An Analysis of the Global Value Chain for Indonesian Footwear Exports
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*By: The Conference Board of Canada*

**About the TPSA Project**

The Canada-Indonesia Trade and Private Sector Assistance (TPSA) project is a five-year, $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, Indonesian 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 greater 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.

**The expected immediate outcomes of TPSA are:**

- improved trade and investment information flows between Indonesia and Canada, particularly for the private sector, SMEs, and women entrepreneurs, including trade-related environmental risks and opportunities;
- enhanced private sector business links between Indonesia and Canada, particularly for SMEs;
- strengthened analytical skills and knowledge of Indonesian stakeholders on how to increase trade and investment between Indonesia and Canada;
- improved understanding of regulatory rules and best practices for trade and investment.

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Executive Summary

Footwear production has become an increasingly important contributor to Indonesia’s economy over the last decade, due in large part to a swift expansion in export capacity. Among the 10 largest global footwear exporters, only Vietnam has increased their footwear exports more than Indonesia in the last decade. As a result, Indonesia is now the world’s sixth-largest footwear exporter and accounts for 3.4 per cent of global exports, up from 2.2 per cent a decade ago. Although Indonesia’s total footwear exports are still well below those of China, Vietnam, and Italy, the country is well-situated within the second grouping of major international footwear producers along with countries like Germany, Belgium, and the Netherlands.

In terms of specific products, Indonesia has a particularly high global share (5 per cent) of athletic footwear, trailing only China, Vietnam, and Belgium on a global scale. Its relatively outsized share of sports footwear exports reflects the physical presence of some of the world’s largest athletic clothing and footwear companies in the country, including Nike, Adidas, and Puma as well as other major regional brands.

Although its footwear sector is growing and performing well in aggregate, there remains untapped potential for the industry. Aside from directly increasing production, Indonesia can benefit more from its footwear sector by extracting a higher share of the total value along the global value chain (GVC) for footwear. The value chain represents all the activities that are required to bring footwear from the conception stage to the final consumer. These include activities that take place prior to the production process, such as sourcing of key material inputs, logistical and transportation services, and design services, and post-production activities such as marketing and sales.

Indonesians have a global reputation as experts in the manufacture of footwear products. But as incomes continue to rise in the country, firms must find a way to absorb these rising costs. One way to do so is by expanding the share of high-value activities in the chain that are conducted domestically. Typically, the activities that occur prior to, and after the production process are higher value, and thus generate the profits to support the higher wages that Indonesians earn today compared to a decade ago.

If Indonesian firms are not able to create more value, then the higher wages paid to workers will eventually make them uncompetitive in the global market. Thus, finding ways to engage in these higher value-added activities will be crucial to their long-term success. However, the industry faces a number of significant barriers that limit its production and export potential. The purpose of this report is to identify these key barriers and to provide recommendations to industry stakeholders that may help alleviate these competitive bottlenecks. To achieve this, we conducted a detailed analysis of the domestic and global supply chain for footwear and situated Indonesia’s performance within this structure relative to some of its major competitors. We also conducted a series of face-to-face interviews with industry stakeholders in Indonesia, including small and large footwear producers, transportation firms, and producers of key material inputs. Their impressions of the state of Indonesian footwear also helped to inform the recommendations contained within this report.

Indonesia, like most other emerging markets, also faces domestic structural issues that inhibit its productivity and export success more generally. Factors such as infrastructure quality, access to finance, and overly stringent labour regulations all hinder the country’s export competitiveness; to overcome these will require a concerted effort by different levels of government.
Globally, footwear demand will remain strong for many years as incomes around the world—particularly in developing markets—continue to rise. Indonesia already has a substantial footprint on the global market and has the potential to benefit considerably by building on its historical success. Thus, if Indonesia’s footwear sector can overcome key export barriers, the benefits that will accrue to its economy are likely to be substantial.
Introduction

In 2015, Indonesia was the world’s 30th-largest exporter of goods and services to global markets, but it has a significantly stronger footprint in certain goods. For example, footwear is one of Indonesia’s most vital exports and has been a key driver of the country’s economic growth over the past decade. Indonesia is the world’s fifth-largest footwear producer, with an estimated 660 million pairs produced in 2015, most of which were destined for foreign markets. In all, it accounts for 3.4 per cent of global footwear exports. Low wages combined with high-quality work have resulted in a comparative advantage for Indonesia in consumer-oriented manufactured products such as footwear, and have also promoted integration between Indonesia and high-income markets like the United States, Canada, and the EU.

