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# **COMMISSION WORKING DOCUMENT**

assessing the quality of data reported by Member States in 2011 on balance of payments, international trade in services and foreign direct investment

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#### 1. Introduction

Article 4(3) of Regulation (EC) No 184/2005 of the European Parliament and of the Council on Community statistics concerning balance of payments, international trade in services and foreign direct investment (the 'BoP Regulation') specifies that:

'The quality of the data transmitted shall be assessed, on the basis of the quality reports, by the Commission with the assistance of the Balance of Payments Committee referred to in Article 11(1). This assessment by the Commission shall be sent to the European Parliament for information.'

This working document assesses the quality of the data reported by the Member States in 2011. It was prepared with the assistance of the Balance of Payments Committee, as required by the BoP Regulation. It is the first working document on this subject prepared by Eurostat for the European Parliament and is based on the results of the balance of payments (BoP) quality assessment exercise undertaken by Eurostat between January and June 2012.

After a short description of the principles that guide any assessment of the quality of official statistics and a brief overview of the challenges encountered in compiling BoP data in a globalised environment, this document analyses the extent to which BoP data comply with the quality principles that guide the European Statistical System (ESS).

# 2. ASSESSING THE QUALITY OF OFFICIAL STATISTICS

BoP quality assessment is an annual exercise conducted by Eurostat in accordance with the principles established by Commission Regulation (EU) No 1227/2010 of 20 December 2010 (OJ L 336, 21.12.2010) amending Regulation No 1055/2008. BoP quality assessment verifies compliance with all the quality criteria laid down in the Regulation on European statistics (Regulation No 223/2009, Article 12(1)), namely: relevance, accuracy, timeliness, punctuality, accessibility and clarity, comparability and coherence.

Eurostat has made great efforts to develop quality management methods and tools for supporting the production of high-quality European statistics. Quality reporting underpins quality assessment, which in turn is the starting point for quality improvements. The 'ESS Handbook for quality reports' details

the full range of methods that can be used for assessing the quality of official statistics<sup>1</sup>, which differ according to the type of statistical process.

The purpose of statistics is to produce estimates of an unknown value; these estimates are not equal to the true values because of variability and bias. Statistics may suffer from a vast typology of sampling and non-sampling errors. For statistics based on a sample survey there is an established theory for checking accuracy that looks at the variability of an estimator around its expected value, expressed by its variance, standard error, coefficient of variation or confidence intervals. Balance of payments (like national accounts) data are compiled as aggregates of a variety of primary statistics, some based on sample surveys, some derived from administrative data, some resulting from models. In the case of aggregated statistics like BoP, a direct approach for measuring accuracy is not possible. The two main instruments that, according to the manuals on quality of statistics, can be used for assessing the quality of this kind of statistics are the analysis of revisions and the examination of errors and omissions<sup>2</sup>; both instruments are covered by this report.

The IMF has also developed standards for assessing the quality of statistics, which are part of the so-called Data Quality Assessment Framework (DQAF). One specific DQAF is dedicated to BoP<sup>3</sup>.

Eurostat's BoP quality reports reflect the best standards established for the ESS and defined by DQAF. To make these reports more suited to capturing the different features of data quality, their content has been expanded over time and will be further improved in the future.

While the quality of aggregated statistics is not the simple sum of the quality of all underlying primary data, the quality of BoP data certainly depends on the quality of all the underlying data sources. Quality reports are regularly prepared for international trade in goods<sup>4</sup>, the main component of the current account; it would however be extremely costly and time-consuming to assess the quality of every single component that feeds BoP data.

### 3. CHALLENGES ENCOUNTERED IN COMPILING BOP STATISTICS

Systems for compiling balance of payments statistics were initially developed as by-products of foreign exchange control systems: resident banks were collecting, and providing BoP compilers (generally part of the national central banks) with, information on each individual transaction in foreign currency. This source of information, called the international transaction reporting system (ITRS) or 'settlement-based reporting', remains the primary source for compiling BoP statistics in many countries outside the European Union.

The lifting of foreign exchange restrictions, the increasing number and complexity of cross-border financial transactions and the integrated management of payments made by multinationals have gradually limited the comprehensiveness of the information collected from the settlement system. In the EU, the usefulness of settlement-based reporting for compiling BoP data has been further limited

See 'ESS Handbook for Quality Reports', Eurostat Working Papers, 2009. See also 'ESS Standard for Quality Reports', Eurostat Working Papers, 2009.

