CHAPTER 8
CLOSING THE SMALL-BUSINESS AND GENDER GAP TO MAKE TRADE MORE INCLUSIVE

Contributed by the International Trade Centre

Abstract: Over the past three decades, the connections that bind the economic activities of countries have grown and deepened at a remarkable rate. This chapter looks at the role of digital connectivity in linking small and medium enterprises, and in particular women-owned or managed enterprises, with customers and suppliers around the world. Firm-level data show that there is a significant connectivity gap between small and large firms, as well as for women-owned or managed firms. This chapter uses a selection of firm-level data to shed light on the causes and effects of these gaps, and to assess their ultimate impact on trade. Checklists to help policymakers identify policy solutions are also provided.
INTRODUCTION

Over the past three decades, the connections that bind the economic activities of countries together have grown and deepened at a remarkable rate. From 1980 to 2007, many of these ties took the form of increasing trade and financial flows, with trade growing roughly tenfold over the period (McKinsey & Company, 2016). However, after the 2008 financial crisis these flows stagnated, returning to their pre-crisis peak only in 2014. In part, this is the result of relatively weaker global economic performance as the large amounts of debt amassed during the boom years slowed growth (Égert, 2012).

Another reason for stagnating flows is structural: after two decades of production out-sourcing to lower-cost countries, supply chains have begun to shorten as manufacturers in key developing economies, such as China, increasingly source parts from domestic factories rather than from abroad (Constantinescu et al., 2015). In contrast, since the early 1990s cross-border data flows have exploded at an exponential rate, barely registering the effects of the financial crisis. It is estimated that between 2005 and 2014, global data flows increased by a factor of 45; projections indicate that they will grow another nine times in the next five years (McKinsey & Company, 2016).

What does the changing nature of cross-border connectivity mean for firms, and in particular small and medium enterprises (SMEs), and women-owned enterprises trying to break into international markets? On the one hand, it opens up new opportunities, makes it easier for new players to build an international reputation, reduces market research costs and expands outreach. On the other hand, it may increase existing gaps between SMEs and large firms, or between women-owned and men-owned enterprises if the former are not able to use increased cross-border connectivity to their advantage.

The International Trade Centre’s (ITC) model of competitiveness among firms rests on three pillars: the capacity to compete, to connect and to change. In this chapter we take a detailed look at the “capacity to connect” pillar, which includes linkages to customers and businesses, and the role these linkages play in promoting competitiveness and exports. We assess the characteristics that determine whether SMEs and women-owned businesses manage to take advantage of new connectivity-related technologies, both at the firm level, in the business ecosystem, and at the national level. Using firm-level data, the chapter provides new evidence regarding the capacity of SMEs and women-owned businesses to reap the benefits of increased global cross-border connectivity.

CONNECTING SMES TO INTERNATIONAL MARKETS IS A DEVELOPMENT PRIORITY

SMEs make up the bulk of the economic tissue of an economy. They account for approximately 50% of GDP and 60-70% of total employment worldwide. Furthermore, in developing countries they tend to employ the poorer, more vulnerable segments of society such as young people and women (ITC, 2015a). Thus, investing in SMEs is a long-term and smart strategy, with sustainable returns that multiply across societies, regions, and countries.

SMEs often drive economic growth and social progress because of the segments of the population they employ and because their small size enables them to quickly adapt to changing market conditions and seize new market opportunities. At the same time, SMEs are vulnerable to economic forces largely out of their control, and may not have the resources to survive the ups and downs of the business cycle as well as their larger counterparts.

To survive and thrive in today’s globalised economy, SMEs must focus on boosting their competitiveness, an area where they lag behind larger firms. Many SMEs neither import inputs nor export products. However, those SMEs which do engage in cross-border trade tend to be more productive and pay higher wages than those which do not (Baghdadi, 2005). Getting SMEs “export ready” can help them connect to global markets, boost wages and thereby foster inclusive growth.
There is a connectivity gap between SMEs and large companies

Although the Internet has a levelling effect on many of the determinants of competitiveness, SMEs are still required to take active steps to leverage these benefits—and not all SMEs do. As a result, there is a gap between small and large firms on key connectivity indicators. Figure 8.1 uses World Bank Enterprise Surveys data to show the gap between small and large firms in terms of having a business website (expressed in percentage points). The data clearly show that small firms are substantially less likely to have a business website, a basic requirement for connecting to potential customers and suppliers in today’s increasingly digital economy.

Figure 8.1. Relative proportions of small and large firms with a business website

Note: Gaps are calculated on a percentage point basis. For example, if 40% of small firms have a business website compared to 60% of large firms, the gap is 20%.

Taking into account factors such as country, sector, firm age, and export status, large firms are ten times more likely than small firms to use email to communicate with buyers and suppliers, and eight times more likely to have a business website. Moreover, exporters are more than twice as likely to have a website as firms that do not export. While causality is difficult to prove either way (i.e. does having a website increase the chances that a firm that does not trade will become a trader, or is it simply that once firms begin to trade they establish a website?), the data do highlight the link between the probability of being an exporter and the simple fact of having a business website.

SMEs in the least developed countries (LDCs) perform particularly poorly when it comes to the capacity to connect. According to the ITC, small firms and medium-sized firms in the LDCs only score 22% and 54% of the e-connectivity score of large firms, respectively. This gap falls dramatically as the level of development rises, highlighting the challenge the LDCs face to catch up to the rest of the world (ITC, 2015a).
Connectivity gaps can persist even when ICT infrastructure is strengthened

Ghana was one of the first African nations to establish widespread Internet infrastructure (Dholakia et al., 2004). This was possible thanks to the liberalisation of the telecommunications industry in the 1990s, and to the efforts of the Ghanaian government to build a knowledge-based economy. The National Information and Communication Technology for Accelerated Development policy, introduced in 2003, had the objective of engineering a socioeconomic development process led by information and communication technology (ICT) (Boateng et al, 2011).

