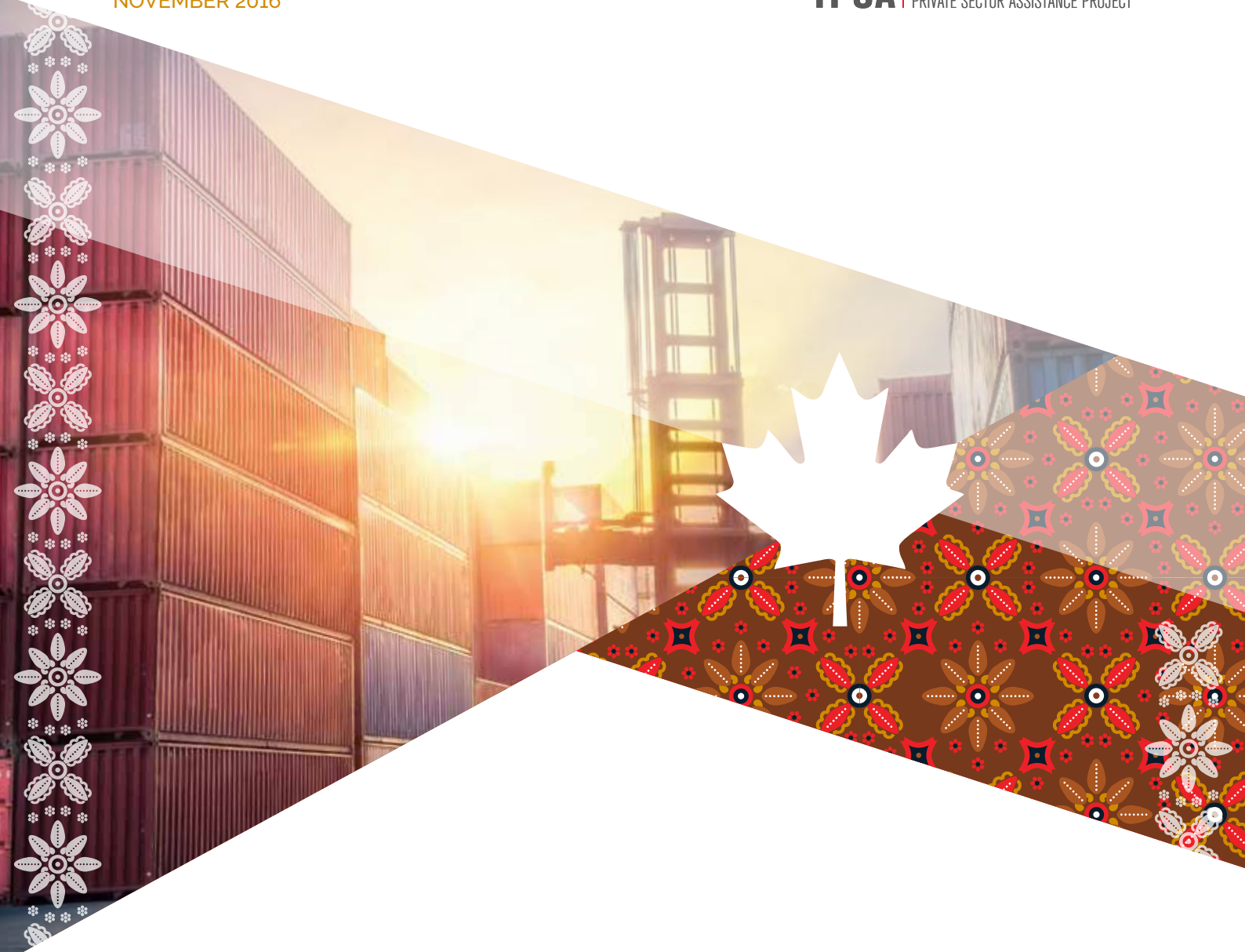


**REPORT**  
NOVEMBER 2016



**TPSA** | CANADA-INDONESIA TRADE AND  
PRIVATE SECTOR ASSISTANCE PROJECT



# Enhancing Indonesia's Exports to Canada

Naufa Muna and Miftah Farid

**Canada** 

Program undertaken with the financial  
support of the Government of Canada  
provided through Global Affairs Canada

IN PARTNERSHIP WITH





## **Enhancing Indonesia's Exports to Canada**

*By: Naufa Muna and Miftah Farid*

The authors are from the Ministry of Trade of the Republic of Indonesia. They produced the research and report during a two-month internship at The Conference Board of Canada in fall 2015.

### **About the TPSA Project**

TPSA is a five-year C\$12-million project funded by the Government of Canada through Global Affairs Canada. The project is executed by The Conference Board of Canada, and the primary implementation partner is the Directorate General for National Export Development, Ministry of Trade.

TPSA is designed to provide training, research, and technical assistance to Indonesian government agencies, the private sector—particularly small and medium-sized enterprises (SMEs)—academics, and civil society organizations on trade-related information, trade policy analysis, regulatory reforms, and trade and investment promotion by Canadian, Indonesian, and other experts from public and private organizations.

The overall objective of TPSA is to support higher sustainable economic growth and reduce poverty in Indonesia through increased trade and trade-enabling investment between Indonesia and Canada. TPSA is intended to increase sustainable and gender-responsive trade and investment opportunities, particularly for Indonesian SMEs, and to increase the use of trade and investment analysis by Indonesian stakeholders for expanded trade and investment partnerships between Indonesia and Canada.

©2016 TPSA Project





# Contents

<b>CHAPTER 1—Background</b> .....	<b>5</b>
Report Objective .....	5
Issues for Indonesian Companies Exporting to Canada .....	6
Regulation .....	6
Environmental and Gender Equality Concerns .....	7
<b>CHAPTER 2—Methodology</b> .....	<b>9</b>
Identifying Targeted Commodities .....	9
Identifying Indonesian Commodities That Are Successful in the World Market (List A) .....	9
Identifying Indonesian Commodities That Are a Missed Opportunity and Successful in the Canadian Market Based on List A .....	10
Low Export Value Exclusion and Grouping .....	10
Analysis of Major Competitors in the Canadian Market .....	11
Analysis of Canadian Market Trends .....	11
Environmental and Gender Analysis .....	11
Data Sources .....	11
<b>CHAPTER 3—Target Commodities for Enhancing Indonesian Exports to the Canadian Market</b> .....	<b>12</b>
Successful Commodities in the World Market .....	12
Successful and Missed-Opportunity Commodities in the Canadian Market Based on List A .....	15
Refining Lists B and C .....	19
Grouping .....	23
<b>CHAPTER 4—Competitors</b> .....	<b>28</b>
Cashew Nuts: Shelled .....	28
Processed Coconut Oil .....	30
Swimwear Products .....	32
Stringed Musical Instruments .....	34
<b>CHAPTER 5—Canadian Market Trends</b> .....	<b>37</b>
Historical Trend and Forecast of GDP .....	37
Retail Sales .....	38
Consumption .....	39





<b>CHAPTER 6—Gender and Environmental Analysis: Garments</b> .....	<b>41</b>
Gender Analysis .....	41
Potential to Benefit Women .....	41
Market Access Opportunity for Exporting .....	43
Social Performance .....	44
Labour Concerns .....	45
Case Study of Women's Home-Based Work: Batik Tulis .....	46
Preliminary Value Chain Analysis .....	46
Remedies From a Gender Perspective .....	48
Environmental Analysis .....	48
Production of Fibres .....	48
Processing Fibres Into Textiles .....	49
Distribution and Use .....	50
End of Life .....	50
Remedies From an Environmental Perspective: Sustainable Textiles and Textile Products .....	50
<b>CHAPTER 7—Conclusions and Further Research</b> .....	<b>52</b>
Conclusions .....	52
Further Research .....	53
<b>REFERENCES</b> .....	<b>54</b>



# CHAPTER 1— Background



## Report Objective

There are market opportunities for Indonesian firms to export to Canada. While Canada is a relatively small country in terms of population (10 per cent that of the U.S.), Canada actually imports nearly twice as much as the U.S. on a per capita basis. In 2015, Canadian imports were US\$419 billion, making Canada the ninth largest import market in the world. Canada ranks in the top 10 on most international ranking schemas, with high income per capita, life expectancy, and educational achievement.

The objective of the research in this report is to identify commodities produced in Indonesia that have a high probability of successfully being exported to Canada. The report also pays special attention to the environmental and social dimensions associated with these commodities.

The top 10 countries for Indonesian exports are Japan, China, Singapore, the U.S., India, South Korea, Malaysia, Taipei, Thailand, and Australia. Even though Canada is not a major market for Indonesian exports, it is still a potential market given the size of Canada's economy and its presence on the Pacific Rim, allowing for ease of transport. Canadian imports from Indonesia increased by 1.4 per cent between 2010 and 2014, and were US\$1.37 billion in 2014. However, the share of Indonesian products in Canadian imports is still small compared with other countries. Table 1 shows that the share of Indonesian products in Canadian imports was only 0.3 per cent. Indonesian exports to Canada are below those of its neighbouring countries, Thailand, Vietnam, and Malaysia.

**TABLE 1: CANADIAN IMPORTS, 2010–14**

Ranking	Exporters	Canadian imports from the world (US\$ million)					Share 2014 (%)
		2010	2011	2012	2013	2014	
	World	392,108.7	450,579.5	462,366.2	461,764.1	462,000.0	100.00
1	United States	197,547.5	223,172.5	234,075.8	240,630.5	251,030.5	54.34
2	China	43,240.2	48,653.5	50,764.8	51,204.5	53,006.3	11.47
3	Mexico	21,465.1	24,814.0	25,535.7	25,919.5	26,008.8	5.63
4	Germany	10,961.2	12,921.0	14,310.2	14,954.9	14,435.5	3.12
5	Japan	13,054.2	13,193.8	15,038.6	13,335.9	12,013.3	2.60
6	United Kingdom	10,405.2	10,435.7	8,547.8	8,182.0	8,284.9	1.79
7	Korea	5,970.7	6,674.6	6,377.8	7,125.6	6,560.3	1.42
8	Italy	4,528.3	5,157.1	5,228.6	5,660.9	5,797.5	1.25



9	France	5,277.7	5,605.0	5,020.4	5,228.1	5,349.3	1.16
10	Taipei, Chinese	3,856.1	4,981.7	4,585.4	4,578.1	4,182.1	0.91
17	Thailand	2,339.4	2,702.6	2,634.7	2,560.3	2,590.4	0.56
18	Vietnam	1,139.7	1,346.1	1,619.1	2,080.2	2,561.5	0.55
20	Malaysia	2,225.1	2,161.7	2,230.8	2,117.3	2,186.9	0.47
31	Indonesia	1,227.7	1,443.7	1,315.0	1,334.1	1,366.2	0.30
37	Philippines	863.5	925.5	992.1	1,104.3	1,120.4	0.24
40	Singapore	1,104.7	1,571.8	1,425.8	1,260.5	1,044.2	0.23
	Rest of the world	66,902.5	84,819.2	82,663.4	74,487.5	64,461.8	13.95

Source: International Trade Centre.

If we compare Canada with the U.S., where the distance to Indonesia and customer preferences are virtually identical, the export-to-GDP ratio is 20 per cent higher in the United States. (See Table 2.) This suggests that there is unfulfilled demand for Indonesian products in the Canadian market.

**TABLE 2: INDONESIAN EXPORT-TO-GDP RATIO**

Country	Exports from Indonesia (US\$ millions)		GDP (current US\$ millions)		Export-to-GDP ratio (per cent)	
	2013	2014	2013	2014	2013	2014
Canada	1,334.1	1,366.2	1,838,964.2	1,786,655.1	0.00073	0.00076
United States	15,741.1	16,560.1	16,768,053.0	17,419,000.0	0.00094	0.00095

Sources: International Trade Centre; World Bank.

## Issues for Indonesian Companies Exporting to Canada

### Regulation

Non-tariff trade barriers are an important issue for Indonesian companies exporting to Canada. Recognizing this fact, this background section includes a brief overview of the Canadian regulatory framework for importing goods into Canada.

A variety of regulations must be satisfied in order to import goods to Canada. Goods that do not meet all regulations will be refused entry at the Canadian border at the expense of the importer. To avoid delay and penalty fees, exporters must work closely with their buyers to make sure the specifications of their product comply with Canadian requirements.

The regulations are different for each type of good. For instance, importers of food products must satisfy a different set of regulations than importers of clothing. Imports of food products must meet several regulations, such as the *Canada Agricultural Product Act*, the food and drugs act and regulations, the *Fish Inspection Act*, the *Meat Inspection Act*, Organic Products Regulations, and regulations related to competition and customs. Clothing imports must comply with the *Consumer Packaging and Labelling Act* and customs regulations.



In general, there are three overall regulatory issues that are important in the Canadian market. They are health and safety, competition, and intellectual property. Regarding health and safety, Canada regulates the safety of consumer products to protect the public by addressing or preventing potential danger, including requiring hazardous goods to be labelled. With regard to competition, Canada regulates to maintain and encourage competition in Canada and to reduce trade in counterfeit goods, including detaining suspected counterfeit goods at the border. Canada also regulates to protect intellectual property rights by ensuring that the owners and creators of intellectual property benefit from their original work or investment in creations, designs, or inventions.

Most laws and regulations that apply to imported goods are governed at the federal level. However, exporters should be aware that additional laws and regulations may apply at the provincial (e.g., alcoholic beverages) and municipal (e.g., recycling of packaging) levels. The Canadian Border Services Agency (CBSA) is the institution responsible for customs services and compliance with Canada's border legislation. The role of CBSA is to enforce the legal import requirements at the border on behalf of government departments.

Obtaining the proper regulatory approvals before attempting to export to Canada is essential. Fortunately, the Government of Canada provides a web-based tool—the Automatic Importing Reference System (AIRS)—that allows exporters to verify Canadian requirements for their products. AIRS can generate a list of import recommendations, required documentation, prohibitions, and references to relevant Canadian acts and regulations.

### Environmental and Gender Equality Concerns

Importing goods into Canada is not just about meeting regulations. The products must also satisfy Canadian demand. Compliance with environmental concerns is a Canadian consumer preference. A survey conducted by GfK Roper Public Affairs & Media and the Yale School of Forestry & Environmental Studies (2008) noted that a majority of Canadians felt it was important for the products they purchase to be environmentally friendly.

Increasing market penetration of environmentally friendly products occurs in many sectors, including food and construction. For example, growth in sales of organic food products amounted to approximately 20 per cent in 2008. Most of the organic food and beverage products in Canadian markets are imported, mainly from the U.S., Mexico, and Chile (Agriculture and Agri-Food Canada, 2010). Another example is the “green building” market, which has increased significantly. McGraw Hill Construction, in a 2015 report, mentioned that over half (56 per cent) of the Canadian respondents to a survey of the building industry reported that over 30 per cent of their projects are currently green-certified, and that by 2017, 70 per cent expect to be doing at least that level of green construction.

The high demand for environmentally friendly products in Canada is a sign that sustainable development has become a standard in the Canadian marketplace. Whether production of the imported product supports sustainable development is another consideration prevalent among Canadian customers. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). Sustainable development is an integrated triangle that includes three aspects: economic, environmental, and social sustainability.

Social sustainability includes concern for gender equality. Gender equality is first and foremost a human right defined in international conventions. The Beijing Platform for Action specifically confirmed the rights of women to work, own property, and run businesses in full equality and free from discrimination. In the marketplace, there is a growing base of ethical consumers in Canada who wish to buy products created



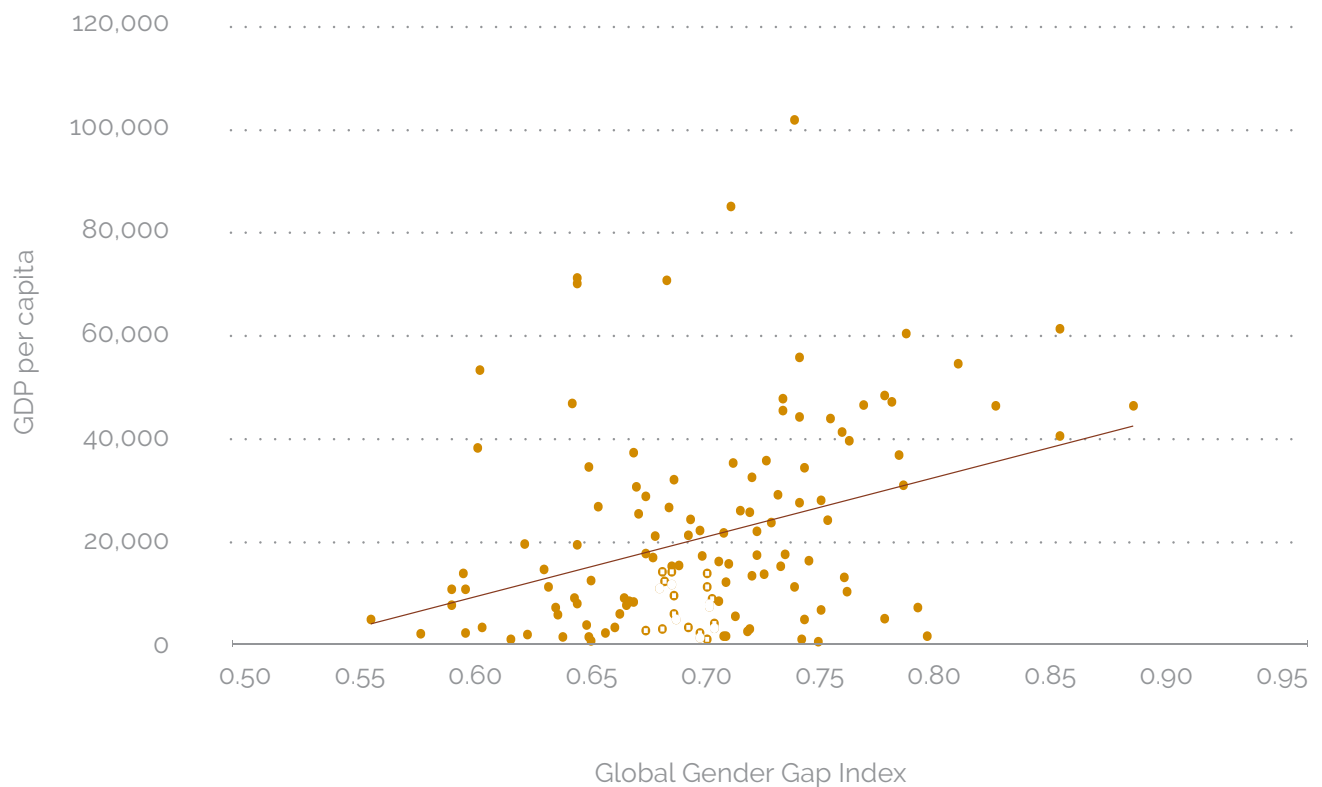


under conditions that respect the rights of women and workers and return profits to the community. Ethical consumerism is a growing trend, where one in three Canadian consumers would pay 15 per cent more for an ethically made product (Abacus Data 2011). There are various standards and codes of conduct, many of which promote social goals ([www.standardsmap.org](http://www.standardsmap.org)). Further, women are important economic actors, and their economic participation matters. According to Korinek (2005), gender biases that limit women's access to opportunities lead to economic inefficiencies that hinder growth and development. Other research from the World Economic Forum (Schwab, 2014) noted that a country's economic development is determined by its human capital, including women, and its ability to use its human capital efficiently.

