



ADB Working Paper Series

**SMALL AND MEDIUM-SIZED ENTERPRISES
IN NEPAL: EXAMINING CONSTRAINTS
ON EXPORTING**

Paras Kharel and Kshitiz Dahal

No. 1166
July 2020

Asian Development Bank Institute

Paras Kharel is research director at South Asia Watch on Trade, Economics and Environment (SAWTEE). Kshitiz Dahal is a research officer at SAWTEE.

The views expressed in this paper are the views of the author and do not necessarily reflect the views or policies of ADBI, ADB, its Board of Directors, or the governments they represent. ADBI does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use. Terminology used may not necessarily be consistent with ADB official terms.

Working papers are subject to formal revision and correction before they are finalized and considered published.

The Working Paper series is a continuation of the formerly named Discussion Paper series; the numbering of the papers continued without interruption or change. ADBI's working papers reflect initial ideas on a topic and are posted online for discussion. Some working papers may develop into other forms of publication.

Suggested citation:

Kharel, P. and K. Dahal. 2020. Small and Medium-Sized Enterprises in Nepal: Examining Constraints on Exporting. ADBI Working Paper 1166. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/sme-nepal-examining-constraints-exporting>

Please contact the authors for information about this paper.

Email: paraskharelpk@gmail.com

The authors thank Dikshya Singh for conducting some of the in-depth interviews with the private sector. They also gratefully acknowledge comments from Shujiro Urata, Ayako Obashi, and participants in a workshop on "Trade, Global Value Chains, and Small and Medium-Sized Enterprises," organized by the Asian Development Bank Institute in Tokyo on 6–7 February 2020, as well as comments from Rajan Sharma.

Asian Development Bank Institute
Kasumigaseki Building, 8th Floor
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500
Fax: +81-3-3593-5571
URL: www.adbi.org
E-mail: info@adbi.org

© 2020 Asian Development Bank Institute

Abstract

Even as a number of developing countries have been able to reap the export opportunities presented by the rise of global value chains (GVCs), Nepal's export performance remains dismal. This paper examines the challenges and constraints faced by manufacturing small and medium-sized enterprises (SMEs) in Nepal, a landlocked least developed country, in integrating themselves into GVCs, with a focus on exporting. The paper combines the limited available secondary data, including firm-level information, with qualitative primary data. It finds that Nepal lacks a concrete policy framework for SMEs, let alone a strategy for their internationalization and participation in GVCs. Fiscal incentives are mostly not targeted at, or tailored to, the needs of SMEs. Incentives granted in one legislation being repealed through another has created policy uncertainty. Other major challenges include an inadequately trained/skilled workforce; onerous collateral requirements and high interest rates when accessing credit; an inadequately funded concessional export credit scheme, with an insufficient term length; procedural difficulty in accessing a cash export subsidy program; high tariffs on raw materials and intermediate goods coupled with an ineffective duty drawback system; the lack of an efficient arrangement for consolidating less-than-container-load cargoes; poor dissemination of information about existing incentives and facilities; inadequate provision of trade and market intelligence; restrictions on online payment solutions; and a weak capacity of the public administration to coordinate and implement trade and industrial policies. The paper makes policy recommendations in five areas: endowments, market access, logistics/trade facilitation, nontariff measures, and other cross-cutting policy issues.

Keywords: small, medium-sized, and large firms; exports; international trade policy; global value chains; landlocked; Nepal

JEL Classification: F12, F13, F14, L25, L52, L53, L60

Contents

1.	INTRODUCTION.....	1
2.	IN SEARCH OF DATA ON SMEs.....	2
3.	A PORTRAIT OF NEPALI FIRMS	3
3.1	Production	4
3.2	International Linkages.....	5
3.3	Finance	6
4.	DISCUSSION AND POLICY OPTIONS	7
4.1	Endowments	8
4.2	Market Access	9
4.3	Logistics and Trade Facilitation	13
4.4	Nontariff Measures.....	14
4.5	Cross-cutting Policy Issues.....	14
5.	CONCLUSIONS.....	16
	REFERENCES	18
	APPENDIX.....	20

1. INTRODUCTION

As is the case with most developing and even developed nations (Yoshino and Taghizadeh-Hesary 2016), small and medium-sized enterprises (SMEs) in Nepal, despite encompassing a significant sphere of the national economy, face significant challenges. The SMEs in Nepal have a low capital base, poor access to technology, and inadequate knowledge and information regarding business opportunities and marketing (Pandey 2004). Similarly, SMEs in Nepal also suffer from poor access to finance brought about by high interest rates, large collateral requirements, inconveniences associated with the process, a lack of information, and inadequate institutional capacity, among other things (NRB 2019).

Nepali firms, overall, are yet to significantly reap the opportunity presented by the rise of global value chains (GVCs) to start exporting or to expand exports by inserting themselves in a specific stage of production or concentrating on a particular task or set of tasks, leaving the rest of the production process to actors downstream and upstream located in other countries. At the aggregate level, one measure of participation in GVCs is the sum of the import content of gross exports (backward participation) and the proportion of gross exports that is domestically produced and is used as inputs in other countries' exports (forward participation) (see Borin and Mancini 2019; World Bank 2019). By this measure, Nepal had the second-highest GVC participation in 2015 (30.85%) among South Asian countries (excluding Bhutan, which has a population of less than 1 million)—second only to India (35.7%).¹ Nepal's GVC participation is slightly higher than that of Cambodia, but lower than that of countries in Southeast Asia such as Thailand (42.7%), Malaysia (57.3%), and Viet Nam (49.4%). Nepal's GVC participation is balanced between backward participation and forward participation, whereas forward participation is stronger than backward participation in India, Bangladesh, Pakistan, and Sri Lanka. Nepal's forward participation is lower than that in these four South Asian countries.

In reality, Nepal's export performance is much weaker than what these indicators of GVC participation suggest. For example, Nepal's merchandise exports in 2019 were less than US\$1 billion, or 3.2% of GDP. These exports are by an order of magnitude lower than Cambodia's, although there is not much difference between the two countries' GVC participation by the above metrics.² The point is that there may be scope for Nepal to expand its exports even within the existing levels of backward and forward GVC participation, given the experiences of comparator countries.

The literature has documented the constraints behind Nepal's lackluster export performance, ranging from domestic supply-side constraints to market access barriers in destination markets to an inefficient transit regime.³ But they do not zoom in on SMEs, which, as evidenced by global experiences, face significant obstacles to participating in international trade, including GVCs (WTO 2016; Ganne and Lundquist 2019). This paper examines the challenges and constraints faced by manufacturing SMEs in Nepal in GVCs, albeit with a focus on exporting. The paper combines the limited available

¹ GVC indicators in this paragraph are for the year 2015 and calculated from the "WDR2020_gvc_data" data set used by World Bank (2019).

² Nepal's exports, in terms of the absolute amount of domestic value added, are also lower than Cambodia's.

³ For example, Kharel (2014); Adhikari and Kharel (2014); Basnett and Pandey (2014); Arenas (2016); Narain and Varela (2017); GoN (2010); GoN (2016).

secondary data, including firm-level information from the World Bank's Enterprise Survey for the year 2013, with insights from qualitative primary information.

When using the Enterprise Survey data set, we characterize firms that both export and import (use foreign material inputs)—a standard way of defining GVC firms, although we cannot determine whether the exports are of final or intermediate goods. However, the small sample size precludes us from delving into this category in detail. There are 38 exporting firms and 25 firms that export and import. Distinguishing between small, medium-sized, and large firms among exporting and/or importing firms entails cutting the data too thin, and does not lend itself to a meaningful statistical analysis. We therefore also utilize information from in-depth qualitative interviews and discussions with the private sector and policymakers to explore, in greater detail, the challenges and constraints faced by manufacturing SMEs in exporting and expanding their exports. The primary information pertains mostly to firms that use some foreign material inputs—which can be termed “GVC firms.” We discuss the constraints to sourcing material inputs, including from abroad—a precondition for being able to produce for foreign markets for many firms. On the export side, the focus is on final goods exports, which account for half of Nepal's gross exports⁴—leaving analysis of the constraints to joining GVCs by producing intermediate goods for future work.

