Valuation of Imports and Exports of Goods: First Stage Survey Results

This report presents an overview of the initial results of the first stage of the online survey on the Guidance Note (GN) on “Valuation of Imports and Exports of Goods in the International Standards (CIF to FOB Adjustment)”, conducted by the Globalization Task Team (GZTT), as part of the global consultation exercise. The initial results show that a majority of respondents support the recommendation to adopt invoice (transaction) values for the valuation of Imports and Exports of Goods in the national accounts and balance of payments statistics. However, only around half of the respondents reported that their agency has access to the information on invoice (transaction) values necessary for balance of payments or national accounts compilation. According to the survey results, most respondent economies currently estimate a FOB valuation adjustment of imports in balance of payments or national accounts, and the size of these adjustment is significantly different across economies. A second stage of the survey will address the quantitative impact that the adoption of invoice (transaction) values would have in the estimates of imports and exports of goods.

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INTRODUCTION

1. **The System of National Accounts 2008 (2008 SNA) recommends recording of imports and exports of goods at free-on-board (FOB) values.** This recommendation is consistent with the valuation principles of trade in goods in the *Balance of Payments and International Investment Position Manual, sixth edition (BPM6).* However, the FOB recording is not fully reconciled with the principle of output valuation at basic prices used for domestic transactions in the 2008 SNA. In later years, different authors suggested the use of transaction (invoice) values. The GZTT GN G.1 “Valuation of Imports and Exports of Goods in the International Standards (CIF to FOB Adjustment)” puts forward three options to solve this apparent inconsistency. At a conceptual level, the majority of GZTT members supported the use of transaction values but at the same time expressed a clear preference for maintaining the consistency between the SNA and the BPM. At a practical level, some GZTT members expressed concerns about the considerable challenges associated with the implementation of this recommendation.

2. **The GN was discussed at the Advisory Expert Group on National Accounts (AEG) meeting and at the Thirty-Fourth Meeting of the IMF Committee on Balance of Payments Statistics, both in October 2020.** Both discussions pointed to additional experimentation and testing. The common view was that a change in the recommendation in the valuation of imports and exports of goods in the international statistical standards should only be adopted if it is clear that it can be implemented in practice and the benefits outweigh the disruption (and cost) of implementation.

3. **The GZTT launched an online survey to test the practical feasibility of recording imports and exports of goods at their observed transaction value.** The survey was posted simultaneously on both the UNSD and the IMF webpages on March 12 with an initial deadline of April 12, 2021, which was extended to April 26. The objectives of the survey, that targeted both national accounts and balance of payments compilers, were to assess (i) the extent of the difficulties in obtaining external trade data at observed invoice (transaction) values from customs records, (ii) the practical implementation of this change, and (iii) whether the benefits of the change outweigh the disruption (and cost) to the statistical system. The survey included two sections: (i) access to and use of invoice (transaction) values, and (ii) current compilation process of imports and exports of goods and related adjustments for freight and insurance services. The initial results of this survey are presented in the next section of this report.

4. **The second stage of testing the adoption of the observed invoice (transaction) values has started and will last through August 2021.** Currently, 43 economies with an adequate geographical representation (see Graph 1 in Appendix), have volunteered for a more detailed testing. The second stage, with a duration of around four weeks, will investigate the impact of adopting invoice (transaction) values for the valuation of imports and exports of goods in national accounts and balance of payments estimates.

INITIAL RESULTS OF THE ONLINE SURVEY ON THE VALUATION OF IMPORTS AND EXPORTS

5. **A total of 119 economies, with a wide geographical coverage, participated in the first stage of the survey and submitted complete answers** (see Graph 2 in Appendix). By statistical domain, 107

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2 Both national accounts and balance of payments compilers were asked to either send separate responses or a single coordinated one.
complete answers were submitted for balance of payments and 99 for national accounts. The initial results presented in this report may be revised as a result of ongoing exchanges with the respondents/institutions to clarify details of answers received (e.g., economies with duplicate answers that are not consistent).