Chart 1 shows that there is a correlation between gender equity and GDP per capita. It also provides evidence that empowering women means a more efficient use of a nation's human capital, which enhances productivity and economic growth.

### CHART 1: GDP PER CAPITA VS. GLOBAL GENDER GAP INDEX 2014

(GDP, 2011 \$international at PPP; index, 0–1)



Source: World Development Indicators; Global Gender Gap Index database.

Because there is a need to consider all aspects of Canadian market preferences, not just product price and quality, we considered environmental and gender equality issues when identifying the Indonesian commodities that would successfully penetrate the Canadian market.







# CHAPTER 2— Methodology

## Identifying Targeted Commodities

Targeted commodities for enhancing Indonesia's exports to the Canadian market are defined as commodities that (i) have been successful in both the world and Canadian markets; or (ii) have been successful in the world market, but are considered missed opportunity commodities in the Canadian market.

Commodities that have been successful in the world market are considered to have demonstrated proven capability to supply goods or services for export. The idea is that, when considering commodities for export to Canada, it is easier to build upon existing strength. Commodities successful in the world market will more easily expand their presence in the Canadian market.

### Identifying Indonesian Commodities That Are Successful in the World Market (List A)

An Indonesian commodity is considered to be successful in world markets when:

- The value of exports of the commodity from Indonesia and total world imports of the commodity both increase.
- The increase in the share of the commodity exported from Indonesia is more than the increase in the share imported worldwide.
- The trend in the export share of the commodity from Indonesia is positive and the trend in the world import share for the commodity is negative.

Commodities that fit any of these criteria will be included on List A. (See Table 3.)

**TABLE 3: IDENTIFYING INDONESIAN COMMODITIES THAT ARE SUCCESSFUL IN THE WORLD MARKET**

		Trend in the world import share for the commodity	
		Negative	Positive
Trend in the world import share from Indonesia for the commodity	Negative	<b>Ignored</b> (not successful in the world market)	<b>Ignored</b> (not successful in the world market)
	Positive	<b>List A</b> —commodities whose trend in exports from Indonesia is positive, even though the trend in the value of total world imports	<b>Ignored</b> —commodities whose increase in the share exported from Indonesia is less than the increase in the world import share  <b>List A</b> —commodities whose value (both as an Indonesian export and worldwide import) increases and those whose share of exports from Indonesia is greater than worldwide imports





## Identifying Indonesian Commodities That Are a Missed Opportunity and Successful in the Canadian Market Based on List A

Only Indonesian commodities that are judged to be successful in the world market (List A) are considered in this step of the analysis. (See Table 4.)

An Indonesian commodity is considered to be **successful** in the Canadian market (**List B**) when:

- both the value of Canadian imports from Indonesia and the value of total world imports of the commodity increase;
- the share of the commodity imported to Canada from Indonesia either:
  - increases more than the share imported to Canada from the world
  - is positive while the share of the total Canadian imports of the commodity is negative.

An Indonesian commodity is considered to be a **missed opportunity** in the Canadian market (**List C**) when:

- the value of the commodity increases, both for Canadian imports from Indonesia and total world imports;
- the trend in Canada's import share of the commodity either:
  - is negative while the trend in the Canadian import share from the world is positive
  - increases less than the Canadian import share from the rest of the world.

**TABLE 4: IDENTIFYING COMMODITIES THAT ARE SUCCESSFUL OR MISSED OPPORTUNITIES IN THE CANADIAN MARKET**

		Trend of Canadian import share from the world for the commodity	
		Negative	Positive
Trend of Canadian import share from Indonesia for the commodity	Negative	<b>Ignored</b>	<b>List C</b>
	Positive	<b>List B</b>	<p><b>List C</b>—when the increase in Canada's imports of the commodity from Indonesia is less than the increase in imports from the world</p> <p><b>List B</b>—when the increase in Canada's imports of the commodity from Indonesia is more than the increase in imports from the world</p>

For the commodities in lists B and C, the value of Canadian imports of the commodity from Indonesia and the value of total world imports of the commodity must increase over the trend time period. The commodities in lists B and C are considered to be those that should have a good chance to be successfully exported from Indonesia to Canada.

### Low Export Value Exclusion and Grouping

The final list of commodities will exclude those that Canada imported from Indonesia that had a value of less than US\$1 million in 2013. Finally, the remaining list of commodities will be grouped according to their production process and how they are sold in Canada. For example, women's non-knitted outerwear, is grouped with women's non-knitted shirts, because these commodities can be produced in the same





factory and are generally sold in the same stores in Canada. However, non-knitted women's shirts, are not grouped with women's knitted shirts, because the production process is different between these two commodities.

### Analysis of Major Competitors in the Canadian Market

For those commodities in List C that had a Canadian import value of more than \$1 million in 2013 (the "missed opportunity" commodities), the trade data will be examined to determine which countries managed to steal market share away from Indonesia. An effort will be made to see if there were any major changes to tariffs that might explain this shift in market share.

### Analysis of Canadian Market Trends

An analysis of past and future market trends for the various commodities will be conducted using secondary data from various institutions, such as The Conference Board of Canada, Trade Facilitation Office Canada, and Statistics Canada. The aim of this analysis is to describe the historical trends and forecasts for several variables that determine the market demand for promising commodities in the Canadian market. Such variables would include gross domestic product (GDP), retail sales, and consumption.

### Environmental and Gender Analysis

Environmental and gender analysis of selected commodities will use a "broad brush" analysis based on a literature review. Regarding the environmental analysis, there are three variables to be considered: the environmental impacts from 1) production, 2) processing, and 3) disposal.

Regarding the gender analysis, there are a number of variables to be considered, including the industry's potential to benefit from an improvement in gender equality, which is mainly determined by the scale and quality of employment opportunities for women; the presence of market-access mechanisms for women to export; and concerns of social responsibility.

### Data Sources

The qualitative data come from a review of the literature, while the quantitative data for the analysis come from the sources listed in Table 5.

No.	Data	Source
1	World imports from Indonesia, 6-digit HS Code level, 2003–13	United Nations: Comtrade database
2	Canadian imports from Indonesia, 6-digit HS Code level, 2003–13	United Nations: Comtrade database
3	Canadian imports from each partner country, 6-digit HS Code level, 2003–13	United Nations: Comtrade database
4	Tariffs issued by Canada for each partner country, 6-digit HS Code level, 2011–13	World Bank: World Integrated Trade Solution (WITS) database
7	Consumption trend and forecast	Statistics Canada and The Conference Board of Canada
8	Retail sales trend and forecast	Statistics Canada and The Conference Board of Canada





# CHAPTER 3—Target Commodities for Enhancing Indonesian Exports to the Canadian Market

As explained in the previous chapter, the commodities that have a good chance of successfully exporting to Canada are those that have been successful in both world and Canadian markets, or that have been successful in world markets but are a missed opportunity in the Canadian market.

## Successful Commodities in the World Market

From 2003 to 2013, Indonesia exported around 5,018 commodities to the world (at the 6-digit HS code level); 28.9 per cent (1,446 commodities) of these have been successful in world markets (List A). (See Table 6.)

**TABLE 6: CLASSIFICATION OF INDONESIAN COMMODITIES EXPORTED TO WORLD MARKETS**

		Trend of world import share for the commodity	
		Negative	Positive
Trend of world import share from Indonesia for the commodity <i>j</i>	Negative	<b>Ignored: 3,572</b>	
	Positive	<b>Success (List A): 1,446</b>	

Source: Comtrade database.

The commodities in List A also have an increase in their value, both in terms of exports to world markets from all countries and from Indonesia. (See Charts 2 and 3.) Their success is indicated by the increasing value of both their exports and their export share over 2003 to 2013. The total value of exports of the commodities in List A increased from around US\$20 billion in 2003 to US\$120 billion in 2013. And, the export share in world markets for those commodities increased from 18 per cent in 2003 to 54 per cent in 2013.

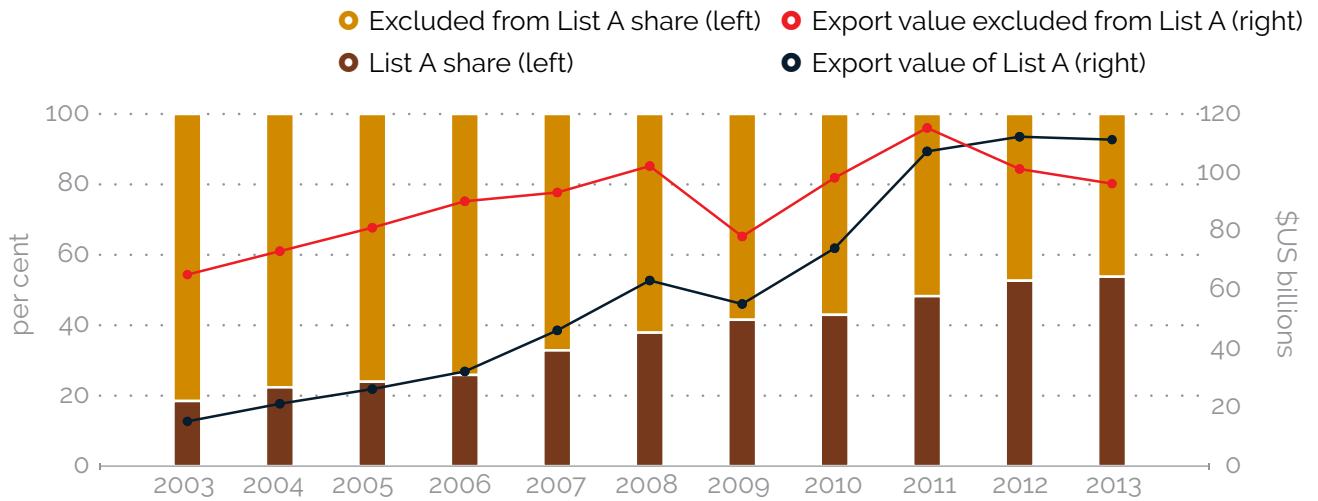




Even in 2008 and 2009, when the world market was hurt by the financial crisis, the share of the commodities in List A in total Indonesian exports held steady at around 38–42 per cent.

**CHART 2: EXPORT VALUE AND EXPORT SHARE OF INDONESIAN COMMODITIES SUCCESSFUL IN WORLD MARKETS (LIST A)**

(share, per cent; value, US\$ billions)



Source: Comtrade database.

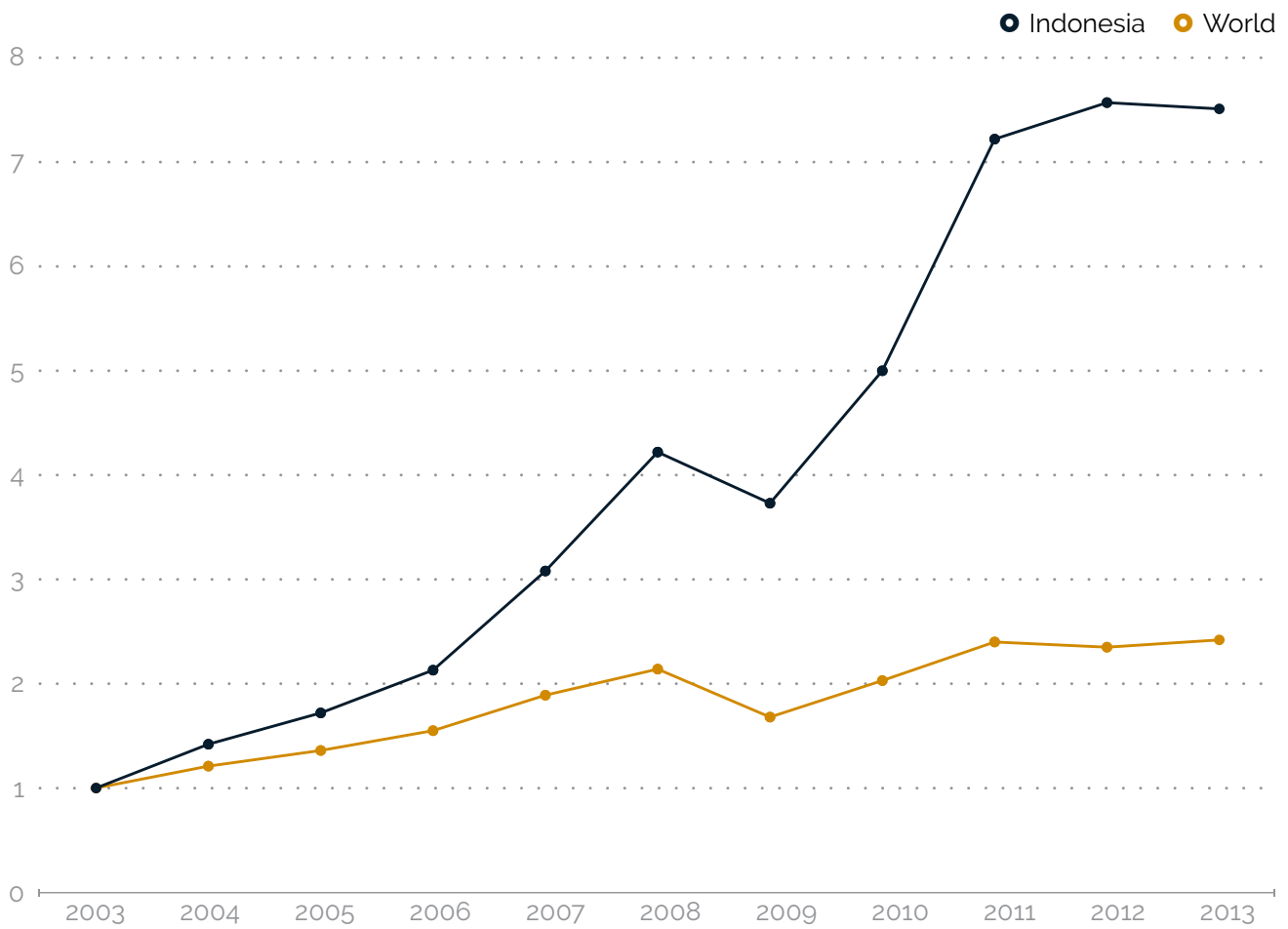
In world markets, exports of the commodities in List A also increased rapidly. Total world exports in 2003 was around US\$2 trillion; this figure grew to around US\$6.1 trillion in 2013.





### CHART 3: LIST A EXPORT INDEX

(index, 2003=1)



Source: Comtrade database.

Most of the commodities in List A are classified as either low tech or unassigned commodities<sup>1</sup>, accounting for 62 per cent of the total List A exports in 2013. As Chart 4 indicates, the technology structure of Indonesian exports changed little over 2003–13.

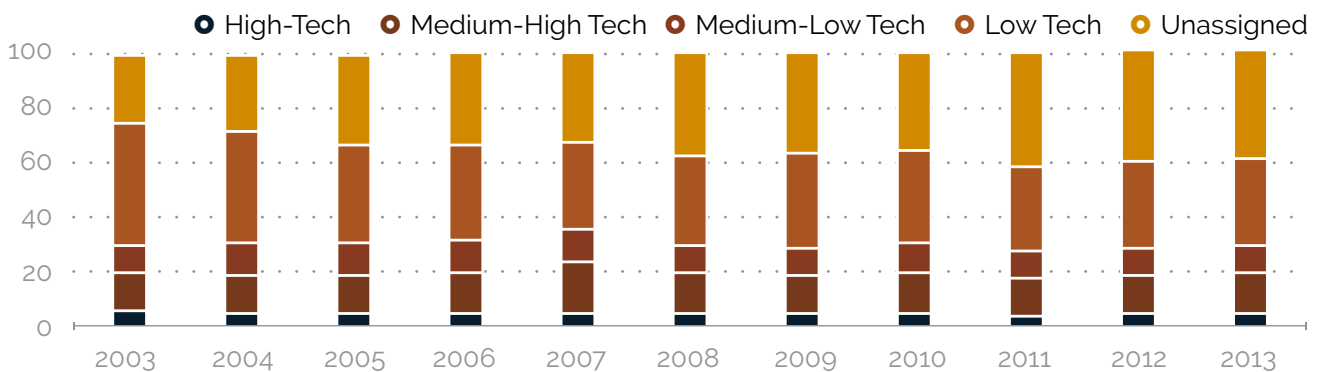
<sup>1</sup> Using STAN Industry List. The list is designed to provide enough detail to focus on technology- and/or knowledge-intensive industries.





