

## Executive Summary

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# Meeting the standard for trade



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The International Trade Centre (ITC) is the joint agency of the World Trade Organization and the United Nations.

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# Meeting the standard for trade

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# Foreword

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Making trade 'possible' is an important part of crafting international trade rules. Making trade 'happen' is very much at the core of the work of the International Trade Centre (ITC).

Making 'good' trade happen hinges upon effective standards that protect consumers and the environment, including plant and animal life – and ensuring that all countries and their micro, small and medium-sized enterprises (MSMEs) have the tools to address these standards. Standards and regulations for both goods and services are essential tools to achieve the social and environmental sustainability of trade, contribute to consumer protection and facilitate trade by guaranteeing compatibility.

In addition to public standards and regulations, the 21<sup>st</sup> century trade landscape is also marked by a proliferation of voluntary sustainability standards (VSS), which must be considered in any business or policy discussion about regulatory frameworks. They are at the heart of international value chains (IVCs), supporting better traceability, transparency and efficiency. The majority of VSS originate in the industrialized world. But this trend is shifting: between 2010 and 2015, over one-third of new VSS originated in non-OECD countries.

Standards are pervasive and diverse. Toys, drugs, business processes and food require very different sets of standards, regulations and technical infrastructure. Navigating the maze of standards and regulations – which many trade practitioners call non-tariff measures (NTMs) – is complex, especially for small and medium-sized enterprises (SMEs). These are particularly vulnerable to the compliance costs that standards and regulations can represent.

Given that getting SMEs into international markets is critical to inclusive global growth and job

creation, it is imperative that standards are both known and achievable.

This is why this year's *SME Competitiveness Outlook* focuses on standards. It combines data analysis, academic insights, thought leader opinions and case studies to provide new insights and guidance on how to navigate this complex world of standards. Policymakers, SME managers, trade experts and standard setters will find information, analysis and cutting-edge tools on the links between standards, trade and competitiveness.

To assist SME managers in navigating the complex world of standards, the report contains guidance for SME managers on how to select and implement standards and regulations.

Policymakers and trade and investment support institutions (TISIs) can help SMEs by ensuring that standards promote 'better' trade, rather than become a bottleneck. This report offers policymakers a five-point action plan to strengthen firms' ability to adopt standards and prove compliance.

A key role for policymakers is to provide well-functioning, appropriate technical infrastructure for standards. This technical infrastructure includes the multitude of bodies involved in creating, maintaining and implementing standards and regulations, both at and behind the border, in the form of national standards agencies, conformity assessment bodies, metrology and accreditation bodies and more. The sheer number of agencies, together with the complex nature of their interdependence, makes improving technical infrastructure a real challenge. Nevertheless, it is a prerequisite for firms interested in selling abroad.

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A component of this infrastructure is shaping governance at the border to facilitate trade. The policymaker's role, however, does not stop at the border. Pro-active involvement in international initiatives working towards mutual recognition or harmonization of procedures, certifications and standards can be highly beneficial. Fostering public-private dialogue can also help in facilitating absorption of standards by firms.

Resource-constrained governments have to make strategic decisions about which product lines they will support with new or more internationally recognized technical infrastructure. This is the case because such infrastructure can be costly.

Regional integration can play a role here. Where domestic market size is insufficient to justify costly investments, governments can come together and pool resources to build the necessary technical infrastructure at a regional level. This is an especially useful approach for small economies and least developed countries (LDCs).

Investment decisions in technical infrastructure have serious long-term implications; they ultimately influence the content of countries' export baskets. To support policymakers in thinking through their investment decisions, this report contains regional snapshots, as well as 35 country profiles featuring information on product lines with unexploited export potential and on diversification opportunities.

This is combined with data on regulatory intensity across sectors, along with SME weaknesses and strengths when dealing with standards and regulations in the relevant economies. Together, policymakers can find a comprehensive, nuanced picture of where opportunities may lie for further investment to boost exports, and where support may be required for SMEs to overcome related burdens.

ITC, the joint agency of the United Nations and the World Trade Organization (WTO), has a long tradition of assisting governments in this endeavour. We collect data on government regulations, on business perceptions of such regulations and on VSS. These data are made available via online platforms designed for the business community.

ITC's policy advice to trade policymakers and standard setters is designed to support them in making standards work for SME competitiveness. Much of this advice is based on public-private dialogue facilitated by ITC. We assist TISIs directly in

building the technical infrastructure that underpins standards and in obtaining international accreditation. We also work with SMEs to meet technical requirements in international markets and overcome technical barriers to trade.

ITC does not work in isolation. Both in the field and in Geneva, ITC works closely with public and private-sector partners to synergise efforts for greater impact on the ground. In our data collection and dissemination, we work with partner agencies like the United Nations Conference on Trade and Development (UNCTAD), the United Nations Economic Commission for Europe (UNECE), the World Bank and WTO – as well as with our network of private-sector partners. On the capacity-building side, we value our longstanding relationship with the International Organization for Standardization (ISO). Our analytical work this year has benefited from collaboration with the European University Institute and from ITC's involvement in the research network on Productivity, Non-Tariff Measures and Openness (PRONTO). I thank all of these partners for our excellent working relationship, and look forward to further collaboration.

My particular thanks go to the five global thought leaders who contributed personally to this report by outlining their views and visions on the role of standards and regulations for international trade. My thanks also go to Sri Lanka, the host of this year's World Export Development Forum, which contributed a special feature to *SME Competitiveness Outlook 2016*.

