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Globalization TT: Valuation of imports & exports in the SNA

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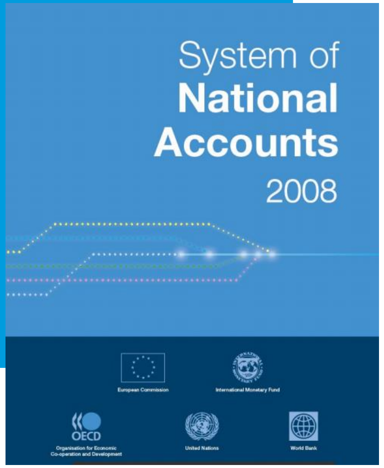
Valuation of imports and exports: introduction

System of National Accounts 2008 (2008 SNA)

- recommends recording of imports and exports of goods at FOB value;
- the FOB valuation seems to not be fully reconciled with the general conceptual principle of recording output at basic prices:
  - → ***FOB valuation principle**: goods are valued excluding freight and insurance services between the exporting and importing countries (i.e., at a point of uniform valuation).*
  - → ***basic price valuation principle**: goods are valued at the observed transaction price receivable by the producer (freight and insurance services are included or excluded depending on if these services are separately invoiced by the producer).*
- imports of goods are to be recorded in the supply and use tables at basic prices:
  - → ***CIF to FOB adjustment** is needed, if FOB-type data detailed by product group are not available for imports.*



Valuation of imports and exports: existing material

2012: Anne Harrison BOPCOM paper

- addresses the apparent inconsistency of the *2008 SNA* recommendation to value output at basic prices and to record imports and exports at FOB values as recommended in *BPM6.*
- presents four suggested options towards resolving this inconsistency and underscored that the process of adjusting CIF to FOB valuation might need re-examination.

2013: BOPCOM Summary of Discussion

- FOB valuation was included in several previous BPM and with the implementation of BPM6 this was not the suitable moment to introduce changes in valuation of goods.

2013: AEG on National Accounts

- the 2008 SNA and BPM6 recommend recording imports and exports of goods at FOB value and the 2008 SNA does not fully reconcile the FOB principle for the valuation of exports with the principle of output valuation at basic prices.

Valuation of imports and exports: existing material

2016: UNSD IMTS Survey on National Compilation and Dissemination Practices

- 68 out of 102 economies (approximately 67 percent) maintain the invoice price as one of the valuations in basic merchandise trade statistics.

2017: UNECE Workshop on Consistency between National Accounts and Balance of Payments Statistics

- different methods are used to estimate the CIF to FOB adjustment in countries.
- useful to share information on questionnaires, methods, and software, and to foster international coordination to reduce asymmetries with partner countries.

2017: ADB Compendium of SUTs for Selected Economies in Asia and the Pacific

- diversity of practices regarding the compilation of the CIF to FOB adjustment.
- data sources used to estimate trade margins differ (e.g., FOB values for imports are available in some economies, while others use ratios to compile the CIF to FOB adjustment).

Valuation of imports and exports: existing material

2017: Hiemstra and de Haan AEG paper

- proposes the recording of imports and exports of goods in the national accounts and SUTs based on the actually observed transaction values, due to data limitations.

2017: AEG on National Accounts

- the use of transaction prices for exports and imports of goods is not consistent with the current SNA recommendations, but recommended an assessment of country experiences in CIF to FOB recording by the ISWGNA to develop a guidance note as part of the research agenda on globalization.

2018: Walter OECD WPTGS paper

- the valuation concept for exports and imports and the related transportation services need to be updated to better incorporate current transportation procedures.
- the current valuation principles force compilers to set up resource and cost intensive methods to calculate the CIF to FOB adjustment.
- an approach based on invoice values would avoid many of the current problems related to the valuation of international trade and would reduce overall asymmetries.

Valuation of imports and exports: existing material

2019: joint IMF-OECD initiative and BOPCOM paper

- 50 percent of respondents to a survey on the use of invoice values were unfavorable to the proposal of adopting invoice values, mainly due to practical considerations related to data availability.
- the CIF to FOB adjustment and the change to transaction values have different impacts according to national circumstances.
- examples according to the reconciliation exercise in pilot countries:

  Albania *for 2016-18, the annual average ratios of invoice values to FOB (BOP) value were estimated between 5.5 and 5.9 percent,*

  Belgium *for 2015 intra-EU trade, the invoice to CIF value was 0.04 and 0.16 percent of total trade, for imports and exports respectively, while the CIF to FOB adjustment was -1.67 percent of total trade for imports,*

  Moldova *for 2019Q1, the average ratios of invoice values to FOB (BOP) trade were around 5 percent, but showing significant fluctuations between different groups of trade partners,*

  Germany *a vast data set from IMTS (47 million observations) showed very small CIF-invoice differences (1.4 percent on average) for the extra-EU imports, and larger FOB-invoice differences (12.8 percentage) for extra-EU exports.*

III. Invoice values as an alternative concept

Example

– **FOB-Contract**

– US company imports goods from China with a FOB contract.
– FOB value of goods: 100
– transportations costs: 10

Current Account USA	Credit	Debit	Net
Goods		100	
Transportation Service			
Resident carrier		0	
Non-resident carrier		10	
Current Account	0 0	100 110	-100 -110

Invoice approach = BPM6

– **CIF-Contract**

– US company imports the same goods from China with a CIF contract.
– FOB value of goods: 100
– transportations cost: 10
– ➔ CIF value: 110

Current Account USA	Credit	Debit	Net
Goods		110	
Transportation Service			
Resident carrier	10		
Non-resident carrier		0	
Current Account	10 0	110 110	-100 -110

Invoice approach ≠ BPM6 !

III. Invoice values as an alternative concept

Arguments for a change!

- **No estimates** are necessary, neither for the goods account nor for the freight account.
- Thus, data **requirements for compilers** are **reduced** (no freight rates or weights)
- **Asymmetries** caused by the CIF/FOB adjustment **will be avoided** because adjustments become superfluous
- The **only information** necessary is the **invoice value** from customs or FTS which is - as a general rule - the starting point for respondents, customs or statisticians to calculate the customs/ statistical value
- The **data can be extracted** directly **from** the company´s **accounting**. Thus, the **reliability** of the single accounts and the overall balance of both **improve**
- In an invoice based world the **regional distribution** is **not a** special **problem**, the partner is always known

Invoice values as an alternative concept

- Therefore, the traditional valuation concept has to be updated to better reflect current transportation procedures

- The concept should avoid that compilers set up resource and cost intensive adjustment methods based on information which itself is estimated

- The concept should avoid making assumptions without having any source data available

- Otherwise we inevitably continue contributing to asymmetries because no single method can be recommended for all countries

- **The invoice approach fulfil these requirements** and would be much more in line with the corresponding principles established by the 2008 SNA

- **Disadvantages** have to be mentioned, e.g. changes in time series !

