Chapter 10

Aid for Trade and Value Chains in Small and Vulnerable Economies and Least Developed Countries

Collin Zhuawu

10.1 Introduction

In recent times participation in global value chains (GVCs) is considered essential by most developing countries including small and vulnerable economies (SVEs) and least developed countries (LDCs). GVCs are seen as important routes to markets for export products and services, offering new opportunities to firms, particularly in expanding their business opportunities across borders. This is important, especially given that reaching international markets can be very difficult for firms located in SVEs and LDCs. There is a need to recognise a number of challenges which SVEs and LDCs have to face in terms of policy reforms aimed at increased and meaningful participation in GVCs.

SVEs and LDCs have a number of characteristics that make it difficult for them to harness the power of trade to be an engine for economic growth and poverty reduction. Furthermore, because of their smallness and remoteness, SVE display certain unique characteristics which pose some challenges to both trade growth and economic development, as already discussed in the previous chapters. The challenges remain prominent obstacles for the integration of these countries in global markets.[1] One way of overcoming the challenges for increased and meaningful participation in global trade could involve the utilisation of Aid for Trade (AfT), particularly in achieving productive capacity and private sector development

An examination of this area is important, as it allows the chance to assess the opportunities, if any, to move from basic activities to higher value added activities of supply chains. Building on the existing literature, this chapter seeks to assess the role of AfT in integrating SVEs and LDCs in GVCs. It starts by giving an analytical perspective on GVCs in terms of increased value added trade and policy implications, followed by an assessment of empirical evidence of the involvement of SVEs and LDCs in GVCs. The study will draw examples from Commonwealth SVEs and LDCs.[2] The chapter also examines the link between AfT and productive capacities in SVEs and LDCs, highlighting some of the lessons learnt from the study.

10.1.1 Value chains and supply chains: analytical perspectives

According to the Organisation for Economic Co-operation and Development (OECD 2012), much of today's world trade and production is increasingly structured around GVCs. This is because of globalisation of production, which means compartmentalising

the production of goods from raw material to finished product, with each process carried out wherever necessary skills and raw materials exist at competitive costs (OECD 2007a). This comes as a result of companies increasingly seeking to be efficient and reduce costs, as they have to face competition in the domestic and international markets, coupled with their desire to enter emerging markets, which offer a number of opportunities including tapping foreign knowledge (ibid.). But what are these GVCs and how do they differ from commodity chains and supply chains?

The concept of GVCs originates from the literature on global commodity chains but now includes a wider variety of products, some of which do not have commodity features (Gibbon and Ponte 2005; Gereffi and Joonkoo 2012). However, in its usage, the concept can take two different meanings. First, when industries are related to an input–output structure, the downstream industry forms the market for upstream firms and upstream firms are drawn to locations where there are relatively many downstream firms (OECD 2007b). This has the advantage of saving on transport costs and benefiting from a large variety of different inputs. Nevertheless, individual firms or countries have to understand and address internal and external constraints and take steps towards the generation of value added (Gibbon and Ponte 2005). Second is the political economy point of view, involving all activities that are necessary to produce a product from conception to its end use. This puts the issue of governance at the centre of the GVCs thereby demonstrating the exercise of corporate power to shape the deterioration of profits and risk (Gereffi and Joonkoo 2012).

Both senses affect the way value chains are understood because they focus on the production system, which involves activities that influence the process of value addition and are of 'intermediate, network type' (Altenburg 2007). In both circumstances, most suppliers are controlled by decisions of the lead firm on the value chain (Kraemer et al. 2011). Thus the value chain concept helps our understanding of the 'dynamics of value creation at different stages of the value chain' as well as the role of barriers to entry and innovation rents (Altenburg 2007). In essence, value chains are mechanisms that allow

> producers, processors and traders – separated by time and space – to gradually add value to products and services as they pass from one link in the chain to the next until reaching the final consumer (domestic or global).
>
> (UNIDO 2011a: x)

The common example given of GVCs is that of China, which, because of its trade liberalisation, has facilitated increased participation in the production networks with its trading partners. As a result, China has had an influx of investment from its trading partners due to its specialisation in labour-intensive activities as well as increased processing of products for export back to its trading partners (OECD 2007b). This fragmentation of production has led to the 'international production sharing and vertical integration of production' characterised by 'global production networks' (ibid.: 5). As a result, finished products are a culmination of activities across multiple sectors, industries and countries from raw material to manufacturing, including services used along the chain (UNCTAD 2013). For example, Table 10.1 shows that the production

Table 10.1 Major components and cost drivers for the Apple iPhone 3G

Country	Manufacturers	Components	Costs (US$)
Japan	Toshiba	Flash memory	24.00
		Display module	19.25
		Touch screen	16.00
Korea	Samsung	Application processor	14.46
		SDRAM-mobile DDR	8.50
Germany	Infineon	Baseband	13.00
		Camera module	9.55
		RF transceiver	2.80
		GSP receiver	2.25
		Power IC RF function	1.25
Germany	Dialog Semiconductors	Power IC application processor function	1.30
United States	Broadcom	Bluetooth/FM/WLAN	5.95
United States	Numonyx	Memory MCP	3.65
United States	Cirrus Logic	Audio codec	1.15
Japan	Murata	FEM	1.35
Cost of rest of materials			**48.00**
Total cost of materials			**172.46**
Manufacturing costs			**6.50**
Grand total			**178.96**

Source: Xing and Detert (2010)

of Apple iPhone 3G involves nine companies from different geographical locations, each manufacturing different parts and components, with the final assembly done in China (Xing and Detert 2010). Such developments have changed the structure of industries not only within developed countries and emerging economies but in developing countries, SVEs and LDCs, as a number of firms in these countries strive to participate in GVCs. This has given rise to activities such as outsourcing and offshoring, particularly of intermediate goods. It has also led to the relocation of activities overseas and at times to closure of production in the home country (OECD 2007b).