Given the importance of trade to the Indonesian economy, and against the backdrop of slowing global trade volumes in the post-financial crisis period, it is useful to better understand Indonesia’s participation in the global value chain (GVC) to help assess the performance of its footwear sector and provide critical information to policy-makers on how to improve Indonesian competitiveness in the global footwear market.

As a starting point, we define the current state of footwear production in Indonesia and assess the country’s footprint in the global market. Thereafter, the report shifts to a supply-chain analysis of footwear production, identifying the key activities along the chain and illustrating possible places where value leakages occur. Lastly, the report will explore the specific areas of non-competitiveness that prevent Indonesia from capturing a greater share of the footwear GVC. To identify potential logistical bottlenecks, a series of in-person interviews and surveys were conducted with Indonesian firms. The culmination of this research will form the basis for recommendations to Indonesian policy-makers on how to alleviate these barriers.
Current State of Footwear in Indonesia

Overview
Footwear is technically defined as products falling within the World Customs Organization's Harmonized System (HS) code 64. For the purposes of this report, we considered six detailed products under this grouping. These are different classifications of footwear that group products by the material characteristics of the uppers and soles; for example, whether they are made of leather or synthetic textiles. Indonesia has a significant global presence in all types of footwear, but is particularly prominent in athletic footwear.

Indonesian footwear manufacturers are concentrated on the islands of Java and Sumatra, particularly in West Java, East Java, and North Sumatra. There is a footwear cluster in the city of Bogor, West Java, where footwear manufacturing is spread out over 14 villages in the Regency. Each village specializes in a certain type of footwear (e.g., sandals, children's shoes, sport shoes). In addition to West Java, the formal and casual shoe-manufacturing segments are mostly situated in Yogyakarta, North Sumatra, and East Java. Meanwhile, sandal manufacturers are mainly located in Banten, West Java, and East Java, while designer fashion sandals are produced mainly in Bali. Based on 2016 figures, the combined garment, textile, and footwear (GTF) industry accounts for 4 million female workers compared to less than 2 million male workers.

Footwear Brands
The presence of international athletic footwear firms in Indonesia has had a significant impact on the sector’s development. For example, Indonesia was the location of 25 per cent of Nike’s footwear production in 2015, behind only Vietnam (43 per cent) and China (28 per cent). Moreover, Nike’s continued investment in the country signals a positive outlook for its production profile going forward. In 2013, the company announced plans to increase its global investment and make Indonesia one of its biggest production hubs. More recently, in 2015, the sportswear giant announced construction of a new US$60-million factory in West Java.

Many other major international footwear manufacturers have a presence in Indonesia, including Adidas, Puma, and other regional brands. The major domestic sport footwear manufacturers are Adis Dimension Footwear, KMK Global Sports, and Panarub Industry. Non-sport industry leaders include Sepatu Mas Idaman, Mangul Java, and Teguh Murni.

Apart from internationally-recognized companies, Aggiomultimex is one of the larger players. The company, home to 2,000 employees, designs, develops, and produces footwear, though their recognition abroad is limited because their product is first sold to other firms such as Oakley and Lacoste, which then sell them under their own brands. This is a common approach for Indonesian firms, which mainly produce for well-known existing brands rather than promoting their own and paying high design and marketing costs. Nevertheless, many domestic firms are renowned for their high-quality production processes, particularly

2 Trade Research and Development Agency, Indonesian Footwear.
those in the areas of Tangerang and Cibaduyut, which are hot spots for some of the most dynamic SMEs in the country.

Global Footwear Market
Total global footwear exports have increased by an annual average of 6.2 per cent annually since 2006. China is by far the largest exporter of footwear, accounting for 35 per cent of global exports. Vietnam is the second largest player (13.2 per cent) and has shown the strongest growth of any country that accounts for at least 2 per cent of the global market over the last 10 years. Vietnamese exports of footwear have increased by an average annual rate of 17 per cent since 2006. Among developed countries, Italy is the global leader, but it is more mature and its products tend to be substantially higher-value than other major global footwear producers. Unsurprisingly, its production has increased significantly more slowly in recent years, causing it to lose global market share to countries like Indonesia and other emerging markets.

Indonesian Footwear Exports
Indonesian footwear exports have increased by 11 per cent a year since 2006, well above the 3.2 per cent average annual increase in total merchandise exports from the country over the same period. The value of Indonesian footwear exports was estimated at US$4.6 billion in 2016. Growth has been particularly strong in the post-financial crisis period since 2009, which coincides with a generalized depreciation of the Indonesian rupiah vis-à-vis the U.S. dollar and other major consumer-market currencies. (See Chart 1.)