- In the coming years, the pros and cons should be thoroughly examined

Valuation of imports and exports: recommended approach – conceptual aspects

Impact of adopting transaction values

- **National Accounts:**
  → in general consistent with the principles concerning the time of recording and valuation of production recommended in the 2008 SNA.
  → need of additional guidance for SUT compilation.
- **Balance of Payments:**
  → demarcation between goods and services
  → introduction of a changeable valuation point
  → change in treatment of international freight and insurance services

Valuation of imports and exports: recommended approach – practical aspects

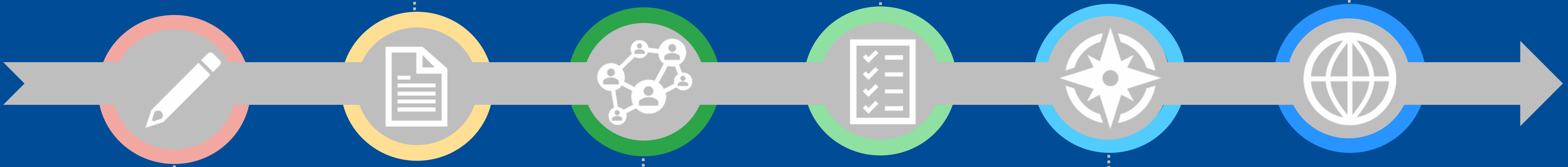
Globalization Task Team (GZTT): consultation

- **in general, transaction values for IMTS are available from custom's documents in the economies of the GZTT members**
  - → access to transaction values data might be challenging to the agency responsible for compiling national accounts or balance of payments statistics.
  - → most members have not conducted studies on the difference between invoice value and CIF or FOB valuation

Joint IMF-OECD initiative: survey results

- **most respondents considered that it is not practically feasible to develop balance of payments statistics for trade in goods and freight transactions using invoice values.**
  - → some concerns include (i) the lack of complete and accurate available data; (ii) the impossibility of using data from corporations' records; (iii) the need for inter-agency collaboration; or (iv) the lack of detailed data on transport services.

Timeline



Mid September 2020
GZTT consultation and GN draft

September 2020
GZTT review & consultation and DITT consultation

October/November 2020
BPTT and AEG consultation

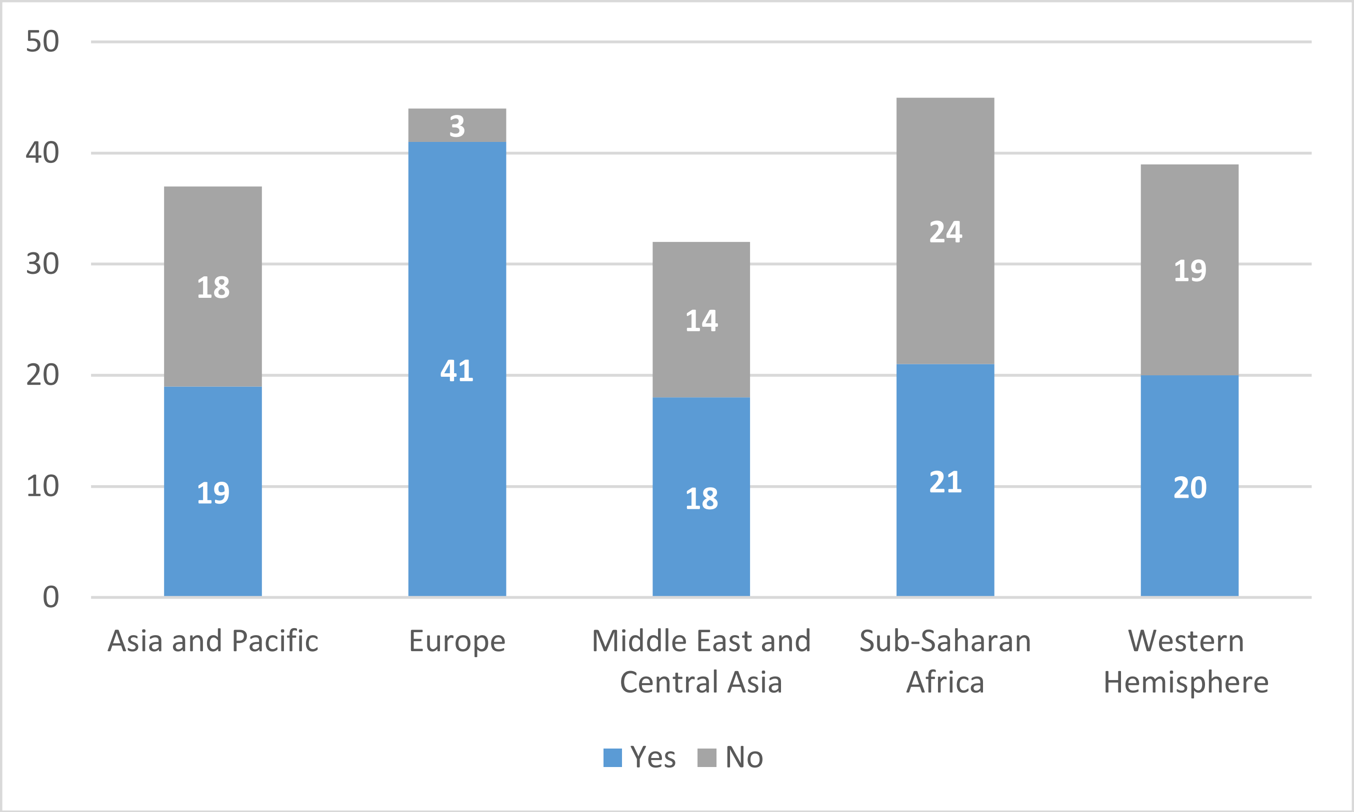
Start 2021
Finalization of draft guidance note

