

WORLD TRADE ORGANIZATION



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FOREWORD

This is a critical year in the world's collaborative effort to end global poverty and boost the incomes of the poorest. We will endorse the Sustainable Development Goals, develop a plan for financing for development, and reach for a landmark agreement to mitigate and adapt to climate change. If we are to end extreme poverty by 2030, we must do all we can in this final push to raise the incomes of the extreme poor. *The Role of Trade in Ending Poverty* makes the case for how trade can contribute to this ambitious goal.

Advances we make this year to reduce global trade barriers and strengthen the global trading system would add significant momentum to our efforts to end poverty. Our best opportunity to take these steps forward will be the WTO Ministerial Conference in Nairobi this December, where participants will make a renewed push to finalize multilateral trade negotiations in many areas. Though progress will be difficult, there is reason for optimism: The 2013 Ministerial Conference in Bali had a historic outcome, as parties signed the WTO's Trade Facilitation Agreement and made important decisions, many of which will benefit Least-Developed Countries.

To build on this momentum, we must address the trade costs that keep markets from being more fully integrated. Critical components will involve implementing the Trade Facilitation Agreement, advancing multilateral negotiations, achieving further policy reforms, and delivering Aid for Trade from the World Bank Group, the WTO and other partners.

In addition, policies to increase the contribution of trade to growth will need to be matched with a new effort to maximize the extreme poor's gains from trade. This entails tackling key challenges confronting the poorest, including rural poverty, gender inequality, fragility and conflict, and the nature of the informal economy.

The Role of Trade in Ending Poverty sets out a framework for action on these issues. Closer coordination between the World Bank Group and the WTO, as well as partnerships with others in the international community, will be critical to our success. Although our two organizations have different mandates and memberships, they are united in a common purpose to contribute to economic development and improve people's lives around the world. At this critical juncture in history, we need to ensure that trade helps all, especially the poorest, as we strive to reach the goal of ending extreme poverty in a generation.

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ABBREVIATIONS and ACRONYMS

EIF	Enhanced Integrated Framework
FCS	Fragile and Conflict-Affected States
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GVC	Global Value Chain
HIV	Human Immunodeficiency Virus
ІСТ	Information and Communication Technology
LDC	Least-developed Country
OECD	Organization for Economic Co-operation and Development
R&D	Research and Development
SPS	Sanitary and Phytosanitary Standards
SME	Small and Medium-sized Enterprises
UN	United Nations
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
ωтο	World Trade Organization



This report offers five interrelated and complementary areas of policy for maximizing the gains of trade opportunities for the poor.



LOWER TRADE COSTS FOR DEEPER INTEGRATION OF MARKETS







INTENSIFY THE POVERTY IMPACT OF INTEGRATION POLICIES

IMPROVE THE ENABLING ENVIRONMENT

MANAGE AND MITIGATE RISKS FACED BY THE EXTREME POOR



BETTER DATA AND ANALYSIS TO IMPROVE POLICY

EXECUTIVE SUMMARY

The expansion of international trade has been essential to development and poverty reduction. Today's economy is unquestionably global. Trade as a proportion of global GDP has approximately doubled since 1975. Markets for goods and services have become increasingly integrated through a fall in trade barriers, with technology helping drive trade costs lower. But trade is not an end in itself. People measure the value of trade by the extent to which it delivers better livelihoods, through higher incomes, greater choice, and a more sustainable future, among other benefits. For the extreme poor living on less than \$1.25 a day, the central value of trade is its potential to help transform their lives and those of their families. In this way, there is no doubt that the integration of global markets through trade openness has made a critical contribution to poverty reduction. The number of people living in extreme poverty around the world has fallen by around one billion since 1990. Without the growing participation of developing countries in international trade, and sustained efforts to lower barriers to the integration of markets, it is hard to see how this reduction could have been achieved.

Trade can continue to play a key role in poverty reduction.

In 2011 (the most recent year for which comprehensive data are available), around one billion people remained in extreme poverty — just under 15 percent of the world's population. The World Bank Group has adopted the goal of reducing this figure to less than 3 percent by 2030, and the concept is prominent in discussions underway this year on the post-2015 Sustainable Development Goals. This report, jointly written by the World Bank Group and the World Trade Organization, explores how sustained efforts to lower trade costs and integrate global markets can maximize the gains for the extreme poor. It offers strategies on how to support further integration of the poor into global trade by lowering trade costs in a way that maximizes the gains and minimizes the risks, with a particular focus on the work of the World Trade Organization and the World Bank Group.

This report has three key messages:

- A sustained effort to deepen economic integration and further lower trade costs is essential for ending poverty. Strong growth in developing countries will be needed to achieve the end of poverty, and trade is a critical enabler of growth, opening up opportunities for new and better work for the poor. Although great progress has been made in reducing trade costs and integrating low-income countries into the global economy, more needs to be done.
- Lowering tariffs and non-tariff barriers between countries are essential elements of this agenda, but this must form part

A key message of this report is the need to sustain efforts to keep global trade open and to do more to lower trade costs, by further integrating markets.

of a wider approach that recognizes the specific constraints facing the extreme poor — and for many, their disconnection from markets — if they are to benefit from trade. This includes challenges facing women, the rural poor, those in the informal economy, and those in fragile and conflictaffected states. Thus, in order to have the greatest impact toward ending poverty, trade policy must be made and implemented in conjunction with other areas of policy. This entails deeper cooperation across sectoral lines, government agencies, and a wider range of stakeholders.

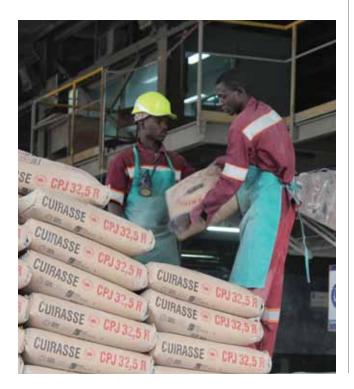
3) The World Trade Organization and World Bank Group have made substantial contributions to trade and poverty reduction. However, a great deal more remains to be done to end poverty, and both institutions and other partners need to continually review their activities to support poverty reduction to ensure they remain relevant in an ever-changing world.

Trade can drive poverty reduction by boosting growth.

Although the drivers of poverty are multi-dimensional, the basic requirement for sustained poverty reduction is economic growth. Opening up to trade increases a country's GDP because it allows each country to use its resources more efficiently by specializing in the production of the goods and services that it can produce more cheaply, while importing the others. Trade also affects longterm growth since it gives access to more advanced technological inputs available in the global market and because it enhances the incentives to innovate. Trade contributes directly to poverty reduction by opening up new employment opportunities, for example for agricultural producers, with the expansion of export sectors, and by bringing about structural changes in the economy that increase employment of low-skilled, poor workers in the informal sector. Trade also provides better access to external markets for the goods that the poor produce. Understanding these channels helps us trace through the impact that trade can have on the extreme poor.

The increasingly integrated global economy has been a critical factor behind the poverty reduction achieved so far. And integration will be just as - if not more - important on the path to 2030. A key message of this report is the need to sustain efforts to keep global trade open and to do more to lower trade costs, by further integrating markets. Reducing trade costs in countries where the poor live may not just oil the engine of economic growth, but also can increase the competitiveness of the goods and services traded by the poor and lower the costs of key inputs in production, such as fertilizers for poor farmers. The inverse relationship between trade costs and income - the poorer countries are, the higher the trade costs they face ---underlines the need to do more on this front. Lowering trade costs is particularly important for countries seeking to take advantage of the fragmentation of production through global value chains, which offer new opportunities to generate growth and income gains through trade.

Yet growth alone may not be enough to achieve the end of poverty by 2030. Based on recent World Bank projections of likely global growth to 2030, growth is unlikely to be high enough across all developing countries to reduce poverty to the level sought by 2030. Developing countries would have to grow at an average of 4 percent each year — even higher than the growth rate of the 2000s and much higher than that of the 1980s and 1990s. Even with sustained growth, as poverty continues to decline globally, there



is evidence to suggest that it will become even harder for overall growth to be translated into income gains for the poor. Extreme poverty is becoming concentrated in countries and regions where poverty reduction seems to be less responsive to overall growth.

The extreme poor face numerous constraints that limit their capacity to benefit from wider economic gains. In this context, trade integration is important not only because of the boost to growth it can provide, but also because there is room for it be executed in ways that more effectively overcome the constraints faced by the extreme poor. A novel feature of this report is the link drawn between these challenges facing people living in extreme poverty and their capacity to benefit from trade, as a key driver of growth. The report describes four leading characteristics of the poor that have a particularly strong impact on their capacity to extract the full potential benefits of trade: rural poverty; fragility and conflict; informality; and gender.

Each of these four characteristics shapes the environment in which the extreme poor live, and constrains them from benefiting from trade opportunities. Poverty in many parts of the world - especially in Sub-Saharan Africa, where the challenge of ending extreme poverty is greatest — is a strikingly rural phenomenon. For the rural poor, trade and internal market barriers in agriculture present real challenges to benefiting from trade opportunities. More than half of the extreme poor live in fragile and conflict-affected areas (often dominated by revenues from high value minerals and other natural resources) and are less likely to be able to benefit from trade opportunities, even though export diversification by providing alternative livelihoods can be an essential pathway out of conflict. Poverty and informality often go hand in hand. Informal sector workers and the micro-enterprises that dominate the informal economy face particular challenges, and are vulnerable to sudden economic shocks. Finally, women are often at the forefront of poverty reduction, and trade has brought particular benefits for women in terms of jobs and empowerment. However, women face specific constraints, both within and outside the household, which can make it difficult to participate in and gain from trade opportunities.

The risks faced by the poor also affect their capacity to benefit from trade opportunities. Major risks faced by the poor across each of the four dimensions of poverty include economic shifts, labor market adjustments, and vulnerability to weather events and to climate change. At the same time, the poor often lack access to the instruments and support necessary to mitigate these risks — things people in advanced countries take for granted, such as insurance and social security. When poor people face risks, they may be unable to adopt strategies to make the most of trade opportunities, even where these strategies would be beneficial. For example, the risks faced by subsistence farmers are at least partly responsible for their inability to invest in higher quality inputs like seeds and fertilizers, which could help them take full advantage of trade opportunities. Similarly, a lack of access to finance often limits the capacity of informal microenterprises to invest in ways that would allow them to offset risks. Understanding and addressing these risks is important to ensure that trade delivers maximum benefits to the poor.

While the challenges and risks facing the extreme poor are considerable, the opportunities are great. Cross-border trade enhances the income of agricultural producers and traders in poor countries. Trade has contributed to women moving out of agriculture into manufacturing and especially services, and this has brought with it higher incomes and more formal employment. Trade can also help to devise pathways out of conflict. Pursuing strategies for economic integration in ways that address the challenges faced by the extreme poor can help maximize the gains from trade.

The greatest impact on poverty reduction will come through a coherent approach that lowers trade costs in ways that maximizes the gains for the extreme poor. Policies that focus on lowering tariffs and non-tariff barriers between countries are essential elements, but they must form part of a wider approach. Only a holistic approach, which also incorporates a variety of specific localized measures, can begin to deliver the gains required to end global poverty. Although countries are the basic "building blocks" of international trade policy, the challenges faced by the poor vary greatly within national borders, and across borders. For this reason approaches that focus on lowering trade costs between countries will need to be complemented by efforts to tackle challenges faced by the poor within and across national borders. This underlines the importance of the various programs that the World Trade Organization and World Bank Group have in place to address these challenges, and of further efforts in this regard.

This report offers five inter-related and complementary areas of policy that can be considered by countries and the international community in implementing this approach:

Lowering trade costs for deeper integration of markets.
 Trade facilitation — including implementation of the WTO
 Trade Facilitation Agreement — as well as tackling other
 policy and infrastructure barriers to goods and services trade
 are critical to growth and poverty reduction.





- Improving the enabling environment. Trade openness itself
 and lowering trade costs is essential for delivering gains
 for the poor. A range of complementary policies helps
 maximize the gains of openness for the poor including
 policies related to human and physical capital, access to
 finance, governance and institutions and macroeconomic
 stability. Strengthening the enabling environment can be
 done through innovative policy frameworks that improve
 consultation with the poor, and target their needs more
 carefully. To achieve this will require deeper cooperation
 across sectors, better coordination across government
 ministries and agencies and that a wider range of
 stakeholders work effectively together.
- Intensifying the poverty impact of integration policies. Bringing a greater focus on tackling remoteness from markets at the sub-national level, and facilitating the activities of poor and small traders, can help improve gains for the poor, especially in rural areas. This also entails reforms to tackle costs generated by a lack of competition, and other sources of domestic costs. Promoting greater inclusiveness of women, and targeting the challenges they face as distinct from men, is central to efforts to intensify the poverty impact of integration policies.
- Managing and mitigating risks faced by the poor. More focus
 is needed on managing the existing risks that poor people
 face that limit them from benefiting from trade opportunities
 when they arise. Effective risk management can be a
 powerful instrument for development, through building poor
 people's resilience to the effects of adverse events and
 also by allowing them to take advantage of opportunities for
 improvement. Addressing any potential risks to livelihoods
 for the poor through trade-related adjustments is also
 important.
- Improving data and analysis to inform policy. The gaps in understanding of poverty, the nature of the informal economy, the participation of women in trade, and of the trade-related constraints in general that many countries face continue to be large. Better data is required for the design and implementation of effective policies to maximize the poverty reduction gains from trade.

The World Trade Organization plays a critical role in underpinning an open and inclusive global trading system. The key goals of pursuing further openness at the multilateral

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level, complementing unilateral opening and regional cooperation, and helping developing and least developed countries to integrate into the trading system remain as relevant today as ever. The rules-based global trading system has been essential in reducing the risks faced by the poor from opaque and unpredictable trade policies — both in terms of access to markets for the products they produce and by creating a stable trading environment to support job-creating investment, both domestic and foreign, in traderelated activities. Updating the World Trade Organization's rules, market access commitments and flexibilities through a successful conclusion of the current round of Doha negotiations will expand the opportunities for developing countries to benefit from inclusion in the global trading system and foster development.

The World Trade Organization also plays a key role in supporting trade facilitation. The need to support countries in making the most of trade opportunities is recognised in the Trade Facilitation Agreement, which states that assistance and support must be granted to help developing countries achieve the capacity necessary to implement its provisions. Various efforts are now underway, including by the World Bank Group, to ensure that this commitment is delivered. Ratification and implementation of the Trade Facilitation Agreement has the potential to deliver significant reductions in trade costs, especially in the poorest countries. Recognising the particular constraints faced by the poor, including small-scale traders, and focusing on connecting the extreme poor to markets would maximize the impact of the Agreement on poverty reduction.

The Aid for Trade Initiative, convened by the World Trade Organization, has helped mobilise significant additional resources for trade-related assistance, and could more closely monitor the impacts of trade integration on poverty reduction. As the leading multilateral donor of Aid for Trade, the World Bank Group has a key role to play through its financing capacity, widespread country presence, capacity to undertake and widely disseminate relevant research, knowledge and analytical expertise, and multi-sectoral capacity and reach. The Bank Group is increasingly focusing on fragile and conflict states, and the importance of agricultural development in raising incomes in rural areas. Improving the tools to monitor the impact of Aid for Trade and integrating effective trade indicators into broader monitoring systems of poverty reduction and progress in fragile states is an important area of on-going and future work for the Bank Group. Both institutions have a critical role to play in implementing the agenda set out in this report.



GLOBAL GROWTH, TRADE AND POVERTY: the macro links

The relationship between economic growth, poverty reduction, and trade is not a simple one. Although great progress has been made in reducing the number of people living in extreme poverty, due in large part to the rapidly growing participation of developing countries in the global economy, nearly one billion people still live on less than \$1.25 per day. What will it take to end extreme poverty by 2030, which is the target date for the World Bank Group's goal,¹ as well as the end date for the next set of United Nations development targets? What role will trade openness play in the next phase of poverty reduction?

Exploring these questions involves an understanding of the nature of the global economy and the structure of global poverty today. In addition, it requires understanding the theory and evidence of the main links between trade, economic growth, and poverty reduction and how these are changing in an evolving global economy.

This chapter shows that extreme poverty is becoming increasingly concentrated in Sub-Saharan Africa and South Asia, although pockets of extreme poverty persist in other regions. The structure of the economies of countries in these regions, especially in Africa, suggests that current growth trends will not deliver the poverty reduction to eliminate extreme poverty by 2030. The chapter concludes, therefore, that we need to identify the key characteristics of the poor in these countries to develop ways in which trade-driven growth can be more inclusive.

The key characteristics that we have identified as being of relevance to the impact of trade on poverty are: the extreme poor mainly live in rural areas, many earn their livelihoods in the informal sector, the majority lives in a fragile and conflict-affected state and women face particular challenges in alleviating poverty. These characteristics are all associated with the poor facing substantial constraints to trade and higher risks in their everyday lives that limit their capacity to adopt strategies that would allow them to raise incomes through trade. The report then asks what needs to be done to first identify and then reduce the barriers to new opportunities that trade can bring to the extreme poor and what can be done to address the high risks they face.

The global economy

Today's economy is a global one — trade as a share of global GDP has grown massively, despite recent weakness, along with FDI. Since 1950 the share of world GDP made up by trade and the volume of world trade have increased dramatically: global merchandise trade in 2014 was \$18.9 trillion, up from \$3.5 trillion in 1990.² Flows of investment have increased by even greater levels. Tariffs have fallen steadily since the end of the Second World War, along with progressive liberalization of capital controls, and greater connectivity through new technology in transportation and communications.

This globalization has created new opportunities for economic growth, development and poverty reduction.

The rapid growth of the global economy is a relatively recent phenomenon. Its expansion built up speed during the technological innovations since the Industrial Revolution, which allowed for the more productive use of existing endowments of economic assets. The even faster growth of the last century is due largely to technological innovations in communications and transportation,



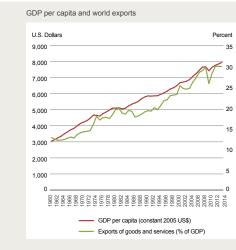
as well as the progressive lowering of barriers to global trade and finance.³ This helps explain the strong correlation between increased exports of goods and services as a share of global GDP, and the steady decline in the number of global poor (Figure 1.1).

In this most recent period, developing countries have experienced high and sustained growth while participation in the global economy has increased rapidly. Developing country total trade as a share of GDP has doubled since 1985. Since 2000 alone, the developing country share of world trade increased from 33 percent to 48 percent. China is now the world's largest exporter, with a number of other developing countries in the top twenty exporters, including Brazil, India, Indonesia, Malaysia, Mexico, and Thailand. This has been accompanied by steady GDP growth. Between 2000 and 2011, the largest, higher-income developing countries - those that are members of the G20 - experienced per capita GDP growth of 5.2 percent per year on average, up from 3.9 percent in the preceding decade. This growth has not been limited to the largest developing countries. Between 2000 and 2011, least-developed country (LDC) per capita income grew at 3.7 percent per year on average, in stark contrast to negative growth of 0.7 percent in the preceding decade. The developing country share of world output grew from 23 percent to 40 percent between 2000 and 2012.4

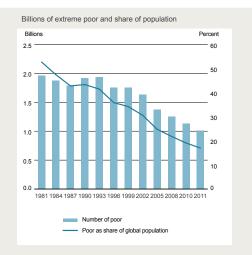
Important trade reforms undertaken in developing economies stand out as an important force behind these trends. Major liberalization episodes happened in Brazil, China and India over the last two decades. Following China's accession to the WTO in 2001, China's simple average tariff fell from about 40 percent in 1985 to under 10 percent today.⁵ The growing size and increased openness of large developing markets has provided new export opportunities for many other developing countries and has been an important factor driving growth.

The emergence of global value chains has been an important driver of developing country participation in the global economy. Countries no longer need to develop competitiveness in whole industries to be able to trade. Declining transportation and communications costs, along with improved technology, have made it easier for firms in developing countries to provide particular tasks or activities (services as well as goods) to value chains that extend across countries. More than half of developing country exports in value-added terms involve global value chains (GVCs.) This is not being generated just through trade from developing to developed countries — the share of trade in parts and components (a good approximation of GVC-related trade) between developing countries has quadrupled over the last 25 years.⁶

Economic growth is key to job generation and critical for poverty reduction, especially in countries with large numbers of young people. Growth increases the demand for labor, which is the main and often the sole asset of the poor. In turn, increasing employment has been crucial in sustaining higher growth. It is the strong growth of the global economy over the past 10 years that has enabled the majority of the world's working-age population to







Source: World Development Indicators, PovcalNet

find employment. Real wages for low-skilled jobs have increased with GDP growth worldwide, which indicates that, globally, the poorest workers have benefited from the increase in global trade and growth.7 Globally, between 2000 and 2011 real monthly average wages grew by just under 25 percent, but in Asia they almost doubled, while in the developed world they increased by only about 5 percent.⁸ At the same time, in every region of the world and particularly in Africa, youth unemployment is a major issue.

The poverty challenge

Amid these shifts in the global economy, the world still faces a great challenge in ending extreme poverty and improving prospects for the poorest.9 Between 1990 and 2010, the proportion of people living in extreme poverty was halved, with East Asia and the Pacific (primarily China) having made the greatest contribution to this (see Table 1.1). Nevertheless, based on the most recent estimates available (2011 data), slightly more than one billion people globally - around 17 percent of the developing world's population — continue to live on less than \$1.25 per day.

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Table 1.1: Population shares and total numbers of people in extreme poverty

Percentage of population below US\$1.25 a day (2005 PPP)					Projections			
Region	1990	2005	2008	2010	2011	2015	2020	2030
East Asia and Pacific	58.2	16.7	13.7	10.3	7.9	4.1	1.5	0.1 ª
Eastern Europe and Central Asia	1.5	1.3	0.4	0.6	0.5	0.3	0.2	0.1 ^b
Latin America and the Caribbean	12.0	7.4	5.4	4.8	4.6	4.3	3.8	3.1
Middle East and North Africa	5.8	3.0	2.1	1.7	1.7	2.0	1.8	2.4
South Asia	53.2	39.3	34.1	29.0	24.5	18.1	13.8	2.1
Sub-Saharan Africa	56.6	52.8	49.7	48.2	46.8	40.9	34.2	23.6
Total (developing world)	43.5	24.8	21.8	19.1	17.0	13.4	10.5	5.7
Total	36.4	21.1	18.6	16.3	14.5	11.5	9.1	4.9

Millions of people below US\$1.25 a day (2005 PPP)

Region	1990	2005	2008	2010	2011	2015	2020	2030
East Asia and Pacific	957.1	324.1	272.3	207.1	160.8	86.4	31.3	2.5
Eastern Europe and Central Asia	7.1	6.0	2.0	2.9	2.3	1.3	0.8	0.3
Latin America and the Caribbean	52.7	41.0	31.0	28.3	27.6	26.8	24.8	21.7
Middle East and North Africa	13.1	9.0	6.5 °	5.5 °	5.6 °	7.3	7.0	10.3
South Asia	603.2	589.0	532.7	465.3	399.0	310.6	249.6	42.5
Sub-Saharan Africa	287.1	399.1	406.8	416.4	415.4	403.2	382.9	334.6
Total	1920.2	1368.1	1251.4	1125.5	1010.7	835.5	696.4	411.8

Source: World Bank, Global Monitoring Report 2014/15. Poverty projections are based on per capita GDP growth rates set out in the World Bank 2014 Global Economic Prospects report, assuming unchanged income distribution within countries

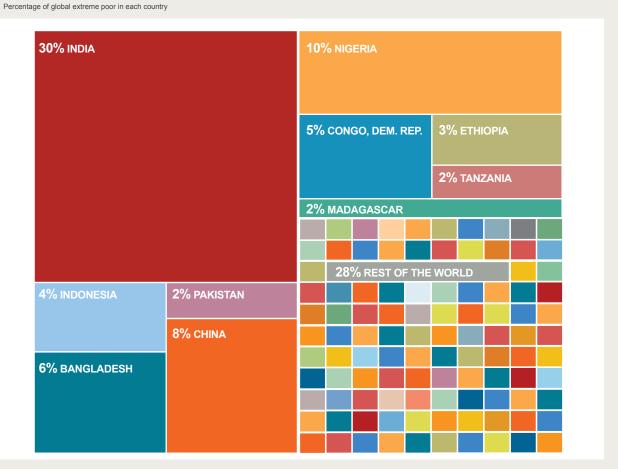
a The statistic for 2030 is 0.11 for East Asia and Pacific. It has been rounded to 0.1 in the table. b The statistic for 2030 is 0.06 for Europe and Central Asia. It has been rounded to 0.1 in the table.

c Refers to the numbers that are provisional because survey coverage is less than 50 percent of population in the region.