CHART 1: FOOTWEAR EXPORTS HAVE RISEN QUICKLY SINCE 2009

(Indonesian footwear exports, US$ billions)

Source: UN Comtrade database.

Overall, footwear accounts for 3.1 per cent of total exports from Indonesia and is an important source of employment and foreign currency for the country. Only Vietnam has seen footwear exports increase more quickly than Indonesia since 2006. (See Chart 2.)
An Analysis of the Global Value Chain for Indonesian Footwear Exports

**Chart 2: Indonesia Trails Only Vietnam in Footwear Export Growth**

(average annual footwear export growth, 2006–16, per cent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>17.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>11.2</td>
</tr>
<tr>
<td>China</td>
<td>8.1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>8.0</td>
</tr>
<tr>
<td>Germany</td>
<td>7.7</td>
</tr>
<tr>
<td>Belgium</td>
<td>7.4</td>
</tr>
<tr>
<td>France</td>
<td>7.3</td>
</tr>
<tr>
<td>Spain</td>
<td>2.9</td>
</tr>
<tr>
<td>Italy</td>
<td>0.8</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>-6.3</td>
</tr>
</tbody>
</table>

*Source: UN Comtrade database.*

Indonesia's global market share is highest in uppers made from textile products (HS 6406), trailing only China, Vietnam, and Belgium in terms of global exports. While walking shoes belong to this commodity grouping, most athletic shoes have uppers made from textiles. The presence of mass-producing sport-shoe giants like Nike, Adidas, and Puma in Indonesia has allowed the country to capture a relatively outsized share of the international market across these products. (See Chart 3.)

**Chart 3: Indonesia's Global Market Share is Highest for Shoes Made with Textiles**

(share of global footwear exports by type, 2016, per cent)

<table>
<thead>
<tr>
<th>Type</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>With uppers made of textiles</td>
<td>4.96</td>
</tr>
<tr>
<td>With uppers made of leather</td>
<td>4.48</td>
</tr>
<tr>
<td>Total</td>
<td>3.44</td>
</tr>
<tr>
<td>With uppers made of rubber or plastic</td>
<td>1.41</td>
</tr>
<tr>
<td>Other</td>
<td>1.27</td>
</tr>
<tr>
<td>Waterproof</td>
<td>1.01</td>
</tr>
</tbody>
</table>

*Source: UN Comtrade database.*

4 Shoes with uppers made of textiles (HS 6404) includes several sport shoes such as running, tennis, and basketball. Things like ski boots or ice skates are not made with textile uppers; thus, HS 6404 only covers “most” sport shoes.
Indonesian footwear products have substantial global reach and are imported by 142 different countries around the world. The top five countries account for more than half of the total, with the United States by far the most common destination for Indonesian footwear, followed by China, Belgium, Germany, and Japan. (See Chart 4.)

CHART 4: THE U.S. IS THE MAJOR DESTINATION FOR INDONESIAN FOOTWEAR

(destination of Indonesian footwear exports, per cent)

Source: UN Comtrade database.
Footwear Value Chain

Indonesia’s Production
The supply chain associated with any production process begins by sourcing the required production inputs. Leather is the most vital input in many types of footwear, particularly athletic footwear where Indonesian producers excel. Leather accounts for the largest share of any material input used in the production process. Finished leather is shipped to footwear manufacturers and combined with chemical dyes, organic and synthetic textiles, plastics, water, electricity, and any other goods and services required to make the footwear ready for market. Manufacturers combine these material inputs with their labour and machinery to produce shoes, and are typically supported by a wide-ranging number of services like design and marketing, transportation, and business services to bring the final product to market. (See Exhibit 1.)

EXHIBIT 1: INDONESIA’S FOOTWEAR PRODUCTION PROCESS

An understanding of how the production process works is necessary to understand the value chain, which outlines how each part of the process contributes to the final value of exported footwear. One way of doing this is by examining Trade-in-Value-Added (TiVA) data compiled by the Organization for Economic Co-operation and Development (OECD). Importantly, TiVA information tracks only the value-added that a country adds to its exports. For example, if Indonesia exports $100 in footwear abroad, but $80 of this is comprised of material inputs purchased from another country, the value-added of Indonesia’s trade is only $20. This information provides an outline of which activities, from the sourcing of inputs and services, through the factory, and eventually to the export point, account for the greatest share of value created.
along the chain. Moreover, it provides an overview of where that value is occurring globally, and allows us to identify specific activities that are higher-value in global footwear exports, where Indonesian firms could potentially be missing opportunities to capture value.