2021 and after
Country consultation and testing

BOPCOM, ISGWNA, AEG Final Approval

Testing Phase 1

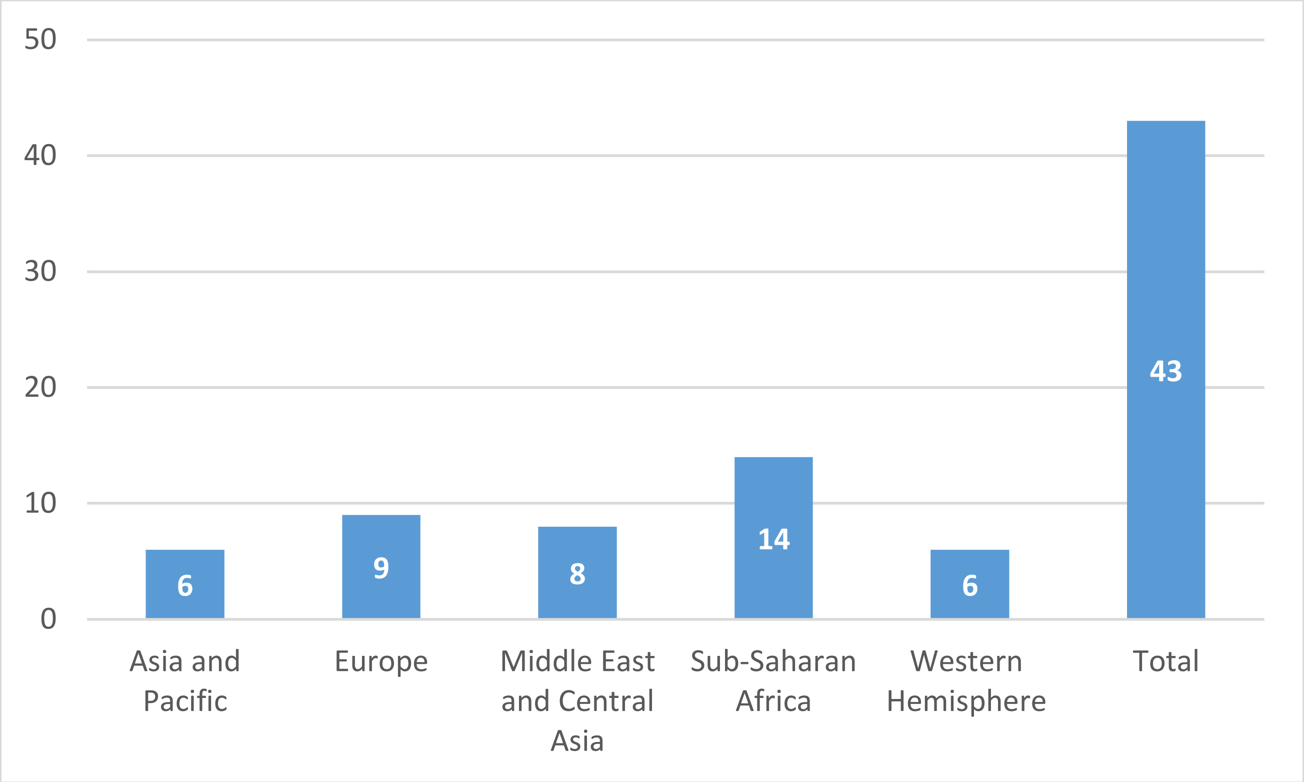
Complete answers: number of economies, by region



- Results by May 26, 2021
- 119 economies submitted complete answers
- 12 economies to be contacted to clarify details on answers received

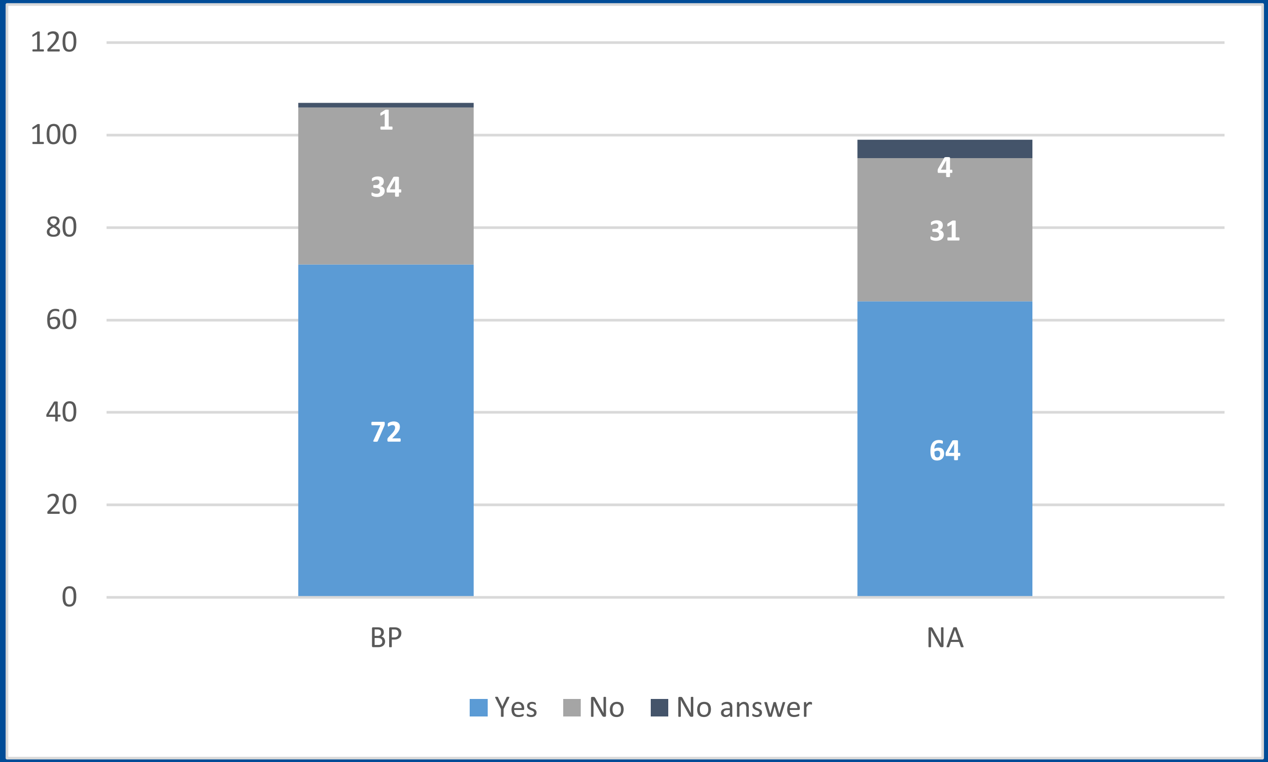
  (some results may change with the outcome of these contacts)

Stage 2: economies that agree to be contacted, by region



- 43 economies agreed to be contacted concerning the study for the use of invoice values (Stage 2 of testing)

