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# Mirror Study of Vietnam's International Merchandise Trade: Findings and **Implications on Cross-Border Trade** Administration

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Abstract: This paper applies a variety of "mirror statistics" initiatives, practices and experiences of many internationals organizations like United Nations, World Trade Organization, World Customs Organization, and national customs administrations in the world as well as cross-border trade-related findings from mirror analyses of Vietnam in 2010-2016. This paper is intended to answer three main questions: (1) what are the substantial reasons of discrepancies in cross-border trade data from mirror analyses of Vietnam in 2010-2016? (2) How to harmonize and standardize "mirror statistics" in cross-border trade administration of Vietnam? And (3) How to produce an effective model of "mirror statistics" analysis for cross -border trade administration of Vietnam in future?

Keywords: Mirror statistics, international trade, cross-border trade, Vietnam.

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#### CHAPTER 1: INTRODUCTION

#### 1. Background

Globally, "Mirror Statistics" has been used as trade analysing tool in assessing the quality of cross-border trade data and enforcement capacity of one country with his counter partners in the world. In reality, disparities from mirror statistics comparison resulted in numerous modes of trade statistics compilation and practices in connection to terms and conditions of crossborder trade transactions such as commodity classification, origin, value of exported and imported goods, compiling time, foreign trade exchange rates, term of delivery, etc. Further, mirror statistics is becoming a material tool for trade policy making and external economics governance of any country in the globe. Theoretically, mirror analyses indicate trade statistical faults and weak enforcement capacity of national customs authorities who are known as "border gate keeper" in cross-border trade administration like mis-compilation and misclassification, commercial frauds, smuggles and illicit trade. This is more challenging in the context of trade liberalization and globalization due to highly increasing cross-border trade flows with a huge variety of country partners, commodities; modes of transactions and transportation; supply chains stakeholders; laws and regulations, technologies and so forth. Significantly, we have seen numerous informal discrepancies in cross-border trade data of Vietnam and China which are still in questions like a peak of nearly 30 billion US dollars in mirror statistics comparison in 2014. In this year, the reported bilateral trade total value and trade balance were 83,636 billion and 43,830 billion US dollars by the National Bureau Statistics of China were much higher than 58,773 billion and 28,963 billion US dollars of the General Statistics Office of Vietnam (Source: the National Bureau Statistics of China, 2015 and the General Statistics Office of Vietnam, 2015). Furthermore, this also occurs in a wide range of trading commodities and industries as well as counter countries due to worldwide growing trade of Vietnam in the era of trade liberalization (Source : General Department of Vietnam Customs, 2015).

Certainly, mirror statistics or mirror comparison of trade statistics, that is, the comparison of Vietnam cross-border trade data against his partner country data, is a useful method to identify the above matters from aspects of border agency cooperation at international and national levels. It will shed the light for a statistical methodology and practices of applying multiple mirror technique which will conduct cross check of trade statistical data of Vietnam and trade partners as a pair of export-import transaction. This research fundamentally applies

a variety of "mirror statistics" initiatives, practices and experiences of many internationals organizations like United Nations, World Trade Organization, World Customs Organization, and national customs administrations in the world as well as cross-border trade-related findings from mirror analyses of Vietnam in 2010-2016.

The research objectives of this paper are:

- Point-out the rationale of mirror analysis in cross-border trade administration of Vietnam in the context of world widely increasing trade flows.
- Build-up a standard process and technical practices for applying "mirror statistics analysis" in cross- border trade administration as a useful tool to improve quality of trade data as well as enforcement capacity of Vietnam Customs in next years.

#### 2. Research questions

Three main questions will be answered in this study, which are:

(1) What are the main reasons of discrepancies in cross-border trade data from mirror analyses of Vietnam in 2010-2016?

(2) How to manage "mirror statistics" for cross-border trade administration in Vietnam?

(3) How to produce a protocol of "mirror statistics" analysis for cross -border trade administration of Vietnam in future?

### 3. Research Methodology

This causal comparative study finds major causes of discrepancies in bilateral trade statistics of Vietnam and his partners in globe. Especially, further focus on the performance of cross-border trade management in Vietnam that mainly facilitates commercial frauds and smuggles.

In this study, the applied research method with basic mean of statistics technique aims to explain the mirror statistics, causal factors in trade statistics disparity in bilateral trade of Vietnam. That is based on the hypothesis that mirror statistics indicate the appropriate ratio of CIF imported value and FOB exported value in reasonable range from 1.05 to 1.1. This ratio may be differentiated by trade costs and international transport routes between Vietnam and his partners.

Information and data collected and analysed from cross-border trade statistical database of General Department of Vietnam Customs (GDVC) and foreign customs administrations in the world. Also, this desk research highlighted significant disparities between data taken from our Vietnam Automated Cargo Clearance System/Vietnam Customs Intelligent Database System The study had carried out many comprehensive interviews with economists and experts on international trade, socio-economic statistics, and cross-border trade administration who shared with the writers a lot of valuable information, practices and policy analyses about cross-border trade statistics and management in Vietnam.

In this research, very basic methods of statistics analysis and correlation test are used to indicate relations among causal factors in bilateral trade statistics discrepancies and cross-border trade management of Vietnam.

### 4. Structure

Chapter 1: Introduction

Chapter 2: Theoretical Literature review

Chapter 3: Overview of the Vietnam's international merchandise trade and cross-border trade administration

Chapter 4: Mirror study of the Vietnam's international merchandise trade

Chapter 5: Case analysis about discrepancy in timber trade between Vietnam and China

Chapter 6: Conclusion and Recommendations

### CHAPTER II: THEORETICAL LITERATURE REVIEW

#### 2.1. International Merchandise Trade Statistics Methods

The "International Merchandise Trade Statistics: Concepts and Definitions 2010" (UNDESA, 2011) provides the basic framework of definitions and guidance to produce merchandise trade statistics. This is concerned with data on physical movements of goods across international borders or through special economic territories.

Every country records the IMTS both imports and exports according to his national legislation and customs regulations. The IMTS traditionally is compiled from customs records for both exports and imports which mainly contribute to trade statistics as well as governing economics statistics.

The "International Merchandise Trade Statistics: Concepts and Definitions 2010" (UNDESA, 2011) had provided a very comprehensive overview of cross-border trade statistics methodologies. On the aspects of international trade transactions, this varies cross-border trade compilations of substantial factors like countries, commodities classification and trade value in exports and imports. Commonly, the last destination and country of origin are compiled as the export and import partner in bilateral trade of the reporting country. In connection, FOB and CIF values are used for trade value in exportation from and importation into the reporting country respectively.

Other tools to concern with international merchandise statistics in the world economy are 2008 SNA and BPM6 compiling national accounts and balance of payments to see the change of ownership of the traded goods between countries.