TiVA tables are less detailed than the national input-output outlined above, but we can examine the aggregate industry of footwear, leather, and textile manufacturing to better understand the distribution of value along the export chain of these products. Although they are different industries, they share many common manufacturing characteristics and key material inputs. Thus, the results are likely to be highly relevant to footwear firms. The information provided in Chart 5 shows that, when these products are exported from Indonesia, only 47 per cent of the total export value is actually created in the footwear production process. Thus, a significant amount of value occurs in other industries that supply key inputs like electricity, business services, and other manufacturing industries like chemicals and machinery.

**CHART 5: PRODUCTION PROCESS ACCOUNTS FOR LESS THAN HALF OF EXPORT VALUE**

(origin of gross value embedded in Indonesian exports, textiles, leather, and footwear industries; per cent)

![Chart 5: Production Process Accounts for Less Than Half of Export Value](chart.png)

47% Footwear production
25% Business services
11% Mining
7% Chemicals and non-metallic minerals
6% Other
3% Other manufacturing
1% Utilities

Source: OECD-WTO TiVA database.

Identifying the specific activities along the chain where the value associated with footwear exports occurs is the necessary first step in determining areas where Indonesia could be missing opportunities to increase the share of value it captures from its exports. For example, when Indonesian firms export footwear products, the manufacturing process is located in the country and thus captures an overwhelmingly large share of the value-added associated with this activity. However, many of the key inputs into footwear, such as chemicals and plastics, are not manufactured by domestic firms in sufficient quantity to meet the demand of Indonesian footwear exporters. Consequently, much of the value-added associated with these inputs accrues to other countries. To the extent that activities that tend to be located in other countries also tend to be higher value, Indonesia should look for opportunities to expand into these areas and build upon its historical success in the manufacturing process.
Overall, Indonesia captures roughly 82 per cent of the total export value of its footwear, which is higher than most other major footwear exporters in the world. (See Chart 6.) This reflects the fact that Indonesia naturally captures a high share of the value associated with the manufacturing process.

**CHART 6: INDONESIA CAPTURES A LARGE SHARE OF EXPORT VALUE**

(domestic value-added as a share of gross exports of textiles, leather, and footwear, per cent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Value-added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>81.7</td>
</tr>
<tr>
<td>Netherlands</td>
<td>77.1</td>
</tr>
<tr>
<td>China</td>
<td>73.5</td>
</tr>
<tr>
<td>Italy</td>
<td>72.5</td>
</tr>
<tr>
<td>Germany</td>
<td>69.2</td>
</tr>
<tr>
<td>France</td>
<td>68.5</td>
</tr>
<tr>
<td>Spain</td>
<td>66.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>66.5</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>65.2</td>
</tr>
<tr>
<td>Vietnam</td>
<td>62.5</td>
</tr>
</tbody>
</table>

Source: OECD-WTO TiVA database.

Virtually all (97 per cent) of the value-added created in this activity accrues to Indonesian firms and workers in the form of profits and wages, and the production process makes up roughly 50 per cent of the total export value. But in other important areas, like business services, Indonesia does less well. Services required to export footwear from Indonesia make up 25 per cent of the total value along the chain, but nearly one-third of that comes from other countries. The same is true of chemicals and mining, which are also key parts of the export chain of footwear. (See Chart 7)
CHART 7: NEARLY ONE-THIRD OF THE SERVICES REQUIRED TO EXPORT FOOTWEAR COMES FROM OTHER COUNTRIES

(share of value by activity in the export value chain that accrues to Indonesian producers, per cent)

- Production process: 97%
- Electricity, gas, water supply: 78%
- Business sector services: 68%
- Chemicals and non-metallic minerals: 67%
- Mining and quarrying: 64%
- Other manufacturing: 54%

Source: OECD-WTO TiVA database.
Value-Chain Analysis and Recommendations

Develop High-Value Services

One big reason that Indonesia captures a relatively high share of the value of its footwear exports is that there are few services attached to them. This is a major concern for Indonesian firms. Not only does the country see a large share of certain services leak out of its borders, but there are relatively few of those services to begin with. Compared to its international peers, Indonesia has the lowest share of services embedded in its footwear exports (24 per cent), which suggests firms may not be maximizing the total value they could achieve from their exports. (See Chart 8.)

CHART 8: LOW SHARE OF BUSINESS SERVICES IN EXPORTS
(business services as a share of total export value, by country, per cent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Value (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia</td>
<td>38</td>
</tr>
<tr>
<td>Cambodia</td>
<td>37</td>
</tr>
<tr>
<td>Vietnam</td>
<td>30</td>
</tr>
<tr>
<td>China</td>
<td>30</td>
</tr>
<tr>
<td>Thailand</td>
<td>30</td>
</tr>
<tr>
<td>Indonesia</td>
<td>24</td>
</tr>
<tr>
<td>Philippines</td>
<td>24</td>
</tr>
</tbody>
</table>

Source: OECD-WTO TiVA database.