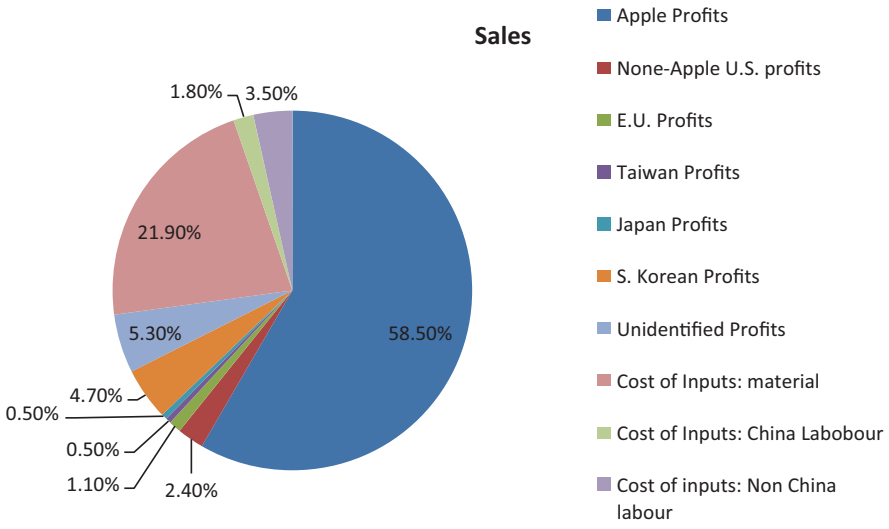
In most instances the terms 'value chains' and 'supply chains' have been used interchangeably, although the two terms may at times express different foci. This is because the notions are overlapping, with no consensus about their specific contents (Altenburg 2007). However, this chapter makes a slight differentiation between the two in that supply chains involve the alignment of firm activities that bring products or services to the market irrespective of the activity processing or not processing for value addition. Supply chains provide criteria for firms to decide what should be outsourced from which locations and suppliers irrespective whether or not the activity adds value (ibid.). Thus, supply chains enable firms to form alliances that make it possible for them to penetrate global markets. It allows different firms to perform different tasks towards the end product, ranging from the production of raw materials through the production of components to the assembling of the final product (OECD 2007a). For instance, on looking at the distribution of value in the Apple iPad and iPhone, Kraemer et al. show that China, besides playing a role in supply chains and being the country of assembly,

gets a small share of the profits and its benefits come in the form of wages paid for assembling the final product (see Figure 10.1). This, they note, is because Apple keeps most of its product designs, marketing, product management and other functions in the United States (Kraemer et al. 2011). This implies that Chinese companies are not involved in high value added production but are in the supply chain by virtue of assembling the final products.

The Chinese example shows us the need to answer some policy questions. For instance, there can be changing patterns of production and specialisation in different countries, with some countries specialising in certain manufacturing products and tasks which allow them to join in the value chains without adding significant value. In essence, this means joining supply chains without being concerned about the extent of value addition. This has led to concerns that the GVCs narrative is intended to support the case of developed countries to bypass the World Trade Organization (WTO) Doha Round through imposing an 'ill-advised liberalisation agenda' on poorer countries (Draper and Lawrence 2013). Indeed, Ismail (2013) argues that the narrative is deeply flawed, as it attempts to reintroduce the idea of self-regulating markets and revive the Washington Consensus. However, firms and countries experience different restructuring depending on different considerations, with high- to medium-technology industries becoming more internationalised than less technology-intensive industries. Given this, it is important that we examine SVEs and LDCs separately in order to have an understanding of their experiences.

Most SVEs and LDCs are found at the raw material production level of supply chains or value chains, which might not be ideal for the growth and development of these countries. Yet some of these countries have the potential to add value and produce value added components in the value chains. However, enabling firms from SVEs and LDCs

Figure 10.1 Distribution of value for iPhone 2010



Source: Kraemer et al. (2011)

to enter GVCs as producers of value added components depends on how the challenges faced by businesses in these countries are confronted. Some of the challenges include lack of production capacities, high costs of inputs, poor market information, limited markets, high costs of technology, low volumes of purchase, lack of business skills and shortcomings in product design and development. The list continues with dependence on specialised imported raw materials, lack of effective enterprise networking, poor-quality products, limited capacity for value added, low levels of productive capacity, poor management skills, high transport costs and the inability to identify potential markets. Mkandawire (2009), on examining the strengthening of supply chains for small and medium-sized enterprises, identifies institutional constraints, as government departments do not collaborate on supporting value chains. Indeed, it is the competitiveness of SVEs and LDCs in both the regional and global markets that has a bearing on the ability of their firms to enter the value chains, contributing to the development of these economies. The biggest challenge, therefore, is for these countries to move from the bottom of the value chains (raw material) to stages of value added processing so that they can continue to prosper in competitive global markets.

This chapter suggest four scenarios for doing this. The first is for firms already operating within value streams, involving many firms in a supply chain, to move up the ladder through assuming a role that allows value added production of components. However, moving up is a big challenge, as it requires firms to be competitive. The second is for firms to integrating into the existing multinational corporations' (MNCs) value chains, building capabilities and competitiveness in specific tasks as part of a broader diversification strategy away from exporting raw materials (Draper and Lawrence 2013). The drawback with this approach is that the MNCs decide on firms and companies to integrate and their role in the GVCs, as in the case of Lesotho below. The third involves firms which are not part of value systems joining the supply chains or networks and moving up the value chain as in the first scenario. This is because at times there is a lack of market transparency, which hampers the formation of business linkages, and in some cases large firms, especially foreign firms, might not be aware of potential local suppliers. The fourth scenario involves firms breaking into the value systems thorough innovation, largely technological innovation. The big problem with this scenario is that SVEs and LDCs lack technological innovation and are thus unable to get into GVCs, as in the case of Belize below. Since most firms in SVEs and LDCs are already operating in the supply chains by virtue of providing raw materials, the first scenario provides a better approach for integrating these firms in GVCs by moving from raw material production to value added processing, which can be done through 'supply chain learning' (Bessant et al. 2003).

At the same time these paths bring with them a number of challenges in terms of policy implications which have to be taken into consideration as the states seek to integrate in GVCs. While GVCs have increasingly become a dominant aspect of world trade, the growing fragmentation of production across borders entail further opening up of countries to trade and investment through the removal of tariff and non-tariff barriers, including other restrictive measures. Accordingly, SVEs and LDCs have to be cognisant of the likely trade policy implications brought about by global value chains. For example:

a. Value chains may magnify the costs of tariff protection by the potential impact of tariff accumulation, especially when intermediates are traded across borders multiple times (OECD/WTO 2012; UNCTAD 2013). This has also the effect of stifling demand for the finished product, affecting production and investment across all stages of a value chain. Thus, the larger the share of foreign input in production, the higher the relative cost faced by exporters in the markets exported to. This means that those economies which use many intermediate imports in their production for export have a higher cost of production (OECD/WTO 2012).

b. At the same time, protection measures on the importation of intermediate inputs increases a country's production costs and reduce its competitiveness in export markets.[4] Protection also impacts on the position of a country in regional and global value chains (OECD/WTO 2012).