**Access and Use of Invoice Values**

6. On a conceptual level, the majority of respondents support the recommendation to adopt invoice (transaction) values for the valuation of imports and exports of goods in the national accounts and balance of payments statistics. In fact, 72 (out of 107) and 64 (out of 99) respondents supported this option on balance of payments and national accounts, respectively (see Graph 3 in Appendix).

7. The respondents provided several arguments in support of the use of invoice values, amongst which, better alignment with valuation at basic prices and change in economic ownership, reduction in asymmetries, access to administrative data, or more useful valuation. These arguments include (i) the use of invoice values would be more aligned with the principle of output valuation at basic prices used for domestic transactions in the national accounts and the principle of change in ownership used in the balance of payments; (ii) the CIF to FOB adjustment estimates would no longer be needed (due to the lack of data and an harmonized methodology, the estimate of a CIF to FOB adjustment is often based on assumptions that reduce the accuracy of the estimates); (iii) the reduction of asymmetries; (iv) the possibility of using corporations data available using invoice values; and (v) the use of a valuation system more suitable as global production arrangements become more relevant.

8. Against the use of invoice values, the respondents referred to complications in recording goods and services, difficulties with calculation of deflators, break in time series that may hinder analysis, possibility of under invoicing as well as costs of implementation. The reasons put forward include (i) the loss of a clear definition between goods and services, that is especially important in economies where the costs of transport services are relevant; (ii) the impact in the accuracy of deflators and volume measures in national accounts, as the goods would include a higher share of freight and insurance services; (iii) a less clear dynamic of trade flows, due to the diversity of delivery terms to be considered; (iv) the introduction of breaks in series given that invoice data are possibly not available for long time periods; (v) the need for consistency in the recommendations of the statistics manuals, including International Merchandise Trade Statistics (IMTS); (vi) the concerns with under invoicing to avoid taxes; and (vii) the concerns with data availability and accuracy, as well as with the resources that would be needed to implement this change.

9. The survey responses provided an indication on the necessary steps for economies to adopt the use of invoice (transaction) values for the valuation of imports and exports of goods and to estimate cross-border freight and insurance services. While some respondents reported that no changes were needed, especially in the case of cross-border freight and insurance services, the steps mentioned by more respondents include the need to: (i) assess customs systems and documents; (ii) design or implement new data sources; (iii) adapt or introduce new surveys, increasing the respondent burden; (iv) monitor the accuracy of invoice values; (v) adapt IT systems and databases; (vi) review legal aspects; and (vii) train staff.
10. **The survey revealed the extent to which invoice (transaction) values were available from custom records or other sources** (see Graphs 4.1 and 4.2 in Appendix). Answers concerning balance of payments reveal that invoice values are fully available for imports for 51 economies and for exports for 60 economies (out of 107 survey respondents), and partially available for 27 and 25 economies, respectively, and available from other sources for 6 economies for both imports and exports. Answers concerning national accounts reveal that invoice values are fully available for imports for 39 economies and for exports for 46 economies (out of 99 survey respondents), and partially available for 27 and 25 economies, respectively, and available from other sources for seven economies and for exports for five economies. Inconsistencies between the answers provided for balance of payments and national accounts for the same economy are currently being further clarified with the respondents.

11. **While over 70 percent indicated that invoice values are either fully or partially available only around half of the respondents reported that their agency has access to the available information on invoice (transaction) values for balance of payments or national accounts compilation** (see Graph 5 in Appendix). Respondents from 56 economies reported having access to invoice values for balance of payments compilation (in a total of 107 answers) and respondents from 47 economies reported having access for national accounts compilation (in a total of 99 answers). A higher number of respondents considered the invoice (transaction) value data available in the economy to be fairly accurate (see Graph 6 in Appendix), although this question presented a lower number of answers.