See 'ESS Handbook for quality reports', Eurostat, 2009, page 65.

See http://dsbb.imf.org/images/pdfs/dqrs\_bop.pdf

See http://epp.eurostat.ec.europa.eu/portal/page/portal/product\_details/publication?p\_product\_code=KS-RA-10-026

by the moves to liberalise the EU market for financial services<sup>5</sup>. Since the traditional data source used for compiling BoP statistics was becoming less and less comprehensive, European BoP statisticians developed alternative data sources, in a context of reduced resources and increasing opposition to the statistical burden on respondents.

From 2000 onwards, BoP compilers in the EU have introduced new data collection and compilation systems. The new systems, already implemented in most of the EU Member States, are based on a combination of different surveys, sometimes integrated with the limited information still available from ITRS. Greater use is made of information obtained directly from firms or individuals. Fuller use is made of sampling and estimation methods. Consistency with other statistics like national accounts and data on merchandise trade is monitored more closely and common tools have been set up at EU and euro-area levels to bring greater homogeneity to the compilation process. An example is the Centralised Security Database that allows compilation of portfolio investment data looking at the information on each single security, while another example is the FDI network, which allows exchanges of micro-data related to foreign direct investment (FDI).

### 4. RELEVANCE

'Relevance' means the degree to which statistics meet current and potential users' needs. As a result of the financial crisis, BoP (and the international investment position, IIP) data have been attracting increased attention from users. BoP and IIP statistics are fundamental tools for analysing external imbalances and are also used as primary data for three of the ten indicators that are part of the EU Macroeconomic Imbalance Procedure (MIP) scoreboard<sup>6</sup>.

In the BoP quality assessment exercise, relevance is measured in terms of the availability of the data required by the BoP Regulation to the final users, assuming that users' needs are well reflected in the Regulation.

Since users' needs evolve over time, the Commission has amended the BoP data requirements, in line with the new international standards. The amended BoP Regulation was published in the Official Journal on 27 June 2012 and will apply from 1 January 2014<sup>7</sup>.

As a consequence of the recent troubles in the financial markets, users are however already expressing requests for detailed BoP and IIP data that go beyond what is included in the amended BoP Regulation. They would need more geographical breakdown for the financial flows, and ideally bilateral data related to many flows of investment. Users responsible for trade negotiations with third countries reiterated their request for information on services "by mode of supply". Eurostat will investigate the possibility of collecting, on voluntary basis, also this kind of information from BoP compilers.

Regulation 2560/2001 on cross-border payments in euro exempted all transactions below the threshold of EUR 12500 from statistical reporting. When Regulation 2560/2001 was reviewed, the threshold was raised to EUR 50000 (Regulation (EC) 924/2009, Article 5(1)).

http://epp.eurostat.ec.europa.eu/portal/page/portal/excessive\_imbalance\_procedure/imbalance\_scoreboard.

See Commission Regulation (EU) No 555/2012 of 22 June 2012,

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:166:0022:0066:EN:PDF

This would imply to operate a clear separation between transactions depending on whether: a) it is the service which is provided across the border (so called "mode 1"); it is the consumer who crosses the border (so called "mode 2"); it is the provider of the service who moves across the border (so called "mode 4"). See Manual on Statistics of International Trade in Services 2010, Chapter V.

# 4.1. Data availability

The data completeness criterion focuses on the availability of the data required by Regulation (EC) No 184/2005, as amended by Commission Regulation (EC) No 707/2009. It is measured as the share of the number of values which are provided in the total number of values required. <u>Table 1</u> shows this indicator by Member State and by dataset.

In the case of the **euro indicators**, in the reference quarters (2010Q3-2011Q2) all the Member States complied fully with the requirements of the BoP Regulation.

For the **quarterly balance of payments**, data availability was stable throughout the latest quarters and averaged 95% for the reference periods (2010Q3-2011Q2), confirming the trend noted for the previous four quarters.

On **international trade in services**, data availability decreased slightly from the previous year to 97% of all data cells requested (at the level of items) for the EU27.