The rest of the paper is organized as follows. Section 2 presents some information on the size distribution of manufacturing firms from census data. Section 3 presents a richer portrait of Nepali firms, distinguishing between small, medium-sized, and large enterprises, and firms of different internationalization statuses. Section 4, drawing also on primary information, summarizes the key issues and constraints faced by Nepali SMEs that have a bearing on their export prospects, and suggests policy options. Section 5 concludes.

2. IN SEARCH OF DATA ON SMES

Nepal's Industrial Enterprise Act 2020 classifies firms by size based on the value of fixed assets.⁵ Nepal lacks a nationally representative survey of firms, including SMEs, that yields detailed information on firm characteristics spanning production, sales, employment, exports, and sourcing (including imports), among other things. As a result, there is no credible basis for estimating the contribution of SMEs to the economy. The MoF (2016) mentions that SMEs contribute 22% to the gross domestic product (GDP) and employ around 1.7 million people, without specifying the basis for the numbers. The contribution of SMEs to output, employment, and exports in the manufacturing sector is unknown.⁶

⁴ Calculation based on UN COMTRADE data for the years 2016 and 2017.

⁵ Small firms have fixed capital of up to NPR 150 million (US\$1 equaled about NPR 118 on 14 March 2020), medium-sized firms have fixed capital exceeding NPR 100 million but less than NPR 500 million, and large firms have fixed capital exceeding NPR 500 million. There are also two other types of firms defined in the Act: microenterprises and cottage enterprises. The criteria determining microenterprises include fixed capital (excluding land and buildings) of no more than NPR 2 million, an annual turnover of no more than NPR 10 million, and employment of no more than nine workers, including the entrepreneur. Cottage enterprises rely on traditional/local skills, technology, and art and culture, and are labor-intensive. In practice, cottage enterprises are mostly microenterprises or SMEs in terms of size.

⁶ The Census of Manufacturing Establishments, 2011/12, which collected more detailed information than the National Economic Census, 2017/18, enumerated firms with ten or more employees only, and its raw data are not available in the public domain. The Survey of Small Manufacturing Establishments 2008/09 sampled firms with less than 10 employees in the manufacturing sector, but its raw data are not available in the public domain.

If one defines firm size in terms of persons engaged rather than value of fixed assets as in the law, it is possible to gauge the relative importance of SMEs in all establishments and all employment, in different sectors, including manufacturing (Table 1). From the published tables of the National Economic Census (NEC) 2017/18 (CBS 2019), which includes both registered and unregistered establishments, we can infer that there are 104,058 manufacturing establishments, in which 510,523 persons are engaged. Manufacturing establishments make up 11% of all establishments and close to 16% of overall employment. Nearly 98% of manufacturing establishments are small units, while 1.6% of them are medium-sized units, and 0.7% are large units, where we define size groups in terms of the number of persons engaged.⁷ Small, medium-sized, and large manufacturing establishments employ 53%, 13%, and 34%, respectively, of the total number of persons engaged in the manufacturing sector.

This may suggest the absence of a “missing middle” in the distribution of firms across three size groups but the presence of a missing middle in the distribution of employment across the size groups. What is clear from the NEC data, however, is that SMEs account for two thirds of employment in the manufacturing sector, the focus of our paper. Moreover, establishments where less than ten persons are engaged make up 95% of enterprises and 46% of people engaged.

Table 1: Employment in Manufacturing Establishments, 2018

	Small	Medium	Large	Total
No. of establishments	101,697 (97.73)	1,629 (1.57)	732 (0.70)	104,058
Employment (persons engaged)	268,783 (52.65)	66,250 (12.98)	175,490 (34.37)	510,523
No. of estbs. with less than 10 persons engaged	98,983 (95.12)			
Employment (persons engaged) in estbs. with less than 10 persons engaged	233,881 (45.81)			

Note: Figures in parenthesis are percentages.

Source: Authors' calculation from CBS (2019).

3. A PORTRAIT OF NEPALI FIRMS

Given the dearth of firm-level data in general and on SMEs in particular, we use the World Bank's Enterprise Survey for Nepal conducted in 2013. It is the only readily available source of fairly representative firm-level data rich enough to investigate and compare the characteristics and behavior of small, medium-sized, and large firms, although firm size is based on employment. Moreover, it also allows us to get a rough sense of the contribution of SMEs to sales and exports, which has been hitherto unknown. Firm size is one of the strata in the stratified random sampling method used in the surveys, thereby making it possible to make statistical inferences at the level of size groups. Ideally, one would also want to make statistical inferences on the differences in the characteristics of firms across different groups of international linkage status—for example exporting (importing) and nonexporting (nonimporting) firms, and these categories within different size categories. However, this is constrained by the fact that exporting (importing) status was not used as a stratum during sampling, and due to

⁷ Small firms have less than 20 persons engaged, medium-sized firms have 20–99 persons engaged, and large firms have 100 or more persons engaged.

the presence of a very small number of firms in some subgroups. We therefore present the means of different characteristics in terms of exporting and importing status, but without breaking them further into size groups and without performing tests of statistical significance.

A total of 482 firms were sampled, of which 283 were small, 147 were medium-sized, and 52 were large. Firm size is defined in terms of employment: Small firms have 5–19 workers, medium-sized firms 20–99 workers, and large firms 100 or more workers. The sectoral distribution was as follows: 242 in manufacturing, 112 in retail, and 128 in services. We will focus on manufacturing firms. Among the manufacturing firms, 91 are small, 105 are medium-sized, and 46 are large. Compared to the National Economic Census (a more recent data collection exercise), this survey undersamples small firms.

Based on the surveyed manufacturing firms, one can infer that large firms contribute 52.4% of the sales of the manufacturing sector, followed by small firms (25.6%), and medium-sized firms (22%). In terms of exports, large firms again take the lead, accounting for 75% of all manufacturing exports. However, it is medium-sized firms that take second position, with a share of 21.7%. Small firms have a 3.2% share in manufacturing exports.

Table A1 in the Appendix presents the characteristics of manufacturing firms as a whole as well as small, medium-sized, and large firms separately. Cases where there is a statistically significant difference between any two groups are marked with an asterisk. Table A2 presents the characteristics of manufacturing firms split into five groups in terms of GVC participation: (i) exporters, (ii) nonexporters, (iii) importers (those that report using foreign material inputs), (iv) nonimporters (those that do not report using foreign material inputs), and (v) firms that are exporters as well as importers (report using foreign material inputs). Firm characteristics are under six broad categories—general characteristics, production, international linkages, use of the Internet, innovation and finance. In the remainder of this section, we discuss production, international linkages, and finance. Nepali firms are also compared with their counterparts in developing countries.⁸

3.1 Production

Small and medium-sized firms have similar levels of labor productivity, but such productivity is significantly lower than that of large firms. While Nepali large firms' average productivity is not significantly different from that of large firms in other countries, the productivity of small and medium-sized firms in Nepal is significantly lower than that of their counterparts elsewhere. Surprisingly, exporters have lower labor productivity than nonexporters. One reason for this could be the sectoral variation within manufacturing, which a simple test of means cannot take into account. The number of firms is not sufficient to compare exporters and nonexporters within manufacturing subsectors. The average productivity of exporters that also use foreign inputs is higher than that of exporters in general, but still lower than that of nonexporters. Firms that use foreign inputs have a higher productivity level than firms that do not.

Small firms are significantly less likely to have purchased fixed assets in the last one-year period than large firms. Large firms have a significantly higher propensity to have internationally recognized quality certification than SMEs. Nepali firms in all three

⁸ Significant differences in the rest of this section imply differences that are statistically significant at the level of at least 10%. Nepali enterprises are compared with enterprises in 67 other countries surveyed, as part of the World Bank's Enterprise Survey, in the years 2012, 2013, or 2014. Details of the tests are available on request.

size groups are significantly less likely to have internationally recognized quality certification than firms elsewhere. Firms that use foreign inputs are more likely to have such certification.

Firms on average maintain—in terms of production days—46 days of inventory of their most important input. Exporters, and especially exporters that use foreign inputs, tend to maintain fewer days of inventory. Compared to small firms in other countries, Nepali small firms maintain a significantly higher number of days of inventory—by an additional 14.2 days on average. A likely factor behind this is the fact that the country is landlocked.