This year marks the first full year of the implementation of the UN Global Goals. With this report, ITC wants to support the efforts of UN Member States towards meeting these goals. Firm in our conviction that SME competitiveness is key for the inclusiveness of trade, we believe that greater integration of SMEs in IVCs can be achieved in a way that is socially and environmentally sustainable. I am confident that this report provides valuable insights into how this can be achieved.



Arancha González  
Executive Director, ITC

# Executive Summary

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Standards and regulations are essential to international trade and value chains. They determine whether inputs are compatible with the next stage in the value chain, final products are safe for consumption and international trade is socially and environmentally sustainable.

This year's *SME Competitiveness Outlook* focuses on making the most of standards and regulations for the competitiveness of small and medium-sized enterprises (SMEs). The report combines data analysis, academic insights, thought leader opinions and case studies to provide guidance for policymakers, SME managers and standard setters.

The report exploits two unique ITC databases for this purpose: the ITC Business Survey on Non-Tariff Measures (NTMs) and the ITC Standards Map, which has data on more than 200 voluntary sustainability standards (VSS). ITC collects and disseminates this data to contribute to increased transparency in trade and provide market-relevant information to SMEs and the institutions that support them.

This report uses these databases for econometric analysis, and draws new and useful insights on sustainable value chain governance and the discriminatory effect of burdensome standards and regulations. The effect of this burden is twice as negative for the exports of small firms as for the exports of large firms.

Standards and regulations are here to stay because of their positive impact on sustainability, compatibility and consumer protection. It is therefore necessary for SME managers to increase their diligence in dealing with standards and regulations. Policymakers and trade and investment support institutions (TISIs), meanwhile, must do what they can to reduce the burden of these measures on SMEs.

The findings presented in this report allow us to provide readers with:

- Strategies for SME managers on how to select and implement standards and regulations.
- An action plan for policymakers and TISIs seeking to think strategically about the ability of SMEs to compete in markets where standards and regulations matter.

*Standards and regulations are here to stay because of their positive impact on sustainability, compatibility and consumer protection.*

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**Standards are part  
of our daily life  
Anything grown,  
produced and traded  
is subject to standards**



## Standards – a part of our daily life

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Standards and regulations are an integral, if easily overlooked, part of our daily life. They determine whether a plug fits into a socket, whether one mobile phone can connect to another, or whether we understand the traffic signs when driving in another country. They determine whether water is safe for human consumption, whether a medicine can be sold or whether a financial institution is allowed to accept deposits and provide credit.

### *Standards are pervasive*

Any company wanting to export is likely to have to meet at least one standard or regulation, be it a governmental regulation affecting imports, a voluntary sustainability standard or a services regulation. An exporter of toddler beds to the United States of America, for instance, must comply with the federal regulation defining safety standards for toddler beds. For exporters producing wooden beds, it is also worth considering employing wood certified by the Forest Stewardship Council (FSC), as the FSC standard is widely used in the furniture industry. Agriculture exporters are likely to employ standards developed by the United Nations Economic Commission for Europe (UNECE) as 70% of fruits and vegetables comply with UNECE agricultural standards.



### *Standards set the bar*

The terms 'standard' and 'regulation' mean different things to those who use them. Lawyers, economists, academics, practitioners, government officials and private-sector representatives see standards and regulations in diverse ways. Trade practitioners often use the term NTMs when referring to standards or regulations.

This report takes the point of view of decision makers in SMEs, and those who advocate on their behalf. For entrepreneurs, terminology is not of primary concern. ITC firm-level surveys repeatedly show that what matters for SMEs is whether access to a selected market depends on meeting the relevant quality level. Whether these originate with a government, a non-governmental body or a private-sector buyer matters little, as does the distinction among national, regional or global standards.

## Definitions used in this report

This report defines standards and regulations broadly:

- Standard – a required or agreed level of quality or attainment.
- Regulation – a rule or directive made and maintained by an authority, often a government.

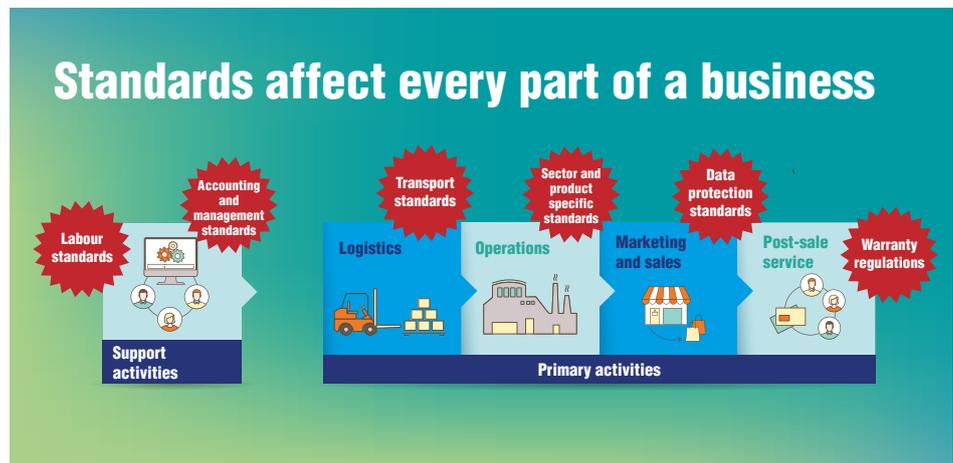
A standard becomes a regulation when written into law. The EU Directive 93/42/EEC on medical devices, for instance, makes multiple references to relevant ISO standards, such as ISO 1135-4:2011 on 'transfusion equipment for medical use'.