For both **FDI flows and FDI stocks**, in the reference period 2010 (t + 9), the EU average increased from the previous year's level and reached 100%. The overall availability of FDI data with an activity and geographical breakdown for the reference year 2009 (t + 21) improved to 92% for FDI flows and held steady at 95% for FDI stocks. Some countries had problems in complying with the FDI reporting due at t+21 months: Belgium did not report activity breakdown for FDI income, due to a compilation process consisting of a global estimation made by instrument/country, Hungary faced problems in the production of the gesmes file, and Poland provided data in NACE Rev.2 eight months after the deadline, too late to be used for making EU and euro area aggregates.

Overall, data availability is very high for all BoP domains. The few data not reported are related to very detailed items and geographical or activity breakdowns.

**Table 1: Data completeness** 

	Euro indicators (t + 2)	Quarterly balance of payments (t+3)	Internatio nal trade in services (t + 9)	FDI flows (t + 9)	FDI stocks (t + 9)	FDI flows (t + 21)	FDI stocks (t + 21)
Belgium	100%	100%	97%	100%	100%	40%	100%
Bulgaria	100%	81%	100%	100%	100%	100%	100%
Czech Republic	100%	100%	100%	100%	100%	100%	100%
Denmark	100%	100%	100%	100%	100%	99%	99%
Germany	100%	100%	100%	100%	100%	100%	100%
Estonia	100%	100%	100%	100%	100%	100%	100%
Ireland	100%	100%	100%	100%	100%	100%	100%
Greece	100%	100%	73 %	100%	100%	70%	87%
Spain	100%	100%	100%	100%	100%	98%	99%
France	100%	81%	100%	100%	100%	100%	100%
Italy	100%	100%	100%	100%	100%	100%	100%
Cyprus	100%	92%	100%	100%	100%	100%	100%
Latvia	100%	87%	100%	100%	100%	100%	100%
Lithuania	100%	100%	100%	100%	100%	100%	100%
Luxembourg	100%	100%	100%	100%	100%	100%	100%
Hungary	100%	97%	98%	100%	100%	75%	96%
Malta	100%	100%	98%	100%	100%	100%	100%
Netherlands	100%	100%	92%	100%	100%	100%	100%
Austria	100%	100%	100%	100%	100%	99%	99%
Poland	100%	74%	100%	100%	100%	0%	6%
Portugal	100%	100%	100%	100%	100%	100%	100%
Romania	100%	85%	100%	100%	100%	100%	100%
Slovenia	100%	100%	97%	100%	100%	100%	100%
Slovakia	100%	93%	91%	100%	100%	100%	100%
Finland	100%	100%	95%	100%	100%	100%	100%
Sweden	100%	94%	98%	100%	100%	100%	100%
United Kingdom	100%	100%	91%	100%	96%	91%	91%
EU average	100 %	95%	97%	100 %	100 %	92 %	95%

### 5. ACCESSIBILITY AND CLARITY

BoP data for the EU27 Member States are available free of charge from Eurostat's website (Eurobase) at:

http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search database.

They are organised as shown in Figure 1.

Figure 1: BoP data online for all users

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Balance of payments - International transactions (bop)

Workers' remittances and compensation of employees (bop_remit)

Balance of payments statistics and International investment positions (bop_q)

Euro area balance of payments (source ECB) (bop_q_euro)

European Union balance of payments (bop_q_eu)

Balance of payments by country (bop_q_c)

International investment position - Annual data (bop_ext_intpos)

International investment position - Quarterly data (bop_q_intpos)

Main Balance of Payments and International Investment Position items as share of GDP (bop_q_gdp)

Export market shares (bop_q_exmash)

International trade in services, geographical breakdown (bop_its)

Balance of payments of the EU institutions (bop_euins)

Balance of payments of the EU institutions (bop_euins)
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Both the quantity and the detail of BoP data disseminated online have increased constantly over time and appropriate metadata have been attached to each table. Regular dissemination of data on workers' remittances started in February 2010. In January 2011 a table on the 'Main Balance of Payments and International Investment Position items as share of GDP' was created, and in October 2011 a table with 'Export market shares' was added and quarterly IIP data started to be disseminated. Due to the increasing interest in national BoP and IIP data, longer time series, deeper geographical breakdowns and more complete tables were disseminated.

### 6. ACCURACY

'Accuracy' means the closeness of estimates to the unknown true values. While primary statistics can measure accuracy with statistical indicators like mean errors and variance, similar indicators cannot be developed for macroeconomic statistics that are the result of a number of different data collection and compilation procedures. The BoP quality report measures accuracy by looking at the size of the revisions. It is assumed that each revision takes the dataset closer to the true value.

