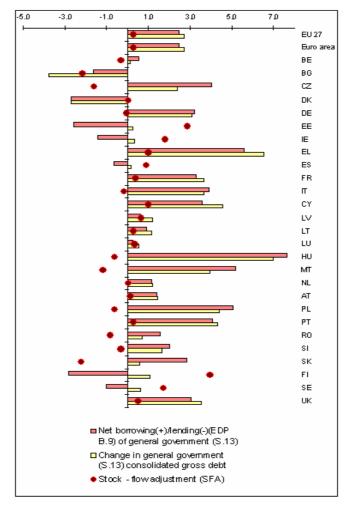
## Stock-flow adjustment (SFA) for the Member States, the euro area and the EU27 for the period 2003-2006, as reported in the April 2007 EDP notification

The main factors contributing to changes in government debt other than government deficits/surpluses (the so-called stock-flow adjustment) are closely monitored by Eurostat

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The so-called stock-flow adjustment (SFA) is the difference between the change in government debt and the government deficit/surplus for a given period. Although SFAs generally have legitimate explanations, they are closely monitored by Eurostat in the framework of quality checks of the data for the excessive deficit procedure (EDP)<sup>1</sup>, to ensure consistency across the reported data. Figure 1 shows for each Member State the 2003-2006 average SFA, together with the average government deficit/surplus (reversed sign) and the average change in government debt, expressed in percent of GDP. The main purpose of this publication is to introduce the elements of SFA, and to provide an analysis of their patterns and trends. This publication also contains country-specific comments.

Figure 1: Government deficit (reversed sign), Maastricht debt, and stock-flow adjustment as % of GDP: 2003-2006 averages



<sup>&</sup>lt;sup>1</sup> Council Regulation 3605/93, as amended, details the rules to organize the prompt and regular reporting of deficit and debt data by Member States, including deficit and debt definitions. Data under the Excessive Deficit Procedure are sent by Member States to Eurostat. For definitions of government deficit and debt and of consolidation, see the Methodological Annex.



1

#### Introduction

The stock-flow adjustment (SFA) is the difference between the change in the stock of government debt and the flow of annual deficit/surplus. It is widely known that deficits contribute to the increase in debt levels, while surpluses reduce them. However, as Figure 1 shows, the change in government debt also reflects other elements. A positive SFA means that the government debt increases more than the annual deficit (or decreases less than implied by the surplus). On the contrary, a negative SFA means that the government debt increases less than the annual deficit (or decreases faster than implied by the surplus).

The importance of the SFA has been emphasized many times, as statistical monitoring of fiscal performance requires understanding the coherence between the two key fiscal indicators, the government deficit and debt. It has been argued that since great attention is paid to the deficit under the EU multilateral fiscal surveillance (EDP and Stability and Growth Pact), governments may have an incentive in underreporting their deficits by reporting transactions under the SFA. Some SFA items, such as Shares and other equity, Other financial assets, Net other liabilities Statistical incurrence of and discrepancies, among others, are known to be used to facilitate hiding deficits, and are thus closely monitored by Eurostat. However, SFAs generally have legitimate explanations.

Figure 2: Evolution of change in debt and annual deficit in EU27 in percent of GDP

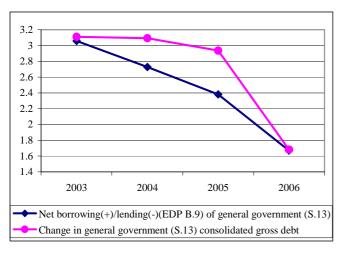


Figure 2 shows that the SFA is changing in time, showing a value of 0.4% in 2004 and 0.6% of GDP in 2005, whilst being nil in 2003 and 2006. Whilst the average SFA levels for the EU27 remain modest overall, when expressed as a percent of GDP, the examination of country data shows that for many countries the SFAs are considerable for some years.

Table 1 shows the SFA for the years 2003-2006, in percent of GDP. Large regular positive SFAs can be observed for Estonia, Ireland and Finland and to a lesser extent for Greece, Spain and Sweden.

On the other hand big regular negative values can be observed for Bulgaria, the Czech Republic, and to a lesser extent to Romania and Slovakia. Several countries exhibit some large annual SFAs, though with signs that differ from year to year (Denmark, Cyprus, France, Lithuania, and the Netherlands). Some large occasional SFAs are reported by Belgium, Hungary, Malta and Poland.

Half of the annual SFA observed for the Member States over 2003-2006 exceeded 1% of GDP, in absolute values, and about one fifth even exceeded 2% of GDP. All Member States reported at least one SFA in excess of 1% of GDP for the four years under review, except Germany (its largest SFA being -0.6% of GDP in 2004) and the UK (its highest SFA being 0.6% of GDP, in both 2004 and 2006).

Table 1: Stock-flow adjustment in 2003-2006, in percent of GDP

	2003	2004	2005	2006
EU 27	0.1	0.4	0.6	0.0
Euro area	0.1	0.3	0.6	-0.1
BE	-2.1	0.7	-0.5	0.5
BG	-5.2	-0.9	-3.3	0.6
CZ	-3.8	0.0	-1.9	-0.8
DK	-1.6	2.0	-0.4	0.0
DE	0.0	-0.6	-0.1	0.3
EE	2.6	2.4	2.4	4.1
IE	1.4	1.8	1.2	2.6
EL	-0.5	1.0	1.1	2.3
ES	-0.2	0.6	1.4	1.6
FR	1.7	0.8	1.0	-2.2
IT	-1.6	0.2	0.6	-0.1
CY	2.3	2.1	0.8	-1.3
LV	0.7	1.1	-0.2	0.8
LT	-0.5	-1.4	1.1	1.8
LU	0.6	-0.6	-0.2	1.5
HU	0.2	-0.1	-1.9	-0.8
MT	0.9	-0.2	-0.8	-4.7
NL	-0.4	0.2	1.5	-1.2
AT	-1.2	0.7	0.4	0.4
PL	0.4	-2.9	-0.2	0.1
PT	-0.4	0.3	1.2	-0.2
RO	0.9	0.1	-1.6	-2.8
SI	-1.1	0.1	-0.5	0.1
SK	0.3	1.0	-6.7	-3.6
FI	6.1	4.0	1.3	4.2
SE	0.8	2.0	3.9	0.1
UK	0.3	0.6	0.4	0.6

To explain the differences between Member States shown above, one has to look at the components of SFA, as it often appears that SFA components offset each other.



## Components of stock-flow adjustment – Factors contributing to the general government debt

The SFA is made up of 15 elements. This publication presents these elements grouped into main components.