Whenever it is not necessary to make a distinction between standards and regulations, the report uses the term 'standard' for both.

Where the term 'standard' does not explicitly refer to rules or directives made by a governmental body, the report makes this clear by specifying or naming the type of standard under discussion.

### *Running a business: Standards every step of the way*

Standards play a critical role at every stage of a firm's generic or – internal – value chain, and in its interaction with suppliers and customers. An internal value chain consists of support activities and primary activities. Support activities pertain to the firm's infrastructure (e.g. management, accounting, and finance), human resource management, technology development and procurement. Primary activities are: inbound and outbound logistics; marketing and sales; post-sale service; and operations, which reflect the firm's core business.



Services-related standards and regulations abound in manufacturing production networks, strongly affecting support activities such as accounting, management and human resources. They are also crucial for primary activities such as logistics, marketing and sales, and post-sale services.

### *Standards are diverse*

At the operations level, standards and regulations are highly specific to sectors or products. A car manufacturer and a hotel may abide by the same accounting

standards, but technical regulations for car production have little in common with services regulations for the tourism industry. Food safety regulations for fruits and vegetables, safety rules for cars, compatibility standards in telecommunication, prudential regulation in finance and privacy regulation for data storage all fall into the category of standards. But they cover very different worlds.

Each sector has its own set of standards and regulations, and institutional set-ups for knowledge transfer, monitoring and certification differ substantially.

Multiple standards also coexist within individual sectors. In the textile industry, the GINETEX textile care labelling system, which provides instructions on washing, drying, ironing and dry cleaning clothes, fulfils an entirely different purpose than the labour standards of the International Labour Organization (ILO).

## Sustainability, compatibility, consumer protection

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Standards play a key role in economies. They are introduced by governments or businesses to facilitate compatibility between bolts and nuts, software and hardware, one software network and another. Businesses introduce standards in value chains to protect their brand name, and governments adopt regulations to protect consumer safety. Increasingly, standards and regulations target social and environmental objectives. Some sectors face more regulations or standards than others.

### ***Consumer protection regulation covers most economic activities***

Fresh and processed foods are marked by the most technical regulations per imported product and the highest share of imports subject to such regulations. This is unsurprising. Because food safety has a direct and immediate effect on human health and life, governments seek to control strictly the quality of food that reaches consumers.

Consumer protection regulation is hardly limited to food, and is common to most economic activities, although its design and stringency varies. Regulations tend to be stricter when a good or service affects consumers' physical well-being (e.g. food additives or surgical interventions), rather than solely their economic well-being (e.g. financial products).

Consumer protection regulation in agriculture and manufacturing often specifies product characteristics. In the services sector, it often targets supplier characteristics.

In food safety, for example, regulation of products includes maximum levels of nitrates in spinach and lettuce and maximum levels of lead in fruit juices. Regulation of suppliers includes food hygiene in restaurants, such as requirements regarding the availability of hand washing facilities for staff or the location of storage for disinfectants.

### ***Services standards are crucial in international value chains ...***

The more vertically integrated the value chain is, the more important standards and regulations become. The standards relevant for inbound and outbound logistics are critical to the effective functioning of international value chains (IVCs). Compatibility standards are also significant, particularly where assemblers source parts from multiple suppliers.

Such standards allow firms to benefit from network externalities and producers to coordinate their activities along the value chain system more efficiently. A Boeing airplane assembled in the United States, for instance, contains parts from multiple

*The standards relevant for inbound and outbound logistics are critical to the effective functioning of international value chains.*

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suppliers located in more than 10 countries. When the plane is assembled, all the different parts have to be compatible. A Barbie doll designed in the United States and assembled in Malaysia also contains body parts produced by suppliers in Chinese Taipei and clothing from suppliers in China. The clothes have to fit perfectly on the body part in order for Barbie to look attractive and for children to be able to change her clothing.

### *... and for their sustainability*

Lead firms of IVCs increasingly show concern for the reputation of their brand. Applying standards within the IVC can facilitate monitoring for lead firms. A lead firm may follow a globally established standard and/or its own standard to set the quality requirements along the value chain. All inputs along the value chain need to be aligned with regulatory requirements or brand expectations.

In this context, international standards for management, accounting and labour practices are playing an increasingly important role within IVCs. Management and accounting standards are becoming more important for SMEs as international buyers increasingly search for suppliers that possess key attributes, such as management quality and strong accounting methods. International labour standards and regulations, meanwhile, are relevant for human resource management within IVCs. Compliance with international labour standards is often necessary to operate efficiently and jointly with partners.

## Some facts and figures about standards

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### *Social and environmental sustainability standards are widespread*

Like consumer protection regulation, sustainability standards cover most economic activities. They are frequently non-governmental initiatives.

Whether the focus is on social or environmental sustainability differs across sectors. ITC collects data on VSS that are disseminated through the ITC Standards Map and used in this report.