## CHART 4: TECHNOLOGY CLASSIFICATION OF INDONESIAN COMMODITIES SUCCESSFUL IN EXPORTING TO WORLD MARKETS

(per cent)

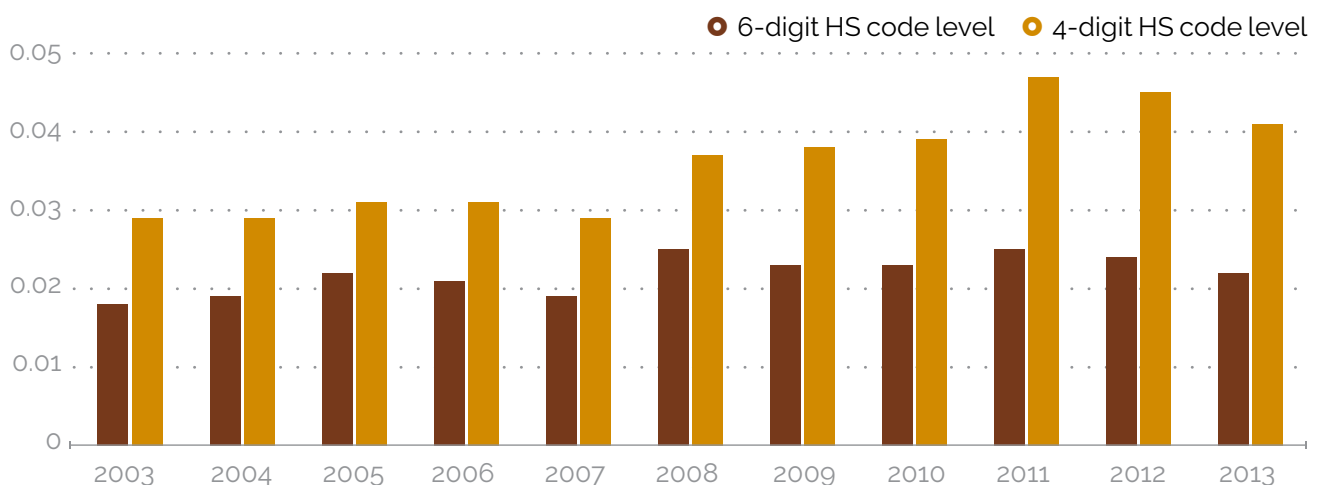


Source: Comtrade database.

In addition, the degree of concentration of Indonesian exports was quite stable over 2003–13, ranging from 0.018 to 0.025.<sup>2</sup> (See Chart 5.) This suggests that Indonesian exports are quite diversified.

## CHART 5: TRADE CONCENTRATION INDEX FOR INDONESIA EXPORTS

(index, 0–1)



Source: Comtrade database.

## Successful and Missed-Opportunity Commodities in the Canadian Market Based on List A

Of the commodities in List A, 33.9 per cent are either successful or missed opportunities in the Canadian Market (31.1 per cent are successful and 2.8 per cent are missed opportunities). (See Table 7.)

<sup>2</sup> Using the Trade Concentration Index (TCI), which is to capture how concentrated the exports of a given country are. A smaller TCI indicates that exports are more diversified. The range is between 0 and 1.





**TABLE 7: SUCCESSFUL AND MISSED-OPPORTUNITY COMMODITIES IN CANADIAN MARKET RELATED**

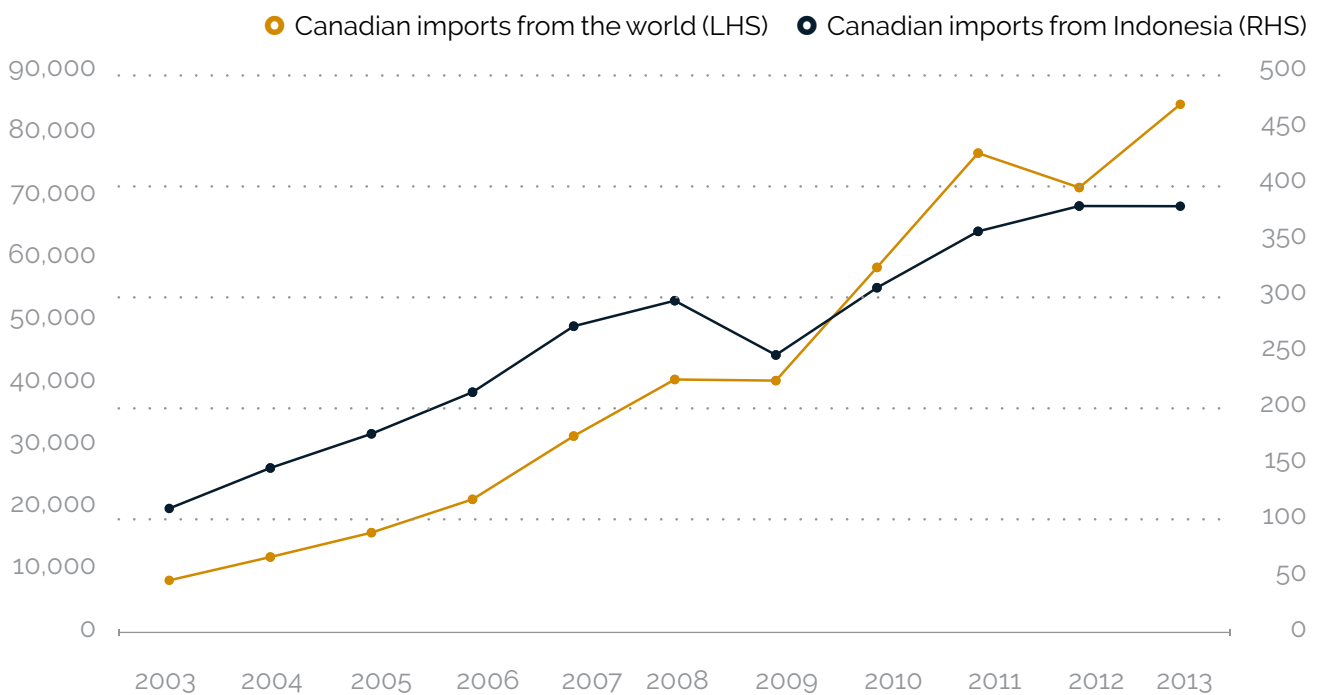
		Trend of Canadian import share from the world for the commodity	
		Negative	Positive
Trend of Canadian import share from Indonesia for commodity <i>j</i>	Negative	Ignored	Missed opportunity (List C): 41
	Positive	1,446	
		Successful (List B): 450	

Source: Comtrade database.

In terms of value, successful commodities exported to the Canadian market (List B) grew from US\$44.7 million in 2003 to US\$473.9 million in 2013, an increase of 960 per cent. (See Chart 6.)

**CHART 6: EXPORT VALUE OF INDOONESIAN COMMODITIES SUCCESSFUL IN THE CANADIAN MARKET (LIST B)**

(US\$ millions)



Source: Comtrade database.

Canadian imports of the commodities in List B from the world grew by 116 per cent from 2003 to 2013. Conversely, the growth in Indonesian missed-opportunity commodities (List C) is less than the growth of Canadian imports of the commodities in List C from the world (105 per cent and 198 per cent, respectively). (See Chart 7.)

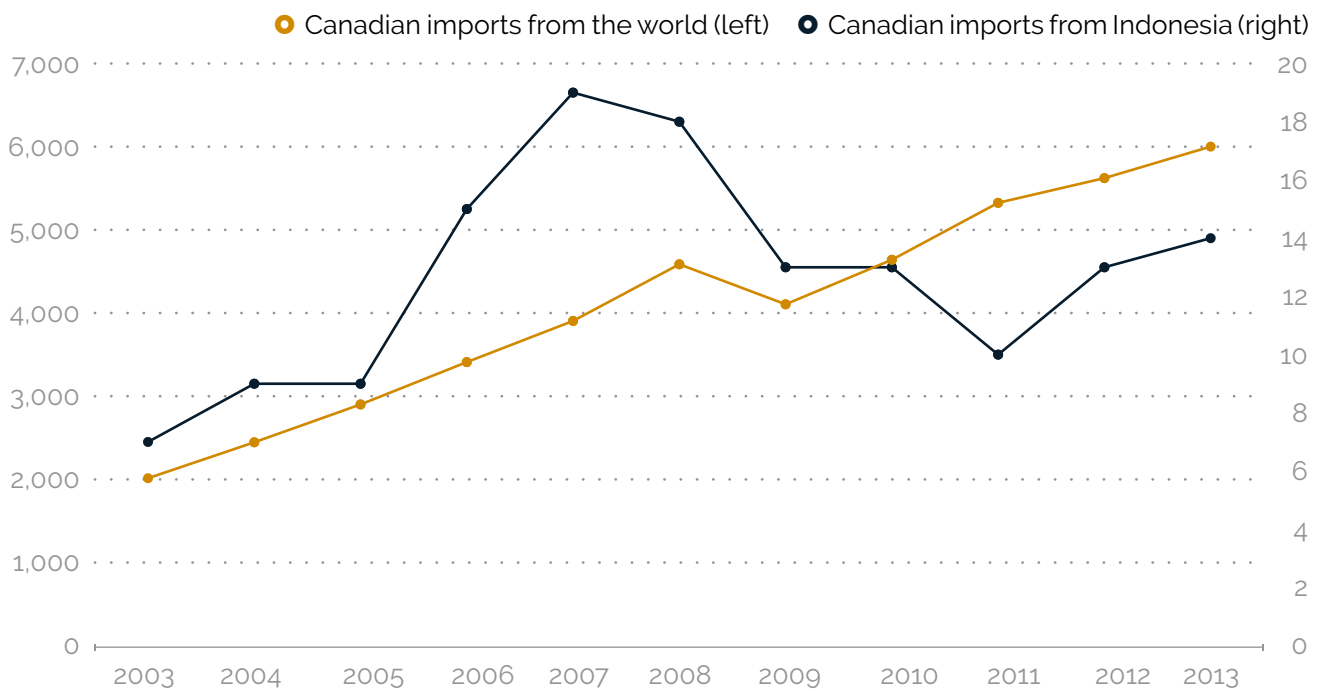






### CHART 7: EXPORT VALUE OF INDONESIAN COMMODITIES THAT ARE MISSED OPPORTUNITIES IN THE CANADIAN MARKET (LIST C)

(US\$ millions)

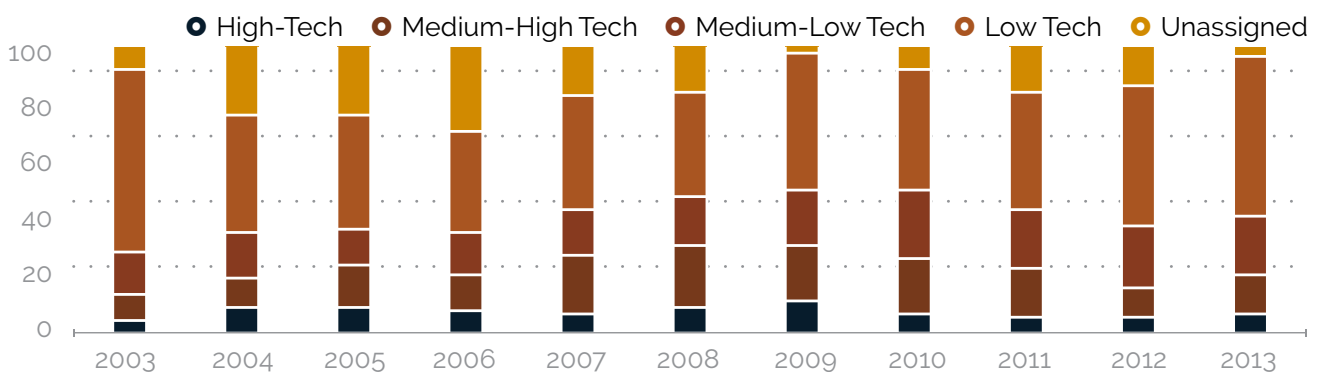


Source: Comtrade database.

The commodities in List B are mainly low-tech and unassigned commodities (64.6 per cent in 2013). (See Chart 8.)

### CHART 8: EXPORT SHARE OF INDONESIAN COMMODITIES SUCCESSFUL IN THE CANADIAN MARKET (LIST B) BY TECHNOLOGY LEVEL

(per cent)



Source: Comtrade database.

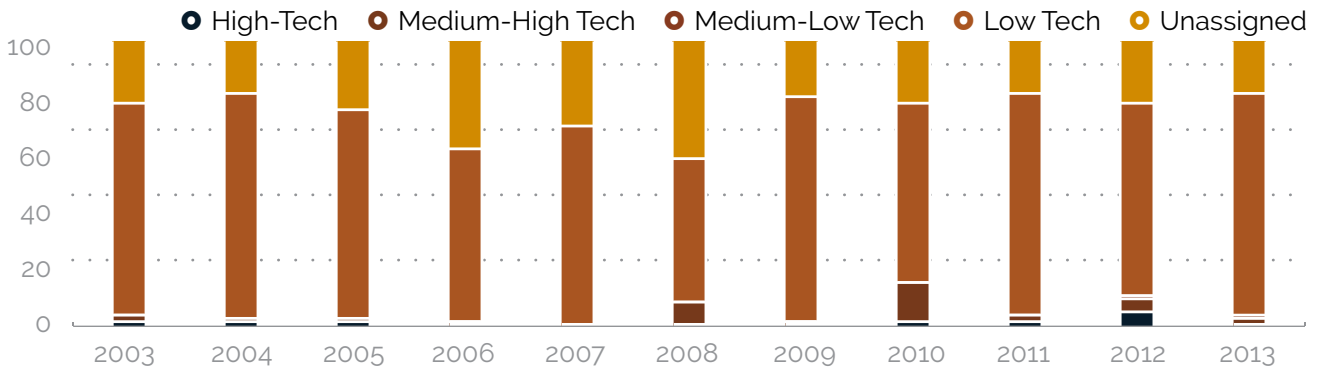




This is especially true for the commodities in List C, where the figure for these two categories jumps to 96.5 per cent. (See Chart 9.)

**CHART 9: EXPORT SHARE OF INDONESIAN COMMODITIES THAT ARE MISSED OPPORTUNITIES IN THE CANADIAN MARKET (LIST C) BY TECHNOLOGY LEVEL**

(per cent)



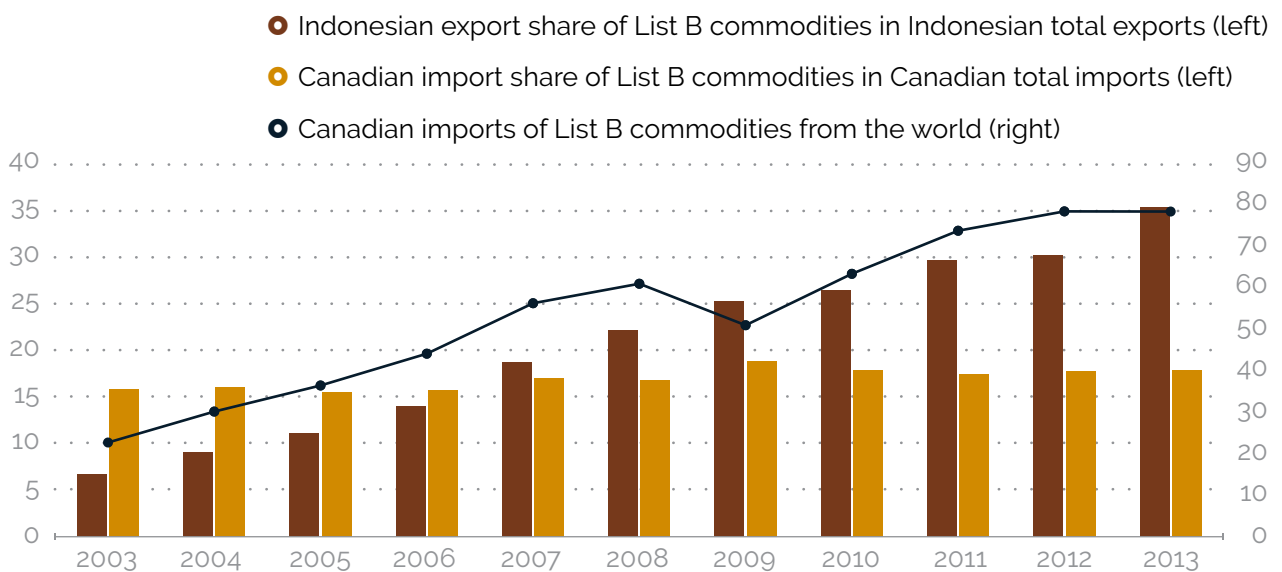
Source: Comtrade database.

Note: Shares less than two per cent were not included in the chart.

In line with the increasing value of exports for the commodities in List B, their share of total Indonesian exports also grew persistently. In 2003, 6.7 per cent of Indonesian exports was commodities in List B; by 2013 this share increased to 35.5 per cent. However, the share of Canadian imports of commodities in List B from the world remained stable. (See Chart 10.)