Figure 8.2. Use of ICT by firms in Ghana

[Chart showing ICT usage by different types of firms in Ghana]


Box 8.1. What can happen when SMEs leverage digital technologies?

Sara Maunda, groundnut farmer, Malawi

In developing countries, the less well-off are often farmers growing one or two staple crops. Mobile Internet telephony can enable these farmers to bypass sometimes costly intermediaries, directly accessing weather forecasts, market pricing information and even features such as livestock tracking (USAID, 2012). When farmers have access to information about prices and stocks, the risks of under-selling, and of either over- or under-supplying their crops to a given market, are reduced. According to a World Trade Organization (WTO) study, the benefits farmers perceive from the use of mobile phones include access to agricultural information concerning stockpiles and prices, data visibility for value chain efficiency, and the ability to tap into new and existing markets (WTO, 2013).

Sara Maunda, a groundnut farmer in Malawi, reported that traders often offer prices per kilo of nuts far below market prices because the sellers are not aware of current market prices. Sara, however, is connected to a mobile platform called Esoko, which provides her with news about prices and stocks. As a result, she comes to the negotiation table with information that enables her to extract a much better price for her produce. Sara cites one example where she sold her produce for 24 000 kwacha (USD 130) instead of 4 500 kwacha (USD 27) thanks to the mobile website (USAID, 2012).
Brodo Footwear, Indonesia

Brodo Footwear is an Indonesian men’s fashion company founded in 2010. In just four years, it has grown from a small company to one employing 100 people. It produces more than 4,000 pairs of shoes per month and generates around USD 120,000 in revenue per year.

In an interview, Yukka Harlanda, Brodo co-founder, explained, “The business evolved when we took it online, especially on social media” (Deloitte, 2015). Brodo increasingly uses Cloud tools and data analytics to focus on marketing and increase sales. These tools also help to gain a better understanding of inventory, customers and online traffic. Yukka continues, “The more we know about our customers, the more effective we can be in reaching them and satisfying their needs.”

A recent McKinsey study, Online and upcoming: The Internet’s impact on aspiring countries, focuses on a sample of emerging economies (Argentina, Hungary, Malaysia, Mexico, Morocco, Turkey, Viet Nam and Chinese Taipei). It reports that SMEs having access to broadband or mobile Internet and investing in digital technology experienced productivity gains of around 10%; furthermore, their revenues increased by 6% and their costs fell by around 4% (McKinsey & Company, 2012). The gains experienced by SMEs spill over to the rest of the economy. Increases in Internet access are associated with greater market competitiveness, increased efficiency and benefits for consumers (McKinsey & Company, 2012).
Policymakers can support small business digitalisation

Policymakers have a specific role to play in supporting the digitalisation of SMEs. Below is a checklist of what they can do to help SMEs fully benefit from the opportunities of digitalisation in the coming decade (Table 8.1).

Table 8.1. A checklist for policymakers to support small-business digitalisation

| 1. Promote the right skills | ✔ Promote e-literacy in the population as a whole.  
✔ Ensure that a pool of highly educated programmers and analysts is available for firms to help digitise their value chains and use the resulting data.  |
| 2. Build awareness of the digital value chain | ✔ Encourage firms to see internal processes as sources of data that can be digitised, analysed, and used to update and develop new or existing processes.  
✔ Incentivise small firms to adopt digital solutions while small.  |
| 3. Improve and update regulation | ✔ Establish or update regulations relevant to online activities, such as online consumer protection and e-signatures.  
✔ Promote competition in ICT sectors to increase efficiency and lower costs.  |
| 4. Build up digital infrastructure | ✔ Ensure good access to critical connectivity-related technologies such as the Internet, mobile networks and location-tracking services.  |


E-commerce is fundamental for business competitiveness

E-commerce is transforming the global business landscape at an unprecedented speed. The first e-commerce transaction on a commercial website was recorded only 21 years ago, in 1995; it involved the sale of a broken laser pointer on AuctionWeb, the predecessor of eBay, for USD 14.83 (Waxman, 2015). In 2013, global business-to-consumer (B2C) e-commerce sales were valued at USD 1.2 trillion (UNCTAD, 2015a); they are estimated to reach USD 1.92 trillion by the end of 2016 (Statista, n.d.). Billions of transactions are completed each day on the Internet and e-commerce is redefining business competitiveness, particularly for SMEs.

The cost of trading internationally has fallen and consumers increasingly look beyond national borders for the best online deals. Cross-border e-commerce involves goods and services delivered from a supplier in one country to a consumer in another country. According to a recent survey of 24 countries published in the Nielsen Global Connected Commerce Report (2016), more than half of the respondents (57%) said they had purchased from an online retailer outside their country’s border in the past six months. In the area of services trade, cross-border e-commerce also brings new opportunities for SMEs. Online software and app markets, such as App Store and Google Play, help deliver digital products from SME developers to billions of smart devices.