### 2.2. Bilateral merchandise trade statistics and ratio of CIF/FOB

Bilateral merchandise trade statistics is concerned with records from both countries but there is only one flow of trade. In principles, the value of exports and imports is at FOB and CIF prices respectively, and the CIF-FOB discrepancy reflects the shipping costs from the export country to his import partners.

The CIF-FOB differences because exports are mostly reported on a free on board (FOB) basis, while imports are reported on a costs, insurance, and freight (CIF) basis. The CIF–FOB differences may result in a higher import value than export value. The International Monetary Fund (IMF) estimates that, on average, the CIF price is larger than the FOB price by 10%. However, the CIF–FOB ratio becomes larger as the distance between trade partners increases and the weight of the traded goods becomes heavier (Pomfret and Sourdin, 2009). Similarly, a

research about CIF/FOB ratios of CEPII1 covering more than 200 countries and 5,000 products between 1994-2007, reveals that there is a stable gap with the COMTRADE exports and imports database of 10% in terms of value of trade for exports, and of 5% for imports. Normally, it means that the CIF/FOB ratios are in range from 1.05 to 1.1 (Guillaume Gaulier, Soledad Zignago, 2010).

Gehlhar, 1996 indicated that the ratio of CIF/FOB in bilateral trade substantially depends on sectors of goods as well as various specific goods. Specially, the manufactures with wide range of goods has a considerable difference between the high unit value such as precious stones, metals, and jewelry and products with low unit value such as toys and sporting goods.

#### 2.3. Mirrors study and cross-border trade administration

Shintaro Hamanaka, 2013 explained the general view on the accuracy of data collected by customs offices that import data are more reliable than export data because governments are more serious about recording imported goods for purposes of tariff revenue collection, taxes, and other regulatory controls. This also indicated that discrepancies from mirror statistics comparison materially caused by various trade data mis compilations and misclassifications like transaction directions, commodity codes, origin of imports and under-reported value of imported goods.

Various factors can lead to discrepancies in mirror statistics (Yeats 1995, Makhoul and Otterstrom 1998, Ferrantino and Wang 2007, Eurostat 2009). These studies mainly focus on not only misclassifications associated with commodities and the direction of trade, but also statistical practices and performance of customs offices (of either the exporting or importing country). A short description of these findings is presented below:

First, in term of international trade transaction which the goods transition starts from the exporting country to the last destination of importing country, costs of importation include not only value of the trading goods but also freight, insurance and other cross-border charges. This leads to the discrepancy among the trade statistics of one reporting country with his partners. That explains value of the ratio CIF/FOB in range from 1.05 to 1.1 as mentioned above.

Second, technically exchange rate used for trade statistics compilation is periodical average value which differs to the rates at the time of trading and reporting in both reporting country and his partners. So it contributes to the considerable disparity in trade statistics of two trading partners whose bilateral trade is substantially high.

<sup>&</sup>lt;sup>1</sup> CEPII: Center d'Etudes Prospectives et d' informations Internationales

Third, difference in timing is considered as a cause of discrepancy in some instances when the transaction occurs in different periods of statistics compilation in two related countries.

Fourth, in term of international transportation for re-exports and transshipment, the information about the country of goods origin and last destination are mis-reported as well as compiled in customs database of the trading countries. This leads to significant gap in bilateral trade statistics because there are numerous rules of origin and destination of the traded goods. (Shintaro Hamanaka, 2013).

It is much more complicated when a country operates international trade transactions with members of an economic integrated region like EU. For example, suppose that goods originating from Vietnam pass through Rottermdam port of Netherlands bbefore reaching the final destination, Germany. The origin country (Vietnam) may record goods as exports to either Netherland or Germany. Germany may record the goods as imports from either Netherlands or Vietnam. And the transit country (Netherland) may record the goods as imports from Vietnam and exports to Germany, re-exports to Germany, or perhaps the transit country does not record anything at all. Again, even if there is a discrepancy, it is difficult to determine which country's customs office (Vietnam, Netherland or Germany) has the correct record. And "Rottermdam Effect" is used to illustrate trade map and statistics scenarios among the relevant countriesas below.

In some situations, the goods were already recorded as exports but returned to the exporting country for any reason will not be recorded by the intended importing country but will continue to be in the record of the exporting country.



Figure 2.1. "Rottermdam effect" in international merchandise statistics

Fifth, Hamanaka, 2013 analyzed a variety of commercial frauds and mis-declarations about value of the traded, origin, transportation and transaction information in order to take advantage of duty free; duty reductions or the duty drawback scheme. For instance, almost countries apply Article 7 in the WTO's valuation agreement for customs value declaration and trade statistics but traders usually trade at incorrect valuation for aims of unfair market competition and duty exemption.

Nowadays, " mirror statistics" is widely developed in many countries to enhance trade data quality as well as cross-border administration by taking advantages of data-driven border control methods, advanced informatics technologies and international cooperation between customs administration in the world. This strongly facilitated and promoted by many international organizations like World Bank, IMF, WTO and WCO (Roger-Claver Victorien Gnogoue, 2017).

# CHAPTER 3: OVERVIEW OF THE VIETNAM'S INTERNATIONAL MERCHANDISE TRADE AND CROSS-BORDER TRADE ADMINISTRATION

# 3.1. Overview of the Vietnam's international merchandise trade

In the global slowdown of the world economy, Vietnam was facing many difficulties and challenges to achieve the growth of GDP at 6.21% and international trade in merchandize goods of nearly \$310 billion US dollars in 2016. It was a very special year of Vietnam's international merchandize trade with trade surplus of \$1.78 billion in comparing to \$3.54 billion in deficit of 2015 (General Department of Vietnam Customs, 2016)



Figure 3.1: Trade in goods of Vietnam from 2006 to 2016

Source: General Department of Vietnam Customs, 2016

Vietnam significantly varies its major exports commodities with high comparative advantages in the world market like textile and garments; computers, fishery products; foot-wears, etc. Vietnam is also an important importing partner of many leading economies in the world and region such as China, EU, USA and ASEAN.

Table 3.1: Top 10 major export commodities of Vietnam in 2016

Unit: Billion US dollars

	2015		2016			
	Value	Share	Value	Share		
Commodities	(bil.\$)	%	(bil.\$)	%	Commodities	Group

Telephones, mobile					Telephones, mobile	
phones and parts	30.17	18.6	34.32	19.4	phones and parts	Ι
thereof					thereof	
Textiles and garments	22.80	14.1	23.82	13.5	Textiles and garments	II
Computers, electrical products, spare-parts and components thereof	15.61	9.6	18.96	10.7	Computers,electricalproducts,spare-partsandcomponentsthereof	ш
Foot-wears	12.01	7.4	13.00	7.4	Foot-wears	IV
Machine, equipment, tools and instruments	8.16	5.0	10.11	5.7	Machine, equipment, tools and instruments	V
Fishery products	6.57	4.1	7.05	4.0	Fishery products	VI
Wood and wooden products	6.89	4.3	6.96	3.9	Wood and wooden products	VII
Means of transportation,					Means of transportation,	
parts and accessories	5.84	3.6	6.06	3.4	parts and accessories	VIII
thereof					thereof	
Coffee	2.67	1.6	3.33	1.9	Coffee	IX
Handbags, purses, suit-					Handbags, purses, suit-	
case, headgear and	2.87	1.8	3.17	1.8	case, headgear and	Χ
umbrella					umbrella	
Others	48.42	29.9	49.76	28.2	Others	
	162.02	100.0	176.54	100.0		





# Figure 3.2: Top 10 major export commodities of Vietnam in 2016

Source: General Department of Vietnam Customs, 2016

To be known as an emerging economy and golden young population, Vietnam is a flourish import destinations in the world trade. For many years, trade deficits have been big concerns of the Vietnam Government, and it was very significant change of around 2 billion US dollars in trade surplus with total import turnover of 175 billion US dollars in 2016.

