suggest that Dutch net external assets were understated in the period 2004-2011, at times by as much as EUR 140 billion. In this respect, the stock exchange climate played a major role (section 4).

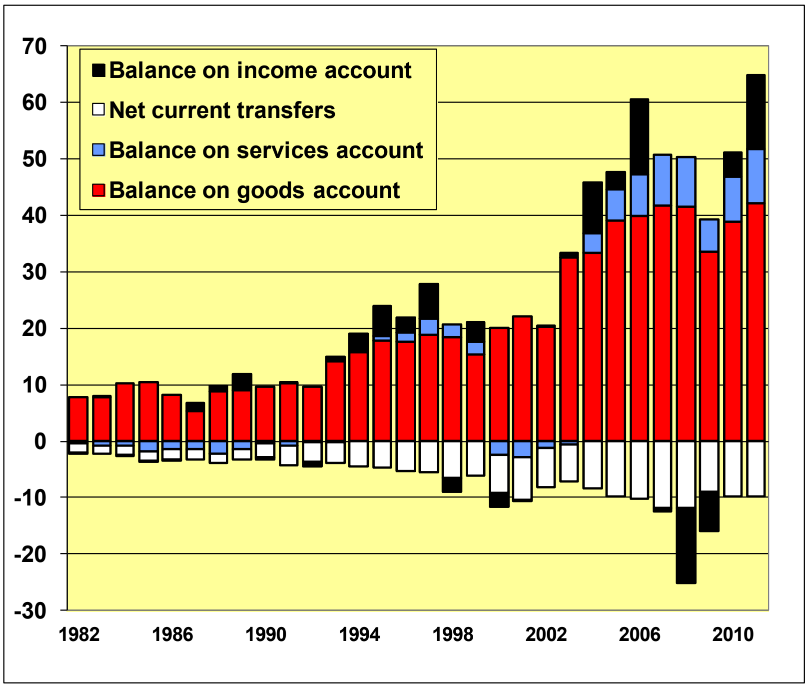
2. Current account surpluses as well as other factors decisive for net external assets

The Netherlands owes much of its prosperity to its favourable location in Northwest Europe. Exports and imports of goods and services have increased steadily over the years. Thanks to its exports of agricultural products and chemicals, transport services and many other forms of high-quality services, the Netherlands earns sizable net amounts from international trade. Over the past three years, the surplus on the goods and services account of the balance of payments averaged some EUR 40 billion (Chart 2). Incidentally the surplus on the current account is usually lower. This is because annually some EUR 10 billion in income is transferred to European institutions, relatives abroad and development cooperation.

Transactions on the current account, whose balance is, by definition, equal to the national savings surplus, result in equally large changes in the country's external claims and liabilities. Export earnings, for instance, may show up in the deposits that exporters (or their local banks in the Netherlands) hold at foreign banks. Thus, it might be expected that, aside from other factors, the Dutch current account surpluses have over the years resulted in a significant increase in net external claims.

Chart 2

Breakdown of current account transactions (EUR billion)



In reality, for many decades external assets and liabilities have also been living "a life of their own", determined in part by the sharply increased international capital transactions since their liberalisation. That is especially true of the Netherlands, characterised as it is by a large financial sector, the presence of many multinational corporations and high levels of savings for old-age pensions which are often invested abroad by pension funds.

