WORLD TRADE ORGANIZATION

SMALL AND MEDIUM MANUFACTURING ENTERPRISE TRADE PARTICIPATION IN DEVELOPING ECONOMIES

MSME Research note #2

TABLE OF CONTENTS

SMALL AND MEDIUM MANUFACTURING ENTERPRISE TRADE PARTICIPATION IN DEVELOPING ECONOMIES[1]

SUMMARY

Manufacturing small and medium enterprises (SMEs) in developing and least-developed economies are not exporting as much as comparable enterprises in developed economies.

SMEs in developing economies report higher participation in upstream sectors that are less technology-intensive.

SMEs in least-developed countries exhibit low integration in global value chains (GVCs) and rely primarily on domestic inputs and demand. They also report lower shares of international trade as part of their total sales relative to SMES in other developing economies.

1 The present note was prepared by Emmanuelle Ganne, Zakaria Imessaoudene, and Kathryn Lundquist, Economic Research and Statistics Division of the WTO. The authors would like to thank Hongxiao Luo, Lily Luo and Zhengyu Ren from Brandeis University for their 2021 analysis of MSME participation in international trade, which served as the starting point for this note.

INTRODUCTION

Micro, small, and medium-sized enterprises (MSMEs)[2] play an integral role in economic and social development and are essential to every economy, including developing and least-developed countries (LDCs). Firms that fall under this category represent roughly 90 per cent of all businesses globally and more than 50 per cent of employment (WTO, 2016). In the context of developing economies, MSMEs not only create jobs, but also stimulate economic development in their respective countries. One study has estimated that “formal SMEs contribute up to 40% of national income (GDP) in emerging economies” (World Bank, 2022), highlighting the size and scale of their impact.

Trade can lead to economic growth by encouraging the reallocation of factors of production, and it has played a pivotal role in the development of several major world economies. In recent decades, trade-opening in developing economies has led to a dramatic increase in trade volume and economic activity. During that same period, the share of manufactured goods in developing economy exports has surged and become the dominating export category in these economies (e.g., the Four Asian Tigers – i.e., Hong Kong, China; the Republic of Korea; Singapore; and Chinese Taipei) (UNCTAD, 1990).

Developing economies which integrate into production and distribution networks can spur their own industrialization and strengthen or develop domestic sectors, thereby gaining access to new technologies and resources which can enhance productivity, encourage innovation, and make domestic exporting firms more competitive in the global marketplace.

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However, while international trade offers ample growth opportunities, MSMEs across developing regions face several hurdles. By looking at data collected by the World Bank Enterprise Surveys (WBES) since 2016, this research note attempts to cover the current trade landscape for small and medium enterprises (SMEs) and offer some insight into how these firms are operating in developing and least-developed economies worldwide. Since the World Bank surveys micro-enterprises separately, they are not included in the WBES. Consequently, this research note looks only at SMEs compared to large firms, defined as firms with a total number of between 10 and 249 full-time employees (SMEs) and of 250 or more full-time employees (large firms).

Following on from WTO (2016), the focus of which was “Levelling the Trading Field for SMEs”, this research note seeks to provide an update on developing-economy SME manufacturing trade participation. Services trade by developing-economy MSMEs is not covered in this note, given the extensive examination of this sector, including by firm size, in the WTO’s 2019 World Trade Report.

DATA

The WBES are firm-level, one-off, economically representative sample surveys of the private sector in economies around the world. Although there are surveys spanning from 2006, and most economies have been surveyed more than once since that year, the information is not panel, or longitudinal data (following the same firms over many years), and therefore cannot be used for an analysis across time to review changes. Rather, the surveys provide a snapshot of the conditions for businesses in the years and economies reviewed.

Therefore, in order to gather the most recent picture of trade from the WBES for developing economies, this research note only looks at surveys issued between 2016 and 2021 for economies that are neither part of the European Union nor members of the Organisation for Economic Co-operation and Development (OECD).[3] For a full list of economies that were reviewed using the WBES, including the regions in which they are situated, see Table 1.

2 MSMEs in this research note include all firms with fewer than 250 employees.
3 For an update on MSME trade in developed economies, including the European Union and OECD members, see WTO (2022).

Given the narrow range of years, the regional coverage of the WBES data was somewhat limited (see Table 1). The greatest number of surveys during this period was conducted in Africa (23 surveys covering 42.5 per cent of all African countries) followed by Latin America (12 surveys covering 36 per cent of all Latin American countries). In addition, given the overrepresentation of least-developed countries in Africa, alongside those in Developing Asia, this research note compares developing economies with LDCs to avoid double-counting between regions and development categories.

Moreover, in terms of export categories, direct exportation refers to the trade of goods between firms located in different jurisdictions, whereas indirect exportation[4] pertains to trade between a firm and a domestic intermediary, which then exports the goods. In other words, indirect exports tend to occur between SMEs and larger domestic direct exporting firms.