Since goods cross borders many times, first as inputs and last as final products, there is a need for increased trade facilitation through fast and efficient customs procedures to smooth the operations of supply chains. As a result there have been trade policy reforms (including in SVEs and LDCs), among other reforms that have facilitated the fragmentation of production processes across the world according to the comparative advantage of location (OECD 2012). There is, therefore, the need to link production stages and cross-border facilitation. The findings of studies undertaken by the Commonwealth Secretariat to assess the effectiveness of AfT in SVEs and countries in sub-Saharan Africa show that, whereas aid had a more significant effect in terms of trade facilitation through cost reduction, it had no major effect on exports (Laurent and Razzaque 2011). This is interesting, as it might also imply less impact on value added processing for export.

10.2 Empirical evidence on the participation of SVEs and LDCs in GVCs

The growth in value chains has affected international trade by allowing outsourcing of intermediate and final production, leading to increased trade through exports and imports. It has also led to increased intra-industry trade, especially in the OECD (OECD 2007b). According to the United Nations Conference on Trade and Development (UNCTAD 2013), value chains shaped by MNCs account for about 80 per cent of global trade. Thus, global investment and trade have become 'inextricably intertwined' through increased international production networks, with firms investing in productive sectors globally and trading inputs and finished products in cross-border value chains (ibid.). However, while MNCs contribute the bulk of value chains, there is still room for small firms, particularly from SVEs and LDCs, to participate gainfully in GVCs. For example, they can do this through integrating into the existing MNCs' value chains, building capabilities and competitiveness in specific tasks as part of a broader diversification strategy away from resource exports (Draper and Lawrence 2013). Staritz and Morris (2013) support the view that firms survive and thrive because of their insertion into particular chains. However, no matter how benign value chains might appear, there is always need to closely examine the

best possible way of benefiting from GVCs. In their study on capturing value in the production of the Nokia N95 smartphone, Ali-Yrkko et al. (2011) show that, despite Europe playing a small role in supplying the physical components, it took the lion's share of the value added, 51 per cent (see Table 10.2).

However, the participation of SVEs and LDCs in GVCs remains relevant in view of multilateral trade liberalisation opening up markets and other opportunities in a growing number of countries, raising the urge in most states to formulate trade policy that facilitates the participation of their firms in GVCs.[5] The reliance by SVEs and LDCs on commodities exports means that they are not left out of GVCs, but that they have to do more in value added exports if they are to benefit meaningfully from GVCs. This is important, as these countries, by virtue of being suppliers of raw materials, have always been part of global value chains, but at the bottom level. Given this, it is expected that the allocation of resources towards higher value added activities will allow an increase in productivity, boosting real income and wealth in a country (OECD 2007b). Indeed, UNCTAD (2013) notes that value added trade plays an important role in economic growth, with such trade contributing on average 28 per cent to developing countries' gross domestic product (GDP) compared with 18 per cent for developed countries. However, the exact value added trade contribution by SVEs and LDCs is not clear from these figures, yet it is important that we get an accurate measure if we are to fully understand their supply side to international trade and identify their sources of competitiveness. This is so because competitiveness in value chains requires access to competitive inputs (OECD/WTO 2012). However, the problem faced concerns the lack of data disaggregated into domestic value added components and imported components, data necessary for the measuring of the benefits and importance of trade in value added to SVEs and LDCs' economies.[6]

Because of lack of disaggregated data on who contributes what in terms of value added in the products that cross borders, particularly for non-OECD countries (Ali-Yrkko et al. 2011; OECD/WTO 2012; UNCTAD 2013), this chapter relies on drawing from some case studies. The use of case studies allows us to draw comparisons and contrasts between countries.[7] Monnereau and (Bert) Helmsing (2011), in their study on Belize, Jamaica and Nicaragua, found lobster chains to be similar in the three countries in terms of both their functional features and the type of chain actors. They

Table 10.2 The geography of valued added in the production of the Nokia N95 in Finland and China (% value each place adds)

	Finland	Other EU-27 countries	Asia	North America	Rest of the world
Assembly in Finland, final sale in Germany	41	27	13	14	5
Assembly in China, final sale in the USA	39	12	16	28	5
Both assembly locations, all markets	38	16	18	17	11

Source: Ali-Yrkko et al. (2011)

also found that the conditions for exporters were similar and largely determined by US public food safety standards. On the other hand the International Trade Centre (ITC 2012) reports that small Ugandan farmers are benefiting from better access to both domestic and international markets and through participation in value chains. This, it notes, has been done through developing market linkages, improving farmers' knowledge and skills in the market and in certification and verification, and through encouraging more farmers to participate in 'high-end nodes' of value chains (ibid.: 1). Such examples are necessary, as they help unpack the story.

Furthermore, in this chapter, two examples from Lesotho and Belize (Boxes 10.1 and 10.2) can be used to show the benefits of participating in value chains and at the same time expose the constraints faced by these countries in enhancing their participation in GVCs. The two examples are similar in that they demonstrate the importance of value chains to the two economies and their growth potential. They differ in that, whereas Lesotho's apparel chains are due to foreign companies, Belize's timber sector activities have emerged from local sources and have remained domestic, largely because of lack of technological innovation. Both countries face constraints (similar and different) in achieving the productive capacity development that is essential for building production and supply networks; this affects their potential to participate in GVCs and benefit from global markets.