VSS mainly aim to:

- Eliminate negative impacts of economic activity on the environment (e.g. GlobalG.A.P., ProTerra, certification by the Global Sustainable Tourism Council).
- Protect basic human rights, such as work and living conditions (e.g. Ethical Trading Initiative, Business Social Compliance Initiative Code of Conduct).
- Improve the economic situation of producers (e.g. Fairtrade International, UTZ).

Implementation levels of such VSS differ significantly across countries. While there are many countries in which producers implement only a handful of VSS, in some countries producers can get certified to as many as 88 initiatives. Access to conformity assessment is likely to be a major determinant of the number of VSS operating in a country.

### *ILO conventions: The most widely referenced international governmental standard*

The ITC Standards Map online database reveals that the ILO core conventions, setting out basic labour rights such as the prohibition of forced work, are the most widely referenced international governmental standards in VSS. The conventions stipulated in the ILO Declaration on Fundamental Principles and Rights at Work adopted in 1998 are referenced in 105 out of 180 VSS in the ITC Standards Map. Other ILO conventions are

*International buyers increasingly search for suppliers that possess key attributes, such as management quality and strong accounting methods.*

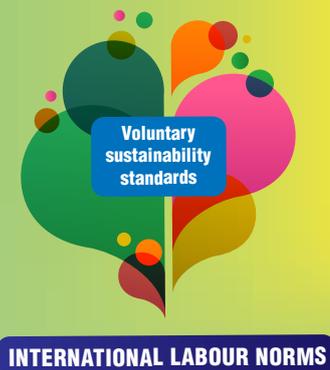
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*Social and environmental sustainability standards cover most economic activities.*

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## More friends than foes

**58% of voluntary standards refer to core ILO conventions**



referred to in 69 VSS. The international governmental norms ranking third and fourth in terms of frequency are the norms set by the World Health Organization (WHO) and the UN Universal Declaration of Human Rights, which are referenced 44 and 42 times respectively.

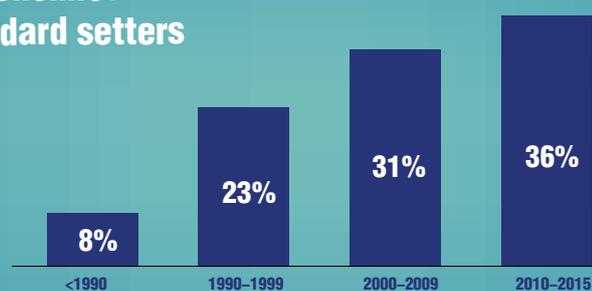
### *Emerging economies play a growing role in VSS*

Most voluntary standards originate in the industrialized world. One of the earliest VSS was the Fair Trade label Max Havelaar, initiated in the Netherlands in 1988. The first product to trade under the label was coffee produced by a Mexican cooperative. About three quarters of the currently active VSS covered in the ITC Standards Map have originated in the Organisation for Economic Co-operation and Development (OECD).

The trend is shifting, however. Between 2010 and 2015, more than one-third of new VSS originated in non-OECD countries. According to ITC's Standards Map, standard setters are particularly active in Brazil, Colombia, India, Kenya and South Africa.

For example, in South Africa, a number of VSS cover: organic production (Afrisco); fruits (Sustainability Initiative of South Africa – SIZA); viticulture (Wine and Agricultural Ethical Trade Association – WIETA); and tourism (Fair Trade Tourism Product Certification Standard). In Colombia, a number of VSS cover different types of products: Echar PA'LANTE – Colcocoa for cocoa, Florverde for floriculture and Alliance for Responsible Mining (ARM), covering metals and minerals extraction.

### Emerging economies become standard setters



Share of voluntary sustainability standards with headquarters in developing countries

Standards may not be globally available.

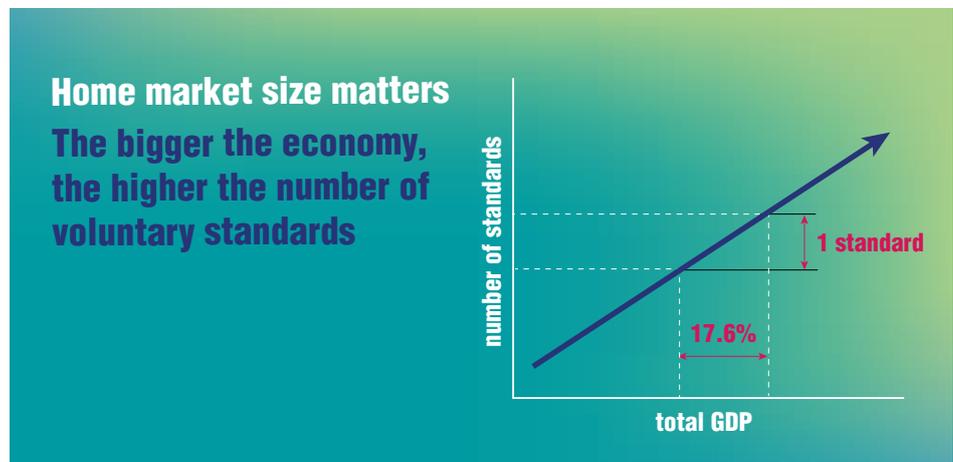
**Larger markets have more sustainability standards**

Geographically, sustainability standards are not available to everyone on an equal basis. On average, ITC found 33 standards operating in a country. The numbers are much lower in the Middle East and North Africa and sub-Saharan Africa. The largest number, 106, is found in the European Union.