Business-to-consumer e-commerce offers the greatest opportunities

Cross-border e-commerce comes in different forms and shapes, involving many types of players, deals and procedures. Transactions may be between enterprises (business-to-business, B2B), between a business and a consumer (business-to-consumer, B2C), or between two individual consumers (consumer-to-consumer, C2C). B2B transactions account for the largest share of global cross-border e-commerce in value terms, exceeding USD 15 trillion in 2013. Cross-border B2C e-commerce has a much smaller global share, at USD 1.2 trillion in 2013. However, B2C trade is the fastest-growing section of international e-commerce and offers the greatest opportunities for SMEs, which represent the majority of the suppliers in cross-border B2C e-commerce.
B2B and B2C cross-border e-commerce also differ in nature: B2B, in most instances, is still made up of traditional international trade between import and export businesses that are connected by the Internet. Cross-border B2C e-commerce is potentially redefining international trade through its entirely new process chain, which links sellers directly with buyers.

**Competitiveness involves many steps along the e-commerce chain**

Cross-border e-commerce is conducted following a relatively standardised process chain, and many detailed elements along this chain need to be in place for SMEs to succeed (Figure 8.3).

**Figure 8.3. The e-commerce process chain**

![Image of the e-commerce process chain]


**Establishing an online business requires a degree of online readiness**

Businesses do not need world-class programmers to build an online presence, but they do need to understand how web technologies work. Basic building blocks, such as setting up a website and using the communication tools provided by online platforms, are essential to get an online store up and running. Programming, graphic design and photo editing skills are useful for the development of a more sophisticated website, but these skills can also be outsourced to specialists. Table 8.2 outlines some of the most important factors that determine whether firms are ready to “go online”.

**Table 8.2. A checklist for establishing online businesses**

<table>
<thead>
<tr>
<th>Firm capabilities</th>
<th>Business ecosystem</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Device to connect to Internet.</td>
<td>✓ Affordable access to Internet</td>
</tr>
<tr>
<td>✓ Technical knowledge and skills</td>
<td>✓ Access to registration as a vendor on online e-commerce platforms</td>
</tr>
<tr>
<td>✓ Business knowledge and skills</td>
<td>✓ Access to a skilled labour market</td>
</tr>
<tr>
<td>✓ Secure online presence (e.g. SSL)</td>
<td>✓ Language skills</td>
</tr>
</tbody>
</table>


Online security, perhaps the most critical element of e-commerce, is defined as the protection of e-commerce assets from unauthorised access, use, alteration or destruction. Consumers need to know that when they conduct a transaction online, they will enjoy the same legal protection as they do with traditional businesses. It is therefore necessary for SMEs to apply a set of open, industry-led, technical standards that facilitate the interconnection and interoperability of businesses over networks (for instance, Secure Sockets Layer or SSL).

In general, to take a business online an SME may adopt one of four business models:

- **Social media presence**: Brick-and-mortar businesses that use social media platforms for real-time promotional purposes.
- **Passive online presence**: Brick-and-mortar businesses that design a website for passive promotional purposes rather than to engage in online commercial activity.
Active online presence: Bricks-and-clicks businesses that have both an offline and an online presence, enabling consumers to purchase goods or services online and offline.

Pure-play online presence: Businesses that operate exclusively online, from giant e-commerce platforms (e.g. Amazon and eBay), search engines and Internet service providers, to SMEs that solely supply their services online, e.g. an app developer.

Each model has its advantages and shortfalls. For each SME, deciding which model works best depends on its knowledge of the market, as well as the resources available to invest in one or several of the four business models. Many SMEs in developing countries opt first for a social media presence, as the entry costs are low and the skills required to manage such an operation may be acquired through private use of these platforms. For instance, a recently conducted survey among female owned enterprises in Indonesia reveals that small firms are twice as likely to use social media networks to promote their products compared to more traditional forms of advertising (Figure 8.4).

International e-payment systems are vital to competitiveness

E-payments are defined as payments that are initiated, processed and received electronically. Economic and behavioural changes are leading to a rise in non-cash payments, including those made online. Access to competitive payment solutions is vital for all forms of e-commerce; unlike bricks-and-mortar companies, online retailers often require payments to be made before a sale is completed, which underlines the trust consumers must have in e-payment systems. Table 8.3 outlines some of the most important factors for promoting the use of e-payment systems within firms.

Table 8.3. A checklist for promoting international e-payment

| Firm capabilities |  
|------------------|---
| ✅ Bank account and online banking |  
| ✅ Sign-up for encryption solutions |  
| ✅ Knowledge of e-payment solutions |  

| Business ecosystem |  
|-------------------|---
| ✅ Availability of third-party e-payment services provider |  
| ✅ Links between third-party e-payment services provider and local banks to enable local withdrawals |  

Payment systems for online purchases can be classified mainly as account-based and electronic currency systems. Account-based payment systems allow payment through an existing personalised account, which can be executed using credit cards, debit cards, mediators such as PayPal, mobile/landline phones or online banking. Electronic currency systems include smart cards (mainly used to pay small amounts within organisations) and online cash systems (software-only electronic money instruments or prepaid cards).

E-payment offers considerable opportunities for SMEs to expand their customer base, launch new products and rationalise their business (Box 8.3). Adoption of e-payments is likely to increase the global reach of SMEs, improve their access to information exchange and management, and reduce their transaction costs, providing substantial benefits through improved efficiencies, and, ultimately, increased revenues.

Box 8.3. Made in Morocco: Linking SMEs to the world of e-commerce

The ITC has developed a comprehensive package of technical and advisory services, collectively referred to as “e-Solutions”, to help firms better understand e-commerce and overcome barriers to selling goods and services over the Internet.