3.2 International Linkages

Foreign investment in firms in the sample is very low—0.3% of firms have foreign investment. While small firms do not have any foreign investment, less than 0.2% of medium-sized firms have foreign investment. In contrast, 9.7% of large firms have foreign investment. Small firms in Nepal are significantly less likely to have foreign investment than small firms elsewhere on average, by 5 percentage points. Medium-sized firms in Nepal are also significantly less likely to have foreign investment than medium-sized firms elsewhere, by 6.5 percentage points.

On average, 10% of firms export. Some 8.8% of firms export at least 10% of their sales. On average, 6.8% of firms export directly. Direct exports account for 92.4% of all manufacturing exports. Just under a third of exporters export only indirectly, with medium-sized exporting firms more likely to do so than small and large exporting firms. Only 7.3% of nonexporting firms plan to export in the next 12 months.

Overall, 10.3% of all manufacturing sales are in the form of exports. Exports account for 1.3% of all sales by small firms. The figures increase to 10% and 14.7%, respectively, for medium-sized and large firms. The pattern is similar when considering only direct exports.

Compared to small and large firms elsewhere, Nepali small and large firms are on average significantly less likely to export (by 21.9 percentage points and 47.5 percentage points, respectively).

The propensity to use imported material inputs or supplies increases with firm size. The share of imports in material inputs or supplies also increases with firm size. Among firms that use imported material inputs or supplies, large firms have a significantly higher propensity to import them directly (89.1%) than small (39.8%) and medium-sized firms (52.8%). Looking at firms that export as well as use imported materials—typically classified as GVC firms in the literature—we see that they constitute 63% of exporters overall. Such GVC firms constitute 47% of small exporting firms, 77% of medium-sized exporting firms, and 63% of large exporting firms, although the differences in these proportions are not statistically significant.

While Nepali large and medium-sized firms are significantly more likely to use imported material inputs or supplies than their counterparts elsewhere (by at least 23 percentage points more), small Nepali firms are significantly less likely to use such imported materials than small firms in other countries (by 12 percentage points less). Nepali large firms have a significantly higher share of imported materials in the material inputs or supplies they use (by 49.7 percentage points) than large firms elsewhere.

Only 1.6% of firms use technology licensed from a foreign-owned company, excluding office software. Large (small) firms in Nepal are significantly less likely, by 18 percentage points (9.5 percentage points), to use such technology than large (small) firms elsewhere on average. Exporters are more likely to use such technology than nonexporters, and

firms that use foreign inputs are more likely to use such technology than firms that do not use foreign inputs.⁹

The impact of exporting on firms cannot be ascertained from the available survey data. But the primary, mostly qualitative, information that we have—to be presented in greater detail in Section 5—provides some idea. Exporters say exporting fetches a higher price than selling to the domestic market, and their net revenues are higher. Interactions with foreign buyers make them more conscious about product trends and designs. Some producers have hired designers to design trending products after starting to export. A felt producer was constantly on the lookout for the possibility of making newer products. Some carpet exporters have taken to using software to design carpets, which minimizes errors by guiding knotters on design. There is also a subtle difference between exporting directly and indirectly. Exporting directly gives manufacturers the opportunity to communicate directly with the ultimate buyers. Producers who export through intermediaries feel that the inability to interact with the ultimate buyers precludes a mutually beneficial outcome: For example, one exporter feels that designs could be enhanced with the addition or omission of certain elements and that buyers would listen to them. However, switching from indirect exports to direct exports is not easy, as the producer needs to gain a good handle on export-related procedures. Likewise, compared to exporting indirectly, exporting directly places a greater demand on the ability to source raw materials and intermediate goods, including from abroad, of the necessary – and of a consistent – quality at competitive prices.

3.3 Finance

As expected, smaller firms tend to have a more constrained access to finance than larger firms, be it in terms of having a checking/savings account, or having applied for a loan, or having an overdraft facility, or the collateral-to-loan ratio. Exporters are better placed than nonexporters in several of these indicators.

A greater percentage of large and medium-sized firms in Nepal have a checking or savings account than their counterparts in other countries (by 4.9 to 5.9 percentage points). A greater percentage of Nepali large firms have an overdraft facility than large firms elsewhere (by 30 percentage points), with no significant difference in the proportions for small and medium-sized firms in Nepal and elsewhere. Nepali firms, whether small, medium-sized, or large, are more likely to have put up a collateral for their most recent line of credit than firms elsewhere (by 16.5, 18.2, and 20.8 percentage points, respectively).

Among firms that had not applied for any loans, 13.2% identified the high collateral requirement as the main reason, with small firms significantly more likely (15.3%) to say so than medium-sized firms (3.9%) and large firms (3.3%).

Among firms that had not applied for any loans, compared to small firms in other countries, Nepali small firms are significantly less likely to identify the absence of a need for loans as the main reason for not taking any loan (by 17 percentage points). Small firms in Nepal are significantly more likely to identify the high collateral requirement as the main reason (by 10 percentage points) than small firms in other countries.

⁹ These are not reported in Table A2.

Smaller firms rely less on bank credit and more on internal funds to fund their purchase of fixed assets and to finance working capital needs than larger firms. Credit from suppliers and advances from customers are also more important for smaller firms than for larger firms in financing working capital needs. Exporters tend to be less reliant on internal funds and bank credit than nonexporters, whether for purchasing fixed assets or financing working capital needs. In particular, credit from suppliers and advances from customers are more important in financing working capital needs for exporters than nonexporters. Compared to nonexporters, exporters also rely more on owners' contributions or issuance of new equity shares for funding fixed asset purchases. This also holds true for firms that use foreign inputs compared to firms that do not.

A significantly lower proportion of financing for working capital comes from banks for small firms in Nepal than for small firms in other countries (by 10 percentage points). Correspondingly, a significantly higher percentage of financing for working capital comes from internal funds for small firms in Nepal than for small firms in other countries (by 11 percentage points).

A significantly higher percentage (40.5%) of small firms view access to finance as a major or severe obstacle to their operations than medium-sized firms (18.6%) and large firms (15.1%). Exporters view access to finance as less of a constraint than nonexporters, especially if the exporter also uses foreign inputs. Compared to small firms in other countries, a significantly higher proportion of small firms in Nepal view access to finance as a major or severe obstacle (by 16.4 percentage points).

A 2018 survey on SME financing in Nepal, carried out by Nepal Rastra Bank (NRB), the central bank, corroborates some of the above findings and sheds further light on access to finance issues of SMEs (NRB 2019). The study does not compare and contrast SMEs with large enterprises, though. It considers firms in all sectors, not just manufacturing. It uses the definition of the Industrial Enterprises Act 2016 to define SMEs, based on fixed assets, when sampling SMEs. Procedural complexity, high interest rates (12.51% is the average interest rate charged to SMEs and an additional nearly 1% service charge is also levied), and collateral requirements are identified as major problems in obtaining loans from banks and financial institutions. SMEs in general find it easier to obtain loans from savings and credit cooperatives, but identify high interest rates as the chief deterrent to obtaining loans from cooperatives. The surveyed SMEs had not drawn any financing for their initial investment from the capital market, and they do not see the capital market as holding the potential to finance their activities.

4. DISCUSSION AND POLICY OPTIONS

Drawing on the findings of previous studies, available firm-level data, and in-depth interviews and discussions with the private sector and policymakers,¹⁰ we now summarize the key issues faced by Nepali SMEs that have a bearing on their export prospects, and highlight some policy options. By SMEs, we refer also to microenterprises

¹⁰ We draw on interviews with four entrepreneurs who run export-oriented SMEs or SMEs that used to export—covering the felt industry (Shanti Shrestha, Nuptse Crafts), the apparel/hosiery industry (Sabita Maharjan, Kirtipur Hosiery), the carpet industry (Shova Gurung, Himalayan Decor Rugs), and the overall handicraft industry (Dharmaraj Shakya, former office-bearer, Federation of Handicraft Associations of Nepal). We additionally obtained the views of the private sector through: a discussion program on Nepal-Bangladesh trade held in Kathmandu on 1 March 2020, organized by South Asia Watch on Trade, Economics and Environment (SAWTEE) and the Ministry of Industry, Commerce, and Supplies, Government of Nepal; discussions with officials at the Federation of Nepal Cottage and Small Industries on 2 March 2020; and a workshop for female entrepreneurs organized by SAWTEE and Manushi in Kathmandu on 6 March 2020.

and cottage enterprises. We structure the discussion around four broad determinants of a country's participation in GVCs, drawing on the framework presented in World Bank (2019) and WTO (2016)—endowments, market access (access to export markets and input markets), logistics/trade facilitation, and nontariff measures—followed by some cross-cutting policy issues.