A long-term pathway toward Indonesia securing more value from its footwear exports would first involve finding a way to embed more high-value services in its footwear. Marketing and developing its own brands, providing in-house procurement and logistical services are all ways to increase the total value to buyers. In the initial stages of expansion, these services would most likely be provided by international firms with the requisite experience and skills. But over time, with strategic partnerships and training, Indonesian firms could learn to provide these higher-value services themselves.

While services account for 24 per cent of Indonesian footwear exports in total, it is important to note that this includes value from both domestic and foreign firms. Indonesian firms only capture about 16 per cent of this value. Broken down further, there is a heavy domestic presence of postal services, telecommunications, real estate, and wholesale and retail trade. These are all activities that must occur close to the production site, and thus will always accrue to the exporting country. But there are notable areas where Indonesia could do better, given time. For example, Indonesia captures just 28 per cent of computer services, 32 per cent of R&D, and 39 per cent of machinery and equipment leasing. (See Chart 9.)
CHART 9: DOMESTIC SHARE OF SERVICES INVOLVED IN EXPORTS ARE LOW FOR SOME INDUSTRIES

(share of value captured by Indonesian firms of services embedded in exports of footwear, leather, and textiles; per cent)

Postal services and telecommunications 81
Wholesale and retail trade 72
Real estate 70
Banking 70
Total business services 68
Transportation services 60
Machinery and equipment leasing 39
R&D 32
Computer services 28

Source: OECD TiVA database.

The fact that Indonesia captures a relatively low share of the value created by service companies when it exports footwear is meaningful because they account for 12 per cent of total input costs for producers. (See Chart 10.) Moreover, the activities where Indonesia does particularly poorly in capturing value also happen to be the higher-value added activities along the value chain. They typically require higher levels of education and pay higher wages.

CHART 10: SERVICES ARE A KEY INPUT INTO FOOTWEAR

(share of total input use for footwear manufacturing in Indonesia, per cent)

Source: Statistics Indonesia.
The “smile” curve shown in Exhibit 2 provides a visual representation that is often used in global value-chain analysis to show how the activities that occur prior to and after the production process tend to be ones that add greater value to the final product. It is clear from the findings above that Indonesia is lacking in the higher value-added activities (i.e., services provided both before and after the manufacturing process) represented on the smile curve.

**EXHIBIT 2: THE SMILE CURVE AND VALUE-ADDED ACTIVITIES ALONG THE CHAIN**

Further, given that several of Indonesia’s major competitors in footwear manufacturing have a higher share of services embedded in their exports, this suggests that Indonesian firms are likely missing out on an opportunity to maximize the value of their footwear exports. A major impediment to this is the fact that the highest-value services, such as design, R&D, and marketing, require specific skills, and one of the most frequently cited barriers by the firms in our consultation process was the inability to access sufficiently skilled labour that would allow them to branch out into higher value-added activities.

Indeed, several of the footwear manufacturers we spoke to noted the mismatch between the skills required by their firms and the training provided by Indonesian institutions. In many cases, firms were keen to expand their operations or move into new activities, including marketing their products online, but accessing the necessary skills to achieve these goals was a challenge, and will continue to hamper efforts to maximize value.

**Improve Backward Value-Chain Linkages**

In addition to improving its capacity to deliver higher value-added services in its footwear exports, another way for Indonesia to secure more value for its export sector is by improving its linkages backwards on the chain. Several of the companies we interviewed noted that in many cases, a reliable source of domestic supply was unavailable for many of the materials and services needed to manufacture footwear. They...
went on to add that, even in cases where domestic supply was available, they often preferred to source their inputs from China because domestic quality was perceived to be too low.

For example, one of the most important material inputs into footwear manufacturing is leather and leather products, and Indonesia currently imports half of the total leather that it uses to produce footwear. The fact that firms import this key input is not necessarily inefficient—it is possible that foreign firms are able to supply these goods to Indonesian firms at lower costs. However, our consultations suggest otherwise. In several cases, producers noted that they paid higher prices for leather (when including transportation) than they would if it was sourced from Indonesian firms, and yet they still chose this option. In some cases, they were directed to by their buyers. In others, they did so because the quality of domestic supply is inadequate.