The full suite of services was put to the test in Morocco in 2015. In January of that year, a group of Moroccan SMEs that had been using e-commerce to sell products domestically formed a cooperative, called Made in Morocco. Their goal was to export their wares, ranging from olive oil and cosmetics to books and music. In May, the firms asked the ITC to help them boost their access to—and competitiveness in—foreign markets.

The ITC took a multi-pronged approach. On the payments side they helped to establish a formal commercial presence in Europe, the United States and the United Arab Emirates to enable the co-operative to handle import duties and domestic taxes. Thanks to these structures, the co-operative’s members can process credit card payments and repatriate earnings in a cost-effective and transparent manner. The local presence also helps to counter customer unease with unfamiliar banks, reassuring them that they will benefit fully from local consumer protection laws, and makes it easy for unsatisfied customers to return purchases.

On the logistics side, the ITC brokered storage, distribution and transportation deals with international partners, including DHL, to facilitate competitive shipping times and costs, improve knowhow about dealing with border procedures, and optimise transport routes. This made it possible for Made in Morocco firms to ship their goods to e-fulfilment warehouses where the products can be swiftly repackaged and dispatched when orders arrive.

Since the ITC initiated its collaboration with Made in Morocco, several members of the co-operative have begun to sell goods—such as couscous, spices, and home decoration items—in Europe. The co-operative is growing and now comprises over 400 SMEs. Made in Morocco has sharply increased export sales and has tripled its transformation rate (the share of website visitors who become customers).


One barrier, however, is the lower likelihood of SMEs to have a bank account. Figure 8.5 shows that between medium and large firms, the differences in the fraction of firms that have a bank account are not huge. For small firms, however, there is a much stronger tendency to be unbanked. Mobile money offers a route for unbanked SMEs to gain access to the services that medium and large firms benefit from.
Figure 8.5. Many small firms in poor countries do not have bank accounts

Credit cards account for the lion’s share of retail e-commerce settlements. Still, usage patterns vary considerably, with most of the developed countries relying on accounts-based systems. Table 8.4 shows that credit cards are the dominant mode of e-payments in North America and Europe, with considerably more variation in the developing world. While mobile payments accounted for only 1% of the total value of e-payments in 2012, they are more important in several African countries “due to high degrees of financial exclusion, limited availability of fixed lines, cost of fixed lines and cost of the card infrastructure” (UNCTAD, 2015b). Nonetheless, in 2012 cash on delivery was the dominant mode of payment in Africa and the Middle East.

Despite the benefits associated with e-payments, a majority of SMEs have been slow in adopting the use of e-payment systems. In the poorer parts of Indian cities, for example, businesses perceive cash as a more convenient and safer mode of payment. In Ghana, problems with mobile money industries include connectivity, security, scalability, interoperability, accessibility, and agent training and representation (IMTFI, n.d.). In some cases, slow adoption is associated with implementation or regulatory constraints, or with the fact that e-payment providers focused initially on unsophisticated microfinance institutions as partners. Limited trust in online transactions is one of the reasons for SMEs’ limited use of e-commerce.

A study of the adoption of e-payment solutions by hotels in the town of Kissi, Kenya concludes that the main factors influencing the adoption of e-payments are the entrepreneurs’ background and the ease of use of electronic tools. According to the study, the adoption of e-payments by SMEs in the hotel sector is driven by the speed and convenience of e-payments, and the low cost of storage facilities. Speed and ease of use also are likely to improve the quality of service and save time, both of which would further encourage the use of e-payments (Stuart and Cohen, 2011; Mas and Ngweno, 2012).
Cross-border delivery has diverse phases and forms

The process by which goods are delivered to customers across borders can have a major impact on:

- the final price of the product or service (because of transport, delivery, custom duties and other costs)
- customer satisfaction (because of delivery time as well as product integrity)
- the reputation of cross-border e-commerce transactions (in terms of cost efficiency, time, and quality of the product), which affects customers’ willingness to consider buying online versus using traditional methods.

Cross-border delivery (usually associated with the transport of goods by sea, road, rail or air) comprises a wide variety of distinctive but strongly interconnected phases, including payment of duties when a border is crossed, until final consignment of the product or service to the end user. Table 8.5 outlines some of the factors firms should consider when setting up their cross-border delivery networks.

Table 8.5. A checklist for facilitating cross-border delivery

<table>
<thead>
<tr>
<th>Firm capabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective warehouse organisation</td>
<td>✓</td>
</tr>
<tr>
<td>Secure packaging for delivery of goods</td>
<td>✓</td>
</tr>
<tr>
<td>Capacity to handle surges in sales during peak periods</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business ecosystem</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to postal and express delivery services with tracking ability</td>
<td>✓</td>
</tr>
<tr>
<td>Access to warehouses and delivery services at destination</td>
<td>✓</td>
</tr>
</tbody>
</table>


Delivering goods across borders

To understand how the delivery of goods occurs, in practice, when an SME engages in cross-border e-commerce, it is necessary to first describe the type of goods that are most commonly sold via electronic means. Indeed, not all goods are suitable for e-commerce, and even less for cross-border e-commerce. Online tradable goods tend to share certain characteristics:

- **Size**: The larger the good, the more costly and complicated the delivery. From a cost-efficiency perspective, businesses that sell small- or medium-sized goods are a better fit for e-commerce than companies that specialise in large goods.
Price: Goods that are traded online tend to be offered at more competitive prices than those sold in physical establishments, as there are no costs related to maintaining a physical presence. Although shipping costs can add significantly to the final price paid by consumers, they are often not borne by the supplier, and high shipping costs are the result of the consumers’ location, in remote areas or in different countries.