Eighty percent of this one billion is concentrated in Sub-Saharan Africa (415 million) and South Asia (399 million). While the share of the population in extreme poverty in each region has fallen since 1990, with important variations across countries, the decline has been faster in South Asia. Sub-Saharan Africa looks set to be the only region that will not achieve the first Millennium Development Goal target of halving extreme poverty at a \$1.25/day level by 2015.¹⁰ Of the remaining extreme poor, 161 million live in East Asia and the Pacific — with the largest number in Indonesia. Other regions together account for less than 50 million (just 3.5 percent) of the world's extreme poor.¹¹ Almost three-fifths of the world's extreme poor are concentrated in five large developing countries: Bangladesh, China, the Democratic Republic of Congo, India, and Nigeria. Adding another five countries (Ethiopia, Indonesia, Madagascar, Pakistan, and Tanzania) would comprise just over 70 percent of the extreme poor (Figure 1.2). Of the countries where more than 4 percent of the population are living in extreme poverty, all but two are in Africa (Bangladesh and Haiti).

Although the rest of the extreme poor are spread across many countries, the share of the extreme poor as a proportion of the total population in these countries is much higher than in many of the large countries listed above. In the Democratic

Figure 1.2: Top 10 countries with the largest share of the extreme poor, 2011



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Source: World Bank, PovcalNet, from Global Monitoring Report 2014/15

Republic of the Congo and Madagascar, for example, an estimated 88 percent of the population is extremely poor — in Burundi, Liberia, Malawi and Zambia the share is between 70 percent and 84 percent (see Figure 1.3).

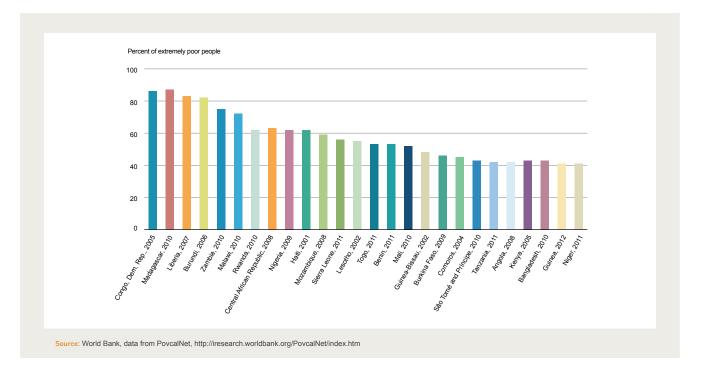
Ending extreme poverty requires a growing global economy and sustained growth in countries where poverty is concentrated - but growth alone will not be enough. Strong global growth in developing countries in particular created the conditions for the reduction by half of the proportion of extreme poor between 1990 and 2010. In a recent study of long-run growth in 118 countries, the strongest driver of poverty reduction among lowest-income earners was found to be increases in average GDP per capita, reinforcing the existing consensus on this relationship.12 Projections from the World Bank of global per capita GDP increasing by 1.7 percent per year (with developing countries growing at around 4 percent and developed countries at about 0.6 percent) would result in a global poverty rate of about 4.9 percent by 2030, assuming income distribution remains unchanged. Among other scenarios contemplated in the 2014/15 Global Monitoring Report, an optimistic scenario of global annual per capita consumption growth of 4 percent per year, combined with no changes in income distribution, was required to lower

poverty to 3 percent globally. However, both scenarios assume that the same relationship between per capita GDP growth and the decline in poverty is sustained — and there is evidence that this is unlikely. After poverty reduction reaches the majority of poor people close to the middle of national income distributions, poverty will fall more slowly for the remaining poor at the bottom of the income distribution. A range of constraints limits the capacity of the poor to take advantage of overall economic growth and trade opportunities. These challenges are the focus of the discussion in the next chapter.

The challenge is even greater in boosting the inclusiveness of growth in each country. The World Bank Group is working to increase real income for those in the bottom two quintiles of the population. As with extreme poverty, constraints that affect the poorest 40 percent of the population can limit their ability to benefit from overall economic growth, and there is no automatic "trickle-down" effect. The nature of these constraints varies widely across countries and income levels. For countries where the bottom 40 percent of the population is also below the extreme poverty line, the constraints of extreme poverty are the main focus. But these will also be relevant for countries that may have large, vulnerable populations at moderate levels of poverty (Box 1.1).

Figure 1.3: Percentage of extremely poor people, countries where 40 percent or more of the population is extremely poor (in descending order)

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While focusing on extreme poverty, we need to avoid any perception that an individual "graduating" from extreme poverty entails a sudden shift to economic stability and prosperity. Many above the extreme poverty line are highly vulnerable and face challenges like inadequate water and

Box 1.1: Trade and shared prosperity

One of the Bank's "twin goals" is to increase the income growth of the poorest 40 percent in each country, to ensure that economic gains benefit the near-poor and lower-middle income groups. Of course, in many countries, and in particular in the poorest countries, 40 percent or more of the population live on incomes that are below the extreme poverty line. In these cases, the discussion in the rest of this report is directly applicable to both of the Bank's goals.

To the extent that increased trade is associated with economic growth, it is likely to be associated with improvements in the standard of living for the bottom 40 percent. While a rise in average income does not necessarily result in a rise in income in the bottom deciles of the population, it is well-established that economic growth often leads to poverty reduction.¹³ Since the bottom 40 percent are in most countries more similar to people at the average income than to the extreme poor, the link between economic growth and outcomes of the bottom 40 percent is likely to be even stronger than the link between growth and reduced poverty.

The benefits of greater trade to the bottom 40 percent depend, in part, on the skill intensity of the products favoured by trade. If a country's comparative advantage lies in goods that are relatively intensive in less-skilled labor, increased trade is likely to benefit the bottom 40 percent relatively more. If a country specializes in technology or high-skill intensive products, then trade can in principle place downward pressure on the wages of the bottom 40 percent. But this is more likely to be the case in high-income countries (although the downward pressure on less-skilled wages observed in high-income countries is at least as likely to result from skill-biased technological change than from trade, if not more so).¹⁴ sanitation, or poor health. In the Middle East and North Africa, for example, although there are no extreme poor, many are below \$2.50 a day, living in vulnerable positions. There is a similar situation in Latin American and the Caribbean (see Box 1.2).

Box 1.2: Vulnerability on the margins of extreme poverty — regional experiences¹⁵

Applying the \$1.25 poverty line to Latin America and the Caribbean would show that extreme poverty was stable in the 1980s and 1990s at approximately 12 percent of the population but began to fall in 2002. By 2011, extreme poverty had declined to about 5 percent, putting the 3 percent goal within reach by 2017, based on growth and income distribution trends. However, the level of development in the region has led analysts to use poverty lines that are higher than the global \$1.25 a day. For example, \$2.50 a day is an average of national extreme poverty lines in the region. However, those above this \$2.50 per day poverty lines should still be considered vulnerable, with recent World Bank analysis estimating that a \$10 per day income reduces the likelihood of returning to poverty significantly enough to be considered "middle class."

In the Middle East and North Africa, the target of less than 3 percent of the population being below the \$1.25 per day poverty line has been met. However, if the poverty line is shifted to \$2 per day (which may be more relevant given relatively higher incomes of many countries in the Middle East and North Africa), in 2012 12 percent of the population were below this line. At \$4 per day, 53 percent of the population were below the poverty line. This suggests significant vulnerability to falling below even the \$1.25 poverty line in times of economic shock or conflict.

The situation of these regions highlights the vulnerability of those who may be earning just above the \$1.25 extreme poverty line. Does this mean the \$1.25 line is irrelevant? It should not, because this level still represents an extreme level of human hardship that is unacceptable. However, ending extreme poverty should not involve ignoring the prospects of those that continue to live in poverty and the risk of falling back into poverty, albeit above the global extreme poverty line.

Trade and the poor: theory and evidence

Trade openness is key to successful poverty reduction, but cannot be relied upon alone. The relationship between trade openness and poverty reduction is a complex one. There are a number of channels through which trade openness affects poverty: economic growth and macroeconomic stability; impacts on households and markets; changes in wages and employment; and impact on government revenues.¹⁶ In each of these, trade can be a key driver of poverty reduction, although potential risks exist and need to be taken into account.

Growth and macroeconomic stability

Trade can benefit the poor by spurring economic growth. Opening up to trade increases a country's GDP because it improves the efficiency of its resource allocation. At the most simple level, trade allows each country to specialize in the supply of the goods and services that it can produce more cheaply and import the others, thus exploiting comparative advantages, and fostering growth in the more competitive sectors and firms in the economy. Integration into global markets also expands the opportunities available to firms from the domestic to world economy, allowing for greater economies of scale. Opening up to trade affects the return to investment: closed economies face falling rates of return on investment. Countries that have pursued growth based upon the domestic market alone have typically been unable to sustain growth for long. The integration of developing countries into the global economy has also generated new sources of demand for other developing countries, with South-South trade between developing countries increasing from 8 percent of world trade to around 25 percent today.¹⁷ Trade also supports growth by giving firms access to inputs that can help boost productivity, but are not available domestically - from world-class logistics services to move goods to markets more efficiently, to seeds and fertilizers for farmers

Trade also links firms and individuals with ideas and technology, helping drive innovation, which supports

productivity growth. Trade can facilitate the transfer of technology through the knowledge embodied in products and services. The knowledge obtained from imported goods, both intermediate inputs and final goods, and services, also spills over to other firms and sectors, enhancing impacts on productivity and growth.¹⁸ The imitation of advanced technologies, embodied in imported goods and services, can subsequently foster research and development (R&D) investments by domestic firms.¹⁹ Furthermore, by increasing the size of the market in which a firm operates, international trade

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increases the payoff from innovation, thereby increasing the incentive to invest in R&D.²⁰ By facilitating open flows of ideas and technology, "late-comers" to development in the second half of the twentieth century did not need to "discover" the innovations that had helped the advanced economies grow. Increasing flows of goods, services, ideas and people meant they could access the best of the global economy.

The impacts of knowledge transfers from trade in health and education products and services can be substantial. For example, large-scale immunization was facilitated by imports of medicines and medical equipment from advanced economies. Empirical evidence suggests that trade openness is associated with faster mortality reductions in developing countries.²¹ Medical imports, originating from the ten countries responsible for the bulk of medical research and development worldwide, are found to be systematically related to lower mortality in developing countries.²² On the other hand, in the absence of strong health care and prevention systems, upgrades to trade corridors, leading to greater movement of people, can contribute to the spread of infectious disease. For example, the increased mobility and migration facilitated by upgrading major trade corridors can create new vectors for HIV infection: as a result, projects where this risk exists now include programs to increase awareness and limit the spread of HIV/AIDS.23

The case for trade openness leading to growth is a strong one. In the long run the potential benefits from improved access to better technology and to a wider variety of intermediate goods and services, the benefits of greater scale and competition, and the reduction in the rent-seeking activities that accompany trade protection will often support sustained growth. However, it is difficult to produce definitive evidence on this. Disentangling causality can be very difficult since economies that are already growing may be better placed to reduce trade barriers. Trade policy reforms are often implemented together with other policies that may also stimulate growth, and many of these policies may also be critical in maximizing the contribution of trade openness to growth, such as, clarity over property rights and effective mechanisms for conflict resolution. In addition, significant public investment in infrastructure, education and health has been present in all countries that have sustained rapid growth. Although some have argued that openness to trade can push countries into less dynamic sectors (such as extraction of minerals), harming growth, there is also evidence that contradicts this.²⁴ In the end, the evidence is strong that no country has been able to sustain growth without openness to trade.25

Box 1.3: The pattern of sectoral growth matters for poverty reduction²⁶

In spite of the rapid growth experienced in Africa over the past two decades, it appears that the conversion of this to declines in poverty has been slower than in the rest of the developing world,²⁷ but there is considerable diversity of experiences across countries. A 1 percent increase in GDP in Cameroon is associated with a reduction in poverty more than twice that experienced in Zambia. In Burundi, the poverty-reducing effect of growth is only half that of the regional average. This reflects the reality that poverty reduction depends on inequality, both levels and changes, and sectoral and geographic patterns of growth.

Effective poverty reduction requires that growth be inclusive. However, poor people are often not located where growth takes place (being in rural and fragile regions) and typically face constraints in moving to areas where growth is occurring. Further, political economy constraints within countries often hamper the implementation of policies of redistribution. This leads to the conclusion that growth is more likely to reduce poverty if it happens in the activities and areas where they work or live so that the geographic and sectoral patterns of growth matter.²⁸

Since poor people are concentrated in rural areas and are typically engaged in agriculture, as will be discussed in more detail in Chapter 2, agricultural growth and rural economic growth will be particularly important for poverty reduction. However, unequal distribution of land ownership may constrain the poverty-reducing effect of agricultural growth.²⁹ Similarly, since poor people usually have less skills, growth which expands sectors which use unskilled labor relatively intensively will be more poverty reducing than growth which expands other sectors. Empirical evidence from African countries supports the view that the structure of growth matters for poverty reduction. Growth in agriculture and services is strongly associated with poverty reduction; however, growth in industry does not have a significant effect on lowering poverty. A 1 percent increase in GDP per capita led by agricultural growth lowers poverty by 0.67 percent. An analogous increase in services reduces poverty by 0.96 percent.³⁰ This contrasts to impacts across other developing countries where the impact of agriculture is not significant while industry and services growth has strong poverty-reducing impacts. Hence, as will be discussed further below, agricultural trade policies, in both developed and developing countries, remain a key element conditioning the impact of globalization on the poor in Africa and elsewhere.

An important aspect of long-term poverty reduction is the movement out of agriculture and into other activities often located in cities. In Africa and South Asia this process has been more one of poor people being "pushed" out of rural areas, due largely to weak access to services, and less of cities acting as "growth poles" to attract the rural poor, with rural growth not sufficient to lower food prices and create demand for urban goods and services. It would be a more positive process were it driven by improving economic opportunities in all areas, where cities gradually pull rural residents in through relatively better performance and prospects, rather than by declining conditions and periodic disasters in rural areas that push people out. This contributes to conflict and waves of migration that are difficult to absorb in the cities and typically just lead to expanded slums. A key element of a transition strategy, therefore, is to enhance living conditions in rural areas.³¹

The pattern of growth across sectors matters for poverty

reduction. Trade-driven growth may not automatically benefit the poor. The links between trade-driven growth and poverty reduction can be complex, but analysis of the poorest countries suggests that the pattern of growth matters for poverty reduction because of differences in the pattern of work by the poor across sectors (see Boxes 1.3 and 2.1). This in turn reflects where the poor live and work, a point that is stressed in Chapter 2.

The challenge for policy is also to combine growth-promoting policies, such as trade opening, with policies that allow the poor to participate fully in the opportunities that are created, and so contribute to that growth. Elements of a country's policy framework other than trade policy must be taken into account to maximize the gains for the poor through trade. For example, recent work has shown that the link between trade and poverty is stronger in countries that have deeper financial sectors, better education levels and stronger governance.32 The beneficial effects of trade on growth and the poor may not materialize in countries characterized by excessive or poor regulation.33 Trade policy must therefore be integrated or mainstreamed into broader development policy rather than defined and applied in isolation, and additional policies may be needed to enhance the impact of trade on the poor.

When trade drives economic diversification and delivers greater macroeconomic stability this is likely to increase the positive impacts for the poor. Many poor countries have highly concentrated economies, with a few, often natural resource-based, industries accounting for much of economic activity. This leads to vulnerability to shocks and macroeconomic volatility, which is usually bad for the poor because it can reduce economic growth³⁴ and adversely affect the distribution of income.³⁵ The poor have little access to finance to be able to smooth their consumption over time and therefore they are the most affected by macroeconomic volatility. If domestic economic shocks are the major source of volatility, trade can help reduce volatility thanks to export diversification. Trade allows domestic goods producers to respond to shocks to the domestic supply chain by shifting sourcing abroad. Geographical export diversification may also help reduce country-specific external shocks.³⁶ Export diversification appears to be associated with less output volatility in low-income countries.³⁷

However, greater trade openness also implies greater exposure to external shocks — especially in outwardoriented industries. Trade can act as a mechanism to transmit a country-specific shock from one country to others. Since many low-income countries' exports are concentrated in a narrow range of commodities, shocks to trade often translate into significant volatility in overall output. Such trade shocks can also cause prolonged recessions by leading to a decline in investment associated with the traded sectors of the economy. Although there are long-term benefits for macroeconomic stability through trade, as noted above, the vulnerability created by such shocks is an important challenge for developing countries and emphasizes the benefits to poor countries of diversifying their exports, in terms of both products and markets.

Impacts on households and markets

Trade will have direct impacts on the poor if it changes the prices and availability of the goods and services they consume and the returns they receive from the goods and services they produce. Trade reform can change relative prices in both product (final goods and services) and factor (labor, capital, etc.) markets. Given the prevalence of poverty in rural areas and the importance of agriculture to poor farmers it is useful to view these changes from the perspective of the farm household as both consumers and sellers of goods and services. Poor farmers can gain if trade increases the price they receive for the food they sell in the market and opens up new (maybe nearer) markets for their produce. All farmers are part of a value chain — they require inputs such as seeds and fertilizers and may use transport services to get their product to market. Trade can play a critical role in reducing the price and increasing the variety of inputs available to farmers. As consumers, trade liberalization can be beneficial to the extent that it reduces the prices for imported goods, as well as increasing the prices of exported goods.

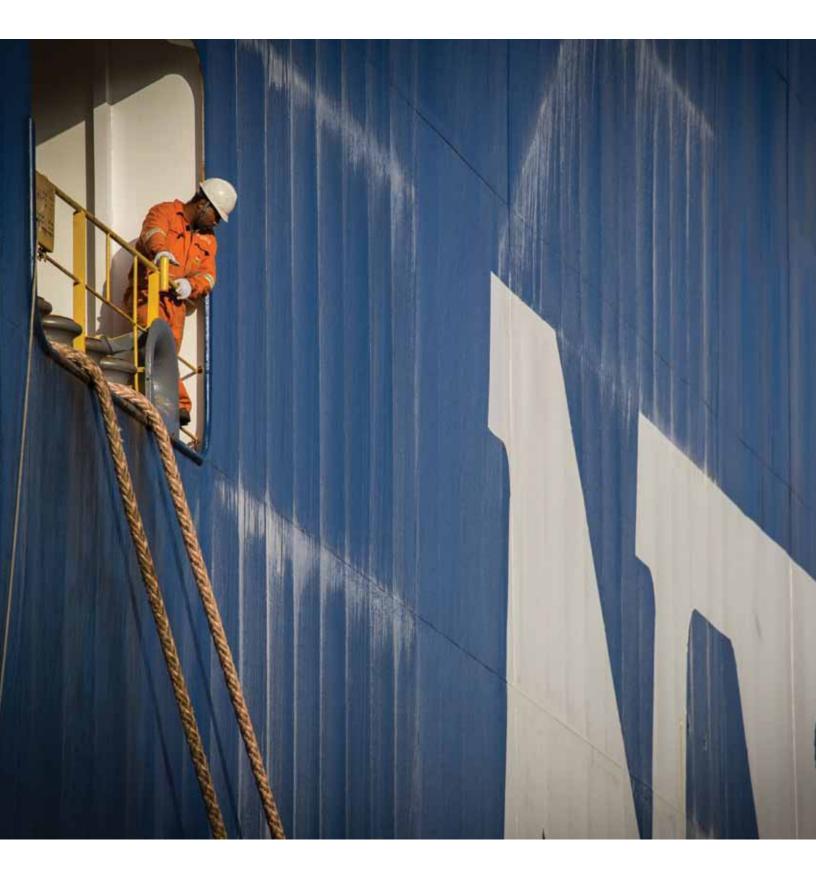
By lowering the prices of imported inputs, trade can help drive productivity gains in agriculture and in other sectors. Agricultural productivity in LDCs is already low compared to other developing regions, and in future the gap could widen as a result of global warming. Enhanced flows of technology are critical for improving productivity and adapting to a changing climate. Technology embodied in imported inputs — for example, seeds or improved crop varieties, fertilizer, agricultural machinery, and animal vaccines — would pave the way for the emergence of more intensive production systems with increased productivity and greater sustainability.³⁸ Other effects of trade on productivity are discussed below.

The additional competition that trade brings is likely to be good for the poor as consumers. It is competition from trade that reduces the price of products consumed by the poor and increases the variety of products available. Trade will tend to be pro-poor if it undermines rents previously made by domestic monopolies and oligopolies. Similarly, lower costs and greater competition for the exports of a country will tend to increase the returns to producers of the products that the country can export efficiently.

A lack of competition along the value chain can make it harder for the poor to benefit from trade opportunities.³⁹ For example, the decline in consumer prices from the removal of a trade barrier will be less if there is limited competition at some point along the value chain. A lack of competition in, say, the transportation and distribution of staples might allow firms in this sector to capture the largest benefits of trade reform. This can then limit the extent to which otherwise beneficial changes in prices are passed through to the poor. Clearly, world prices still matter, but the structure of the value chain and policy interventions along that chain affect the way that changes in global commodity prices are translated into movements in consumer prices.

Impact on wages and employment

In helping allocate resources to the most productive activities in each country, trade helps transform economies, with the potential to reduce poverty. The "typical" pattern of trade-driven growth experienced by many developing countries that have integrated into international markets involves the transition of people from relatively low productivity to higher productivity work. This typically involves shifts in the concentration of employment in specific sectors. In East Asia, for example, as productivity and incomes increased in the agricultural sector, demand for goods and services in other sectors increased, even before manufacturing and service sector export-drive growth took off.



Increases in jobs and wages in sectors where the country can export competitively can benefit the poor.