Table 1: Countries represented in WBES data (2016-21)

Region	2016	2017	2018	2019	2020	2021	Total
Africa	Benin*, Cameroon, Côte d'Ivoire, Egypt, Eswatini, Guinea*, Lesotho*, Mali*, Togo*, Zimbabwe	Liberia*, Niger*, Sierra Leone*	Chad*, Gambia*, Kenya, Mozambique*	Morocco, Rwanda*, Zambia	Egypt, South Africa, Tunisia	w	23
Latin America and the Caribbean	Dominican Republic, El Salvador, Honduras, Nicaragua	Argentina, Bolivia, Ecuador, Guatemala, Paraguay, Peru, Uruguay	Suriname				12
Commonwealth of Independent States			Belarus	Azerbaijan, Georgia, Kazakhstan, Kyrgyz-stan, Moldova, Tajiki-stan, Uzbekistan	Armenia		9
Developing Europe				Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia, Ukraine			7
Developing Asia	Cambodia, Lao People's Democratic Republic*, Myanmar*, Thailand		Lao People's Dem-ocratic Republic*	Mongolia			6
Middle East				Jordan, Lebanon			2
Total	18	10	7	20	4	0	**59**

Note: Asterisks (*) are used to identify LDCs.

4 Indirect exports in the WBES consist of sales to a trader or third party for export without modification.

1. SME PARTICIPATION IN DIRECT EXPORTS

According to the WBES, national sales continue to dominate total sales by manufacturing SMEs in developing economies and LDCs, which indicates that SMEs in developing economies and LDCs are primarily engaged in domestic rather than international commerce (see Figure 1). When looking at the global average percentage of total sales for both categories, only 11.1 per cent of total SME sales in 2016-21 were derived from direct exports. After comparing manufacturing SMEs in LDCs with manufacturing SMEs in developing economies, it becomes apparent that they lag behind in terms of direct exports (7.9 per cent compared to 11.5 per cent). LDC SMEs appear to be more limited in their capacity to export directly.

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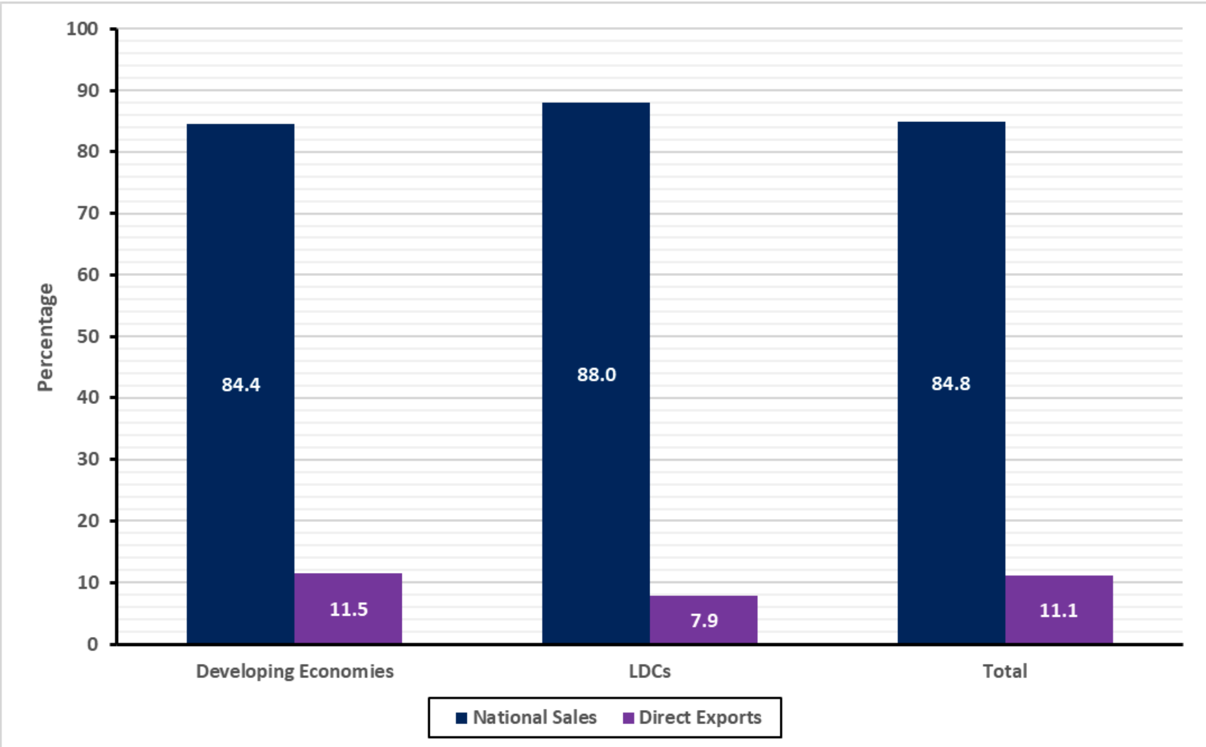
Figure 1: SMEs in LDCs are less likely to export directly than SMEs in developing economies (2016–21) (percentage of total sales)[5]



Note: Figures do not add up to 100 per cent because indirect exports are not included in the figure. Indirect exports in developing economies and LDCs are discussed in Section 2 of this note.

Source: WTO estimates based on World Bank Enterprise Surveys.