Specificity: The goods most commonly traded online and across borders are typical of, or specific to, a certain location, and are generally not available everywhere. For small manufacturers of traditional African handicrafts, for example, the Internet provides an opportunity to access both the African diaspora and foreign consumers more generally. This is the case of eShopAfrica (Ghana), SkinnyLaMinx (South Africa) and Botswana Craft (Botswana), e-commerce firms specialised in selling African arts and crafts primarily to North American and European markets.

Delivering services across borders

There are differences between the supply of services and goods that have major implications for cross-border e-commerce. Services are non-storable and non-perishable, which means that supply and consumption generally occur simultaneously (for example, a hairdresser giving a haircut). It also means that no warehousing system is required for services supplied online, either domestically or cross-border. Furthermore, services are intangible and invisible—they have no specific form that can be touched or seen (for example, a person cannot see or touch a data processing service provided by a computer). This is of great significance for electronic cross-border supply of services, as they are often not subject to border measures such as customs duties or procedures.

AFTERSALES ARE AN IMPORTANT PHASE OF E-COMMERCE

The aftersales phase of the e-commerce process includes all the activities that take place after buyers have made their payment online and sellers have delivered the product or service to their clients. The significance of this phase should not be underestimated, as it provides the basis for establishing a lasting relationship between SMEs and customers. Table 8.6 contains a list of factors that need to be addressed in order to provide aftersales services that satisfy customers.

Table 8.6. A checklist for aftersales

| Firm capabilities | ✓ Effective customer feedback mechanism and customer relations management |
|                  | ✓ Return or cancellation policies |
|                  | ✓ Provision of sufficient information to enable consumers to make informed choices, including information on available forms of redress |
| Business ecosystem | ✓ Availability of dispute settlement procedures |
|                  | ✓ Mechanisms for recognising the validity of transaction-related records, including delivery records, chat records with salespersons, etc. |


Customers play a key role in aftersales, in two main phases:

- consumer evaluation of the product or service delivered to them, which can serve to inform subsequent customers as to the quality, functionality and cost of a purchase
- consumer assessment of, and potential recourse to, all available tools and instruments for redress in case the product or service does not meet their expectations.
Once a product or service is delivered, the end user is faced with some questions: Does the product resemble the one presented on the supplier’s website? Does it perform as indicated on the website? Was the product/service of good quality? Does it meet expectations as to its functionality? Were there additional costs on delivery (e.g. customs duties) that were not included in the information provided by the supplier about the final price of the online transaction?

SMEs engaging in e-commerce that want to be competitive internationally—and to be perceived by consumers as better, more reliable and trustworthy than others—should:

- Give consumers clear, transparent and correct information about the goods or services supplied, their pricing, and all phases of the transaction, from payment to delivery.
- Ensure secure and reliable payments via the Internet.
- Deliver goods or services within a reasonable time frame.
- Provide adequate customer support.

Policymakers can help by ensuring a conducive environment for e-commerce

Making the transition to e-commerce can be demanding for SMEs. In some cases, small businesses lack the technical capabilities required; in other cases, the national environment holds them back. Many factors are critical to the efficient functioning of e-commerce, and most of these are beyond the control of SMEs.

Table 8.7. An e-commerce checklist for policymakers

| 1. Establishing an online business | ✓ Simple business registration process with the local authorities |
|                                  | ✓ Policies and easy practices for intellectual property registration and infringement resolution |
|                                  | ✓ Solid ICT and electricity infrastructure |
|                                  | ✓ Regulations governing e-signatures and e-contracts |
|                                  | ✓ National strategies for e-commerce growth |
| 2. International e-payment       | ✓ Functional financial market in line with international standards |
|                                  | ✓ Foreign exchange system allowing easy convertibility of currency; regulations on the free flow of currency |
|                                  | ✓ Adoption of internationally recognised standards |
|                                  | ✓ Regulations for preventing online fraud and combating cybercrime |
| 3. Cross-border delivery         | ✓ Transparent cross-border customs procedures and rules on the application of duties and taxes for e-commerce |
|                                  | ✓ Simple customs procedures and expedited customs clearance for small parcels |
|                                  | ✓ De minimis threshold for import duty exemption to reduce the burden on SMEs and customs authorities |
|                                  | ✓ Mechanisms to ensure freedom and security of cross-border data flows |
|                                  | ✓ Efficient physical and digital connectivity infrastructure |
|                                  | ✓ Modernised national postal services to increase efficiency of delivery |
| 4. Aftersales                    | ✓ Consumer rights policies and their enforcement |
|                                  | ✓ Adequate infrastructure for implementing and monitoring consumer protection policies |
|                                  | ✓ Appropriate policies for ensuring adherence by firms to national/international standards on consumer protection |
|                                  | ✓ National initiatives for developing effective online dispute settlement schemes |
|                                  | ✓ Elimination of duties on returned products |

The WTO Trade Facilitation Agreement, which entered into force in February 2017 after reaching the threshold of acceptance by two-thirds of WTO members, can support cross-border delivery. The agreement requests member countries that do not have a *de minimis* threshold to adopt one. However, due to the increased flow of low-value goods across borders, driven primarily by e-commerce sales, some countries have begun to lower their *de minimis* thresholds.

Yet, the establishment of *de minimis* thresholds is only one determinant of ease of cross-border delivery; at the same time, cross-border delivery is only one of the four components of the e-commerce process chain discussed here. Other policy factors across the e-commerce process chain that should be prioritised by national policy makers to encourage e-commerce growth are described in Table 8.7 (ITC, 2016a).