Table 3.2: Top 10 main import	ts commodities of Vietnam in 2016
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SEO.		Value	Share
SEQ	Commodifies	(billion \$US)	(%)
Ι	Machine, equipment, tools and	20	16.2
	instruments	29	10.3

Π	Computers, electrical products, spare- parts and components thereof	28	16.0
III	Telephones, mobile phones and parts thereof	11	6.0
IV	Fabrics	10	6.0
V	Iron and steel	8	4.6
VI	Plastics	6	3.6
VII	Petroleum products	5	2.9
VIII	Textile, leather and foot-wear materials and auxiliaries	5	2.9
IX	Other base metals	5	2.8
Х	Iron and steel products	4	2.5
XI	Others	64	36.4
	Total import value	175	100.0







# Source: General Department of Vietnam Customs, 2016

In general, Vietnam's trade in goods have increased around 4 times from 85 billion US dollars when Vietnam officially became WTO member in 2007. Numerous markets in the world have reached trade records over 01 billion US dollars including 28 exports partners and 22 imports partners. In 2016, China continually is the biggest supplier with total imports turnover of about 50 billion US\$ which accounted 28.2% the total imports of Vietnam and the highest share for 10 years. However, United State of America (USA) has been the biggest export market of Vietnam that reached over 38 billion US\$ and 21.8% of the total exports of Vietnam in 2016.

Nations/ region	Exports turnov	/er	Imports turnov	Total turnover	
	Value (million US\$)	Shareintotal exports(%)	Value (million US\$)	Shareintotal imports(%)	(imports and exports )
China	21,960	12.4	50,018	28.6	71,978
United State of America	38,450	21.8	8,696	5.0	47,146
Republic of Korea	11,406	6.5	32,161	18.4	43,567
Japan	14,671	8.3	15,062	8.6	29,734

 Table 3.3. Main trade partners of Vietnam in 2016

Taiwan	2,272	1.3	11,234	6.4	13,506
Thailand	3,691	2.1	8,849	5.1	12,540
Germany	5,961	3.4	2,847	1.6	8,807
Malaysia	3,342	1.9	5,171	3.0	8,513
Hong Kong	6,088	3.5	1,497	0.9	7,585
Singapore	2,420	1.4	4,744	2.7	7,164

Source: General Department of Vietnam Customs, 2017

Contributing to trade surplus of nearly 1.78 billion US\$ in 2016 as well as trade performance from "Doimoi", the FDI sector is leading economic stakeholders in industrial production and exports performance of Vietnam. In 2016, this sector gained 123.81 billion US\$ and 8.9% of trade value and export growth respectively in comparing to 4.3% of the domestic ones. In future, when a wide range of new FTAs comes into force it is promising to achieve much higher growth in investment and international trade of Vietnam.

# 3.2. Cross-border trade administration in the context of trade liberalization Overview about Vietnam customs

#### Overview about the Vietnam Customs

On September 10, 1945, according to the Ordinance No. 27-SL of the President of Democratic Republic Interim Government of Vietnam, the Interior Minister Vo Nguyen Giap, on behalf of the Government, signed to establish the "Department of tariffs and indirect taxes" With the purpose of establishing the sovereignty of Vietnam's tariffs independently, ensuring the control of imported and exported goods and maintaining revenue from this activity.

Vietnam Customs has constantly constructed, completed and improved the legal basis the State management relevant to the practice of Vietnam. Vietnam customs experienced a long development progress. In the beginning, Vietnam temporarily used the professional regulation of tariffs of the colonial government, until Customs Regulations and Customs Ordinance were developed and issued. The current 2014 Vietnam Law Customs came into effect since January 01, 2015. On September 04, 2002, due to the Decision no. 113/2002/QD-TTg of the Prime Minister, Customs Department belongs to the Ministry of Finance.

#### Functions and missions of Vietnam customs

Vietnam customs has function of State management over customs for import and export operations, transit into Vietnam, combating smuggling or illegal transportation of goods, foreign exchange or Vietnam cash through borders. Stipulating in the Vietnam Customs Law 2014, the missions of Vietnam customs are specified as follows:

- Effectively manage import and export activities and international exchanges, facilitating trade and production development.
- $\checkmark$  Protect and create conditions favorable for the development of the national economy.
- $\checkmark$  Guarantee income for the budget.
- ✓ Perform anti-smuggling, prevent trade fraud, and protect the interests of consumers.
- $\checkmark$  Contribute to protect economic sovereignty, national security and social security.
- $\checkmark$  Serve socio-economic management

#### Progress of innovation and modernization of Vietnam customs

With the aim to facilitate the development of import and export, foreign investment, tourism development and international trade, ensure management, improve the quality and effectiveness. Vietnam Customs has always followed their slogan which has been laid out: "Professionalism, Transparency, and Efficiency".

Vietnam customs has taken part in the international integration. In the period of 2008-2010, Vietnam Customs carried out the reform, development and modernization in the context Vietnam became an official member of WTO. The bilateral and multilateral relations, wide and deep and comprehensive integration in international economy forums make import and export of goods, means of transportation and immigrants increase quickly. Domestic production developing at high speed still needs to import equipment, machines and materials. The export turnover continues growing up. Foreign direct investment into Vietnam also goes up at higher speed, especially when Vietnam became WTO member and joined free trade zones.

Recently, the reform of administrative procedures in the management of state operations including customs reform was launched and obtained positive results. Customs procedure reform for the past years has brought positive effects to the economy, contributing to the reduction of procedures cost, the increase in business competitiveness and attracting foreign investment into Vietnam.

Being an official member of WCO from 1 July 1993, Vietnam step by step has followed WCO standards and initiatives. Vietnam customs have actively participated in forums and workshops, and implemented guidelines and policies of WCO. Vietnam customs together with customs of other countries set the goal of facilitating trade. Lastly, the Vietnam Customs are acting as the substantial governmental agency in implementation of the Trade Facilitation Agreement (TFA) of WTO as well as many Vietnam-participated FTAs in the world. The

Vietnam Customs is making the best effort to cut time and cost of exports and imports in Vietnam to average level of the ASEAN.