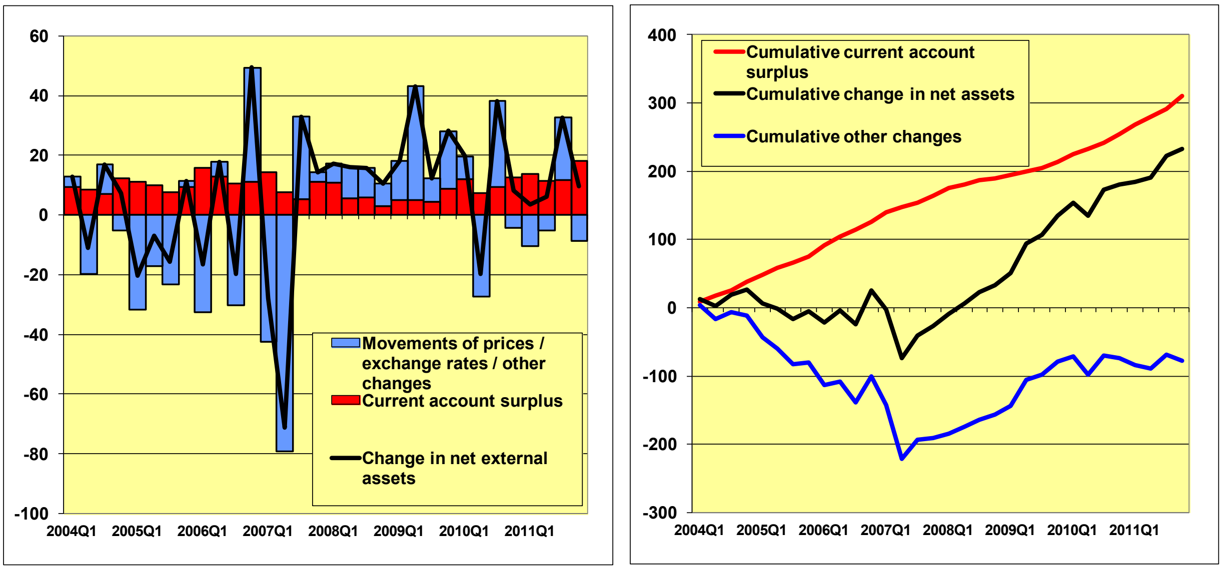
In 2011, external assets and liabilities, amounting to EUR 2,898 billion and EUR 2,673 billion, respectively, were already 50 times as high as the current account surplus. This also illustrates the importance of other factors, including the *valuation method* used for financial assets and liabilities, for the level of and the movements in our country's net external assets. In the period 2004-2011, Dutch net external assets increased from around nil to EUR 224 billion. This may be ascribed to current account surpluses, which totalled over EUR 310 billion for the period 2004-2011, but price, exchange rate and other changes depressed the total by about EUR 100 billion (Chart 3 shows data about these changes as from 2004, the first year after the introduction of new surveys by DNB).

During the first three to four years of the period concerned (2004-2011), revaluations depressed net external assets, but worked out positively in later years. These deviations from the underlying trend of net external assets would have been considerably smaller – as will be illustrated below – if, on the Dutch balance sheet, not only listed equities, but cross-border participating interests, too, would have moved in line with stock exchange prices.[5]

[5] A case in point is the example, cited earlier, of Shell: when stock exchange prices go up, foreign holdings in Shell increase, but the values of Shell's foreign subsidiaries do not; as a result, Dutch net external assets go down due to purely statistical inconsistencies.

Chart 3

Movements in net external assets (EUR billion)



3. Estimating market values from book values

In a company's accounts, the capital and reserves (shareholders' equity) show the company's worth, that is, in accordance with generally accepted accounting rules. Under normal conditions, with favourable prospects, this book value is lower than market value, the amount which "the market" would be prepared to pay for the company. When calculating net external assets, DNB includes subsidiaries at book value; as a result, both assets (Dutch outward direct investment) and liabilities (inward direct investment) are included at amounts below market value. In practice, the difference between market value and book value, the so-termed value gap, is usually positive.

In this section, a description is given of the manner in which such distortions resulting from the valuation of both Dutch outward participations (in equity capital) and inward participations in the Netherlands at book value have been adjusted and how book values have been converted into market values. In this context, three categories of companies are distinguished.