**ONLINE TOOLS CAN HELP WOMEN-OWNED BUSINESSES CONNECT TO INTERNATIONAL MARKETS**

There is a voluminous body of literature that supports the idea that empowering women in both economic and social contexts leads to stronger and more prosperous societies (Kabeer, 2012; Klasen, 2002; ITC, 2014; ITC 2015c). Moreover, a review of the evidence carried out by Kabeer (2012) concludes that although gender equality strongly promotes economic growth, the opposite is not necessarily true—that economic growth automatically promotes gender equality. Therefore, an agenda focusing explicitly on women’s economic empowerment may be the best approach to tackle today’s multiple and varied gender gaps.

One of the areas where the gender gap is greatest is in the ownership or management of enterprises. In terms of pure numbers, firms are much more likely to be owned or managed by men than women. In a survey of approximately 19 000 firms across 99 developing countries, only 36% were partially or wholly owned by women (Davies, 2015). This percentage drops to 15% amongst the subset of exporters. This is a problem, as women’s participation in ownership or management is correlated with a number of key development outcomes, such as rises in GDP per capita (Amin, 2014).

Interestingly, there is little evidence for the widespread belief that women-owned or managed firms are less productive than their men-owned and managed counterparts. Once exporting is added to the picture, the results change somewhat. For women-owned firms, the exporter productivity premium (EPP)—the difference in productivity between exporters and non-exporters is roughly half the size of what it is for men-owned firms. This suggests that when women-owned firms face the same barriers to trade as men-owned firms, they find them more costly to overcome. Furthermore, the effect gets stronger as firm size increases, keeping the exporting firms owned or managed by women small (Davies, 2015).

At a first pass, it may not seem obvious why improved connectivity may have any effect on these factors; however, electronic systems that remove face-to-face interactions or mask the gender of the relevant parties can limit the opportunity for gender discrimination. For example, when trying to comply with standards and regulations—a process which often involves multiple face-to-face interactions—micro and small firms managed by women reported “discriminating behaviour of officials” as a greater problem compared to men-managed firms (ITC 2016c).

Connectivity also includes the extent to which enterprises connect with buyers and suppliers. The following section explores the ways in which women-owned or managed enterprises connect to regional and global markets.

**Is there a gender-based connectivity gap?**

To determine whether there is a gender-based connectivity gap at the firm level, the use of emails to communicate with buyers and suppliers by women-managed firms was compared to that of men-managed firms, using the World Bank’s Enterprise Survey dataset (World Bank, 2016). The use of emails can be interpreted as a proxy for accessing the Internet. Taking into account factors such as country, sector, export status, firm size, year of survey and firm age, the analysis showed that women-managed firms are about 12% less likely to use email than men managed firms.
Why would women-managed firms be less likely to use the Internet? The reasons are surely varied, but according to Intel’s publication *Women and the Web* (2012), almost 40% of women surveyed cited lack of familiarity or comfort with technology as a reason. This is largely a reflection of the general disadvantages women often face at the early stages of education, receiving limited or no digital training. Surveys indicate that in developing countries, women are 8% less likely to have access to the Internet than men (Box 8.4). In Arab States, this percentage increases to 9% (Table 8.8).

**Box 8.4. She Will Connect: Reaching over 1.3 million women in Africa**

Through the She Will Connect program, Intel is investing in closing gender gaps in technology access and accelerating career paths by empowering more girls and women to use technology, connecting them to economic and social opportunities, and inspiring them to become future innovators. The focus is on three areas:

1. **Digital literacy skills**: Intel is collaborating with NGOs across Kenya, Nigeria and South Africa to integrate digital literacy into their gender and development programmes targeting women and girls. Participants learn how to operate computers while gaining experience with the Internet, email, social media, online safety, and applications for word processing, spreadsheets and multimedia, among others. The objective is to give them the skills they need to succeed in a knowledge-based economy.

2. **Peer networks and gender-relevant content**: Research shows that the Internet can empower women by providing opportunities to connect with people outside of their communities, reinforcing digital literacy skills and increasing the continued use of ICTs. Content tailored for women and peer networks are being put in place to support this, in co-operation with gender-relevant partners such as World Pulse and UN Women.

3. **Income-generation opportunities**: Face-to-face training prepares women for broader opportunities. Partnerships with organisations that provide training in ICT as well as job placement, such as the African Centre for Women, enable women to access opportunities that can improve their income. She Will Connect is directly linking 10 000 women with income generation opportunities and training programs to ensure lasting community-wide impact. Graduates from the program move on to online work opportunities that enable them to apply their newly acquired digital skills.

By the end of 2016, She Will Connect reached over 1.3 million women in Africa, approximately 200 000 of them through face-to-face training.


**Table 8.8. The Internet gender gap across regions**

<table>
<thead>
<tr>
<th></th>
<th>Africa</th>
<th>Arab States</th>
<th>Asia and Pacific</th>
<th>Americas</th>
<th>Commonwealth of Independent States</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet penetration for men</td>
<td>28%</td>
<td>46%</td>
<td>48%</td>
<td>66%</td>
<td>69%</td>
<td>82%</td>
</tr>
<tr>
<td>Internet penetration for women</td>
<td>22%</td>
<td>37%</td>
<td>40%</td>
<td>64%</td>
<td>65%</td>
<td>76%</td>
</tr>
<tr>
<td>Gender gap</td>
<td>6%</td>
<td>9%</td>
<td>8%</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>World gap</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6%</td>
</tr>
</tbody>
</table>

*Source: ITU (2016) ICT Facts and Figures*
Internet access gives women a voice, creates education opportunities, and facilitates strong networks (Figure 8.6). Indeed, studies indicate that countries with a higher proportion of women in primary, secondary and tertiary education also have higher numbers of top women managers (Amin and Islam, 2014). The advantages of education, in turn, determine what skills women bring to their businesses when they become managers, as well as their willingness to exploit international business opportunities.