	Rank (/189)	Doc. for export (pcs)	Time to export (days)	Cost to exports (USD)	Doc. for import (pc)	Time to import (days)	Cost to import (USD)
Brunei	46	5	19	705	5	15	770
Cambodia	124	8	22	795	9	24	930
Indonesia	62	4	17	571	8	26	648
Laos	156	10	23	1,950	10	26	1910
Malaysia	11	4	11	525	4	8	560
Myanmar	103	8	20	620	8	22	610
Philippine	65	6	15	755	7	15	915
Thailand	36	5	14	595	5	11	760
Singapore	1	3	6	460	3	4	440
Vietnam	75	5	21	610	8	21	600

Table 3.4: Ease of trading cross border of the ASEAN members in 2014

Source: World Bank, 2015.

Contributing to the Vietnam's economic development and international merchandise trade growth, the Vietnam Customs has achieved many milestones in two pillars of international trade controls and facilitation. A brief statistics about the very successful performance of the Vietnam Customs is illustrated as follows

Customs Declaration Forms (thousand)					Companies	
Exports	Imports	Total	Annual Change (%)	Year	Quantity (thousand)	Annual Change (%)
1,125	1,195	2,320	19.6	2006	28.39	15.3
1,377	1,494	2,871	23.8	2007	33.29	17.3
1,560	1,723	3,282	14.3	2008	37.84	13.7
1,620	1,892	3,512	7.0	2009	41.34	9.2
2,007	2,157	4,165	18.6	2010	44.5	7.7
2,253	2,380	4,633	11.2	2011	46.82	5.2
2,532	2,655	5,187	12.0	2012	48.71	4
2,880	3,041	5,921	14.2	2013	52.17	7.1
3,599	3,629	7,228	22.1	2014	55.63	6.6
4,160	4,350	8,510	17.7	2015	63.4	14
4,757	5,220	9,977	17.2	2016	73.13	15.4

Table 3.5. Number of customs declaration form and enterprises

Source: GDVC, 2016



On the aspect of cross-border trade control, the Vietnam Customs is facing to various risks and challenges to fulfil his obligation in the context of rapidly increasing trade liberalization and globalization. Geographical position and characteristics with a wide range of border gates connecting with the outside world, especially Vietnam is the neighbour of China which is the most populated country in the world with very huge market of variety of commodities. That is why Vietnam is known as the busiest transiting point in many logistics flows of illegal goods to the destination of China.

Vietnam is a transitional economy with many remarkable achievements in socio-economic development and innovation. This is a merging market with mainly young population and becoming a potential destination of many illegal trade transactions, commercial frauds and smuggles. The top six commercial frauds and smuggles in Vietnam (General Department of Vietnam Customs) have been presented below:

- ✓ illegal trafficking in narcotics (illegal drugs);
- ✓ wildlife and endangered animals;
- ✓ counterfeits and piracy;
- $\checkmark$  timber and wooden products;
- $\checkmark$  waste; and
- $\checkmark$  indirect tax evasion

In Vietnam, illegal trade occurs simultaneously in different modes of transport such as sea and inland waterways; road and air. Firstly, road transport is the most common methods of smuggling and trafficking illegal goods between the neighbouring countries and Vietnam, especially with China, Laos and Cambodia. Secondly, air transport and mail and express mail are commonly used for delivering the prohibited commodities which are high value and concealed in light and small packages. Third, sea transport and inland waterways is usually used to carry a big volume and scale of illegal goods with various methods of sophisticated concealment. Recently, trafficking in waste and prohibited second-hand (dual-use) goods according to Vietnam regulations is much more serious by this mode of transport from EU to Vietnam. There were so many containers of dangerous chemical and industrial waste arrived Vietnam' seaports but no import customs declaration and receipt that are causing a lot damage to human health (of authorized staffs, inspecting customs officers, port workers and so forth) and local environment. There is an estimated quantity of 5,411 containers of waste, rust that are stuck in sea ports such as 4,818 containers in Haiphong port; 459 containers in Hochiminh port, 83 ones in Baria-Vungtau port, 34 ones in Quangninh port and 6 ones in Danang port. These were declared as reused rubber tires and general goods imported for re – exporting (Vietnam General Department of Customs).

Finally, illegal trafficking displacing to the non-official points - through forests and fields, over rivers, over mountains is very difficult to control in Vietnam because of geographical locations as well as low livelihood of the poor people who are living in the remote mountainous areas alongside borderlines, especially between Vietnam and China in the North and Vietnam and Cambodia in the South.

Table 3.5: Rep	ort on law enforce	ement of the Viet	nam Customs
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(Arrests and seizures of commercial frauds and smuggles by the Vietnam Customs)

	Year	2015		2016	
		Case	Value	Case	Value
			(million		(million
			VND)		VND)
Category					
	Smuggle	1.087	236.775	985	321.659
	Narcotics and heroin	186		143	

	Administrative	17.716	188.697	14.290	86.871
	Offence				
	Counterfeits	14	556	20	3.407
	and fakes				
	Others	732	36.443	51	4.560
Modus	Road	7.221	204.843	5.970	118.684
Operandi	transports				
	Air transport	1.451	20.732	926	34.716
	Sea and Inland	11.063	236.896	8.593	263.097
	waterway				

Source: GVDC, 2017

Last but not least, globalization and trade liberalization with strong commitments of trade facilitation and market openness also cause many chances to increase both legal and illegal trade in Vietnam . Widely spreading increases in internet applications but not having adequate IT management mechanism leading to promote illegal e-commerce, transnational crime networks, illegally exploitation as well as new methods of money transactions which are used for illegal trade payment. Differences between Vietnam and other countries about laws, rules and regulations on prosecution of seizures and arrests so sometimes it is not strong enough to mitigate the violations (PhanThiThuHien, 2016).

# CHAPTER 4: MIRROR STUDY OF THE VIETNAM'S INTERNATIONAL MERCHANDISE TRADE

### 4.1. Introduction of the Vietnam's international merchandise trade statistics

In principles, international merchandise trade statistics of Vietnam complies with the IMTS 2010 of UN above. Compilation of Customs official statistics on imports and exports is one of Vietnam Custom's core roles as stipulated in the Customs Law (No. 54/2014/QH13, approved on 23rd June 2014).

#### ✓ Data sources

International merchandise trade statistical data of Vietnam are collected and compiled from the following sources: import and export declaration forms; documents enclosed with customs dossiers and other additional information sources such as reports from businesses.

#### ✓ Coverage

All goods leave Vietnam's customs territory (exported) or enter into Vietnam's customs territory (imported) which reduces or in-crease Vietnam's material re-sources are included in the coverage of statistics. Those goods leave or enter temporarily into Vietnam's customs territory which do not increase or reduce Vietnam's material resources are excluded from the coverage of statistics.