In low-income countries these sectors tend to employ large numbers of unskilled workers and so the impact on poverty may be significant. The poor will also benefit more if jobs are created in the areas where they reside. A number of African countries have large endowments of mineral resources and so increased trade openness will tend to stimulate these sectors rather than labor-intensive ones (see Box 1.3). There is little hard evidence on the poverty implications for labor market outcomes through trade and trade policy. The focus of most research to date has been on the effect on relative wages. The evidence is mixed, but existing studies that focus on economies that are abundant in unskilled labor find that absolute wages of low-skilled workers tend to increase.⁴⁰ There are concerns that the globalization of trade may have led to increased income volatility for workers but evidence to support this is limited.41 Ultimately, the impact on wages will depend on the nature of the labor market in the specific country, influenced by factors like the level of competition among employers for labor, and the bargaining power of workers. In addition, there is no evidence that in the long run openness to trade is associated with higher rates of unemployment.42 The links between trade and jobs are complex, but the importance of understanding the role of trade in contributing to the challenge of providing more and better jobs is clear (Box 1.4).

The adjustment of the economy through trade openness toward more competitive parts of the economy brings long-term gains, but entails short-term adjustment costs for the poor that need to be carefully managed. Unemployment or lower wages in uncompetitive sectors that contract as a consequence of trade openness bring risks for poor people, if these short-term adjustment costs are not addressed. In this way, trade reform for the poor may involve long-term benefits but with high short-term adjustment costs in some cases. Their lack of endowments make it difficult for the poor to borrow to tide over temporary periods of joblessness or income loss while waiting for future opportunities to appear. Phased implementation may be one strategy that can be employed, along with managing shortterm adjustment costs and building capabilities to exploit opportunities generated through trade.

Box 1.4: Trade and the jobs challenge

The jobs challenge facing the world is daunting. Of the roughly 3 billion people worldwide that have jobs, some 1.65 billion have regular wages or salaries, while another 1.4 billion work in farming, small household enterprises or as casual or seasonal day labor. The latter make up the majority of workers in the poorest countries, although there is little data on employment in many of the poorest countries, complicating analysis of their situation.

Because of demographic changes, to keep the ratio of employment to working-age population worldwide constant, in 2020 there should be around 600 million more jobs than in 2005, with around 12 million per year and per region needed in East Asia and the Pacific, and in South Asia, and around 9 million per year in Sub-Saharan Africa.⁴³ The creation of jobs for those who want to work is critical, and as discussed in this report trade can drive the economic growth that delivers jobs along with the reallocation of people to better jobs, and improving aspects of the work people do. But in poor countries where growth has been narrowly focused on capital intensive extractive industries, it has not generated the jobs required for the growing numbers entering the workforce. This publication addresses many of the characteristics of this jobs challenge and how they link with trade: the creation of new jobs, informal work, and women and jobs, among others. For example, as Chapter 2 discusses trade has played a significant role in creating jobs for women in many countries.

Trade, like technological change, leads to simultaneous job creation, destruction and reallocation both across and within sectors. This entails costs for those who lose their current job in the process. These costs tend to be minimized in countries with flexible labor markets and effective institutions for (re)training and supporting people in transition from one job to another.

For poor countries the jobs challenge is inextricably linked with the challenge of structural transformation away from low productivity farm-dominated economies to high productivity economies in which all sectors — agriculture, manufacturing and services — contribute to job creation in the long term. The growth of agribusiness sectors, for example, can generate non-farm jobs in rural areas. Manufacturing and services provide new opportunities for absorbing new entrants into the jobs market. Trade plays a key role in structural transformation. For example, liberalizing trade in services can be catalytic if it provides job-creating firms with access to lower cost and higher quality inputs into production — electricity, finance, telecommunications, transport and so on.

The fragmentation of production into global and regional value chains has generated new opportunities for the poor. Production sharing across countries has made it easier for developing countries — and especially those with small domestic markets — to harness trade for their development. In this way it can best be thought of as a new technology that enables the same transition from lower- to higher-productivity activities as trade in general. The flow of technology and expertise from advanced to developing countries that took place as economies like the Republic of Korea and Japan developed large manufacturing sectors can take place more easily now in narrower activities, at a lower cost. In this way, GVCs can help facilitate the economic transformations to which trade contributes — in growth, productivity, jobs, and innovation — that we discuss in this chapter (see Box 1.5).

The impact of GVCs on poverty is enhanced through connections to the rest of the economy. Attracting foreign direct investment to establish a factory in an export processing zone (for example) will lead to a certain increase in employment and wage gains for those directly involved, but the greatest impact on poverty arises when other firms and workers in the local economy become involved as suppliers to the investing firm. This requires competitiveness among domestic firms supplying services or other inputs to the GVC investor.44 Trade policy matters, but so does the overall business environment, the nature of the labor market, the level of competition in the domestic economy, infrastructure connectivity, and so on. Of particular importance then is ensuring that the poor are able to take advantage of the opportunities created by GVCs. As we explore in subsequent chapters, these issues are at a general level not that different to the overall challenges in ensuring that the poor benefit from trade. Any risks that GVC participation entails also need to be considered. The nature of GVCs reinforces the message that poverty reduction through policies to increase trade openness needs to be complemented by measures that target the poor, as well as broader economic reforms.

Impact on government revenue

A key long-term challenge for most developing countries is increasing revenue collection to support spending, including on pro-poor programs: trade can have an impact on this. Although liberalization may appear to create risks for the poor by lowering tariff revenue, strategies to increase revenue collection capacity, or raise new taxes, can be pursued to offset this. At first glance, trade liberalization will reduce tariff revenues, and this will certainly occur if all trade taxes are reduced to zero and no other changes take place. By lowering

Box 1.5: How do GVCs affect the economy?

Because the sharing of production across different locations is a business strategy, it is the decisions taken by firms at the lead position in GVCs that determines their structure. Policymakers seek to attract GVCs because they can lead to economic upgrading (in terms of higher value-added production) and social upgrading (in terms of better welfare for individuals, poverty reduction, and so on). Through what channels does GVC connectivity and upgrading contribute to productivity gains, growth and poverty reduction? Four broad effects (at least) can be identified. First, GVC lead firms tend to require more or better inputs from local suppliers, and can assist locals suppliers in becoming more productive by adopting better technology and management practices. Second, GVCs can also help foster greater competition in the domestic economy, through competition between the GVC lead firm and local firms. Spillovers in knowledge and technology from GVC to domestic firms can also boost overall firm competitiveness. Third, investments in infrastructure and backbone services (like logistics or information and communication technologies) related to the GVC lead firm are likely to have positive benefits for other parts of the economy, which would not have been achieved without GVC participation. Finally, increases in demand for skilled labor, training to local firms, and turnover in skilled workers from firms related to the GVC lead firm (e.g., their suppliers) and the rest of the economy can increase productivity.45

While GVCs participation may have sizable benefits, there may be risks through GVCs. By generating competitive pressure to initiate, maintain or upgrade participation within GVCs, risks can also be created. While labor, social and environmental standards set by GVC lead firms can lead to the application of higher standards, the results of this have been mixed. There is some evidence that participation in GVCs increases exposure to global business cycles and vulnerability to changes in location decisions by GVC lead firms, among other potential risks. Integrating into GVCs may be especially difficult in poor countries with large informal sectors because firms in the informal sector may not be able to satisfy the standards required by the lead firm and may not have access to services, such as accountancy services, that are essential for effective engagement. Where informality dominates, countries may be more likely to be positioned at the lower end of the value chain, and local firms and workers more vulnerable.

a government's revenue through tariffs, there is less capacity to fund services that may be important for improving the welfare of the extreme poor. Tariff revenue is typically a more important share of overall government revenue for low- and middle-income countries than high-income countries.

However, in practice trade openness does not necessarily lead to lower revenues from trade, with many reforms leading to increased revenue collection through increased trade volumes and improved capacity to collect revenue. Fostering trade may involve measures that do not affect tariff revenues (e.g., addressing non-tariff measures) and in reality, tariffs in most economies are rarely reduced to zero anyway.⁴⁶ Further, most countries apply non-discriminatory excise and consumption taxes, such as value-added taxes, and revenues from these taxes will rise as trade increases. Reforms to improve revenue collection at the border, while also facilitating trade, can help offset the tax revenue impact of tariff liberalization. Tariff cuts may lead to increased revenue by boosting trade and bringing it closer to an optimal level. Furthermore, to the extent that quantitative restrictions on imports are replaced by tariffs, new sources of tariff revenues will be generated. Even in the event that the initial tariff is already below the revenue-maximizing level, customs collection can still be partially or wholly compensated for by greater collection of domestic taxes, even if tax rates do not change, since trade opening stimulates economic activity and growth. Overall, it is

important that the impact on tax revenue through tariff reduction is taken into account, with strategies like raising new indirect tax (e.g., value-added taxes), and customs modernization, to offset revenue losses implemented.⁴⁷

Conclusion

Trade will make an essential contribution to delivering the growth necessary to end extreme poverty. Trade contributes by opening up new opportunities for jobs; lowering prices for products consumed by the poor; improving access to external markets for the goods that the poor produce; and bringing about structural changes in the economy as export sectors expand and increase employment of low-skilled workers.

Harnessing the full potential of trade will require action on two fronts: supporting an open global economy and facilitating the greater integration of developing countries; and taking a more targeted approach to helping poor people overcome the constraints and the risks they face in benefiting from trade opportunities. To do this requires a focus on the characteristics of the poor and an understanding of how they interact (or do not interact) with international markets. The challenge for policy is to combine growth-promoting policies, such as those that increase openness to trade, with policies that allow the poor to participate fully in the opportunities that are created.



CONSTRAINTS FACED BY THE POOR

Analysis of the role of trade in contributing to poverty reduction needs to go beyond its impact on economic growth. As discussed in the preceding chapter, economic growth will remain the key driver of poverty reduction globally, and trade will continue to be a critical driver of growth. Nevertheless, in the areas in which extreme poverty is now concentrated — South Asia and Sub-Saharan Africa — with predicted growth more than 370 million people in these regions are likely to remain extremely poor in 2030, amounting to around 4.5 percent of the global population. Strikingly, 80 percent of these extreme poor will be in Sub-Saharan Africa.⁴⁸

To assess how trade could be more effective in driving poverty reduction, we need to understand the constraints the poor face, based on who the poor are, where they are, and the economic activities they are involved in. The macro-level framework for identifying the impact of trade on poverty, discussed in Chapter 1, is useful for tracing through a number of key effects of trade openness on the poor, including changes in relative prices, wages, and productivity. However, an in-depth analysis of the characteristics of the poor is required to identify the main constraints that need to be addressed - and additional risks that will have to be mitigated - for trade to fulfil its maximum potential for poverty reduction. This chapter draws on the available theories and empirical evidence to examine four particularly relevant dimensions of poverty - rural poverty, informality in the economy, fragile and conflict situations, and women - to illustrate how and to what extent they affect the capacity of the poor to benefit from trade.

The picture that emerges is that these dimensions of poverty increase the challenges to participate in trade, but also increase the size of potential benefits if the constraints faced by the poor are addressed. Being in a rural area reduces the chances of being able to participate effectively in trading activities, as connections to markets are difficult and human and physical capital are usually lower than in other areas. The poor in conflict-affected areas face particular risks and challenges. Informal workers are also likely to be more vulnerable to trade shocks, as their social protection is lower than for formal workers, and the micro-enterprises that dominate the informal sector are constrained in the extent to which they can benefit from trade. Finally, the constraints faced by women make it more difficult for them to take advantage of trade-related opportunities than for men.

At the same time, the constraints faced by the poor can expose them to risks through trade openness. Assisting poor people to mitigate these risks is important to allow them to participate in, and benefit more from, trade. For each dimension of poverty related to trade, we need to understand what risks exist in order to consider how they can be addressed.

Rural areas

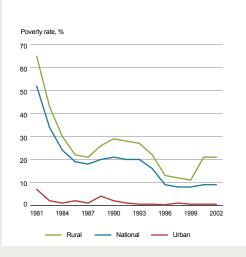
Extreme poverty in many countries is predominantly a rural phenomenon. An estimated 75 percent of the extreme poor in Africa live in rural areas.⁴⁹ In Vietnam, 95 percent of the poor live in rural areas. The incidence of poverty is also much higher in rural areas. In East Asia, just 4 percent of the urban population live in extreme poverty, while over 20 percent of the rural population live on less than \$1.25 a day. In Sub-Saharan Africa, one third of the urban population, but almost half the rural population, live in extreme poverty. Hence, rural poverty-reducing policies are central to achieving the objective of eliminating extreme poverty.

In rural areas the poor continue to rely on agriculture for their livelihoods, and poverty is linked to low agricultural productivity. Boosting productivity on smallholder farms is a key way of reducing rural poverty (see Box 2.1) and delivering food security for farming and non-farming households. At the same time, the growth of non-farm (although often agriculture-related) activities is an important aspect of poverty reduction in rural areas. Thus, agricultural development is critical to reducing poverty, although the exact relationship between poverty reduction and agricultural growth in any country depends on the agricultural and social structure of a given location. Estimates suggest that a 1 percent rise in agricultural GDP results in a 6 percent increase in income growth for the poorest 10 percent of the population.⁵⁰

Box 2.1: Poverty reduction in rural areas has driven the overall fall in ${\rm poverty}^{{\rm S1}}$

In China, poverty fell from 53 percent of the population in 1981 to 8 percent in 2001, with around 500 million people escaping from poverty.52 This was driven by transformation in rural areas, with rural poverty falling from 76 percent in 1980 to 12 percent in 2001, accounting for three-quarters of the total reduction (see Box figure). The initial sharp decline in poverty was spurred by agricultural reforms that led to substantial increases in agricultural production and productivity in part as a result of farmers using highyielding varieties of hybrid rice seed. Rural incomes rose by 15 percent a year between 1978 and 1984. In subsequent years, the role of the rural non-farm sector became more important by providing employment and income to millions of people, with the share of the rural non-farm sector in GDP increasing from close to zero in 1952 to more than one third in 2004. Growth in agriculture did more to reduce poverty than either industry or services.

Rural and National Poverty Rates in China — 1981 to 2002



Source: Ravallion and Chen (2007).

Poor access to infrastructure and public services constrain the ability of the rural poor to benefit from trade opportunities.⁵³ Producers in rural areas often lack (reliable) access to critical services inputs, such as transportation, communication and financial services, electricity and safe water, as well as facing high cost and limited variety of material inputs, such as seeds and fertilizers.⁵⁴ As a result, rural firms and farmers face greater challenges in reaching final destination markets and tend to be equipped with lower skills compared to those in urban areas. Agricultural products face additional barriers in reaching destination markets, due to the relatively high protection of agriculture and the perishability of products. Farmers in rural areas experience high post-harvest losses,⁵⁵ and typically receive relatively lower producer prices for the staple foods they produce.

Farmers and firms in rural areas face particularly high transport costs and delays when shipping to international and national - markets. Domestic transport costs are often a multiple (on a per ton/km basis) of transport costs between marketing centres and larger cities, or international shipping. This is the result of bad roads, but also limited competition among transport service providers.⁵⁶ As a result, producing at small distances from a major marketing centre can increase overall transport costs significantly, and rural areas by definition are distant from larger marketing centres. As transport costs to markets are generally absorbed by producers who have limited market power, rural producers become less competitive,⁵⁷ or can achieve only lower farm gate (or factory gate) prices in those cases where goods remain competitive and marketable. This affects the ability of rural firms and farmers to compete, functions as a disincentive to expand production, and negatively affects incomes, despite trade opening improving their prospects through better prices in international markets.

High transport costs may also dilute the benefit of lower consumer prices brought about by trade opening. Trade opening lowers consumer prices⁵⁸ — but the extent to which border price changes translate into domestic price changes for households is determined by transport costs. High transportation costs associated with connecting to rural markets in Mexico, for instance, dampened the impact of border price reductions (when the country joined the North American Free Trade Agreement) on the domestic price faced by rural consumers.⁵⁹ A recent study suggests that the gains from trade in remote regions of Nigeria and Ethiopia tend to be captured by intermediaries, thus highlighting the importance of the distribution sector in influencing the extent to which the rural poor benefit from trade.⁶⁰ High transport costs can therefore drive up the prices for consumption goods, which can be beneficial for local producers but can negatively affect the real income of consumers.

Higher costs for intermediate goods and services further reduce competitiveness. International trade can increase the availability of essential parts and components.⁶¹ But in rural areas, the prices of inputs that need to be procured from abroad or domestic centres of production (such as fertilizers, seeds, pesticides or packaging material) are higher than those in the better-connected urban areas. Longer lead times to obtain such inputs demand higher inventories, thereby raising financing costs, which are often particularly high in rural areas. While higher input costs directly raise production costs, poor connectivity can also lead to the unavailability of critical goods and services that can reduce productivity. In turn, this can contribute to both lower productivity and losses as a result of risks, such as pests and diseases. These factors reduce the overall competitiveness of enterprises located in rural areas, and the ability to benefit from trade. Access to credit is especially problematic in rural areas.62

Lower population densities in rural areas make the provision of infrastructure and services more costly. For example, in Africa over 20 percent of the population in rural areas lives in very dispersed settlements of less than 15 people per square kilometre, increasing the costs of providing infrastructure.⁶³ Economies of scope (which would permit access to diversified inputs) are frequently absent in rural areas, and because companies are small they do not benefit from economies of scale, including when accessing information, organizing transport, importing, or exporting, because related costs are largely fixed per transaction. This means that small producers pay higher prices per unit of output, further affecting their capacity to compete when trade opportunities arise.

Beyond direct connectivity issues, structural factors further penalize the rural poor and make it more difficult for them to benefit from trade integration. While primary school completion rates were similar for rural and urban areas in a sample of 46 countries, enrolment rates in rural areas are frequently lower.64 In addition, the guality of education is generally lower in rural areas, as results from the 2010 Southern and Eastern Africa Consortium for Monitoring Educational Quality show. Health outcomes, such as infant mortality and morbidity rates, also tend to be significantly worse in rural areas. These factors contribute to making mobility out of poverty more difficult.65 As a result, the ability of people living in a rural area to benefit from trade is impaired through two channels: directly through poor connectivity, and indirectly because their location negatively affects household characteristics that affect labor productivity. For the rural poor these factors are aggravated, as they often belong to socially marginalized groups or those with least access to land and water.66

Production in rural areas is largely dominated by agriculture, and agricultural markets present particular

challenges to trade integration. Trade opening can lead to increased sales for farmers in developing countries. However, poor access to markets and the costs of compliance with public and private standards set in high-income destination markets, especially for food items, make it difficult for agricultural producers to reach such markets. While larger farmers are more frequently capable of meeting them, small holders face particular challenges, especially when located in remote areas. Poor access to safe water, reliable electricity, knowledge, and reliable testing services make meeting (and proving compliance with) such standards particularly challenging. Furthermore, most rural households are involved in staples production, with staples outputs representing on average 62 percent of farm output in Sub-Saharan Africa. This reflects the fact that many rural households engage in subsistence farming to retain control over their food supply, as markets function only imperfectly. This presents a barrier to diversifying production into cash or industrial crops.

Remoteness contributes to low producer prices for small farmers and reduces the incentive to produce for the market. Small farmers dispersed across rural areas are unable to benefit from consolidation and scale in selling their output, and often have no choice but to sell to middlemen/intermediaries who are able to exploit this situation. As a result, small farmers tend to receive a relatively low price compared to the final price. African smallholder farmers who sell surplus harvest typically receive less than 20 percent of the consumer price of their products, with the rest eaten away by high transaction costs and post-harvest losses.⁶⁷

Weak institutions and lack of functioning markets limit access of rural farmers to instruments to mitigate the severe risks they face. Farmers face considerable risks from weatherrelated events and price volatility. In rural areas in poor countries, small farmers are typically unable to access instruments, such as weather-indexed insurance and warehouse receipt systems, to help address these risks. This reflects the lack of appropriate institutions, but also barriers, especially at the regional level, that impede trade and the development of market mechanisms that mitigate risk (see Box 2.2). Institutions that have developed to address risks in agricultural markets cannot address, and indeed will be constrained by, policy-related risks. In addition, efficient institutions are more likely to develop at the larger scale that would be enabled by open regional trade. Weather-indexed insurance, for example, becomes more viable if the financial institution is able to offer cover to farmers over a wide region, as many weather-related shocks affect only a limited area.

Box 2.2: Mitigating risks for small farmers in rural areas⁶⁸

Warehouse receipt systems

These allow farmers to deposit a stated quantity of a specified quality of a commodity into a private warehouse, where it can be pooled with other commodities of similar quality. A receipt is issued to the owner as evidence of location and ownership. Warehouse receipt systems facilitate risk management in three ways. First, they provide farmers with improved access to formal credit, since the receipts can be conveyed to a financial institution as verifiable collateral for loans. Second, the warehouse receipt system protects farmers against low sale prices for their commodities, by providing them with safe storage of commodities until market prices become attractive, at which time the stock can be sold and any credit is reimbursed. This allows for diversification of sales across time, which helps reduce seasonal price volatility. Third, the system helps large-scale accumulation because the warehouse physically groups a set of consignments of known quality so that a large-scale buyer (e.g., government, miller, aid agency) can target these collectively.

However, such systems remain limited in poor countries. First, the development of these market-based systems requires predictable and consistent government policies to allow companies to make investments in buildings and management capacity.⁶⁹ For example, export bans that reduce domestic prices can reduce the value of the collateral to a level less than that of the receipts, making the cereals risky assets. Thus, trade barriers can undermine warehouse receipts systems, and also increase the risk of storage by making it difficult to predict future prices.

Weather-indexed insurance

Weather-indexed insurance can mitigate the impact of climatic shocks on farmers. This, in turn, can enable farmers to invest in more productive seeds and fertilizers that would otherwise be too risky in the face of crop failures. Without insurance, households adopt strategies that reduce risks but also limit income potential. Hence, effective insurance against such weather-related risks can allow households to move into farm activities that yield higher incomes.

Weather-indexed insurance is a financial derivative written against deviations in average rainfall or temperature indices constructed from data measured at weather stations. For example, if observed rainfall is below a set threshold, leading to low yields, an insured farmer would receive payment to compensate for reduced food staple production.

Weather-indexed insurance is common in developed countries, but is rare in developing countries. While the potential for weather-indexed insurance is substantial, progress needs to be made with regard to data and information on weather and the effects of severe weather conditions for insurance providers to develop new products.⁷⁰ Improvements in legal and regulatory environments are also necessary for buyers and sellers to have confidence that contracts can be enforced. In many African countries, for example, appropriate laws and regulations for the development and use of weather insurance products are not in place. Policy predictability is also crucial. Insurers will be reluctant to sell policies if there is a possibility that the government could alter the terms of the insurance contract after the insurance is sold.