4.1 Endowments

SMEs in some sectors are faced with a shortage of workers with the required skills. There is a limited match between the requirements of industry and human resources produced by the government-run Council for Technical Education and Vocational Training (CTEVT). There is a lack of industry-led training centers. There is hardly any link between academic institutions, vocational training institutions, and industry. There is potentially room for government-industry collaboration. Technical education and vocational training courses should be linked with the requirements of industrial villages being announced by subnational units under a federal system of governance recently adopted by the country. Imparting SMEs, or their human resources, with the skills necessary for accessing and processing trade- and market-related information is a felt need (as also identified in ITC (2017)).

Onerous collateral requirements of financial institutions impede SMEs' access to finance. The banking system is characterized by a high spread rate. Commercial banks had a weighted average interest rate on loans of 11.94% as of mid-January 2020, compared to a weighted average interest rate on deposits of 6.79%. As a result, inherited capital and own savings are a major source of finance for these enterprises. The bulk of SMEs have yet to access the few existing concessional loan schemes available through banks.¹¹ Most of them are unaware of the schemes, which suggests the need for better dissemination of information about such schemes. Most concessional loan schemes, which entail an interest subsidy, are not SME-specific. Moreover, such loans are mostly for agriculture. Of the NPR 47 billion in outstanding concessional loans provided under nine different schemes as of mid-January 2020, nearly 96% (NPR 45 billion) were for commercial agriculture and livestock development.¹² The second-ranking category was loans for women entrepreneurs, amounting to NPR 1.6 billion, which potentially benefits SMEs in the nonagricultural sector.¹³

There are no sizeable refinance schemes specifically for SMEs. The funding available under refinance schemes, including export refinance—wherein the central bank provides loans to banks at concessional rates and caps the interest rate the latter can charge on loans to their customers—is deemed inadequate. Smaller enterprises appear to lose out to larger firms when competing for the limited funds. The attractiveness of export refinance, available at an interest rate of about 3%–4%, is diluted by a short maturity period. Entrepreneurs in industries such as carpets and other handicrafts deem six months to be too short a period for their production cycle. A lack of knowledge of the existence of refinance schemes is a problem. One exporter the researchers spoke to had found out about the export refinancing facility when a bank employee mentioned it to her in a casual manner.

Independent and rigorous evaluations of existing subsidy schemes such as the Micro, Cottage, and Small Enterprise Development Fund and the Female Entrepreneurship

¹¹ See also NRB (2019).

¹² Data from Nepal Rastra Bank, Current Macroeconomic and Financial Situation (first six months of Fiscal Year 2019/20).

¹³ Ibid.

Development Fund are essential for improving their effectiveness. The Department of Industry is setting up a “Main Fund on Loan Flows to Micro, Cottage, and Small Industries” with a view to mobilizing and channeling finance from banks, finance companies, cooperatives, and nongovernmental organizations to individuals who establish enterprises after receiving some training (NRB 2019). This has the potential to streamline funding. The central bank can consider requiring or incentivizing banks and finance companies to invest in the Fund.

Foreign direct investment is not allowed in micro- and cottage enterprises, which have long been on the negative list of Nepal’s foreign investment law. However, a new law,¹⁴ enacted in early 2019, which amended and integrated previous laws on foreign investment, allows technology transfer, including know-how sharing, even in industries on the negative list. The government’s drive to attract foreign investment should also give attention to tapping this avenue, which may help micro- and cottage enterprises break into export markets and/or expand exports.

There are some instances of foreign investment having helped small firms export indirectly. For example, Kirtipur Hosiery, a small firm, produced ready-made garments under the John Players and Springwood brands, then owned by Surya Nepal, which is a subsidiary of ITC India. The garments were sold in Nepal and India. The entire export process was handled by Surya Nepal. However, the firm was left in the lurch when it stopped receiving orders after the brands were sold to Reliance Retail, another Indian company, in March 2019. This points to the need for the government to continuously provide services that enable small firms to find buyers to export their products, whether directly or indirectly.

4.2 Market Access

Nepali SMEs produce products that are eligible for preferential market access provided by a number of developed and developing countries under different schemes—in the European Union, the United States, Japan, Canada, the People’s Republic of China (PRC), and India, among others. Besides supply-side constraints, a lack of knowledge of the trade preferences on offer is also impeding the utilization of preferential market access schemes.

Traders are not aware of provisions in trade agreements with neighboring countries. For example, while Nepali products face high customs duties and para-tariff barriers in Bangladesh, customs duties, if not para-tariffs, are lower for some products of export interest to Nepal due to preferential treatment provided by Bangladesh under the Agreement on South Asian Free Trade Area (SAFTA). However, the exporting community is not fully aware of the preferential market access opportunity under SAFTA. Similarly, there is a provision in the Nepal-India trade treaty for concessions in the application of additional duty (excise) on articles manufactured in small-scale units in Nepal on a par with the treatment given to similar articles manufactured in India.¹⁵ Although small enterprises stand to potentially benefit from this provision—which states that small-scale units are as defined by Nepal’s Industrial Enterprise Act—the private sector in Nepal is largely unaware of it. As per discussions with exporters and former trade officials, this provision remains unused.

From our discussions with SME exporters, we surmise that a starting point for exporting directly is trade fairs. Even the trade fairs organized within Nepal see some participation

¹⁴ Act Amending and Unifying Laws Related to Foreign Investment and Technology Transfer, 2019.

¹⁵ Protocol to Article V of the Treaty of Trade between the Government of Nepal and the Government of India.

of international buyers. Affiliation to the World Fair Trade Organization—information about which can be obtained while participating in trade fairs—also serves as an important avenue of market linkage. The World Fair Trade Organization is a global association of social enterprises that are said to adhere to equitable and sustainable business practices. The Organization links producers in developing countries directly to purchasers in the developed world, creating market access opportunities for the producers. To become a member of the Organization, producers need to adhere to certain “fair trade” principles.¹⁶ Small firms tend to find it easier to work with buyers who follow fair trade principles than with large commercial buyers. Nuptse Crafts, which exports felt products, tried to establish business with large commercial buyers who supply their items to large chain stores. However, it found commercial buyers ruthless in contract execution. Considering the labor-intensive nature of its products and the volume of orders, it was difficult for it to find the workers who could finish the orders on time. Contracts with commercial buyers have clauses that allow the buyers to deduct money for delayed delivery. After working on two orders with such buyers, the firm decided to stick to the smaller buyers who are accommodative of slight delays in delivery. Moreover, commercial buyers provide large orders but the prices offered are quite low, while the smaller ones are open to negotiations. This case indicates that the optimal type of market access—selling to commercial (usually large) buyers or fair-trade buyers—is partly a function of an enterprise’s endowments (e.g., the capacity to meet the demands of certain types of buyers). According to Fair Trade Group Nepal, an umbrella body of organizations affiliated to the World Fair Trade Organization, “fair trade” handicraft exports account for 20% of Nepal’s total handicraft exports.¹⁷

SMEs also export indirectly through what may be called “export houses,” which take orders from abroad, subcontract the work to SMEs as per the specifications received, and then ship the consignment. The role of export houses is performed by established exporters as well as freight forwarders. An option that combines exporting indirectly with the potential of getting fair trade terms is exporting through an intermediary affiliated to the World Fair Trade Organization. Manushi, for example, is a nongovernment organization that aims to empower women by providing them with a means to achieve financial independence. It is a founding member of Fair Trade Group Nepal. One of its entities, Manushi Pvt. Ltd., sources handicraft products from affiliated producers and exports them. The government has a role to play in connecting producers to such organizations. When planning the industrial villages to be set up at the subnational level, it would be worthwhile bringing on board existing export houses and intermediaries so that some production can take place with an eye to international markets.

Regular exhibitions and competitions should help establish contact between small producers and buyers, whether final or intermediary. For example, after being in the knitting and garment-manufacturing business catering to the domestic market for over two decades, Sabita Maharjan set up a formal enterprise (Kirtipur Hosiery) in 2009, and in 2011 received a social entrepreneurship award. Surya Nepal, a subsidiary of ITC India and one of the largest private sector enterprises in Nepal, was the sponsor of Asha Awards. She then received orders to produce garments from Surya Nepal, to be sold within Nepal and exported to India. This drew in another buyer. Sherpa Adventure Gear, a US-based adventure apparel manufacturer, approached her to supply sweaters and other hand-knitted woolen wear.