5 See Annex Table 1 for more information regarding the number of firms surveyed per country group, and Annex Table 2 for more information regarding the number of firms by manufacturing sector.

The sectoral analysis outlined in Figure 2 shows that SMEs in developing economies and LDCs continue to have lower participation rates in direct exports than their larger counterparts across most manufacturing sectors, except in the coke, refined petroleum products, nuclear fuel (ISIC 23),[6] and recycling (ISIC 37) sectors. SMEs from the developing economies reviewed reported that, on average, 11.2 per cent of their manufacturing sector sales was comprised of direct exports, less than half the proportion reported by large companies (roughly 33 per cent) (see Figure 2). The sectors in which SMEs reported the highest shares of direct exports included tobacco (34 per cent of total sales), textiles and apparel (20 per cent of total sales), and leather products (19 per cent of total sales).

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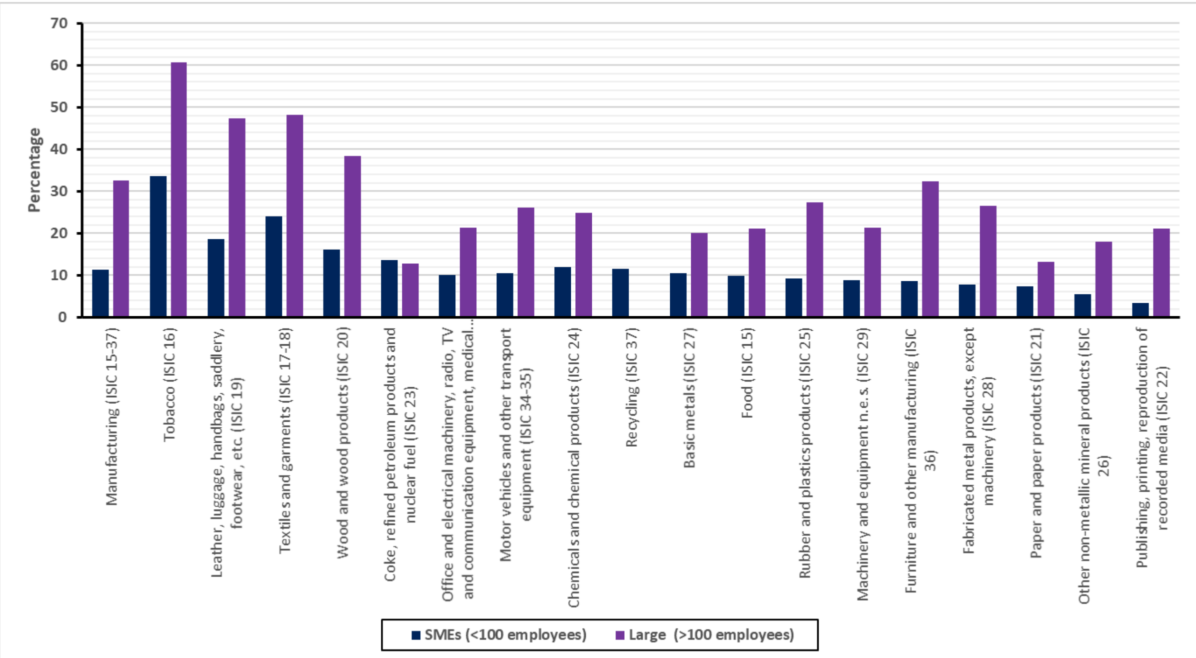
Upon further examination, although surveyed SMEs appear to participate actively in the direct exportation of certain products, large firms maintain the lion's share in direct export shares. The share of direct exports for large firms appears to be at least double that of SMEs across most sectors. For example, although the shares of direct exports for SMEs in the previously mentioned sectors are about 34 per cent (tobacco), 19 per cent (leather goods) and 18 per cent (textiles and garments), the shares of direct exports for large firms for the same sectors are roughly 61 per cent, 47 per cent and 49 per cent.

Figure 2: Large firms in developing and least-developed economies outperform SMEs in direct exports across most manufacturing sectors (2016–21) (percentage of total sales)



Note: WTO estimates based on the International Standard Industrial Classification of All Economic Activities (ISIC).

Source: WTO estimates based on World Bank Enterprise Surveys.

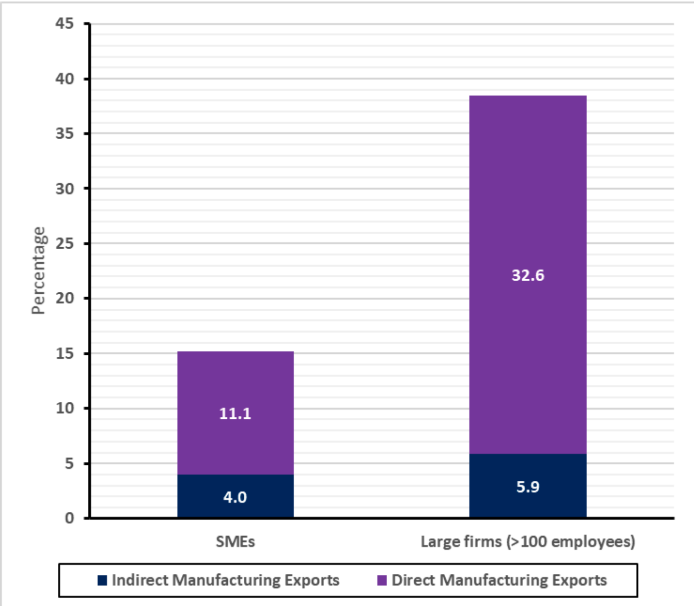
6 ISIC stands for International Standard Industrial Classification of All Economic Activities, which is the international reference classification of productive activities.