The situation of these countries is worsened by other factors owing to their characteristics which influence the share of domestic value added in production for export. For instance, small sizes mean small economies, and being less developed means a poor economy with less diversification and increased importation of inputs, particularly intermediates. In the case of Belize, for example, producers have not been able to join GVCs partly because they have not been able to benefit much from the small Belize market, which is satisfied by imports and local value added from old technology. On the other hand, less domestic value added in small open economies can contribute significantly to GDP in relation to the size of the economy, as in the case of Lesotho, which has experienced increased export earnings and employment creations from cut–make–trim. This makes the movement up the supply chains, from raw material production to value added processing, important for these countries if they are to be meaningfully integrated in GVCs. In one of its studies, UNIDO (2011b) found substantial potential for extending the production of cashew nuts in Tanzania on existing farms, engaging in new plantations for improved varieties as well as increasing domestic value added processing for export (currently only 40 per cent of the cashew nuts produced in Tanzania are processed there). The study also found potential for diversifying processing by diversifying the product range as well as the use of by-products, providing jobs to low-skilled labourers and women.[8]

However, the need to ensure that size or low levels of development do not constrain the participation of these countries in GVCs remains apparent. For SVEs and LDCs to continue to grow from raw material producers to value added exports, there is a need for the countries to find innovative ways of processing to add value and make the 'most of their exports' (Humphrey 2003: 1). Because most SVEs and LDCs are already part of supply chains, moving up the supply chain through value added processing activities allows

Box 10.1 Lesotho: apparel industry

The apparel industry in Lesotho is integrated in the apparel GVCs through foreign direct investment (FDI) and has developed into the largest sub-Saharan Africa apparel exporter to the USA under the Growth and Opportunity Act (AGOA). Recently the industry has started exporting within the region, particularly to South Africa, taking advantage of duty-free market access to South Africa, as provided under the Southern African Customs Union (SACU), and low production costs, including labour costs, in Lesotho. Basically the two export markets are supplied by two different types of firms: affiliates of Taiwanese transnational producers and South African companies, which are inserted in distinct value chains. The Taiwanese producers are US buyer-governed value chains and the South African producers are South African retailer-governed value chains. As such, the value chains differ in terms of ownership, targeted markets, products, governance structures, firms' setup and motivation, and challenges as perceived by the owners. However, both chains have had an impact on the productive capacities and private sector development in Lesotho, with benefits to the economy in general.

- Thanks to value chains linked to Taiwanese transnational producers, Lesotho has become sub-Saharan Africa's largest exporter of apparel to the US market, with a 2004 share of 26 per cent, exports having increased from US$111 million in 1999 to $456 million in 2004. The increase in exports was matched by an increase in employment from 9,840 in 1999 to 53,087 in 2004.
- Between 2006 and 2011, exports of apparel to South Africa increased from ZAR17 million to ZAR445 million and employment increased by 5.5 per cent between 2008 and 2009 for South African firms.
- To date the apparel sector contributes 18 per cent of gross domestic product (GDP), about 70 per cent of total manufacturing, 60 per cent of exports, 50 per cent of the formally employed workforce and 80 per cent of Lesotho's manufacturing workforce. Despite the number of employment in the apparel industry declining from 53,087 in 2004 to 39,197 in 2011, the industry remains important for employment creation and poverty reduction in a country with half of the population living below the poverty line.[a]
- There has been export market diversification, with most producers supplying the South African market not having previously exported to the United States.

However, a close look at the Lesotho case reveals a number of shortcomings where FDI is involved in building value chains in a foreign country.

- The Taiwanese affiliates in Lesotho have their head offices in Taiwan, where decision-making on higher-value functions, product development and design, logistics, merchandising etc. takes place. Lesotho firms are only

(continued)

(continued)

involved in cut–make–trim (CMT) operations, and head office has little desire to transfer more than manufacturing activities to Lesotho. Only a few Taiwanese companies are involved in more capital-intensive finishing operations. As a result, besides not providing Lesotho with the performance of a high value added function, the future of the industry is also uncertain, especially in the event of operating costs beginning to rise.

- The above Taiwanese scenario is also true of South African manufacturers, except that some plants in Lesotho are given more decision-making powers. Accordingly, they have relocated some of their broader production-related function to Lesotho. Moreover, South African firms do not act globally and do not have substitute companies elsewhere. However, all this is an attempt to move away from the high-cost production environment in South Africa. The question remains what will happen when costs begin to rise in Lesotho.
- Taiwanese firms see wages in Lesotho as higher than overseas. This is a challenge to Lesotho if Taiwanese are to remain in the country.
- South African firms identify the lack of finance, transport, logistics and customs-related costs and deficiencies in the support sector as challenges.
- Both types of industries see low levels of productivity as limiting their export growth. The challenge therefore remains the establishment of production facilities in Lesotho.
- Only a few firms have undertaken major process innovations; firms are mostly involved in ongoing investment in machinery.
- There are no supply chain linkages between foreign firms and local firms, largely because there are no local firms in formal manufacturing. At the same time there has not been any stimulation of local entrepreneurship through backwards linkages or knowledge spillovers.
- Skills transfer from Taiwanese firms has been limited to basic production, with limited effort to advance local skills. Instead such skills are imported. South African firms, besides taking the development of local skills seriously, also import a number of skills because of local conditions.

[a] The decline in employment is related to the decline in exports due to a number of factors but largely because of the phase-out of the Multi-Fibre Agreement (MFA).

Source: Staritz and Morris (2013)

diversification in the export sector to enhance effective and meaningful participation in GVCs. If this is the case, the designing of sector-level strategy for participating in GVCs requires collaboration between government and the private sector, which has the knowledge of markets within supply chains (Humphrey 2003). This is important because

Box 10.2 Belize: timber production value chain and the potential for joining GVCs

Timber is declining in importance in terms of export earnings, but timber producers in Belize have started to process timber for trade at the national level and for household use after realising the economic potential in timber activities within the silvopastoral system. The value chain map shows that communities are involved in logging, primary transformation, intermediate and secondary transformation. During primary transformation, most of the wood is meant for domestic use, mainly for home repairs and houses for newly married couples. Most of the sold timber goes to the construction sector, with 1 per cent going to the furniture industry. The intermediate level is involved in activities from sale at the farm gate to the final users. Carpentry work is done at the secondary level (only in one community), producing furniture and wooden houses. Furniture is made according to specification received, allowing different kinds of furniture and designs. At this level, there are value added products that have a potential in the market. However, the products do not receive any marketing because the producers do not see much opportunity in these businesses. Besides small communal producers, there are a few large companies throughout the country, processing less than half of the total timber production. Nevertheless, all the timber harvested is processed into sawn lumber (value added).

Benefits include the following:

- The livelihoods of the people in three different small communities have been improved by income generation, benefiting individuals and the communities involved at large. For example, in Springfield, part of the income earned is used to support community activities and solve common problems. However, the income from the businesses is still regarded as insignificant.
- It provides affordable houses especially in view of the rising demand for housing. Because of the demand for housing, the building sector is expanding, causing a spillover to other sectors such as finance and banking, giving affordable loans for residential projects.
- There is a big popular furniture shop which is very successful in the national market and is very much in demand by the tourist sector. However, the quality of cuts from the traditional small producers prevents them from benefiting from this national market, let alone the export market. Nevertheless, they supply certain types of wood, such as quam, which are preferred by home owners and low-income customers.