Another example where backward linkages in footwear exports could be improved relates to plastics and synthetic materials. Increasingly, global footwear products are a combination of leather, plastics, and synthetics, particularly in athletic footwear such as sports cleats, which typically have plastic molds attached to the soles. Two popular synthetic materials used in high-end footwear around the world are polyurethane (PU) and polyvinylchloride (PVC). PU has several advantages over PVC and is considered preferable by footwear manufacturers. It is more breathable and performs better in extremely cold and hot weather. It is also more environmentally friendly since it does not require the same chemical plasticizers used in the production of PVC.

However, several of the larger footwear producers we spoke to indicated that it was virtually impossible to find a domestic source of PU to use in their products. As such, they were forced to turn to higher-cost alternatives sourced internationally, which slowed their production process and reduced margins. At the same time, they noted the easy access to PVC in Indonesia, which is interesting because PU and PVC share many similarities in their production. They are both synthetic materials that require similar machinery and skill sets to produce, and are petroleum derivatives based on ethylene. Understanding why domestic production of PU, which is likely to be in strong demand going forward given existing trends in global footwear manufacturing, is not aligned with a potentially large user like footwear manufacturing would likely identify opportunities for Indonesian firms to capture more value from their footwear exports.
Other Areas of Non-Competitiveness and Recommendations

Historically, Indonesia has been a low-wage country and this fact has offered the country a competitive advantage in the global market for labour-intensive manufactured goods like footwear. The country’s success in exporting its products all over the world has led to rapid economic development and, consequently, significantly higher wages. Average earnings of Indonesian workers in the combined garment, textile, and footwear industry are less than US$200 per month and the gender wage gap is 10 per cent.\(^5\)

Although wages are still low relative to other manufacturing powerhouses in the region (see Chart 11), Indonesia cannot rely on a low-wage, low-cost manufacturing strategy indefinitely. Firms must focus on adding value to their products and increasing the efficiency of their operations.

**CHART 11: INDONESIAN MANUFACTURING WAGES REMAIN BEHIND COMPETITORS**

(annual wages for all manufacturing employees, Canadian dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>2014</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Trading Economics.

Indonesia’s historical success has been significant, but a number of barriers impede the country from maximizing the value it retains along the export value chain. This section examines three of the most common barriers that emerged in the literature and through our industry consultation process that hinder footwear firms’ ability to export: regulatory barriers, poor infrastructure, and a lack of international contacts and training.

Regulatory Barriers

Internal regulatory challenges were ten cited by participants in our consultation process as a major barrier to exporting footwear. If Indonesian footwear firms are to secure their future and maximize the amount of value the country captures along the value chain, then labour regulations must be streamlined. An example cited multiple times by interviewees was that minimum-wage policies appear to be ad hoc, and can vary significantly from jurisdiction to jurisdiction. Minimum wages have increased by an average rate of 12 per cent per year between 2011 and 2015, and many of the firms we spoke to indicated that these increases were out of step with productivity gains over the same period. This creates a strong disincentive for firms to hire and puts additional pressure on their bottom line. Moreover, uncertainty over minimum-wage policies in the country is considered a major barrier to foreign investment in the industry, according to APRISINDO, Indonesia’s main footwear industry association.

Other areas of labour regulation also impose an indirect cost on footwear firms. For example, Indonesian firms pay the highest cost of dismissal among competitors in the region. (See Chart 12.) In fact, Indonesia ranks in the top three globally in terms of mandatory severance pay for dismissal. In theory, this is meant to protect workers’ rights in the market and provide a social safety net in the event of job loss. However, in practice it creates several issues which contradict this goal. First, firms develop a preference for informal labour, which bypasses normal human-resource operations, leaves workers without access to a safety net, and provides fewer legal protections. It also incentivizes firms to hire workers on temporary contracts or release them prior to their becoming eligible for severance pay.

CHART 12: INDONESIAN FIRMS FACE HIGH DISMISSAL COSTS

(cost of dismissing a worker after one year of employment, weeks of salary, 2014)

Source: OECD Indicators of Employment Protection.

7 Indonesia Investments, “Indonesia’s Footwear Industry Hurt.”
8 Ibid.
9 Ibid.
The extremely high cost of dismissal is a direct disincentive to expansion and risk-taking for Indonesian firms. A factory owner is less willing to take a risk and expand its operations, hiring new workers in the process, if it will have to pay extensive severance costs in the event the new venture is unsuccessful and the workers must be let go. Multiply this across an entire industry or economy, and its impact on lowering productivity and innovation is clear.