**CHART 10: INDONESIAN EXPORT SHARE AND CANADIAN IMPORT SHARE OF INDONESIAN COMMODITIES THAT ARE SUCCESSFUL IN CANADIAN MARKET**

(per cent; US\$ billions)



Source: Comtrade database.

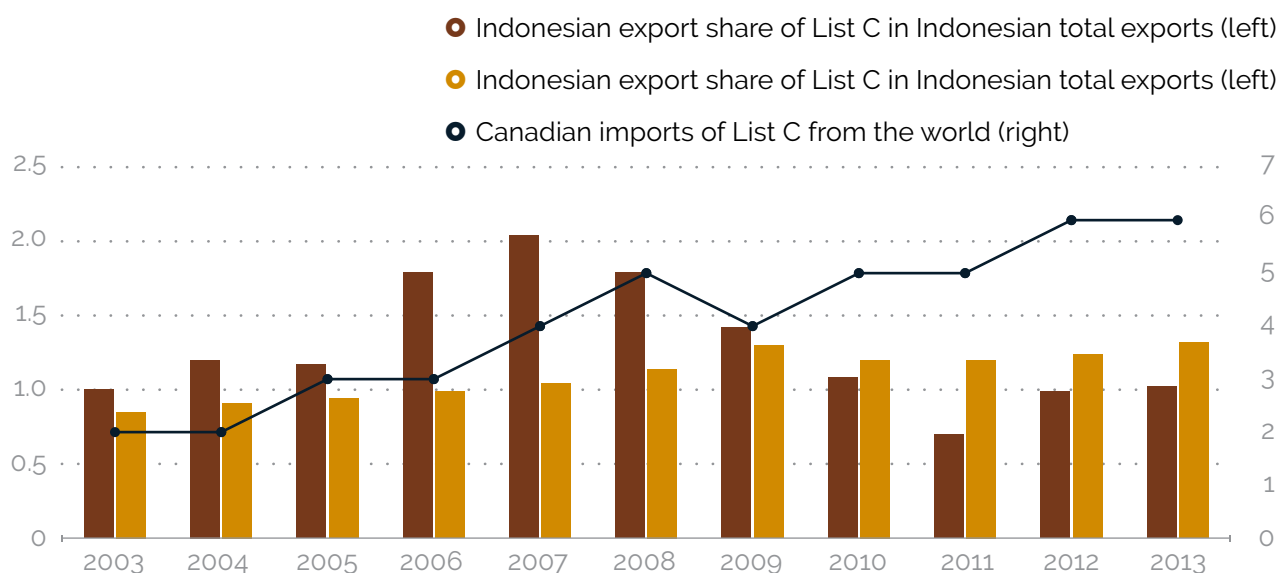




Meanwhile, the export share of total Indonesian exports for those commodities in List C tended to decrease since 2008 in a growing Canadian market. (See Chart 11.)

### CHART 11: EXPORT AND IMPORT SHARE OF INDONESIAN COMMODITIES THAT ARE MISSED OPPORTUNITIES IN THE CANADIAN MARKET

(per cent; US\$ billions)



Source: Comtrade database.

### Refining Lists B and C

A further refining of the commodities in lists B and C is obtained by excluding those commodities that had a Canadian import value of less than US\$1 million in 2013. The final commodity lists are presented in Tables 8 and 9.

TABLE 8: REFINED LIST B (SUCCESSFUL COMMODITY)

No.	6-digit HS code	Description
1	030420	Frozen fillets—from group fish fillet and other fish meat
2	090111	Coffee, not roasted, not decaffeinated
3	151190	Other—from group palm oil and its factions, whether or not refined, but not chemically modified
4	170290	Other, including invert sugar—from group other sugars, including chemically pure lactose, maltose, glucose, fructose, in solid form, sugar syrup not containing added flavouring or colouring matter
5	180400	Cocoa butter, fat, and oil
6	291570	Palmitic acid, stearic acid, their salts and esters—from group saturated acyclic monocarboxylic acids and their anhydrides, etc.





**TABLE 8: REFINED LIST B (SUCCESSFUL COMMODITY)**

No.	6-digit HS code	Description
7	382370	Industrial fatty alcohols
8	382490	Other—from group prepared binders for foundry moulds or cores, chemical products, and preparations of the chemical or allied industries
9	400110	Natural rubber latex, whether or not pre-vulcanized
10	401110	Of a kind used on motor cars (including station wagons and racing cars)—from group new pneumatic tires, of rubber
11	401120	Of a kind used on buses or lorries—from group new pneumatic tires, of rubber
12	401150	Of a kind used on bicycles—from group new pneumatic tires, of rubber
13	401693	Gaskets, washers, and other seals—from group other articles of vulcanized rubber other than hard rubber
14	420221	Handbags, whether or not with shoulders strap, including those without handle: with outer surface of leather, of composition leather, or patent leather
15	420222	Handbags, whether or not with shoulder straps, including those without handle: with outer surface of plastic sheeting or of textile materials
16	481940	Other sacks and bags, including cones—from group cartons, boxes, bags, and other packing containers of paper, paperboard, etc.
17	570330	Of other man-made textile materials—from group carpets and other textile floor coverings, tufted, whether or not made up
18	610120	Of cotton—from group men's or boy's overcoats, car-coats, capes, cloaks, anoraks, etc.
19	610130	Of man-made fibres—from group men's or boy's overcoats, car-coats, capes, cloaks, anoraks, etc.
20	610220	Of cotton—from group women's or girl's overcoats, car-coats, capes, cloaks, anoraks, etc.
21	610342	Trousers, bib and brace overalls, breeches and shorts—of cotton
22	610343	Trousers, bib and brace overalls, breeches and shorts—of synthetic fibres
23	610433	Jackets and blazers: of synthetic fibres—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.
24	610442	Dresses: of cotton—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.
25	610443	Dresses: of synthetic fibres—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.
26	610444	Dresses: of artificial fibres—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.





**TABLE 8: REFINED LIST B (SUCCESSFUL COMMODITY)**

No.	6-digit HS code	Description
27	610462	Trousers, bib and brace overalls, breeches and shorts: of cotton—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.
28	610463	Trousers, bib and brace overalls, breeches and shorts: of synthetic fibres—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.
29	610510	Of cotton—from group men's or boy's shirts, knitted or crocheted
30	610910	Of cotton—from group T-shirt, singlets, and other vests, knitted or crocheted
31	620311	Suits: of wool or fine animal hairs
32	620331	Jackets and blazers: of wool or fine animal hair—from group men's or boy's suits, ensembles, jackets, blazers, trousers, etc.
33	621290	Other—from group brassieres, girdles, corsets, braces, suspenders, etc.
34	621600	Gloves, mittens, and mitts
35	640299	Other footwear—from group other footwear with outer soles and uppers of rubber or plastics
36	640391	Other footwear: covering the ankle—from group footwear with outer soles of rubber, plastics, leather, or composition leather and uppers of leather
37	640411	Footwear with outer soles of rubber or plastics: sports footwear, tennis shoes, basketball shoes, gym shoes, training shoes, etc.
38	640419	Footwear with outer soles of rubber or plastics: other
39	670420	Of human hair—from group wigs, false beards, eyebrows, eyelashes, switches, etc.
40	670490	Of other materials—from group wigs, false beards, eyebrows, eyelashes, switches, etc.
41	711319	Of precious metal, whether or not plated or clad with precious metal
42	730429	Casing, tubing, and drill pipe, of a kind used in drilling for oil or gas
43	730900	Reservoirs, tanks, vats, and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 L
44	741220	Of copper alloys
45	760612	Rectangular (including square): of aluminum alloys
46	800110	Tin, not alloyed
47	800300	Tin bars, rods, profiles, and wire
48	842381	Other weighing machinery: having a maximum capacity not exceeding 30 kg



**TABLE 8: REFINED LIST B (SUCCESSFUL COMMODITY)**

No.	6-digit HS code	Description
49	844390	Parts—from group printing machinery, including ink-jet printing machines, other than those of heading no. 8471
50	847050	Cash registers—from group calculating machines and pocket-size data recording, reproducing, and displaying machines with calculating functions
51	848180	Other appliances—from group taps, cocks, valves, and similar appliances for pipes, boiler shells, etc.
52	850650	Lithium—from group primary cells and primary batteries
53	851020	Hair clippers with self-contained electric motor
54	852691	Other: radio navigational aid apparatus—from group radar apparatus, radio navigational aid apparatus, and radio remote control apparatus
55	853649	Relays: other—from group electrical apparatus for switching or protecting electrical circuits or for making connections to or in electrical circuits
56	854441	Other electric conductors, for a voltage not exceeding 80 V: fitted with connectors
57	871200	Bicycles and other cycles (including delivery tricycles), not motorized
58	901420	Instruments and appliances for aeronautical or space navigation (other than compasses)
59	901910	Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus
60	903149	Other optical instruments and appliances—from group measuring and checking instruments, appliances, and machines, not specified or included elsewhere in this chapter; profile projectors
61	920590	Other—from group other wind musical instruments (for example clarinets, trumpets, bagpipes)
62	920790	Other—from group musical instruments, the sound of which is produced, or must be amplified, electrically (for example organs, guitars, accordions)
63	940179	Other seats, with metal frames: other—from group seat (other than those of heading no. 9402), whether or not convertible into beds, and parts thereof
64	950390	Other—from group other toys; reduced size ("scale") models and similar recreational models, working or not; puzzles of all kinds

Source: Comtrade database.





**TABLE 9: REFINED LIST C (MISSED-OPPORTUNITY COMMODITY)**

No.	6-digit HS code	Description
1	080132	Cashew nuts: shelled— <i>from group coconut, Brazil nut, and cashew nut</i>
2	151319	Coconut (copra) oil and its fractions
3	611241	Women's or girls' swimwear: of synthetic fibres
4	920290	Other— <i>from group other string musical instruments (for example, guitars, violins, harps)</i>

Source: Comtrade database.

## Grouping

The above commodities are then grouped according to production processes and Canadian retailing practices. Tables 10 and 11 are preliminary lists of these groups broken down by their constituent commodities.

**TABLE 10: TOP COMMODITIES SUCCESSFUL IN THE CANADIAN MARKET**

No.	Product group	6-digit HS code	Description
1	Processed fish	030420	Frozen fillets— <i>from group fish fillet and other fish meat</i>
2	Coffee	090111	Coffee, not roasted, not decaffeinated
3	Derivative products from crude palm oil	151190	Other— <i>from group palm oil and its fractions, whether or not refined, but not chemically modified</i>
		291570	Palmitic acid, stearic acid, their salts and esters— <i>from group saturated acyclic monocarboxylic acids and their anhydrides, etc.</i>
4	Sugar	170290	Other, including invert sugar— <i>from group other sugars, including chemically pure lactose, maltose, glucose, fructose, in solid form, sugar syrup not containing added flavouring or colouring matter</i>
5	Cocoa products	180400	Cocoa butter, fat, and oil
6	Chemical products	382370	Industrial fatty alcohols
		382490	Other— <i>from group prepared binders for foundry moulds or cores, chemical products, and preparations of the chemical or allied industries</i>
7	Natural rubber	400110	Natural rubber latex, whether or not pre-vulcanized



**TABLE 10: TOP COMMODITIES SUCCESSFUL IN THE CANADIAN MARKET**

No.	Product group	6-digit HS code	Description
8	Rubber tires and gaskets	401110	Of a kind used on motor cars (including station wagons and racing cars)— <i>from group new pneumatic tires, of rubber</i>
		401120	Of a kind used on buses or lorries— <i>from group new pneumatic tires of rubber</i>
		401150	Of a kind used on bicycles— <i>from group new pneumatic tires, of rubber</i>
		401693	Other: gaskets, washers, and other— <i>from group other articles of vulcanized rubber other than hard rubber</i>
9	Handbags	420221	Handbags, whether or not with shoulders strap, including those without handle: with outer surface of leather, of composition leather, or patent leather
		420222	Handbags, whether or not with shoulder strap, including those without handle: with outer surface of plastic sheeting or of textile materials
10	Paper Bags	481940	Other sacks and bags, including cones— <i>from group cartons, boxes, bags, and other packing containers of paper, paperboard, etc.</i>
11	Carpets	570330	Of other man-made textile materials— <i>from group carpets and other textile floor coverings, tufted, whether or not made up</i>
12	Knitted or crocheted garments	610120	Of cotton— <i>from group men's or boys' overcoats, car-coats, capes, cloaks, anoraks, etc.</i>
		610130	Of man-made fibres— <i>from group men's or boys' overcoats, car-coats, capes, cloaks, anoraks, etc.</i>
		610220	Of cotton— <i>from group women's or girls' overcoats, car-coats, capes, cloaks, anoraks, etc.</i>
		610342	Trousers, bib and brace overalls, breeches and short—of cotton
		610343	Trousers, bib and brace overalls, breeches and short—of synthetic fibres
		610433	Jackets and blazers: of synthetic fibres— <i>from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.</i>
		610442	Dresses: of cotton— <i>from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.</i>
		610443	Dresses: of synthetic fibres— <i>from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.</i>







**TABLE 10: TOP COMMODITIES SUCCESSFUL IN THE CANADIAN MARKET**

No.	Product group	6-digit HS code	Description
12	Knitted or crocheted garments	610444	Dresses: of artificial fibres—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.
		610462	Trousers, bib and brace overalls, breeches, and shorts: of cotton—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.
		610463	Trousers, bib and brace overalls, breeches, and shorts: of synthetic fibres—from women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, etc.
		610510	Of cotton—from group men's or boy's shirts, knitted or crocheted
		610910	Of cotton—from group T-shirt, singlets, and other vests, knitted or crocheted
13	Not knitted/ crocheted garments	620311	Suits: of wool or fine animal hairs
		620331	Jackets and blazers: of wool or fine animal hair—from group men's or boy's suits, ensembles, jackets, blazers, trousers, etc.
		621290	Other—from group brassieres, girdles, corsets, braces, suspenders, etc.
		621600	Gloves, mittens, and mitts
14	Footwear	640299	Other footwear: other—from group other footwear with outer soles and uppers of rubber or plastics
		640391	Other footwear: covering the ankle—from group footwear with outer soles of rubber, plastics, leather or composition leather, and uppers of leather
		640411	Footwear with outer soles of rubber or plastics: sports footwear, tennis shoes, basketball shoes, gym shoes, training shoes, etc.
		640419	Footwear with outer soles of rubber or plastics: other
15	Wigs	670420	Of human hair—from group wigs, false beards, eyebrows, eyelashes, switches, etc.
		670490	Of other materials—from group wigs, false beards, eyebrows, eyelashes, switches, etc.
16	Precious metal jewellery	711319	Of precious metal, whether or not plated or clad with precious metal
17	Metal tubing	730429	Casing, tubing, and drill pipe, of a kind used in drilling for oil or gas
18	Metal tanks	730900	Reservoirs, tanks, vats, and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 L





**TABLE 10: TOP COMMODITIES SUCCESSFUL IN THE CANADIAN MARKET**

No.	Product group	6-digit HS code	Description
19	Copper	741220	Of copper alloys
20	Aluminum	760612	Rectangular (including square): of aluminum alloys
21	Tin	800110	Tin, not alloyed
		800300	Tin bars, rods, profiles, and wire
22	Weighing machinery	842381	Other weighing machinery: having a maximum capacity not exceeding 30 kg
23	Printing parts	844390	Parts—from group printing machinery, including ink-jet printing machines, other than those of heading no. 8471
24	Cash registers	847050	Cash registers—from group calculating machines and pocket-size data recording, reproducing, and displaying machines with calculating functions
25	Valves	848180	Other appliances—from group taps, cocks, valves, and similar appliances for pipes, boiler shells, etc.
26	Lithium batteries	850650	Lithium—from group primary cells and primary batteries
27	Electric shavers	851020	Hair clippers with self-contained electric motor
28	High-tech radar apparatus	852691	Other: radio navigational aid apparatus—from group radar apparatus, radio navigational aid apparatus, and radio remote control apparatus
29	Electrical apparatus	853649	Relays: other—from group electrical apparatus for switching or protecting electrical circuits or for making connections to or in electrical circuits
		854441	Other electric conductors, for a voltage not exceeding 80 V: fitted with connectors
30	Bicycles	871200	Bicycles and other cycles (including delivery tricycles), not motorized
31	Aeronautical navigation equipment	901420	Instruments and appliances for aeronautical or space navigation (other than compasses)
32	Massage equipment	901910	Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus
33	Optical measuring instruments	903149	Other optical instruments and appliances: other—from group measuring and checking instruments, appliances, and machines, not specified or included elsewhere in this chapter; profile projectors
34	Wind musical instruments	920590	Other—from group other wind musical instruments (for example clarinets, trumpets, bagpipes)





**TABLE 10: TOP COMMODITIES SUCCESSFUL IN THE CANADIAN MARKET**

No.	Product group	6-digit HS code	Description
35	Electrical musical instruments	920790	Other—from group musical instruments, the sound of which is produced, or must be amplified, electrically (for example organs, guitars, accordions)
36	Metal furniture	940179	Other seats, with metal frames: other—from group seat (other than those of heading no. 9402), whether or not convertible into beds, and parts thereof
37	Toys	950390	Other—from group other toys; reduced-size ("scale") models and similar recreational models, working or not; puzzles of all kinds

Source: Comtrade database.

**TABLE 11: TOP COMMODITIES THAT ARE MISSED OPPORTUNITIES IN THE CANADIAN MARKET**

No.	Product group	6-digit HS code	Description
1	Cashew nuts	080132	Cashew nuts: shelled—from group coconut, Brazil nut, and cashew nut
2	Coconut oil and its derivatives	151319	Coconut (copra) oil and its fractions
3	Swimwear	611241	Women's or girls' swimwear: of synthetic fibres
4	String musical instruments	920290	Other—from group other string musical instruments (for example, guitars, violins, harps)

Source: Comtrade database.