Poor people working in agriculture face particular challenges in benefiting from the transfer of technology facilitated by international trade. In addition to policy barriers that limit the use of imported seed varieties, perceptions that new seed varieties present risks for farmers, which they are unable to manage, may impede their adoption. With formal insurance markets generally inaccessible for poor farmers, this presents a barrier to the adoption of trade-enabled technology.⁷¹ Poor smallholders are less likely than larger farms to adopt new technologies that are perceived as "high-risk, high-return".⁷² Barriers to information and education for farmers about new technologies that increase productivity can also have a disproportionate impact on the poor. Gender, social status, or exclusion from kinship networks can further exclude the poor from flows of information.⁷³

Distortions to international agricultural trade harm poor rural producers by eroding their competitiveness and affecting international prices. Subsidies provided to farmers by some economies — particularly large economies — have a significant negative effect on others. The overall environment has improved since the conclusion of the WTO Agreement on Agriculture in 1995, which introduced greater discipline on agricultural subsidies. Nevertheless, economic evidence suggests that production-related subsidies have negative effects on the welfare of poor farmers by depressing prices and hindering entry into major export markets by rural producers not receiving such subsidization. Recent estimates indicate that the removal of agricultural trade distortions could reduce the number of extreme poor (using a \$1/day poverty line) by 2.7 percent.⁷⁴

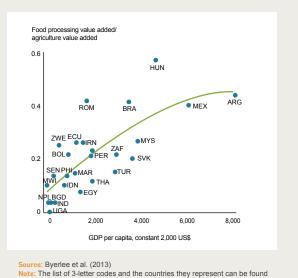
Diversification into non-farm economic activities is key to transformation and poverty reduction in rural areas. Agricultural commodities in their raw form are generally associated with relatively low value added. The development of an internationally competitive rural non-farm sector, including agri-business, is necessary for creating job opportunities and rising incomes (Figure 2.1). In Sub-Saharan Africa, the agri-business

sector is about half the size of the farming sector. In Latin America and Asia, agri-business is between 2 and 3 times larger than the farming sector, while in Organization for Economic Co-operation and Development (OECD) countries, the ratio of the size of agribusiness to farming can be as high as 10.⁷⁵

Fragile and conflict-affected areas

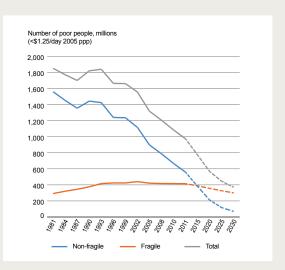
In the past 30 years, the world has become less poor everywhere except in fragile and conflict-affected states (FCS). This year, most of the world's poor are expected to live in fragile countries where civil conflict is common, and security and the rule of law are very weak (Figure 2.2).⁷⁶ This trend is expected to continue, and in 2030 more than 90 percent of the world's extreme poor are projected to live in fragile and conflict-affected states.

Fragile countries also have a significantly higher poverty incidence than other developing countries. The difference is large when considering either the OECD or the World Bank list of fragile countries (Figure 2.3). Using the OECD definition, the mean value of the extreme poverty rate (measured against the \$1.25 per day line) in fragile countries is almost 5 times that in the other developing countries. And this difference is highly significant. The difference is only slightly smaller when considering the World Bank list.⁷⁷ Figure 2.1: A rising share of food processing in total agriculture value-added is associated with rising incomes



Note: The list of 3-letter codes and the countries they represent can be found in World Bank (2007), page xviii.

Figure 2.2: Most of the poor live in fragile countries



Source: Historic (1981-2011) data is from PovcalNet (accessed Oct. 10, 2014). Projections based on 10-year historic growth scenario from Lakner, Negre and Prydz (2014) as reported in Call (2015).

Note: Estimates from countries on the OECD Fragile States list from 2014. Poverty estimates only from countries where at least one household survey and PPP conversion factors available. For 18 countries of the 51 on the list, we do not have such data. These missing countries of the 51 on the percent of the total population in fragile states.

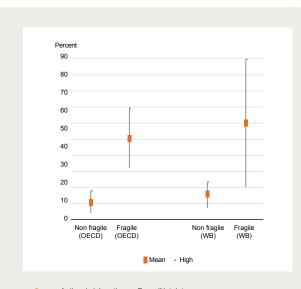


Figure 2.3: Fragile countries have a higher incidence of extreme

poverty than other developing countries

Source: Authors' elaboration on PovcalNet data. Note: The lines represent 95% confidence intervals. Poverty rate for a category of countries indicates the average share of country's population below the extreme poverty line (\$1.25 per day in PPP terms). Poverty figures are for the years 2010-14. Fragile countries are defined according to the World Bank or OECD list for 2014.

Many fragile countries, as well as regions within countries, are affected by civil conflict or are emerging from conflict.

Civil conflicts take a huge toll on human life, but they also cause protracted, severe disruption of economic activities, assets, infrastructure and human capital. These effects of conflict can have a direct impact on individual earnings, as demand for and production of goods and services are often disrupted⁷⁸ and the mobility of goods and labor restricted.⁷⁹ Conflict can also negatively affect lifetime earnings by reducing individual schooling and health outcomes.⁸⁰ Not surprisingly, conflict can dramatically increase poverty. In Rwanda, 20 percent of the population fell into poverty following the genocide.⁸¹

Fragility can also indirectly contribute to higher poverty through the weakness of state institutions.⁸² Where institutions are weak, they cannot effectively provide much needed public goods or support the efficient allocation of resources. This can result in lower overall earnings and affect a large share of the population. In addition, state institutions in weak institutional settings can be captured by interest groups. As a result, these captured institutions then allocate public resources towards areas dominated by those groups,⁸³ rather than to the poorer areas or those most in need. Countries emerging out of conflict and with weak state institutions are also more exposed to relapsing into conflict, which makes their fight against poverty more difficult. A 2011 study by the World Bank finds that nearly 90 percent of the conflicts between 2000 and 2010 occurred in countries that had already experienced a recent conflict; and almost half of the post-conflict countries relapse into conflict within 10 years. A vicious circle can ensue, as high rates of poverty and unemployment can increase the risk of conflict because they decrease individuals' opportunity cost of engaging in conflict.⁸⁴ The high poverty rates typical of fragile contexts make it more difficult to break the conflict-povertyconflict cycle.

Individuals, households and firms in fragile and conflictaffected areas are likely to be less able to reap the gains from trade. On one hand they are typically less exposed to trade. Conflict and violence stifle trade and thus undermine the preconditions for benefiting from it. On the other hand, even when trade opportunities do arise, various dimensions of fragility, such as exposure to conflict and the uncertain economic environment, pose constraints to reaping those benefits.

Conflict and violence often directly hinder the ability to trade across (and within) borders, which can raise the prices of basic goods and services and exacerbate poverty. Conflict often leads to a collapse in imports, which can directly affect consumption through increased prices and less variety of goods and services in the market. The violence that led to the closure of the border between Sudan and South Sudan raised the prices of basic commodities, especially in the northern states of South Sudan, which were reliant on imports from Sudan for much of their basic consumption.85 This led to an estimated increase in poverty of as much as 10 percent. Similarly Uganda's trade boom of the 1990s occurred only through the borders with Kenya and Tanzania, but not through those with Sudan and Democratic Republic of Congo, in large part due to the civil unrest in the Ugandan districts bordering these countries. During the trade boom, districts closer to the external border experienced a smaller reduction in prices of common consumption items than the other districts.86

Conflict and violence reduce the ability to trade by lowering the production capacity of firms and households.

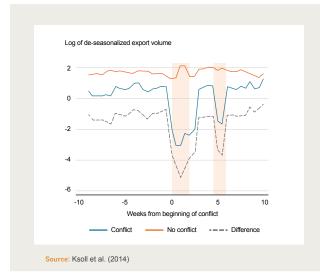
Conflict can reduce the access of local firms to imported inputs, which can stifle their productivity and in turn lead to lower wages, sales and employment.⁸⁷ Evidence from Sierra Leone suggests that the civil conflict in the 2000s reduced firms' output through two further channels: an increase in unit cost as disruption to production compelled reversion to less sophisticated and less capital-intensive means of production that would have been

competitive in "normal" times, and a drop in demand due to the reduction in household income.⁸⁸ Similarly, the civil unrest in Côte d'Ivoire following the 1999 coup d'état led to an average 16–23 percent drop in firms' productivity, with a larger drop for foreign firms, which were specific targets of the violence.⁸⁹

Conflict can also affect the ability of individuals to provide labor, thus indirectly reducing production, trade and earnings. The post-electoral violence in Kenya in 2008 dramatically raised the costs workers faced to reach the workplace. This led to a large welfare loss for workers (equivalent to more than three times average weekly earnings) and reduced firms' outputs and exports of cut flowers, one of the country's leading agricultural export sectors (Figure 2.4).⁹⁰ Colombian households in areas affected by civil conflict substituted on-farm with off-farm labor, as agricultural work in the field became more difficult during the hostilities.⁹¹ Similarly the Maoist conflict in Nepal induced more women to enter the labor market to compensate for the negative impact of the war on households' earnings.⁹² These coping strategies, however, are not always available, especially in more isolated rural communities, which lack alternative occupations to subsistence agriculture.

In conflict-affected situations, households often adopt sub-optimal production and investment decisions to reduce the risks they face. These strategies typically reduce households' productivity and earnings, constraining their ability to exploit the gains from trade. In Rwanda during conflict, small agricultural producers sold their cattle to be able to smooth household consumption.⁹³ And farmers in conflict-affected areas in Uganda

Figure 2.4: Conflict and Kenyan cut flower exports



relied more on subsistence activities to protect food consumption and their income.⁹⁴ Households also adapt investment decisions to cope with the conflict in ways that reduce the surplus production that they can trade. For example, in Colombia farmers in conflictaffected areas reduced the amount of land allocated to perennial crops in favour of less profitable seasonal crops and pasture, which require lower investments.⁹⁵

The effects of civil conflict spill over to neighbouring countries. Bilateral trade between neighbouring countries declines if one of the countries has a domestic conflict, by 12 percent on average.⁹⁶ The drop is particularly large for those firms exporting to the neighbour in conflict. For example, following the outbreak of the Syrian civil war, Lebanese exporters to Syria experienced an average reduction in exports of 25 percent, while exports by Jordanian firms fell by 75 percent.⁹⁷ Civil conflict may also affect neighbouring countries indirectly, through the disruption of transit for goods and increased insecurity and uncertainty in the neighbourhood. These penalties are even higher for landlocked countries that rely on countries in conflict for access to global markets.⁹⁸

The adverse effects of conflict on trade can extend well beyond the end of hostilities. Investment and production decisions made during conflict are often difficult to reverse, so that households may remain stuck with sub-optimal production patterns even after the conflict ends. Areas emerging out of a conflict usually experience a high degree of uncertainty, which can stifle investment decisions beyond the short-run effect of conflict.99 Thus, households and firms may choose to continue with what are now sub-optimal strategies after the end of conflict, due to uncertainty over whether peace will last. For example, households in Mozambique were still practising many of their wartime coping strategies three years after the 1992 ceasefire.¹⁰⁰ Finally, the impact of loss of education and worse health outcomes due to conflict affect the ability of households to benefit from economic opportunities well beyond the conflict period.¹⁰¹ These factors reduce households' ability to reap the net gains from trade even in the post-conflict environment, thus calling for special efforts to rapidly integrate post-conflict areas with the rest of the economy and provide households and firms with mechanisms to deal with the risks and uncertainties that they face.

In countries with poor governance and weak institutions, competition between different groups within society over returns from trade in products such as lucrative minerals can contribute to conflict. Fragility is typically associated with weak state institutions that impair the provision of the public goods that are necessary for the poor to participate in and benefit from trade.

These include security, transport, energy and telecommunications infrastructure, agricultural extension services and training. Weak institutional capacity affects the ability of governments to manage tension over the control of natural resources.¹⁰² For example, conflicts in the Great Lakes region of Africa have been fuelled by the exploitation of high-value tradable commodities, notably including minerals such as diamonds, gold and the "Three Ts" (tantalum, tin and tungsten), but also timber. Control over the extraction and trade of these resources has been highly contested, fomenting conflict both within and between countries. For the most part, these resources are mined and traded through informal, and often illicit, channels. The benefits have accrued to those that control critical parts of the value chain in transit countries and in destination countries. Transparent management of extractive resources is an essential element for preserving peace in these circumstances. The international community can help through effective and pragmatic measures to address the traceability of conflict-related products, for example through the Kimberley Process Certification Scheme for Rough Diamonds, and other schemes related to the traceability of precious metals. In weak states affected by conflict, large and sudden declines in real incomes, for example driven by increases in the international prices of essential consumption goods such as food, may also exacerbate tensions.103

While ensuring that valuable resources are traded through formal channels is critical to stability, providing alternative employment opportunities for artisanal miners and diversifying trade are also important to resolving such conflicts. Recent international efforts to tackle the trade in conflict minerals have focused on due diligence - requiring companies to implement checks on their supply chains to make sure they are not supporting abusive armed groups. The OECD has developed comprehensive due diligence guidance for companies using tin, tantalum, tungsten and gold. The UN Security Council has similar guidelines. To maximize their effectiveness, policies to address trade in conflict minerals must take place within the context of a comprehensive program for peace and security, including actions to support economic development. Providing alternative livelihoods for artisanal miners in conflict zones is critical to the success of such programs, and trade can play a key role in supporting agricultural development and diversification into agro-processing, basic manufacturing and services.

Informality

The informal sector covers a wide variety of activities. Informal work often involves subsistence farming, self-employment in petty trade or low-transformation household-based production, unpaid work in family farms or family firms, and wage employment in unregistered firms that lack social security coverage (see Box 2.3). This type of informal worker typically earns low wages and has tenuous direct links with trade. But many informal workers are employed by formal firms and may benefit from similar working conditions as formal or declared employees, but without coverage by social security, and in many cases without a written contract.

Box 2.3: Picturing the informal sector¹⁰⁴

The informal sector consists of economic activity that is unregistered, involving self-employment or work for a very small, unregistered firm. Although these firms are often described as SMEs, this is not particularly accurate. Rather than larger SMEs, it is microenterprises employing less than 10 workers - but often only one worker - that make up the bulk of employment in most developing countries. For example, informal sector microenterprises are often dominant employers in the manufacturing and services sectors, accounting for close to 100 percent of employment in Ethiopia, around 60 percent of manufacturing and 80 percent of services in India, and between 50 percent and 60 percent in Ghana. The kind of work done by those in the informal sector varies. Agricultural production on family farms is the dominant informal sector activity. Non-farm activities include small-scale service delivery, transporting people or goods; simple construction work; scavenging for waste that can be reused; personal services like hairdressing or house-cleaning; repairing clothes, shoes or mechanical objects; and so on. Workers in microenterprises in the informal sector lack access to social safety nets or other formal employment protections.

Research provides evidence of a strong correlation between poverty and informality. For example, one study of five developing countries¹⁰⁵ indicates that the share of working poor¹⁰⁶ is higher among workers in informal employment than among those formally employed. Data for 44 countries from the International Income Distribution Database also indicates that informality is consistently higher among the bottom 40 percent of the income distribution than in the top 60 percent.¹⁰⁷ This finding holds for different measures of informality, including the type of employment contract, access to health insurance, and access to social security. The 2013 World Development Report on jobs found that informal workers face a higher probability of being poor, and generally lack social insurance coverage and job protection, making them more vulnerable than formal sector workers along multiple dimensions.¹⁰⁸ Within countries, informality declines with the level of education, suggesting that those with little education are both poor and more likely to find a job in the informal sector. Informal self-employment declines with development, suggesting that as the opportunity cost of being informal rises, fewer people enter.¹⁰⁹ Overall, a blanket conclusion that informal sector workers are less well off than formal sector workers is probably not merited. Nevertheless, the informal sector workers are disproportionately poor, less covered by social protections, and less linked to sources of productivity improvement than formal sector workers.

Those working in the informal sector face greater risks than those in formal activities. Workers in informal firms typically do not have the same employment rights as those in formal employment. Informal sector firms and households have limited access to finance to smooth over short-term economic fluctuations, like a sudden rise in food prices or a sudden contraction in economic growth. In addition, informal sector workers are not covered by social benefits such as health, pension or unemployment insurance, so tend to be less covered against risk than formal sector workers. In general, workers in the informal sector, both wage earners and self-employed, appear to face more earnings risk than do comparable workers in the formal sector. On the other hand, informal sector workers pay less in taxes, may value the flexibility the micro-enterprise sector offers, and often find social protections systems costly and poorly designed.¹¹⁰

Many small entrepreneurs in the informal sector regularly cross borders to provide goods and services, but their growth is limited by the constraints posed by informality. Informal workers tend to be low skilled, and therefore typically benefit from trade liberalization through new job opportunities and higher wages. Policies that facilitate the transition of workers from the informal to the formal sector are likely to increase the benefit from trade opportunities, while mitigating the risks.

A common characteristic of the poor in the informal sector is low productivity, which reduces their earnings potential and resilience to trade shocks. A trade-related shock that leads to a decline in informal employment can cause an immediate loss of income, requiring poor households to curb expenditures on food and other essentials. Informal workers are also more likely to be unbanked and to lack access to finance, whether for smoothing consumption or for investing in human or physical capital. Informal workers' low levels of human capital thus tend to be accompanied by low levels of physical capital investment, further undermining productivity and the ability to appropriate the gains from increased trade. Informal self-employed workers and micro-enterprises also tend to have limited access to market information, and to external markets and the latest technologies used therein, which limits learning, innovation and technology adoption/adaptation. Informal sector workers also tend to use sub-par business processes, reducing cost effectiveness.

There is little available evidence, especially at the micro level, that increased openness to trade is associated with a larger informal sector.¹¹¹ An often-expressed concern is that trade reforms that increase competition in the domestic market will lead to a rise in informality. It is argued that in the face of greater competition, formal sector firms will seek to reduce labor costs by cutting wages and benefits, replacing permanent workers with part-time workers, subcontracting with establishments in the informal sector, and laying off workers who subsequently seek employment in the informal sector. Economic theory does not provide a clear answer, and it is possible to specify models in which trade has the opposite effect. What matters is how the labor market works and how wages in the formal and informal sectors are determined. There are very few empirical studies that have looked at how specific trade reform episodes have affected the size of the informal sector. Those studies that exist have not found compelling evidence of a relationship between trade liberalization and the share of the informal sector in total economic activity. It is the nature of the labor market that seems to be of greatest importance.112

Women, trade and poverty

Poverty disproportionately affects women, and gender discrimination and marginalization impede women's efforts to escape poverty. Women have been at the centre of global efforts to reduce poverty, in particular since the Fourth UN Conference on Women in 1995 identified eradicating the "persistent and increasing burden of poverty on women" as a critical area for action. However, the continuing dearth of appropriate gender-disaggregated data make it difficult to determine how many women are poorer than men, how much poorer they are, and whether gender differences in income have widened or narrowed in recent decades. Nevertheless, a range of indicators of food security, education, health and vulnerability point to women suffering disproportionately from poverty.¹¹³ Constraints faced by women can be direct: for example when women farmers are excluded from the production of cash crops, or indirect, for example when girls and women have limited access to education, finance, ownership of assets such as land, and information. Statutory and customary laws limit women's access to land and other types of property in most countries in

Africa and in about half the countries in Asia.¹¹³ Also of importance is the extremely limited sharing of household tasks, which means that women lack sufficient time to pursue actions that reduce the poverty and vulnerability of their households.

There has been some progress. For example, women have gained parity in primary education in a majority of countries, maternal mortality has fallen by 47 percent since 1990 and the gender gap in labor force participation has narrowed slightly in the same period. But women are still paid less than men for equal work, are over-represented in vulnerable, informal employment, are underrepresented in positions of power and political decision-making, and undertake a disproportionate share of unpaid domestic work.¹¹⁵

Women in the poorest countries face the greatest challenges and the biggest constraints. According the UN Development Programme's Gender Inequality Index,¹¹⁶ South Asia and Sub-Saharan Africa, the two regions with the highest levels of poverty in the world, also have the highest degree of gender inequality. The poorest countries have achieved minimal progress since 1994 in improving women's status, reducing maternal death, eliminating child marriage or increasing women's life expectancy. Lack of access to health services and the extreme physical burdens of food production, water supply and unpaid labor create disproportionate threats to poor women.¹¹⁷

Women in developing countries face more risks than men. Women's risks related to earnings and employment are higher due to their higher participation in the informal sector, their need for flexibility in working hours to meet household and family commitments, and their greater tendency to move in and out of the labor market. Women farmers face greater risks due to their lack of a legal right to own land in many developing countries, and more limited access to instruments, such as credit, to offset weather and employment-related shocks.

Trade has played a key role in empowering women and assisting them in dealing with poverty. Increased trade openness over the past three decades has brought new job opportunities, has often increased returns for women working in export-oriented sectors, and has increased incentives to remove gender biases and discrimination. Across developing countries, exporting firms generally employ a significantly higher share of women than non-exporters.¹¹⁸ Declines in trade barriers, together with new information and communication technologies (see Box 2.4), have reduced transaction costs and increased the access to markets for many women, and in some cases have increased women's wages relative to men's.¹¹⁹

Box 2.4: Gender inequality in access to ICTs¹²⁰

Information and communication technologies (ICTs) notably access to the Internet and to mobile phones --have been an important means of generating additional income for many poor households in recent years. Mobile phones make it easier to access price information, increase flexibility in how women can manage time, and can ease access to important services like banking, health, and education. Because of the tendency for women to face more restrictions than men over their mobility and time due to the combination of family and income-generating commitments, access to ICTs can have a disproportionately positive impact on poverty alleviation for women. However, gender inequalities in access to ICTs limit women's opportunities to escape poverty. Although gender-disaggregated data on ICT access in developing countries are sparse, the evidence available suggests clear gender gaps. In a number of African countries, for example, women are half as likely as men to own or use a cell phone. In many developing countries, women are less likely to be able to access the Internet, although the picture is mixed. Addressing these gender gaps in access to ICTs is critical to poverty reduction.

Increased employment for women through trade has led to positive changes in household dynamics. Women employed in export-oriented industries may be better able to bargain within the household and affect the allocation of resources, leading to better nutrition and higher education for household members. For example, girls in Indian villages where business process outsourcing increased employment among young women were more likely to be in school than girls in villages where there were no such links through trade. By contrast, such trade links did not affect the probability of boys being in school.¹²¹ In Latin America, the increase in female labor force participation rates is largely explained by changes in education and family formation (marriage and children), gender wage gaps are partly explained by the presence of children in the household, and the gap in terms of poverty between female-headed and male-headed households has closed.¹²² Enormous benefits can arise if the empowerment of women through trade-generated jobs leads to a reduction in physical violence against women within households.

Trade has created new opportunities for women in manufacturing and services. The growth of female employment has been faster in manufacturing and tradable services than in other sectors, and female employment in these sectors has increased faster in developing than in developed countries. Increases in female employment levels between 1995 and 2005 were correlated with increases in international trade.123 The associated shift from agriculture to other sectors has brought with it higher incomes and more formal employment for women. But within agriculture, a shift in some countries towards non-traditional and higher value added products, such as horticulture, has also brought benefits to women and reduced gender inequalities in rural areas. Women appear to benefit more from large-scale, exportoriented estate production and agro-industrial processing than from smallholder contract farming.¹²⁴ However, these trends towards the manufacturing and services sectors and high-value agriculture appear less prevalent in the poorest countries, where traditional agriculture still dominates.