Enterprises that produce goods with export potential or that are already selling to tourists or exporting indirectly through intermediaries may be keen on attempting to export

¹⁶ See <https://wfto.com> for details.

¹⁷ <https://www.fairtradegrouppnepal.org/content/about-us>.

directly. Lacking know-how on navigating the different stages of the export process, including understanding market access conditions and finding buyers, they are reluctant to take the plunge. Guidance on this score could make a vital difference. Dissemination of information on the export process in the Nepali language could help. Most SME exporters use the services of logistics companies/freight forwarders. Facilitating interactions between freight forwarders and SME producers could help the latter establish contacts in export markets. For example, in breaking into export markets, a carpet-factory-worker-turned-carpet-producer benefited from a freight forwarder's contacts. The two had known each other before. An arrangement for bringing into contact producers and freight forwarders should be explored to make this channel yield wider benefits. For SMEs producing handicrafts that are not in a position to overcome the fixed and variable costs of exporting directly by finding buyers on their own, setting up well-managed shopping or permanent exhibition centers specializing in Nepali products targeting foreign visitors and linking them with SME producers is one way of introducing SME products to "international buyers." A study on the spending habits and patterns of international tourists in Nepal should aid in assessing the feasibility of this approach.

As a least developed country, Nepal is allowed under World Trade Organization rules to provide subsidies for manufacturing exports. SMEs find the process of availing themselves of the cash incentives for exports provided by the government cumbersome. This is so even after the working procedure on export was revised. A small-scale carpet exporter the researchers talked to reported not having received the cash subsidy in the last three years due to procedural difficulties. In an assessment of the effectiveness of the cash subsidy program, Defever et al. (2017) find that the subsidy did not have a significant impact on firm-level export values, prices, quantities, or their growth rates, and was received primarily by large exporters that were already shipping eligible products. As it was the larger, established exporters that received most of the subsidy, the finding of no effect is probably driven by these exporters. We do not know from the study what the impact was on smaller exporters that did receive the subsidy. While the subsidy program has undergone revisions since the period covered in the assessment (2011–2014)—most notably, exports to India now also qualify for the subsidy—a key feature of the program remains: The cash subsidy rate is applicable to the absolute value of exports of an eligible firm. Exporters consider the subsidy rate of 3%–5% insufficient.

Narain and Varela (2017) recommend redesigning the subsidy scheme to make the cash incentive applicable to only new export flows—incremental growth in exports by existing exporters, and exports of new firms—in order to better serve the government's goal of achieving higher exports and product-market diversification. They suggest that incremental growth in exports by existing exporters be calculated for each product-destination combination for each exporter. However, for this approach to be meaningful, the subsidy will have to be provided for a reasonable number of years after the initiation of the new export flow. A subsidy for only the year when a new export flow was initiated may not have the desired effect. If the aim of the subsidy is to cover a significant part of the fixed cost of discovering a market, a subsidy provided for only the year of a new export flow may be inadequate as an incentive. Further, discovery is a constant process even within the same product-destination market. It may be worthwhile to grant the subsidy for a certain minimum number of years once a new export flow is initiated, provided export growth is positive in the subsequent years. Higher rates of subsidy may be considered for SMEs given that they face greater barriers to exporting. A dedicated amount should be set aside specifically for SMEs. If export subsidies are provided to help firms discover foreign markets, there is a need to revisit the current arrangement that provides export subsidies to producers only, and not to firms that specialize in finding foreign buyers and markets for, and exporting, goods produced by

others. The government should conduct regular and rigorous evaluations of the cash subsidy scheme, distinguishing between the impacts on different firm-size groups.

Both new exporters and existing exporters find exhibitions and trade fairs abroad to be an effective means of showcasing their products and finding buyers. The government provides some subsidy for participation in such events, offsetting part of the cost of participation. SMEs want the support to be scaled up to benefit more firms and to increase the frequency of participation. The government should consider allocating funds to subsidize participation in trade fairs, the provision of export intelligence, and other export promotion activities that specifically target SMEs as these firms are most likely to be constrained by the market failures that such subsidies seek to correct. Some guidance and support after participation in trade fairs abroad is also essential, as there are instances where enterprises see brisk sales in a trade fair but do not see further exports thereafter due to, *inter alia*, a lack of knowledge of the export process and difficulty in communicating with potential buyers (language being a barrier). Consider, for example, the participation in trade fairs abroad by the proprietor of a small/cottage enterprise in far-west Nepal that specializes in the production of handmade crafts from the *bijayasal* tree (*pterocarpus marsupium*). Water kept in *bijayasal* wares (e.g., pitchers, mugs, cups) is traditionally believed to have medicinal properties. *Bijayasal* products have also been identified as having export potential by a study by the Trade and Export Promotion Center, a government agency. In a trade fair in the PRC, the products sold like hot cakes, fetching prices four times those in Nepal. But the enterprise did not export thereafter.

Activities such as the provision of export intelligence are in the nature of public goods/services that benefit an entire industry and are more likely to generate positive spillovers than firm-specific cash incentives. A lack of access to trade and market intelligence placing Nepali SMEs with export potential at a disadvantage vis-à-vis competitors has been identified in other studies too (e.g., ITC 2017). Collaboration between the government and business associations in managing the funds should be explored. This financing must be monitored and its effectiveness assessed in comparison with the effectiveness of cash incentives provided directly to firms.

There are nontrivial tariffs on imported inputs, which are a serious impediment to deeper integration of Nepali firms into GVCs.¹⁸ Although a duty drawback scheme for exporters is in place, the private sector finds its implementation weak. Further, SMEs that import indirectly, through bulk importers, because individually they do not have the volume for direct importation to be economical are unable to benefit from the duty drawback scheme. One way around this problem could be encouraging the setting up of export (promotion) houses, which, besides enabling the sharing/pooling of orders received by individual firms and/or securing export orders for firms, could also make tracing imports to their usage by affiliated firms more feasible. This, however, requires a change in the legislation, since the existing duty drawback scheme does not apply to sales to export (promotion) houses, and such sales are subject to indirect taxes. A provision in the Industrial Enterprise Act 1992 that treated such sales as exports was repealed.

Taxes levied on the production of intermediate goods sold to exporters also dent price competitiveness. The recently introduced Industrial Enterprise Act 2020 provides for a refund of customs tariffs paid on imported inputs by the manufacturer of intermediate goods that are in turn used in the production of goods that are exported. This provision, however, is weaker than a provision that once existed in the Industrial Enterprise Act 1992, which stipulated that the intermediate goods manufacturer should be reimbursed

¹⁸ See Arenas (2016), and Narain and Varela (2017). There is an average tariff of 9.3% on raw materials and 11.4% on intermediate goods (WTO 2018).

for *all* indirect taxes levied on its production materials and all indirect taxes levied on the production of its goods, based on the quantity of subsequent exports.

4.3 Logistics and Trade Facilitation

The time and cost of importing and exporting through seaports in India are inflated by, *inter alia*, poor road conditions, delays and congestions in the ports, and insufficient allocation of railway rakes (and hence no fixed train schedule) for Nepal-bound cargo (ITC 2017; ESCAP and ADB 2017). The high variability in the time and cost of transit transport erodes the competitiveness required to participate in GVCs.

Of particular importance for SMEs is the availability of efficient less-than-container-load (LCL) shipment services, as individually they do not have the volume to fill a container.¹⁹ The regime governing transit for Nepal's third-country trade via India is not supportive of LCL trade. In the ongoing negotiations between Nepal and India on revising the trade and transit treaties, Nepal should seek a provision in the transit regime that facilitates LCL trade—for example, by allowing the state-owned Nepal Transit and Warehousing Company Ltd. to consolidate cargoes at seaports to which Nepal has access.

Nepal should, likewise, press for provisions enabling efficient LCL trade when negotiating a protocol to the tripartite Motor Vehicles Agreement (MVA) in the eastern South Asia subregion.²⁰ The MVA aims for a seamless movement of cargo (and passenger) vehicles between Bangladesh, India, and Nepal for bilateral as well as third-country trade, obviating the need for loading and unloading trucks at the border, but in its current form it does not address the issue of consolidating LCL cargo.