**Current Compilation Process**

12. **The main data sources used to estimate imports and exports of goods are customs records and IMTS based on customs records, as reported by respondents** (see Graph 7 in Appendix 1). For balance of payments, the answers for 58 economies refer to customs records and for 54 economies refer to IMTS based on customs records as the main data source. In the case of national accounts, around 49 economies refer customs records and 53 economies refer IMTS based on customs records as the main data source. In the case of cross-border freight and insurance services estimates in balance of payments, the main data source most referred by respondents was international trade in services surveys (or other business surveys), followed by customs records (see Graph 8 in Appendix).

13. **Most respondent economies estimate a FOB valuation adjustment of imports** (see Graph 9 on Appendix). Concerning balance of payments, respondents from 82 economies (in a total of 107 answers) revealed that a FOB valuation adjustment, while for national accounts this number was 83 (in a total of 99 answers). The question on the process used to estimate the FOB valuation adjustment of imports reveals that a high share of the respondent economies uses fixed ratios from previous periods or CIF and FOB data available from customs records (see Graph 10 on Appendix). Economies reported very diverse estimates of the CIF to FOB adjustment of imports, ranging from around zero to 16 percent (excluding outliers). The average of the estimated adjustment reported was around six percent (see Graph 11 on Appendix).

**Next Steps**

14. **The work on analyzing the survey results is still on progress.** Current actions include the clarification of duplicate or inconsistent answers and other forms of presentation of results. The second stage of testing will last through August 2021 and will investigate the different terms of delivery and quality of the data to determine a quantitative impact of adopting invoice (transaction) values for the
valuation of imports and exports of goods in national accounts and balance of payments estimates. On the first stage, 43 economies with an adequate geographical representation, have volunteered for a more detailed testing. The first results of the second testing stage are expected to be available in September 2021. The GN will be updated with the results from both stages later in 2021.
Appendix. Graphs on GN G.1 First Stage Survey Results

Graph 1. Survey Stage 2: Number of Economies that Agree to be Contacted, by Region

Graph 2. Complete Answers Received, by Region
(Number of Economies)
Graph 3. Support the Use of Invoice Values on a Conceptual Level, by Statistical Domain (Number of Economies)

Graph 4. Availability of Actual Invoice (Transaction) Values in the Economy (from Customs Documents or Other Data Sources), by Statistical Domain

Graph 4.1 Exports of Goods (Number of Economies)
Graph 4.2 Imports of Goods
(Number of Economies)

Graph 5. Access in Practice to Invoice (Transaction) Values for Balance of Payments or National Accounts Compilation by the Compiling Agency, by Statistical Domain
(Number of Economies)
Graph 6. Accuracy of Invoice (Transaction) Values Available in the Economy, by Statistical Domain (Number of Economies)

Graph 7. Main Data Source Used to Estimate Imports and Exports of Goods, by Statistical Domain (Number of Economies)
Graph 8. Main Data Source Used to Estimate Cross-Border Freight and Insurance Services in Balance of Payments
(Number of Economies)

<table>
<thead>
<tr>
<th></th>
<th>Freight</th>
<th>Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Int. Trade in Services Survey (or other)</td>
<td>41</td>
<td>39</td>
</tr>
<tr>
<td>Customs records</td>
<td>33</td>
<td>36</td>
</tr>
<tr>
<td>IMTS based on Customs records</td>
<td>25</td>
<td>11</td>
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Graph 9. Estimation of a FOB Valuation Adjustment of Imports in Balance of Payments or National Accounts, by Statistical Domain
(Number of Economies)

<table>
<thead>
<tr>
<th></th>
<th>BP</th>
<th>NA</th>
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<tbody>
<tr>
<td>Yes</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>No (Imports are available CIF and FOB)</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>No (different reason)</td>
<td>82</td>
<td>83</td>
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</table>
Graph 10. Process Used to Estimate the FOB Valuation Adjustment of Imports in Balance of Payments or National Accounts, by Statistical Domain (Number of Economies)

- Use of fixed ratios from previous periods
- Based on survey data
- Based on CIF and FOB data available from custom records

Graph 11. Size of the FOB Valuation Adjustment, by Economy (Percent of Total Imports of Goods FOB, the Vertical Bars Represent Economies, and the Horizontal Line Represents the Average of the Reported Adjustments)