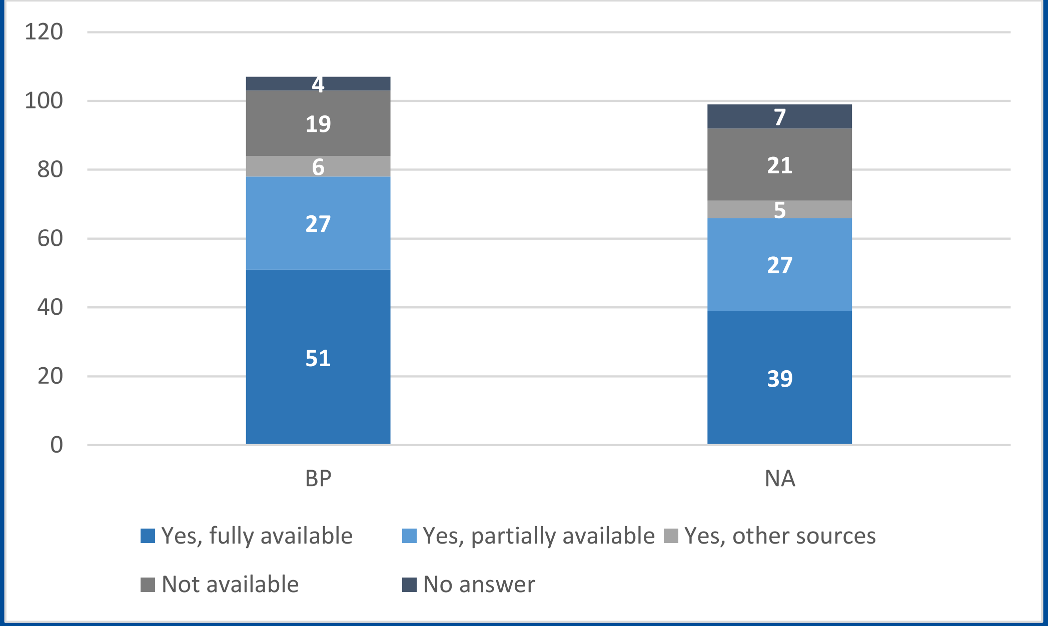
Support the use of invoice values on a conceptual level, by statistical domain



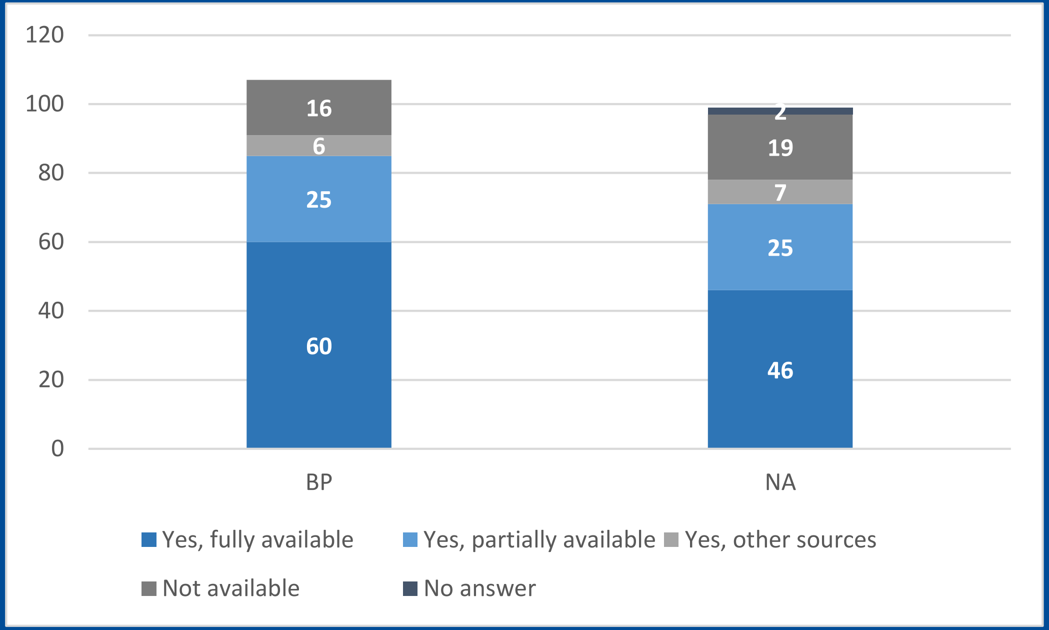
- BP: 72 economies support the use of invoice values on a conceptual level
- NA: 64 economies support the use of invoice values on a conceptual level

Availability of actual invoice (transaction) values in the economy (from customs documents or other data sources), by statistical domain

Exports of Goods



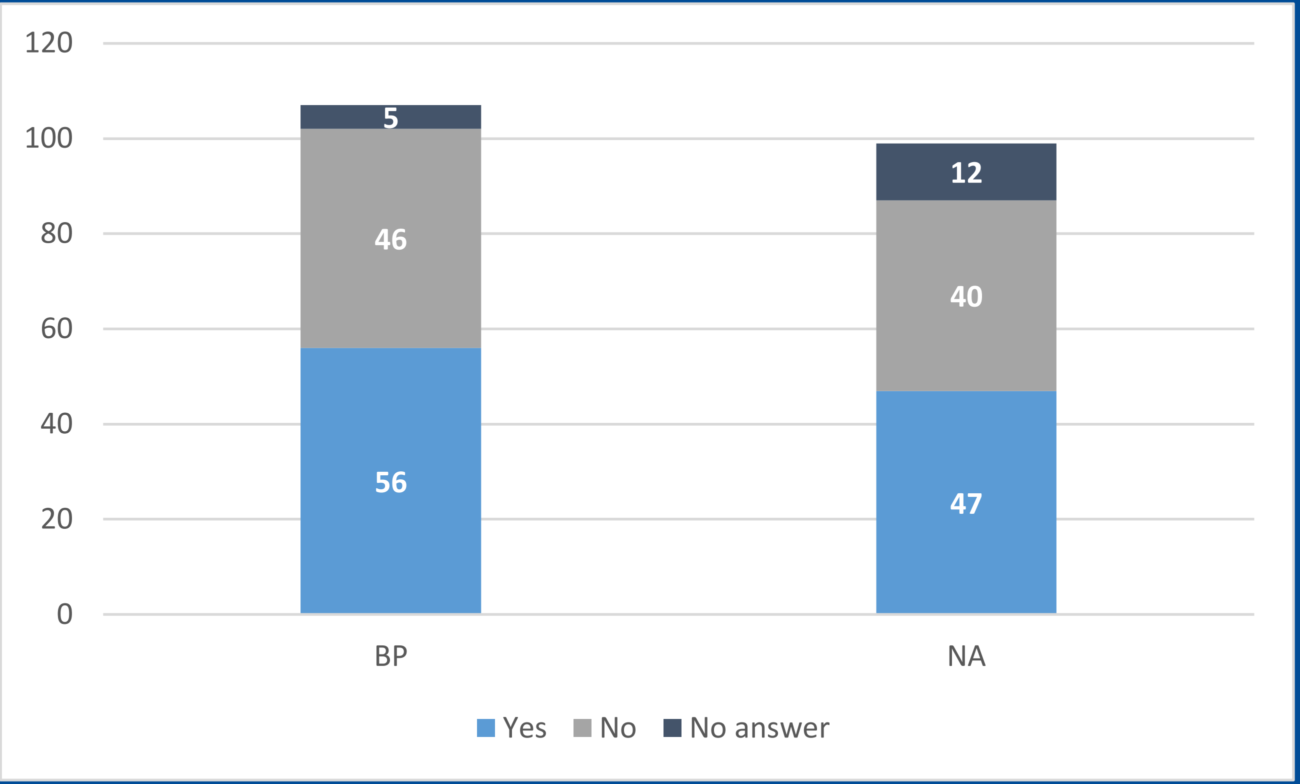
Imports of Goods



Full availability of invoice data, in the economy:

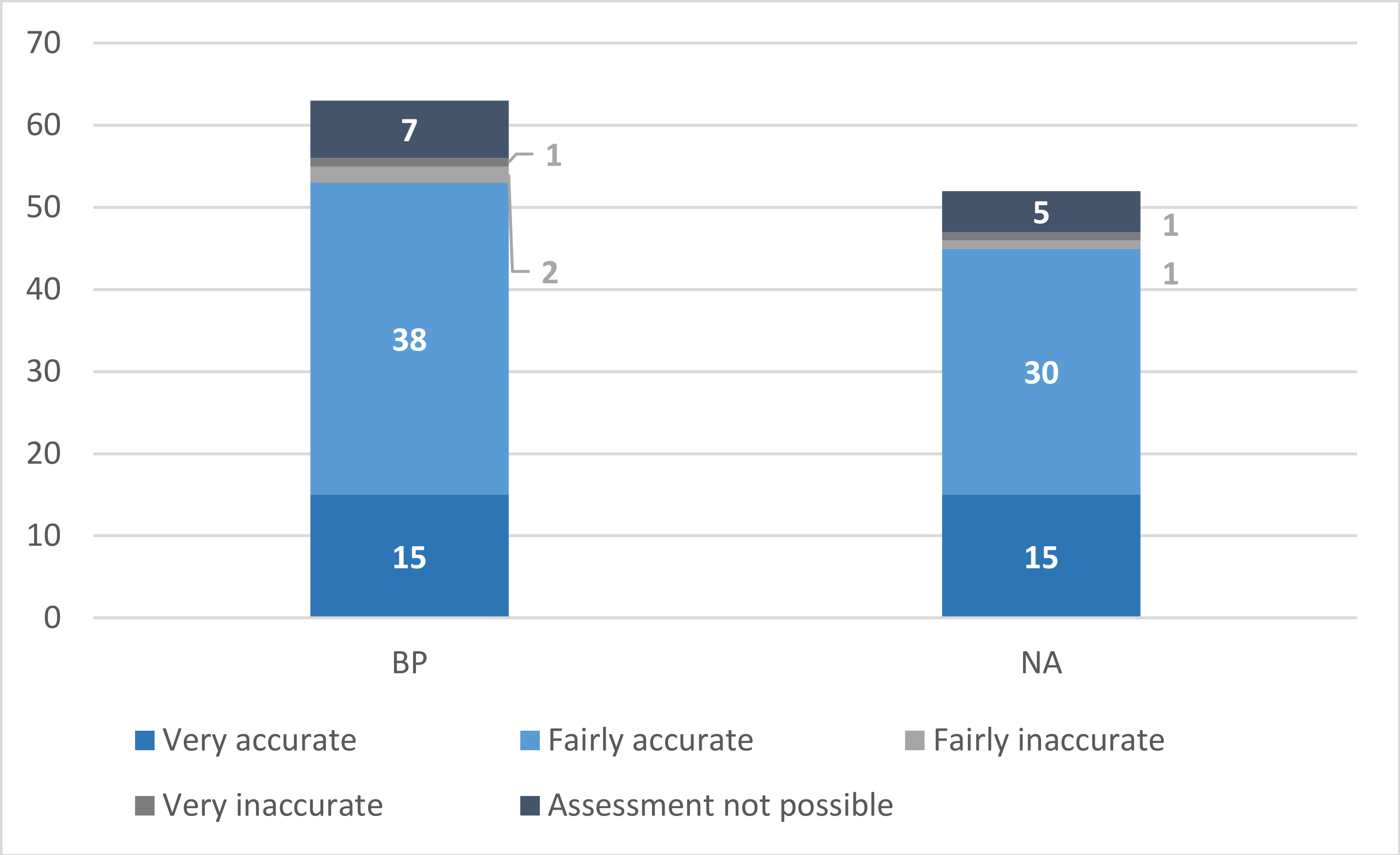
- BP: Exports 51 economies; Imports 60 economies (out of a total of 107)
- NA: Exports 39 economies; Imports 46 economies (out of a total of 99)

Access in practice to invoice (transaction) values for BP or NA compilation by the compiling agency, by statistical domain