A quarter of Nepal's merchandise exports are transported on passenger flights. SMEs export carpets, felt products, jewelry, and other handcraft items by air. In a survey of logistics companies in ITC (2017), 70% of them identified limited air transport capacity as a constraint. The existing system of cargo booking among airlines operating in Nepal causes uncertainty among logistics companies about the cargo-carrying capacity. Most of them cannot book directly and instead have to book through a few logistics companies that have been nominated by airline operators as agents. Further, the infrastructure at the only international airport, in Kathmandu, needs to be upgraded to facilitate the movement of air cargo (ITC 2017).

E-commerce offers an opportunity for SMEs to reduce trade costs (WTO 2016) in ways beyond what is offered by the basic functions of the internet: corresponding with clients, creating a website, and doing some market research. Yet Nepali SME exporters' use of the Internet is largely confined to these basic functions. E-commerce in Nepal is still at a nascent stage, with transactions largely among domestic parties (mostly conducted on a cash-on-delivery basis) and with restrictions in place on cross-border e-payments for international trade (see United Nations 2017). One of the chief obstacles to the viability of cross-border e-commerce in Nepal is the lack of convenient and efficient payment solutions: Existing regulations bar Nepali exporters from accepting payments made using credit cards and payment gateways such as PayPal. Relaxing restrictions on making and receiving cross-border payments online would be the first key step towards enabling SMEs to tap e-commerce opportunities. SMEs should also be provided with training or orientation on e-trade opportunities. Many of them are simply unaware of the freely accessible market intelligence websites.

¹⁹ The authors thank Rajan Sharma, former president of the Nepal Freight Forwarders' Association, for his helpful comments on this subsection.

²⁰ While Bangladesh, Bhutan, India, and Nepal signed the Agreement in 2015, Bhutan did not ratify it but gave its consent to the rest to proceed with implementing the Agreement.

Expensive logistics also deter e-commerce: Using the services of international firms such as DHL and FedEx to post small packages does not make economic sense to many SMEs. This is where the issue of cargo consolidation assumes high importance.

4.4 Nontariff Measures

Technical regulations, consisting of technical requirements and related conformity assessment, are the most common nontariff measures that not only SMEs but also large companies find burdensome (see also ITC [2017]). These measures fall under what are known as sanitary and phytosanitary (SPS) measures—intended to protect the life and health of humans, animals, and plants; and technical barriers to trade (TBT)—intended to protect the environment and public health, and to protect consumers from deceptive practices. And in some cases, firms have their own private standards that go beyond these mandatory SPS and TBT requirements.

The standards and quality requirements impose additional costs on producers, which are in many instances more severe for SMEs, given their limited resources. Firms might have to incur additional costs to meet the specified standards as they might have to change or upgrade their production technologies. Firms also have to demonstrate that they meet the stipulated standards through what are known as conformity assessment measures, which include inspection, testing, and certification. But given the poor state of the quality infrastructure in Nepal (outdated legal and regulatory framework, poor institutional capacity, inadequate calibration and testing services, etc.), the conformity assessment poses significant challenges to firms in Nepal, more so for SMEs (ADB 2019).

A case study by ADB (2019) highlights the barriers created by standards and quality requirements for firms in Nepal. Sujal Foods Pvt. Ltd., one of the biggest confectionery producers in Nepal, had to halt its exports to India, as some of the required testing services were not available in Nepal, and hence its shipments would be stranded at the Indian border for 15–21 days while the samples were being tested at a distant laboratory in Kolkata. In addition to time and costs, the limited shelf life of these products made it an insurmountable challenge for the confectionery maker. Significantly improving the national quality infrastructure will be crucial in enabling SMEs' meaningful participation in international trade.

Difficulties with export-related measures, i.e., Nepalese regulations on exports, also hurt SME exporters in the manufacturing sector (ITC 2017). One such measure is the advance payment requirement for exports, which is also applicable for goods exported for promotion in trade fairs. As buyers are reluctant to make full payments before receiving the goods, this requirement constrains SMEs' ability to find new buyers (ibid.).

4.5 Cross-cutting Policy Issues

Nepal lacks a policy on SMEs, let alone a strategy for their internationalization and participation in GVCs. The Industrial Policy and the associated Industrial Enterprise Act (IEA) categorize enterprises into micro-, cottage, small, medium-sized, and large enterprises. However, substantive SME-specific provisions are rare. An SME-specific policy would provide a guiding framework for the government to initiate programs and schemes for building and strengthening SME capacity, including specifically the capacity to export.

Weak coordination between, and conflicting priorities of, government agencies has resulted in not all the provisions in the Industrial Policy making it to the Industrial

Enterprise Act, and some provisions in the Industrial Enterprise Act being repealed by the annual Finance Act, introduced alongside the budget. This affects SMEs too. The Department of Industry (under the Ministry of Industry) is the lead agency in the formulation of the Industrial Policy while the Ministry of Finance is the tax- and tariff-setting agency. For example, while the Industrial Policy refers to reducing the cost of raw materials and intermediate goods, there are nontrivial tariffs on critical imported inputs used by SMEs. Overall, the weak capacity of the public administration to coordinate and implement trade and industrial policies is a critical constraint (Basnett and Pandey 2014). It should be noted, though, that the recently introduced Industrial Enterprise Act 2020 has a provision that explicitly rules out any change that reduces the concessions, exemptions, and facilities granted under the Act.

SME owners/managers need to be made aware of the available tax exemptions and concessions and other incentives and schemes. Even if on a limited scale, these could help SMEs reduce their cost of production and trade costs. Dissemination of such information could be a joint undertaking of the government and business associations like the Federation of Nepal Cottage and Small Industries.

Although both the trade policy and the trade integration strategy acknowledge the need to integrate SMEs into GVCs and have specified policies to do so, the policies are very broad or ambiguous in nature in some instances, and are poorly implemented in others—for example, measures to integrate firms into GVCs through enhancing quality assurance infrastructure have not been realized in practice. The issue of inter-agency coordination is not confined to coordination between the Ministry of Finance and the Ministry of Industry, Commerce, and Supplies (MoICS). It also concerns the required coordination between the MoICS and the Ministry of Agriculture and Livestock Development (MoALD), and between departments within a ministry. It is the MoALD that is responsible for the formulation and implementation of food safety standards, and upgrading the government-owned food laboratory, which are critical for successfully exporting food products, while strategizing for breaking into export markets and expanding exports is a mandate of the MoICS.

The federal government has launched a special economic zone (SEZ) in Bhairahawa in Southwest Nepal adjoining India, and several more SEZs are being planned. While issues of basic infrastructure, human resources, and institutional arrangements governing SEZs have to be resolved before the Bhairahawa SEZ can be expected to deliver enterprises, jobs, and exports, attention must be paid right at the outset to harnessing the potential of SEZs to help smaller enterprises participate in GVCs by supplying intermediate or semi-processed goods to larger firms located inside SEZs. The SEZ Act treats sales by firms outside SEZs to firms inside SEZs as exports,²¹ and such sales are thus eligible for tax exemptions and concessions afforded to direct exports. As a result, by leveling the playing field for imports and domestic supplies, the operationalization of SEZs could help alleviate a policy distortion that makes it economical for exporting firms to import certain intermediate products from abroad rather than source them domestically. In addition, for SEZs to benefit SMEs, the federal government must coordinate with provincial and municipal governments to help foster linkages between SEZs and the industrial villages being planned at the subnational level.

Data constraints are a serious impediment to understanding Nepali firms in general and SMEs in particular. There is an urgent need to significantly improve the enterprise record-keeping systems at the Department of Industry, the Department of Cottage and Small Industries, the Cottage and Small Industry Development Committee, and the Office of Company Registrar to enable the creation and updating of a database of registered

²¹ Firms in SEZs are required to export at least 60% of their output.

firms—micro, cottage, small, medium-sized, and large—that are *currently in operation*, with basic information such as value of sales, sectoral classification, number of workers, and value of investment (domestic and foreign). Raw data from existing censuses and surveys of firms should be made available to researchers. Detailed surveys and/or censuses of manufacturing firms, including SMEs, should be conducted regularly, at least once every five years. The surveys, or a component thereof, must enumerate a representative number of exporting firms. A panel dimension must be introduced in such surveys, to be able to track firms over time. Importantly, raw data from the new surveys must be made available to researchers in a timely manner.