Revisions do not mean that 'errors' have been made or that the quality of the data has been deteriorating over time. On the contrary, revisions are made when new data sources and better information become available. A well-established and publicly communicated revisions policy is a sign of the strength of the statistical system in question.

The size of revisions is, however, a measure of the quality of the first release of a specific dataset, compared with the latest vintage made available. There is a trade-off between timeliness and revisions: the earlier the first release of a dataset, the higher the revisions that can be expected as later vintages of the same dataset are released.

# 6.1. Stability

<u>Tables 2 and 3</u> show the mean average values of revisions for the quarterly balance of payments over the last 14 quarters (2008Q1-2011Q2) for each EU Member State, expressed as percentage of the original value.

<u>Graph 1</u> shows the differences between the first and final estimates for the total current account of the EU27. The first estimates are available three months after the end of the reference period (Q+90 days). Final estimates are normally available after three and half years, but revisions are also possible after longer periods.

Revisions were highest in 2007 and, on average, bigger for debits than for credits. Revisions of national data often compensate between countries. Estimates of the EU27 aggregates are therefore quite stable over time.

Revisions in different directions for credits and debits can result in sizeable revision of the balance, even if the absolute revisions are minor.

Mean average values of revisions should be interpreted with caution as they might be abnormally high if the initial estimates were low. In particular, indicators for small economies are very sensitive to this factor: in a few cases they show extreme values despite the fact that the absolute amounts of both the first estimates and subsequent revisions are very small. More generally, cautious interpretation is also warranted in cases (e.g. financial derivatives) where revisions of net flows (debits minus credits) are measured.

In the **current account** very small revisions were recorded on both the credit and the debit sides of the **goods account**, whereas in the **services account** the values of revisions were generally higher than for goods. The **income account** is affected most by revisions, with very high values often recorded on direct investment income due to the difficulties compilers have in estimating profits in their first transmissions. Over the 14 quarters considered, mean average revisions were generally higher for the **financial account** items than for the current account items, reflecting differences in both the scale and volatility of cross-border financial transactions. For the EU, the revisions were largest for **outward direct investment** and **portfolio investment assets**.

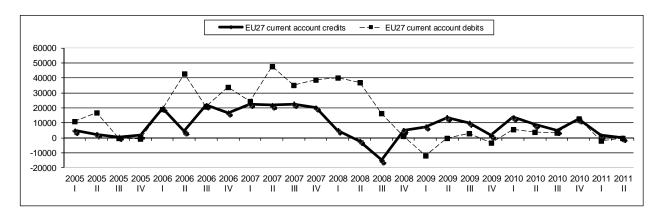
Table 2: Mean average values of revisions for main items of current account, 2008Q1-2011Q2