The two tables show the commodities likely to be able to substantially increase their exports to Canada. The commodities are quite diverse, ranging from primary products to high-end products, and from final goods to inputs.



# CHAPTER 4— Competitors



This chapter aims to identify Indonesia's major competitor countries in each missed-opportunity product group in terms of Indonesian exports to Canada. By definition, for missed-opportunity product groups Indonesian producers have lost market share to other countries. It is important to identify which countries have stolen market share from Indonesia. This analysis will only examine the top five export countries for each product group and will indicate each country's import tariff for that product group in the Canadian market. Once the successful competitor countries have been identified, further research can attempt to determine the reason for their increased market share.

## Cashew Nuts: Shelled

Indonesia's competitor countries are Vietnam, Brazil, India, and the United States. As can be seen in Table 12, Vietnam is the biggest exporter to Canada, dominating the market with a 68.2 per cent share. Vietnam is followed by Brazil, which has a 17.2 per cent market share. Indonesia is in fourth position and has only a 2.3 per cent share of the market.

The Canadian import trend from Vietnam in the period 2003–14 was the highest among the five countries, and was also double the trend of Canadian imports from the world. Clearly, Vietnam has done an excellent job of marketing their cashew nuts in Canada. The Canadian import trend from Indonesia is slightly less than the world export trend. However, the growth of Canadian imports of cashew nuts from the United States in 2014 was the highest (19.7 per cent year-over-year) among Canada's imports from the other four countries.

The import tariff rates in Canada for shelled cashew nuts for the five exporters is the same; 0 per cent. Thus, in terms of tariff barriers, the five countries have a level playing field on which to compete.

According to data from the Food and Agriculture Organization of the United Nations, Vietnam has been the biggest producer of cashew nuts in the world since 2003. It is followed by Nigeria and India. Indonesia ranks ninth in the list of the biggest producers, and Brazil ranks 11th. (See Table 13.) Distance probably explains why Canada imports more from Brazil. The United States is not a producer of cashew nuts; it imports from other countries as cashew nuts, in shell (HS 080131) and then exports to Canada as cashew nuts, shelled (HS 080132).



**TABLE 12: FIVE BIGGEST EXPORTERS OF SHELLED CASHEW NUTS TO THE CANADIAN MARKET**

Rank	Exporters	US\$ millions											Average annual growth (per cent) 2003-2014	Annual Growth (per cent) 2013-2014	Share (per cent) 2014	
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013				2014
	World	37.3	49.6	52.8	40.6	46.7	60.1	46.4	57.3	74.2	73.2	81.2	81.4	74	0.3	100
1	Vietnam	13.5	20.0	20.0	16.2	19.7	34.4	22.7	29.9	40.3	40.9	53.9	55.5	13.8	3.1	68
2	Brazil	14.0	17.1	18.6	12.3	20.1	15.2	16.2	19.8	15.8	16.6	12.5	14.0	0.0	12.0	17
3	India	5.9	8.6	9.3	7.7	3.5	6.3	4.0	3.5	9.5	7.4	6.9	5.1	-1.3	-26.3	6
4	Indonesia	1.1	1.3	1.2	1.7	0.6	2.1	0.4	0.4	0.8	1.2	2.2	1.9	4.9	-15.4	2
5	United States	0.6	0.7	1.1	1.0	1.5	0.7	0.7	0.5	1.3	1.3	1.4	1.6	8.8	19.7	2
	Rest of the world	2.2	1.7	2.6	1.7	1.3	1.4	2.4	3.1	6.6	5.9	4.3	3.3	3.7	-23.9	4

Source: International Trade Centre.





**TABLE 13: PRODUCTION OF CASHEW NUTS (TONNES)**

Rank	Country	2003	2010	2011	2012	2013
1	Vietnam	657,600	1,242,000	1,237,300	1,190,900	1,110,800
2	Nigeria	524,000	830,000	835,000	900,000	950,000
3	India	500,000	613,000	674,600	725,000	753,000
4	Côte d'Ivoire	84,811	380,000	393,000	450,000	450,000
5	Benin	46,002	102,137	162,986	170,000	180,000
6	Philippines	111,291	134,681	133,388	132,541	146,289
7	Guinea-Bissau	84,586	104,000	130,000	130,000	138,195
8	Tanzania	91,340	74,170	121,070	160,000	127,947
9	Indonesia	106,931	115,149	114,789	116,915	117,400
10	Burkina Faso	4,292	20,800	95,000	60,000	115,000
11	Brazil	183,094	104,342	230,785	80,630	109,679
12	Mozambique	63,818	96,558	112,796	64,731	65,000
13	Ghana	16,500	30,000	36,000	40,500	44,500
14	Kenya	10,000	17,568	20,927	29,026	30,000
15	Thailand	43,492	37,857	29,060	28,000	27,000

Source: FAOSTAT.  
Note: Some figures are estimates.

Interestingly, India is the biggest importing country for cashew nuts in shells (HS 080131) in the world, followed by Vietnam. This suggests that both countries have successfully developed the cashew export industry and need to import from other countries to fulfil the export demand. The United States is also included in the list as the 10th biggest importer of cashew nuts in shells. It imports cashew nuts from Vietnam, India, Brazil, Sri Lanka, and Indonesia.

### Processed Coconut Oil

Competitors to Indonesia for processed coconut oil in the Canadian market are the Philippines, Sri Lanka, the United States, and Malaysia. Philippines is the biggest exporter to the Canadian market and dominates with a 61.4 per cent market share. It is followed by Sri Lanka, with a 21.75 per cent market share. Indonesia is in fifth position with only 4.8 per cent of the market. However, the value of Canada's imports of processed coconut oil from Indonesia grew by 146.5 per cent in 2014. But even this was surpassed by the growth of Canadian imports from Sri Lanka in 2014 (239 per cent year-over-year). (See Table 14.)

Even though the Philippines dominates the market, the Canadian import trend for processed coconut oil from this country between 2003 and 2014 was the same as the Canadian import trend from the world as a whole (0.22 per cent). The Canadian import trend from Sri Lanka in the same period was the highest at 0.53 per cent, followed by Indonesia (0.28 per cent) and the United States (0.26 per cent).





**TABLE 14: FIVE BIGGEST EXPORTERS OF COCONUT PRODUCTS TO THE CANADIAN MARKET**

Rank	Exporters	US\$ millions											Average annual growth (per cent) 2003-2014	Annual Growth (per cent) 2013-2014	Share (per cent) 2014	
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013				2014
	World	6.4	8.6	12.8	9.7	17.1	18.1	15.4	16.5	28.4	33.5	40.6	57.8	0.2	42.3	100.0
1	Philippines	4.1	4.0	2.8	4.9	9.1	13.6	7.7	9.9	14.8	21.5	29.2	35.5	0.2	21.6	61.4
2	Sri Lanka	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.4	2.4	8.0	0.5	239.0	13.9
3	United States	0.3	0.5	0.5	0.4	0.5	1.2	2.0	2.6	4.8	4.7	3.5	4.4	0.3	23.8	7.6
4	Malaysia	1.4	3.5	8.7	3.1	3.8	1.5	3.4	2.5	7.4	4.5	2.9	3.3	0.1	15.8	5.8
5	Indonesia	0.2	0.1	0.3	0.7	3.1	0.7	1.6	0.9	0.2	1.2	1.1	2.8	0.3	146.5	4.8
	Rest of the world	0.3	0.3	0.4	0.6	0.6	1.0	0.7	0.7	1.1	1.2	1.5	3.8	0.3	150.2	6.5

Source: International Trade Centre.





Identical to the case of cashew nuts, processed coconut oil enters Canada from all of the five biggest exporting countries tariff-free.

Based on FAO statistics, as presented in Table 15, Indonesia is the biggest producer of coconut in the world, followed by the Philippines. Sri Lanka is fifth and Malaysia is tenth. However, based on Indonesian export data for coconut products, Indonesian exports of processed coconut oil or virgin coconut oil (HS 151319) to the world was only 31.8 per cent of its total exports of coconut products and their derivatives (including desiccated coconut, other desiccated coconut, copra, crude coconut oil, virgin coconut oil, and cake or solid residue of coconut or copra). Indonesia has moved up the value chain to export processed coconut products, generating more value-added in the country as a result.

**TABLE 15: PRODUCTION OF COCONUT (TONNES)**

Rank	Country	2003	2010	2011	2012	2013
1	Indonesia	16,145,000	18,000,000	17,500,000	19,400,000	18,300,000
2	Philippines	14,294,200	15,510,283	15,244,609	15,862,386	15,353,200
3	India	8,630,000	10,840,000	10,280,000	10,560,000	11,930,000
4	Brazil	2,978,490	2,843,453	2,943,651	2,931,531	2,890,286
5	Sri Lanka	1,947,120	1,990,440	2,057,320	2,224,500	2,513,000
6	Viet Nam	893,300	1,162,200	1,201,563	1,273,003	1,303,826
7	Papua New Guinea	631,000	1,210,000	1,210,000	1,210,000	1,200,000
8	Mexico	1,026,800	1,156,800	1,139,300	1,091,800	1,064,400
9	Thailand	2,117,296	1,298,147	1,055,318	1,057,000	1,010,000
10	Malaysia	580,000	550,140	562,556	624,152	646,932
11	Tanzania	389,446	570,000	550,000	520,000	530,000
12	Myanmar	364,689	428,075	420,000	421,850	425,000
13	Solomon Islands	192,000	396,000	384,000	408,000	410,000
14	Vanuatu	231,100	400,000	373,500	371,000	410,000
15	Ghana	315,000	292,000	344,000	345,000	366,183

Source: FAOStats.

Note: Not all figures are official and some have been estimated.

## Swimwear Products

Indonesia is the fourth largest exporter of swimwear to the Canadian market. The first position is occupied by China, which dominates the market with more than 60 per cent market share, followed by Cambodia. Both countries combined account for almost three-quarters of the Canadian swimwear market.







**TABLE 16: FIVE BIGGEST EXPORTERS OF SWIMWEAR PRODUCTS TO THE CANADIAN MARKET**

Rank	Exporters	US\$ millions											Average annual growth (per cent) 2003-2014	Annual Growth (per cent) 2013-2014	Share (per cent) 2014	
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013				2014
	World	30.0	40.1	46.4	65.1	78.2	88.1	74.1	73.1	95.7	86.6	96.7	94.0	0.11	-2.8	100.0
1	China	7.4	14.4	20.6	35.6	50.7	59.2	46.7	45.6	60.9	56.6	60.1	58.9	0.21	-2.0	62.7
2	Cambodia	0.0	0.5	2.8	5.5	6.3	7.6	7.8	7.0	10.3	6.1	10.5	10.4	0.63	-0.8	11.1
3	Viet Nam	0.1	0.2	0.4	0.8	1.4	2.5	3.0	4.0	4.7	3.6	5.9	5.6	0.45	-4.2	6.0
4	Indonesia	1.0	1.7	1.6	2.5	2.7	2.0	2.4	1.5	1.8	2.0	3.3	4.2	0.14	27.6	4.5
5	United States	8.0	8.0	6.3	5.3	5.2	4.6	3.1	3.0	4.1	5.9	5.1	4.0	-0.06	-20.8	4.3
	Rest of the world	13.2	15.2	14.5	15.2	11.5	11.2	11.0	11.3	12.0	9.8	9.2	8.0	-0.04	-13.7	8.5

Source: International Trade Centre.





Although China dominates the market, the Canadian import trend from Cambodia was the highest in the 2003–14 period (0.63 per cent), followed by Vietnam (0.45 per cent). Canadian imports from China and Indonesia followed with a trend of 0.21 per cent and 0.14 per cent, respectively. The Canadian import trend from the United States in the same period was negative (–0.06 per cent), far below the world export trend (0.11 per cent). Growth in Canadian swimwear imports from Indonesia in 2014 was 27.6 per cent, while Canadian imports from the other four countries actually declined, suggesting excellent potential for Indonesian swimwear in Canada. (See Table 16.)

China, Indonesia, and Vietnam share the same high tariff on swimwear products in the Canadian market, while Cambodia and the United States face no tariff. (See Table 17.) This indicates that China has a big advantage compared with the other four countries for this product since the high tariff does not prevent it from dominating the market.

**TABLE 17: CANADIAN SIMPLE AVERAGE OF APPLIED IMPORT TARIFFS FOR THE FIVE BIGGEST EXPORTERS OF SWIMWEAR PRODUCTS (PER CENT)**

Country	Canadian Applied Import Tariff for HS 611241											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Cambodia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
China	18.5	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Indonesia	18.5	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vietnam	18.5	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0

Source: WITS.

## Stringed Musical Instruments

The data show that there is a steady demand for stringed musical instruments such as guitars, violins, and harps in the Canadian market. The biggest exporter of these products to Canada is China, followed by the United States and Mexico. These three countries held more than 85 per cent of market share in 2014. Indonesia was in fourth position with 7.9 per cent, followed by Italy in fifth position with 0.8 per cent. (See Table 18.)

The Canadian import trend from Mexico in 2003–14 was high at 0.58 per cent. Mexico is followed by Italy (0.28 per cent) and the United States (0.09 per cent). The export trend of these three countries is above the world export trend (0.08 per cent). The Canadian import trend from China was the same as the Canadian import trend from the world as a whole. Indonesia lagged its competitors with an import trend of 0.05 per cent in the same period. However, the growth in Canadian imports of stringed musical instruments from Indonesia in 2014 was the highest among the other four countries (19.53 per cent) and also higher than world export growth (0.7 per cent).

China and Indonesia share the same tariff (2.5 per cent) in the Canadian market. Mexico and the United States face no tariff as NAFTA countries. However, Italy faces the highest tariff among the five countries (3 per cent). (See Table 19.)





**TABLE 18: FIVE BIGGEST EXPORTERS OF STRING MUSIC PRODUCTS TO CANADIAN MARKET**

Rank	Exporters	US\$ millions											Average annual growth (per cent) 2003-2014	Annual Growth (per cent) 2013-2014	Share (per cent) 2014	
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013				2014
	World	15.2	20.0	23.8	25.1	28.0	32.6	27.3	27.1	29.8	34.1	34.4	34.6	0.08	0.7	100.0
1	China	5.5	8.1	11.0	10.6	10.8	14.2	11.5	10.1	11.3	13.0	13.0	13.4	0.08	2.6	38.7
2	United States	5.0	5.7	7.8	9.2	12.2	13.0	10.8	11.5	13.3	14.7	13.3	12.7	0.09	-4.0	36.8
3	Mexico	0.0	0.1	0.1	0.3	0.7	0.8	1.0	1.9	1.9	2.8	3.6	3.9	0.58	7.6	11.2
4	Indonesia	1.6	2.8	1.9	1.4	1.6	2.0	2.2	2.0	1.9	1.9	2.3	2.7	0.05	19.5	7.9
5	Italy	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.3	0.3	0.28	11.5	0.8
	Rest of the world	3.1	3.4	3.0	3.6	2.5	2.6	1.9	1.6	1.5	1.6	1.9	1.6	-0.06	-16.7	4.6

Source: International Trade Centre.





**TABLE 19: CANADIAN SIMPLE AVERAGE OF APPLIED IMPORT TARIFF FOR THE FIVE BIGGEST EXPORTERS OF STRINGED MUSICAL INSTRUMENTS (PER CENT)**

Country	Canadian Simple Average of Applied Import Tariff for HS 920290											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
China	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Indonesia	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Italy	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Mexico	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: WITS.

The same as for swimwear, China has an advantage in the Canadian market compared with the United States and Mexico, given that they can easily overcome the tariff wall.





# CHAPTER 5—Canadian Market Trends

Understanding Canadian market trends is vital for formulating market strategy. The focus of Chapter 5 is to examine the historical trends in the sales of the product groups that have a good chance of being successfully exported from Indonesia to Canada, and to forecast the future demand for these products to allow for a focus on promising markets. The emphasis will be on products sold in consumer markets, as opposed to products that serve as inputs to industrial processes. However, it would be possible in the future, using input-output analysis, to also generate market projections for input product groups. Chapter 5 will examine the historical trends and short-term forecasts for Canadian GDP by province, the historical trends in retail sales, and the forecast for consumption for Canada as a whole.

## Historical Trend and Forecast of GDP

The Conference Board of Canada, in its fall economic outlook, noted that investment in oil and gas and Canadian GDP are linked to the price of oil and gas. In 2015, the Conference Board projected Canada's real GDP growth to be 1.3 per cent, lower than for 2014. The Conference Board's GDP forecast for 2015 indicated that the energy sector is responsible for most of the projected weakness. That forecast is in line with the sharp decline in the average oil price from C\$53 per barrel in 2014 to around C\$33 per barrel in 2015. As a result, investment in oil and gas also declined sharply in 2015.

However, at the provincial level, real GDP growth for most of the provinces in 2015 was projected to be higher than national real GDP growth. The highest growth was projected to happen in British Columbia, Ontario, and Manitoba. British Columbia is developing the liquefied natural gas (LNG) sector, attracting major project investment. In addition, B.C. is becoming increasingly focused on small business and services (the service sector provides almost four-fifths of the province's jobs), and strengthening its relationship with Japan, China, Korea, and India to become a trade hub for goods, services, and people travelling between Asia and North America (WorkBC, 2015). Meanwhile, Ontario is home to nearly half of Canada's top 1 per cent of income earners (those who earn C\$191,000 or more per year). Most live in Toronto, making this city a hub for high-end luxury goods. In addition, Ontario attracts more immigrants than any other province. With large populations from all corners of the world, the province offers strong opportunities to introduce new ethnic products (Trade Facilitation Office, 2015).