Table 2 presents the SFA elements, as reported to the European Commission by Member States, showing EU27 figures in 2003-2006 for illustration. Table 3, placed at the end of the document, details the SFA of each Member State (for each year over 2003-2006). For many SFA items, this publication provides a supporting graph. Cross-references to the data are made through the text. Table 3 columns are numbered, and references are included throughout the text in brackets.

The starting point of the analysis is the *deficit/surplus level* and its contribution to the change in general government debt.

The first SFA group is called *Net acquisition of financial assets*. These corrections appear because financial transactions are "below the line": while not contributing to the deficit, they lead to increases or decreases of the stock of debt.

A second group of SFA items comprises transactions in those liabilities that are excluded from the Maastricht debt: *financial derivatives* (F.34) and *Other liabilities* mainly composed of *payables* (F.7).

A third SFA group includes selected other adjustments:

The Effects of face valuation are shown in the next three lines (Issuances above(-)/below(+) nominal value, Difference between interest (EDP D.41) accrued(-) and paid(+), Redemptions of debt above(+)/below(-) nominal value), reflecting the fact that the government debt, defined in Council Regulation 3605/93, as amended, excludes accrued interest and is measured at face value (for bills and bonds issued).

The Appreciation (+)/depreciation (-) of foreign-currency debt reflects the impact of changes in exchange rates on the Maastricht debt components, which are denominated in foreign currencies.

The Other changes in volume (Changes in sector classification (K.12.1) (+/-), and Other volume changes in financial liabilities (K.7, K.8, K.10)(-)) mainly arise from the reclassification of units inside or outside general government, and other rare cases of disappearances of debt that do not transit via the deficit/surplus.

The last item is the *statistical discrepancy*, which reflects differences arising from the diversity of data sources.

Table 2 Stock-flow adjustment item for the EU27

EU-27				
Data are in million euro	2003	2004	2005	2006
Net borrowing(+)/lending(-)(EDP B.9) of general government (S.13)*	308,012	288,214	262,028	193,187
Net acquisition (+) of financial assets <sup>(1)</sup>	29,675	31,264	69,030	60,273
Currency and deposits (F.2)	6,306	20,698	28,328	43,189
Securities other than shares (F.3)	-5,845	11,259	17,829	23,944
Loans (F.4)	1,166	7,907	9,710	-5,987
Shares and other equity (F.5)	8,863	-2,747	-1,115	-16,192
Other financial assets (F.1, F.6 and F.7)	19,183	-5,851	14,278	15,319
Adjustments <sup>(1)</sup>	-25,483	1,108	-8,659	-55,585
Net incurrence (-) of liabilities in financial derivatives (F.34)	-1,285	-1,436	-696	-1,119
Net incurrence (-) of other liabilities (F.5, F.6 and F.7)	-9,588	10,244	-13,831	-60,140
Issuances above(-)/below(+) nominal value	-197	4,221	668	8,322
Difference between interest (EDP D.41) accrued(-) and paid(+)	-8,910	-5,276	-12	2,733
Redemptions of debt above(+)/below(-) nominal value	2,660	1,541	274	751
Appreciation(+)/depreciation(-) <sup>(2)</sup> of foreign-currency debt	-5,766	-7.992	4,578	-6,485
Changes in sector classification (K.12.1)(+/-)	-596	-614	-268	-553
Other volume changes in financial liabilities (K.7, K.8, K.10)(-)	-1,802	420	629	906
Statistical discrepancies	983	6,121	539	-3,299
Change in general government (S.13) consolidated gross debt (1)(3)	313,174	326,706	322,924	194,588
Memorandum item: aggregation effect** Memorandum item: change in aggregated general government debt**		17,654 344,360	21,198 344,122	28,213 222,800

<sup>\*</sup>Please note the sign convention in this table for net borrowing / net lending: a positive entry reflects a deficit, a negative entry reflects a surplus.

<sup>\*\*</sup> Aggregated data for EU27 are calculated from the nominal figures sent by Member States to Eurostat, using an average or an end of period rate as appropriate. For the EU27 aggregate, it should be noted that the "aggregation of (national) changes in government debt" (which is reported here) is not the same as the "change in aggregated debt", owing to the impact of different exchange rates used for flows and for stocks when the data are converted in euro.



<sup>(1)</sup> Consolidated within general government.

<sup>(2)</sup> Due to exchange-rate movements and to swap activity.

<sup>(3)</sup> A positive entry in this row means that nominal debt increases, a negative entry that nominal debt decreases.

#### Net lending (+) / Net borrowing (-) (EDP B.9)

The main factor contributing to the change in government consolidated gross debt is generally the deficit or surplus of the general government sector (in table 3 column 1). Figure 3 illustrates deficit levels in 2003-2006, sorted in ascending order by the deficit level in 2006. The EU27 government deficit remained between 1.7 and 3.1% of GDP over the 2003-2006 period, decreasing year by year, while the euro area deficit remained around that of the EU27.

Denmark, Finland, Estonia and Ireland recorded surpluses in 2003-2006. Bulgaria and Sweden had also surpluses, except for 2003, as well as Spain except for 2004. Belgium and Luxembourg had surplus in 2003 and 2006 and deficit in 2004 and 2005. Latvia and the Netherlands had deficits except for 2006. Finally, 16 out of the 27 Member States recorded deficits in each year during this time period.

The deficit of Austria, Lithuania, Slovenia and Romania never exceeded the 3% limit during 2003-2006.

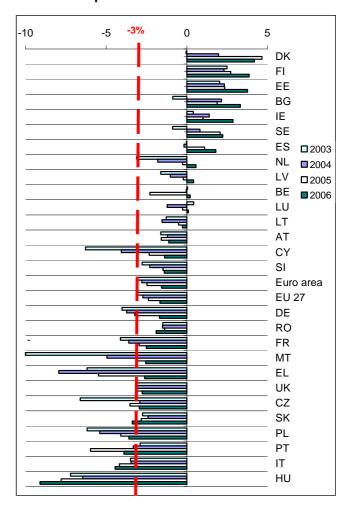
In the period of 2003-2006, Italy, Hungary and Poland recorded deficits always above 3% of GDP. Cyprus decreased noticeably its deficit below this limit, starting from a high deficit in 2003.

France, Germany, Greece, Malta and the UK decreased their deficit below 3% in 2006 after being three years above, while the deficit of the Slovak Republic went above the 3% limit in 2006 after being three years below. The Czech Republic deficit returned to below 3% after exceeding this limit in 2005.

In 2006, the deficit of Italy, Hungary, Poland, Portugal and Slovakia exceeded the 3% limit.