2. SMES AND INDIRECT EXPORTS

While shares of direct manufacturing exports are relatively low for SMEs, direct exporting is not the only means by which firms can tap into global markets. SMEs can also interact with global markets by supplying goods indirectly to domestic firms, which then export them. Consequently, according to WTO (2016), "SMEs can use the services of domestic intermediaries such as agents or distributors to help market their products in foreign countries and reach new markets".

Though this may be the case, Figure 3 suggests that SMEs seem to be more engaged with direct manufacturing exports than with indirect exports. Larger firms in developing economies and LDCs still hold the largest share of total sales in direct and indirect manufacturing exports. Overall, SME participation in exports, direct and indirect, is estimated to hover around 15 per cent of total manufacturing sales, whereas larger firms capture just over 38 per cent of total manufacturing export sales.

Figure 3: Large firms more actively engage in direct and indirect manufacturing exports than SMEs (2016–21) (percentage of total sales)

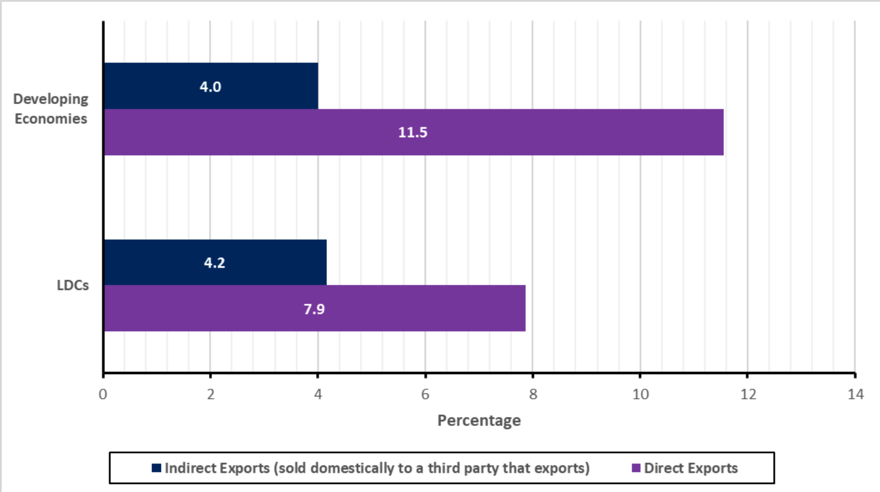


Source: WTO estimates based on World Bank Enterprise Surveys.

SMEs in developing economies appear to be more engaged in direct exports when compared to those in LDCs; however, their participation in indirect exports is slightly lower. LDCs remain more reliant on domestic channels to conduct business, as their manufactured goods are either directed toward the domestic market or toward third-party intermediaries, typically larger exporting firms.

Breaking it down further, as indicated in Figure 4, SMEs in developing economies appear to be more engaged in direct exports when compared to those in LDCs; however, their participation in indirect exports is slightly lower. LDCs remain more reliant on domestic channels to conduct business, as their manufactured goods are either directed toward the domestic market or toward third-party intermediaries, typically larger exporting firms.

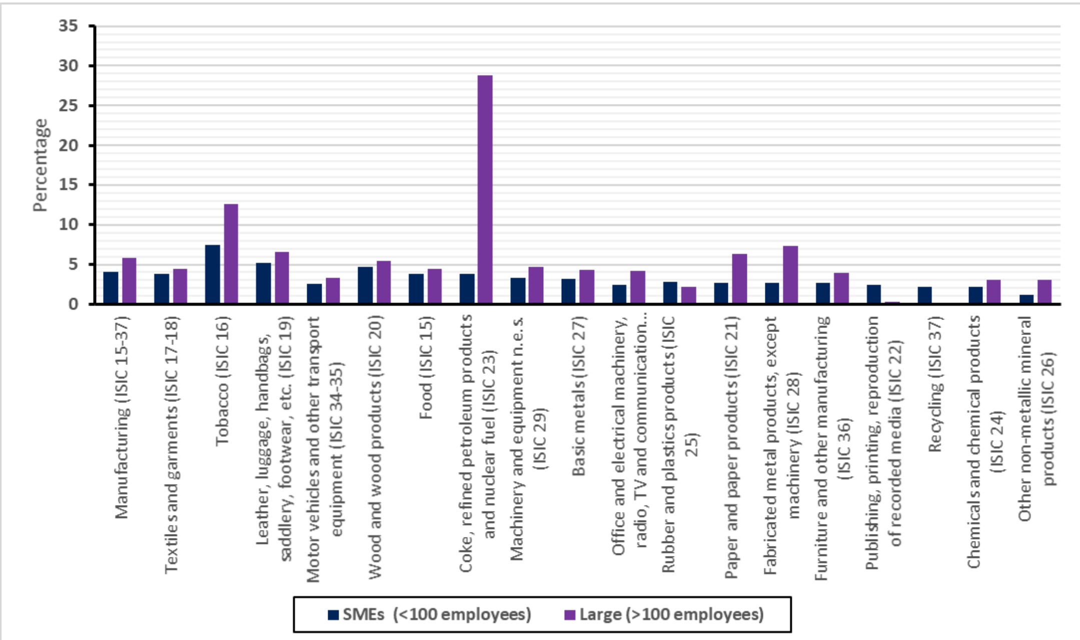
Figure 4: SMEs' shares of indirect manufacturing exports in total sales are roughly similar in developing and least-developed economies (2016–21) (percentage of total sales)