### ✓ Trade system

Before 2009: trade system used in international merchandise trade of Vietnam complied with *the special trade system with relaxed definition*. Since 2009, Vietnam has turned to use *the general trade system* to compile trade statistics.

### ✓ Classification system

Statistics of imports and exports in Vietnam are classified according to the current export and import tariffs schedules which were compiled based on the Harmonized system (HS 2012 version).

### ✓ Statistical values

For Vietnam's exports: FOB-based value.

For Vietnam's imports: CIF-based value.

Currency used in Vietnam's international merchandise trade statistics: US dollar. Transactions quoted in other currencies were converted into US dollar based on official exchange rate

disseminated by the State Bank of Vietnam at the time of registering declaration forms with Customs.

### ✓ Trading partners

*For Vietnam's exports*: the statistical country is *the last known destination* at the time of exportation.

*For Vietnam's imports*: before 2009, the statistical countries and territories are country and territory of consignment. Since 2009, the statistical countries and territories have been the ones of *origin according to Vietnam's regulations on rules of origin*.

### ✓ *Time of recording*

It is the time that registered customs declaration forms are accepted by Customs.

# 4.2. Mirror study of the Vietnam's international merchandise trade statistics with major trade partners in the world

# 4.2.1. Presentation of data

Data of Vietnam is collected from international merchandise trade database of the General Department of Vietnam Customs. This presents the national regulations of Vietnam on crossborder trade as well as statistics methodology. In this writing, Vietnam is selected as the reporting country in mirror study in both exports and imports. Data of the Vietnam's trade partners is collected from database of COMTRADE, UN.

# 4.2.2. Mirror analysis in case Vietnam as the reporting country of exports

# Table 4.1: Bilateral trade statistics discrepancy in the Vietnam's exports data

Unit million US dollars

# Figure 4.1: Ratio CIF/FOB in case of Vietnam's reporting exportation

		Year 2013			Year 2014			Year 2015			Year 2016		
STT	Nation	Import Value (ITC)	Export Value (GDVC)	Ratio CIF/FOB									
1	China	16,892	13,186	1.28	19,900	14,931	1.33	25,128	16,604	1.51	37,172	21,944	1.69
2	United States of America	25,904	23,841	1.09	32,011	28,644	1.12	39,665	33,480	1.18	43,773	38,450	1.14
3	Germany	7,541	4,737	1.59	8,097	5,178	1.56	8,968	5,705	1.57	9,777	5,961	1.64
4	France	3,732	2,204	1.69	4,041	2,398	1.69	4,587	2,953	1.55	4,994	2,983	1.67
5	Japan	14,233	13,631	1.04	15,417	14,693	1.05	15,125	14,137	1.07	16,238	14,671	1.11
6	Hong Kong	5,060	4,108	1.23	5,490	5,202	1.06	6,553	6,965	0.94	7,527	6,088	1.24
7	Canada	2,080	1,545	1.35	2,561	2,079	1.23	3,200	2,411	1.33	3,745	2,653	1.41
8	Korea (Republic)	7,175	6,618	1.08	7,989	7,144	1.12	9,803	8,932	1.10	12,495	11,406	1.10
9	Poland	1,142	349	3.27	1,288	509	2.53	1,510	585	2.58	1,650	598	2.76
10	Switzerland	1,287	289	4.46	1,044	265	3.94	1,022	230	4.44	1,500	593	2.53
11	Russian Federation	2,597	1,903	1.36	2,296	1,725	1.33	2,055	1,439	1.43	2,465	1,616	1.53
12	Thailand	3,269	2,858	1.14	3,938	3,255	1.21	4,034	3,146	1.28	4,450	3,615	1.23
13	Indonesia	2,723	2,451	1.11	3,418	2,891	1.18	3,162	2,852	1.11	3,228	2,618	1.23
14	Singapore	3,057	2,607	1.17	3,200	2,910	1.10	3,604	3,215	1.12	3,009	2,407	1.25
15	Australia	3,656	3,347	1.09	4,478	3,894	1.15	3,359	2,829	1.19	3,328	2,827	1.18
16	Philippines	871	1,694	0.51	1,348	2,311	0.58	1,273	2,020	0.63	1,982	2,220	0.89
17	Cambodia	988	2,921	0.34	1,693	2,688	0.63	0	2,410	0.00	1,416	2,199	0.64
18	Netherland	2,509	2,934	0.86	2,675	3,764	0.71	4,893	4,762	1.03	4,364	6,012	0.73



Generally, most of the ratio of the import value and export value is higher than "1" except in cases of Cambodia, Netherland and Philippine. This substantially reflects the appropriate methodology and quality of statistics data.

Significant points from "mirror statistics" analysis of Vietnam's exports as follows:

Firstly, in cases of the top import partners of Vietnam like USA, Japan, Korea, and Hong Kong but except China, the ratio of the import value and export value or CIF/FOB ratio is highly proper in range from 1.04 to 1.1.

Secondly, the CIF/FOB ratio in cases of the Philippine, Cambodia and Netherland is much smaller than 1 in 2013-2016 that are (0.51; 0.58; 0.61; 0.89), (0.34; 0.63; 0 and 0.64) and (0.86; 0.71; 1.03 and 0.73) of Cambodia and Netherland respectively. These huge discrepancies reflect the differences between Vietnam and trade-related countries in making international merchandise statistics reports in some special modes of doing business like imports for re-exports; intermediary and transits.

In details, with more advantages in sea transportation than Cambodia, almost flows of goods imported to the last destination of Cambodia are shipped via Vietnam by transits transactions or imports for re-exports to Cambodia. In these situations, Vietnam compiled export data for the partner of Cambodia but it is not reported in the Cambodia import data because Vietnam is not the country of origin. The similar situation happens in case of Philippine as the transits ports in the international route from Vietnam to other Pacific countries. Other reason causes the discrepancy between Vietnam and Cambodia is smuggles and commercial frauds so many shipments departed from Cambodia to Vietnam but do not make customs declarations for imports.

The picture about the geographic positions of Vietnam, the Philippine and Cambodia seen as the main factor of international trade formula among these countries is illustrated below. In case of the Netherlands, as "Rotterdam Effect" mentioned above, many shipments from Vietnam to the EU are reported to exports toward Netherland due to last destination port of Rotterdam but it is not actually consumed in Netherlands but others the European countries like Germany, France, and Switzerland.

This also explain why the CIF /FOB ratio between Vietnam and some European countries like Germany, France is further high at (1.59; 1.56; 1.57;1.64) and (1.69; 1.69, 1.55 and 1.67) respectively. In these cases, probably Vietnam's exports data miss partly of Germany and France but they compiled as imports from Vietnam according to the origin of goods.



Next, huge discrepancies and the CIF/FOB ratios (above 2.5) are seen in cases of some countries locating centrally in the EU region like Switzerland and Poland. Probably, international transportation and "Rotterdam Effect" are considered as the most contributing factors in this phenomenon.