Home market size is a major deciding factor in the number of VSS in a country, as shown in a recent publication by ITC and the European University Institute (EUI). Larger economies have more voluntary standards present in their territory. In other words, they have higher standards availability.

This finding is likely to be driven by supply-side related factors:

- First, larger economies are more diversified. VSS tend to focus on certain products and services – those for which consumers and value chain players require higher standards, more transparency and traceability, for example agriculture, mining and textiles. Larger, more diversified economies have a higher probability of producing such products and services; hence we expect a higher number of standards in operation.
- Second, third-party certifiers (conformity assessment bodies) generally operate as commercial entities and choose their geographic location based on cost-benefit analysis. Setting up local premises involves fixed costs, which is more likely to be economically viable in larger economies with a sufficient number of clients (i.e. producers to certify).



**Standards affect competitiveness**

**Investing in standards and regulations is costly, especially for SMEs**

Smaller and less productive firms find it harder to cover fixed costs to comply with standards and regulations. The same requirement represents a bigger obstacle to a developing country small firm, which therefore is likely to have lower capacity to comply.

**Small firms' export value hit twice as hard**

This report finds that when there is a 10% increase in the frequency of regulatory or procedural trade obstacles encountered, the value of exports decreases by 1.6% for large firms. For small firms, however, the value of exports declines by 3.2%.



### ***Firms from poorer countries find it harder to meet standards***

This is particularly a problem in developing countries, where firms tend to be smaller and less productive than in developed countries. Firms in poorer economies may also face a more challenging immediate business environment, because necessary testing facilities and logistics infrastructure are more likely to be lacking.

As one interviewee in the NTM Business Surveys said, '[exported] products need to be tested, but proper equipment is needed, for testing and facilities in our country are limited' and 'the Ministry of Health takes time to deliver health certificates [required to export] and the Ministry of Fisheries takes too long to issue the export authorization'.

Evidence collected through ITC NTM Business Surveys confirms that firms located in poorer countries are more likely to complain about regulatory or procedural obstacles to trade than their counterparts in richer countries. For example, exporting and importing firms from Malawi report, on average, a higher share of markets where they face burdensome regulatory or procedural obstacles to trade compared to exporting and importing firms from Mauritius. Investments in the relevant technical infrastructure in poor economies can help to address this.

### ***Only the fittest survive***

This report also finds that technical regulations do not affect the prices of existing exporters, but do affect those of new entrants. This may be due to the latter being unable to internalize the costs of compliance with technical regulations.

Econometric findings show that higher presence of technical regulations leads to increased exit rates for firms of all size and a higher concentration of firms within each sector. Only the fittest survive – those that have the financial capacity to absorb increased costs and that are able to offer a higher-priced product to consumers.

### ***Procedures discriminate against women***

Female-owned enterprises do not report a higher burden from regulations than those owned by men. This changes, however, when it comes to procedural obstacles, which often require personal interaction between firm managers or owners and national officials. When exporting is subject to a licence, for example, a female applicant can face discrimination in countries with gender-biased cultural barriers. This can take the form of demand for a bribe or a delay in processing the application.

ITC Business Surveys on NTMs show that the share of procedural obstacles to trade reported by female-owned exporting firms is higher than for male-owned firms. Notably,

## Women face more procedural obstacles

**When exporting, women and men encounter the same regulations**  
**In personal interactions, women face more procedural obstacles**



*The share of procedural obstacles to trade reported by female-owned exporting firms is higher than for male-owned firms.*

the share of cases associated with 'information and transparency issues' is greater among female-owned firms than male-owned firms. Female-owned micro firms report a higher share of procedural obstacles due to 'information and transparency issues', 'informal or high payments' and 'discriminatory behaviour' than male-owned micro firms.

Female-owned exporting enterprises are also found to experience better sales and profitability when trading with far-off destinations than when trading just across the border from their home country. Reduced regional trade may therefore be one of the unintended consequences of a bias against women through procedural obstacles.

### **Compliance costs are lower for more competitive SMEs**

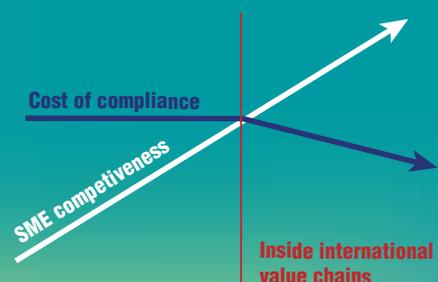
Complying with standards associated with IVCs is likely to benefit prospective suppliers, because it gives privileged access to the value chain and thus to buyers.

Beyond these tangible returns on investing in compliance, connecting to IVCs may offer other financial advantages, according to data from the ITC Standards Map. When standards are set by companies, producers and other stakeholders (such as buyers in the supply chain) are more likely to share implementation and certification costs. This evidence suggests that when lead firms set standards, they are more likely to help defray some of the compliance costs that otherwise would be entirely borne by suppliers.

Accessing IVCs, however, is easier said than done. Lead firms have an incentive to look for the most suitable suppliers before entering into commercial relationships with them. Therefore, SMEs must be competitive and productive to integrate successfully into such chains. Only the most competitive will succeed.