In poor countries, women participate in trade in many ways. Women play a key role as small-scale, cross-border traders; women participate in the production of traded goods and services, ranging from rural cotton farmers, to textile workers, to professional activities such as legal and accountancy services; and women can also be entrepreneurs with dominant ownership of exporting companies. While women face common problems, such as limited access to finance, across all areas of traded activity, there are also specific barriers that vary according to the type of activity.

Cross-border trade enhances the income of agricultural producers and traders in poor countries, many of whom are women. Cross-border exchange provides the main source of income for a large number of small-scale traders who are predominantly poor women carrying agricultural products.¹²⁵ The households of cross-border traders are just as well off in the quality of the dwelling, access to electricity, type of cooking fuel used, and ownership of durable goods, as the average urban household that is used as a comparator.¹²⁶ Hence, trading activities are critical in enabling households in border areas to attain the levels of welfare enjoyed by the typical households elsewhere in the country. In Cameroon, women are heavily involved in the harvesting and trade of eru, a vegetable found in the forest and in high demand in neighbouring Nigeria. A recent study of harvesters and traders of eru found that the income from eru trade allows women to contribute financially to their household, especially to their children's education.¹²⁷ The study confirmed that eru harvesting and trade enables women to diversify their source of household income, thus reducing their vulnerability. Taking part in eru trade is also seen as a source of empowerment for women. A typical view

is "I am happy to have my own business and do not receive orders from any boss; neither do I need to depend on any man for my *livelihood.*" Trade opportunities have played an important role in creating jobs for women in Lesotho and Cambodia (Box 2.5).

Box 2.5: Positive trade impacts for women: the garment sector in Lesotho and Cambodia $^{\rm 128}$

A study of the impact on women of the growth of the export-oriented apparel sector in Lesotho suggests that trade and trade policy, in the form of preferential access to the US Market under the African Growth and Opportunity Act, can play a key role in creating jobs for women, including relatively unskilled women who otherwise would have little chance of being formally employed. The benefits extended beyond formal employment and the resulting income, to access to innovative workplace health programs that provided free HIV care and treatment. These services were provided by the Apparel Lesotho Alliance to Fight AIDS (ALAFA) — a public-private partnership involving the Government of Lesotho, local industry (Lesotho-based manufacturers and trade unions), international brands, retailers and donors. Of particular importance was that workers could access the ALAFA clinics while on the factory premises and so did not miss a working day (the public clinics reportedly had an average waiting time of eight hours). Workers thereby avoided having to make difficult choices between wages and attention to health. Another important aspect of the program was that workers who had been dismissed still had access to the ALAFA clinics for the subsequent six months.

The export-oriented garment sector is one of the main providers of wage employment in **Cambodia**, with significantly higher participation by women than others sectors: 85 percent of total garment industry workers are women. Women in the garment sector receive a positive premium on wages compared with other sectors, contributing to their economic empowerment, despite an overall gender wage gap across all sectors of 30 percent. Preferential market access on garments coupled with assistance to upgrade labor standards in the garment industry made an important contribution. The Better Factories Program — a partnership managed by the International Labor Organization and supported by the government, by the Garment Manufactures Association of Cambodia, and by the unions, has helped implement favourable conditions for female employment.

However, gender gaps have limited the ability of many women to benefit from trade opportunities. Since the challenges facing women are often highest in the poorest countries, it is typically poor women in Africa and South Asia who have been excluded from the benefits of more open trade. Some of the key issues are:

- (i) With lower education levels and less training, women producers and traders face more constraints in accessing overseas markets than do men. This is particularly constraining in agriculture, as it limits the ability of women farmers to raise their yields through use of improved seeds and fertilizers. Limited education and illiteracy make it difficult to comply with complicated border procedures and make women traders more vulnerable to predatory behaviour and extortion by officials, and those pretending to be officials, at borders with weak governance.
- (ii) Women face greater risks when trading across borders. Bad governance and non-transparent rules and regulations at borders mean that women traders are often subject to extortion and physical harassment, including rape, when crossing borders.¹²⁹ While there has been considerable attention to facilitating trade in terms of the processing of trucks and containers, with substantial support from the donor community, there has been little attempt to improve the conditions faced by small-scale traders, the majority of whom tend to be women, despite the significant potential benefits of such improvements for poor households in border areas.
- (iii) Women face substantial time constraints, a result of the uneven distribution of responsibilities in the household. The amount of time women can spend on trade-related activities is limited by social biases towards work in the home and bearing and caring for children. The eru traders in Cameroon lamented that they often have to cancel planned trips to the market because of lack of time. Time delays in crossing the border can be particularly burdensome for women. Women who challenge these constraints within the household can suffer domestic violence. Measures to simplify trade procedures for women, to provide nursing facilities at border posts and border markets, to provide storage to allow for better planning and organization of time, and to provide training and support to traders and producers in a way that is compatible with household obligations can all have important benefits for women.

- (iv) Women can be excluded from traditional, male-dominated distribution networks. Successful exporting or importing usually requires interaction with distribution networks. However, women often have limited access to contacts in the market and to role models, and as a result, their contact with the "business culture," which serves as the main training ground for trade, is often limited. Analysis of male- and female-owned firms suggests that male-owned firms are more likely to find customers through traditional networks of contacts, while women-owned firms have to find other means.¹³⁰ The Internet is playing an important role in allowing women exporters to overcome these constraints, underlining the importance of ICT connectivity for women, especially in rural areas (although Internet penetration remains low in the poorer communities).
- (v) Women have limited access to finance and face restrictions on ownership of land. There is a clear gender gap with regard to access to finance. Women in developing economies are found to be more excluded from the financial sector than men, even after controlling for income and education. Of those living below US\$2 per day across the globe, women are 28 percent less likely than men to have a bank account.131 The difference is even greater in the poorest regions. Lack of access to finance significantly constrains women's participation in trade-related activities, because these generally require capital. This applies to a wide range of cases - from women traders who want to expand their business, to farmers who want to increase their yields by investing in modern seeds and fertilizers, to owners of exporting companies. Often lack of collateral, and especially restrictions on land ownership, limit women's access finance. In many countries, a woman may still need the signature of her husband to be granted a bank loan, but not vice versa.

Discrimination, for example in the labor market and in the household, may limit the opportunities for women to benefit from trade. Existing patterns of gender segmentation may become more entrenched, especially in the poorest countries, if women remain confined to slow-growing (or contracting) non-tradable sectors while men continue to predominate in the tradable and expanding sectors.¹³² Studies find that women farmers in Africa are less productive than their male counterparts, but this gap disappears when controlling for factors such as the quality and tenure of land and access to inputs in the market. Addressing

constraints that limit women's access to inputs, for example, is critical for maximizing the gains of trade for women. Even when trade opportunities have delivered new jobs for women, gender biases have sometimes resulted in greater risks, less protection and more unfavourable working conditions for women compared to men (Box 2.6 discusses one example). Jobs for women in export sectors may be less sustainable if women are denied the opportunities for training and skill enhancement.

Box 2.6: Risky business: poor women cross-border traders in the Great Lakes Region¹³³

A recent survey identified the following key features of cross-border trade in the Great Lakes Region: the majority of traders are women (85 percent of the respondents); most of the officials who regulate the border are men (82 percent); for almost two-thirds of the respondents, income from cross-border trade is the main source of income; and most (77 percent) report that household income is heavily dependent on their trading activity. These survey results paint a dark picture of the conditions experienced by poor, female crossborder traders. Cross-border traders regularly have to pay bribes and suffer harassment. An important feature of many border crossings is the large number and range of officials at the border, increasing the opportunities for abuse, particularly in an environment of generally weak governance. A lack of transparency and awareness by both traders and officials of the rules and regulations that govern cross-border movements of goods and people compounds this situation. A large number of traders report having to pay bribes and being subject to acts of violence, threats, and sexual harassment. Traders are exposed to beatings, verbal insults, stripping, sexual harassment, and even rape. Much of this abuse is unreported. This lack of economic and physical security and safety undermines the livelihoods of these traders and compounds their lack of access to finance, information, and business knowledge.

Trade policies and their implementation can have important effects on women. Increasing recognition of the different effects of trade on women compared to men, and improving the extent to which women are consulted on trade policies and their implementation, can help increase the poverty impact of trade. For example, efforts to improve facilities at borders could do more to address the specific needs of women. As another example, export bans on staple foods, such as maize, reduce the price received by poor farmers, and may have a particularly deleterious impact on the welfare of the many female farmers and their households.

Conclusion

The extreme poor face a range of constraints that condition the way they benefit from trade opportunities. Addressing these constraints involves understanding how the nature of poverty across the four dimensions of rural poverty; fragility and conflict; informality; and gender affects the relationship between poor people and trade. The constraints faced by the poor tend to cut across multiple dimensions of poverty - many of the women facing challenges in benefiting from trade opportunities are those in rural areas, working in the informal sector, for example. The extent to which each of these dimensions applies within each country --and across borders for neighbouring countries - varies, but the four dimensions identified in this chapter provide a lens through which the constraints faced by the extreme poor in benefiting from trade can be better understood. The risks that the extreme poor face further compound the difficulties for them in maximizing the gains from trade opportunities. At the same time, the strength of these constraints and risks means the opportunities for poverty reduction are great if they can be addressed.



POLICIES TO MAXIMIZE THE GAINS OF TRADE OPPORTUNITIES for the poor, and minimize the risks

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Policies to support open markets and integrate economies are indispensable in the effort to end poverty. As Chapter 1 showed, an integrated global economy has allowed a flow of goods, services, investment and ideas that has helped lift more than one billion people out of poverty since 1990. Even though trade integration may not automatically contribute to poverty reduction in the short term, without it economies struggle to grow in the long term and thereby to boost incomes for the poorest. Even outside the countries where the poorest are concentrated, trade makes an important contribution to growth and poverty reduction. Economic growth in large developing countries has not only helped lift people in those economies out of poverty; by boosting global demand their growth has created new opportunities for the extreme poor elsewhere. Growth in advanced economies also helps add to global demand. Thus, on-going efforts to integrate markets in goods and services through unilateral reform, regional cooperation, and multilateral processes are critical to poverty reduction.

At the same time, ending poverty will require a targeted approach to maximize the gains and minimize the risks of economic integration for the extreme poor. Chapter 2 showed that extreme poverty is entrenched in rural areas, in fragile states, among women, and among informal sector workers and firms. Broad-based growth policies must be complemented by approaches targeted at the poor to achieve continued progress in poverty reduction, particularly as the responsiveness of poverty reduction to aggregate growth will decline as global poverty continues to fall.¹³⁴

This chapter sets out a framework (Figure 3.1) for analysing the most important trade-related policy issues for tackling extreme poverty. This framework combines policies to lower trade costs, focused on reforms to reduce tariff and non-tariff barriers and facilitate trade between countries, with measures to deepen the poverty impact of these policies, as well as complementary policies to tackle sub-national and internal constraints faced by the poor that limit their capacity to benefit fully from the opportunities generated through trade. The most effective prioritization and sequencing of policies will vary by country, depending on the nature of the challenges faced by the poor. The issues presented in this chapter are intended to respond to the characteristics shared by the poor globally — set out in Chapter 2 — but the specifics vary from country to country. In many cases, regional approaches will be important to complement multilateral efforts to address these challenges.

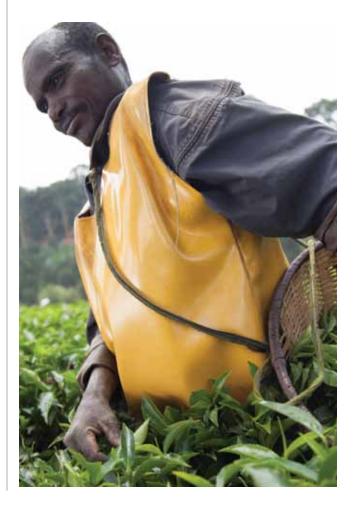


Figure 3.1: Framework of issues

Implementation of reforms across each of the five main areas in this framework should be considered, with the overall goal of boosting growth and raising incomes for the extreme poor



A key message is that lowering tariff and non-tariff barriers, and other national-level approaches — although critical — may not be enough to deliver the poverty gains required to end global poverty by 2030. While countries are the basic "building blocks" of international trade policy, the challenges faced by the poor vary greatly within national borders, and across borders. This means that a focus on lowering trade costs between countries will need to be complemented with efforts to tackle challenges faced by the poor within and across national borders.

This chapter looks at the policies necessary to address these constraints and the role of the World Trade Organization (WTO) and World Bank Group in addressing them. The chapter is structured in four sections. The first considers the need to improve data and analysis of the links between poverty and trade. Despite some steps forward, significant data gaps continue, making it hard to design effective policies based on the characteristics of poverty in individual countries. The second section considers policies to lower trade costs and improve the enabling environment, which are necessary to stimulate growth and contribute to poverty reduction. The third section focuses on ways in which this process of integration can be refined to maximize the gains for the poor, other policies to be considered in overcoming the key constraints the poor face, and the risks which further limit their capacity to benefit from trade opportunities. The final section considers implications for the World Bank Group and WTO.

Integrating markets and improving the enabling environment

Further efforts to integrate markets are critical to unlocking the economic growth needed for poverty reduction and creating new trade opportunities for the poor. Reducing trade costs can directly benefit the poor by making the goods and services that they provide more competitive and lowering the costs of inputs in production. This section discusses four key areas of action, including tariff and non-tariff measures; infrastructure and trade facilitation; access to trade-related technology and trade finance; and the enabling environment. The section does not include an exhaustive list of policies, but rather focuses on critical steps to harness trade for poverty reduction that cut across each of the poverty dimensions examined in Chapter 2.

Tariff and non-tariff measures

Despite steady progress in economic integration, various tariff and non-tariff measures continue to generate significant trade costs, including in areas of importance for the poor. A key contribution of the multilateral trading system to the global economy has been the long-run reduction in trade barriers facilitated by the WTO and the General Agreement on Tariffs and Trade (GATT) before it. Average tariffs levied by importers on products from least-developed countries (LDCs) have been decreasing over time, in line with global declines in mostfavored nation (MFN) tariffs, preference schemes, and the WTO Decision on Duty-Free Quota-Free market access (see Box 3.1). However, despite these overall declines, tariffs and tariff rate quotas on agricultural products remain, on average, higher than those applied to non-agricultural products, and relatively high duties persist on a number of products of importance for lowincome producers, especially in agriculture and clothing. This is especially true for MFN and bound duties (Table 3.1). Most importantly, significant distortions remain in agriculture, especially due to the use of subsidy measures. This lack of discipline on trade policies on agricultural products contributes to an uncertain trading environment that has a particularly adverse impact on poor farmers, given the very high risks they already face (as discussed above).

Box 3.1: WTO decision on Duty-Free Quota-Free (DFQF) market access

At the 2005 Ministerial Conference in Hong Kong, WTO members agreed to enhance market access for leastdeveloped countries through non-reciprocal preference schemes, and decided that "developed countries and developing country members declaring themselves in the position to do so would provide duty-free and quota-free market access on a lasting basis [...] for all products originating from all LDCs [...] no later than the start of the implementation period in a manner that ensures stability, security and predictability". The decision required that DFQF market access should be provided for at least 97 percent of products. Further, at the Ministerial Conference in Bali in December 2013, WTO members decided that developed countries that do not yet provide DFQF access on at least 97 percent of products originated in LDC "shall seek to improve" their DFQF coverage prior to the next Ministerial Conference. Today, most developed and some developing countries offer significant duty-free market access to products from LDCs.

Table 3.1: MFN applied and bound rates, and binding coverage (in percent), based on World Tariff Profiles (2014)

	Most-favored nation (MFN) in percent			Bound rate in percent			Binding coverage ^b
	Average	Ind.ª	Agr.ª	Average	Ind.ª	Agr.ª	Average
Developed	4.7	2.4	18.6	10.4	5.8	40.1	99.0
Developing	8.3	7.5	13.3	31.7	26.6	48.8	87.5
LDCs	11.5	11.0	14.8	59.2	42.2	72.8	60.5

Source: WTO Integrated Database and World Tariff Profiles 2014 including AVEs.

a The standard WTO definition of agricultural products (Agr.) and non-agricultural products (Ind.) has been used

b The average binding coverage across all products. Agricultural products close to 100% bound

Further progress in the Doha negotiations, and in particular achieving a substantive outcome on agriculture, is necessary to increase the effectiveness of trade in reducing poverty. The agriculture sector, which employs most of the poor, will continue to play a key role in lifting people out of poverty. Its role could be strengthened if more was done to remove remaining obstacles to agricultural exports. Tariffs and subsidies are particularly high in the agricultural sector, as discussed in Chapter 2, and anti-competitive behaviour in some segments of the supply chain can make it particularly hard for the poor to benefit from trade participation. The increasing importance of supply chains in production has highlighted the linkages between the agriculture sector on one side and the services and manufacturing sectors on the other, showing that progress in removing obstacles to trade ideally should occur simultaneously across all sectors. In the long run, the capacity to leverage agriculture for reducing poverty will depend on achieving continuous improvements in productivity, reducing the costs to trade in agricultural goods, reducing tariffs on imports and key intermediates such as fertilizers and agricultural machinery, and improving access to a range of services that are key inputs in the production chain.

The capacity to comply with product standards has become an important factor in determining access to markets,¹³⁵ particularly for poor producers of agricultural products. Standards are often set to achieve important and legitimate public policy objectives of the importing country. Well-designed standards can facilitate trade by providing necessary information to producers seeking to enter new markets. There is evidence that the standards introduced by multinationals investing in developing countries may contribute to increased trade for these countries, and have a significant impact on poverty reduction.¹³⁶ However, compliance with standards may also result in higher production costs, and new inspection and certification requirements that undermine competitiveness. There is also a risk of setting standards too high for smallholder farmers to meet, or at a level that consumers do not really require or cannot afford. In addition standards may be manipulated to act as trade barriers. The Standards and Trade Development Facility is an example of a program assisting developing countries to meet international standards (Box 3.2).

Box 3.2: The Standards and Trade Development Facility

Recognizing the growing potential of standards to reduce the benefits of agricultural trade for the poor, five international organizations - the Food and Agriculture Organization of the United Nations (FAO), the World Organization for Animal Health (OIE), the World Bank, the World Health Organization (WHO) and the WTO --established the Standards and Trade Development Facility (STDF) in 2002. The STDF helps developing countries gain access to markets by improving their capacity to meet international sanitary and phytosanitary (SPS) standards, guidelines and recommendations. The STDF has strengthened collaboration on SPSrelated technical cooperation, improving the capacity of beneficiaries to identify and prioritize SPS needs and formulate project proposals that are able to secure funding, and improving the performance of the beneficiaries of STDF-funded projects.

Trade and regulatory policies in many countries with large poor and rural populations also affect the productivity of poor farmers. In Africa in particular, these policies affect the potential for greater regional trade. Only 5 percent of Africa's demand for food staples is met through supply from other African countries.¹³⁷ Barriers to imports of seeds and fertilizers can severely limit productivity increases in agriculture. Improved access to seeds and fertilizers could help produce a version of the Asian "Green Revolution" of the second half of the 20th century in West Africa, where 20 percent of the region's food requirements are met through imports. With proper seed and fertilizer inputs, West African countries could double or triple their output of most major crops. Although governments in the region are gradually becoming more active in supporting imports, including through regional trade of these inputs, more needs to be done to analyse and address the trade-related barriers limiting farmers' access to inputs and their ability to sell their produce.138

Well-designed and implemented standards incorporate assessments of effects on the poor. While standards are often an important part of the process of production upgrading for the poor, poorly designed standards may impair the ability of the poor to trade. For example, proposed standards in the East African Community on discoloured maize could exclude all smallholderproduced maize, if the requirements are too stringent and alternatives for lower grades are not provided.¹³⁹ Simply importing standards from developed countries will often not be appropriate, particularly for products not destined for export to developed countries. Even where food safety is concerned, governments should evaluate whether there are equivalent, less burdensome ways of ensuring that food is safe. For example, international standards for the consumption of fresh cold pasteurized milk require very specific procedures, processes, and equipment to limit the growth of bacteria that could cause harm to humans -requiring investments that are beyond most poor producers in East Africa. However, in many developing countries the majority of people consume raw milk but boil it before consumption, which — if properly done — kills the bacteria. While requiring that all producers in East Africa satisfy the international standards would indeed raise the quality of milk in the domestic markets, it could compromise the supply of milk from a vast number of small producers.¹⁴⁰ This highlights the importance of supporting poor producers to upgrade their capacities in meeting international standards.

Infrastructure and trade facilitation

Physical infrastructure improvements are important to lowering trade costs to support the participation of the poor in trade. Traders and producers in lower income countries often do not have effective modes of transportation infrastructure including quality roads, railway, ports and air transportation — to allow their goods and services to reach markets in a secure and timely manner. Improved trade-related infrastructure can reduce the costs involved in connecting to markets. Poor infrastructure accounts for more than 40 percent (up to 60 percent for landlocked countries) of transportation costs.¹⁴¹ The need for infrastructure investment in the countries where the poor are concentrated is significant. For example, recent World Bank estimates suggest that South Asia alone requires transport infrastructure investments of between \$411 and \$691 billion (2010 prices) through 2020.¹⁴² Rural road upgrading and maintenance is of great importance for connecting the poor in remote areas. Improving port efficiency can have a large impact on reducing shipping costs. Research shows that bad ports can be equivalent to being 60 percent further away from foreign markets for the average country.¹⁴³

However, approaches that focus on weak physical infrastructure alone as a barrier to connecting the poor to markets are unlikely to achieve their full potential. Addressing "soft infrastructure" constraints - including logistics services and border management — is required to maximize the gains from infrastructure investments. This entails policy measures and regulatory reforms that often involve complex political economy dynamics. Freight costs in developing countries are on average 70 percent higher than in developed countries, with Africa being the region with highest cost, at twice the world average.¹⁴⁴ Lowering freight costs requires a mix of increased competition, simplified regulations, and other reforms to address the structure of the transport sector. A recent study shows that that the gains from trade in remote regions of Nigeria and Ethiopia tend to be captured by intermediaries, highlighting the role of high distribution costs in limiting the gains from trade enjoyed by the poor in remote areas.145

Lowering trade costs through improvements to policy and procedures affecting border management is critical. The costs generated by inefficient border management can be addressed through trade facilitation reform programs. The measures contained in the WTO Trade Facilitation Agreement (see Box 3.3) should form the "baseline" for any trade facilitation program to connect the poor to the opportunities presented by international trade. These measures also would complement existing national and regional trade facilitation initiatives, as well as other reforms, including those targeted at small-scale traders like Simplified Trade Regimes or the Charter for Cross-Border Traders (see Box 3.6).

Box 3.3: The Benefits of the Trade Facilitation Agreement

The Trade Facilitation Agreement (TFA) signed at the Ninth WTO Ministerial Conference foresees a number of measures for streamlining border processes, such as pre-arrival processing of shipments, electronic documentation and payment, and the release of goods prior to the final determination of customs duties. The aim is to reduce the time required for, and improve the predictability of, trade. Poor trade facilitation is an important source of high trade costs across countries where the poor are concentrated. Delays at the borders, administrative costs and cumbersome procedures are particularly burdensome in developing countries, and most of all in LDCs. Delays in getting goods from the factory gate onto the ship hinder exports more than foreign tariffs do,¹⁴⁶ particularly in lower-income countries. For instance, importers in Sub-Saharan Africa face an average applied tariff of 11.2 percent, whereas the estimated ad valorem tariff equivalent of the delays importers incur (expressed in monetary costs) may be as much as 25.6 percent.