The highest deficits in the examined period were shown by Malta in 2003, where the deficit amounted to 10% of GDP, and by Hungary, 9.2% of GDP in 2006.

Figure 3: Net lending(+)/net borrowing(-) 2003-2006 in percent of GDP





#### Net acquisition of financial assets

The net acquisition of financial assets is generally the main factor in the SFA. It reflects acquisition less disposal of financial assets by the general government sector in the form of: Currency and deposits (F.2), Securities other than shares (F.3), Loans granted by the government to non-governmental units (F.4), Shares and other equity (F.5) as well as Other financial assets: mainly other accounts receivable (F.7), and occasionally Monetary gold (F.1) and Insurance technical reserves (F.6).

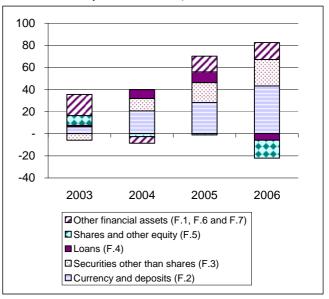
In principle, the information on net acquisition of financial assets must be coherent with financial accounts data published by Member States, and reported to Eurostat in the context of the ESA95 transmission programme. However, slight deviations may appear, notably due to differences in vintages.

Transactions in financial assets are reported on a consolidated basis, i.e. excluding transactions in government's own instruments. This is due to the fact that government debt is defined as consolidated within general government. The acquisition of government bonds by government units are thus not shown (in table 2 for instance) as acquisition of assets but as reduction in government debt. The importance of transactions between sectors can be observed when information at the level of each sub-sector of general government is provided. Such information on SFA by sub-sectors is accessible on the Eurostat web site.

Transactions in financial instruments, such as sales of shares, are without direct impact on government debt because they lead to changes in holdings of other types of financial assets, normally currency and deposits. However, there will be a subsequent impact on the debt, if government uses the proceeds to repay its debt. Changes in market value (e.g. changes due to price changes) of financial assets owned by general government are not included here. These have no impact on the government deficit nor on the change in government debt.

Figure 4 shows the components of net acquisitions of financial assets for the EU27 in 2003-2006 in billions of euro. A trend can be observed for accumulation of Currency and deposits (F.2) and of Securities other than shares (F.3), in recent years, with an impact of 0.4% and 0.2% of GDP respectively in 2006. Loans contribute with a positive sign over 2003-2005 but negatively in 2006 (-0.1% of GDP). The sign of Other financial assets (F.1, F.6 and F.7) and of Shares and other equity (F.5) changes over 2003-2006. However both can have significant contribution to annual SFAs.

Figure 4: Net acquisition of financial assets 2003-2006 for EU27 (in billion EUR)



Separate sections are devoted to each SFA element, examining data by country, focusing on large values. For analytical purposes, the Other financial assets (F.1, F.6 and F.7) item is analysed separately, together with Net incurrence of other liabilities (F.6, and F.7) and Financial derivatives (F.34).

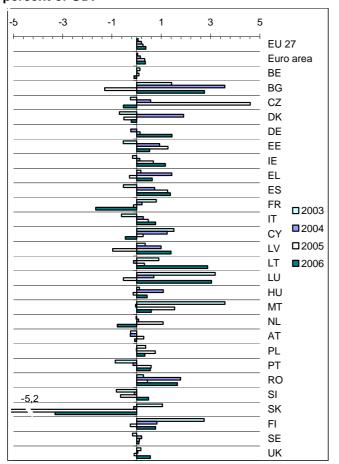


#### **Currency and deposits (F.2)**

The F.2 position (column (5)) reflects mainly movements in government deposits at banks, which can fluctuate substantially from one year to another, in particular due to Treasury operations. Other government units (e.g. local government, social security funds) also hold bank accounts. This figure tends to increase along with economic growth, and on average Member States with high nominal GDP growth would have higher F.2 values. Transactions in F.2 might also be influenced from one year to the next by very large operations that lead to large cash inflows or outflows in a given year. For example a large bond issuance might increase the deposits of government if the receipts from the issuance are not used for another purpose like bond redemption or government spending, but are kept in the bank.

Particularly high positive values can be observed for Bulgaria (in 2004 and 2006), the Czech Republic (in 2005), Denmark (2004), Lithuania (2006), Luxembourg (2003, 2006), Malta (2003), and Finland (2003). On the other hand, negative values can be noted for Slovakia in 2005 and 2006 (reflecting withdrawal of cash accumulated from large privatization receipts in previous years) and for France in 2006 (reflecting enhanced liquidity management by the French Treasury).

Figure 5: Currency and deposits (F.2) 2003-2006 in percent of GDP

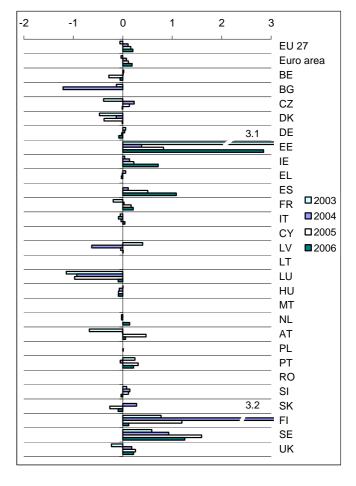


#### Securities other than shares (F.3)

Securities other than shares (column (6)) mainly reflect net purchases of bills, notes or bonds issued by banks, non-financial corporations, or non-residents (including foreign governments) predominantly by some asset-rich social security funds or other reserve funds. Purchases of bonds issued by resident government units are not reported here because these lead to a fall in Maastricht debt. Thus these are instead reported under the items change in debt or redemption above/below par (see below).

Figure 6 shows a marked dispersion across Member States for this item. Finland (all years), and to a lesser extent Sweden (2005, 2006), show large purchases, reflecting social security investments. Other large investments flows of some other asset-rich social security funds do not appear here because they invest primarily or exclusively in government securities (such as Cyprus and Greece), which are consolidated in this presentation, or in deposits (Luxembourg). Estonia (2003, 2006) also exhibits large values.