**Figure 8.6. Beneficial outcomes that can result from women and girls having online access**

<table>
<thead>
<tr>
<th>EXPRESSION</th>
<th>OPPORTUNITIES</th>
<th>NETWORKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater voice of opinions and exchange of ideas online, in household and political arena</td>
<td>Learning new skills or obtaining formal education</td>
<td>Relationships from within and far beyond the community</td>
</tr>
<tr>
<td>Increased confidence and sense of self-worth</td>
<td>Obtaining employment</td>
<td>Greater access to specialised information (e.g. health, business opportunities)</td>
</tr>
<tr>
<td></td>
<td>Ability to carry out domestic tasks with greater efficiency (e.g. online shopping)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Intel (2012), Women and the Web.

**Digital solutions limiting face-to-face interactions can help**

To the extent that face-to-face interactions present a disadvantage for women-led companies, digital solutions that limit the opportunity for discrimination should benefit women-owned or managed firms. It is a known fact that women face greater barriers to trade at the border, for example. The obstacles range from having to pay larger bribes to gender-based violence (Brenton et al., 2011; Blackden et al., 2010; Morris and Saul, 2000; Ndiaye, 2010). In Liberia, 37% of cross-border women traders were subjected to sexual-based violence and 15% reported being forced to have sex (UNECA et al., 2010). Digital solutions that remove the need for face-to-face interactions when trading at the border or requesting an export licence at a government agency, for example, can help reduce the negative incentives that women running a business face.

The “single window”, an electronic system designed as part of the 2013 WTO Trade Facilitation Agreement, enables traders to submit regulatory documents and certificates electronically, which reduces the need to visit multiple authorities for exporting a product (WTO, 2017). Systems like this may support women-owned enterprises wishing to enter international markets.

In the same vein, reducing the number of middle-men on the path to exporting a product may have greater benefits for women-owned or managed firms, as the number of face-to-face interactions is likely to be lower. There are a number of e-platforms dedicated to directly connecting women enterprises with international buyers. One such platform is the ITC’s SheTrades app (Box 8.5). SheTrades allows thousands of women to connect in real time to buyers, enabling them to offer their products and services in a global market. When women-led businesses connect directly to buyers, they also retain a greater share of the profit they generate, thereby reducing the EPP gap.
In what ways do women-owned enterprises use ICT tools?

Supporting Indian Trade and Investment for Africa (SITA) is a UK Aid-funded project implemented by the ITC. Its aim is to boost the competitiveness and productivity of East African companies by enhancing and capitalising on Indian trade with investments in East Africa (ITC, 2015a). The early stages of project implementation included a firm-level survey of several hundred companies in Kenya, Tanzania, Uganda and Ethiopia working in the cotton, textile and apparel, pulses and sunflower oil sectors. The survey contains a number of ICT-related questions, which together with information on the gender of the manager or owner of the firm allow the analysis of how the use of ICT technologies by women-led firms in Africa compares to that of men-led firms.

Figure 8.7 shows five ways in which ICT is used by firms managed and owned by men as compared to women. Firms with elements of women’s leadership or ownership are less likely to use ICT to communicate with employees and suppliers, which is in line with previous findings from the World Bank Enterprise Surveys (World Bank, 2016). However, the survey also finds that women-led or owned firms seem to be more likely to pay employees using electronic systems. This preference may be explained by data from the Global Findex Database, which indicate that 65% of men in developing countries have bank accounts, compared to 58% of women (World Bank, 2017). Mobile money offers a way for women to narrow that gap. It allows them to get paid quickly, saves them the time needed to travel to often distant bank branches, and—critically—offers them a way to save in a more secure, non-cash form (GSMA, 2014).

Box 8.5. SheTrades: Connecting one million women to market by 2020

The SheTrades initiative provides women entrepreneurs around the world with a unique network and platform to connect to markets. Through the SheTrades app, they are able to share information about their companies, increase visibility, expand networks, connect and internationalise. SheTrades, which aims to connect one million women entrepreneurs to market by 2020, also helps corporations include more women entrepreneurs in their supply chains.

Thanks to SheTrades, thousands of women businesses—located predominantly in Kenya, Mexico, Nigeria, India and Brazil—are now able to connect in real time, boosting their companies in the global market and in supply value chains. All registered companies’ benefit from e-learning courses, mentoring sessions, webinars and guidebooks on topics such as negotiation skills, e-commerce and market analysis, among others. Opportunities to attend trade fairs and exhibitions within the SheTrades delegations are also offered through the platform.

Sara Yirga is owner and manager of Ya Coffee Roasters in Ethiopia, one of the companies registered on SheTrades. Her goal is to improve farming, roasting and quality standards, and to expand her market by meeting new business partners. SheTrades provides what Sara is looking for: a platform for networking with peers, but also a place where investors and buyers are ready to source products and services from women entrepreneurs. In Sara’s words, “SheTrades is a tool that really helps many women achieve their dreams of connecting with other women on the other side of the world. I see it also as a platform to inspire and empower women from different walks of life, but having one thing in common, a business to run.”