		1	G.		Tr.		T.	1	Otl	her	C	C	DI.		C	)I	Cur	rent
MS	Goo	oas	Servi	ices	Trans	sport	Tra	vei	serv	ices	Comp. c	от етр.	DI in	come	Inco	ome	trans	sfers
	С	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
BE	3.45	2.77	1.75	12.21	-0.04	0.75	-1.52	0.92	3.08	-4.74	7.63	19.26	-16.05	61.67	-14.11	-32.95	59.44	15.57
BG	-0.74	0.51	3.79	3.14	-13.18	-8.44	15.87	16.51	6.24	10.77	-2.13	65.26	44.00	8.35	6.81	14.10	22.36	-3.70
CZ	2.05	-2.79	1.09	18.66	-6.59	3.60	0.22	8.14	15.47	5.81	2.64	-2.93	-63.06	1.68	-11.49	1.28	-1.75	2.34
DK	1.01	-2.06	1.95	0.22	0.16	2.51	-4.67	-0.76	9.30	-3.75	24.63	-3.13	3.62	-52.04	1.61	1.63	11.12	0.27
DE	1.92	3.41	3.45	2.11	6.22	5.67	0.39	-3.22	2.69	3.19	7.27	2.67	-3.45	-44.07	2.97	6.08	-6.28	-0.72
EE	-0.41	0.53	1.39	-3.94	0.92	-7.73	-8.93	-2.88	7.08	0.27	-4.30	-0.05	4.58	991.78	-1.08	-0.22	-6.53	0.40
ΙE	-0.48	1.03	-5.08	-2.92	0.13	1.08	0.76	-1.27	-5.36	-3.10	0.00	-0.11	11.99	-10.34	-8.42	0.49	-8.78	-5.99
EL	-1.27	-0.70	-0.21	-0.70	-0.17	-0.62	0.00	0.00	-1.33	-1.68	-1.40	-0.65	15.61	-18.94	-2.71	-1.39	-0.49	0.47
ES	0.80	-0.62	-0.35	-2.78	1.17	-5.69	-0.53	0.65	-0.63	-2.35	1.77	0.19	-6.85	-16.30	-0.27	0.91	3.37	4.16
FR	0.14	-0.70	-0.50	-2.57	-1.06	-0.24	3.98	-1.57	-1.91	-4.87	4.42	7.29	17.48	2.72	4.16	0.83	6.57	4.59
IT	-0.26	0.74	14.73	11.26	3.16	0.24	1.12	0.39	38.14	26.11	353.33	145.17	200.05	40.58	43.04	-6.73	56.81	12.50
CY	-29.69	-10.88	7.10	1.78	6.48	-0.19	-1.06	-2.83	9.91	8.22	-4.02	-0.29	434.16	221.13	12.80	-1.11	-8.81	0.26
LV	-0.20	0.09	-0.08	-0.14	-0.37	2.47	0.00	0.00	-0.04	-0.82	-2.60	0.00	10.77	-6.22	0.02	-0.18	0.13	-0.11
LT	-0.16	0.54	-0.44	4.68	1.29	1.36	-3.25	16.04	-2.98	-1.02	17.57	32.36	321.03	-412.40	-5.46	-5.23	-11.99	15.71
LU	7.07	-0.91	-3.98	4.94	0.08	0.45	-0.21	0.86	-4.25	-3.41	10.28	48.85	10.17	13.79	-5.81	-31.27	-1.69	0.74
HU	-6.33	-0.32	2.44	-0.16	-2.19	2.38	0.00	-19.27	4.59	3.63	1610.53	-11.62	77.79	50.73	-1.82	1.07	-8.65	-18.07
MT	1.27	-3.52	11.10	42.00	2.94	-2.84	6.97	-18.36	14.51	66.92	-4.99	-0.44	-183.68	-9.14	-0.17	-0.31	66.34	66.55
NL	-1.92	0.28	-1.67	3.80	0.57	1.04	-3.20	-0.68	-2.25	2.62	-1.15	97.62	4.84	23.89	-3.23	-2.76	2.19	7.33
ΑT	0.68	-0.82	1.42	0.47	3.28	1.07	-1.64	0.85	1.94	-0.17	-0.73	-10.89	12.63	-5.82	0.76	-0.41	-11.55	-2.74
PL	-0.81	-1.02	-0.95	-1.41	0.47	1.95	-2.77	-3.40	-0.22	-2.08	-21.69	293.84	308.05	-22.84	-0.07	-0.71	-63.93	-21.09
PT	-0.38	-0.01	1.43	0.25	3.45	-0.25	-0.10	-0.09	1.80	0.85	-0.70	3.96	4.98	-1.35	0.95	-6.33	-9.36	-11.57
RO	0.04	0.36	1.38	1.14	-7.51	0.45	2.39	0.81	5.34	3.79	6.83	27.92	-630.52	-327.00	24.01	0.46	-1.35	8.46
SI	4.14	9.10	-8.40	19.94	6.88	4.11	0.78	-3.55	6.27	3.75	95.52	15.68	-92.87	-27.29	0.57	4.95	-3.51	14.28
SK	-1.90	0.19	0.81	1.10	1.10	1.10	1.09	1.09	-0.36	0.04	50.17	-15.71	803.66	-26.93	0.95	1.12	0.74	-0.45
FI	1.23	-0.06	16.51	24.49	9.39	10.17	1.04	2.21	19.37	36.31	4.12	5.51	24.05	545.66	-0.47	3.56	27.34	18.66
SE	1.74	1.18	1.51	1.59	-0.48	2.68	-9.07	-3.00	5.28	3.55	-3.03	-1.77	17.97	-15.40	-3.49	-9.77	-11.97	-3.50
UK	0.28	0.21	0.69	-2.72	3.91	-1.98	0.70	-5.54	0.30	-2.08	1.15	-3.84	-28.77	-13.93	9.80	-0.76	2.04	-0.17
EU	0.62	0.81	1.39	1.56	1.43	0.86	-0.18	-2.73	1.95	1.73	13.51	30.55	3.06	-2.17	1.13	-4.11	8.68	4.01