Figure 6: Securities other than shares (F.3) 2003-2006 in percent of GDP



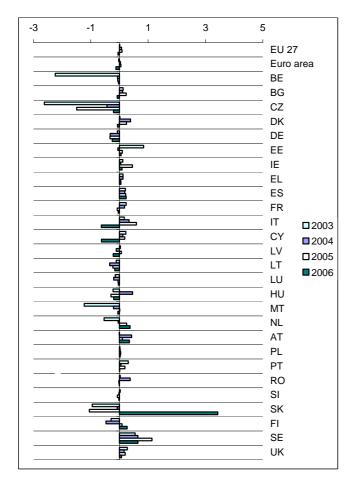


#### Loans (F.4)

F.4 (column (7)) comprises loans to non-government units only, since the figures in this table are consolidated. This item includes lending, notably to foreign governments, to public corporations, or to students. The value of loans grows with increased lending and decreases with loan repayments, with counterpart entries under cash. Loan cancellations are also reflected here with a counterpart entry under capital transfer (government expenditure). The size of the item reflects the prevalence of lending as part of government policy in various countries.

Estonia (2003), Sweden (most years) and Slovakia (2006, reflecting renewed Treasury lending to banks via the debt agency) have noticeable positive values. High negative values can be observed for Belgium (2003), the Czech Republic (2003, 2005), Malta (2003) and Slovakia (2003, 2005). For Belgium a change in financing scheme of housing loans, substituted by guarantees led in 2003 to the quasi liquidation of government portfolio of loans. Debt cancellations mainly explain the high negative figures for the Czech Republic, and for Slovakia in 2005.

Figure 7: Loans (F.4) 2003-2006 in percent of GDP



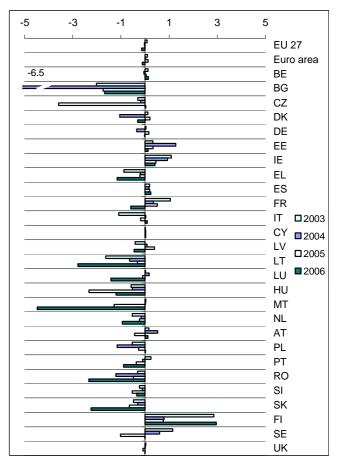
#### Shares and other equity (F.5)

The item Shares and other equity (column (8)) captures acquisitions less disposals by government units of equity in corporations. These may reflect privatisation proceeds, equity injections in public corporations, or portfolio investments. Figure 8 reports these various transactions on a net basis.

A decrease of shares and other equity may mirror privatisation proceeds. These can be non-negligible, notably for the recently acceded Member States. Privatisation proceeds for the EU15 Member States peaked during the 1990s. For Bulgaria (all years), the Czech Republic (2005), Lithuania (2003 and 2006), Hungary (2005), Malta (2006), Romania (2006) and Slovakia (2006), the high (negative) values in the item Shares and other equity reflect large privatisations. It can be noted that in these years the currency and deposit figures (F.2, column (5)) for these countries often sharply increased, showing the proceeds in cash.

Another component of the item shares and other equity relates to equity injections by government, which cover capital injections (generally in the form of cash provided by government) to specific public corporations when government is acting similarly to a private investor with the expectation of a market return on its invested funds. These are therefore not considered as government expenditure in national accounts.

Figure 8: Shares and other equity (F.5) 2003-2006 in percent of GDP





Since these are not treated as expenditure of the government, these are not included in the net lending/net borrowing of Member States, despite leading to a financing need and an (indirect) increase of government debt of the government.

Eurostat is particularly vigilant on the recording of capital injections: they must be recorded as government expenditure (capital transfer expenditure) whenever there is no evidence that government is acting similarly to a private investor. As an example, in the April 2007 EDP notification, Eurostat amended upwards the deficit data notified by Portugal in 2005 by 158 mn euro (0.1% of GDP) due to the reclassification by Eurostat of capital injections by government in two hospitals as capital transfers, initially reported by Portugal as equity injection.

Cases of substantial equity injections (those capital injections treated as transactions in equity rather than as capital transfers) are observed in the Czech Republic

(2003, Osinek, a.s.), Denmark (all years, investments in so-called "quasi-corporations"), Estonia (Riigi Kinnisvara AS, real estate company), Spain (all years, ADIF – High speed train), Germany (all years, quasi corporations), Greece (2005, ATE Bank), France (2003, France Telecom), Italy (2004, SACE), Portugal (2004, CGD Bank), and Austria (2004, Austrian Railways).

The item Shares and other equity also captures portfolio investments in the form of purchase of quoted shares on the market made by some government units, notably asset-rich social security funds, such as in Finland and Sweden or some specific portfolio investment operations such as the sale in 2006 of Arcelor shares by Luxembourg. This item also includes net investment in mutual funds, which are alternative investment vehicles. In particular, placements in money market mutual funds are reported here, despite being close substitutes for bank deposits.

## Other financial assets (F.1, F.6 and F.7), Net incurrence of other liabilities (F.6 and F.7) and Financial derivatives (F34)

Whereas public accounts or budget recordings are often cash based (or partly cash based) in the EU, ESA 1995 follows the accrual principle (namely recording transactions when the obligation to pay arises, not when the payment is actually made). Consequently, the impact on the financing needs of government does not directly arise from the deficit, as government revenue can be cashed, or government expenditure can be settled, at different accounting periods than the economic transaction itself. Thus two items have to be added in the transition from the deficit to the change in debt: Other financial assets (column (9)), which mainly shows the receivables of government; and Net incurrence of other liabilities (column (12)), which mainly shows the payables of government.

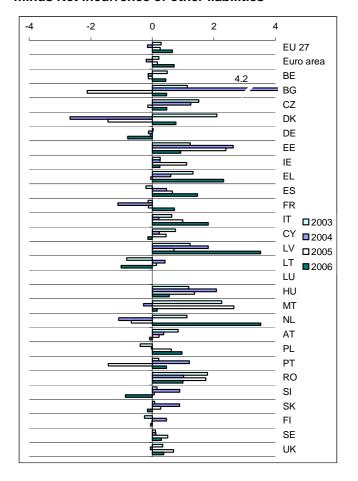
Other financial assets mainly include receivables of taxes and social contributions as well as amounts concerning EU transactions (amounts paid by government on behalf of the EU but not yet reimbursed by the EU), trade credits, or rare occasions of advance/late payments for expenditure such as wages or benefits paid one month in advance. The amount of other financial assets tends to increase over time because of nominal GDP growth.

By the same token, entries in net incurrence of other liabilities include (among others) deliveries of goods and services not yet paid for, as well as sums received from the EU but not yet paid out by the government to the final beneficiary.

Figure 9 presents the net impact of other assets and other liabilities. Large values can be observed for Bulgaria (all years), for Denmark in most years, including the impact of balancing effects (i.e. elimination of the statistical discrepancy, see below), for Latvia in 2006 (mainly relating to EU claims) and the Netherlands in 2006. Luxembourg does not report other payables/receivables.