Lastly, we analyses the discrepancy between Vietnam's reporting export statistics and the China's compiled import data. The CIF/FOB ratio is higher than the normal rate indicates the missing data from exports compilation of Vietnam. This reveals that it is challenging for the Vietnamese authorities to

control exportation from Vietnam to China due to various interconnected border gates on different geographic locations.

#### 4.2.3. Mirror analysis in case Vietnam as the reporting country of imports

Analysing "mirror statistics" illustrated in the Table 4.2 when Vietnam is the reporting country of imports, there are some key conclusion as follows:

First, very significantly most of CIF/FOB ratios are below the "1" value except Japan, Taiwan, USA, France and Italia. These countries are known to have standard international merchandise statistics frameworks that are well operating for compilation of very huge value and volume of trade in goods in the world. It means that methodology and quality of the Vietnam's trade statistics data is not the main reason of these abnormal discrepancies.

Secondly, in cases of Hong Kong and Singapore, the CIF/FOB ratios are extremely low that are (0.11; 0.12; 0.13 and 0.16) and (0.52;0.53; 0.51 and 0.42) respectively. International transits in goods at these hubs before leaving for last destination of Vietnam is the most contributing factor because Vietnam does not report imports statistics data from Hong Kong and Singapore according to the actual origins of traded goods.

In contrast to the cases of Hong Kong and Singapore, discrepancies in statistics data between the Vietnam's imports value and Cambodia's export value are greatly big at 5.52; 3.36 and 4.13 in 2014, 2015 and 2016 respectively. It raises questions about the international trade statistics methodology and quality of data of Cambodia which causes many differences in goods classification, valuation, and methods of producing statistics reports (Hamanaka, 2011). However, the reason causes very high CIF/FOB ratios in case of Cambodia is that many exportations of the Cambodia-originated goods are transited in Vietnam before departing to the last destination and reported as importations to Vietnam from Cambodia.

Next we move to the CIF/FOB ratios in case of Japan that are almost stable in range from 1.05 to 1.1 even changes happened to others countries like USA, France and Germany in 2015 and 2016. Simultaneously, Vietnam had nationally implemented the VNACCS/VCIS by ODA from the Japanese Government that is seen as the biggest achievement in modernizing and innovating the Vietnam's customs clearance mechanism for exports and imports. Taking advantages of trade facilitation policy and e-Customs procedures, many commercial frauds are successful by cancelling and changing goods customs declarations from physical inspection (red flow) to exemption of both documentary and physical inspections (green flow). Without a strong legal enforcement, a significant value of smuggles and commercial frauds makes the Vietnam's trade statistics unrealistic and missing. The problem is that a variety of changes in the customs declaration for exports and imports may cause abnormal discrepancy and low CIF/FOB ratios in trade statistics data between Vietnam and most of his import partners. In term of trade statistics techniques, changes in customs declarations about mode of doing business, valuation,

time of declaration, foreign currency and exchange rates will caused considerable differences in statistics data.

Last but not least, smuggling and commercial frauds like mis-declaration of origin, classification and customs valuation are the top concerns of cross-border administration and control in Vietnam, These are major reason of discrepancies in cases of Vietnam's importation due to high import tariff barriers.



Figure 4.2: Ratio CIF/FOB in case of Vietnam's reporting importation

# Table 4.2: Bilateral trade statistics discrepancy in the Vietnam's imports data

## Unit million US dollars

	Year 2013				Year 2014			Year 2015			Year 2016		
	Country	Export Value (ITC)	Import Value (GDVC)	Ratio CIF/FOB									
1	China	48,586	36,938	0.76	63,731	43,713	0.69	66,381	49,521	0.75	61,094	50,019	0.82
2	Hong Kong	9,436	1,050	0.11	8,676	1,038	0.12	9,832	1,321	0.13	9,356	1,498	0.16
3	Singapore	10,870	5,689	0.52	12,904	6,839	0.53	12,131	6,038	0.50	11,354	4,763	0.42
4	India	5,988	2,881	0.48	6,527	3,113	0.48	5,357	2,657	0.50	5,958	2,746	0.46
5	United States of America	5,036	5,233	1.04	5,734	6,297	1.10	7,072	7,796	1.10	10,151	8,702	0.86
6	Malaysia	4,227	4,099	0.97	4,384	4,207	0.96	4,466	4,201	0.94	5,730	5,171	0.90
7	France	934	997	1.07	1,015	1,116	1.10	1,719	1,261	0.73	1,645	1,144	0.70
8	Korea (Republic)	21,088	20,705	0.98	22,333	21,763	0.97	27,773	27,614	0.99	32,651	32,163	0.99
9	Thailand	7,182	6,318	0.88	7,888	7,093	0.90	8,764	8,284	0.95	9,337	8,849	0.95
10	Australia	2,040	1,587	0.78	2,764	2,056	0.74	2,559	2,023	0.79	2,798	2,425	0.87
11	Netherlands	744	678	0.91	710	552	0.78	897	691	0.77	923	677	0.73
12	Russian Federation	1,373	855	0.62	645	827	1.28	824	746	0.90	1,373	1,131	0.82
13	Germany	2,463	2,965	1.20	2,633	2,620	1.00	2,565	3,213	1.25	2,990	2,850	0.95
14	Austria	186	197	1.06	186	226	1.22	187	412	2.21	204	351	1.72
15	Italy	893	1,177	1.32	971	1,337	1.38	1,218	1,453	1.19	1,158	1,427	1.23
16	Philippines	541	953	1.76	375	677	1.81	727	906	1.25	747	1,060	1.42
17	Taiwan	8,919	9,416	1.06	9,965	11,079	1.11	9,460	10,993	1.16	9,551	11,235	1.18
18	Japan	10,550	11,615	1.10	11,830	12,926	1.09	12,543	14,367	1.15	12,990	15,064	1.16
19	Cambodia				96,801	503,649	5.20	185,645	623,405	3.36	229,059	945,967	4.13

# CHAPTER 5: DISCREPANCY IN BILATERAL TRADE STATISTICS OF VIETNAM: CASE OF CHINA AND SWITZERLAND

# 5.1. "Mirror statistics" Analysis about bilateral trade in timber between Vietnam and China

China is one of Vietnam's largest export markets for timber and wooden products of Vietnam. This part analyses the statistics discrepancies between two countries in trade of the Vietnam's main timber exporting commodities in 2013-2015 that are indicated in Table 5.1