Diagram – From book value to market value

a. Company having its head office in the Netherlands		**b. Company with head office abroad** *Foreign subsidiaries at net asset value*		**c. Company with head office abroad** *Foreign subsidiaries at historical cost*	
Book value of capital and reserves	20	Book value of capital and reserves	20	Book value of capital and reserves	26
Market value (stock exchange value)	32	Estimated market value (1.6 x 20)	32	Estimated market value (1.6 x 26/1.3)	32
MV/BV = 32/20 = 1,6		(1.6: average of group a)		(1.3: halfway between 1 and 1.6 of group a)	
Value gap	12	Value gap	12	Value gap	6
Operational group result	3	Operational group result	3	Operational group result	3
Of which: profits earned abroad	2	Of which: profits earned abroad	2	Of which: profits earned abroad	2
Foreign share	2/3	Foreign share	2/3	Foreign share	2/3
Foreign subsidiary (net asset value)	10	Foreign subsidiary (net asset value)	10	Foreign subsidiary (net asset value)	14
Allocated part of value gap (2/3 x 12)	8	Allocated part of value gap (2/3 x 12)	8	Allocated part of value gap (2/3 x 6)	4
Foreign subsidiary (market value)	18	Foreign subsidiary (market value)	18	Foreign subsidiary (market value)	18
Adjustment of foreign assets	8	Adjustment of foreign assets	8	Adjustment of foreign assets	4
Adjustment of foreign libailities	0	Adjustment of foreign libailities	12	Adjustment of foreign libailities	6
Net adjustment	8	Net adjustment	-4	Net adjustment	-2

a. Companies with head office in the Netherlands

For companies with their head office in the Netherlands, mainly outward direct investment needs to be adjusted (apart from foreign (minority) interests in the Dutch company; see below). For the adjustment of outward direct investment, first the value gap is determined, being the difference between the market and the book value of the Dutch company. *Book value* is understood to mean the company's capital and reserves on a (globally) consolidated balance sheet, i.e. the difference between assets and debt of all group entities with the exception of intragroup claims and liabilities.[6] For the *market value* of listed companies, market capitalisation is used, i.e. the number of outstanding shares multiplied by the share price. The (unweighted) average ratio of market to book value of these companies is also used to estimate the market value from the book value of non-listed companies with their head office in the Netherlands.

If a value gap occurs, it can be ascribed to the group entities in the Netherlands and those abroad, but the extent of their individual contributions is unknown. Which part of the value gap is to be allocated to domestic or foreign group entities can therefore only be approximated, for instance by looking at their contributions to overall group operations, measured by balance sheet totals, for instance. In the case of *financial* institutions, mostly banks, it is assumed that, thanks to solvency requirements, the balance sheet totals are sufficiently in line with shareholders'equity capital for the latter to be used for proportionally allocating the value gap. If shareholders' equity capital of the Dutch parent company is, for instance, 1,000 and its outward direct investment is worth 600 (the shareholders' equity capital of the foreign subsidiary), then 60% of the value gap is allocated to the foreign subsidiary and 40% to the parent company in the Netherlands.

For *non-financial* institutions, this method is usually not an option. A foreign subsidiary often represents far more (or, conversely, far fewer) operations than can be deduced from shareholders' equity capital. A useful indicator for the contribution to operations and value gap in that case is constituted by the profits earned (the operational result). Dutch companies have to report to DNB about the part of operational profits earned abroad. A comparison with the amount earned domestically provides a key for the domestic/foreign allocation of value gaps. The foreign parts of the value gaps can then be used to convert outward investment from book to market value (see the diagram).[7]

b. Companies with head office abroad – foreign subsidiaries at net asset value

A Dutch company may form part of a group of companies with its head office abroad. In that case, inward capital participations in such a company, i.e shareholders'equity capital, qualifies for an adjustment from book to market value. After all, the inward investment is reported to DNB at book value. The *size* of the adjustment – the value gap, the difference between market value and capital – partly depends on the manner in which a company values its foreign subsidiaries (see below). That is why two categories, b and c, are

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[6] In the same manner and based on the same accounting rules, the value of individual (foreign) subsidiaries can be determined as the difference between all assets and debt of those subsidiaries while leaving out intragroup claims and liabilities. For foreign subsidiaries, reporting to DNB takes in accordance with this *net asset value* method.