In addition, government entities, notably Treasuries, carry out operations in financial derivatives, such as swaps, futures, and options, and the cash flows related to those operations are recorded in the financial accounts. The effect of these is overall small.

Figure 9: Net financial assets: Other financial assets minus Net incurrence of other liabilities





#### Other adjustments

#### Effects of face valuation

These items relate to the fact that the Maastricht debt is valued at face value.

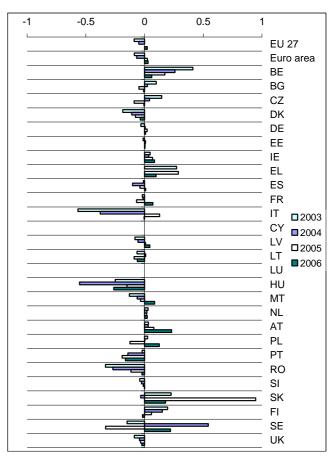
Difference between interest (EDP D.41) accrued and paid (column (14)) must be presented here, because government expenditure on interest according to ESA 1995 requires a recording spread over time following the accrual principle, whereas the cash impact is only when interest is actually paid. As this item also captures the spreading of the premium or discount at issue, positive values would reflect the accrual impact of large amounts of bonds issued in the past at a premium. The specific adjustment for swaps (stream of payments on swaps and forward rate agreements) for the measurement of the government deficit for EDP purposes is included here (see methodological annex). The large entry for Slovakia in 2005 results from the reimbursement of an old debt to the Czech Republic, following international arbitration. Hungary (2004) shows large values. Sweden also exhibits large and changing values for all years.

Governments routinely issue bonds below or above their face value (face value = par value), notably in the form of fungible bonds or in the case of zero coupon bonds (not common in Europe). When the face and the issuance values differ, this has consequences on the recording in national accounts. Since government debt must be recorded at face value but the proceeds that enter currency and deposits correspond to the issue value, the difference must be recorded as *Issuance above/below par* (see column (13)). Hence, the difference is recorded as government expenditure or revenue not at time of issuance, but only gradually over time.

By the same token a similar adjustment must be made in the case of early redemption, when government buys back issued bonds. The difference between the repurchase value and the face value must be presented in the column *Redemptions of debt above/below par* (column (15)).

High values for Ireland in 2004 in both items *Issuance* above/below par (column (13)) and *Redemptions of debt* above/below par (column (15)) reflect large scale debt restructuring treated statistically as redemption of old debts alongside the issuance of new debt.

Figure 10: Difference between interest (EDP D.41) accrued and paid 2003-2006 in percent of GDP

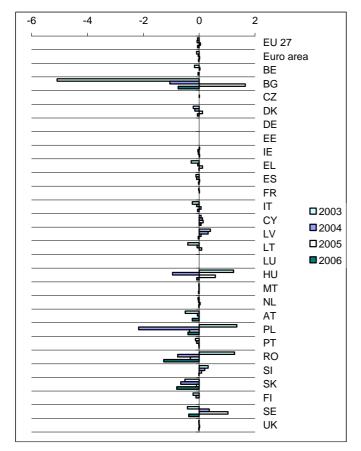




## Appreciation/depreciation of foreign currency debt

If a government issues bonds denominated in a currency other than in its own currency, the depreciation or appreciation of the national currency leads to changes in debt without an impact on the deficit/surplus. This leads to entries in Appreciation/depreciation of foreign currency debt (column (16)). Looking at Figure 11, it is clear that mainly recently acceded Member States have substantial amounts of bonds denominated in foreign currency, mostly in euro or in U.S. dollars. Large values are observed but with different signs across the period for Bulgaria, Hungary, Poland, Romania and to a lesser extent Sweden reflecting appreciation (negative entries) and depreciation (positive entries) phases of their currency. Systematic noticeable negative values can be observed for Slovakia (all years). More in general this SFA item loses importance with the introduction of the euro.

Figure 11: Appreciation/depreciation of foreign currency debt 2003-2006 in percent of GDP

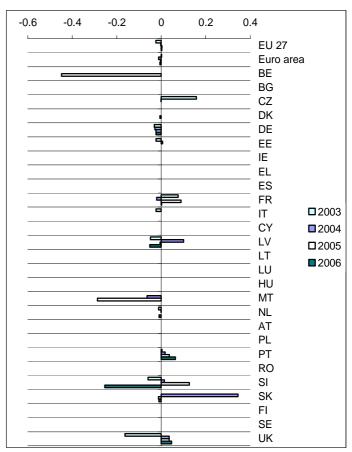


# foreign Other changes in volume: Changes in sector classification (K.12.1) (+/-) and Other volume changes in financial currency liabilities (K.7, K.8, K.10)(-)

It might happen that an institutional unit that was classified outside (inside) government is reclassified inside (outside) government. The impact of this is shown under Changes in sector classification (K.12.1) (column (17)). Some other specific events can give rise to entries in other changes in volume.

Large values can be observed for Belgium in 2005 (reclassification of a wastewater treatment company outside government), for Malta in 2005, Slovenia in 2006 (adjustment related to new information on the restitution fund debt), Slovakia in 2004 (resulting from the transfer of an old debt to the Czech Republic, following international arbitration) and the United Kingdom in 2003.

Figure 12: Other changes in volume 2003-2006 in percent of GDP



#### Statistical discrepancy

The government sector accounts in national accounts (ESA1995) are often compiled from a diversity of sources, which may not be fully integrated or completely homogenous, leading to differences between the revenue and expenditure data and the financing data, or between the transactions in debt and other economic flows in debt (i.e. valuation effects and other changes in volume) data and the change in debt data.

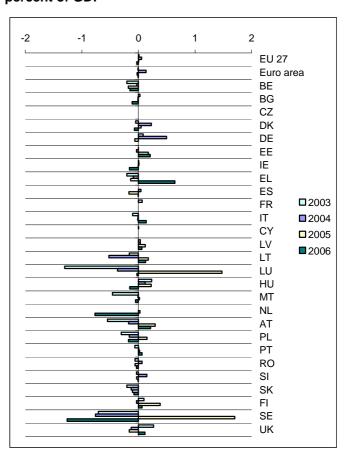
The extent of discrepancies can thus indicate the accuracy of the data supplied by Member States. Therefore Eurostat monitors discrepancies carefully, to determine if they are of an excessive size, or accumulate (i.e. are of a same sign) over time. In particular, a continuously positive discrepancy may raise questions on whether the deficit is appropriately measured.