In 2016, Canadian real GDP growth is forecast to be stronger. British Columbia, Ontario, and Manitoba still remain the three provinces expected to post the highest growth. Over the next few years, British Columbia's economy is projected to advance at a robust pace. The housing market is showing no signs of fatigue and remains a dominant factor in the solid performance of B.C.'s economy. If all conditions are met, construction on the first multi-billion dollar LNG terminal will start in 2016 and that will provide a strong boost to the construction industry and business services. In Manitoba, some major investments by the public and private sectors will help keep the economy vibrant over the next two years. As investment soars and manufacturing advances at a steady pace, new jobs will be created. The service sector in Manitoba will also perform well over the near term. The Ontario economy in the next few years will be driven by strong growth in full-time employment, which will create wage gains and boost household consumption. In addition, Ontario's exports should improve significantly on U.S. economic strength and a lower dollar.





Therefore, to enhance exports to Canada, Indonesia should focus on three provinces: British Columbia, Ontario, and Manitoba. In addition to their relatively strong economic growth, 55.1 per cent of the Canadian population is in those three provinces (Statistics Canada, 2015).<sup>3</sup>

## Retail Sales

Discussing the development of retail sales is important because it illustrates how demand for the targeted product groups has evolved in recent history. In this section, we will only focus on the retail sales of goods for final consumption that are likely to succeed as Indonesian exports to Canada, such as clothing, footwear, and coffee. Tracking the sales of input goods (such as rubber, tin, chemical products, etc.) is also important, but because of time constraints, an analysis of this demand is not included in this report.

Retail sales data are obtained from Statistics Canada's CANSIM database. The final demand commodity groups for the priority commodities identified in Chapter 3 are aligned with the retail sales categories as presented in Table 20.

**TABLE 20: CANSIM DATABASE FOR RETAIL SALES**

No.	CANSIM database	Retail sales grouping	Commodity groups in Chapter 3
1	Fresh fish and other seafood	Food and beverages	Processed fish, coffee, sugar, cocoa products, cashew nuts
2	Candy, confectionery, and snack foods		
3	Frozen foods		
4	Non-alcoholic beverages		
5	Jewellery and watches	Jewellery and watches	Precious metal jewellery
6	Clothing and accessories	Clothing, footwear, and leather goods	Garment, footwear, handbag
7	Footwear		
8	Luggage and leather goods		
9	All other indoor furniture	Furniture and other home appliances	Metal furniture, carpets
10	Floor coverings and tiles		
11	Toys, games, and hobby supplies (including electronic games)	Toys, games, and hobby supplies (including electronic games)	Toys

Retail sales during 2010–14 grew by 3.6 per cent per year on average. Among the retail sales groups defined in Table 20, retail sales for jewellery and watches had the highest growth, followed by clothing, footwear, and leather goods. (See Chart 12.)

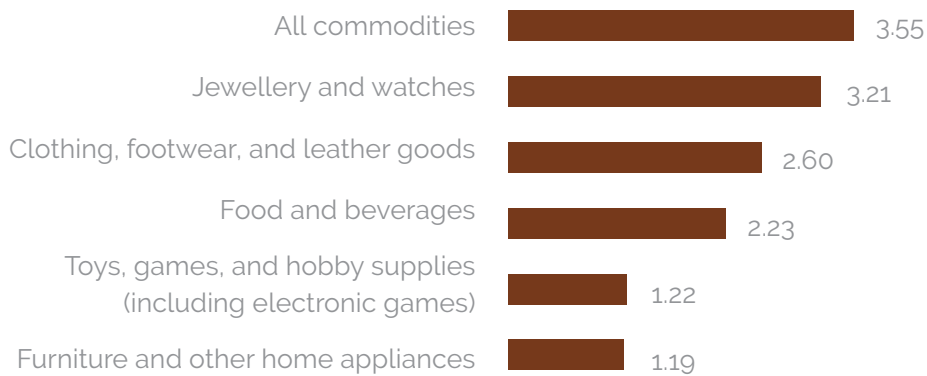
<sup>3</sup> As of July 1, 2015.





## CHART 12: RETAIL SALES GROWTH, 2010–14

(per cent)



Source: Statistics Canada.

The above figures suggest that Indonesia should give special focus to clothing, footwear, and jewellery exports to Canada. Additional information about Canadian spending behaviour is provided by a survey conducted by Ebates.ca in mid-2015. According to this survey, the vast majority of Canadians (79 per cent) planned on spending the same or even more over the 2015 holiday season than they did in 2014. The same survey also showed that around half of Canadians planned to take advantage of the deals during the biggest shopping days of the year: 45 per cent planned to shop on Black Friday; 40 per cent on Cyber Monday; and 53 per cent on Boxing Day—which in Canada is still viewed as the day with the best deals. The top items that Canadians planned to shop for during the 2015 holiday season included clothing and accessories (67 per cent), electronics (55 per cent), books (54 per cent), toys (46 per cent), health and beauty (43 per cent), and sports and exercise gear (21 per cent) (Trade Facilitation Office, 2015).

### Consumption

Around 25 per cent of Canadians' household income is expended on taxes, pension/savings, and insurance. Most of the remaining income is spent on basic needs, for instance shelter, transportation, food, and health care. And around 34 per cent of income is spent on other non-basic consumer goods and services (Trade Facilitation Office, 2015).

In terms of goods and services spending based on the Statistics Canada's Survey of Household Spending, household spending during 2010–14 grew by 2.3 per cent per year on average. For 2015, The Conference Board of Canada forecasts total Canadian household spending to grow by around 2 per cent.

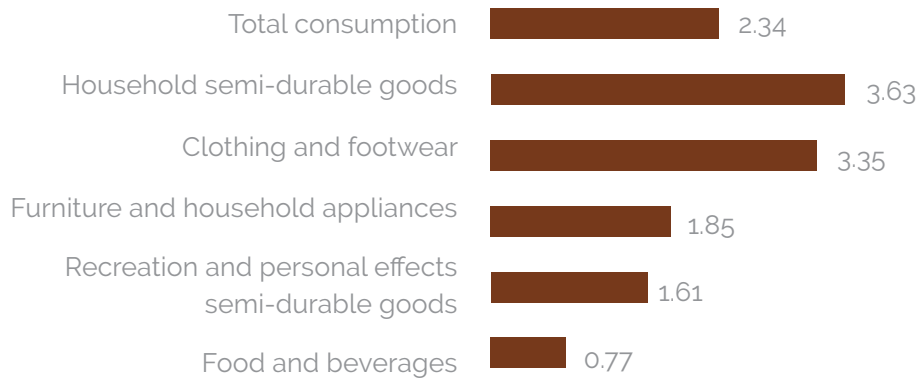
Among the household spending groups that align with the target commodity groupings, household spending for household semi-durable goods and clothing and footwear grew more than other groupings during 2010–14, at 3.6 per cent and 3.4 per cent respectively. (See Chart 13.) This is in line with the growth of the retail sales groups over the same time period.





### CHART 13: CONSUMPTION GROWTH, 2010–14

(per cent)

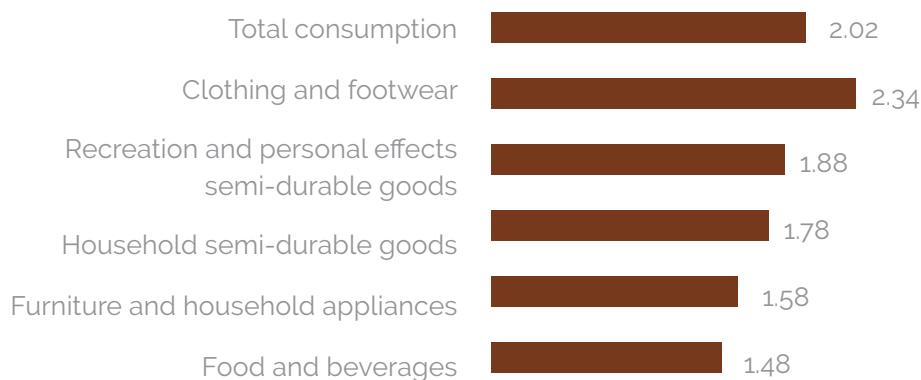


Source: Statistics Canada.

The Conference Board's consumer spending forecast indicates that spending will continue to grow over the next five years, although there will be a slowdown for some sectors. Several household expenditure categories over 2016–20 are expected to grow faster than during the 2010–14 period, especially the food and beverages group (1.5 per cent) and the recreation and personal effects semi-durable goods group (1.9 per cent). However, the clothing and footwear group and the household semi-durable goods group will experience a slowdown, growing by 2.3 per cent and 1.8 per cent respectively. (See Chart 14.) Nevertheless, the nominal value of the increase in clothing and footwear spending is greater than in the other groups because of the relatively large size of this spending category.

### CHART 14: CONSUMPTION GROWTH FORECAST, 2016–20

(per cent)



Source: The Conference Board of Canada.







# CHAPTER 6—Gender and Environmental Analysis: Garments

This chapter serves as an example of the gender and environmental analyses that can be undertaken at a high level for each of the target commodity groups identified in Chapter 3. The analyses will focus on the garment commodity grouping, because 1) in terms of numbers, the role of women is large; and 2) literature has shown that the garment sector has environmental issues.

The garment sector is important for Indonesia because it represents 1.6 per cent of GDP (2012) and provides work for 1.3 million employees (2011). The garment sector in Indonesia is one of the largest in the world, and is growing at over 8 per cent per year, as enterprises move from China to Indonesia (Better Work Indonesia, 2014a). Moreover, there are more than 170 foreign brands and companies active in Indonesia's garment industry. Indonesian garments have fared well in international export markets by meeting high-quality standards.

## Gender Analysis

### Potential to Benefit Women

In 2011, 1.3 million people were directly employed (e.g., in factories) and many others were indirectly employed (e.g., home workers). Around 78 per cent of the home workers were women. According to data from the 2015 World Bank's Enterprise Survey, women made up 30.2 per cent of fulltime workers in manufacturing and 40.8 per cent in services. (See Table 21.)

**TABLE 21: SHARE OF WOMEN WORKING FULL TIME, 2015 (PER CENT)**

<b>Manufacturing</b>	<b>30.2</b>
Food	47.1
Textiles	51.3
Garments	52.3
Chemicals & Chemical Products	32.7
Rubber & Plastics Products	12.0
Non-Metallic Mineral Products	9.5
Other Manufacturing	24.5





<b>Services</b>	<b>40.8</b>
Retail	45.4
Other Services	35.6

Source: World Bank Enterprise Survey 2015.

Women play an essential role in the garment industry. The majority of full-time workers in that industry are women (52.3 per cent) and 36 per cent of firms in the garment industry had a female top manager. (See Table 22.) Thus, women have the opportunity to influence policy decisions. This sector is expected to continue to be a major contributor to Indonesia's economic future, considering Indonesia's comparative advantages for labour-intensive industries (Better Work Indonesia, 2014a).

**TABLE 22: SHARE OF FIRMS WITH A FEMALE TOP MANAGER, 2015 (PER CENT)**

<b>Manufacturing</b>	<b>16.0</b>
Food	18.3
Textiles	19.3
Garments	36.0
Chemicals & Chemical Products	24.3
Rubber & Plastics Products	42.7
Non-Metallic Mineral Products	2.3
Other Manufacturing	6.2
<b>Services</b>	<b>23.6</b>
Retail	28.7
Other Services	17.9

Source: World Bank Enterprise Survey 2015.

Women are not only workers, as 39.3 per cent of garment firms have majority female ownership (See Table 23.)

**TABLE 23: SHARE OF FIRMS WITH MAJORITY FEMALE OWNERSHIP (PER CENT)**

<b>Manufacturing</b>	<b>14.5</b>
Food	19.3
Textiles	17.0
Garments	39.3





Chemicals & Chemical Products	6.2
Rubber & Plastics Products	40.7
Non-Metallic Mineral Products	2.5
Other Manufacturing	4.4
<b>Services</b>	<b>19.1</b>
Retail	21.8
Other Services	16.2

Source: World Bank Enterprise Survey 2015.

However, regarding worker's wages, a study done by Taniguchi and Tuwo (2014) found that a gender wage gap exists in Indonesia. Using data from the National Labour Force Survey (Sakernas) in 2010, the study found that monthly wages for male workers were higher than for female workers, especially in rural areas. The gender wage gap in the manufacturing sector (including the garment industry) was 28.4 per cent.

The study also analyzed gender wage differences by employment category and age group. While the gender wage difference was wide in young workers (below 19 years old) and for part-time workers, the highest gender wage gap was for 30- to 59-year-olds who were fully employed.

Given the significant role of women in the garment industry, training of women workers is necessary to boost productivity and product quality. Better Work Indonesia has organized skills training for women in the garment industry.

According to World Economic Forum data for Indonesia, on a scale of 1 to 7 (1 being the lowest and 7 the highest score for accessing the training), Indonesia's score was 4.4, lower than Malaysia (5.3), Philippines (4.6), and Singapore (5.3), but the same score as Thailand.

### Market Access Opportunity for Exporting

The garment sector is fully involved in exporting, with 14.2 per cent of garment firms exporting either directly and indirectly. (See Table 24.)

**TABLE 24: SHARE OF FIRMS EXPORTING AT LEAST 1 PER CENT OF SALES, DIRECTLY OR INDIRECTLY (PER CENT)**

<b>Manufacturing</b>	<b>7.8</b>
Food	5.8
Textiles	14.0
Garments	14.2
Chemicals & Chemical Products	15.6
Rubber & Plastics Products	4.8
Non-Metallic Mineral Products	3.4





Other Manufacturing	7.3
<b>Services</b>	<b>11.4</b>
Retail	14.8
Other Services	7.7

Source: World Bank Enterprise Survey 2015.

For the manufacturing sector as a whole, the share of manufacturing firms with women in top management and men in top management that conduct exporting (either directly or indirectly) is 12.9 per cent and 10.1 per cent, respectively. This is lower than the average for all countries (16.9 per cent) and for the average of East Asia and Pacific countries (14.3 per cent) and for the world.

The above differences could be due to lack of education (training). Formal training opportunities in firms with women in top manager roles in Indonesia are less than in other East Asia and Pacific countries. The proportion of workers offered formal training in Indonesia versus the average in East Asia and Pacific countries is 11.2 per cent and 60.4 per cent, respectively (World Bank Enterprise Surveys, 2015).

In addition, the Asia Foundation (2013) noted challenges for women-owned or -operated small and medium-sized enterprises (SMEs) in exporting activities, such as poor business management skills, operational challenges, financial barriers, lack of business networking and participation in business associations, lack of government support, corruption, and a lack of social support systems.

## Social Performance

There are forms of certification and industry codes of conduct that demonstrate compliance with social and environmental standards in the garment industry.

Social performance is considered important for a growing segment of consumers. In garment production, social performance is described in the Ethical Trading Initiative's *Base Code*, which includes the application of minimum labour standards in business, production, and sourcing (work is freely chosen, collective bargaining is respected, work conditions are safe, non-discrimination is practised, living wages are paid, child and forced labour is not practised, health and safety measures are in place). While a limited number of business entities subscribe to the *Base Code*, domestic and international companies operating in Indonesia are required to comply with the national labour law reflecting these practices.

Since 2003, Indonesia has had regulations to prohibit discrimination at the workplace (Article 6 of Act no. 13, 2003). Article 6 states that every worker/labourer has the right to receive equal treatment without discrimination from their employer. However, women can find themselves in disadvantaged situations in the workplace; mostly in regard to wages or dismissal due to pregnancy or getting married. Some garment factories were found to have issued recruitment materials such as job announcements or job application forms that made reference to the applicant's gender, marital status, or religion.

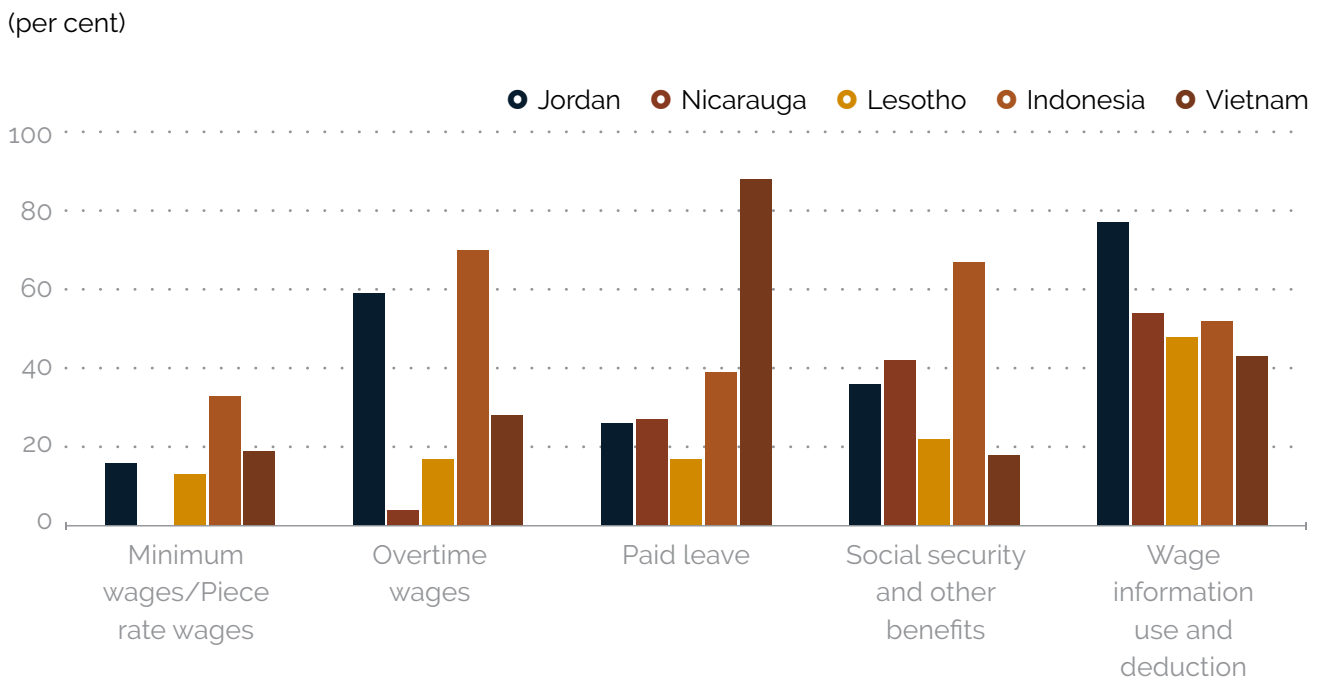
However, along with the other ASEAN (Association of Southeast Asian Nations) countries, Indonesia has provided adequate protection to the reproductive needs of women, giving menstruation and maternity leaves. This refers to Indonesia being a part of the International Labour Organization (ILO) Convention No. 183 on maternity protection. Unfortunately, to obtain menstruation leave, a female worker must go through complicated procedures, with paramedics required to perform tests (IndustriALL Indonesia Council—Committee on Women, 2014).