Source: WTO estimates based on World Bank Enterprise Surveys.

At the sectoral level (see Figure 5), SMEs in developing economies are predominately engaged in indirect exportation (at least 5 per cent of their total sales) of textiles and garments, tobacco, leather goods and automotive equipment.[7] Although large firms possess higher shares for the first three sectors, SMEs represented in the surveys reported being more involved in indirect exports of automotive parts. This is most likely due to the inclusion of Morocco and Tunisia, which have been able to attract foreign investments from large automotive manufacturers due to their proximity to the European and African markets and workforce (Oxford Business Group, 2020; USITA, 2021).

Figure 5: Outside of certain sectors, indirect export participation between SMEs and large firms is relatively similar across most manufacturing sectors (2016–21) (percentage of total sales)



Note: Based on the International Standard Industrial Classification of All Economic Activities (ISIC). N.e.s. stands for "not elsewhere specified".
Source: WTO estimates based on World Bank Enterprise Surveys.

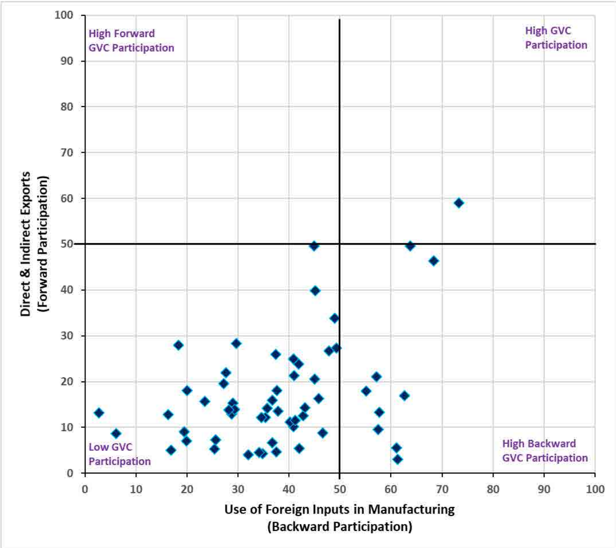
7 Other sectors in which indirect exports from SMEs are highest are office and electrical machinery components (ISIC 30-33), rubber and plastic products (ISIC 25), and publishing and printing materials (ISIC 22).

3. BACKWARD AND FORWARD PARTICIPATION IN GLOBAL VALUE CHAINS

As previously found in WTO (2016), manufacturing sector SMEs from developing economies have relatively low levels of GVC participation.[8] As Figure 6 shows, as a share of sales, SMEs are still more likely to import inputs from abroad for production than to export (Figure 6, backward GVC participation, lower-right quadrant). SME survey respondents generally indicated lower levels of forward GVC participation, proxied in Figure 6 by using direct and indirect exports. Only one economy surveyed during the time reviewed, Albania, had levels of exports and foreign inputs that put it into the upper right quadrant of Figure 6, indicating a relatively higher level of GVC participation.

SMEs are still more likely to import inputs from abroad for production than to export.

Figure 6: SMEs have low GVC participation, but are more likely to have backward GVC participation (2016–21) (share in total sales and share in total inputs)



Note: Each square represents the average GVC participation of SMEs in each developing economy.

Source: WTO estimates based on World Bank Enterprise Surveys.

When compared with large firms, the low level of SME GVC participation by manufacturing firms within developing economies is even starker (see Figure 7). SMEs in developing economies exhibit slightly larger GVC participation than those in LDCs, with large firms from many different areas reporting high use of foreign inputs (backward participation) and direct and indirect exports (forward participation). Smaller firms in developing countries, however, remain less likely to participate in GVCs, although they are generally shifted further to the right in Figure 7 than SMEs in LDCs, indicating a slightly higher use of foreign inputs in production.

As Figure 7 shows, SMEs in LDCs exhibit very little integration into GVCs, as they rely more than larger firms on both domestic inputs and on demand involving relatively low exports. Although large firms in some LDCs display high levels of GVC participation (upper right quadrant), no LDC SMEs report large shares of international trade as part of their total sales. Furthermore, few SMEs in LDCs exhibit strong backward participation or imported inputs for downstream production, instead apparently sourcing more domestic inputs when needed or relying on their own value-added.