Table 5.1: Main timber commodities of Vietnam exported to China in 2012–2014

Commodity	Year	HS code	Exp. Tariff in VN	Turnover (million US dollars)			Quan (millio	ıtity n m <sup>3</sup> )
				Vietnam <sup>1</sup>	China <sup>2</sup>	Imp./Exp. <sup>3</sup>	Vietnam	China
Total	2012			710.5	835.30	1.18	7.08	7.19
	2013			960.4	1,144.50	1.19	8.57	10.15
	2014			845.1	1,439.10	1.70	8.40	10.09
Woodchips	2012	4401	5%	495.16	584.27	1.18	6.38	6.28
	2013		5%	600.54	757.04	1.26	7.60	8.34
	2014		5%	510.84	634.25	1.24	6.63	7.08
Sawn wood	2012	4407	10% or 20%	108.62	27.05	0.25	0.15	0.07
	2013		10% or 20%	168.33	70.75	0.42	0.29	0.21
	2014		10% or 20%	146.38	96.77	0.66	0.32	0.28
Round wood	2012	4403	5%	39.3	136.31	3.47	0.02	0.09
	2013		5%	63.83	123.47	1.93	0.03	0.05
	2014		5%	12.53	241.55	19.28	0.01	0.14
Veneer	2012	4408	10%	3.64	16.41	4.51	0.31	0.58
	2013		10%	5.96	36.54	6.13	0.22	1.25
	2014		10%	17.06	67.62	3.96	0.83	2.20
Notes:	1	1	L	1	1	1	1	L

<sup>1</sup> Data of timber exports to China recorded by the General Department of Vietnam Customs

<sup>2</sup> Data of timber imports from Vietnam recorded by the General Administration of Customs People' Republic of China

<sup>3</sup> Ratio of the imported value of China/the exported value of Vietnam

Source: The General Department of Vietnam Customs, 2015.

Data on Vietnamese timber exports, recorded by Vietnam and China Customs, reveals the following three points:

- The reported value of goods imported into China is generally higher than the value of the goods exported from Vietnam, except in the case of sawn wood.
- The ratio of the value of goods imported into China and the value of the goods exported by Vietnam are likely to indicate trade costs of transboundary movements, with the costs of exporting timber from Vietnam to China higher than the rate of 1:1 in terms of international trade. This was the case for round wood (3:47, 1:93 and 19:28 in 2012, 2013 and 2014 respectively) and veneer exports (4:51, 6:13 and 3:59 in 2012, 2013 and 2014 respectively). In contrast, it was extremely low for sawn wood exports, calculated at 0:25, 0:42 and 0:66 in 2012, 2013 and 2014.
- There are discrepancies in the reported quantity of timber exported from Vietnam to China. In details, the quantities of timber imports recorded by China are often higher than the reported quantities Vietnam exports, except for sawn wood.

According to (Alberto Goetzl, 2005), there are several major factors leading to discrepancy in statistics of bilateral trade in timber, namely: incorrect compilation of trade statistics; inadequate trade data collection systems; classification practices; product measures and conversion; illegal activity; and trans-shipments and triangular trade.

However, Time, distances and exchange rates in the compilation of trade statistics would not create large discrepancies in trade value and quantity between Vietnam and China due to wide range of similarities in timber trade transaction (Phan Thi Thu Hien, 2017). For instance, refer to The commodity origin, the origin of timber imported for re-exportation to China is shown as the source country in the case of sawn, round and veneer, while wood chips wholly obtained in Vietnam are reported legally and transparently. Furthermore, the naturally neighbouring location does make Trade costs or the ratio of the imported value and the exported value highly rational and appropriate in case of timber exportation from Vietnam to China. That is why huge discrepancies in bilateral trade of timber between Vietnam and China illustrate weakness in cross-border management and legal enforcement on trade in timber of Vietnam as follows:

#### (1) Illegal timber exportation from Vietnam to China

In Vietnam, illegal trafficking in timber is mainly conducted by transnational networks from the source country to the destination of Vietnam and vice versa, namely smuggling and other illegalities in transport inbound and outbound to/from Vietnam (Phan Thi Thu Hien et al., 2016). Although, exportation of raw timber and logs is banned in many Asian countries, many shipments of timber arriving in Vietnam were inspected and found to be smuggled out of natural forests from his neighbouring countries, such as Laos, Cambodia and Myanmar (EIA, 2011). Further, Vietnam is a main provider of raw material and logs to other wood-based producing hubs via common border gates and clandestine land routes. This demonstrates that illegal trafficking is a major causal factor in the differences in timber trade data between Vietnam and China, especially data on wood chips, round wood and veneer.

Forging documentation for Vietnam's timber exportation is known as the most fraudulent method to trade smuggled and illegally harvested timber. That is why we see the discrepancies in data on timber exports from Vietnam to China in both reported value and quantity. According to studies of Forest Trend into the international trade in timber of Vietnam, most of imported logs and sawn wood imported from Laos and Cambodia were well-documented before re-exporting in the form of raw material or minimally processed wood to countries like China and India (an estimated 5 per cent of the total import amount). Vietnam has become a laundering hub for illegally harvested logs and smuggled timber from Laos, which has been Vietnam's biggest provider of sawn wood (EIA, 2011). This possibly explains the situation of sawn exports from Vietnam to China, with timber being illegally certified as Vietnamese origin before exporting to China, with approved customs clearance on the Vietnam Customs system, but rejected in the customs clearance for imports in China. Also in the case of sawn wood exports, the illegal declarants made customs declarations for timber exports to China with fraudulent dossiers and information but there was no shipment of the declared timber, which was probably replaced by other goods.

From the Table 5.1, there are gaps in mirror statistics of the export value and volume of wood chips, round wood and veneer from Vietnam to China. Missing data caused by smuggles and concealments which were not compiled in the Vietnam customs statistics systems but

officially recorded as imported value and volume from Vietnam by Chinese Customs. In contrast, sawn wood exports recorded by Vietnamese Customs, did not appear in the China import statistics, resulting in unusual differences in mirror statistics in which the recorded imported value and volume were much lower than those exported.

In conclusion, it is illegal trade in timber that creates considerable discrepancies in the data on timber trade due to the reasonably missing data and different compilation of two trade statistics agencies in Vietnam and China.

#### (2) Tax evasion in the Vietnam's timber exportation

Vietnam's tax policy on timber exports has motivated illegal traders to evade tax by reducing customs values and exports tax obligations. In Vietnam, prohibition and conditionally trade in raw timber, especially unprocessed or simply processed wood, are subject to considerably high export tariffs, while import rates of zero per cent are designed to protect and develop supply for the export-driven wood-processing industry of Vietnam. Consequently, the exported value and volume compiled by Vietnamese Customs are lower than the imported data recorded by China, especially for some precious and high-priced timber exported to China, such as rosewood and 'trac' (Xuan Phuc, Le Huy & Thi Cam 2015). This leads to considerable discrepancies in mirror statistics of timber trade between Vietnam and China as indicated in the Table 5.1. This is obtained by mis-declaration in customs valuation for exports in Vietnam, but the China Customs technically adjusted the declared value for imports (Phan Thi Thu Hien, 2017). In order to conduct these sales transactions, the Vietnamese timber exporter operates two accounting system, with one used to obtain the exact amount paid by the Chinese buyer and the other opened for official accounting activities, customs declarations and tax obligations in Vietnam.