We do not have data about the non-compliance level with ILO standards for female workers in the garment industry, but aggregate data (for women and men) indicate that many non-compliance issues happen in the textiles, clothing, leather, and footwear industries, especially regarding wage and benefits payments. Indonesia has the highest level of non-compliance for minimum wages compared with similar countries (Nicaragua, Lesotho, and Vietnam); Indonesia has higher levels of non-compliance for overtime wages and social security and other benefits than Vietnam (ILO, 2014). (See Chart 15.)

**CHART 15: NON-COMPLIANCE WITH WAGE AND BENEFITS PAYMENTS IN FACTORIES, FOR TEXTILE, CLOTHING, LEATHER, AND FOOTWEAR**



Source: International Labour Organization.

In terms of ensuring the safety of workers, Indonesia has issued Government Regulation No. 28 (2002) about workplace construction standards. It is important to avoid what happened in Bangladesh on April 24, 2013, when a garment factory collapsed and killed 1,100 workers.

### Labour Concerns

A study done by the ILO and IFC in Indonesia in 2011–12 surveyed 918 workers in 42 garment factories and found safety concerns. Their concerns related to thirst, heat, chemicals, pollution, and workplace hazards. It was found that 53.5 per cent of workers surveyed experienced severe thirst often or every day. The workers also raised concerns over dusty or polluted air (64.3 per cent) and bad chemical smells (68.9 per cent). This might be related to lack of proper ventilation in some factories, which also relates to another concern—excessive heat. Another concern related to working condition was the noise level in the factory.

Most workers surveyed (69.7 per cent) worked in non-permanent positions (ILO and IFC, 2012). Implications for workers on short-term contract include job insecurity, few training opportunities, lack of promotion, and limited benefits and social protection rights. In particular, the garment industry is known to employ a significant number of home-based workers, 87 per cent of whom are women, who finish garments on the basis of piece work (ILO, 2010). Women may like a home-based arrangement because it allows them to balance home care and income-generation activities in a flexible way. Home-based work, however, can be





unpredictable and is characterized by long hours, arbitrary withholding of work, low pay, and child labour. In many cases home-based arrangements are not contractual and not under the protection of any labour laws. (See text box, Case Study of Women's Home-Based Work: Batik Tulis.)

### Case Study of Women's Home-Based Work: Batik Tulis

Batik is a garment product in Indonesia that is already acknowledged as an important cultural heritage by UNESCO. Originally, batik was done by artisans using wax, but nowadays there are many textile batiks (fully printed batiks) that are produced by machine, for a cheaper price and involving many male workers. However, "batik tulis," produced by batik artisans, is still available and regarded as valuable, expensive, and high-quality batik. In this case, the batik artisan is generally identified with women, because "membatik," or making batik, requires precision and patience, which are stereotyped as characteristics of women. Even though there are many male workers and male managers in the batik industry, women still play a very significant role.

In the batik industry as a whole, and especially for "batik tulis," production is often organized through the "putting out system." In this system, women can work at home and are paid on a per-piece basis. Firms can find this system more cost effective, since they do not need to provide working places, working equipment, or facilities such as water and electricity. But as informal workers, they cannot get benefits, such as health and accident insurance, and they also tend to get lower pay. A study done by the International Labour Organization (2010) that surveyed 2,068 informal workers in 22 sectors in Jakarta, Jogjakarta, Central Java, and Kupang found that 58 per cent of informal workers earned under 800,000 rupiah (Rp) per month (C\$80 per month). The lowest income level is found in the batik cloth sector and sand/stone cutting (50 to 60 per cent with earnings less than Rp400,000 per month, or about C\$40), while the highest income levels were found in the vehicle repair, food stall/restaurants, fishery, and furniture sectors.

As a home industry, the batik industry threatens the workers' domestic harmony. Since the batik home worker usually works in the domestic area, their house becomes unorganized and messy. Children lose their place to play and study. Furthermore, since the waste products (from wax, kerosene, chemicals, and dust) are produced in the home, they represent an environmental threat to the family members and their near neighbours. Hunga (2014) stated in her article that the State Minister for Environment has identified the batik industry at the micro, small, or medium scale as one of the worst causes of river pollution in Indonesia.

The batik industry should consider the environmental and social costs of the home-based system for the health of its workers and their families. Respiratory disorders, skin diseases, and other diseases caused by fine threads from the cutting and sewing process, air pollution from kerosene, chemical dyes waste, and a prolonged sitting position should also be considered by the employer as health threats requiring remedies.

The ILO, with its local partners under the MAMPU Project (Access to Employment and Decent Work for Women), advocates for an improved understanding of employers' responsibilities to home-based

### Preliminary Value Chain Analysis

The garment industry is included in the textile and textile products sector in Indonesia. The whole textile and textile products industry is quite complex and therefore usually divided into upstream, midstream, and downstream industries, the latter being characterized by labour-intensive work carried out by a large workforce of women. (See Table 25.)





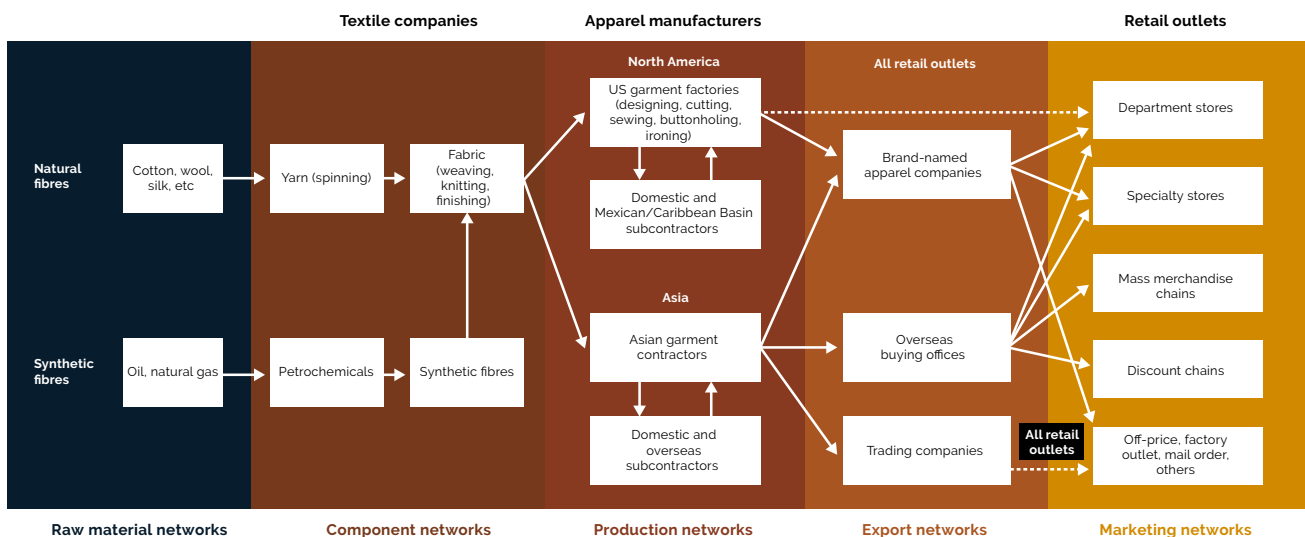
**TABLE 25: INDUSTRIAL STRUCTURE OF TEXTILE AND TEXTILE PRODUCTS IN INDONESIA**

Industry structure	Sector	Industrial characteristics
Upstream industry	<ul style="list-style-type: none"> <li>Natural fiber</li> <li>Fiber industry (man-made fiber)</li> </ul>	<ul style="list-style-type: none"> <li>Capital intensive and large scale</li> <li>Fully automated industry</li> <li>Large number of small-scale firms</li> <li>Very high energy absorption</li> <li>Products: natural fibre, synthetic fibre, rayon fibre</li> </ul>
Midstream industry	<ul style="list-style-type: none"> <li>Spinning</li> <li>Weaving</li> <li>Knitting</li> <li>Dyeing/printing/finishing</li> </ul>	<ul style="list-style-type: none"> <li>Somewhat capital and investment intensive</li> <li>Modern technology and continuous growth</li> <li>Workforce is larger than in the upstream industry</li> <li>High energy absorption</li> <li>Products: thread, yarded fabric (woven and knitted), finishing fabric</li> </ul>
Downstream industry	<ul style="list-style-type: none"> <li>Garment</li> <li>Other textile products</li> </ul>	<ul style="list-style-type: none"> <li>Labour-intensive and mostly women</li> <li>Growing technology</li> <li>Both capital- and labour-intensive</li> <li>High flexibility with various end-product consumers</li> <li>Products: clothing, pillow sheets, curtains, blankets, car seats, tents, carpets, etc.</li> </ul>

Source: Kuncoro.

Since many garment industry firms in Indonesia are large foreign-owned enterprises, Indonesia is included in the global production network, as can be seen in Exhibit 1. The garment industry in Indonesia is fully integrated both nationally and internationally.

**EXHIBIT 1: THE GLOBAL APPAREL VALUE CHAIN**



Source: Gereffi and Memedovic.





## Remedies From a Gender Perspective

The garment industry provides employment opportunities for women, and potentially increases their sense of empowerment because they have more income under their control. Worldwide, the garment industry is built on the competitive advantage of cheap female labour and weakened labour standards. It is therefore important to mitigate against the worst of these, and protect the most vulnerable who may be found in informal work. Remedies could include:

- ensure gender equality in staff training and promotion;
- ensure that reasonable benefits are provided by garment industry firms to the home-based garment industry;
- enhance enforcement to avoid further cases of non-compliance related to the minimum wage and wages for overtime, as well as ensure gender equality on monthly wages and other benefits;
- promote associations that empower women, for example in batik, not just as wage workers, but also as owners or co-owners;
- promote access to productive resources, such as capital and technical assistance;
- encourage use of eco-friendly dyeing products in the garment industry, especially in the batik industry;
- promote the business case for social responsibility codes through industry associations and multi-stakeholder initiatives;
- promote sex-disaggregated data collection to facilitate gender analysis at the industry level.

## Environmental Analysis

An analysis of the environmental impact of the garment industry should address all stages of the value chain, such as raw material production and manufacturing. For this reason, the environmental analysis of the garment industry needs to be broadened to an environmental analysis of the textile and textile products (TTP) sector as a whole.

Environmental effects from TTP production vary depending on the types of fibres (e.g., cotton, rayon, polyester); the manufacturing process (e.g., wet versus dry); the quantity and quality of chemicals used during yarn and fabric manufacturing; the application (or not) of efficient technologies during the multi-stage operation process; consumer behaviour in end-product maintenance; and final disposal. As Nieminen and his colleagues observed (cited in Martinuzzi, Kudlak, Faber, & Wiman 2011), it is nearly impossible to apply a single life-cycle assessment to analyze TTP environmental footprints.

A textiles life-cycle analysis (LCA) covers four main stages: 1) production of raw materials/fibres; 2) processing of fibres into textiles; 3) distribution; 4) use; and 5) disposal (end of life) of the end products (clothing).

## Production of Fibres

In the TTP LCA, fibre production is the least studied (Chen and Burns, 2006). Fibres can be divided into natural (e.g., cotton, wool, silk), regenerated cellulose (e.g., rayon, lyocell), and synthetic (e.g., polyester, nylon, acrylic), each of which differs in its production process and associated environmental footprints. Raw materials used in Indonesia are dominated by cotton (45 per cent), polyester (45 per cent), and rayon (10 per cent). Indonesia imports almost all of its cotton; polyester is largely produced domestically; and rayon is obtained both from domestic production and imports.

Cotton is a natural cellulosic fibre that comes from a renewable resource (the cotton plant) and is inherently biodegradable. Some customers are thus of the view that cotton-based textiles are more environmentally friendly than other textile products (Kooistra, Pyburn, and Termorshuizen, 2006). This is not necessarily the case. Cotton production requires vast amounts of water, and cotton irrigation has been known to pressure surrounding water supplies (e.g., rising water tables, water wastage). Water shortages and soil salinization have been reported in some cotton growing areas (Kooistra et al., 2006). Conventional cotton also requires







regular application of fertilizers and pesticides to keep production levels high, with some of the latter considered hazardous and carcinogenic (Expert Panel on the Social and Economic Performance of Cotton Production [SEEP], 2012). Cotton growing is estimated to use 3 per cent of the world's agricultural land, yet is responsible for 25 per cent of the world's pesticide usage (Chen and Burns, 2006). Pesticide runoff has been reported to contaminate waterways and adversely affect aquatic life in parts of Australia, Alabama, Pakistan, and India (Kooistra et al., 2006). Many studies have also linked improper use of pesticides, especially in developing countries, to pesticide poisoning and health hazards to cotton farmers (SEEP, 2013). Indonesia, however, produces less than 1 per cent of its cotton needs, with most imported from Australia, the U.S., Brazil, India, and some African countries.

Polyester is a synthetic fibre produced from a polymer solution petroleum by-product. It is non-renewable and non-biodegradable. Petroleum extraction can cause detrimental environmental impacts that range from clearing land to construct oil drilling facilities, disposing of saline water improperly (produced in large volumes with oil and gas), and accidentally releasing hydrocarbon water, to abandoned or incorrectly plugged oil wells (Kharaka and Dorsey, 2005). Petroleum extraction is also an energy-intensive process, and so is polyester production. Petroleum burning is responsible for significant climate change-causing GHG emissions. When this is added to the polyester LCA equation, 1 kg of polyester fabric is responsible for the release of more than 30 kg carbon dioxide equivalent (Kooistra et al., 2006). Other environmental effects include volatile organic compounds emissions (harmful to human health) and waste water chemical by-products. Indonesia, as an oil-producing country, produces 1.4 million tonnes of polyester annually, which is among the highest in the world ([www.indotextiles.com](http://www.indotextiles.com), website discontinued). Indonesia's polyester value chain is vertically integrated, meaning substantial economic benefits stay within the country.

### Processing Fibres Into Textiles

Fibres are transformed into yarns and yarns into fabrics with such technologies as knitting, weaving, non-woven technology, braiding, and tufting. Yarn and fabric manufacturing is a multi-stage process that includes preparation (e.g., sizing, desizing, scouring, bleaching), dyeing, printing, and finishing. Each step typically consumes large quantities of water, energy, and chemicals, which in turn generate large amounts of waste (mostly waste water). These fabrics are ultimately transformed into end products (e.g., clothing) through cutting and sewing.

Wet processing is the most common method of textile manufacturing, regardless of the type of fibre. This process is extremely energy, water, and chemical intensive and thus generates significant environmental impacts. Of these, liquid wastes tend to dominate over air emissions and solid waste (United Nations Environment Programme [UNEP], 1996). Liquid waste is generated at all stages of the textile manufacturing process. The waste water is generally hot and alkaline, containing substantial organic and suspended matter pollutants such as fibres and grease (UNEP, 1996). Chemical usage in the dyeing process produces liquid effluents with strong smell, colour, and heavy metal pollutants that include chromium, arsenic, zinc, and copper (Ghaly et al., 2014). Untreated effluent increases water turbidity (which prevents sunlight penetration that is necessary for photosynthesis) and causes oxygen depletion (necessary for aquatic life). Untreated effluent can also cause illness among people, such as nausea, skin irritation, and ulceration. Some of the pollutants are also carcinogenic (Ghaly et al., 2014).

In addition to water contamination, air pollution and solid waste disposal are also of concern. Air pollution comes from the release of particulates, volatile organic compounds (VOCs), nitrogen oxides, sulphur oxides, and carbon monoxide. Textile mills are increasingly using inexpensive coal as an energy source, and in the process generating large amounts of fly ash solid waste. This ash is considered toxic, and when released into the environment can cause lung disease, heart damage, kidney disease, reproductive problems, and gastrointestinal illness (Physicians for Social Responsibility, n.d.).





## Distribution and Use

The distribution stage mainly involves transportation of the final products from producers to intermediaries, retailers, and consumers.