However, there are constraints and opportunities in the chains.

Constraints

- The communities still use old traditional technology and the traditional method of trading is at the farm gate, which means they sell their products

(continued)

(continued)

at low prices. Old technology (no electricity, exclusive use of animals for transport and mill sawing) means relatively poor-quality products, compared with other producers who use modern technology. Machinery is outdated and not in good condition, which contributes to low quality. This affects the competitiveness of their value chain.

- The three communities studied have minimal interaction with external players, limiting the chances to upgrade quality and the expansion of lumber production. Minimal interaction also inhibits outsourcing of services or creating alliances or linkages with other producers in the chain outside the communities.
- Processing capacity is low and there is a lack of technical standards to improve productivity.
- There is also lack of technical support to improve their performance and product quality.
- There is no awareness of the market potential in Belize by the traditional producers.
- The traditional producers do not know their products' market value and competitors' rates.

Opportunities

- The timber market in Belize is very small compared with the rest of Central America and yet producers in Belize have not been able to capture a portion of the Central American market. Some businesses have been importing raw material from as far as the United States to supply local demand. Efforts should be made to tap this market and encourage the participations of traditional producers. This might entail joining US value chain streams but the problem is that there is no automatic technological transfer inside these chains (Ismail 2013).
- Traditional producers can take advantage of national demand of timber by introducing new timber species.
- Many residents have skills and good artisan abilities, are very creative and can be encouraged to have more options in the furniture market.
- Networking and communicative skills are already in existence and operative but there is potential for improvement.

Source: Vidal (2012)

it will not only allow participation in GVCs but create positive results for the economy through generating more value added through producing intermediates for export. It is therefore essential that SVEs and LDCs identify those value added export sectors that bring considerable benefits to these countries through participation in GVCs. However,

the participation in GVCs must be mainstreamed in the development policies of these countries to allow effective integration which can significantly benefit their economies. For example, in their study of lobster value chains in Belize, Jamaica and Nicaragua, Monnereau and (Bert) Helmsing (2011) argue that the three countries are weak in terms of their embedding and autonomy but Belize has taken a pro-development approach through organising small-scale fishers into co-operatives and thus enabling them to participate better in terms of export chains.

Benefits can also be realised in the services sector, as the advancement in information and communication technology has had a pronounced effect on the sourcing of services from abroad. For instance, services in the knowledge sector, such as data entry or research and consultancy, can be carried out over the internet and by tele- and video-conferencing (OECD 2007a,b). It is also important to note that GVCs also bring about an extensive use of services; 46 per cent of inputs to exports come from service-sector activities (UNCTAD 2013). This is because manufacturing for export makes use of services in production. According to UNCTAD, more than 60 per cent of global FDI stock is in services activities, 26 per cent in manufacturing and 7 per cent in the primary sector (ibid.). This has also brought with it the issues of exporting jobs abroad, which might be seen in negative terms in the outsourcing country. However, it is expected that in the long run the effect on employment would be in terms of the type of jobs available rather than the number (UNCTAD 2013). Moreover, the number of jobs lost to offshore production may be large in absolute terms, but relatively small compared with overall job creation and loss in the labour market (ibid.). On the other hand, the OECD (2012) argues that, although there is concern about job losses, the jobs created in the export industry are a result of foreign inputs. For example, the creation of employment in Lesotho in the apparel export sector between 1999 and 2004 was due to the importation of inputs into the apparel industry (see Box 10.1).

10.3 Aid for Trade and the integration of LDCs and SVEs in global trade

If we are to go by the evidence shown above on the importance of value chains to SVEs and LDCs, there is every reason to think positively about the importance of effective and meaningful participation by SVEs and LDCs in GVCs. Yet SVEs and LDCs do not have the capacity. As argued above, one way of enabling SVEs and LDCs to benefit from trade liberalisation requires those activities which encourage higher value added processing, which can be partly enabled by and utilise AfT. Targeting the productive and private sector development category is an important starting point because of the need for SVEs and LDCs to diversify their export base and stop reliance on export earnings from a single commodity or a narrow range of products for growth and economic development. According to OECD/WTO (2011), LDCs on average depend on three products for more than 70 per cent of their export earnings, leaving them highly vulnerable to adverse price changes and falls in demand. Again, they do not have the production capacity to take advantage of improved market access opportunities. Given this, AfT has to be operationalised effectively in mainstreaming

trade in national developments strategies, part of which involves addressing supply constraints to take advantage of improved export markets. This becomes critical especially in view of the diversification of export markets for LDCs (ibid.).

Lamy (2012: 2) notes that AfT can be used to help businesses in poorer countries to help 'unlock' the economic potential of value chains. This can be done through diversification and specialising in areas where they have 'competitive advantage or niche potential'. Rugwabiza (2011: 1) points to the importance of 'galvanising' private sectors in poorer countries along value chains and broadening the suppliers' networks through investing in capacity and competitiveness of producers, traders and institutions. AfT can be utilised to help countries retain or create new opportunities for value added processing through evaluating performance gaps and identifying where value could be added at each link in the chain as well as realising the needs or requirements of business in terms of upgrading their activities. For example, it can be used to help increase the efficiency and effectiveness of internal processing by businesses, produce new products or improve old products to be competitive, increase value added by changing the mix of activities at the firm level, and move to a new value chain (Humphrey 2003). It can also be used to enable chains as tools for trade development at the national level through increasing efficiencies in the existing national components of value chains, extending the national value chain and building new value chains (ibid.). According to Humphrey (2003), increasing efficiencies in the existing value chains involves helping strategy makers determine the type of trade support services to be provided to different institutions to help increase the overall export performance of export sectors.

On the other hand, extending the national value chain will help identify opportunities for capturing greater value by extending parts of the chain from a given country. Building new chains involves creating new export opportunities through creating new chains associated with existing ones (Humphrey 2003). Thus, AfT can be useful in helping policy-makers better understand the use of value chains in contributing to economic and social development. There is a need to ensure that the actual barriers faced by enterprises to joining GVCs are known to the policy-makers and dealt with. Indeed, there is a need to address the lack of understanding of the role of intermediaries in supply chains and the lack of appreciation of the value added by intermediaries' marketing enterprises. These lacks prevent business- and trade-supporting institutions from emphasising value added (ITC 2009). Yet there have not been substantial studies examining the utilisation of AfT for the purposes of building chains and enhancing the participation of developing countries, particularly SVEs and LDCs, in GVCs.