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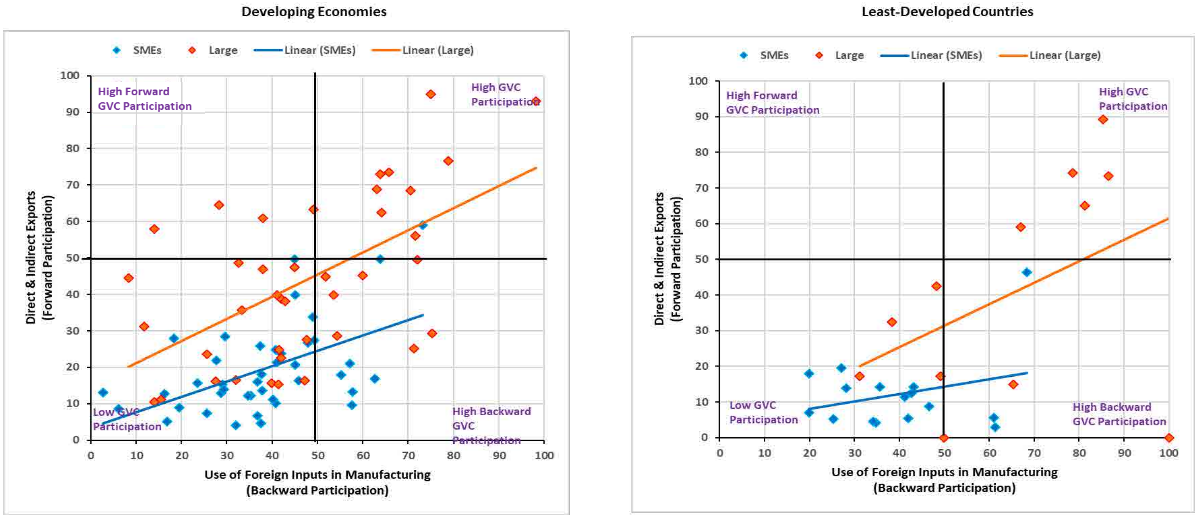
8 Due to data limitations, forward GVC participation is proxied here using total exports. The WBES does not distinguish between exports of intermediate goods and services that are further used along the production chain, and products dedicated to final consumption. Therefore, these two indicators are retained to estimate the potential of SMEs' downstream linkages to GVCs, as in WTO (2016).

Figure 7: GVC participation by level of development (2016–21) (share in total sales and share in total inputs)

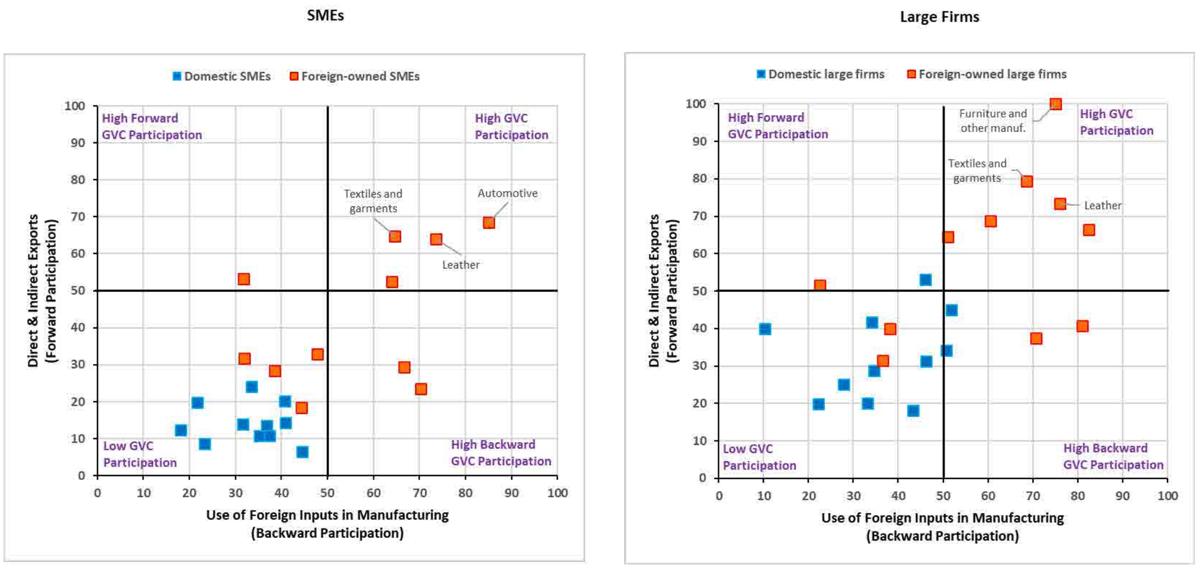


Note: Each square represents the average GVC participation of SMEs in each developing economy.

Source: WTO estimates based on World Bank Enterprise Surveys.