However, statistical practices differ in Europe, with some compilers showing discrepancies explicitly, whilst others allocate them under various other SFA items, such as other financial assets and liabilities. Therefore for some purposes, it may be useful to consider together other assets, other liabilities and statistical discrepancies.

Discrepancies between the non-financial and the financial accounts often relate to the time of recording of Treasury or Budget transactions compared to the moment they flow through the banking system. A notable cause of discrepancies originates from the accrual recording and the difficulty to match cash and accrual data.

Luxembourg and Sweden exhibit very high annual values but they largely compensate over time. The cumulated value in the 2003-2006 period is also positive in excess of 0.5% of GDP for Hungary and Finland, but for these countries the trend is generally decreasing and in 2006 the values of their statistical discrepancies were respectively -0.2%, and 0.1% of GDP. The statistical discrepancy, which in past notifications was high for Greece, has been noticeably reduced in 2003-2005 after successive increase of deficit, but is high again in 2006.

Figure 13: Statistical discrepancy 2003-2006 in percent of GDP





#### Table 3: Stock-flow adjustment tables, in years 2003-2006

#### Stock flow adjustment to General government - 2006

Differenc Change +)/lending general incurren interest on(+)/depr eciation(-Changes olume/ between )(EDP (-) of (FDP ons of debt B.9) of nt (S.13) (-) of othe D.41) )(5) of acquisition foreign-currency capital eneral consolida Stock - flow (+) of and other than and other in financia liabilities above(accrued( above(+) Statistical statistical adjustment (SFA) shares (F.3) discrepar cies (+/-) (K.12.1)(6 K.7, K.8, Loans (F.4) (F.34) (B.9f-B.9) aid(4)(+ nt (S.13) debt (2) debt (6) .10)(6)( (11)+(12)+ (13)+(14)+ =(2)+(1)=(4) +(10)+(19) =(5)+(6)+(7) +(8)+(9) (15)+(16)+ (17) (12) (20)+(21) 0.1 0.1 0.0 8.4 -0.8 0.4 -0.1 -0.2 0.0 -0.4 0.0 0.2 0.0

#### Stock flow adjustment to General government - 2005

April 2007 EDP notification

April 2007 EDP noi	unoution			_	_	_	_				_	_						_	_		_
	general governme	general governme nt (S.13) consolidat	Stock - flow adjustment (SFA)	(+) of	and deposits			equity	Other financial assets (F.1, F.6 and F.7)	Adjustmen ts (10)=	Net incurrence (-) of liabilities in financia derivatives (F.34)	incurrence (-) of other liabilities	Issuances above(- )/below(+)	D.41) accrued(-)	Redempti ons of debt above(+)/ below(-)	Appreciati on(+)/depr eciation(- )(5) of foreign- currency debt (6)	in sector	Other volume changes in financia liabilities (K.7, K.8, K.10)(6)(-)	discrepanc	Difference between financial and capital accounts (B.9f-B.9)*	Other statistical discrepan
-	(1)	(2)	(3) =(2)+(1)=(4) +(10)+(19)	(4) =(5)+(6)+(7) +(8)+(9)	(5)	(6)	(7)	(8)	(9)	(11)+(12)+ (13)+(14)+ (15)+(16)+ (17)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19) =(20)+(21)	(20)	(21)
BE	-2.3	1.7	-0.5	-0.3	0.1	-0.3	-0.1	0.0	-0.1	-0.1	0.0		0.1	0.2		0.0	-0.4		-0.2	-0.1	
BG	1.9	-5.2	-3.3	-5.5		0.0	0.2		-2.7	2.2									***		NA
CZ	-3.5	1.6		-1.1		0.1	-1.5			-0.8										0.0	
DK	4.7	-5.1	-0.4	-1.2		-0.4	0.2			8.0				-0.1	0.0					0.0	
DE	-3.2	3.1	-0.1	-0.1		0.0	-0.3			0.1										0.0	
EE	2.3	0.1	2.4	3.6		0.8	0.1	0.3	1.0	-1.3						0.0				0.1	
IE	1.0	0.2		2.1		0.2	0.5			-0.8				0.1				NA	0.0		NA
EL	-5.5	6.6		0.3		0.0	0.0		0.8	0.9						0.1			-0.1	0.0	
ES	1.1	0.3		2.2		0.5	0.2			-0.7						0.0					
FR	-3.0	4.0	1.0	0.7		0.2	-0.1	0.5		0.3					0.0	0.0				0.0	
11	-4.2	4.8		1.1		0.0	0.6		0.3	-0.5						0.1			0.0	0.0	
CY	-2.3	3.1	0.8	0.8		0.0	0.2		0.3	0.0				0.0		0.1				0.0	
LV . –	-0.2	0.1	-0.2	-0.1	-1.0	0.0	0.1		0.5	-0.2						0.1				0.1	
LT	-0.5	1.6		0.4			-0.2				NA O	0.5	***			0.1			0.2	0.2	
LU	-0.3	0.1	-0.2	-1.7	-0.5	-1.0	-0.1	-0.1		0.0			NA	NA		NA		NA	1.5		
HU	-7.8	5.8		-2.0		-0.1	-0.3			-0.2										0.2	
MT NL	-3.1	2.3	-0.8	1.5		0.0	0.0	-1.3	1.2	-2.4						0.0			0.0	0.0	
AT AT	-0.3	1.7	1.5	0.9		0.0	0.3	-0.2 -0.4	-0.2 0.2	0.5 -0.5						0.0				0.0	
	-1.6			0.6		0.0	0.1														
PL	-4.3	4.1	-0.2	0.9			0.0		0.3		NA O	-0.3 0.9						NA		NA	0.2
PT	-6.1	7.2		0.2		0.3	0.2		-0.5	0.9										0.0	
RO	-1.4	-0.3		0.3			0.0	-0.5		-1.9							NA	NA 0.4	-0.1	-0.1	
SI	-1.5	1.0	-0.5 -6.7	-0.9 -7.1		0.1	-0.1 -1.1	-0.5 -0.7	0.3	0.4						0.1			0.0	0.0	
SK	-2.8	-3.9				-0.3				0.5						-0.1			-0.1	-0.1	
FI SE	2.7 2.1	-1.4 1.8	1.3	1.4		1.2 1.6	0.1	0.8 -1.0	-0.4 0.2	-0.5	-0.2 NA	-0.4 -0.3				0.0		0.0 NA	0.4 1.7	0.2	
UK		3.5					1.1 0.2									0.0			-0.2		
	-3.1			0.7		0.3			0.4	-0.1											
EU 27	-2.4	2.9		0.6		0.2	0.1		0.1	-0.1										NC	NC
Eurozone 13	-2.5	3.1	0.6	0.7	0.3	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