Table 3: Mean average values of revisions for main items of financial account, 2008Q1-2011Q2

	QBOP FINANCIAL ACCOUNT MEAN (%)									
MS	DI outward	DI inward	PI assets	PI liabilities	OI assets	OI liabilities	Fin deriv.			
BE	-31.03	27.54	-124.24	-44.69	41.73	10.10	-186.75			
BG	16.91	67.33	67.11	17.69	115.41	-39.60	5.54			
CZ	-111.98	-397.93	0.02	3.46	-8.11	-2197.80	-0.71			
DK	-46.19	53.49	21.69	0.02	2.00	0.24	20.77			
DE	-26.56	52.11	-4.10	12.30	54.50	-1.58	6.07			
EE	32.41	53.09	9.56	-0.67	-13.79	-31.16	1.49			
IE	71.28	-377.19	-7.77	82.50	-39.87	-2.57	54.00			
EL	9.72	-54.83	-4.25	-0.59	-450.81	0.28	-0.01			
ES	7.41	-36.64	11.17	-5.00	-0.98	0.56	-56.68			
FR	-43.78	-30.99	-16.32	-4.36	-26.45	-28.23	-100.27			
IT	234.78	-63.77	-185.28	162.04	-1369.01	261.87	666.93			
CY	629.42	404.98	-15.00	-847.87	-80.27	32.28	-4.36			
LV	-23.64	-38.18	-204.30	33.65	-9.10	-37.02	-1.38			
LT	8.02	162.63	-44.70	-41.77	-3.44	4.30	-22.28			
LU	-114.94	-139.05	-15.67	-18.30	32.03	-12.60	1597.77			
HU	-23.16	204.44	46.60	5.65	-18.19	8.46	5.26			
MT	197.44	-28.12	-4.99	-71.68	0.08	2.29	-0.11			
NL	-68.42	95.70	-4.15	-38.61	-25.58	-16.72	-28.15			
AT	93.64	-1.37	2.87	3.71	-8.75	4.00	9.95			
PL	91.07	-52.24	-66.65	-15.51	-1.70	-15.18	0.67			
PT	-345.76	-25.69	-38.70	46.58	-54.88	-258.31	9.98			
RO	2549.20	-140.35	-89.82	-17.72	-105.36	9.16	42.86			
SI	-28.47	8.74	-0.55	1.10	-1033.25	66.04	-588.34			
SK	-49.32	-18.22	-3.54	1.42	-1.85	-11.61	-100.32			
FI	165.75	-71.90	-1.98	-15395.81	0.35	-1.02	17.56			
SE	82.68	-44.64	10.48	-64.85	-146.32	-16.56	-44.98			
UK	-12.63	-17.94	145.57	-3.44	5.21	33.31	-5.97			
EU	31.53	-11.16	68.69	12.88	29.94	6.49	16.16			

Graph 1: Differences between first and final estimates for EU27 current account, 2005Q1-2011Q2, in EUR million



### 7. TIMELINESS AND PUNCTUALITY

Punctuality is measured in terms of compliance with the deadlines for data transmission set by the BoP Regulation. <u>Table 4</u> analyses<sup>9</sup> the punctuality of the balance of payments statistics. It shows that, with very few exceptions, the Member States have been able to meet the deadlines for all the datasets.

Timeliness is measured as the gap between the reference period covered by the datasets and the moment when the data are made available to the final users. Currently BoP data are reported to Eurostat 90 days after the end of the reference period. The amended BoP Regulation takes into account users' requests for more timely statistics, reducing the reporting deadline from the current 90 days to 85/82/80 days, respectively from 2014/2017/2019 onwards.

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Punctuality is assessed as 'good' if data were always delivered on or before the deadline, 'acceptable' if, on average, the delay did not exceed five days and 'bad' in other cases.