In conclusion, illegal trade is a major cause of the discrepancies in data for timber exports from Vietnam to China. While it is impossible to quantify illegal trade in timber by transacted value and volume, applying a mirror statistics methodology and analysing the discrepancies in timber trade data between Vietnam and China can provide insights into such illicit trade.

#### 5.2. Case of bilateral trade between Vietnam and Switzerland

This part focuses on the discrepancies in the bilateral trade statistics between Vietnam as the reporting country and Switzerland as his trade partner.

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Regarding to the data about international merchandise trade of the General Department of Vietnam Customs on side of Vietnam as the reporting country and in parallel the trade statistics of Switzerland collected from the ITC, Comtrade, it seems unusual and unreasonable in both movement directions of physical goods.



Figure 5.1. Mirror Statistics on exports from Vietnam to Switzerland in 2011-2016

#### Source: GDVC and ITC

In case of the Vietnam's exportation, almost the Switzerland's imported value was higher than the values of exports. It reflects the reality of international merchandise trade between two country as well as norms and practices of trade statistics. However, the ratio of the Switzerland's imported value and the Vietnam's exported value is much higher than the normal level from 1.05 to 1.1 as the table below.

Table 5.2. Mirror Statistics on exports from Vietnam to Switzerland in 2011-2016

Year	2011	2012	2013	2014	2015	2016
Exported Value of Vietnam	1,189	398	289	265	230	593

Imported Value of Switzerland	1,255	717	1,287	1,044	1,022	1,500
Ratio imported value/exported value	1.06	1.80	4.46	3.94	4.44	2.53

Source: GDVC and ITC

Probable, "Rotterdam effect" is the major explanation about these huge discrepancies because Vietnam reported the last destination is the arriving border gate at the EU but not Switzerland although Vietnam is compiled as the imports partner of Switzerland based on the commodity origin. Trade costs and international transportation also contributes to the big gaps in "mirror statistics" in the bilateral trade between Vietnam and Switzerland.

In contrast, most of the Vietnam's imported value from 2013 to 2016 is substantially smaller than the Switzerland's exported value as illustrated in the Figure 5.3.



Figure 5.2. Mirror Statistics on imports of Vietnam from Switzerland in 2011-2016

Year	2011	2012	2013	2014	2015	2016
CH						
exported						
value	289	344	1,810	462	519	551
VN						
imported						
value	1,771	398	411	368	437	506
Ratio						
CIF/FOB	6.13	1.16	0.23	0.80	0.84	0.92

Table 5.3. Mirror Statistics on imports from Switzerland in 2011-2016

Source: GDVC and ITC

It seems unrealistic due to long distance and complex transportation from Switzerland to Vietnam. As explanation of trade statistics experts in Vietnam, Asia is the biggest market of Switzerland in gold exportation and reported officially by this country from April 1<sup>st</sup>, 2014 to now. However, it is not allowed to report and publish the data of trade in gold as a special commodity in Vietnam. Certainly, difference in trade statistics compilation as well as confidential policy for trade in some special commodities leads to extremely significant discrepancy between the imported value of Vietnam and exported value of Switzerland.

#### CHAPTER 6: CONCLUSIONS AND RECOMMENDATION

#### 6.1. Conclusions from mirror statistics analysis in case of Vietnam

According the "Mirror Statistics" analysis results, a conclusion about the international merchandise statistics and cross-border administration of Vietnam as follows:

*Firstly*, most of discrepancies in case of the Vietnam's importation are out of the normal range in comparing with the exportation. This is caused by a large amount of the Vietnam's reported imports statistics data trading goods of transits business and importation for re-exportation via Vietnam to the neighbouring countries like China, Cambodia and the Laos.

*Secondly*, the Vietnam's VNACCS/VCIS implementation contributing substantially to current achievements of trade facilitation and business environment since 2014 has raised concerns about the credibility and reality of information and data submitted by the Vietnamese enterprises and customs declarants. This is known a newly contributing factor to variety of bilateral trade statistics discrepancies of Vietnam recently.

*Thirdly*, increasing trade facilitation and market liberalization as well as e-commerce certainly are creating many motivations to smuggling and commercial frauds that are major drivers to discrepancies in trade data of Vietnam with other countries based on mis-declaration in origin, customs valuation, commodity classification and fraudulent documentation. Further, this requires the Vietnamese trade statistics officers not only to be good at technical performance but also to have a comprehensive understanding about new trends and changes in the international business environment.

*Fourthly*, lacks of international cooperation's in merchandise trade statistics operations and customs information sharing networks among Vietnam with trade partners in case of abnormal and unrealistic "mirror statistics" so it is difficult to find the contributing factors as well as solutions to improve the bilateral trade statistics data.

*Last but not least*, "mirror study" really become an effective tool to produce international merchandise statistics database at high quality, also to attentional signals to enhance cross-border trade controls and bilateral trade relations of the Vietnam.

# 6.2. Recommendations on applying "mirror study" to enhance cross-border administration of Vietnam

6.2.1. Design the "mirror statistics" analysis protocol supporting to cross-border trade administration in Vietnam

The General Department of Vietnam Customs plays vital roles in international merchandise trade statistics and formally establishes a functional unit of "mirror statistics". This unit operates centrally as a hub for merchandise trade data transmission and management at national and international levels. This mission must be stipulated officially in goals, tasks, vision of the Vietnam Customs.



#### Figure 6.1. Functions and tasks of the Customs "Mirror statistics" unit

In this part, we suggest a protocol of "Mirror Statistics Analyses" according to international trade statistics standards, norms, practices as well as technical capacity of the Vietnam Customs. This is an important function of the Vietnam Customs that commits to all the statement of the national customs like: professional, efficiency, transparency, effectiveness and modernization.

A model of "mirror statistics" analysis process is designed as follows:



#### 6.2.2. Standardizing sources of international merchandise trade data

The Vietnamese import and export enterprises play an important role in creating creditable sources of international merchandise trade database as well as effectiveness and efficiency of cross-border trade administration in Vietnam. In term of laws compliance and trade facilitation, the Vietnam Customs enhance the cooperative relationship with the business community aiming to higher quality of customs declaration information and statistics database via the VNACCS/VCIS.

Standardizing statistics methods and technique in alignment to new changes in international business and trade cooperation are the top priority of the Vietnam Customs. Initiatives on trade in value-added and "one way" statistics mechanism operating among Canada, Mexico and USA are good examples for standardization and modernization in international merchandise trade statistics of Vietnam.

Finally, enhancing border agencies collaboration in international trade statistics and cross-border control will give us a comprehensive and interrelating masterplan to moderate the discrepancies in international merchandise trade statistics as well as to promote efficiency and efficiency of the Vietnam Customs.

Last but not the least, this research should be more meaningful and comprehensive if the writer had fully accessed the international merchandise trade database of Vietnam and carried out interviews with the Vietnamese authorities in cross-border trade policy making and enforcement whose attitudes and arguments on cross-border trade administration are highly appreciated.

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