



**Asymmetries in international
merchandise trade statistics:
A case study of selected
countries in Asia and the
Pacific**



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Asymmetries in international merchandise trade statistics: A case study of selected countries in Asia and the Pacific

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Abstract

This working paper introduces the concept of bilateral asymmetries in international merchandise trade statistics (IMTS), i.e. the discrepancies that can be seen in reported bilateral trade flows between trading partners. Such discrepancies mean that the value of exports reported by one country does not equal the value of imports reported by its partner, also called mirror data. These discrepancies impact bilateral trade balances and other economic variables reliant upon trade balance and thus are relevant from trade and economic policymaking. Asymmetries in bilateral trade statistics are a serious concern for the quality of statistics, especially from the perspective of consistency. They may also lead to misconceptions about trade balances among policy-makers, businesses and the general public. This paper provides an overview of the main concepts in IMTS and defines asymmetries in bilateral trade statistics. It outlines how to measure the discrepancies in bilateral trade statistics and provides a case study for 10 countries in Asia and the Pacific. The paper also provides an overview of the sources of bilateral trade asymmetries and suggests some basic actions that can be taken to improve the quality of IMTS and reduce bilateral asymmetries, or at least, allow researchers to balance bilateral trade flows for analytical purposes.

Keywords: international merchandise trade statistics, bilateral trade asymmetries, trade balance, valuation, discrepancies in mirror trade data, Asia and the Pacific.

JEL classification: C82, F13, F14, F15, F23, O19, O24

Contents

Abstract.....	i
1 Introduction.....	1
2 Definition of basic concepts	1
2.1 International Merchandise Trade Statistics (IMTS).....	1
2.2 Bilateral trade statistics and asymmetries	2
2.3 Efforts to overcome the issues with bilateral trade asymmetries	3
3 Measurement of the degree of trade asymmetry.....	4
3.1 Bilateral trade discrepancy index	4
3.2 Interpretation of the discrepancy index.....	5
3.3 Presentation of data.....	6
4 Case studies	7
4.1 Regional case study.....	7
4.2 Case studies of selected countries.....	9
5 Sources of asymmetries in merchandise trade statistics	11
5.1 Differences in valuations of imports and exports	11
5.2 Differences in attribution of trade partners	12
5.3 Differences in recording re-exports	12
5.4 Other sources of discrepancies.....	13
6 Conclusion.....	14
References	17
Annex	19

Tables of Figures

Figure 1: Bilateral trade discrepancy indexes for Cambodia and its partners, 2013	9
Figure 2: Bilateral trade discrepancy indexes for Philippines and its partners, 2013	10
Figure 3: Bilateral trade discrepancy indexes for Singapore and its partners, 2013	11

Table of Tables

Table 1: Possible interpretations of the bilateral trade discrepancy indexes for Country A	6
Table 2: Suggested presentation of bilateral trade statistics and associated discrepancies.....	7
Table 3: Bilateral trade asymmetries for the selected countries, 2013	19

1 Introduction

International trade is regarded as a major driver of economic growth and its importance is recognized in many goals and targets of the 2030 Agenda for Sustainable Development.¹ Statistics are crucial to allow for evidence-based formulation and evaluation of policies, which means also that sustainable development is impossible without good data.² International trade statistics form part of this crucial set of data to inform policy-makers in their policy decisions and trade negotiations. Data to measure development challenges of countries need to be available. But, that is not enough, for data to be useful they need to satisfy certain quality standards, including being consistent between countries and over time.

International trade statistics suffer consistency challenges. Reported trade flows are not consistent between countries, creating discrepancies in international trade statistics, which can result in ill-informed policy. This paper discusses these discrepancies – called asymmetries in bilateral trade statistics, defines their measurement and illustrates their importance for the countries in Asia-Pacific. It also outlines the reasons for existence of the asymmetries and provides ideas for a further research agenda.

2 Definition of basic concepts

Trade statistics have a history dating back to the League of Nations in the 1920s, when the first international regulations were developed. These regulations have evolved substantially since then, most recently due to the increased globalization of production and distribution processes and the resulting increase in demand for more timely and accurate data on trade.

2.1 International Merchandise Trade Statistics (IMTS)

International merchandise trade statistics (IMTS) are concerned with data on physical movements of goods between countries, which are defined by the “International Merchandise Trade Statistics: Concepts and Definitions 2010” (UNDESA, 2011), referred to as the IMTS Manual in this paper. The Manual provides the basic framework of definitions and guidance to produce merchandise trade statistics,³ and acknowledges that IMTS can be both the merchandise trade statistics compiled by the national agencies, as well as the consolidated and standardized trade statistics presented by international agencies. It also specifies that the terms ‘goods,’ ‘merchandise’ and ‘commodities’ can be used interchangeably for the purpose of trade statistics.

IMTS has traditionally measured the physical movements of goods across international borders or through special economic territories. The recording of IMTS depends on national legislation, mainly the customs regulations. As a result, customs records are traditionally the

¹ See A/RES/70/1.

² For a more detailed discussion see SDG 17 in Statistical Yearbook for Asia and the Pacific 2015 (UNESCAP, 2016).

³ For detailed definitions see IMTS Manual (UNDESA, 2011) and IMTS Compilers Manual (UNDESA, 2013).

main source of IMTS for both imports and exports. However, some countries with more advanced statistical systems also use other data sources, such as enterprise surveys and administrative records associated with taxation. This dissimilarity in data sources could lead to some discrepancies in definition of trade, trade partners and in the valuation of goods traded between countries concerned.

The IMTS Manual establishes the important links between trade statistics and the broader frameworks governing economic statistics, such as the 2008 SNA and the BPM6, as well as the trade in services statistics, defined by the “Manual on Statistics of International Trade in Services 2010.”⁴ Trade in services is increasing in amount and importance; however, it is also much more challenging to measure than trade in merchandise. This paper deals with trade in merchandise only.

It is important to note that some of the conceptual frameworks outlined in the 2008 SNA and the BPM6 differ with the concepts stipulated by the IMTS Manual.⁵ The requirements for IMTS are to reflect the physical movement of goods across country borders, whereas national accounts and balance of payments compilation is more concerned with the change of ownership⁶ of those goods. The former will include goods that enter and leave the territory of one country, but the latter will only include transactions that involve change of ownership between residents and non-residents.

Hence, trade statistics compiled on the basis of IMTS Manual will need to be adjusted to satisfy the needs of balance of payments compilation. One of the notable differences is in respect of goods for processing. In IMTS goods sent for processing to a different country are recorded irrespectively of the change of ownership. Whereas, goods that are sent abroad for processing without change of ownership and returned back after processing, are not recorded in the balance of payments.

2.2 Bilateral trade statistics and asymmetries

Bilateral trade statistics show bilateral merchandise flows between two countries, where one of the countries is the exporter of goods to the other, which is the importer of the goods. For each transaction there is a ‘reporting country’ – the country that reports the merchandise flow (can be either export or import), and a ‘partner country’ – the trading partner of the reporting country. As a result, a trade flow reported by country A can take two forms: (1) export of goods from country A to country B; or (2) import of goods to country A from country

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