Nevertheless, there has been work on donor-led value chain interventions from which the utilisation of AfT can draw experiences.[9] Altenburg (2007) argues that value chains are used by international organisation and national donor agencies in the context of private sector development. Such value chain interventions focus, among other areas, on improving market access conditions, upgrading opportunities for poorer countries' firms and promoting export-based development. Staritz (2012) identifies several common characteristic of donor-led value chain interventions. The

first is market access upgrading, which focuses on improving market access conditions to allow the identification of upgrading opportunities for firms and producers in developing countries, particularly for exports. Because productive capacities are underdeveloped in developing countries, this is expected to increase efficiency and competitiveness through value added and effective insertion into GVCs. Such market access upgrading is done by helping suppliers and producers gain access to information and resources, develop linkages with other businesses, comply with lead firms requirements and standards, increase productivity, gain new skills and develop competencies and capabilities as well as assuming new functions/activities related to higher value added in the chains (ibid.).

A second is the provision of market-based support services in a number of ways. Of significance to this chapter are those interventions which focus on increasing the capabilities of the private sector, with a focus on weak participants in GVCs, establishing and strengthening linkages between firms along the chain at both the domestic and the international level, and improving business services and the business environment as a whole with a view to improving the operation of value chains (Staritz 2012). Nevertheless, donor-led interventions in this instance are still selective, focusing on individual firms or groups of firms. The third characteristic is concerned with the involvement of the lead firm in trying to help developing-country suppliers and producers to access markets and skills, build linkages and upgrade their activities. This is because donor assistance is often given through lead firms to local businesses, and lead firms have a greater say in inclusion or exclusion, including the upgrading, of developing-country firms in chains, as they determine what is produced and where, how it is produced, conditions of entry into the chain and upgrading, and the distribution of profits (Altenburg 2007; Staritz 2012).

However, foreign-led value chains for development have limitations. They can have an impact on the export-developing strategies for developing countries as global shifts in supply and demand structures bring about increased competition between developing countries. Moreover, domestic producers in developing countries compete with imports from cheaper sources, thereby forcing the closure of some domestic enterprises. The other limitation is that upgrading does not necessarily bring about gainful placement in the value chains at the level of higher value added activities sufficient to secure higher sustainable incomes with effects on development. Donor-led value chain interventions can also create winner and losers as the process of inclusion and exclusion at the local and global level leave firms and regions not part of the GVC and thus excluded from global markets (Staritz 2012). There is also the possibility of competition between different chains as policy intervention in one chain may affect the position of a competing chain (Altenburg 2007). Donor-led value chain interventions assume that the interest of developing country firms and even the developmental interests of these countries will coincide with those of the lead firm. Yet a close examination shows the existence of a conflict of interest. There are trade-offs between different development objectives, with the structure of value chains depending on an ongoing negotiating process among stakeholders with different interests, which can lead to different outcomes including unintended side effects (Altenburg 2007). This is because countries tend to focus on specific business

functions rather than on specific industries or firms involved in specific activities (OECD 2012). For example, lead firms may want to suppress skills and technology transfer, whereas the governments of developing countries might see this as critical to ensure spillover effects for development purposes.

Most important is that the donor-led approach focuses on the firm level and interfirm networks and ignores a number of non-firm actors such as states, which have a critical role to play in value chains and development. States remain important players in value chains, as they influence upgrading trajectories through a number of policy measures. It is critical that donors work with the recipients in order to ensure that the development effects can be realised, as this will allow value chains to be mainstreamed in the development objectives of the recipient countries. Moreover, donor agencies may not know exactly what a supply chain requires. However, firms have to be part of supply chains which enable them to access external and diversified markets, technology transfer through learning, economies of scale and scope, and competitive imports for production of exports. This is because being part of a supply chain provides options for enabling learning, and makes incremental additions to existing knowledge to enable adaptation in the supply chain (Bessant et al. 2003).

This is important because, as discussed above and as demonstrated in the case of Lesotho (Box 10.1), integration into GVCs may lock firms in developing countries into low value added activities. Such a lock-in is not beneficial in terms of GVCs contributing to effective socio-economic development in these countries in terms of eradicating poverty. The challenge, as argued in this study, is for SVEs and LDCs to climb to higher levels of value added activities (upgrading) for export, which is essential for their export-led growth and development. Value chains brought in by MNCs may not always bring supply chain linkages between foreign firms and local firms, as the MNCs may prefer to source cheaper inputs from outside, as is the case with Taiwanese firms in Lesotho. It is from this understanding that AfT can be useful in filling in the gap and help in creating an enabling trade and investment environment. Unlike in the case of donor-led interventions, AfT will allow demanders to have a say in the intervention in the value chains through designing and developing their own projects. The main challenge is to ensure that trade policy incorporates the rapid and increasing changes in the global trade landscape, as this will give us a better understanding of a country's position in global production networks and enable us to take necessary policy measures (OECD 2012). For instance, it can allow the identification of sources of national competitiveness and also highlight the challenges in upgrading or building new chains in competitive areas.

10.4 Aid for Trade and value chains in small states and LDCs

AfT is intended to assist developing and least-developed countries to increase their exports of goods and services, to integrate more effectively into the multilateral trading system and to benefit from trade liberalisation through increased market access. To realise this, the initiative is intended at helping these countries in overcoming their supply-side constraints, build their economic infrastructure and increase competitiveness. The initiative is about mobilising funding, policy coherence and

getting WTO members to use trade in the service of their developing objectives (WTO 2006). For SVEs and LDCs, this entails getting their regulatory, business and trade policies right in order to make use of opportunities offered in regional and global markets. However, SVE and LDC projects should be considered AfT activity if they are trade-related development priorities in the recipient countries (Cali et al. 2011). These activities fall into the broad categories of trade policy and regulation, trade development, trade-related infrastructure, other trade-related needs, and trade-related adjustment and building productive capacity. It is the last category which is critical when assessing the potential for utilising AfT to support value chains for SVEs and LDCs. This is because the resources made available in this category include, among others, business development, assistance to banking and financial services, forestry, mining, agriculture, industry, fishing, mineral resources and tourism – all of which hold the potential for SVEs and LDCs to move up the supply chain from raw material production to value added processing and also generating new capacity.