[7] If a Dutch company mainly earns its profits *abroad*, the largest part of the value gap will be allocated to outward direct investment. An example is constituted by Royal Dutch Shell. At year-end 2009, the value gap for this company, derived from publicly available figures, amounted to EUR 35 billion (EUR 130 billion market value minus EUR 95 billion book value). Of the profits in the fourth quarter, X% (a confidential percentage) originated from abroad. On this basis, it may be estimated that the equity capital held in foreign subsidiaries at market value instead of book value would be X% of EUR 35 billion higher.

distinguished. However, in both cases, the market value of the inward direct investment is obtained by adding the value gap to the book value.

Companies of category b value their domestic and/or foreign *subsidiaries* in the same manner as companies in category a, that is, at net asset value. Hence, by definition, the shareholders' equity capital of the company (the balancing item) is also comparable to that of companies from category a. Consequently, it is assumed that shareholders' equity capital differs just as much from market value as in the case of companies from category a. The diagram uses the same factor, 1.6 (market value/book value), so a value gap of 60%, for companies from categories a and b.

If the company has subsidiaries abroad and there is outward direct investment, the adjustment to market value proceeds in the same manner as that described for companies of category a.

c. Companies with head office abroad – foreign subsidiaries at historical cost

Many companies established in the Netherlands with their head office abroad can only value their foreign subsidiaries at historical cost, since they know too little about those subsidiaries to determine the net asset value, as defined above, under a, and preferred by DNB. For instance, they do not know how much profit these subsidiaries (and, in turn, their subsidiaries) have reinvested abroad and, consequently, how much the value has increased in the course of time; quite often, only the group's management knows this and they could have their offices elsewhere abroad, without having any obligation to report to DNB. In this respect, valuation at historical cost provides a less clear a picture than the net asset value. On the other hand – and assuming for the time being that this carries more weight − the historical cost of foreign subsidiaries includes the goodwill paid at the time of their take-over. The goodwill included in foreign assets is often substantial, resulting in a proportionally higher shareholders'equity capital of the Dutch company. For companies in this category it is therefore assumed that this capital, i.e. inward equity capital in subsidiaries, already better approximates the higher market value and that inward direct investment therefore requires less adjustment. Shareholders' equity capital is therefore only raised by half of the average adjustment percentage for categories a and b.[8]

A special subcategory is constituted by the so-called special financial institutions (SFIs). Their assets and liabilities have been left unadjusted. In footnote 1, it was already noted that, in the case of SFIs, differences from market value have no noticeable impact on net external assets. Moreover, for SFIs the book value of assets and liabilities (mostly valued at historical cost) often constitutes a better approximation of market value than for other companies established in the Netherlands. This is because SFIs are relatively frequently subject to intra-group transactions (restructuring operations with attendant changes in ownership), so that the valuation at historical cost is often more up-to-date.

From each of the three categories distinguished above, the principal companies (and, in the case of category a, all companies) have been subjected to an examination. The examination covered the quarterly figures for the period 2007 IV-2011 IV. For these companies, that is, at the micro-economic level, direct investment has been adjusted to market value. Subsequently, the results, in terms of the percentage adjustments found, have been used as

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[8] This is as yet an arbitrary assumption, which, for instance, in part c of the diagram on page 6 results in a higher book value of the foreign subsidiary and higher shareholders' equity capital of the Dutch parent. A sensitivity analysis showed that the full adjustment of inward direct investment resulted in an approximately EUR 20 billion larger addition to net external assets and that leaving the figures unadjusted led to a EUR 20 billion lower addition to net external assets (averages for the period under consideration). In all cases, adjustment led to an *upward* adjustment of net external assets.