Looking at developing economy GVC participation from the perspective of whether or not a firm is foreign-owned[9] provides further insights (see Figure 8). In keeping with the findings in WTO (2016), foreign-owned firms of all sizes are much more likely to be found in the upper right quadrant of Figure 8, indicating higher GVC participation. This is especially true in sectors with higher use of GVCs, such as textiles and apparel, and leather. Further, across every sector, foreign-owned firms reported higher shares of "foreign imports" for inputs and exports abroad than domestic-owned firms. For example, foreign-owned SMEs in the automotive sector reported that, on average, 68 per cent of their sales were from direct or indirect exports, while 85 per cent of their inputs were from "foreign imports", compared to only 14 per cent of sales exported by domestically-owned automotive SMEs and 41 per cent of inputs from foreign sources.

Figure 8: GVC participation by foreign or domestic ownership (2016–21) (share in total sales and share in total inputs)



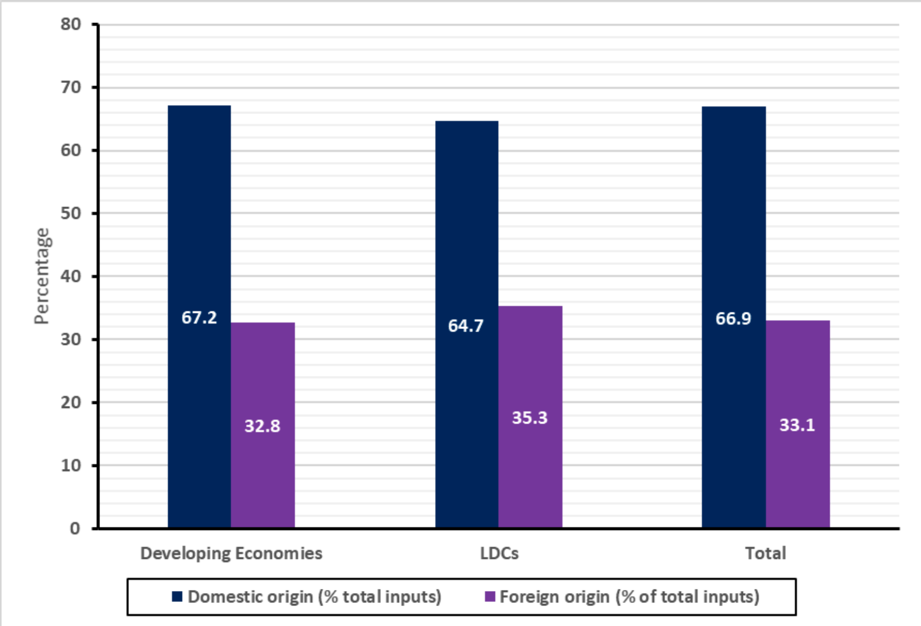
Note: Each square represents the average GVC participation of SMEs in each developing economy.

Source: WTO estimates based on World Bank Enterprise Surveys.

9 Foreign ownership includes all firms that are at least 51 per cent owned by foreign nationals.

Moreover, when looking at the use of foreign and domestic inputs in production (see Figure 9), SMEs in both developing economies and LDCs appear to rely heavily on their domestic markets to obtain key inputs. Roughly two-thirds (67 per cent) of total developing and LDC SME inputs are sourced domestically, while one-third (33 per cent) of inputs is obtained from foreign sources. While LDCs rely on domestically-sourced inputs, foreign-sourced inputs are not negligible. Between the two categories, it appears that developing-economy SMEs are slightly more dependent on domestic inputs at 67 per cent (compared to roughly 65 per cent in LDCs), whereas SMEs in LDCs are slightly more reliant on foreign inputs at 35 per cent (compared to about 33 per cent in developing economies). Overall, it appears that surveyed SMEs in developing and least-developed economies are relatively similar in terms of their integration into GVCs.

Figure 9: Shares of foreign and domestic inputs in production of SMEs in developing and least-developed economies are similar (2016–21) (percentage)



Source: WTO estimates based on World Bank Enterprise Surveys.

CONCLUSION

Overall, when looking at the small, medium and large enterprises located in the countries represented in the World Bank Enterprise Surveys data from 2016 to 2021 (see annex tables 1 and 2), it becomes apparent that SMEs in developing economies and LDCs are not exporting as much as enterprises in developed economies (see WTO, 2022). Firms in developing economies tend to orient their production and services towards their domestic markets, as demonstrated by their significantly lower shares of exports as a proportion of total sales (see Figure 1). This is also true in terms of the use of inputs necessary for production, as SMEs have been found to depend predominately on domestic inputs rather than foreign ones (see Figure 7). While ownership (i.e., domestic or foreign) does play a role in a firm's dependence or use of certain inputs, SMES in developing economies and LDCs appear to be limited in their ability to enter or compete in foreign markets.

This observation also reinforces the finding that SMEs located in developing and least-developed countries participate in upstream, less technology-intensive sectors, which require less processing and therefore contribute less value-added to exports. There are, however, limitations to the study regarding developing economies, as, on the one hand, it is based on survey data and therefore cannot be used for an analysis across time to review changes, and, on the other hand, is characteristic of SMEs located in just 57 economies. Governments in developing regions should assess ways to support small and medium-sized businesses and incentivize trade, directly or indirectly, to match or exceed the global average. One way to support this would be by tapping into local or geographically proximal value chains.