The environmental issues of the use phase are related to washing (or dry cleaning), tumble drying, and ironing. Different fibres may require different maintenance, e.g., synthetic-fibre-based products may not need as high temperature washing and ironing as cotton-based products. The environmental impacts at this stage are dependent on consumer behaviour. If consumers choose more maintenance, more water and energy resources are consumed and more laundry waste water is generated.<sup>4</sup>

## End of Life

The end-of-life phase includes the product's reuse, recycling, or final disposal (i.e., incineration or landfill). Reuse typically extends the lifetime by 50 per cent, thus proportionally reducing the LCA environmental impact (EKONID, 2001). End of life refers to post-consumer waste generated from textile articles, especially from clothing. Cotton-based fabric is biodegradable and even compostable, but polyester-based fabric is not (Li, Frey, and Browning, 2010). However, when considering the entire product's life cycle, polyester is not necessarily less environmentally friendly than cotton. Polyester requires less energy during the maintenance phase (i.e., washing, drying, and ironing) and recycling is common. Cotton recycling is difficult due to the presence of dyes and other fibres (Chen and Burns, 2006). Fibres from recycled polyester are estimated to reduce air pollution by 85 per cent when compared with new polyester production from raw materials (Chen and Burns, 2006). Rayon is also biodegradable, with a biodegradability rate even faster than cotton (Park, Kang, and Im, 2004). However, rayon recycling is still uncommon.

## Remedies From an Environmental Perspective: Sustainable Textiles and Textile Products

The term sustainable or "environmentally responsible," when applied to textiles products, should mean minimal environmental effects from the entire lifecycle—from fibre production, to manufacturing, usage, maintenance, and disposal (Chen and Burns, 2006). Efforts to make the industry more environmentally friendly, although still considered nascent, are making some inroads.

### Using greener fibres as a raw material:

Greener fibres include organic cotton, polyester made from recycled materials, and regenerated cellulose fibres made from fast-growing renewable resources (e.g., bamboo, hemp, or abundant corn fibres). Organic cotton, grown without using pesticides or other toxic chemicals, is now produced in 20 countries, led by India.

### Implementing sustainable manufacturing:

In textile manufacturing, new technologies and materials are being developed and deployed to reduce environmental impacts. New generations of machines are more energy and water efficient. More environmentally benign substances can be utilized at each stage of the manufacturing process. For example, the use of organic enzymes in cotton's desizing and scouring is a much greener alternative than sodium hydroxide (Chen and Burns, 2006). Natural dyes (usually derived from plants) can substitute for synthetic dyes. New waterless dyeing technologies are also being developed, although they are still expensive and only for certain fibres (mostly polyester). Greener wood-pulp-based fibres derived from eucalyptus trees (i.e., lyocell) can be produced using fewer toxic chemicals, and a closed-loop process—whereby the solvent is recycled—can also be used. However, these new green technologies are still costly, and sustainable textiles are still years away from becoming a mainstream practice.

---

<sup>4</sup> Canada has restricted phosphate use in laundry detergents. Excessive phosphate, which gets into the waterways, can cause algae blooms and thus, eutrophication (a condition where oxygen is depleted due to aerobic bacteria consuming algae, leading to the demise of aquatic life).





### **Encouraging voluntary environmental labelling:**

Textile environmental performance is communicated to consumers through several different eco-labelling systems. Prominent ones include the Global Organic Textile Standard (GOTS), Fair Trade, Cradle to Cradle, EU Eco Label, Nordic Eco Label, and Sustainable Textile Production (STeP) by OEKO TEX.<sup>5</sup> The majority of these eco-labels are voluntary, with the exception of the organic label, which is strictly regulated in many countries. Different certification schemes may focus on environmental (and sometimes social) performance at different phases, e.g., raw materials, manufacturing, disposal, or a combination. Some of the most common textiles certifications found in Canada are GOTS (which incorporates both organic and fair trade standards), bluesign, Cradle to Cradle, EU Eco-label, and OEKO-TEX.

---

<sup>5</sup> For a more complete list, please see [www.ecotextilelabels.com/](http://www.ecotextilelabels.com/).





# CHAPTER 7— Conclusions and Further Research

## Conclusions

Based on trade data from 2003 to 2013, there are 1,446 products that have a higher Indonesian export market share trend on world markets than the trend export market share for all countries. These commodities are considered successful Indonesian products in the world market. From this list, 450 Indonesian products have a higher Canadian import market share trend than the trend in the Canadian import share from the world for the same products. These commodities are classified as successful in the Canadian market. In addition, there are 41 Indonesian products that are considered to be missed opportunities in the Canadian market, where the trend in the Canadian import market share from the world is higher than Canadian import market share trend from Indonesia.

After excluding those commodities that had a value of less than US\$1 million in 2013, there remain 64 successful and 4 missed-opportunity Indonesian commodities that would have a good chance of successfully exporting to Canada.

These 64 commodities can be grouped according to whether they would typically be produced by a single firm and how they would be sold in Canada. After grouping, there are 37 product groups of successful products and 4 missed-opportunity product groups that can be considered the priority for further analysis to identify how their exports to Canada could be enhanced. The product groups are quite diverse, ranging from primary products to high-end products and from inputs to final goods.

An analysis of the four missed-opportunity commodity groups to determine which country is taking market share away from Indonesia indicates that in many cases lower labour costs are involved, especially as regards China and Vietnam. In addition, other neighbouring countries or the U.S. are taking Indonesian raw goods and processing them for the Canadian market. In this latter case there would appear to be room for Indonesia to move up the value chain. Tariffs were not found to play a role in the shift in market share because they remained unchanged over 2003–13.

Canadian retail sales during 2010–14 grew most strongly for jewellery and watches, followed by clothing, footwear, and leather goods. Based on historical trends, these commodity groups should take priority in terms of support from the Indonesian government.

Based on the Conference Board's forecasts, the food and beverages sector and the recreation and personal effects semi-durable goods sector is expected to show the most rapid growth between 2016 and 2020. The growth in clothing and footwear and household semi-durable goods spending is expected to slow. Nevertheless, the nominal value of the increase in consumption of clothing and footwear is still greater than the other sectors given its large size.





The garment industry provides employment opportunities for women, and potentially increases their sense of empowerment because of the increased income under their control. However, the garment industry worldwide is built on the competitive advantage of cheap female labour and weak labour standards. It is therefore important to mitigate against the worst of these abuses and protect the most vulnerable who may be found in informal work.

In the Indonesian garment industry there are issues regarding a gender wage gap and workers' health concerns that need to be examined as part of the work to enhance exports from the garment industry. Several remedies that can be raised toward meeting these concerns are:

- gender equality in providing staff training and promotion;
- ensure reasonable benefits and social securities are provided by the garment industry, especially to home-based workers;
- enhance law enforcement to avoid further cases of non-compliance related to minimum wages and overtime wages in the garment industry, as well as ensure gender equality on monthly wages and other benefits;
- promote associations that empower women, for example in batik, not just for women as wage workers, but also for women as owners of SMEs or co-operatives;
- promote access to productive resources, such as capital and technical assistance;
- encourage the use of eco-friendly dyeing products in the garment industry, especially in the batik industry;
- promote the business case for social responsibility codes through industry associations and multi-stakeholder initiatives;
- promote disaggregated data collection to facilitate gender analysis at the industry level.

There are environmental issues along the entire textile and textile products supply chain. Using greener fibres as raw material, implementing sustainable manufacturing, and encouraging voluntary environmental labelling should be undertaken to minimize negative environmental impacts.

## Further Research

Proposed further research based on this report includes:

- a deeper competitiveness analysis to better understand why four product groups (shelled cashew nuts, processed coconut oil, swimwear, and stringed musical instruments) are missed opportunities in the Canadian market;
- a Canadian market trend analysis for input goods;
- a gender and environmental analysis for the other target product groups.



# REFERENCES



Abacus Data. (2010, November). *Ethical consumerism and Canadians: Part ii of the corporate and community social responsibility research series*. Presentation at The Corporate and Community Social Responsibility Conference, Ottawa, Ont.

Act no. 13 of the Republic of Indonesia, Concerning Manpower. (2003).

Agriculture and Agri-Food Canada. (2010). *Market trends: Organics*. Ottawa: International Markets Bureau.

Asia Foundation. (2013). *Access to trade and growth of women SMEs in APEC developing countries: Evaluating the business environment in Indonesia*. San Francisco: Asia Foundation.

Better Work Indonesia. (2014a). *Better work Indonesia: Garment industry 4th compliance synthesis report*. Geneva: International Labour Organization.

Better Work Indonesia. (2014b). Enhancing the professionalism and workers' integrity in garment industry through better work Indonesia training [Blog post]. Retrieved from <http://betterwork.org/indonesia/?p=5004>

Chen, Hsiou-Lien, and Burns, Leslie. (2006). Environmental analysis of textile products. *Clothing and Textile Research Journal*, 24(3), 248–261. doi: 10.1177/0887302X06293065

Ebates Canada. (2015). *Canadians fully embracing shopping season in spite of slower economy and lower dollar* [Press release]. Retrieved from [www.tfocanada.ca/news.php?item=3034&thisnewsyear=2015](http://www.tfocanada.ca/news.php?item=3034&thisnewsyear=2015)

EKONID (German-Indonesian Chamber of Commerce and Industry). (2001). *Market survey of Indonesian textile industry*. Bonn, Germany: GTZ. p.vii.

Enterprise Surveys. (2015). Retrieved October 2016, from <http://www.enterprisesurveys.org/data/exploreeconomies/2015/indonesia>

Expert Panel on the Social, Environmental and Economic Performance of Cotton Production. (2012). *Fact sheet on pesticide use in cotton production*. Retrieved from [www.icac.org/wp-content/uploads/2012/04/seep\\_pesticides\\_facts2.pdf](http://www.icac.org/wp-content/uploads/2012/04/seep_pesticides_facts2.pdf)

Expert Panel on the Social, Environmental and Economic Performance of Cotton Production. (2013). *Measuring sustainability in cotton farming systems: Towards a guidance framework* [Executive summary]. Retrieved from [www.icac.org/getattachment/mtgs/Plenary/72nd-Plenary/Documents/e\\_SEEP-report.pdf](http://www.icac.org/getattachment/mtgs/Plenary/72nd-Plenary/Documents/e_SEEP-report.pdf)

Gereffi, Gary, and Memedovic, Olga. (2003). *The global apparel value chain: What prospects for upgrading by developing countries*. Vienna: United Nations Industrial Development Organization.

GfK Roper Public Affairs & Media and Yale School of Forestry & Environmental Studies. (2008). *The GfK Roper Yale survey on environmental issues—Summer, 2008: Consumer attitudes toward environmentally-friendly products and eco labeling*. New York, New York: The GfK Roper Yale Survey on Environmental Issues.



Ghaly, A. E., Ananthashankar, R., Alhattab, M., and Ramakrishnan V. V. (2014). Production, characterization and treatment of textile effluents: A critical review. *Journal of Chemical Engineering & Process Technology* 5(182). doi: 10.4172/2157-7048.1000182.

Government Regulation no. 28 of the Republic of Indonesia, Concerning Building Construction. (2002).

Hunga, Arianti Ina Restiani. (2014). Protecting women's domestic area and environment: Study on eco-friendly batik. *Indonesia Feminist Journal*, 2, 82–105.

IndustriALL Indonesia Council—Committee on Women. (2014). *Laporan hasil survey perlindungan maternitas dan hak-hak reproduksi buruh perempuan pada 10 afiliasi industriall di Indonesia [Report survey on maternity protection and reproduction rights of women workers on 10 affiliates of IndustriALL in Indonesia]*. Geneva: IndustriALL.

International Labour Organization. (2010). *Social security for informal economy workers in Indonesia: Looking for flexible and highly targeted programmes*. Jakarta: ILO.

International Labour Organization. (2014). *Wages and working hours in the textiles, clothing, leather and footwear industries*. Geneva: Sectoral Activities Department-ILO.

International Labour Organization and International Finance Corporation. (2012). *Indonesia baseline report: Worker perspectives from the factory and beyond*. Geneva: ILO.

International Trade Centre. (2015). *Trade Map database*. Retrieved from [www.trademap.org](http://www.trademap.org)

Kant, Rita. (2012). Textile dyeing industry an environmental hazard. *Natural Science*, 4(1), 22–26. doi: 10.4236/ns.2012.41004

Kharaka, Yousif K., and Dorsey, Nancy S. (2005). Environmental issues of petroleum exploration and production. *Environmental Geosciences*, 12(2), 61–63. doi:10.1306/eg.intro0605020205

Kooistra, Karst, Pyburn, Rhiannon, and Termorshuizen, Aad. (2006). The sustainability of cotton: Consequences for man and environment (report no. 223). Retrieved from Science Shop, Wageningen University & Research Centre: [www.wageningenur.nl/upload\\_mm/1/3/4/6cdf8347-b399-4365-8459-e24aeaba6922\\_223.pdf](http://www.wageningenur.nl/upload_mm/1/3/4/6cdf8347-b399-4365-8459-e24aeaba6922_223.pdf)

Korinek, Jane. (2005) *Trade and gender: issues and interactions* (OECD Trade Policy Working Paper No. 24). Paris, France: OECD.

Kuncoro, Mudrajad. (2013). Indonesia's textile and its products industry: Recent development and challenges. *The Business & Management Review*, 4(2), 126–139.

Li, Lili, Frey, Margaret, and Browning, Kristie J. (2010). Biodegradability study on cotton and polyester fabrics. *Journal of Engineered Fibers and Fabrics*, 5(4), 42–53. Retrieved from [www.jeffjournal.org/papers/Volume5/5-4-6Frey.pdf](http://www.jeffjournal.org/papers/Volume5/5-4-6Frey.pdf)

Martinuzzi, André, Kudlak, Robert, Faber, Claus, and Wiman, Adele. (2011). *CSR activities and impacts on the textile sector* (RIMAS Working Paper no. 2/2011). Vienna, Austria: Vienna University of Economics and Business. Retrieved from [www.sustainability.eu/pdf/csr/impact/IMPACT\\_Sector\\_Profile\\_TEXTILE.pdf](http://www.sustainability.eu/pdf/csr/impact/IMPACT_Sector_Profile_TEXTILE.pdf)



McGraw Hill Construction. (2015). *Canada green building trends: Benefits driving the new and retrofit market*. Ottawa: Canada Green Building Council.

Park, Chung Hee, Kang, Yun Kyung, and Im, Seung Soon. (2004). "Biodegradability of cellulose fabrics." *Journal of Applied Polymer Science*, 94(1), 248–253. doi: 10.1002/app.20879

Physicians for Social Responsibility. (n.d.). *Coal ash: Toxic—and leaking*. Retrieved September 26, 2016, from [www.psr.org/environment-and-health/code-black/coal-ash-toxic-and-leaking.html](http://www.psr.org/environment-and-health/code-black/coal-ash-toxic-and-leaking.html)

Schwab, Klaus (Ed.). (2014). *The global competitiveness report 2014–2015: Full data edition*. Geneva, Switzerland: World Economic Forum.

Statistics Canada. (2015). Canada's population estimates: Age and sex, July 1, 2015. *The Daily*. Retrieved from [www.statcan.gc.ca/daily-quotidien/150929/dq150929b-eng.htm?HPA](http://www.statcan.gc.ca/daily-quotidien/150929/dq150929b-eng.htm?HPA)

Statistics Canada. *Survey of household spending*. Retrieved from <http://www.statcan.gc.ca/eng/survey/household/3508>

Taniguchi, Kiyoshi, and Tuwo, Alike. (2014). *New evidence on gender wage gap in Indonesia* (ADB Working Paper no. 404). Manila, Philippines: Asian Development Bank.

The Conference Board of Canada. (2015). *Canadian outlook autumn 2015: Economic forecast*. Ottawa, Ont.: CBoC. Retrieved from [www.conferenceboard.ca/e-library/abstract.aspx?did=7485](http://www.conferenceboard.ca/e-library/abstract.aspx?did=7485)

Trade Facilitation Office. (2015). *Access Canada: A guide on exporting to Canada*. Ottawa, Ont.: Trade Facilitation Office.

United Nations. *Comtrade database*. Retrieved from <http://comtrade.un.org/>

United Nations Food and Agriculture Organization. *FAOSTAT database*. Retrieved from <http://faostat.fao.org/>

United Nations Environment Programme, Industry and Environment. (1996). *Cleaner production in textile wet processing* [Workbook]. Retrieved from [www.unep.fr/shared/publications/pdf/WEBx0033xPA-TextileWet.pdf](http://www.unep.fr/shared/publications/pdf/WEBx0033xPA-TextileWet.pdf)

WorkBC. (n.d.). British Columbia's economy. *WorkBC*. Retrieved December 1, 2015, from [www.workbc.ca/Statistics/People-the-Economy/B-C-s-Economy.aspx](http://www.workbc.ca/Statistics/People-the-Economy/B-C-s-Economy.aspx)

World Bank. *Enterprise survey*. Retrieved from <http://www.enterprisesurveys.org/>

World Bank. *International Finance Corporation*. Retrieved from [http://www.ifc.org/wps/wcm/connect/corp\\_ext\\_content/ifc\\_external\\_corporate\\_site/home](http://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/home)

World Bank. *World development indicators*. Retrieved from <http://data.worldbank.org/data-catalog/world-development-indicators>

World Bank. *World integrated trade solution (WITS) database*. Retrieved from <http://wits.worldbank.org/>







World Bank. (2012). *Toward gender equality in East Asia and the Pacific: A companion to the world development report*. Washington, D.C.: World Bank.

World Commission on Environment and Development. (1987). *Report of the world commission on environment and development: Our shared common future*. New York, New York: Oxford University Press.

World Economic Forum. (2014). *The global gender gap index 2014: The case for gender equality*. Retrieved from [reports.weforum.org/global-gender-gap-report-2014/part-1/the-case-for-gender-equality/#view/fn-16](https://reports.weforum.org/global-gender-gap-report-2014/part-1/the-case-for-gender-equality/#view/fn-16)