Measuring the effectiveness of AfT has not been an easy thing to do; most studies use case studies to assess the impact of AfT. Moreover, the data do not show the utilisation of AfT for the purposes of value chain activities. Given this, it is assumed in this chapter that part of AfT to the productive capacity category is for activities that enable the creation of a trade and investment environment conducive to value added processing and integration in GVCs. AfT can be a fitting source of financial resources that can be used for a well-co-ordinated technical assistance and training programme in developing productive capacities and transforming industries in these countries to assume the roles of value added processing and move up the supply chains they are part of. However, much trade-related technical assistance to LDCs has tended to be policy-oriented and institutional support, with less support for enterprises (ITC 2010a). Yet trade-related technical assistance that leads to developing productive capacity remains critical. The ITC Export-led Poverty Reduction Programme (EPRP), which aims at linking LDC communities to world markets by inserting them into value chains of products and services, has projects in 12 LDCs, which have so far benefited 38,000 poor people by creating additional jobs and higher incomes (ITC 2010a). This work by the ITC gives us an example of technical assistance in productive capacity and private sector development. The issue is that SVEs and LDCs should focus on the value of exports rather than the quantity, as is the case with commodity exports. However, this requires a lot of thinking about innovation for diversification (ITC 2010b). This requires financial resources which SVEs and LDCs do not have. Nevertheless, the AfT initiative can provide poorer countries with financial resources for the 'proper functioning' of the productive and export sectors, including enhancing their competitiveness (ITC 2010b).

10.5 Lessons learnt and recommendations

What emerges from this analysis is that, because of a number of characteristics, SVES and LDCs have found it difficult to use trade as a tool for economic growth and poverty reduction. However, GVCs offers an important avenue that can help SVEs and LDCs harness trade for development through providing important routes to export markets. Not only do GVCs provide routes to export markets but they also offer

new opportunities for SVEs and LDCs firms to expand their business opportunities. There is also scope for generating new capacity and diversification of export product range through expanding into new activities, which also creates employment and improves the standards of living in these countries. The other important issue that emerges from the analysis is that LDCs and SVEs often participate in low value added activities which give them the basis for moving up supply chains through value added processing. However, SVEs and LDCs do not have the capacity to move up and would benefit from financial support for those activities which help create a trade and investment environment that is conducive to higher value added processing. The role of AfT in this respect cannot be overemphasised:

- AfT can be used to help in the implementation of policy interventions aimed at making the business environment more reliable and more transparent, fostering enterprise development, including in new areas of economic activity which involved value added production. This can be done through support for trade policy and regulations as trade and investment policies which can help determine the extent of SVEs and LDCs benefit from value added processing as well as affect competitiveness for local firms and value chains compared to imports and market-seeking foreign investment.
- AfT in productive capacity and private sector development should be made an important aspect of enabling businesses in SVE and LDCs to participate in and benefit from regional and global value chains, thus allowing them to participate effectively in world trade. One way of doing this is by utilising AfT for conducting value chain analysis to identify concrete policy constraints that affect competitiveness as well identifying areas in which businesses in small states can add value and participate in regional and global value chains. This will also, in a way, help in the diversification of the export bases of SVEs and LDCs. For example, technical assistance given to countries can help in the formation of sector co-operatives, clusters and networks, and pilot group purchases which provide opportunities for strengthening supply and value chains.
- AfT can be used to try and sustain already existing value chains. This can be done by strengthening the supply capacity of local firms to produce at competitive costs and to supply reliably and in compliance with standards, through developing skills ranging from technical skills in production process to management competencies. This is important, as local suppliers in value chains are constantly threatened in terms of competition from other global suppliers. Given this, SVEs and LDCs have to try and build resilience through improved productivity, improved competiveness and building new skills. Export promotion, on the other hand, may help facilitate the integration of SVEs and LDCs firms and businesses in global supply chains. There is also a need for the industry and government to develop a strategy that will help move from chains that create employment only but have the potential to generate skills and spill over to the larger economy.
- AfT can be a source of financial resources for country-specific studies to help recipient countries identify areas for use of AfT in developing production and

the private sector for exports. AfT, in such a case, can be used to start producing competitive value added products.

- There is a need to find ways that AfT can be used to overcome particular institutional and other bottlenecks that hinder the effective participation of existing export businesses in regional and global value chains.
- AfT can also be used to meet adjustment costs brought about by economic activities which make it possible for firms from SVE and LDCs to join GVCs: activities such as reforming employment regulations, trade policy and industrial policy. Support for adjustment costs can also be used for developing productive capacity, which can also help develop value chains.

Notes

1 However, it should be noted that these countries are not homogeneous but share characteristics that have a bearing on their ability to fully participate and integrate in regional and global value chains.
2 Commonwealth SVEs and LDCs include Antigua and Barbuda, The Bahamas, Bangladesh, Barbados, Belize, Botswana, Brunei Darussalam, Republic of Cyprus, Dominica, Fiji Islands, The Gambia, Grenada, Guyana, Jamaica, Kiribati, Lesotho, Malawi, Maldives, Malta, Mauritius, Mozambique, Namibia, Nauru, Papua New Guinea, Rwanda, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Samoa, Seychelles, Sierra Leone, Solomon Islands, Swaziland, Tonga, Trinidad and Tobago, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu and Zambia.
3 Goods cross borders many times, first as inputs and last as final products. This brings about the need for increased trade facilitation through fast and efficient customs procedures to smooth the operations of supply chains.
4 Tariffs and other barriers on imports are a tax on exports.
5 Opportunities come with activities such as outsourcing, offshoring, sub-contracting, joint ventures and outright shifting of production to a different location.
6 The OECD and the WTO have already initiated work in measuring value added and explore some of the methodologies and the challenges they pose (OECD/WTO, 2012). So far the data are only on OECD countries, making it difficult to get data on SVEs and LDCs.
7 This is notwithstanding the fact that such examples only show the situation for that specific product and country.
8 Cashew nut farming is also a source of income and livelihoods for many people; 85 per cent of cashew nut growers are smallholders farming around one hectare (INIDOP 2011b).
9 Donor-led value chains interventions evolved when major international organizations and national donor agencies developed their own value chain approach, largely aimed at private sector development (Altenburg 2007, Humphrey and Nava-Aleman 2010). A number of agencies, such as the United States Agency for International Development (USAID), the Organisation for Economic Co-operation and Development (OECD), German Development Cooperation (GIZ), World Bank, the Food and Agriculture Organization (FAO) and the International Labour Organisation (ILO), have designed comprehensive value chain analysis tools in order to define entry points for intervention. Such value chains have been labelled as 'value chains for development' (Staritz 2012).