Moving forward, developing member states should dedicate more resources to the collection of national data and statistics, especially in terms of the status of trading MSMEs operating in their respective territories. By capturing more information related to the domestic business landscape, governments can provide international organizations with valuable insight into the opportunities and challenges facing small, medium-sized and large enterprises across the development spectrum. By participating in information-gathering initiatives, governments can facilitate knowledge production activities and support efforts to level the trading field. Data collection not only allows for better policymaking domestically, but also provides valuable insights that can elicit opportunities to harmonize economic policies.

BIBLIOGRAPHY

Ladrière, M., Lundquist, K. and Ye, Q. (2022), "B2B E-commerce Marketplaces and MSMEs, evidence of Global Value Chain facilitation?", Working Paper no. ERSD-2022-07, Geneva: World Trade Organization (WTO).
https://www.wto.org/english/res_e/reser_e/ersd202207_e.htm

Lanz, R., Lundquist, K., Mansio, G., Maurer, A. and Teh, R. (2018), "E-Commerce and Developing Country-SME Participation in Global Value Chains", Working Paper no. ERSD-2018-13, Geneva: WTO.
https://www.wto.org/english/res_e/reser_e/ersd201813_e.pdf

Oxford Business Group (2020), "Morocco attracts automotive manufacturers and suppliers", *Oxford Business Group*.
https://oxfordbusinessgroup.com/analysis/driver%E2%80%99s-seat-automotive-manufacturers-and-suppliers-flock-kingdom

Paul, M. (2021), "Area Under Tobacco Cultivation in Africa Rose Over 3% in 6 Yrs: WHO Report". *Downtoearth.Org.In*.
https://www.downtoearth.org.in/news/africa/area-under-tobacco-cultivation-in-africa-rose-over-3-in-6-yrs-who-report-75573#:~:text=The%20main%20tobacco%20leaf%20growing,in%20Africa%2C%20Malawi%20and%20Zimbabwe

United Nations Conference on Trade and Development (UNCTAD) (1990), *Trade and Development Report, 1990*, New York: UNCTAD.
https://unctad.org/system/files/official-document/tdr10_en.pdf

United States International Trade Administration (USITA) (2021), "Tunisia - Automotive Parts, Services & Equipment", Washington, D.C.: International Trade Administration.
https://www.trade.gov/country-commercial-guides/tunisia-automotive-parts-services-equipment

World Bank (2022), "Small and Medium Enterprises (SMEs) Finance", Washington, D.C.: World Bank.
https://www.worldbank.org/en/topic/smefinance#:~:text=SMEs%20account%20for%20the%20majority,(GDP)%20in%20emerging%20economies.

World Trade Organization (WTO) (2016), *World Trade Report: Levelling the Trading Field for SMEs*, Geneva: WTO.

WTO (2022), "MSME Trade Participation in Developed Economies", Research Note, Geneva: WTO.

ANNEX

Annex Table 1: Firm count (by size) in WBES data (2016-21)

Number of firms by size			
Firm size:	Large	SME	Total
Developing Economies	**2,311**	**18,259**	**20,570**
Africa	883	6,670	7,553
Developing Asia	115	973	1,088
Commonwealth of Independent States (CIS)	405	3,848	4,253
Developing Europe	286	2,297	2,583
Latin America and the Caribbean (LAC)	578	3,757	4,335
Middle East	44	714	758
Least-developed countries (LDC)	**271**	**2,872**	**3,143**
Africa	174	1,942	2,116
Asia	97	930	1,027
Total	**2,582**	**21,131**	**23,713**

Source: World Bank Enterprise Surveys.

Annex Table 2: Firm count (by industry) in WBES data (2016-21)

Industry	SMEs (<100 employees)	Large (>100 employees)	Total
Total manufacturing (ISIC 15-37)	**11,109**	**1,788**	**12,897**
Food (ISIC 15)	3,054	438	3,492
Tobacco (ISIC 16)	19	18	37
Textiles and garments (ISIC 17-18)	1,808	445	2,253
Leather, luggage, handbags, saddlery, footwear, etc. (ISIC 19)	295	47	342
Wood and wood products (ISIC 20)	316	25	341
Paper and paper products (ISIC 21)	211	47	258
Publishing, printing, reproduction of recorded media (ISIC 22)	400	15	415
Coke, refined petroleum products and nuclear fuel (ISIC 23)	24	6	30
Chemicals and chemical products (ISIC 24)	632	148	780
Rubber and plastics products (ISIC 25)	862	110	972
Other non-metallic mineral products (ISIC 26)	901	101	1,002
Basic metals (ISIC 27)	169	55	224
Fabricated metal products, except machinery (ISIC 28)	817	74	891
Machinery and equipment n.e.s. (ISIC 29)	505	82	587
Office and electrical machinery, radio, TV and communication equipment, medical precision and optical n.e.s. (ISIC 30-33)	397	101	498
Motor vehicles and other transport equipment (ISIC 34-35)	169	50	219
Furniture and other manufacturing (ISIC 36)	509	24	533
Recycling (ISIC 37)	21	2	23
Total	**11,109**	**1,788**	**12,897**

Note: N.e.s. stands for “not elsewhere specifed”.

Source: World Bank Enterprise Surves.

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