5. CONCLUSIONS

This paper finds that Nepal lacks a concrete policy framework for SMEs, let alone a strategy for their internationalization and participation in GVCs. Although both the trade policy and the trade integration strategy acknowledge the need to integrate SMEs into GVCs and have specified policies to do so, the policies are very broad or ambiguous in nature, or poorly implemented. For example, measures to integrate firms into GVCs through enhancing quality assurance infrastructure—a crucial requirement to be able to meet the standards and technical regulations in destination markets—have not been realized in practice.

Fiscal incentives, facilities, and concessions for manufacturing firms and the exporters among them are mostly not targeted at, or tailored to, the needs of SMEs. Moreover, many SMEs do not know of the existence of such provisions. Provisions in the Industrial Enterprise Act being repealed through the annual finance acts has created an unpredictable policy environment. SMEs' access to credit is severely constrained by onerous collateral requirements and a high interest rate. Most SMEs have yet to access the few existing concessional loan schemes, and are unaware of the same. Refinance schemes are not adequately funded, and the export refinance term is not for a sufficient duration. Disbursements from the export cash subsidy program appear to be going mostly to larger firms.

Other constraints holding back Nepali SMEs' participation in GVCs include an inadequately trained/skilled workforce, high tariffs on raw materials and intermediate goods coupled with an ineffective duty drawback system, high time and cost of transit when importing and exporting, insufficient attention to the logistics and trade facilitation needs of SMEs such as consolidating less-than-container-load cargoes, poor dissemination of information about preferential market access, inadequate provision of trade and market intelligence, and a weak capacity of the public administration to coordinate and implement trade and industrial policies. Restrictions on cross-border electronic payments prevent SMEs from seizing e-commerce opportunities. While participation in trade fairs, at times with the support of government agencies, has helped SMEs export directly, there is a need for handholding for a certain while thereafter. Helping establish contact between SME producers and existing intermediaries such as exporters and freight forwarders could help SMEs export indirectly. Technical education and vocational training courses should be linked with the requirements of industrial villages being set up at the subnational level (municipalities). Imparting SMEs, or their human resources, with the skills necessary for accessing and processing trade- and market-related information is a felt need.

SMEs' participation in GVCs can be aided by effectively operationalizing an existing legislative provision for extending incentives, discounts, concessions, and facilities to firms that produce under contracting/subcontracting arrangements for export-oriented

firms. While planning the newly mooted industrial villages, it would be worthwhile bringing on board existing exporters (that also function as export houses) and other intermediaries so that some production can take place with an eye to international markets. Reimbursing duties paid on imports of raw materials used by firms to produce goods that they sell to export promotion houses, and treating such sales as exports and hence exempt from indirect taxes, would aid SMEs' export competitiveness. In moves under way to operationalize the sole special economic zone (SEZ) of the country, and to set up more of them, attention must be paid right at the outset to drawing SMEs into SEZs and also harnessing the potential of the zones to help smaller enterprises participate in GVCs by supplying intermediate or semi-processed goods to export-oriented larger firms located inside SEZs. One strategy could be to foster linkages between SEZs and industrial villages, for which coordination between all three tiers of government is crucial.

Finally, conducting regular surveys of firms, including SMEs, with a detailed coverage of internationalization dimensions, and making such data available to researchers, would make for a better understanding of firm behavior, including with respect to GVC participation.

REFERENCES

- ADB. (2019). *Potential Exports and Nontariff Barriers to Trade: Nepal National Study*. Manila: Asian Development Bank.
- Adhikari, R., and Kharel, P. (2014). Nepal and SAFTA: Issues, Prospects and Challenges. In Mohammad A Razzaque and Yurendra Basnett (eds.), *Regional Integration in South Asia: Trends, Challenges and Prospects*. UK: Commonwealth Secretariat.
- Arenas, G. (2016). From Evidence to Policy: Supporting Nepal's Trade Integration Strategy. World Bank, Policy Note 2: Nepal Integration into Value Chains: Stylized Facts and Policy Options.
- Basnett, Y., and Pandey, P.R. (2014). Industrialization and Global Value Chain Participation: An Examination of Constraints Faced by the Private Sector in Nepal. Manila: Asian Development Bank.
- Borin, A., and Mancini, M. (2019). Measuring What Matters in Global Value Chains and Value-added Trade. World Bank Policy Research Working Paper 8804.
- CBS. (2019). *National Economic Census 2018: National Report*. [Report No. 1-2 by Size of Persons Engaged]. Kathmandu: Central Bureau of Statistics, National Planning Commission, Government of Nepal.
- Defever, F., Reyes, J. D., Riaño, A., and Varela, G. (2017). All These Worlds Are Yours, Except India: The Effectiveness of Export Subsidies in Nepal. World Bank Policy Research Working Paper 8009.
- ESCAP, and ADB. (2017). *Trade and Transport Facilitation Monitoring Mechanism in Nepal*. Manila: Asian Development Bank.
- Ganne, E., and Lundquist, K. (2019). The Digital Economy, GVCs and SMEs. In D. Dollar, E. Ganne, V. Stolzenburg and Z. Wang (eds.), *Global Value Chain Development Report 2019: Technological Innovation, Supply Chain Trade, and Workers in a Globalized World*. Geneva: World Trade Organization.
- GoN. (2010). *Nepal Trade Integration Strategy 2010*. Kathmandu: Government of Nepal.
- . (2016). *Nepal Trade Integration Strategy 2016*. Kathmandu: Government of Nepal.
- ITC. (2017). *Nepal: Company Perspectives, An ITC Series on Non-Tariff Measures*. Geneva: International Trade Centre.
- Kharel, P. (2014). Structural Transformation and Trade Policy: Case of Nepal. In *Trade Performance and Competitiveness: Selected Issues Relevant for Asian Developing Economies*, pp.1–73. Bangkok: United Nations Economic and Social Commission for Asia and the Pacific.
- Ministry of Finance (MoF). (2016). Bittiya Chhetra Bikas Radaniti 2073/74-2077/78 [Financial Sector Development Strategy 2016/17-2020/21]. Kathmandu: MoF, Government of Nepal.
- Narain, Ashish, and Gonzalo Varela. (2017). *Trade Policy Reforms for the Twenty-First Century: The Case of Nepal*. Washington, DC: World Bank Group.
- Nepal Rastra Bank (NRB). (2019). Nepalma sana tatha majhaua udhyamma bittiya sadhan parichalan [SMEs Financing in Nepal]. Kathmandu: NRB.

- Pandey, G.D. (2004). Problems and Prospects of SMEs in Nepal. In N. Dahal. and B. Sharma (Eds.), *WTO Membership: Opportunities and Challenges for SMEs in Nepal*. Kathmandu: SMEDP and SAWTEE.
- United Nations. (2017). *Nepal Rapid eTrade Readiness Assessment*. Geneva: United Nations.
- World Bank. (2019). *Trading for Development in the Age of Global Value Chains*. Washington, DC: The World Bank.
- WTO. (2016). *World Trade Report 2016: Levelling the Trading Field for SMEs*. Geneva: WTO.
- . (2018). Trade Policy Review: Nepal (WT/TPR/S/381). Geneva: WTO.
- Yoshino, N., and Taghizadeh-Hesary, F. (2016). Major Challenges Facing Small and Medium-sized Enterprises in Asia and Solutions for Mitigating Them. Asian Development Bank Institute (ADBI) Working Paper 564.