## Competitiveness reduces the cost of compliance

**To enter a value chain, SMEs must be competitive first**  
**Costs are shared among businesses within a value chain**



## Policymakers and managers: Similar challenges, different angles

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### *Managers navigate a complex world of standards*

Management decisions are crucial for export success. Navigating the complex world of regulations and standards is one of the challenges managers meet. For those running a firm that exports and/or imports, this challenge is more complex.

Business managers can take practical steps to make standards and regulations work for the firm, instead of against it. For this they need to understand how their firm is affected by what is often known as regulatory turbulence – the combined effect firms face due to regulatory distance and regulatory fluctuation. Regulatory distance captures the stringency of standards and regulations in countries in which the firm operates. Regulatory fluctuation indicates how these change over time.



### *Information is crucial; so is the ability to assimilate and use it*

Access to information about the design of standards and the compliance and certification processes is crucial to make standards work for SMEs. There are multiple national, regional and global platforms of information, which this report describes. SME managers, however, also need to have the capacity to digest and use this information constructively.

Once managers decide which standards and regulations to meet, compliance must be ensured. This becomes an integral part of production, provision, import and export of goods and services. From the point of view of an exporting company, standards and regulations affect every stage of goods production and services provision, from importing inputs to delivering the final product or service. Proving compliance is another critical step, notably when serving foreign markets.

### *Being proactive, gaining market share*

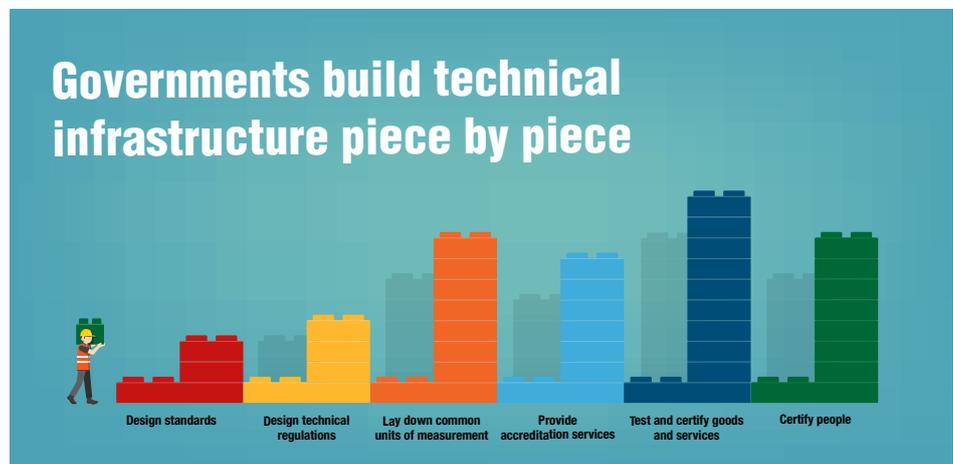
Managers also have the option of seeking to influence the development of standards and regulations. Standard-setting processes usually include consultations involving private sector specialists. The development of industry standards, for instance, typically involves members of relevant trade associations or a firm consortium. Proactive participation in this process is particularly important for managers because other participants are likely to be their direct competitors.

The payoffs can be significant, as illustrated in recent case studies. Even if a firm is not able to influence significantly specifications in a national or international standard, being informed early is often enough to adjust business operations and be prepared for the new standard.

### ***Policymakers and TISIs shape the immediate business environment***

While standards are a gateway to trade, compliance can be time-consuming and costly. Whether costs are prohibitive largely depends on the support SMEs find in the immediate business environment, in national legislation and from national institutions.

Policymakers and TISIs can shape a supportive regulatory environment that simultaneously protects the public interest. This role is complex, because an effective regulatory environment needs to be supported by a national technical environment consisting of numerous interdependent institutions. Shortcomings in a single institution can trigger systemic problems.



### ***Informed decisions for costly investments***

The national technical infrastructure to support standards and regulations comprises processes and institutions that define standards and regulations and carry out conformity assessment. Conformity assessment, in turn, has five components: testing, inspection, certification, metrology and accreditation. Creating and maintaining a well-functioning technical infrastructure is challenging for resource-constrained developing countries, yet it is crucial for connecting firms to regional and global markets.

The specificity of standards at the operations level has implications for how governments target resources to build certification and other standards-related technical infrastructure. It also has implications for the private sector's role in this process.

Different expertise is needed to set up a laboratory to test food additives, a crash-testing institute for vehicles, or an institution to regulate finance. Resource-constrained developing countries may not be in a position to build these all at the same time. Investment decisions regarding technical infrastructure may therefore promote one sector over another, whether intentionally or not.

### *Public and private sectors: Joining forces*

Governments have a role to ensure that national technical infrastructure works for firms. Collaboration with the private sector – often through TISIs – increases the chance that regulation and implementation are business-friendly.

When it comes to standards and regulations, it can be challenging to attain a government objective such as consumer protection or environmental sustainability without unduly hampering production processes. Striking the right balance often requires involving industry specialists in the standard-setting process.

Governments must weigh public and private roles, however, to avoid industry capture. Indeed, there may be incentives for industry to lobby for regulations that offer protection at the border or are too lax to protect consumers, workers or the environment effectively. The responsibility for avoiding such situations lies with the government.

### *An action plan for policymakers and TISIs*

Setting the right incentives while introducing appropriate checks and balances is a complex challenge. Part of the challenge relates to the number of institutions that make up national technical infrastructure, and their interdependence.