### Stock flow adjustment to General government - 2004 April 2007 EDP notification

-)/lending( (EDP 3.9) of general governme	general governme nt (S.13) consolidat ed gross	Stock - flow	acquisition (+) of financial	and deposits	other than shares	Loans	Shares and other equity	financial assets (F.1, F.6	ts (10)=	(-) of liabilities in financial derivatives	incurrence (-) of other liabilities (F.6 and	Issuances above(- )/below(+)	between interest (EDP D.41) accrued(-) and	ons of debt above(+)/ below(-)	eciation(- )(5) of foreign- currency	in sector classificati on (K.12.1)(6	liabilities (K.7, K.8,	Statistical discrepanc		Other statistical discrepan
(1)	(2)	(3) =(2)+(1)=(4) +(10)+(19)	(4) =(5)+(6)+(7) +(8)+(9)	(5)	(6)	(7)	(8)	(9)	(13)+(14)+ (15)+(16)+ (17)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19) =(20)+(21)	(20)	(21)
																				NA OIS
						0.1							0.0	0.1						
-0.2	0.8	0.6	1.3		0.1	0.2	0.2	0.1	-0.7		-0.4	-0.1	-0.1	0.0	-0.1	0.0				
-3.6	4.4	0.8	0.3	0.2	0.0	0.2	0.3	-0.5	0.6	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-3.5	3.6	0.2	0.6	0.3	-0.1	0.3	0.0	0.0	-0.4	0.0	-0.2	0.3	-0.4	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
-4.1	6.1	2.1	1.7		0.0	0.1	0.0	0.3	0.4		0.1	0.1	0.0	0.0			0.0	0.0		
-1.0	2.1	1.1	1.4					1.1												
								0.4												
																				0.0
-3.1	3.7	0.6	0.5		0.2	0.2					0.2	0.1								
		0.4				0.1			0.0				0.0							NC
-2.8	3.1	0.3	0.2		0.1	0.0	0.0	-0.1	0.0		0.1		-0.1	0.0						
(3	orrowing(	orrowing (Change in plending (general per pl	orrowing( Change in Mending( general EDP 9) of consolidat stock - flow consolidat ( S.13)*    (1)	orrowing(   Change in	orrowing( Change in /illending() general EDP goorme nt (S.13) consolidat stock - flow or (S.13) assets (3)         Net acquisition of financial assets (3)         Currency and deposits assets (3)         Currency and assets (4)         Currency and assets (4)         Currency and assets (3)         Currency and assets (4)         Currency and assets (4)<	Orrowing (Change in Planding (general EDP)         Net acquisition (h) or and deposits shares (F.3)         Currency and opposition and deposits shares (F.3)         Securities other than deposits shares (F.3)           .9) of orroward (s.13)*         (s) (SFA)         (h) (+) of financial assets (3)         (F.2)*         (F.3)*           (s) (s.13)*         (dbt (2))         (SFA)         (s) (H) +(s) +(s) +(s) +(s) +(s) +(s) +(s)         (s) (F.2)*         (s) (F.3)*           (s)	Orrowing (Change in Plending (general EDP)         Operation of the thin properties of the thin propertie	Orrowing (Change in Plending (general p.9) of mt (S.13)         Net acquisition or mosphere in t(S.13)         Net acquisition financial assets (3)         Currency and deposits of the fram of their fram of their fram the position of their fram o	Orrowing (Change in Pilending (general DP)         Net acquisition or (F.1, F.6)         Currency and deposits of (F.3)         Securities of (F.3)         Shares and other financial and Eys. (F.1, F.6)         Other financial and F.7)           (S13)**         debt (2)         (SFA)         (SFA)         (F.2)         (F.3)         (F.4)         (F.5)         Shares and other sassets adjustment financial assets (3)         (F.2)         (F.3)         (F.4)         (F.5)         (F.1, F.6 and F.7)           (0)         (0)         0.7         0.7         0.0	Other   Converged   General   Other   Currency   Securities   Other   Charge   Currency   Other   Currency	Net   Net	Net   Currency   Currency   Currency   Securities   Shares   Sha					Order   Change   Part   Change   Part   Change   Part   Change   Change	Order   Change   Ch	Change in   Part   Change in   Part   Change in   Part   Part	Commonweight   Comm

### Stock flow adjustment to General government - 2003 April 2007 EDP notification

April 2007 EDP not	lilication																				
	general governme	general governme nt (S.13) consolidat	Stock - flow adjustment (SFA)  (3) =(2)+(1)=(4)	(+) of financial assets (3)	and deposits	Securities other than shares (F.3)			Other financial assets (F.1, F.6 and F.7)	Adjustmen ts (10)= (11)+(12)+ (13)+(14)+ (15)+(16)+	Net incurrence (-) of liabilities in financia derivatives (F.34)	incurrence (-) of other liabilities	Issuances	accrued(-)	Redempti ons of debt above(+)/ below(-)	foreign-		Other volume changes in financia liabilities (K.7, K.8, K.10)(6)(-)	Statistical discrepancies	capital	Other statistical discrepan
	(1)	(2)	+(10)+(19)	+(8)+(9)	(5)	(6)	(7)	(8)	(9)	(17)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	=(20)+(21)	(20)	(21)
BE	0.1	-2.2	-2.1	-2.0	0.1	0.0	-2.2	0.1	0.0	` '	0.0	- ' '	. ,	· '	· · ·			· ' '			` '
BG	-0.9	-4.3	-5.2		1.4	-0.1	0.1	-2.0													
CZ	-6.6	2.8			-0.2	-0.4	-2.6	-0.3													
DK	0.0	-1.5	-1.6	0.0	-0.7	-0.5	0.0	0.1					0.0	-0.2	0.0			0.0	0.0	0.0	
DE	-4.0	4.1	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1 0.0	
EE	2.0	0.5	2.6	3.8	-0.5	3.1	0.8	0.3	0.0	-1.2	0.0	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ΙE	0.4	1.0		1.4		0.0	0.1	1.1									NA	NA	0.0		NA
EL	-6.2	5.7			0.2	0.1	0.1	-0.9													
ES	0.0	-0.2	-0.2	-0.2		0.0	0.2			0.0											
FR	-4.1	5.8	1.7	1.7		-0.2	0.2	1.1													
IT	-3.5	1.9				-0.1	0.2	-1.1													
CY	-6.3	8.6		2.4	1.5	0.0	0.2	0.0													
LV	-1.6 -1.3	2.3	0.7 -0.5	1.0 -0.8	0.3	0.4	-0.1	-0.4 -1.6				-0.6				-0.4					
LU	-1.3 0.4	0.7	-0.5 0.6	-0.8 1.9		NA -1.1	-0.1 -0.1	-1.6		0.4		NA 0.8	NA 0.0	-0.1 NA	NA NA	-0.4 NA		NA 0.0	-0.2 -1.3		
HU	-7.2	7.4	0.6	-0.5		0.0	-0.1	-0.6													
MT	-10.0	10.9	0.2	3.0		0.0	-1.2	0.0													
NL	-3.1	2.7	-0.4	-0.2		0.0	-0.5	-0.5													
AT	-1.6	0.4		0.0	-0.2	-0.7	0.0	0.2													
PL	-6.3	6.6		-0.5		0.0	0.0	-0.5				0.1			NA 0.0		NA O.C	NA 0.0		B NA	-0.3
PT	-2.9	2.5		0.0	-0.9	0.2	0.3	0.2													
RO	-1.5	2.3	0.9	0.8	0.3		0.0	-0.3									NA	NA	-0.1		0.0
SI	-2.8	1.7	-1.1	-1.0	-0.8	0.1	0.0	-0.2	-0.1	0.0	0.0	-0.2	0.0			0.3	-0.2	0.2	0.0	0.0	
SK	-2.7	3.0		0.1	1.0	0.0	-1.0	-0.5											-0.2		
FI	2.5	3.6		6.1	2.7	0.8	-0.3	2.9													
SE	-0.9	1.7	0.8			0.6	0.6	1.2				-0.1					NA	NA	-0.7		
UK	-3.2	3.4		0.4	0.2	-0.2	0.3	0.0													
EU 27	-3.1	3.1	0.1	0.3	0.1	-0.1	0.0	0.1													NC
Eurozone 13	-3.0	3.1	0.1	0.3	0.0	0.0	0.0	0.1	0.2	-0.2	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0