Table 4: Punctuality of data transmission\*

	Euro indicators	Quarterly balance of payments	International trade in services	Foreign direct investment — flows	Foreign direct investment — stocks
Deadline:	reference period + 2 months	reference period + 3 months	reference period + 9 months	reference period + 9 (or 21) months <sup>10</sup>	reference period + 9 (or 21) months
Austria	good	good	good	good	good
Belgium	good	good	good	good	bad
Bulgaria	good	good	good	good	good
Cyprus	good	good	good	good	good
Czech Republic	good	good	good	good	good
Denmark	good	good	good	good	good
Estonia	good	good	good	good	good
Finland	good	good	good	good	good
France	good	good	good	good	good
Germany	good	good	good	good	good
Greece	good	good	good	good	good
Hungary	good	good	good	good	good
Ireland	good	good	good	good	good
Italy	good	good	good	good	good
Latvia	good	good	good	good	good
Lithuania	good	good	good	good	good
Luxembourg	good	good	good	good	good
Malta	good	good	acceptable	good	good
Netherlands	good	good	good	good	good
Poland	good	good	good	good	good
Portugal	good	good	good	good	good
Romania	good	good	good	good	good
Slovakia	good	good	good	good	good
Slovenia	good	good	good	good	good
Spain	good	good	good	good	good
Sweden	good	good	good	good	good
United Kingdom	good	acceptable	bad	good	good

<sup>\*</sup>Punctuality: good:  $\leq 0$  days, acceptable:  $\leq 5$  days, bad:  $\geq 5$  days

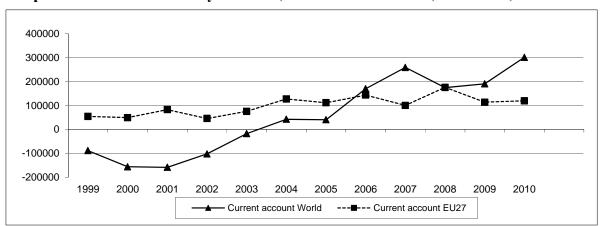
For FDI (both flows and stocks), there are two separate data requests, each with different deadlines: one 9 months after the end of the reference period, the other 21 months after the end of the reference period.

### 8. COMPARABILITY

'Comparability' means the differences that can be observed when statistics on the same domain are compared between geographical areas or over time.

The BoP quality report measures comparability over space by looking at asymmetries. Eurostat regularly provides tables that highlight the top persistent asymmetries for each country and item and encourages countries to address the underlying problems via bilateral contacts and exchanges of more detailed information. The foreign direct investment (FDI) network was also set up to allow exchanges of bilateral FDI data and, in the course of time, is expected to reduce the asymmetries in FDI.

<u>Graph 2</u> compares EU27 and World asymmetries. While EU27 asymmetries are by no means trivial (they represent almost 1% of EU GDP), they have been stable from 2004 onwards. The various initiatives that Eurostat is undertaking to address asymmetries in the EU27 BoP are bearing visible fruit.



Graph 2: EU27 and World asymmetries, total current account, 1999-2010, in EUR million

#### 9. COHERENCE

Coherence focuses on the consistency of statistics produced for different purposes. The BoP quality report measures this component by looking at both internal consistency (compliance with integrity rules, coherence between the quarterly and annual data and size of errors and omissions) and external consistency (coherence between BoP data and similar statistics from different statistical frameworks). The external consistency of BoP goods data and foreign trade statistics (FTS) (as produced by Intrastat and Extrastat) is regularly monitored.

### 9.1. Internal consistency

Internal consistency is measured by looking at the values of net errors and omissions. Net errors and omissions constitute the residual item balancing the accounts. Sometimes compilation errors offset one another. Consequently, the size of this residual item does not necessarily provide an indication of the overall accuracy of the statement.

Net errors and omissions are closely monitored by national BoP compilers: high values or constant increases are a sign of problems in the compilation systems that have to be identified and addressed.

<u>Table 5</u> shows the average relative error recorded by the Member States for the period 2008-2010. It is equal to the average of the absolute value of net errors and omissions during the period in question (measured as a share of the average of current account credits and debits), as recorded in the quarterly balance of payments of the Member States. For the period 2008-2010, three Member States (Italy, Finland and Sweden) recorded a value in excess of 10% for this indicator and five (Bulgaria, Denmark, Ireland, France and Poland) showed a value higher than 5%. In Italy errors and omissions jumped from 3.8% in the period 2006-2008, as evidenced in last year's quality report, to 12% in the period 2008-2010, due to the transition towards a totally new collection and compilation system.

<u>Table 6</u> shows the cumulative average relative error recorded for the period 2008-2010. It is equal to the cumulative natural values of net errors and omissions for the same period (measured as a share of the average of current account credits and debits). One Member State (Sweden) recorded a value in excess of 10% for this indicator and three (Bulgaria, Denmark and Finland) showed a value of more than 5%.