### *Five-point action plan to make standards work for trade and development*

To make standards work for trade and reap maximum benefits from trade opportunities, policymakers may focus on five areas:

- Make information on standards and technical regulations accessible to firms.
- Encourage and enable firms to adopt standards and comply with technical regulations.
- Strengthen technical infrastructure.
- Improve governance at home to facilitate border crossing.
- Leverage international mechanisms that facilitate trade.

TISIs are likely to play a key role in this action plan, notably because they are active in the technical infrastructure relevant for standards and regulations in many countries.



### ***Facilitate access to information***

Obtaining information on standards and regulations, especially in unpredictable regulatory environments, can be costly for firms. General and sector-specific TISIs can contribute to addressing this challenge by disseminating relevant information. Such entities interact directly with businesses and are thus better positioned to understand their information needs.

### ***Enable firms to comply with technical standards***

When firms consider implementing standards or regulations, they are likely to perform an analysis of the costs and benefits. On the one hand, costs are often easy to identify, as they are tangible and immediate. On the other hand, benefits are often hard to identify and measure. Strengthening firms' awareness and capacity to deal with relevant decision-making processes can help.

### ***Support technical infrastructure***

Technical infrastructure related to conformity assessment is complex and potentially costly. A challenge for governments interested in building their country's technical infrastructure is the fact that standards and regulations are specific to certain sectors. For instance, the training and equipment needed to demonstrate compliance with a variety of sanitary and phytosanitary (SPS) measures differs greatly across products. Testing milk and meat are two totally different processes. As governments have limited resources, there inevitably are choices regarding which sectors to support. This may have significant impact on the country's future export course.

### ***Strengthen governance at home***

The lack of coordination among agencies involved in the end-to-end trading process is one of the most common causes of delays in administrative and compliance procedures for exports. Increased inter-agency coordination, for instance between conformity assessment bodies and border agencies, can contribute to addressing this.

More importantly, it is crucial to define and demarcate clearly the roles and responsibilities of all institutions involved in national infrastructure. The demarcation between accreditation and certification bodies is important. The definition and set-up of the institution that applies sanctions for breaches in compliance are key to the institution fulfilling its role.

There needs to be a well-defined national strategy for how these institutions work together to support SME compliance with standards and regulations.

### ***Leverage international mechanisms***

Certification of goods or services at home only facilitates trade if relevant foreign conformity assessment bodies recognize it. Otherwise, exports may need to be certified again in the destination country or become blocked at the border. Participation in mutual recognition agreements for certification or in efforts to harmonize standards and regulation across borders can be of benefit.

Mutual recognition agreements of certification are formal agreements that acknowledge the equivalence of accreditation by laboratories and certification bodies. Mutual recognition of testing procedures permits firms to avoid double testing, which reduces compliance costs. This is one of the areas where the multilateral process can contribute greatly to facilitating trade.

## Regional snapshots: Standards are key to exploiting export potential



### *Middle East and North Africa*

The Middle East and North Africa (MENA) has significant unexploited growth potential for fresh and processed food exports. Much of this is for trade within the region itself. Yet, the MENA region imposes, on average, the largest number of technical regulations on fresh and processed food imports – nearly four times more than other regions. Reforming those regulations could be very beneficial for the region. More intensive use of harmonization or mutual recognition within the region could also help the region to exploit its export potential.

In addition, small firms in the MENA region hold few internationally recognized quality certificates. Strengthening firm-level capacity to meet standards could also contribute to increased export growth and competitiveness.



### *Asia-Pacific*

The Asia-Pacific region has strong export performance in IT and electronics. ITC's export assessment analysis finds that those sectors are also responsible for about one quarter of the unexploited export potential in existing lines of export. Chemicals are the most promising avenue for product diversification. This sector is characterized by a predominance of consumer protection regulation, whereas compatibility standards dominate in the IT and consumer electronics sectors. The region's immediate business environment for implementing standards and regulations is strong.

SMEs in the Asia-Pacific region are, on average, less likely to hold an internationally recognized quality certificate than most other regions. These results, however, are likely to be driven by poor, small economies in the region. The regional standards analysis is based on unweighted averages. These do not convey the strong performance in quality certificates and international management standards in large emerging economies such as China, India and Indonesia. The relevant country profiles discuss in detail this performance.



### *Latin America and the Caribbean*

In the Latin American and Caribbean (LAC) region, the fresh food and transport equipment sectors have significant unrealized export potential. ITC's product diversification assessment identifies a wide variety of sectors the region could diversify into, including fresh and processed foods, chemicals, and metals and basic manufactures.

In contrast to other regions, the LAC region exposes fresh food imports to significantly more regulation than imports of processed food.

Adopting international management standards is relatively popular in the region. But while medium-sized and large firms perform well when it comes to international quality certificates, small firms are trailing. It could be beneficial for the region to strengthen the capacity of small firms to comply with quality certificates, which are often sector specific, as well as to strengthen the immediate business environment to help reduce the time management spends dealing with regulations.

### *Sub-Saharan Africa*

Fresh food, metals and basic manufacturing have the highest unrealized export potential in sub-Saharan Africa. Metals and basic manufactures and, to a lesser extent, chemicals offer opportunities for export diversification.

Adoption of international quality certificates is fairly widespread among medium-sized and large firms in sub-Saharan Africa. Small firms trail, but the situation is no worse than in other regions. In this context, it is surprising that international management standards are not more widely adopted. Given that these management standards are not sector specific – implying transferable expertise – weaknesses in this domain may undermine the region's potential to diversify into new products.