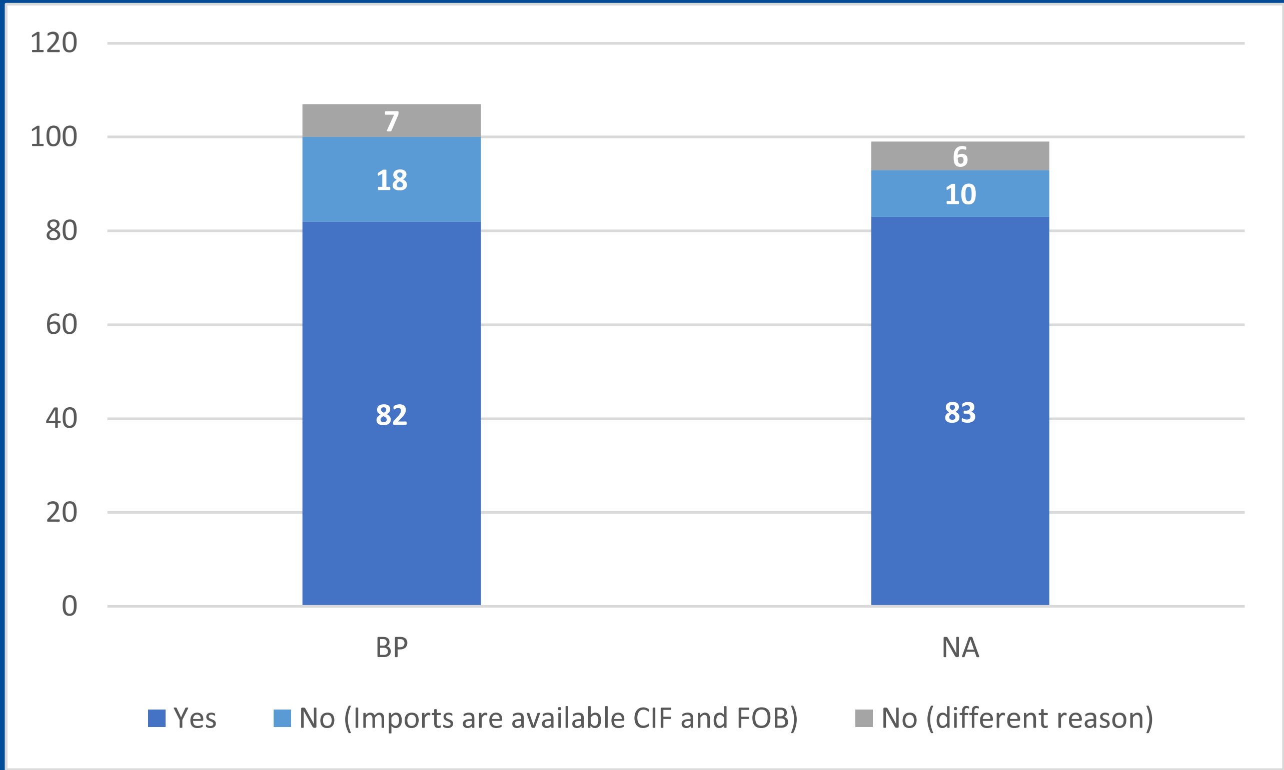


- BP: 56 economies have access to invoice data for BP compilation (out of a total of 107)
- NA: 47 economies have access to invoice data for NA compilation (out of a total of 99)

Accuracy of invoice (transaction) values available in the economy, by statistical domain

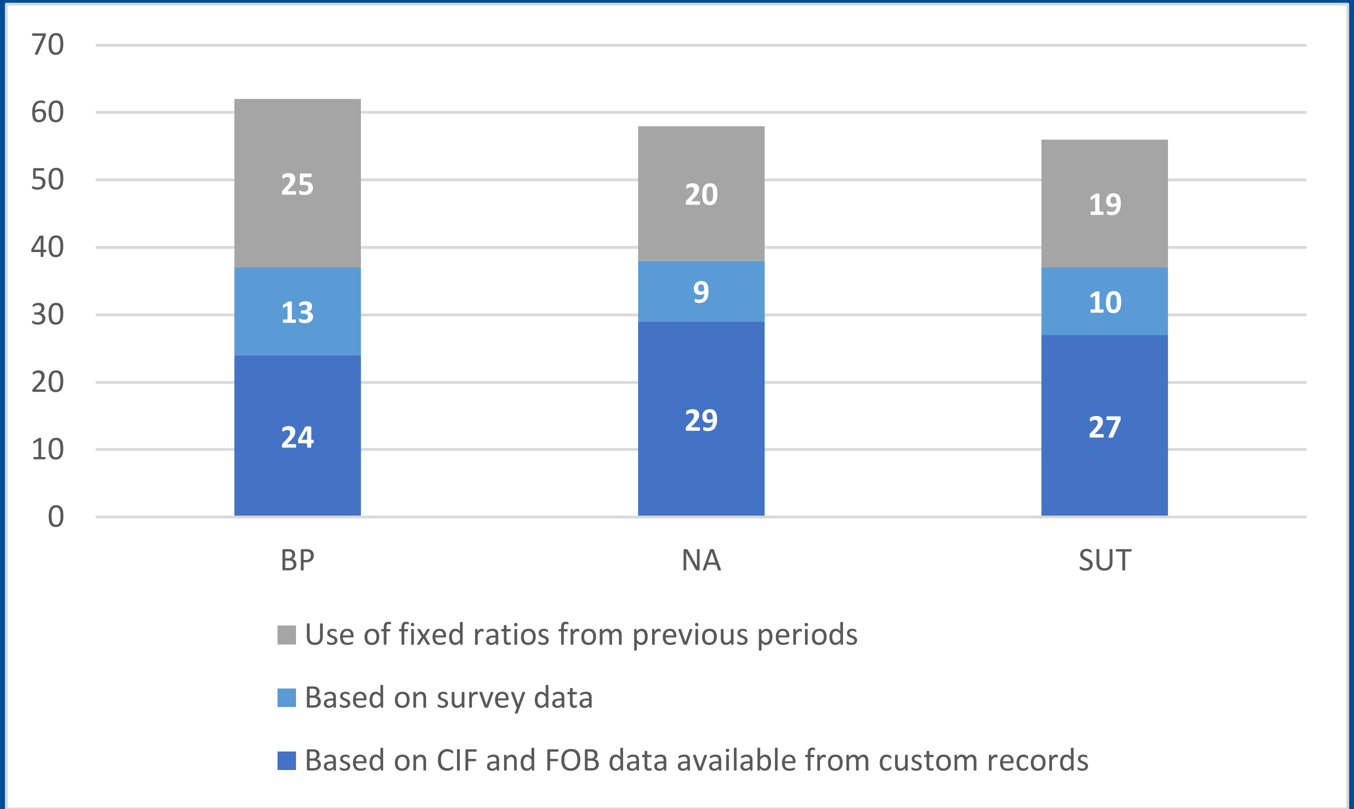


Estimation of a FOB valuation adjustment of Imports in BP or NA, by statistical domain