Table 5: Average relative error 2008-2010

Belgium	0.5%	France	5.1%	Austria	3.4%
Bulgaria	8.6%	Italy	12.0%	Poland	5.2%
Czech Republic	2.2%	Cyprus	2.1%	Portugal	1.7%
Denmark	8.0%	Latvia	2.3%	Romania	4.3 %
Germany	3.7%	Lithuania	0.9%	Slovenia	1.5%
Estonia	1.8%	Luxembourg	0.3%	Slovakia	4.1%
Ireland	10.0%	Hungary	1.9%	Finland	12.0%
Greece	2.0%	Malta	4.1%	Sweden	13.7%
Spain	2.3 %	Netherlands	4.2%	United Kingdom	3.6%

Table 6: Cumulative average relative error 2008-2010

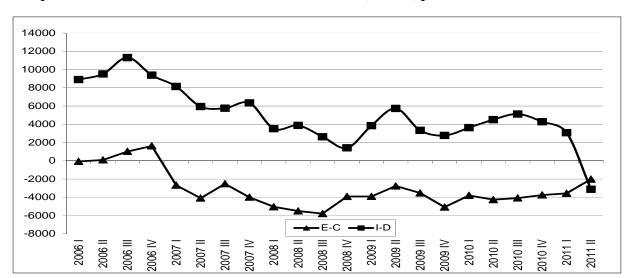
Belgium	0.0%	France	3.3%	Austria	0.7%
Bulgaria	-5.7%	Italy	0.0%	Poland	-4.6%
Czech Republic	-0.3%	Cyprus	-0.5%	Portugal	-0.3%
Denmark	-5.5%	Latvia	-1.9%	Romania	-2.9%
Germany	0.7%	Lithuania	0.2%	Slovenia	0.2%
Estonia	0.9%	Luxembourg	-0.1%	Slovakia	-3.3%
Ireland	-2.3%	Hungary	-2.1%	Finland	-8.6%
Greece	0.0%	Malta	1.3%	Sweden	-16.3%
Spain	-0.9%	Netherlands	0.7%	United Kingdom	0.2%

# 9.2. External consistency

External consistency is related to the coherence between BoP data and similar statistics from different statistical frameworks.

External consistency related to goods, as reported in BoP data and in foreign trade statistics (FTS), is regularly monitored by Eurostat. When comparing the two datasets, methodological differences between the BoP and FTS should be taken into account. The main ones are related to the fact that the BoP requires a change of ownership in order to record a transaction, whereas FTS record physical cross-border movements of goods, and to differing valuation methods<sup>11</sup>. One example of this difference is the treatment of non-monetary gold that changes ownership without being physically transported to the country of the new owner; this gold is not included in FTS but is included in the BoP.

The overall consistency between FTS and BoP data can be assessed quickly by looking at the time series of differences between the values for credits/exports and debits/imports available from the two statistical frameworks, and is shown in <u>Graph 3</u> for the EU27 aggregate. From 2006Q1 onwards the consistency between the data on goods in the BoP and in FTS has definitely improved and has stabilised at fairly low levels.



Graph 3: Goods — difference between FTS and BoP, EU27, partner 'Extra EU27'

### 10. CONCLUSIONS

The entry into force of Regulation (EC) No 184/2005 led to closer harmonisation of balance of payments statistics throughout the EU and increased the availability of data to users.

This working document shows that the BoP data required by Eurostat under Regulation (EC) No 184/2005 are reported by every Member State, generally on time. A much larger amount of BoP data is now available to final users compared to what could be obtained at the end of the 1990s: more detail is now available on transactions and geographical breakdowns, the frequency and timeliness of the data have improved and longer time series have been reconstructed for the sake of economic analysis. Greater use is made of estimation, but the resulting quality is kept under very strict control. Quality reports allow regular monitoring of the stability and consistency of the data.

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Imports/debits are valued *free on board* (f.o.b.) in the BoP, but are valued *cost, insurance and freight* (c.i.f.) in FTS.

As a result of the financial crisis, both BoP and IIP data are under increased scrutiny by users. Eurostat and national compilers are making every effort to ensure that BoP and IIP data fully meet the needs of the wide circle of users.

The next BoP quality assessment exercise will start in January 2013.