A common finding of the economic literature is that trade facilitation can improve export performance, and that the potential gains are larger for developing than developed countries. Estimates indicate that the implementation of the TFA would reduce trading times by 2 days on average, with significant positive effects on trade.¹⁴⁷ For example, using a sample of Uruguayan firms, one study¹⁴⁸ shows that an increase by two days in the duration of export inspections reduces exports by 16.4 percent. Overall estimates suggest that the TFA may reduce developing countries' trade costs by 14 percent on average.¹⁴⁹ Trade facilitation can also promote export diversification. For Sub-Saharan African countries, one set of simulations suggests that improved trade facilitation can lead to an increase in the number of products exported by destination of up to 16 percent.¹⁵⁰

Trade facilitation may be particularly beneficial to the poor. Time at the border is costly, particularly for the poor, and most especially for women who are most time-constrained due to obligations in the home. Lack of governance and corruption impinge most heavily on small traders with very fine profit margins. Reforms to make border crossing procedures more transparent and predictable are of particular importance to small traders, and especially women, who are typically more vulnerable given the asymmetry in power between the official and trader, and the lack of a functioning mechanism for addressing complaints and resolving disputes. Trade facilitation is likely to be of particular importance for perishable agricultural products, which are often the products produced and traded by the poor.

Access to trade-related technology and trade finance

Improvements in access to information and communications technologies (ICTs) can increase the gains from trade for the poor. The quality of ICT infrastructure in developing countries lags significantly behind high-income countries. At the global level the application of ICTs has significantly changed the transport sector. The freight industry, traditionally very fragmented, has become more integrated, and a multimodal transport system organized by logistics companies has developed. Sharing information among terminal operators, shippers and customs brokers can help manufacturers and logistics contractors to manage the supply chain and facilitate "just-in-time" delivery and material requirements planning.¹⁵¹ Inability to deliver on time significantly reduces access to new trade opportunities arising from supply chain production. In addition, crossborder trade in services (GATS Mode 1) largely depends on telecommunications as the channel for transactions. For example, the use of ICT in the tourism sector renders the use of online reservation systems possible, thus providing local people working in the sector the possibility to bypass international agents in the tourism value chain. Technology has also enabled the rapid growth of business process outsourcing in developing countries like the Philippines and India, creating new and better-paying jobs for people. Online freelancing also provides workers access to larger and more global employment marketplaces. Workers can bid for tasks on platforms, such as Elance-oDesk and Freelancer.com, and deliver services digitally to their employer.152

ICTs also can help to reduce information costs, foster trade, improve market efficiency and increase traders' income. For example, the introduction of mobile phone services to coordinate sales between fishermen at sea and wholesale and retail traders in Kerala - a state in India with a large fishing industry — has reduced price dispersion across markets through increased opportunities for arbitrage.¹⁵³ Fishermen's profits increased by 8 percent, consumer prices fell by 4 percent, and fish waste was reduced. The Internet is improving access to information on markets and also on countries' trade rules and regulations. Additionally, the opportunities for lowering trade costs by connecting to buyers directly and using efficient distribution services established by large, specialized e-commerce firms can help create new export opportunities that can generate benefits for the poor. Export survival rates appear to be significantly higher for firms participating in e-commerce, and e-commerce appears to be facilitating the participation of a greater number of small firms in international trade.¹⁵⁴

Lack of access to trade finance is a serious impediment to participating in trade, with small firms in low-income countries most affected. As much as 80 percent of global trade is supported by some form of financing, for example credits that bridge the time gap between the exporter's shipment and the importer's receipt, or loans for working capital to provide exporters advance payments to meet urgent financial needs. A recent survey shows that lack of access to trade finance is a major obstacle to trade for 66 percent of exporters in Africa.¹⁵⁵ These difficulties have been exacerbated since the financial crisis, as global banks have reduced their banking network and costs by cutting finance for trade in the poorest countries.¹⁵⁶ A December 2014 survey of 900 banks by the African Development Bank shows that obtaining confirmation of letters of credit has become more difficult for African banks. When finance is available, interest rates and collateral requirements are very high for traders (over 25 percent and more above inflation). A similar survey by the Asian Development Bank estimates the amount of finance rejected in developing Asia at close to \$1 trillion, with a rejection rate of 50 percent for trade financing submitted by SMEs. Although there have been some successes in efforts to raise awareness of the impact of trade finance constraints, and address these through targeted programs and wider reforms to the financial sector, limited access to trade finance continues to be a constraint on trade.

Enabling environment

A sound enabling environment is critical for trade to

contribute to growth. At the country level, successive research has confirmed that key ingredients of policy strategies for sustained and inclusive growth include:¹⁵⁷

- · Sustained investment in education, health and infrastructure;
- · Functioning capital markets;
- Labor market reform, fostering competition and innovation in the domestic economy, and facilitating shifts from less to more competitive economic activities;
- · Ensuring macroeconomic stability;
- Effective governance, rule of law, and secure property rights.

These enabling factors help create the conditions for the poor to benefit from trade. Financial sector depth, governance and property rights, and education are particularly important in maximizing the contribution trade makes to poverty reduction. A healthy financial sector helps overcome limitations on access

to credit, helping businesses grow, and making it easier for households to manage risks and economic fluctuations. Strong governance allows contracts to be enforced and increases predictability, while education is important in skill upgrading. An analysis of 30 African countries over 1981-2010 found that trade openness tends to reduce poverty in countries with deep financial sectors, high education levels, and strong governance. These factors are very important in ensuring an economy's capacity to transform through trade openness by reallocating resources from less productive sectors to more productive ones.¹⁵⁸ By reducing distortions in resource allocation, changes in the overall enabling environment help maximize the positive impact of trade openness on growth. Deepening integration into global markets through lower trade costs involves work to address "behind the border barriers", internal costs, regulatory issues, and many of the other traderelated policies surveyed in the preceding sections. Lowering trade costs is critical for poor countries, since the lower average incomes are, the higher trade costs tend to be.159

Despite shocks, the generally more stable macro-economic situation of many developing countries in recent decades has helped create the conditions for sustained growth and poverty reduction. In Africa, the boom-bust cycles that preceded the 1990s were replaced in many countries by greater stability, assisted by stronger macroeconomic policy management and debt relief. These stronger macroeconomic frameworks even proved resilient to the impact of the 2008–09 crisis.¹⁶⁰ In a climate of macroeconomic instability, with exchange rate volatility and high inflation directly affecting trade and business decisions, it is unlikely that growth or trade can be sustained.

Cross-cutting investments in human capital — notably good nutrition, education and health — are important long-run determinants of labor productivity.¹⁶¹ Addressing job-relevant skills deficits among the poor can be an important aspect of fostering their participating in trade through employment in exportrelated firms. The availability of skilled workers can also be a key determinant of global value chain-driven investment, as well as the potential for countries to benefit from positive spillover effects of GVCs through greater employment of workers in the domestic economy. Job training programs must be carefully designed, with a focus on providing poor individuals with skills demanded by tradeoriented firms.¹⁶²

Constraints in the overall business environment that create an incentive for informal, rather than formal, economic activity need to be addressed. Such constraints include high rates of taxation and social security contributions, regulatory burdens, limited access to finance, barriers to competition, and

corruption. Efforts to address these constraints, coupled with targeted support for small firms, can help foster an environment where small firms are more able to participate in trade. At the same time, the sheer size of the informal sector and the number of micro and small enterprises involved means it is important to remain realistic about the impact of programs that only provide direct support to such firms: they need to be complemented by reform to address economy-wide constraints.¹⁶³ At the same time, the likely timeframe for implementing the economy-wide reforms needed to support a transition to formality also confirms the importance of policies intended to support informal firms' participation in trade, for example as small traders.

Well-functioning trade institutions are critical in transmitting the positive effects of trade to the poor. The institutions that support trade continue to be weak in many countries with significant numbers of poor people. The experience of LDCs supported through the Enhanced Integrated Framework (EIF) — a mechanism to assist LDC integration into the global economy — is informative. Through the EIF, almost all LDCs have received technical reports (Diagnostic Trade Integration Studies) analysing trade competitiveness and potential. However, some have found it challenging to translate this analysis into comprehensive and sustained policy reform.

The quality of trade-related institutions has helped the more successful low-income countries to maximize the gains from trade-driven growth. Lao PDR, for example, has built an effective, centralized institutional structure for trade policy, and for coordinating donor-funded trade projects, which enabled a demand-driven process with strong ownership by the government. Ministries of trade or commerce need the capacity to develop and implement trade policies effectively, and coordinate with the wide range of agencies involved in managing the many dimensions of competitiveness in international markets. For example, effective efforts to lower trade costs at the border involve not only the agency responsible for customs and ministries of commerce, but also ministries of public security, health, agriculture, and others.

Improvements to the enabling environment should be undertaken in tandem with the targeted approaches outlined in the following section. Small-scale business and poor farmers, unlike large and politically well-connected firms, often cannot find viable ways around the constraints imposed by a weak enabling environment. Policies to improve the enabling environment and targeted reforms are not mutually exclusive; one need not precede the other, and they can be closely linked. For example, policies to deepen integration could incorporate measures to support small traders and strengthen consultations with the poor, as well as negotiations to reduce barriers to goods and services trade.

Refining integration and mitigating risks to maximize positive effects for the poor

This section outlines a number of ways in which the wider process of economic integration outlined in the preceding section can be built upon with more targeted policies to maximize the benefits of trade for the poor. It also considers the risks faced by the poor, and the extent to which these can be mitigated.

Refining integration to maximize gains for the poor

The wider processes of economic integration must be complemented by more targeted approaches to maximize gains for the poor. An evaluation of the characteristics of poverty at the country level can generate pro-poor recommendations for strengthening sub-national connectivity, addressing internal barriers to competition, facilitating small-scale trade, and improving institutions, among others.

The returns from addressing sub-national trade facilitation, logistics and other internal market issues are likely to be substantial. While trade facilitation reforms at key international gateways – including those discussed in the preceding section – are likely to have positive outcomes for the poor, they are not enough to maximize the gains for the poor. Even if the efficiency of trade at major gateways improves, the extent to which the benefits pass through to those in remote areas depends largely on internal, behind-the-border constraints, including sub-national connectivity and logistics, and barriers to competition.

A concerted effort to improve sub-national logistics could generate significant benefits for poor agricultural producers, who typically experience high transport costs in accessing remote international gateways. The trade-related barriers along the agricultural supply chain from producer to consumer are complicated, especially at the first stages of the supply chain. Substantial costs are incurred in the earliest steps taken to consolidate small volumes of agricultural products from smallholder farmers. The gains from reducing these transport costs could be significant. For example, a 50 percent reduction in transport costs could increase real agricultural GDP by seven percent in Mozambique and three percent in Malawi. Reforms to increase competition among logistics providers could reduce the cost of transporting staples in West Africa by 50 percent within 10 years.¹⁶⁴

Greater impact could be achieved through coordination between trade, transport and agricultural support policies; for example, road projects in rural areas to connect farmers to markets may have limited effect without coordinated investment in storage facilities. An absence of well-planned storage facilities (whether financed by government, private sector, or a combination) can significantly raise transport costs. Increased understanding of the alignment of interests between producers, buyers and governments is likely to have a positive impact. This could involve, for example, taking advantage of the greater capacity of larger firms to address sources of logistics costs, and the willingness of large domestic and multinational firms to invest directly in supply chain improvements if the policy framework is stable and supportive. It would also involve an understanding of how the needs of small producers are different from those of large producers, and what role intermediaries play in shaping profits earned by poor farmers.

Lowering domestic transport costs is particularly important for poor producers of food staples. Given the low ratio of value-to-weight of many agricultural products, transport costs represent a significant share of the final price. For example, a 2007 study of the value chain for fresh cassava in Cameroon found that domestic handling and transport costs made up 21–35 percent of total shipment value, over the relatively short delivery distance of 130 kilometres. This compared with less than 12 percent for cotton lint delivered over more than 1,200 kilometres from northern Cameroon to the port of Douala.¹⁶⁵ Food staples are strongly linked to poverty reduction, particularly given their importance for food security.

Promoting competition can help ensure a level playing field for firms, reduce the barriers to entry facing small firms, and lower input costs for potential exporters as well as prices for poor consumers. Anti-competitive behaviour in transport and distribution networks, for example, is often identified as one of the reasons behind intra-national transport costs being higher than international transport costs in many countries — although the small scale of domestic shipments, weak infrastructure, and other factors are also important.¹⁰⁶ A recent analysis of sugar and maize in Kenya found that market distortions, have increased market prices and thus reduced the real incomes of poor households. Relaxing trade barriers to allow sugar prices to fall by 20 percent was estimated to reduce poverty by 1.5 percent. Similarly, adjusting government interventions in the maize market could reduce maize prices by 20 percent on average, and that would reduce poverty by 1.8 percent.¹⁶⁷

Improving competition among the processors and traders of crops could significantly increase farm gate prices for informal smallholder farmers. Case studies of export crops in Africa — such as cotton in Zambia, Malawi, and Burkina Faso, coffee in Uganda, Rwanda, and Côte d'Ivoire, tobacco in Malawi and Zambia, and cocoa in Côte d'Ivoire and Ghana,¹⁶⁸ demonstrate the substantial impact of the structure of export value chains on poverty and welfare in rural areas. For example, splitting the largest cotton processing firm in Zambia could increase the income of the average cotton producer by more than 2 percent. Similarly, concentration in the distribution sector acts as an import barrier by increasing trading costs,¹⁶⁹ thus reducing the market access benefits for the poor from tariff reductions.

Measures to facilitate formal trade and overcome the constraints faced by small-scale traders are important.

Programs that improve the overall transparency of trade regulations can be especially beneficial for small-scale traders, who often lack the capacity of firms to locate and understand what rules apply. Transparency can also be implemented in ways that are particularly targeted at small-scale traders that may have limited capacity to understand or access regulations, either physically or on the Internet. Trade facilitation reforms that streamline border clearance procedures should have a particularly positive impact on small traders, complementing simplified trade regimes or other similar schemes. For example, the Common Market for Eastern and Southern Africa (COMESA) implements a Simplified Trade Regime which provides for simple customs procedures and declarations for shipments of less than US\$1,000, although low awareness of the scheme, mutual mistrust between border officials and traders, and poor information have limited its impact to date. The Charter for Cross-Border Traders (see Box 3.6) is another example of an approach that addresses the constraints imposed by size, while still supporting the gradual formalization of trade. One of the key aims of the Charter is to improve trust between traders and officials by establishing mutual responsibilities. Another example is provided by the World Bank Group's Great Lakes Trade Facilitation Project (Box 3.4) which targets support to small-scale traders in a fragile and conflict-affected region.

Box 3.4: The Great Lakes Trade Facilitation Project

The project's objective is to facilitate cross-border trade by increasing the capacity for commerce and reducing the costs faced by traders, especially small-scale and women traders, at targeted borderland locations in the Great Lakes Region. The project will support interventions in six countries (DRC, Burundi, Rwanda, Tanzania, Uganda, and Zambia) that have a common desire to promote cross-border trade and are facing similar constraints. The development indicators being used to measure success include: (i) average time to cross borders (ii) incidence of harassment of small scale traders, especially women; and iii) perception of traders regarding quality of services provided by border agencies.

The project will prioritize agriculture and trade in food products (the primary goods traded in border areas by small-scale traders), by targeting border crossing points which form major bottlenecks in the link between farmers and regional markets. These efforts should improve food security, increase incomes for many poor households, and raise employment in the agriculture, food processing and logistics sectors. The first phase of the project, involving the DRC, Rwanda and Uganda, has been prepared; it is expected that implementation will commence in October 2015.

More targeted systems for gathering and disseminating information can reduce information costs for the poor. Poor farmers and small firms often have little or no information on market conditions, prices and the quality of goods. Surveys of urban and rural households in Nepal and India suggest that the poor gather information mainly through informal networks of trusted family, friends and local individuals, and that the internet, fax and computers are accessible by only 2 percent of the lowincome households.¹⁷⁰ This limits the ability of the poor to organize collectively to help offset the market power of the generally larger and stronger market intermediaries to whom they sell their produce and from whom they buy inputs and consumer products. Better access to market and price information — including through ICTs, as discussed above — can assist producers with marketing decisions, and help them to organize and develop strategies to achieve better and more stable prices for their agricultural produce. However, such information must be location-specific, timely and accurate, dynamic, locally available, and in a language understood by the rural population. Few government-run market information systems have adequately met these requirements.

Box 3.5: Country examples from India and Cambodia on increasing connectivity¹⁷¹

The impact of reforms in India a decade ago to increase private sector participation in agriculture provides an example of how increased efficiency in the supply chain can lower costs and deliver benefits to producers. Since these reforms, a large Indian agricultural firm has progressively rolled out the "e-Choupal" system, comprising simple computer kiosks serviced by trained staff in rural villages. The system has now spread to cover at least 4.3 million farmers through a network of more than 6,400 kiosks. The e-Choupals provide information to farmers on prices available for their produce, helping them sell at times when they can maximize profits. They are provided with a tentative quote, based on criteria made available to the farmer for transparency, for the price of their produce along with information on the nearest procurement hub where the farmer can sell the produce. These improvements in logistics and information services have significantly lowered costs and increased profits. The e-Choupals also demonstrate how efficient supply chains involve the flow of not just goods from producers, but two-way flows of information between buyers and producers, as well as more efficient logistics services. Although the e-Choupals have had a positive impact, the continued high level of rural poverty in India indicates that more is needed to connect the rural poor to market opportunities.

The experience of **Cambodia** underlines the potential benefits of a comprehensive effort to lower the trade costs that rural producers face. The most recent World Bank Poverty Assessment of Cambodia found that from 2004 to 2011 the poverty rate fell from 52.2 to 20.4 percent. Ninety percent of Cambodia's poor lived in rural areas, and increased rice prices and production have been the key drivers of poverty reduction. Higher rice production was achieved through infrastructure improvements and other reductions in export costs for poor farmers, in the context of a relatively open trade policy and minimal distortions through subsidies or price controls in the agricultural sector.

Efforts are required to strengthen consultation with the poor and improve the impact of institutions on poor people. Increasingly, mechanisms are being used to improve the voice of the poor, for example by ensuring that public-private dialogue includes smaller firms operating in the informal sector, women traders, and those in rural areas without access to institutional networks for influencing policy. Nevertheless, consultations with the poor and the dissemination of trade information need to be more effective. A severe lack of transparency on what regulations apply, when they are often determined in an apparently arbitrary manner, exacerbates this situation.¹⁷² Where institutions are ineffective, consultation non-existent, and transparency very limited, the capacity for poor farmers to address regulations that impair their capacity to earn income is severely constrained. Progress in improving this situation is closely linked to the data and analytical agenda. Mechanisms for stakeholder engagement that include the poor can be established, or existing national structures for consultation of policies can be adapted. For example, recognising that the majority of cross-border traders in Africa live in extreme poverty and face a range of policy constraints that limit their capacity to benefit from trade, innovative approaches are being taken to include small traders in the institutional structures governing trade (see Box 3.6).

Box 3.6: The Traders Charter

The Charter for Cross-Border Traders, which has been developed and tested by the World Bank at a number of border posts in Sub-Saharan Africa, enshrines a basic set of rights and obligations that apply to both traders and officials. The obligations in the Charter are displayed clearly, with the goal of increasing transparency and awareness of the rules, hopefully improving behaviour at borders and promoting the gradual formalization of small-scale, cross-border trade. For example, the Charter requires that whenever a physical check of a trader is requested, the relevant official must provide the reason; and that female traders have the right to be inspected in private by female officials. Another example is that traders must pay appropriate duties and present the required documentation when crossing the border. Following consultation with small traders at key border crossings, the Charter is being piloted at the border between Malawi and Zambia, with World Bank assistance, and could be rolled out to other countries. The Charter is an example of an innovative approach to reflecting the needs of the poor more clearly in the implementation of trade policy.

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The principle of developing policies that recognise the poor more effectively can be applied widely. For example, poverty analysis could be more explicitly incorporated into Diagnostic Trade Integration Studies undertaken in LDCs. These studies could also more systematically include consultation with poor stakeholders (e.g., women traders, small traders, and farmers), building on recent examples in countries like Zambia.¹⁷³ Such approaches are gaining attention at the global level with multinational enterprises, as well as national governments. For example, the World Economic Forum's New Vision for Agriculture is based on national processes for increasing agricultural productivity (focused at the smallholder level), bringing together producer associations, business, and government. A national committee was established in Tanzania to implement the New Vision approach, co-led by the Minister of Agriculture and a vicepresident of Unilever, and engaging global and local companies, donor agencies, civil society and farmer leaders. This committee has developed a blueprint for generating US\$1.2 billion in farming revenue and 420,000 new jobs in the Southern Agricultural Growth Corridor, largely for smallholders.¹⁷⁴ Another approach is to set up agricultural commodity exchanges that explicitly target the needs of poor farmers (Box 3.7).



Box 3.7: Agricultural commodity exchanges

Agricultural commodity exchanges aim to link farmers to upstream buyers, to improve farmers' understanding of market conditions and enable them to receive better prices on their crops. The Ethiopian Commodity Exchange (ECX), a spot trading mechanism set up in 2008, includes a warehouse receipt system that assesses the quality of the commodities on delivery and issues electronic warehouse receipts, which can be traded on the exchange (or pledged against bank loans). All coffee and sesame products from Ethiopia not directly exported by farmers are traded at the ECX by law. The ECX reaches 2.4 million small farmers through farmer cooperative unions, which are members of the ECX.¹⁷⁵ By effectively using mobile technology, agricultural commodities exchanges can become a platform where farmers can receive up-to-date market information, which helps farmers optimize decisions related to the sale of their produce. Kenya's Agricultural Commodities Exchange (KACE), which deals with non-traditional export commodities such as maize and beans,¹⁷⁶ conveys daily information on the prices of some 20 commodities collected from market vendors around the country to farmers and market intermediaries such as traders, through SMS text messages and daily radio bulletins.¹⁷⁷ Similarly, the ECX provides market data in various ways, including to rural ticker boards. In 2011, its SMS service had 156,000 subscribers, and it received 61,000 calls a day inquiring about price information.¹⁷⁸ The use of this system can lead to significantly increased income through better access to information and services — 75 percent of farmers reported higher income as a result of the KACE.179

There is a clear need to engage women more in trade policy, coupled with wider efforts to achieve gender equality. As we saw in Chapter 2, women are disproportionately represented in small-scale, cross-border trade, and stand to gain greatly through trade. A well-designed trade policy should take into account the potentially different effects on men and women, and the way in which male and female participation in trade varies. For example, women are more vulnerable to abuse at border crossings, especially when the overwhelming majority of border officials are male. And without wider efforts to address barriers to gender equality, women entrepreneurs who might otherwise be able to export may be unable to participate in male-dominated business networks.

Knowledge platforms are one option for enhancing inclusive trade policy development and implementation.