#### METHODOLOGICAL ANNEX

The **Legal base** for the excessive deficit procedure (EDP) is Article 104 of the Treaty establishing the European Community and Protocol V on the excessive deficit procedure annexed to the Treaty. Article 104 states that:

- 1. Member States shall avoid excessive government deficits.
- 2. The Commission shall monitor the development of the budgetary situation and of the stock of government debt in the Member States with a view to identifying gross errors. In particular it shall examine compliance with budgetary discipline on the basis of the following two criteria:
- (a) whether the ratio of the planned or actual government deficit to gross domestic product exceeds a reference value, unless:
- either the ratio has declined substantially and continuously and reached a level that comes close to the reference value,
- or, alternatively, the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value;
- (b) whether the ratio of government debt to gross domestic product exceeds a reference value, unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.

The reference values are 3% for the deficit and 60% of GDP for the government debt in the annexed Protocol.

**Source of fiscal data**: Council Regulation 3605/93, as amended, defines the data to be reported by Member States to the European Commission in the context of the EDP reporting<sup>2</sup>: the notification tables 1-4. The basis for the comments and graphs in this document is mostly EDP table 3A, namely the table "Provision of the data which explain the contributions of the deficit/surplus and the other relevant factors to the variation in the debt level (general government)".

Detailed data, including tables as reported by Member States, can be found on the Eurostat website in the <u>free data</u> section as well as in the dedicated *Government Finance Statistics* section.

**Deficit**: The Protocol on the excessive deficit procedure annexed to the Treaty requires that the government deficit or surplus is the net borrowing or net lending as defined by the European System of Accounts (ESA) of the general government sector<sup>3</sup>.

The net lending/net borrowing (B.9) is the balancing item of the capital account in ESA95. It is also calculated as the difference between total revenue and total expenditure of the general government sector as defined in the Commission Regulation 1500/2000 amending ESA95 to include the definition of total expenditure and total revenue of general government. See, for further details on B.9 of general government, ESA95 § 8.49-8.50. The EDP B.9 (i.e. the deficit relevant to fiscal surveillance) differs from B.9 by the "stream of payments on swaps and forward rate agreements", which are included in interest for the EDP procedure (EDP D.41), but which are excluded in interest in the framework of ESA95 (D.41).

**Government gross debt**:<sup>4</sup> According to the protocol annexed to the Treaty, the government debt is the gross debt outstanding at the end of the year of the general government sector measured at nominal value and consolidated. Council Regulation 3605/93<sup>5</sup>, as amended, defines further the government debt as the sum of government liabilities in currency and deposits (AF.2), in securities other than shares, excluding financial derivatives (AF.33) and in loans (AF.4). The Regulation further defines that nominal value for securities excludes accrued interest and correspond to face value.

Consolidation: Member States debt data should be reported consolidated at the level of the general government sector. Consolidation means presenting a grouping of units as if they were one unique unit. This involves the elimination from both uses/assets and resources/liabilities of all reciprocal transactions as well as revaluations, other changes in volumes and stocks that occur between units which belong to the same grouping: in this case to the general government sector (or its sub-sector)<sup>6</sup>. Government gross debt is to be consolidated: therefore holdings of government debt by government units must be excluded.

By the same token, all items reported in EDP table 3A should be also presented on a consolidated basis: not only those related to transactions (e.g. a loan given by central government to a local government unit should be removed from the calculation of the consolidated debt of general government sector as well as from the calculation of loans assets), but also valuation adjustments (such as issuance and redemptions of debt above and/or below par, as well as foreign exchange valuation) and other economic flows adjustments (other volume changes in financial liabilities.

<sup>&</sup>lt;sup>6</sup> See ESA95 § 1.58 and SNA § 2.80-2.84.



<sup>&</sup>lt;sup>2</sup> Excessive Deficit Procedure (EDP) reporting as requested in the Protocol annexed to the Treaty on European Union (see Official Journal C 191 of 29 July 1992) and related legal acts.

<sup>&</sup>lt;sup>3</sup> ESA95 §2.68-70 describes the general government sector as the institutional sector principally engaged in redistribution of national income and wealth and /or mainly producing non-market output intended for individual and collective consumption, and mainly financed by compulsory payment. For more information on general government sector see also ESA95 §1.28, §2.68-74 and Tables 2.1 and A IV.5.notably

<sup>&</sup>lt;sup>4</sup> The outstanding general government consolidated debt at the end of each year is provided by Member States in table 1 of the EDP notification, according to the European legislation.

<sup>&</sup>lt;sup>5</sup>Official Journal L332, 31.12.1993, 9.7. Regulation as last amended by Commission Regulation (EC) No 351/2002 (OJ L 55, 26.2.2002, p.23).