References

Ali-Yrkko, J, P Roouvinen, T Seppala and P Yla-Anttila (2011), 'Who captures value in global value chains? Case Nokia N95 smartphone', *Journal of Industry, Competition and Trade*, Vol. 11, 263–78.

Altenburg, T (2007), *Donor Approaches to Supporting Pro-Poor Value Chains*, Report prepared for the Donor Committee for Enterprise Development Working Group on Linkages and Value Chains. www.enterprise-development.orgg

Bessant, J, R Kolinsky and R Lamming (2003), 'Putting supply chain learning into practice', *International Journal of Operations & Production Management*, Vol. 23 No. 2, 167–84.

Cali, M, M Razzaque and DW te Velde (2011), 'Effectiveness of Aid for Trade in small and vulnerable economies: an empirical assessment', Economic Paper 91, Commonwealth Secretariat.

Draper, P and R Lawrence (2013), 'How should sub-Saharan African countries think about global value chains?', *Bridges Africa*, Vol. 2 No. 1, 12–16.

Gereffi, G and L Joonkoo (2012), 'Why the world suddenly cares about global value chains', *Global Value Chain Management*, Vol. 48 No. 3, 24–32.

Gibbon, P and S Ponte (2005), *Trading Down: Africa, Value Chains, and the Global Economy*, Temple University Press, Philadelphia.

Humphrey, J (2003), 'Value chain analysis: a strategy to increase export earnings', *International Trade Forum*, Vol. 1, International Trade Centre, Geneva.

Ismail, F (2013), 'Global value chains: towards an alternative narrative for the multilateral trading system', *Bridges Africa*, Vol. 2 No. 2, 4–6.

ITC (2009), 'Private sector should "think regional" to benefit from North–South Corridor', Export Impact for Good (online), International Trade Centre, Geneva.

ITC (2010a), 'Least developed countries', Export Impact for Good (online), International Trade Centre, Geneva.

ITC (2010b), 'Developing countries urged to focus on the value of exports rather than volume', in *International Trade Forum*, 16 December, International Trade Centre, Geneva.

ITC (2012), 'Greater farmer participation in Uganda's coffee value chains brings benefits', Export Impact for Good (online), 7 November, International Trade Centre, Geneva.

Kraemer, KL, G Linden and J Derdrick (2011), *Capturing Value in Global Networks: Apple's iPad and iPhone*, Research supported by the Alfred P. Sloan Foundation and the U.S. National Science Foundation (CISE/IIS), available at: www.pcic.merage.uci.edu/papers/2011/value_iPad_iPhone.pdf (accessed 31 July 2013).

Lamy, P (2012), 'Equipping ITC for the priorities and challenges of today', speech by Pascal Lamy, WTO Director-General, at the 46th Session of the ITC JAG (21–22 May), *International Trade Forum Magazine*, 21 May, International Trade Centre, Geneva.

Laurent, E and M Razzaque (2011), 'Assessing the effectiveness of Aid for Trade', *Commonwealth Trade Hot Topics*, Issue 86, Commonwealth Secretariat, London.

Monnereau, I and AHJ (Bert) Helmsing (2011), 'Local embedding and economic crisis: comparing lobster chains in Belize, Jamaica and Nicaragua', in (Bert) Helmsing, AHJ and S Vellema (Eds), *Value Chains, Social Inclusion and Economic Development: Contrasting Theories and Realities*, Routledge, New York, 178–195.

Mkandawire, W (2009), 'Strengthening supply chains for micro-, small and medium-sized enterprises in Namibia', *Small States: Economic Review and Basic Statistics*, Vol. 13, 27–38.

OECD (2012), 'Mapping global value chains', Working Party of the Trade Committee, 4–5 December, TAD/TC/WO/RD(2012)9.
OECD (2007a), *Moving up the (Global) Value Chain*, Policy Brief (July), OECD, Paris.
OECD (2007b), *Moving Up the Value Chains: Staying Competitive in the Global Economy: Main Findings*, OECD, Paris.
OECD/WTO (2011), *Aid For Trade and LDCs: Starting to Show Results*, www.oecd.org/dac/aft
OECD/WTO (2012), *Trade in Value-Added: Conception, Methodologies and Challenges*, www.wto.org/english/res_e/statis_e/miwi_e/oecd_wto_mar2012_e.doc.
Rugwabiza, V (2011), 'Aid for Trade as investment in trade: engaging the private sector', in *International Trade Forum Magazine*, 1 December, International Trade Centre, Geneva.
Staritz, C (2012), 'Value chains for development? Potentials and Limitations of Global Value Chain Approaches in Donor Interventions', Working Paper 31, Österreichische Forschungsstiftung für Internationale Entwicklung (OFSE), Vienna, available at: www.oefse.at/Downloads/publikationen/WP31_value_chains.pdf (accessed 31 July 2013).
Staritz, C and M Morris (2013), 'Local embeddedness, upgrading and skill development: global value chains and foreign direct investment in Lesotho's apparel industry', Working Paper 20, Capturing Gains.
UNIDO (2011a), *Diagnostics for Industrial Value Chain Development: An Integrated Tool*, UNIDO, Vienna.
UNIDO (2011b), *Tanzania's Cashew Value Chain: A Diagnostic*, UNIDO, Vienna.
UNCTAD (2013), *Global Value Chains and Development: Investment and Value Added Trade in the Global Economy*, UNCTAD, Geneva.
Vidal, C (2012), '*Timber production value chains in three Belizean Mennonite communities*', *Technical Series*, Technical Bulletin 53, Tropical Agriculture Research and Higher Education Centre (CATIE), Turrialba.
WTO (2006), *Recommendations of the Task Force on Aid for Trade*, WTO, WT/AFT/1, Geneva.
Xing, Y and N Detert (2010), 'How iPhone widens the United States Trade Deficit with the People's Republic of China', ADBI Working Paper Series, No. 257, Asia Developing Bank Institute.