APPENDIX

Table A1: Firm Characteristics

	All Firms	Small (S)	Medium (M)	Large (L)	Diff: S-M	Diff: S-L	Diff: M-L
General characteristics							
Mean age (years)	15.56	14.5	19.3	15.9	*		
% sole proprietorship	65.6	78.9	25.3	0	*	*	*
% with female owner	23.7	22.3	29.9	8.6		*	*
% with majority female ownership	11.0	13.6	3.2	0	*	*	
% with financials checked by external auditor	69.2	62.9	88.3	97		*	*
Production							
Mean labor productivity (NPR)	1,355,220	1,186,715	1,146,012	9,220,069		*	*
% purchasing fixed assets	31.3	27.7	40.2	68.2		*	
% with international quality certification	2.0	0.1	5.9	47.9	*	*	*
Mean days of inventory	46.1	46.4	45.5	40.7			
Mean days to manufacture	11.2	10.8	13.4	5.5		*	*
International linkages							
% with foreign investment	0.3	0	0.2	9.7		*	*
% of firms exporting	10	5.94	23.9	15.4	*		
% of firms that export at least 10% of sales	8.8	5.9	18.4	15.4			
% of firms that export directly	6.8	5.86	9.4	14.1			
% of exporters that export only indirectly	32	1.3	60.6	8.7	*		*
% of nonexporters planning to export in next 12 months	7.3	5.2	16.8	5			
Mean % of sales exported (among exporters)	52.3	69.4	36.2	67.2	*		*
Mean % of exports exported directly (among exporters)	49.7	58.5	39.4	87.7			
% of sales exported	10.3	1.3	10.1	14.7	–	–	–
Direct exports as % of sales	9.5	0.54	9.1	13.9	–	–	–
% of firms using imported raw material inputs	44.9	35.2	74.4	92.8	*	*	*
% of firms importing directly (among firms that use imported inputs)	46.8	39.8	52.8	89.1		*	*
Mean % of imports in material inputs	27.6	22.7	39.6	81.9	*	*	*
Mean % of directly imported inputs in total imported inputs	98.6	99.8	96.7	100	*		*
% of firms that export and import (use imported materials)	6.3	2.8	18.4	9.7			
% of firms that export directly, and use directly imported materials	1.4	0	6.2	5.7			
% of firms using licensed technology from abroad (excluding software)	1.6	0.2	6	6.7			
Internet							
% of firms using Internet	36.2	26.1	68.4	96.9	*	*	*
% of firms using Internet to correspond with clients via email (among firms using Internet)	92.5	87.4	98.7	100			*
% of firms using Internet for online purchase (among firms using Internet)	12.1	8.7	17.3	10.3			
% of firms using Internet for online sales (among firms using Internet)	21.2	18.5	22.7	36.5			
% of firms using Internet for marketing (among firms using Internet)	39.0	37.1	40.8	45.9			
Innovation							
% of firms doing product innovation	12.3	8.2	23.2	52.6		*	

	All Firms	Small (S)	Medium (M)	Large (L)	Diff: S-M	Diff: S-L	Diff: M-L
Mean no. of products introduced (among firms that innovated)	2.2	1.7	2.3	4.7	*	*	

continued on next page

Table A1 continued

	All Firms	Small (S)	Medium (M)	Large (L)	Diff: S-M	Diff: S-L	Diff: M-L
% of firms doing process innovation	22.9	19.5	34.2	31.1			
% of firms doing internal R&D	2.4	1.3	5.4	11.4			
% of firms doing external R&D	0.3	0	1.0	4.2			
% of firms providing formal training to employees for development/introduction of innovative products, services, processes	15.1	13.3	16.5	67.1		*	*
Finance							
% of firms having checking/savings account	86.5	82.5	99.1	100	*	*	
% of firms with overdraft facility	39.8	30.1	68.4	94.3	*	*	*
% of firms with line of credit	32.5	30.7	35.9	58.8			
% of firms that have had to put up collateral (among firms with line of credit)	96.6	95.7	98.8	100			
Mean of collateral to credit ratio (%)	399.26	437.43	270.69	267.69	*	*	
% of firms applying for loan a year ago	24.8	19.7	40.1	49.9	*		
% of firms whose fixed asset purchase was funded at least in part by banks	19.7	16.3	19.2	68.4		*	*
% of firms whose fixed asset purchase was funded at last in part from internal sources	85.2	85.9	82.2	92.1			
Mean percentage of financing of fixed asset purchase by banks	14.2	13.1	12.6	38.1		*	*
Mean percentage of financing of fixed asset purchase by internal funds	71.1	75.7	61.9	59.9			
Mean percentage of working capital financed by banks	6.3	3.9	12.2	31.9		*	
Mean percentage of working capital financed by internal funds	79.9	83.8	67.9	62.8	*	*	
Mean percentage of working capital financed by credit from suppliers and advances from customers	10.4	8.9	16.2	4.9			*
% of firms that view access to finance as a major or severe constraint to operations	35.2	40.5	18.6	15.1	*	*	

Note: * denotes statistically significant difference at 10% level or less. – denotes significance tests not performed since values are not means or proportions.

Source: Authors' calculations based on the World Bank's Enterprise Survey for Nepal (year 2013).

Table A2: Firm Characteristics, by Internationalization Status

	Exporter	Nonexporter	Uses Imported Materials	Does Not Use Imported Materials	Exporter and also Uses Imported Materials
No. of firms in sample (Total = 242)	38	204	146	95	25
General characteristics					
Mean age (years)	20.3	15.0	16.3	14.9	19.2
Average size (employees)	35.9	16.7	27.7	11.1	39.9
% sole proprietorship	51.1	67.2	54.1	74.9	34.4
% with female owner	34.8	22.4	29.8	18.7	54.8
% with majority female ownership	9.2	11.2	12.3	9.9	14.7
% with financials checked by external auditor	87.6	67.1	86.7	54.9	80.3
Production					
Mean labor productivity (NPR)	721,541.2	1,425,942	1,613,117	1,146,023	859,427.9
% purchasing fixed assets	59.4	28.2	35.1	28.1	73.9
% with international quality certification	2.5	2.0	4.4	0.2	3.5
Mean days of inventory	40.4	46.7	53.3	40.2	37.0
Mean days to manufacture	14.3	10.9	11.4	11.1	13.9
Internet					
% of firms using Internet	75.6	31.8	62.5	15.5	78.6
% of firms using Internet to correspond with clients via email (among firms using Internet)	100	90.5	90.8	97.7	100
% of firms using Internet for online purchase (among firms using Internet)	16.8	10.8	15.5	1.3	25.6
% of firms using Internet for online sales (among firms using Internet)	51.6	13.0	22.8	16.3	53.2
% of firms using Internet for marketing (among firms using Internet)	31.6	41.1	46.5	15.3	46.8
Innovation					
% of firms doing product innovation	25.4	10.9	18.3	7.5	40.3
Mean no. of products introduced (among firms that innovated)	2.5	2.1	2.4	1.8	2.5
% of firms doing process innovation	35.6	21.5	29.0	17.9	36.8
% of firms doing internal R&D	1.2	2.5	5.1	0.1	1.9
% of firms doing external R&D	0.3	0.3	0.6	0.06	0.5
% of firms providing formal training to employees for development/introduction of innovative products, services, processes	2.5	16.6	16.2	14.3	3.4
Finance					
% of firms having checking/savings account	99.7	85.0	99.4	75.9	99.5
% of firms with overdraft facility	73.3	36.0	65.5	18.8	77.6
% of firms with line of credit	29.0	32.8	48.0	19.7	37.4
% of firms that have had to put up collateral (among firms with line of credit)	100	96.2	95.6	98.6	100
Mean of collateral to credit ratio (%)	249.9	416.9	366.0	457.3	261.6
% of firms applying for loan a year ago	21.5	25.1	29.6	20.8	23.5
% of firms whose fixed asset purchase was funded at least in part by banks	15.5	20.7	32.5	6.7	19.8
% of firms whose fixed asset purchase was funded at last in part from internal sources	78.7	86.7	76.6	94.2	72.8
Mean percentage of financing of fixed asset purchase by banks	11.2	14.9	21.9	6.3	14.3

continued on next page

Table A2 *continued*

	Exporter	Nonexporter	Uses Imported Materials	Does Not Use Imported Materials	Exporter and also Uses Imported Materials
Mean percentage of financing of fixed asset purchase by internal funds	60.4	73.7	53.6	89.2	49.3
Mean percentage of financing of fixed asset purchase by owners' contribution or issuance of new equity shares	28.5	8.3	21.3	2.9	36.4
Mean percentage of working capital financed by banks	4.9	6.5	12.9	1.0	1.8
Mean percentage of working capital financed by internal funds	67.6	81.3	73.5	85.2	68.2
Mean percentage of working capital financed by credit from suppliers and advances from customers	20.1	9.3	10.7	10.1	20.2
% of firms that view access to finance as a major or severe constraint to operations	13.9	37.6	27.8	41.3	2.0

Source: Authors' calculations based on the World Bank's Enterprise Survey for Nepal (year 2013).