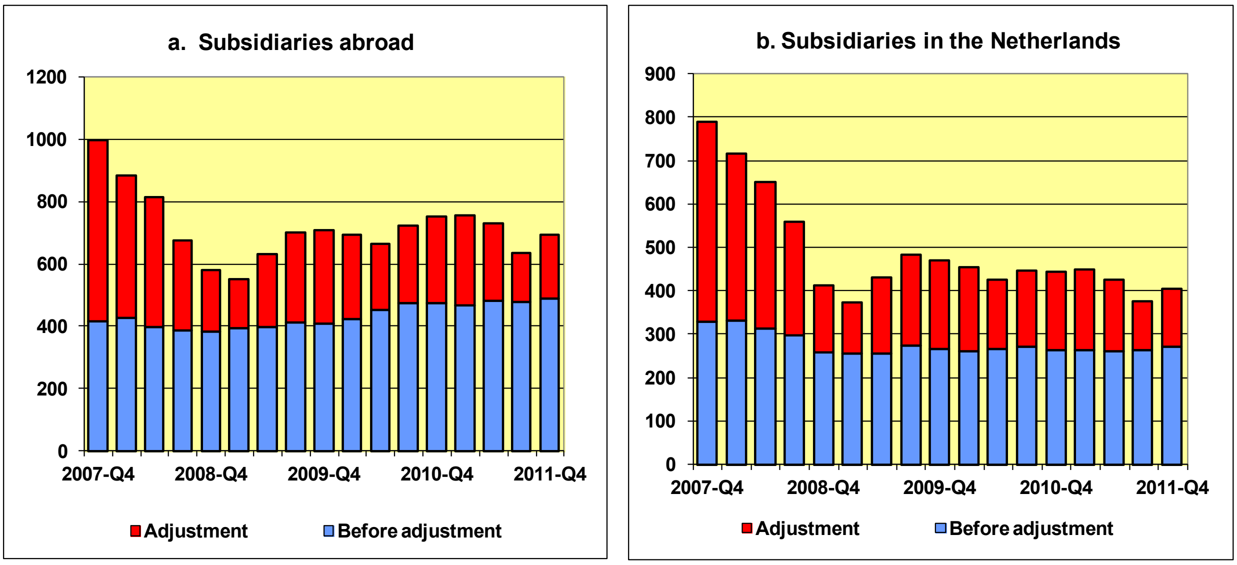
a basis for estimates concerning direct investment by the companies not covered by the examination.

4. Result: The Netherlands richer than with net external assets calculated in the usual manner

The adjustment of direct investment to market value has major consequences for both Dutch assets and Dutch liabilities. Although the adjustments vary greatly during the course of the period covered by the examination, they invariably lead to a substantial increase in both Dutch outward direct investment and inward direct investment (Chart 4).

Chart 4

Equity capital in subsidiaries abroad and in the Netherlands (EUR billion)



In euro terms, the largest adjustments mostly concern Dutch outward direct investment. In the fourth quarter of 2007, these adjustments totalled EUR 580 billion. On the Dutch balance sheet, adjusting the value of direct investment to market value would result in an increase in assets in particular. In most cases, the effects on net external assets are likewise substantial; in the first quarter of 2011, Dutch net external assets would be as much as EUR 100 billion higher if direct investment were valued at market value instead of book value.