The SheTrades app is regularly updated, improved and upgraded with new functionalities. As of November 2016, it displays a tracking system that allows enterprises to go from commitments to implementation. Governments, individuals and research institutions, among others, can make specific, measurable pledges online.

Figure 8.7. Use of ICT by women- and men-managed or owned firms

Do women exporters trade regionally or globally?

The SheTrades app is a rich source of information on women-owned or operated firms. Creating a profile on the site involves filling in a variety of information on the company, from the product being produced to the destination of exports. Using profile information, it is possible to assess the types of business linkages women exporters make with the outside world, and specifically whether being part of a value chain makes any difference.

Figure 8.8 compares the share of firms exporting to their host region, to two regions (i.e. multi-regional) and to three or more regions (i.e. globally), split by whether they are inside or outside an international value chain. Here, being part of a value chain is defined as producing intermediates; being outside a value chain is seen as realising trade in final goods. The data indicate that half of the women-managed firms on the SheTrades platform who produce final goods for export, do so to countries within their own region. However, women-owned firms in a value chain are significantly more likely to sell beyond their host region, trading to two or more regions. This adds to evidence that suggests that being in a value chain helps firms to access markets.
Figure 8.9 illustrates a second interesting trend. It plots the percentage of women employees in a firm against where the firm trades: whether in its home region, in multiple regions, or globally. The results suggest that as firms expand their global reach, they employ proportionately more women, at least within the sample of firms surveyed by SITA. Furthermore, if the enterprise is women-led, the share of women employees is significantly higher, indicating that the involvement of women-led enterprises in international trade can boost women’s participation in the labour force to a greater extent than the involvement of other types of companies.

Figure 8.9. Firms trading globally employ more women

Source: Adapted from ITC (2015b), Supporting Indian Trade and Investment for Africa (SITA) data.

A checklist for policymakers can help to meet the global goals

Closing the gender-based connectivity gap will take considerable effort, especially by policymakers. A low supply of well educated, technically literate women limits the chances of women with the right skills making it to the top of any business. Those who manage to overcome these initial barriers and become managers also may face discrimination, which imposes costs on their business. These factors discourage women-led firms from entering international markets and reduce their opportunities for growth.

The Sustainable Development Goals (SDGs) provide a framework for countries to focus their efforts on promoting the connectivity of women-managed and owned firms. SDG 5.b states that countries should “enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.” Establishing targets and ensuring that data collection processes capture the gender dimension are crucial steps to tackle the gender-based connectivity gap.

The following checklist of actions can help policymakers meet the objectives of SDG 5b. (Table 8.9).

Table 8.9. Achieving SDG 5.b: A checklist for policymakers

| Business ecosystem | ✓ Establish dedicated programmes to teach girls e-skills. |
|                   | ✓ Boost the affordability of the Internet so that more women with lower incomes have access. |
|                   | ✓ Improve women’s participation in producing online content. |
|                   | ✓ Limit the opportunities for face-to-face discrimination by digitising processes. |

| National environment | ✓ Integrate gender priorities into national ICT development strategies. |
|                     | ✓ Integrate the gender dimension into trade promotion initiatives. |
|                     | ✓ Ensure ICT statistics include gender disaggregation. |
|                     | ✓ Mandate non-discrimination clauses to help women enter the labour force, thereby increasing the pool of potential women managers and owners. |
CONCLUSIONS

Over the past three decades, the connections that bind together the economic activities of countries have grown and deepened at a remarkable rate. In this general context, digital connectivity is helping to connect SMEs and women-owned or managed enterprises to customers and suppliers around the world.

Firm-level data show that there is a significant connectivity gap, however, between small and large firms. Small firms are found to be ten times less likely to have a business website and eight times less likely to use email, than large firms. This is a problem, as poor digital and physical connectivity lowers the likelihood of firms engaging in international markets. Firms that do not export are found to be two times less likely to have a website than firms that do. SMEs in the LDCs face the biggest barriers, as the connectivity gap for them, in comparison to larger firms, is significantly greater than in more developed countries. To support SMEs in connecting to global markets, policymakers can promote e-literacy, encourage firms to digitalise their production processes, and ensure national ICT infrastructure meets the demand of consumers and firms alike.

The exporter productivity premium is also roughly half the size for women-owned firms compared to men owned firms. Part of the reason for this may be their weaker use of connectivity technologies, which often help firms find new buyers and suppliers. For example, women-managed firms are 12% less likely to use email than men-managed firms. Discrimination at the border may also be a factor reducing the benefits of trade for women. Digital tools, such as the single window, eliminate or reduce the need for personal interactions, which sometimes make it difficult for women to get their goods across the border.

Firm-level data also suggest that there are differences in the use of technologies between women- and men-owned firms. Women-led companies in selected East African countries are more likely to use mobile money as a means of paying employees and suppliers than men-led companies. This may be due to the advantages that mobile money offers women in terms of providing an independent and protected mechanism to save money.

To promote women’s access to competitiveness-boosting digital technologies, there are numerous actions open to policymakers. These include establishing dedicated programmes to teach girls’ e-skills, improving online content to promote women’s participation, and integrating the gender dimension into trade promotion initiatives and national ICT strategies.
REFERENCES


OECD (2012), “Public debt, economic growth and nonlinear effects: Myths or reality?”, OECD Publishing


UNCTAD (2015a), Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries, United Nations Publications.


World Bank (2016), Enterprise Surveys (database) www.enterprisesurveys.org


WTO (2013), E-commerce in developing countries. Opportunities and challenges for small and medium sized enterprises, World Trade Organization.