These are mechanisms for gathering information, consulting with relevant stakeholders, improving transparency, and implementing policy, generally targeted at a specific policy challenge. Knowledge platforms allow for an alternative approach to tackling traderelated problems, beginning with the identification of a particular problem rather than the specific constraints imposed by government institutions. For example, the World Bank has helped develop a knowledge platform to increase the competitiveness of professional services in the East African Community. The platform has brought together policymakers, business, academics, and other stakeholders to identify barriers and remove them. A similar approach could be beneficial for a number of trade-related issues of great relevance for the poor. For example, a national or regional knowledge platform focused on agriculture trade-related issues could help identify export and import barriers preventing the poor from benefiting more from agriculture. This platform could bring together experts and policymakers from trade, agriculture, health and safety, and other government agencies, along with farmers and other stakeholders, and be implemented on national and regional levels.

Producer associations, cooperatives, and similar institutions to align interests among different participants in pro-poor value chains have an important role. Cooperatives, for example, are a common feature of the agriculture sector in developed economies. However, only 10 percent of farmers in developing countries are aggregated into producer organizations.¹⁸⁰ Such organizations can make it easier for farmers to overcome constraints imposed by small size. Even where formal aggregation into producer organizations is not pursued (noting that decisions on the organization of firms should be made by the private sector, not government), policy measures that facilitate greater cooperation and coordination among different stages of the value chain can help. The e-Choupal example in India (see Box 3.5) is one example. In Morocco, the Company of Commercialisation and Export supports the aggregation of small-scale agriculture producers, providing information on export opportunities, transport and logistics, and other aspects of exports that individual producers could not afford to collect. At the global level, producer associations are an important part of the World Bank Group's Agriculture Strategy, as in the World Economic Forum's NVA initiative discussed above. More systematic work needs to be undertaken to analyse the impact of producer organizations and similar institutions, to help small producers overcome constraints due to their small size, and to identify effective policy interventions.

Government- or private sector-led export promotion and investment facilitation agencies can help the poor overcome the challenges of small scale and connect them to trade opportunities. These institutions are likely to be particularly effective when producer organizations, cooperatives, or other associations help lower the costs at early stages of the export process, which export agencies do not address. Government support needs to be sensitive to poverty dimensions. For example, attention should be paid to representation of women in businesses supported by such agencies, as well as gender-related issues that might prevent women traders from accessing the benefits provided.

Tourism is an important services sector that can contribute to poverty reduction in remote areas and where the informal economy dominates. A recent study finds that between 10 and 25 percent of tourism expenditures reach the poor.¹⁸¹ The sector is, however, underperforming in many countries in which the extreme poor are concentrated. Opportunities from tourism can be readily accessible to the poor, who can provide goods and services to tourists that travel to regions where they live. The influence of global value chains (cruise ship companies and large tour operators) can be important. Increasing participation of the poor in tourism value chains could contribute to poverty reduction, and more attention needs to be paid to how governments interact with those lead players in terms of policy, as well as the character and structure of infrastructure investments.

Understanding and managing risks

The risks the poor face prevent them from responding to economic opportunities brought about through trade.

Chapter 2 showed how weak institutions and a lack of functioning markets limits the capacity of rural farmers to mitigate risks, and how weak institutions in fragile states limit the capacity to manage the impact of trade-related price shocks. As opening to trade shifts economic activity from less to more productive areas of the economy, the impact on people — especially the vulnerable — can be considerable. More attention needs to be given to mechanisms to help manage these adjustments and minimize any negative impact on the poor, who are the least able to support themselves after experiencing an adverse shock. For example, in World Bank Group projects, expertise on labor market and social safety net development is being more systemically integrated into trade projects, in line with the World Bank Group Trade Strategy.

Aid for Trade can be used to address trade-related adjustment needs, although the use of this assistance has so far been low. Among five themes of the Aid for Trade

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Initiative (see Box 3.9), trade-related adjustment has consistently received the least assistance since the Aid for Trade Initiative was established in 2005. In the 2013 Aid for Trade Global Review, for example, \$63 million in trade-related adjustment assistance was reported, approximately 0.15 percent of the total \$41.5 billion in Aid for Trade commitments.¹⁸² The reasons for this warrant further investigation, with particular focus on how trade adjustments relate to characteristics of the extreme poor discussed in this report.

More attention needs to be devoted to mitigating risks that prevent the poor from adopting strategies to benefit from trade opportunities. The top-down analytical model primarily used in trade and poverty analysis, which traces changes in relative prices as a result of trade opening through to effects on the poor, does not identify risks that confront the poor and limit their ability to interact with markets. For example, subsistence farmers' low capacity to manage the economic, climactic, and other risks they face exacerbates the constraints of low income and savings to prevent them from investing in new technologies, such as seeds and fertilizers, that are made more available and at cheaper prices through trade. Similarly, firms in the informal sector may not be able to obtain capital to invest in risk mitigation strategies that would allow them to integrate into formal markets and benefit more.

A more coordinated approach between labor market policies and trade policies may help mitigate temporary, adverse consequences of import competition. Often, a poor individual's capacity to supply his or her labor presents the most significant pathway out of poverty - and trade can fundamentally reshape the demand for labor, creating more formal wage employment at higher incomes. The International Collaborative Initiative on Trade and Employment surveyed a wide range of priorities in this area. Labor market policies to complement trade openness that are of most relevance for developing countries include social protection schemes to compensate for losses imposed by trade-related shocks, efforts to support compliance with labor standards, and measures to improve the formalization of employment.¹⁸³ Social protection schemes supported by development partners that aim to protect the real income of the poor when it is threatened by external shocks can form part of the response to managing the risk of conflict in fragile states.¹⁸⁴ At the same time, a greater understanding is required of the links between poverty, informal employment, and trade. Much existing research has focused on the ways in which trade openness affects the character of employment, rather than the different (albeit related) question of how the informal nature of work for the majority of the world's poor affects their capacity to benefit from trade, and how this can be addressed.

Export diversification to reduce the vulnerability of the poor to trade shocks on specific products is another priority. In Cambodia, for example, almost all of the country's success in poverty reduction has been due to exports of rice, putting farmers at risk from price shocks in rice markets. Export diversification is clearly relevant in such situations (and is already occurring in Cambodia, including through growth in recent years of the export-oriented garments sector and services trade). Export diversification is also relevant for the challenges faced by fragile and conflict-affected states. Diversification of exports away from a narrow set of commodities, especially into labor-intensive sectors, can generate income that mitigates the risk of a return to violence in post-conflict states.¹⁸⁵

Volatile food prices are of particular importance for the poor, as both producers and consumers of food. Government policies can increase volatility and reduce the capacity of smaller, poorer countries to manage the adverse impact of shocks. Although the interplay of different effects on consumers and producers through food price shocks is complex, recent World Bank research indicates that food price rises have a net positive impact for the poor over two to three years after a price shock, although urban consumers of food can remain worse off for longer. However, the border policies that governments pursue in an effort to insulate the poor from the effects of price shocks are collectively ineffective and may have negative consequences for the poor. International cooperation to remove distortions in agricultural trade provides a way to address these effects. Domestically, policies to improve social protection and assistance for affected consumers and producers can have a more positive effect on real incomes than trade interventions.¹⁸⁶ Mechanisms to manage risk more effectively - including weather-indexed insurance and warehouse receipt insurance, mentioned above - also have an important role to play.

Trade can also play an important role in addressing the vulnerability of the poor to climate change. Increased extreme weather events and drought create additional risks for already vulnerable poor people in many countries. This is compounded by the dependence of many producers in poor countries on rain-fed agriculture systems. In rural areas, climate change could result in even lower food production. Trade-related policies will be important in facilitating trade from food surplus to deficit countries, thus playing a critical role in food security, but also in providing access to inputs (for example, drought-resistant crop varieties) to help address the impact of climate change on food production.¹⁸⁷

The diverse impact of climate change will generate opportunities in agriculture as well as risks, and trade will be **key in minimizing supply volatility.** It is estimated that climate change will induce heterogeneous shocks across countries and regions. For example, in East Africa, future climate predictions suggest that some countries will experience severe dry conditions that may reduce agricultural production in years when others are only mildly affected. This underlines the importance of better matching of supply and demand between countries, which can be undermined by trade restrictions such as export bans.¹⁸⁸

Understanding the links between trade and poverty through better data and analysis

A new data and analytical agenda that is better connected to other policy areas (e.g. labor markets, agriculture, and gender issues) would provide a stronger basis for designing the policies needed to maximize the benefits of trade for the poor. Better data provides a foundation for identifying key constraints facing the poor and defining effective interventions. For a start, comprehensive data on the pattern of existing trade by the extreme poor (volumes, types of goods and services, and mode of transportation) does not exist. More analysis is required of barriers that impinge heavily on the poor, both to ensure effective advocacy for responses to deal with these issues and to inform the design of policy interventions.

Improving understanding of the nature of poverty in each economy is the starting point for strengthening the poverty impact of trade-related policies. The availability of household surveys has increased from the 22 countries covered in the 1990 World Development Report, which was based on one of the first comprehensive cross-country databases on poverty, to more than 1,000 today.¹⁸⁹ These surveys have vastly improved our ability to measure poverty, design policies, and assess progress in poverty reduction, but significant gaps remain. National census data, up-todate poverty surveys, and other economic information are needed to gain a more complete understanding of the patterns of poverty at the national level. Consistent data across borders is needed to go beyond national analysis, for example to look at neighbouring border regions where poverty is concentrated. There is a particular need for more gender-disaggregated data to understand the participation of women in the economy and the links between gender and poverty. The challenges of collecting relevant data on trade and poverty are especially great in fragile countries.

Indicators of the transaction costs involved in international trade are necessary to measure the impact of trade integration policies on the poor. There has been a steady improvement in indicators for measuring trade costs — for example, through the

World Bank/UNESCAP trade costs database (which measures bilateral trade costs in agriculture and manufacturing), the Logistics Performance Index, and the Doing Business indicators. However, these national indicators of transactions costs are not sufficient to understand the varied levels of trade costs faced by the poor, and must be complemented by indicators that capture the trade costs faced by the poor in each country or region. For example, the cost of shipping a container through the main port, while important to a country's integration in international markets, may not provide adequate information on the trade costs faced by the poor in rural areas or in the informal sector. The costs of getting produce to market and across nearby border crossings may be the most important determinant of the costs faced by poor, small-scale traders. Hence, a broad range of data are required to design effective policies to achieve a reduction in trade costs.

Indicators of trade costs also need to capture the costs of trade in services. Trade in services can play a critical role in poverty reduction, a role that is often overlooked. Services are critical, job-creating inputs into almost all other activities. Examples include the role that transport services play in connecting the poor to markets, the importance of trade in health and education services in overcoming weaknesses in the enabling environment, and how innovative approaches to trade in financial services (e.g. the use of cell phones) can improve access to finance for poor people. Moreover, a small number of studies indicate that crossborder trade in services can be important for both consumers and providers of services.¹⁹⁰ Interestingly, poor service providers are crossing borders to provide services that are traditionally thought of as "non-tradable", such as hairdressing. Indicators that may be relevant for the involvement of the poor in trade in services include the cost of trade finance, the cost of crop insurance, fees charged by services providers for standardised services, and the time and cost to obtain a work permit in neighbouring markets, among others.

More data is necessary on localized, trade constraints in areas where the poor are concentrated. For example, the World Bank's Logistics Performance Index, which provides a detailed picture of logistics at the national level, is increasingly complemented with sub-national analyses of logistics performance. A combination of geographical information systems, network analysis, and supply chain analysis can be used to assess connectivity at the sub-national level in "lagging regions".¹⁹¹ This is an emerging field, and further work to assess connectivity at the sub-national level is a priority to develop a clearer picture of the trade-related constraints facing the poor. In general, trade diagnostic work would benefit from a greater focus on localized and other constraints faced by the poor. Reflecting the limited data, most trade diagnostic studies look only at the formal economy at the national level, focus on individual countries and so fail to identify key cross-border spillovers, and are rarely integrated into deeper analysis that considers issues relating to poverty, fragile states and gender.¹⁹²

Better data are required on the informal sector, given its importance in countries with large numbers of poor people. Existing research has focused on the impact of trade liberalization on the formal sector, while a greater understanding of the constraints that informality imposes on participation in trade is necessary to address the challenges presented by informality. One pressing need is for more comprehensive labor market surveys, as many of the assumptions regarding the impact of trade on jobs only reflect the experience of the small (in many economies) share of workers engaged in wage employment — not the majority of those in the informal sector engaged in subsistence activities or self-employment.¹⁹³

A greater availability of data on the participation of women in trade could improve the design of trade-related policies. Many policymakers and other stakeholders adopt approaches that assume the opportunities and effects of trade are the same for men and women, or that trade policy has no place in addressing gender inequality. Chapter 2 examined the important role of women in trade and the specific challenges women face in benefiting from trade opportunities. Increased recognition of these challenges is the first step in addressing them more effectively.

Investing in new instruments and sources of data can provide the information necessary to better guide policy analysis. Survey data and other shorter-term and (relatively) lower-cost approaches are important. For example, a World Bank survey of more than six hundred traders at a number of land border crossings in Africa in 2011 and 2012 helped develop a clearer picture of the trade policy challenges faced by these (overwhelmingly poor) traders, the majority of whom are women.¹⁹⁴ This has provided the basis for a World Bank trade facilitation project which focuses on improving conditions for small traders, the first of its kind.

New technologies are now available to collect data more directly from the poor, without the cost and administrative challenges of large-scale surveys. Rapid consumption surveys have been shown to be effective in providing essential information in fragile and conflict states.¹⁹⁵ New techniques, such as crowdsourcing and "mystery shopping", can provide specific information on the barriers and the risks that the poor face with regard to trade.¹⁹⁶ Crowd-sourcing, the process of soliciting contributions from a large group of people (often an online community or a

group of mobile device users), appears to be effective in obtaining information from remote, poor communities. The rapid expansion of mobile penetration throughout poor regions in Africa and South Asia is increasing the number of potential contributors to crowdsourcing surveys. There is a range of possible uses of crowd-sourcing surveys to monitor the impact of trade (Box 3.8). Contributors could be asked to provide information on particular barriers to trade they face, or to report on product and services prices, which could then provide insights on the extent to which markets are integrated across borders. These surveys should be undertaken in conjunction with other interactions with the contributors, to improve incentives for participation.

Better data can help tackle the political economy challenges countries face in maximizing the gains for the poor. For example, entrenched, politically influential stakeholders may resist reforms that reduce their economic rents but generate widespread welfare gains. Improving the evidence base for policy debate, formulation, and implementation can help those who want to reform rules and regulations governing trade that are politically difficult to implement. Politicians and officials can be held more accountable for commitments they have made and gain credit for positive outcomes that result from politically-difficult decisions, Stakeholders also need to be able to see progress being made and to reap the benefits of opening up to trade to allow politicians to garner support for further steps to deepen integration.

Box 3.8: Pilot studies of crowd-sourced data

In 2014, the World Bank conducted three pilot studies on intra-regional trade in Africa using SMS-based crowd-sourcing surveys. The first pilot focused on the prices and quality of maize, seeds and fertilizers, and targeted farmers from Burkina Faso, Cameroon, Ghana, Kenya, Malawi, Mali, Tanzania, Uganda and Zambia. An SMS survey was administered to about 150 respondents in each of the target countries, based on an existing phone directory.

In the SMS survey, farmers were asked the price they paid for the fertilizers they use. The results suggest that prices for homogeneous products can differ substantially between neighbouring countries. For example, the price of urea was found to be more than 16 percent higher in Kenya than in Tanzania.

In addition to collecting data on specific prices and quantities of goods and services, the survey gauged consumer and producer perceptions on a range of qualitative indicators, and measured farmer satisfaction with the seeds they are using, generating interesting results: for example, farmers in Cameroon have a much lower level of satisfaction with their seeds than farmers in other countries.

The second pilot study gathered quantitative information on trade in health and education services in Cameroon, Ghana, Kenya, Malawi, Nigeria, Rwanda, Tanzania, Uganda and Zambia, including: (i) data on health and education professionals, as well as students and patients involved in trade in health and education services; (ii) information on differences in the cost and the quality of education degrees and medical treatments across countries; and (iii) information on the recognition of foreign academic degrees and medical qualifications. The results from the SMS-based survey highlight the extent and importance of regional trade in health and education services, and suggest that the availability and the quality of services are more important determinants of trade flows than the cost of services. The crowd-sourcing surveys also generated information on selected barriers to services trade, such as the time it takes to recognize foreign degrees of professionals, or the cost of courses required for the recognition of the degrees obtained abroad.

The third study involved a cell-phone based survey of small cross-border traders in Kenya, Malawi, Tanzania and Zambia. The traders were asked about their most recent experience of crossing the border, in terms of the time taken, whether they paid unofficial fees, if they were subject to insults or physical abuse, and which goods they were carrying. The data was disaggregated by gender.

The three pilot studies confirm the potential of crowd-sourcing techniques to generate new indicators of trade integration. Issues concerning the representativeness of the sample and the necessary sample size to obtain meaningful results need to be carefully addressed. While keeping these challenges in mind, the cost advantage and the capacity to deliver new and timelier data relative to traditional face-to-face surveys indicates that crowd-sourcing holds substantial promise for expanding the data on trade integration and filling important information gaps on the impact of trade on poor people.

WTO and World Bank Group support for trade as a means of poverty reduction

Both the WTO and World Bank Group contribute to economic development and the improvement of poor people's lives through trade. The focus of collaboration between the two institutions to date has been in support of efforts to lower tariff and non-tariff barriers between countries, and other sources of trade costs — this Report underlines the scope to deepen cooperation on maximizing the impact of trade policies for the poor.

Leveraging the full potential of the global economy for poverty reduction is an important priority for the World Bank Group. One of the key objectives of the Bank Group's reform agenda has been to deliver more effective results for its clients, by allowing for more effective collaboration across different sectoral lines, bringing the best experience and knowledge to bear for addressing development challenges. This change has put the Bank Group in a better position to address one of the key messages of this report — the need for trade policy implementation to be better "joined-up" with areas of policy that are often seen as distinct, including labor markets, agriculture, gender equality, or fragility and conflict.

The World Bank Group 2011–2021 Trade Strategy, implementation of which is being led by the Trade and Competitiveness Global Practice, responds to multiple dimensions of the policy challenge of maximizing the benefits of trade integration for the poor. Support for trade-related work has grown from \$3.3 billion in fiscal year 2004 to \$13.2 billion in fiscal year 2014. The Strategy sets out four themes for the Bank Group's trade work in response to this growing demand: trade competitiveness and diversification; trade facilitation, transport logistics, and trade finance; support for market access and international trade cooperation; and managing shocks and promoting greater inclusion. Approximately half of the World Bank's trade-related commitments (as of Fiscal Year 2014) were for trade facilitation, reflecting high demand from developing countries as well as growing awareness of the importance of trade facilitation reforms. There are clear synergies between these priorities and the challenges set out in this Report. For example, the strategy prioritizes efforts to promote greater inclusion across the Bank Group's trade work, including by increasing work on small traders, promoting internal trade to connect lagging and more remote regions within and between countries, and doing more to address the gender dimensions of trade projects. The wider work of the Trade and Competitiveness Global Practice supports countries in a range of areas where complementary action is necessary for maximizing the gains of trade, including investment climate

improvements, connecting to and upgrading in global value chains, and fostering innovation and entrepreneurship.

Trade will play a key role in implementing the World Bank Group's action plan for ending poverty and hunger. As earlier chapters of this report have discussed, trade can help disseminate knowledge on new techniques and technologies, make new technologies, such as drought-resistant seeds, available to the poor, and link poor farmers to markets and value chains, and hence to better opportunities for improved incomes. Specific issues where the Bank Group is developing its support include:

- Facilitating trade in farm inputs through mutual recognition, and, where appropriate, harmonization (at the regional level), of seed and fertilizer standards and certificates.
- Improving the transparency and predictability of trade policies and safety nets, including greater discipline on the use of ad hoc trade policies such as export bans, better quality and improved availability of market information, and better-aligned safety nets that protect the purchasing power of the poorest and most vulnerable.
- Investing in infrastructure and policy reforms that reduce the costs of connecting to markets and ensure that the incentive structure for agricultural production and marketing is consistent with raising the incomes of poor farmers.

The World Bank Group has intensified efforts in recent years to support efforts to improve services trade. This has involved identifying barriers to services trade, assessing the full range of constraints on the competitiveness of developing country services sectors, and supporting countries in implementing the necessary reforms. A recently-released Services Competitiveness Toolkit, for instance, provides a framework for analysing competitiveness issues and identifying export potential. The Regulatory Assessment on Services Trade and Investment toolkit complements this by providing guidance on how to assess and reform the regulatory environment for services. It has already been used in a number of countries — including least-developed countries like Cambodia, Lao PDR, and Liberia — as a basis for reform.

Multilateral efforts to reduce barriers to trade, first under the GATT and then the WTO, have had an important impact on growth, and therefore poverty reduction. Though unilateral and regional integration help to explain the growth of trade, multilateral integration has had a major role (e.g. researchers¹⁹⁷ estimated that the reduction of China's weighted average tariff protection on imports from 21.4 percent to 7.9 percent was exclusively due

to its WTO accession), and the two processes are often found to reinforce each other. $^{\rm 198}$

WTO commitments enhance good governance and the predictability of market access conditions, and this has an economic value in itself beyond reforms in applied trade policies. Research estimates that economic growth increases by 2.5 percent, on average, for at least five years after a country's GATT/WTO accession, leading to a permanently higher output of about 20 percent.¹⁹⁹ The increase of growth is sharpest in those countries that initially have lower quality of institutions, indicating that WTO commitments can promote economic development by contributing to good governance. Another study²⁰⁰ estimates that the increased certainty of trading conditions following China's 2001 WTO accession explains 22 percent of its export growth to the United States. The WTO rule-based system and its monitoring activities helped restrain protectionist responses to the global economic crisis of 2008–09.

The flexible nature of the WTO gives broad space for developing countries to tailor their commitments to their own policy priorities, including poverty reduction, although this needs to be weighed up against the benefits of making commitments that promote stability and predictability.

WTO rules provide flexibility to help developing countries cope with the costs and risks involved in trade liberalization. Special provisions for developing countries (referred to as special and differential treatment) include less-than-full reciprocity in market access negotiations and non-reciprocal preferences provided by more advanced economies, special flexibility to restrict imports and promote exports (including through subsidies under certain conditions), as well as provisions addressing resource constraints, including via technical assistance and the possibility to implement commitments more slowly.²⁰⁴¹ The Trade Facilitation Agreement includes a novel approach to flexibility that links technical assistance with self-determined implementation timelines on the part of developing countries. In the WTO Agreement on Agriculture, policies to develop rural infrastructure, to enhance investment in agricultural research, to provide training and extension services to farmers, and to offer relief to farmers from natural disasters are all exempted from the monetary ceilings (they fall in the so-called

"Green Box"). While the Green Box applies to both developed and developing countries, developing countries are given special treatment in respect to stockholding policies for food security purposes, the provision of subsidized food to needy consumers, and various kinds of subsidies. Finally, some WTO provisions allow exceptions for food security objectives, for example allowing members to maintain temporary export restrictions (with due consideration for importing countries' food security). In general, taking advantage of necessary exceptions to WTO rules must be weighed against the benefits of making commitments that promote stability and predictability.