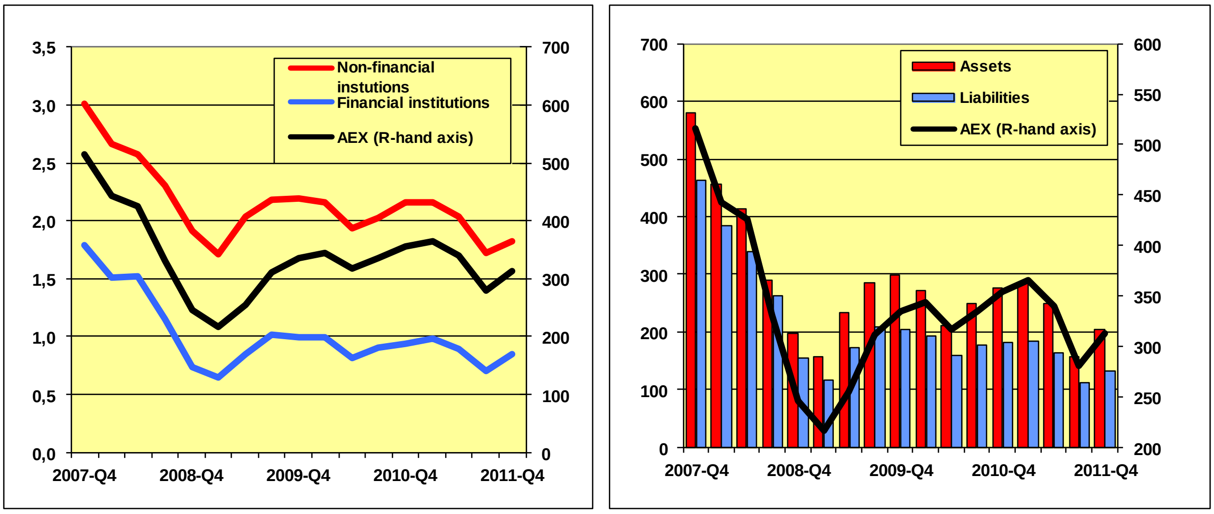
Valuation at market value also has consequences for the movements in net external assets. The period covered by the examination (2007 IV-2011 IV) includes years of major unrest. During the financial crisis, the fall in stock exchange prices caused shareholders' equity capital of the non-financial institutions examined to drop to a low averaging 1.6 times their book value (Chart 5a). For financial institutions, the drop was even more pronounced, with a market value temporarily at a level of no more than two-thirds of book value (and, as a consequence, a negative value gap).

Chart 5

Relationship between AEX and adjustment of direct investment (shareholders' equity)

a) Ratio of market value to book value

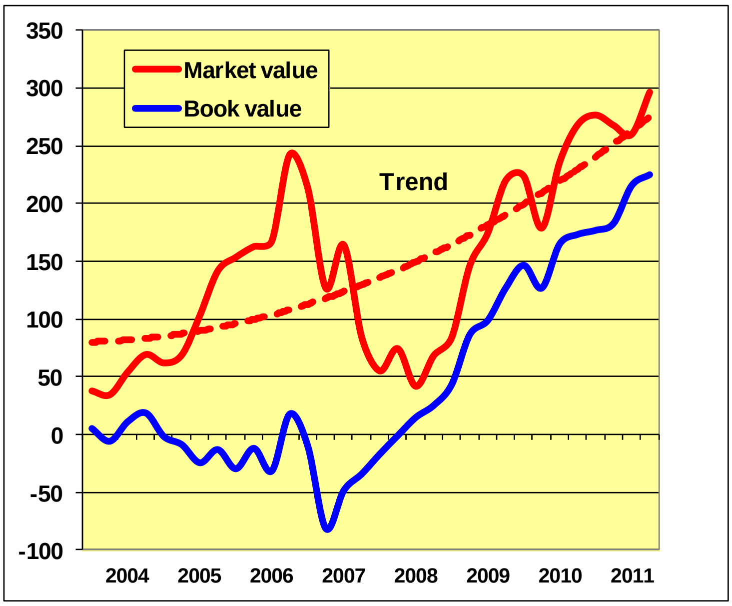
b) Adjustment of direct investment (EUR billion)



Both the ratios of market value to book value (Chart 5a) and the adjustments of direct investment (Chart 5b) are closely in line with the movements in the AEX index, in both percentage and euro terms. Hence, this significant correlation has been relied on to make estimates for earlier periods preceding the period 2007 IV-2011 IV of the differences between market value and book value, without first calculating the value gaps for individual companies in the three groups distinguished.[9] Subsequently, net external assets have been calculated to as early as 2004 I.