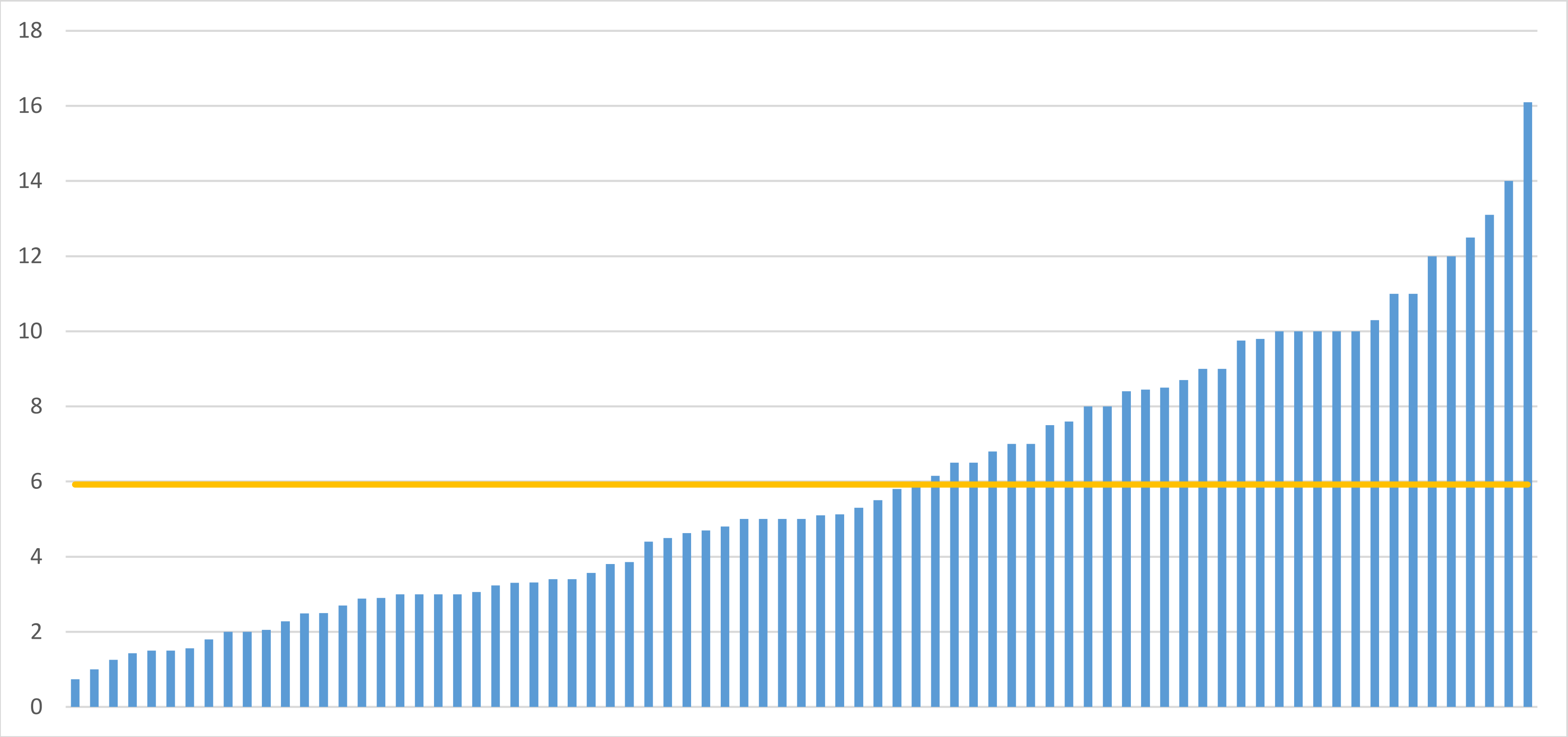


- BP: 82 economies estimate a FOB valuation adjustment of Imports (out of a total of 107)
- NA: 83 economies estimate a FOB valuation adjustment of Imports (out of a total of 99)

Process used to estimate the FOB valuation adjustment of Imports in BP or NA, by statistical domain



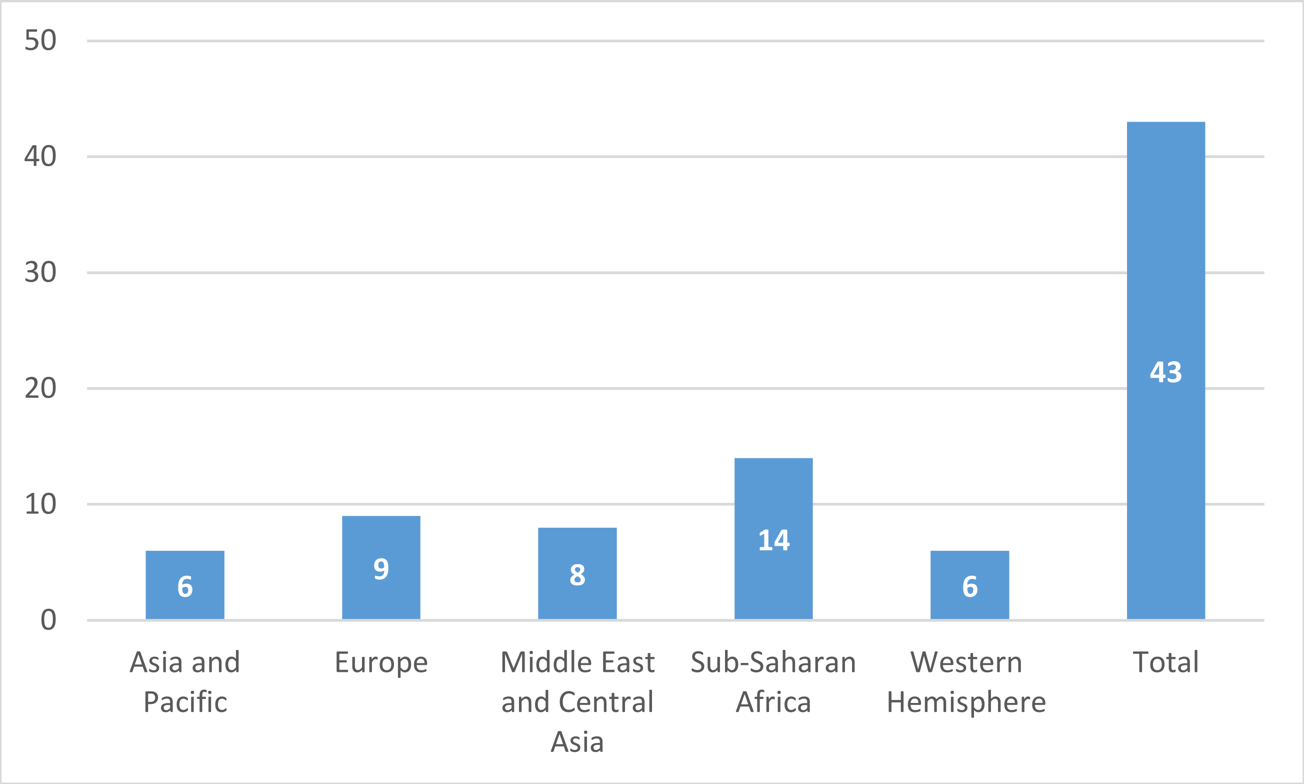
Size of the FOB valuation adjustment



- Economies reported very diverse estimates of the CIF to FOB adjustment of Imports, ranging from 0 to 16% (excluding outliers)
  - Blue columns in the graph represent the estimates reported
- The average of the estimated adjustment reported 6%
  - Orange line in the graph represent the average of the estimates

Testing Phase 2

Stage 2: economies that agree to be contacted, by region



- 43 economies agreed to be contacted concerning the study for the use of invoice values (Stage 2 of testing)