As a result of firms hiring a greater share of temporary workers, or bypassing hiring altogether, high dismissal costs effectively weaken workers’ attachment to the labour force and inhibits skills development, which can keep productivity stagnant. The impact high dismissal costs have is likely a contributing factor to Indonesia ranking 72nd on the World Economic Forum’s Human Capital Index, which measures the extent that a country develops the knowledge and skills of its labour force. This is well behind China (34th) and Thailand (40th), and just behind Vietnam (64th), the major competitors Indonesia will have to grapple with going forward.

Indonesian firms face other institutional and regulatory issues beyond those related to labour markets. The World Bank ranks Indonesia 173rd in the world in terms of ease of starting a new business, and 170th in the world when it comes to enforcing contract law. One area in particular that is a large disincentive to foreign investment in the country is the high cost of registering a property. At the median, firms pay 10.8 per cent of the property’s value in Indonesia—significantly higher than other global footwear giants. (See Chart 13) This increases start-up costs for new firms, and is a disincentive to foreign investment in the country relative to competing countries in the region. In turn, aggregate production falls below its potential and limits export capacity. Moreover, Indonesia misses out on the opportunity to integrate the new technologies and skills that foreign firms bring when they set up operations, particularly the higher value-added services which domestic Indonesian firms currently lack.

**CHART 13: COST OF REGISTERING A PROPERTY WELL ABOVE MAIN RIVALS**

(cost of registering property, per cent of value)

<table>
<thead>
<tr>
<th>Country</th>
<th>Cost of Registering Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>10.8</td>
</tr>
<tr>
<td>Cambodia</td>
<td>4.4</td>
</tr>
<tr>
<td>China</td>
<td>3.4</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.6</td>
</tr>
</tbody>
</table>


**Recommendations**

Streamlining labour regulations within the country and with respect to major global competitors would help clarify operating costs and make Indonesia a more attractive destination for foreign capital. All levels of government must work to ensure that regulations are aligned across jurisdictions and internal trade barriers are reduced.

Several of the firms we spoke to were optimistic about future changes to the minimum wage policy. For example, the government has suggested that it is considering linking future increases to productivity growth, as opposed to measures of cost of living. A second suggestion is that the government conduct an extensive wage review once every five years, with interim increases between reviews to be determined primarily by inflation.
Regulations that require firms to pay high severance in Indonesia effectively outsource the social safety net from government to industry, with unintended consequences: more workers forced into the informal sector, and a greater number of employees hired on temporary contracts. Consequently, a greater number of Indonesian employees do not benefit from the protections that the regulations are meant to provide. If a safety net for workers who lose their jobs is the goal, then it should not be firms who provide this social service. Rather, government policy should focus on eliminating barriers to hiring and innovation, and allowing Indonesian firms the freedom they need in their operations to achieve their potential.

Finally, it is important that Indonesia reduces red tape by lowering costs on things such as property registration. The cost of registering a property consists of fees, transfer taxes, stamp duties, and any other payment to the property registry, notaries, public agencies, and lawyers. Although only taxes and stamp duties are directly related to government intervention, policy-makers must find ways to streamline property registration specifically for new businesses in order to encourage investment. Once this is done, higher investment by firms will support more sophisticated and higher capacity operations, allowing firms to be better prepared to export.

**Infrastructure**

As an island nation, Indonesia naturally faces infrastructure challenges, which impact industries with broad supply chains that span international borders, such as footwear. As the global economy becomes increasingly integrated and trade between nations increases, infrastructure becomes more important for a country to successfully participate in global value chains. World-class infrastructure acts as a strong magnet on capital because it provides for operational efficiency with respect to shipping goods in and out of a country. Thus, the race to upgrade infrastructure, particularly related to transportation, is global and never-ending. Chart 14 shows that, according to the World Economic Forum, the quality of Indonesian infrastructure falls in between the two other manufacturing hubs in the region.

**CHART 14: INFRASTRUCTURE QUALITY**

(index values, where 1 is worst and 7 is best, 2016)

![Chart showing infrastructure quality](chart_image)

*Source: World Economic Forum.*
A key finding from our primary research related to Indonesia’s infrastructure is that many firms face difficulty with regard to energy access and pricing. Formerly a net oil exporter, the country has found it hard to attract the necessary capital to modernize its energy sector and meet its growing energy needs due to poor infrastructure. Consequently, energy shortages are still common, particularly in some outlying regions. Moreover, a number of the manufacturers we interviewed stated that high energy costs were a direct barrier to expanding their operations. This is likely because almost all the firms we interviewed generated some or all of their own electricity on-site using generators. In some cases, they did so because the electricity supply was unreliable or too costly. However, not only is individual generation at the plant gate costlier on an industry-wide basis (unless it uses a waste by-product to fuel the generators, which is not the case here), but it is considerably less environmentally friendly, since small-scale generation using fossil fuels is less efficient than large-scale energy generation.