### *Eastern Europe and Central Asia*

Eastern Europe and Central Asia (EECA) have unexploited export potential in metals and basic manufactures. Together with chemicals, this sector also offers opportunities for further export diversification.

Apart from developed economies, the EECA region is the wealthiest region in our sample. Not surprisingly, the region performs well in criteria related to standards and regulations at the firm and national policy levels. Nevertheless, the EECA region does not outperform other regions when it comes to time managers spend on regulations and the extent to which they adopt international management standards. These areas may warrant improvement, in particular if the region aims to take advantage of diversification opportunities in sectors such as chemicals.



Harmonization stimulates exports by allowing exporters to sell the same product in multiple markets. Therefore, national regulators may want to consider international standards when they develop national policies. Where adhering to international standards is not possible or desirable, mutual recognition of partner countries' standards or regulations may in certain instances represent an alternative route to facilitating trade.

## SME competitiveness to enter sustainable value chains

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### *ITC assesses standards and regulations at three levels.*

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Standards and regulations matter for SME competitiveness. They intervene at all three levels of the economy – firm level, immediate business environment level and national policy level – and consequently figure prominently among the determinants of SME competitiveness.

The report has analysed:

- At the **firm level**, the role of standards is captured by the 'International Quality Certificate' indicator which measures the number of firms with internationally recognized quality certificates. These include operation-specific certificates.
- At the **immediate business environment level**, an indicator measuring how much time managers spend on requirements imposed by government regulations is included. The variable indicates the administrative effectiveness regarding implementation of regulations.
- At the **national level**, an indicator reflecting the prevalence of technical regulations for imports and compliance with ISO standards related to management processes. The latter variable was collected at the national level and cannot be broken down by firm size. It is used to assess the friendliness of the national environment to international standards.

### *Compliance: A key to exploiting export potential*

Country profiles and regional snapshots in this report also feature information on products and sectors with potential for increased exports. ITC's export potential assessment identifies underexploited export opportunities in products that are already being exported. The product diversification assessment tool identifies new sectors that could help diversify the economy's export basket.

The information presented is based on quantitative analysis. It is a useful and evidence-based step towards the development of trade and investment strategies, particularly if complemented with qualitative country-level information to exploit its full potential. Due to data restrictions, this analysis only covers exports of goods.

Regional snapshots in this report combine information on export potential and SME competitiveness with a focus on sectors in which standards play an important role. In global trade, fresh and processed foods are the two sectors most affected by regulations. The next three sectors with the highest average number of regulations are information technology (IT) and consumer electronics, chemicals and transportation equipment.

For countries with the potential to ramp up production and exports in these sectors, optimizing standards-related determinants of SME competitiveness is critical to realizing this potential and translating it into broad-based job creation and economic diversification.

## Being strategic increases chances of success

*Aligning investment decisions in technical infrastructure with national policy priorities may make sense.*

As we have seen, many standards and regulations are specific to sectors, value chains or products. The same holds for many components of technical infrastructure for assessing conformity and certifying compliance. Given that building and running technical infrastructure is costly, resource-constrained countries may sometimes have to make hard choices, notably for the products to be supported by an internationally recognized technical infrastructure. Aligning investment decisions in technical infrastructure with national policy priorities – including those outlined in export strategies – may make sense.

Public-private dialogue is key to this endeavour. It ensures that governments' policy and investment decisions take business imperatives into account. This sets the stage for policies and institutions geared towards guaranteeing 'good' trade: trade that takes consumer protection, social responsibility and environmental sustainability objectives into account.





## Featured in 2016 SME Competitiveness Outlook

### Country profiles

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1. Burkina Faso
2. Bangladesh
3. Barbados
4. Cambodia
5. China
6. Colombia
7. Costa Rica
8. Côte d'Ivoire
9. Ecuador
10. Egypt
11. Guinea
12. Indonesia
13. India
14. Jamaica
15. Jordan
16. Kazakhstan
17. Kenya
18. Lebanon
19. Madagascar
20. Malawi
21. Mauritius
22. Morocco
23. Namibia
24. Nepal
25. Paraguay
26. Peru
27. Rwanda
28. Senegal
29. Sri Lanka
30. Thailand
31. Trinidad and Tobago
32. Tunisia
33. Turkey
34. United Republic of Tanzania
35. Uruguay

## Thought leaders

**Diane Wang**

The standards and regulations of cross-border e-commerce trade and their effect on SME competitiveness

**Zhang Xiaogang**

Unlocking trade opportunities for small businesses

**Cecilia Malmström**

Standards and regulations – impact on SME competitiveness in international trade

**Roberto Azevêdo**

Levelling the playing field for SMEs

**Seth Twum-Akwaboah**

AGI's hopes for the future of Ghanaian SMEs

## Case studies



Practical guides for SMEs on standards and quality management



Improving quality in Sri Lankan fruit and vegetables



Kenya's tea sector adapts to climate change, gets certification



Improved quality leads to exports for Nigerian shea butter



Alerting Mauritian policymakers to trade obstacles



ITC's Coffee Guide at the service of exporters



Food safety standards boost Kenya's Sous Chef



Medical and wellness tourism can benefit from accreditation



The other side of the story: Importers see regulations as trade obstacle



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