HS chapter (HS 2017)	Number of records	CIF value (in currency units)	Invoice value (in currency units)	Difference as CIF-invoice value (in currency units)	Difference as CIF-invoice value (in % of CIF value)
1	606	275,134	274,926	208	0.1%
2	8,438	586,072	584,635	1,437	0.2%
3	5,700	174,330	173,625	705	0.4%
4	14,265	721,850	722,077	-227	0.0%
5	387	5,190	5,185	4	0.1%
6	4,014	82,133	81,575	558	0.7%
7	21,335	316,227	308,244	7,982	2.5%
8	16,328	322,101	313,457	8,644	2.7%
9	6,341	112,644	112,881	-237	-0.2%
10	2,806	169,812	168,618	1,194	0.7%
11	3,761	139,255	138,946	309	0.2%
12	3,373	53,454	53,449	6	0.0%

TABLE 1

Imports of goods by delivery terms

Period 1: 2017

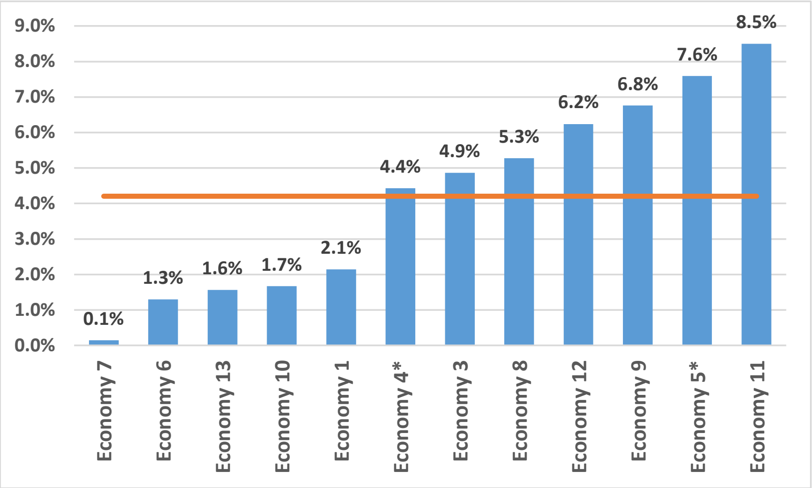
Terms of delivery (Incoterms)	Number of records	CIF value (in currency units)	Invoice value (in currency units)	Difference as CIF-invoice value (in currency units)	Difference as CIF-invoice value (in % of CIF value)
EXW	184,501	7,254,727	7,219,000	35,727	0.5%
FCA	29,890	1,676,833	1,663,391	13,442	0.8%
CPT	58,534	1,478,708	1,485,856	-7,148	-0.5%
CIP	63,282	2,146,569	2,147,821	-1,252	-0.1%
DAT	1,935	918,885	917,790	1,095	0.1%
DAP	121,119	6,558,929	6,562,531	-3,602	-0.1%
DDP	173,582	4,484,751	4,491,992	-7,241	-0.2%
FAS	237	217,963	217,859	103	0.0%
FOB	32,063	2,711,696	2,661,413	50,282	1.9%
CFR	60,515	1,593,117	1,589,757	3,361	0.2%
CIF	329,556	13,110,092	13,097,243	12,849	0.1%
Unknown delterms	355,558	10,504,425	10,484,068	20,357	0.2%
Subtotal intra EU	1,410,772	52,656,695	52,538,721	117,974	0.2%
Total extra EU		30,286,590			
Total		82,943,285			

GZTT G.1: Second Stage of Testing (1)

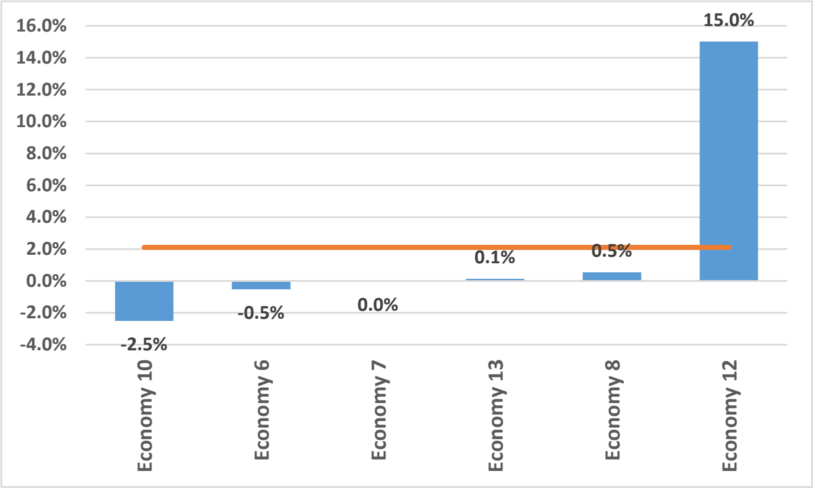
GZTT G.1 Stage 2 of testing from Jun-Sep 2021 to assess the impact of adopting invoice (transaction) values for the valuation of imports and exports of goods.

- **Imports of Goods**: 12 economies tested the difference between the CIF and transaction (invoice) valuation: reported impact spans from 0.1 to 8.5 percent
- **Exports of Goods**: 6 economies tested the difference between FOB and transaction (invoice) valuation: reported impact spans from -2.5 to 15 percent

Imports of Goods



Exports of Goods



GZTT G.1: Second Stage of Testing (2)

GZTT G.1 Stage 2 of testing - main results:

- **HS chapters:** the results show a significant heterogeneity of impacts by HS chapter, that is reduced when only the 5 main imports/exports of goods for each economy are considered.
- **Delivery terms:** a diversity of delivery terms is reported, with significant differences in the shares across economies.
  - An average of 16.3 percent of Imports of Goods are recorded as CIF
  - An average of 15.8 percent of Exports of Goods are recorded as FOB
  - In general, the impact presented does not show a clear pattern across economies for the same delivery term code and movement.

Preliminary findings

- Disappointing response from 43 candidate countries
- Half of responses addressed valuation of exports only
- Compilation of the results still in progress

Feedback from BOPCOM and AEG

- Support the use of invoice values on a conceptual level for inclusion in BPM7 and SNA 2025
- Further experimentation and testing is required by countries
- As wide a range as possible of countries need to participate in the testing
- Need to identify the challenges for all countries in adopting the Invoice value for Exports and Imports of goods

Way forward – Questions to participants

- Data on invoice value needs to be assessed
- Include invoice value in the data collected from ITGS compilers
- Enable a Quality Assurance framework to assess the Invoice value over a number of periods
- Conceptual arguments have been accepted - now it is about the practical issues
- Are there countries willing to help with this ?

END

Questions ?

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