Transportation is another important component of the footwear supply chain, and Indonesia’s quality of infrastructure is hindering its competitiveness there as well. Poor road and port quality is a major concern for the logistical side of the footwear supply chain. Auto sales have dipped slightly in the past few years, but remain much higher than a decade ago. This is in line with the rapid income gains realized by workers in the country, which has provided for more disposable income and created greater demand for cars.

However, this has led to more traffic congestion, particularly in highly populated areas like Jakarta. Transportation times are longer, and firms incur more wear and tear on their vehicles. These costs are indirectly passed on to footwear firms, because transportation services factor prominently into bringing materials to the plant gate for manufacturing and taking finished goods to their final destination.

Particularly important from Indonesia’s perspective is the quality of its water transportation and port infrastructure. The country is surrounded by water, and thus the main way that goods move in and out of the country is through sea ports. This is one of the most important pieces of the infrastructure puzzle that directly impacts international trade, since the larger and more efficient a country’s ports, the greater its ability to import and export in a timely manner.

**Recommendations**

Energy is always an important component of any manufacturer’s cost structure and is essential to the mass production of footwear. Ensuring efficient and reliable access to electricity to power operations would help alleviate several of the major infrastructure concerns identified by producers in our consultation process. The government is planning a phased removal of energy subsidies going forward, and it will be important to understand how this will impact the competitiveness of Indonesian firms. The government’s strategy will emphasize diversification and sustainability of its energy sources, targeting 23 per cent of energy from renewable sources by 2025. A related goal should be to improve on the reliability of electricity throughout the grid and reduce the number of firms operating solely on direct generation on-site.

As well, improving capacity at Indonesia’s sea ports will help reduce supply-chain bottlenecks, cut down on costs for firms, and make Indonesia a more attractive place to do business. Countries with world-class ports often also emerge as important transshipment points in global value chains, and several of the world’s busiest ports are located in the region, including Shanghai, Shenzhen, Singapore, and Hong Kong. The quality of Indonesia’s shipping infrastructure must keep pace with its competitors if it hopes to maintain, and eventually improve, the aggregate value that it captures from global supply chains.

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11 Ibid.
Lack of International Contacts and Training
Perhaps one of the most important conclusions that was revealed in our industry consultation process was that smaller firms were willing to actively engage in exporting activity, but had no idea how to proceed. They had no international contacts and no staff with the requisite skills to liaise with foreign buyers. Moreover, in many cases, their production process did not allow them to meet the mandatory minimum runs of many international buyers.

Recommendations
Among the firms we interviewed who had participated in government-sponsored trade shows and trade assistance, satisfaction was unequivocally high. Our interviewees reported that they made important business contacts, which often resulted in new sales for their firm. The government and industry associations need to focus on reaching out to SME footwear producers, which face particularly heavy barriers to exporting.

Skills training will also be important to ensure that small firms gain greater ability to interact directly with international firms. They need to learn to market their own brands, source their own materials, and offer buyers full-service manufacturing, complete with delivery to the final destination. Providing Indonesian workers with these skills can be achieved through government or industry-led training programs.
Conclusion

Indonesian footwear is an important component of the country’s economy and accounts for 3.1 per cent of its total merchandise exports. The Southeast Asian country also has a strong and growing global presence within the industry. In 2016, Indonesia exported US$4.6 billion of footwear—the sixth most of any country. Further, its footwear exports have grown by an average of 11.2 per cent over the last decade, and now make up 3.4 per cent of global footwear exports, up from 2.2 per cent in 2006.

Export statistics, however, reveal only part of the industry’s performance. A better assessment of Indonesia’s footwear industry is its participation in the GVC, because it can reveal where and how much value domestic firms are extracting from the footwear supply chain.

The data show that Indonesia has a relatively low share of high-value services embedded in its footwear exports compared to its major competitors, which suggests that it may be missing out on opportunities to maximize the aggregate value of its trade. Moreover, our analysis also suggests that for many of the services that are embedded in Indonesian footwear exports, a large share is being provided by firms in other countries. Things like R&D and computer services disproportionately come from abroad. Services in general account for about 12 per cent of total operational costs when exporting footwear. As such, developing the capacity to provide more of these services domestically would improve the share of value that Indonesia secures.

To help firms in this sector achieve their full potential, policy-makers should look for opportunities to alleviate the main barriers that were directly identified by industry participants during our consultation process. Improving logistical infrastructure, streamlining labour and other regulations across the country, and ensuring greater access to reliable and efficient energy are the areas likely to offer the greatest benefit in the near term.
Bibliography