Chart 6

Dutch net external assets



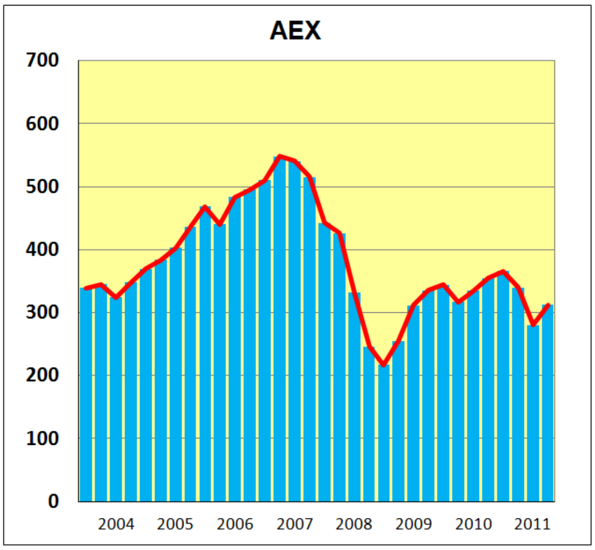
[9] A linear relationship has been estimated, separately for outward and inward direct investment, between percentage changes in the AEX index (explanatory variable) and in the ratio of market to book value (dependent variable).

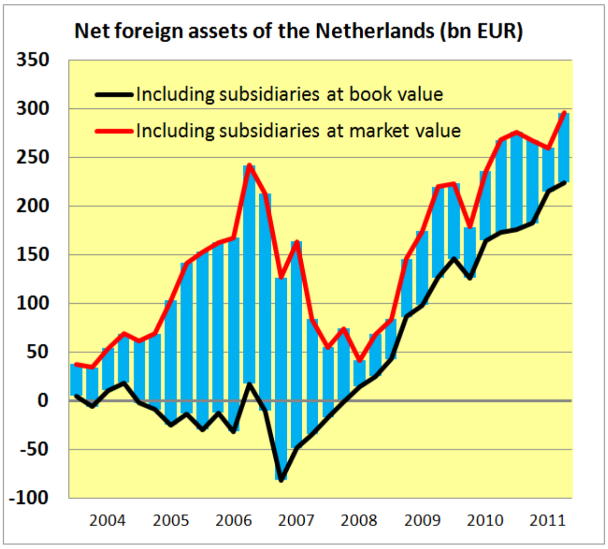
In the period 2004-2011, *valued at book value*, Dutch net external assets did not at first show an increase, despite sustained surpluses on the current account of the balance of payments (Chart 6). Until 2007, this reflected negative effects of price, exchange rate and other changes, especially for those items within external assets that are sensitive to changes in the stock exchange climate. These effects could make themselves felt because direct investment at book value could *not* move with "the market". As a result, net external assets (at book value) temporarily moved away significantly from the trend. By contrast, valued at market value, net external assets clearly regain the upward trend in line with the large current account surpluses earned in the period concerned.

Hence, whenever the AEX index shows large upward and downward movements, while direct investment is valued at book value, major gaps may arise from time to time between the movements in net external assets at market value and net external assets at book value (Chart 7). For that reason, in the future the Dutch net external asset figures published on DNB's website will also include figures in which holdings of equity capital in subsidiaries are valued at market value.

Chart 7

AEX index and distortion of net external assets





5. Conclusion

It may be concluded that, in many cases, valuation of outward and inward direct investment at market value instead of book value results in a considerable increase in Dutch net external assets. In the period 2004 I-2011 I, the difference repeatedly exceeded EUR 100 billion, sometimes even EUR 200 billion. Both inward and outward holdings of equity capital in subsidiaries are often significantly understated if valued at book value. Moreover, this valuation method also gives rise to fluctuations in net external assets of a purely statistical nature. Hence, the usefulness of the present statistics may be enhanced if, in addition to the figures compiled using the standard method, users are also given data showing Dutch net external assets at market value. A better insight into this quantity is all the more important since data on the current account and external assets will come to play an important role in the Excessive Imbalances Procedure, the agreements recently made by European countries to better monitor and prevent macro-economic imbalances.