The WTO also involves a range of institutional mechanisms that are specifically devoted to the concerns of developing countries. The Committee on Trade and Development, among other functions, oversees the implementation of the WTO's trade-related technical assistance. The WTO leads the Aid for Trade Initiative (see Box 3.9) and has partnered with a range of other organizations on various trade capacitybuilding initiatives in developing countries, such as in the Standards and Trade Development Facility and the Enhanced Integrated Framework. In July 2014, the WTO launched its Trade Facilitation Agreement Facility, to ensure all countries are able to access support for implementation of the TFA. The WTO also provides information on the implementation of commitments by trading partners, including WTO schedules of commitments, notifications (e.g. of subsidies, technical barriers to trade, and SPS measures) that many developing countries would find it difficult and exceedingly costly to obtain on their own.²⁰² The Trade Policy Review Mechanism provides regular reviews of each WTO member's actual practices in implementing their commitments, which helps each member learn about others' policies and evaluate its own trade policies, including formulating specific technical assistance needs. Finally, the WTO Dispute Settlement Mechanism contains a range of provisions that give special consideration to developing country concerns and allow for special flexibility in dispute settlement procedures in light of the possible resource constraints faced by these countries, including when it comes to implementing dispute settlement rulings. Developing countries may also obtain legal assistance in dispute settlement proceedings via the WTO Secretariat or at the Advisory Centre on WTO Law.

Box 3.9: Aid for Trade

The WTO-led Aid for Trade Initiative - of which the World Bank Group is a key partner — has helped generate substantial increases in trade-related assistance, along with a greater focus on results, since its establishment in 2005. The Aid for Trade Initiative aims to increase the awareness of governments regarding the importance of trade for development and to mobilize resources to address the trade-related supplyside constraints of developing countries. It covers four broad support categories: trade policy and regulations; economic infrastructure, i.e. transport, energy and telecommunications; productive capacity-building, i.e. sectoral support; and trade-related adjustment. Aid for Trade commitments amounted to US\$56.7 billion in 2013, accounting for almost 40 percent of total ODA. Several studies find that Aid for Trade, in general, is positively correlated with export performance and the reduction of trade costs.²⁰³ The challenge of ending poverty underlines the on-going need for Aid for Trade, and also considerable room to strengthen the link between Aid for Trade, poverty reduction, and increased inclusion. For example, there has been little focused discussion in the Aid for Trade Initiative of how to maximize the poverty impact of Aid for Trade, with work normally focused on boosting growth and exports.

The World Bank Group and the WTO cooperate with each other, as well as other multilateral institutions, to promote trade as a means of poverty reduction. The Bank Group is a central partner in the Aid for Trade Initiative. Other key examples of cooperation include the Bank Group's support for negotiation and implementation of the WTO Trade Facilitation Agreement; both institutions' roles in the Enhanced Integrated Framework; and their advocacy to ensure that the Basel Committee on Banking Supervision's new financial sector regulations following the global financial crisis did not impose unintended, negative consequences on the availability of trade finance.²⁰⁴

Conclusion: implementing a strengthened trade policy agenda for the poor

The issues presented in this chapter should be seen as providing a framework for analysing some of the key traderelated policies that can maximize the potential contribution of trade to ending poverty. Integrating markets can transform countries' economies, lifting growth, driving productivity gains, and boosting incomes. These changes were instrumental in the poverty reduction of the last two decades. Keeping markets open and further lowering trade costs, along with policies to address the key constraints the poor face in each country in profiting from the opportunities created by trade, will be essential for ending poverty.

Potential gains from reducing trade distortions and trade costs are great. For example, the agricultural sector will continue to play a critical role in lifting people out of poverty, but tariffs in destination markets and distortive subsidies continue to be high, and exporters continue to pay the high costs of poor trade facilitation. A successful conclusion of the Doha Round, regional trade cooperation, and unilateral reforms, as well as the implementation of policies that can effectively reduce trade costs, such as an improved business environment, improved trade facilitation and trade-related infrastructure, are key to creating new economic opportunities. In the countries where the poorest are concentrated, implementation of the reforms set out in this chapter could deepen integration with the global trading system and contribute to stronger connectivity of the extreme poor to international markets, while managing the risks the poor face.

In implementing the framework for policy analysis and action outlined in this chapter, policymakers should recognise that many poor people in different economic sectors face common challenges. For example, the challenges and constraints presented by the employment of most poor people in the informal economy apply across the services, agriculture and manufacturing sectors. Policy responses that apply across sectors are likely to have more impact than narrower ones. Institutional frameworks or economy-wide constraints — for example those that prevent women from achieving full economic participation — need to be addressed if policies targeted at particular sectors are to achieve their intended goals. At the same time, analyses of the drivers of competitiveness in specific sectors and value chains of importance to the poor remain relevant.

Realising the potential created by international productionsharing for poverty reduction requires an understanding of linkages between sectors and policy dimensions. By allowing countries to participate more easily in segments of a particular value chain, GVCs offer the possibility of a more fragmented and eclectic development pathway - with opportunities being created for the poor in more ways — than a traditional model based on "progressing" from one sector to another (see Box 1.5). In the same way that GVCs require policymakers to better understand the linkages between trade, investment, skills, infrastructure, and other policies, the linkages between sectors are important in determining GVC participation. The capacity to access quality and affordable services (e.g., logistics) can be a key determinant of GVC-driven investment choices. By understanding the potential for GVC participation and upgrading, policymakers can focus on the different points where benefits for the poor can be increased and address specific barriers that may limit participation of the poor at particular stages of a value chain.

A fundamental message that emerges is that in order to have the greatest impact toward ending poverty, trade policy must be made and implemented in conjunction with other areas of policy. The framework set out in this chapter points to clear relationships between poverty dimensions. Addressing the challenges facing small traders, for example, will benefit many women among the extreme poor, and mitigating the trade-related risks facing fragile and conflict states is likely to help the many rural poor in these countries. At a broader level, while economic integration can be pursued in ways that helps maximize the gains and minimize the risks generated through poverty, trade outcomes for the extreme poor are also shaped by the nature of poverty. So, for example, while trade-related policy improvements can play an important role in limiting conflict in fragile states, the ultimate impact on poverty reduction will be limited unless the root causes of conflict are addressed. Or, in countries where deep gender bias persists, there will be limits to the extent to

which the benefits of trade can reach the extreme poor, even if trade can help create economic opportunities for women. This underlines the need flagged at the opening of this chapter for more integrated approaches to tackling extreme poverty, based on an understanding of the fundamental drivers of poverty in each country, and the way in which economic integration can work in concert with other areas of policy to improve livelihoods for the extreme poor.

The World Bank Group and the WTO both have a strong role in promoting coherence to support multilateral governance of the trading system, and the implementation of trade policies in a way that delivers the greatest possible benefits for the poor. The multilateral trading system has a significant positive effect on the global enabling environment. This supports trade's contribution to growth and poverty reduction, as well as contributing to countries' economic performance. An open, predictable, non-discriminatory, rules-based multilateral trading system will continue to be a necessary tool for development and poverty reduction in the future. Success in moving forward effectively on the Doha agenda will create new economic opportunities, boost business confidence and revive the support for multilateral cooperation aimed at reinforcing the stability of the world economy. As well as supporting multilateral, regional and unilateral trade reforms, the World Bank Group is increasingly taking the challenges faced by the poor in benefiting from trade into account. Its Trade Strategy and the formation of the Trade and Competitiveness Global Practice provide the tools for doing so, along with intensified efforts to address the challenges of fragility, agriculture, and others. The two institutions cooperate closely together on a wide-ranging agenda. Aid for Trade and other forms of multilateral cooperation are important in reducing persistently high trade costs in developing countries, and reducing poverty. This report stresses the importance of expanding the focus of this agenda to maximize the positive effects of trade for the poor.



Chapter 3

NOTES

- Specifically, to essentially end extreme poverty by reducing the share of people living on less than \$1.25 a day to less than 3 percent of the global population by 2030. See http://www.worldbank.org/en/publication/global-monitoringreport/report-card/twin-goals
- 2. WTO press release 14 April 2015 and World Bank (2011e).
- 3. Commission on Growth and Development (2008).
- 4. WTO (2014).
- 5. WTO (2014).
- 6. WTO (2014).
- 7. Kingdom et al. (2006).
- 8. ILO (2013).
- 9. Poverty data in this section from World Bank (2015a).
- 10. World Bank (2015a). Africa faces a particular challenge in ending extreme poverty not just because of the number of the poor but also because many of the poor are a long way from the poverty line. There are far fewer immediate poor in Sub-Saharan Africa than were recorded in China and India, which would facilitate sharper reductions in poverty. Chandy et al. (2013) show that poverty is less responsive to growth and distribution changes in Sub-Saharan Africa than in India or China at any given poverty rate.
- Careful analysis of trends in poverty in aggregate and across countries is made difficult by the significant weaknesses in data. See Chapter 3, as well as World Bank (forthcoming a).
- 12. Dollar et al. (2013).
- 13. Dollar et al. (2013).
- 14. Feenstra and Hanson (1999), Baldwin and Cain (2000).
- Latin America and Caribbean information from World Bank (2013a); Middle East and North Africa from Ianchovichina (2014).
- 16. Winters (2002) and Winters et al. (2004).
- 17. WTO (2014).
- Coe et al. (1997), Gera et al. (1999), Xu and Wang (1999), Acharya and Keller (2009), Van Meijl and van Tongeren (1998).
- 19. See Helpman (1993).
- Recent empirical evidence from Argentina shows that firms in sectors with the largest market access gains were more likely to increase technology spending than firms operating in sectors where trade opening was less ambitious. See Bustos (2011).

- 21. See Jamison et al. (2001), Owen and Wu (forthcoming), Papageorgiou et al. (forthcoming).
- 22. See Papageorgiou et al. (forthcoming).
- 23. Asian Development Bank (2010).
- 24. See, for example, Rodriguez and Rodrik (2001). The key assumption in these models is the existence of learningby-doing only in the manufacturing sector and that the knowledge developed in the North cannot transfer to the South. In contrast, it is now well established that knowledge spillovers exist (Keller, 2010), although it is not yet known how important they are. A general result of the economic literature is that even when negative effects of trade on growth exist, provided that there are large knowledge spillovers, the ultimate effect of trade on growth is positive (Baldwin and Robert-Nicoud, 2008). For a review, see WTO (2008).
- 25. Commission on Growth and Development (2008).
- 26. This box is derived from World Bank (2014c).
- 27. Christiaensen et al. (2013).
- 28. Loayza and Raddatz (2006) find evidence from a crosscountry analysis that not only the size of economic growth but also its composition matters for poverty alleviation, with the largest contributions coming from labor-intensive sectors (such as agriculture, construction, and manufacturing).
- 29. Christiaensen et al. (2011).
- 30. See Table 2 from World Bank (2014c).
- 31. Linking Africa to Build Africa; World Bank (forthcoming b).
- 32. See Le Goff and Singh (2014).
- 33. Bolaky and Freund (2008).
- Ramey and Ramey (1995); Aghion and Banerjee (2005); Hnatkovska and Loayza (2005); Martin and Rogers (2000).
- Breen and Garcia-Penalosa (2008); Inter-American Development Bank (1995); Laursen and Mahajan (2005).
- 36. Jansen et al. (2015).
- 37. IMF (2014).
- 38. World Bank (2015d).
- 39. McCorriston (2011).
- 40. A number of studies analyse this issue. Some look at the effect of openness on the gap between high- and low-skilled workers and find a reduction of this gap (thus inferring that low-skilled workers have gained relatively more than high-skilled workers). Other studies find an increase in the wage gap, but find that this is associated with higher wages for both high- and low-skilled workers. Other studies find

a positive impact on the level of employment of low-skilled workers. See Verhoogen (2008), Pellandra (2013), Frías et al. (2009), Amiti and Cameron (2011), Kumar and Mishra (2008), and Mishra and Das (2013), Burstein et al. (2013).

- 41. Fajnzylber and Maloney (2005).
- 42. Bottini and Gasiorek (2009) find that a 10 percentage point increase in the export share (as a measure of openness) of a sector led to 3.5 percent more jobs on average in Morocco during the period from 1994-2002. This study also finds that there was no significant correlation between imports and job destruction, despite considerable trade opening by Morocco during that time period. This may reflect that certain employment policies facilitated short-term adjustment for workers. Feenstra and Hong (2010) calculate that, for China, a \$1,000 increase in exports generated between 0.16 and 0.20 person-years of employment. Edmunds and Pavcnik (2006) find that the liberalization of Vietnam's rice market increased wage hours. In other research the evidence is more mixed. Casacuberta et al. (2004) find a positive relationship between measures of trade openness and job creation for Uruguay, but the impacts are rather small (less than 0.1 per cent). In South Africa, Dunne and Edwards (2007) find a zero net effect of trade liberalization on employment. Gains in export sectors are matched by losses in import competing sectors. Also see OECD (2012).
- The preceding paragraphs are drawn from World Bank (2013c).
- 44. Taglioni and Winkler (2014).
- 45. This draws extensively on Taglioni and Winkler (2014).
- 46. Indeed, application of tariffs rather than quotas has been the direction chosen under the multilateral trade rules starting from GATT and more firmly under the Agreement on Agriculture, especially for agricultural products.
- 47. IMF (2011).
- 48. World Bank (2015a).
- 49. Livingston et al. (2011). Also Ravillion et al. (2007) estimate that in 2002, over 70 percent of the poor in both Sub-Saharan Africa and South Asia lived in rural areas, although there has been some increase in the share of the urban poor over the previous decade.
- 50. Ravallion et al. (2007) and Ligon and Sadoulet (2007).
- 51. This paragraph is derived from World Bank (2007), page 46.
- 52. Ravallion and Chen (2007).
- 53. Using household survey data before and after trade policy reforms in India, Topalova (2007) finds that the poor in rural areas gained less from trade liberalization than other income groups or the urban poor.
- 54. Banerjee et al. (2008).
- 55. World Bank (2011d).
- 56. Foster and Briceño-Garmendia (2008) report that in Africa, rural roads are generally in poor condition, and the backlog for rehabilitation is higher than for other roads. Poor roads and limited competition for domestic transport services increase transport costs, especially along rural roads. For example, in Malawi transport prices (on a per ton/km

basis) between farms and market centers remain 10 to 20 times higher than transport costs from such centers to ports in neighbouring Mozambique. As a result, the cost of transporting goods 40 km from the village to the market center in Malawi is nearly half the cost of transporting these goods nearly 1,200 km from the market center in Malawi to the port of Beira. The limited competition among (rural) transport service providers allows them to exploit information asymmetries and can depress prices for farmers, while keeping prices high in intermediate markets (Kunaka, 2010; Hoppe and Newfarmer, 2014).

- 57. Milner et al. (2001) show that high transport margins taxed exports from rural areas in Uganda.
- In Bangladesh, trade liberalization helped to mitigate the post-flood food crisis in 1998, with imports of rice stabilizing market prices. See del Ninno et al. (2001).
- 59. Nicita (2004).
- 60. Atkin and Donaldson (2014). Interesting new research also shows the distributional impact of retail store entry: see Atkin et al. (2015).
- 61. Litchfield et al. (2003) show that foreign trade opening increased the availability of farm inputs such as fertilizers and pesticides in Vietnam. Gisselquist and Grether (2000) find similar evidence for farmers in Bangladesh.
- 62. Lopez et al. (1995) show that the supply response to price incentives is much lower for poor farmers with more limited access to capital in Mexico.
- 63. Foster and Briceño-Garmendia (2008).
- 64. See World Bank (2013b).
- 65. See IFAD (2011).
- 66. FAD (2004).
- 67. CTA (2010).
- 68. Drawn from World Bank (2012a).
- 69. UNCTAD (2009).
- 70. Skees and Collier (2008).
- 71. See Foster and Rosenzweig (2010).
- 72. See Murdoch (1990).
- 73. See Peterman et al. (2011) (the empirical evidence, however, is not conclusive) and Foster and Rosenzweig (2010).
- 74. Anderson et al. (2013).
- 75. World Bank (2015).
- 76. The definition of fragile countries is from the OECD list, which is composed of countries that are fragile according to the World Bank and other regional development banks (World Bank list henceforth) plus countries which have a high score of the Fund For Peace's Failed States Index (i.e., above 90).
- 77. Details of the WBG and OECD lists are available at http://www.worldbank.org/en/topic/fragilityconflictviolence/ overview. Seventeen of the 33 countries in the World Bank 2015 list are in Africa.
- 78. Collier and Duponchel (2013) and Klapper et al. (2013).

- 79. Calì and Miaari (2013) and Ksoll et al. (2014).
- 80. Bundervoet et al. (2009) and Shemyakina (2011).
- 81. Justino and Verwimp (2006).
- 82. This is the other main criterion commonly used in the classification of countries as fragile. The World Bank list considers fragile any country with an average Country Policy and Institutional Assessment (CPIA) score (that is an average between the World Bank and the regional development banks' CPIA ratings) below 3.2.
- 83. Hodler and Raschky (2014).
- 84. Blattman and Miguel (2010).
- 85. Calì and Varela (2013).
- 86. Calì (2014a).
- 87. See Amodio and Di Maio (2014) for an example.
- 88. Collier and Duponchel (2013).
- 89. Klapper et al. (2013).
- Ksoll et al. (2014) estimate that weekly export volumes fell by 38%, driven by a worker absence rate of 50% during the peak of the violence.
- 91. Fernandez et al. (2011).
- 92. Menon and van der Meulen Rodgers (2015).
- 93. Verpoorten (2009).
- 94. Deininger (2003).
- 95. Arias et al. (2014).
- 96. Qureshi (2013).
- 97. Calì et al. (2015).
- 98. Moore (2015).
- 99. Arias et al. (2014).
- 100. Bozzoli and Brück (2009).
- 101. Akresh et al. (2012) and Bundervoet et al. (2009).
- 102. The micro evidence in support of this link is growing (Dube and Vargas, 2013; Maystadt et al., 2014; Berman et al., 2014; Abidoye and Calì, 2015), while it is more disputed across countries (e.g., Bazzi and Blattman, 2014; Cotet and Tsui, 2013; Calì and Mulabdic, 2014 and Lei and Michaels, 2014).
- 103. Abidoye and Calì (2014).
- 104. Blades et al. (2011) and World Bank (2013c).
- 105. The study by Heintz (2008) covers Brazil, El Salvador, India, Kenya, and South Africa.
- 106. The report compares the number of individuals who are poor (i.e., who live in poor households) expressed as a percentage of the total number of individuals (poor and nonpoor) within a particular category of employment.
- 107. Observations fall between 1998 and 2012. The only exception to this pattern can be observed for Iraq in 2006, defining informality as lacking access to health insurance or social security. World Bank (2014a) confirms that in Malaysia, informal workers and those in the agriculture sector are the groups with high concentration of households in the bottom 40 percent.

- 108. World Bank (2013c).
- 109. Loayza and Rigolini (2006).
- 110. Maloney (2004).
- 111. Winters and Martuscelli (2014).
- 112. The most thorough test of the hypothesis of a relationship between trade liberalization and informality was undertaken by Goldberg and Pavcnik (2003) who, exploiting industry variation in protection across time, find no relationship with the share of informality in Brazil, and a modest relationship in Colombia. They conclude that, compared to labor market rigidities, trade policy is of secondary importance in determining the magnitude of informal employment. More recently, Menezes-Filho and Muendler (2011) find a significant effect of trade liberalization on the labor market, but no statistically significant relation between informal work and trade in Brazil. Bosch et al. (2012) argue that the vast majority of the 10 percentage point rise in informality in Brazil in the 1990s was due to the increased firing costs and a negligible fraction to the far-reaching trade reform.
- 113. UNDP (2014a).
- 114. UN (2010).
- 115. UN (2014).
- 116. UNDP (2014b).
- 117. UN (2014).
- 118. See Calì (2014b) for cross-country data and Hallward-Dreiemeier et al. (2011) for specific examples.
- 119. See Chapter 6, World Bank (2012b).
- 120. Box based on Chapter 6, World Bank (2012b) .
- 121. See Box 6.1 in World Bank (2012b).
- 122. Chioda (2015).
- 123. World Bank (2012b).
- 124. See Miet Maertens and Johann Swinnen (2012).
- 125. It is estimated by officials that between 20,000 and 30,000 people cross through the Goma-Rubavu border post between the DRC and Rwanda each day. Most of these are women. In Southern Africa it is estimated that small-scale cross-border trade contributes around 30 to 40 percent of intra-regional trade, with a value of US\$17.6 billion per year, and that 70 percent of this trade is undertaken by women (SARDC, 2008).
- 126. Garcia et al. (2013).
- 127. See Ndumbe (2013)
- 128. UNCTAD (2012).
- See also the film 'Les Petites Barrières' at http:// go.worldbank.org/MKK5U1Y2D0
- 130. Bussuroy et al (2012).
- 131. Asli Demirgüç-Kunt (2013).
- 132. World Bank (2012a).
- 133. For more details see Brenton et al (2011).
- 134. World Bank (2015a).
- 135. WTO (2012 and 2014).

- 136. Maertens et al. (2011) and Kadigi et al. (2010).
- 137. World Bank (2012).
- 138. Keyser et al. (2015).
- 139. See Keyser (2012).
- 140. Keyser and Jensen (2012).
- 141. Limao and Venables (2001).
- 142. Andres et al. (2013).
- 143. Clark et al. (2004).
- 144. WTO (2004)
- 145. Atkin and Donaldson (2014).
- 146. Hummels (2007).
- 147. Hillberry and Zhang (2015).
- 148. Volpe Martincus et al. (2015).
- 149. Among the various policy areas, the improved availability of trade-related information, simplification and harmonization of documents, streamlining of procedures and the use of automated processes would have the greatest impact on trade volumes. See Moisé-Leeman and Sorescu (2013).
- 150. Beverelli et al. (2015).
- 151. Another example of ICT use to support more efficient trade is the use of GPS tracking devices on trucks in transit trade by transit country customs authority. This can provide real-time information on the location of trucks to allow traders and customs officials to prepare ahead for clearance and could reduce the upfront financial burden for small-scale traders if it can replace the transit bond guarantee system.
- 152. The forthcoming 2016 World Development Report on the Internet discussed the role of the Internet in development, including through trade, in more detail.
- 153. Jensen (2007).
- 154. Suominen (2014).
- 155. Centre for the Promotion of Imports from Developing Countries (CBI) (2013).
- 156. WTO document number WT/WGTDF/W/74 (available from www.wto.org).
- 157. Although detailed discussion of the enabling factors is beyond the scope of this publication. The 2008 Commission on Growth and Development Report surveyed the critical policies needed to facilitate sustained growth. WTO (2014) also discussed these issues.
- 158. Le Goff and Singh (2013).
- 159. Arvis et al. (2013).
- 160. Hostland and Giugale (2013).
- 161. World Bank (2013).
- 162. Almeida et al. (2009).
- 163. Independent Evaluation Group (2014).
- 164. World Bank (2012a).
- 165. World Bank (2012a).
- 166. Kunaka (2011).
- 167. Argent and Begazo (2015).

- 168. Porto et al. (2011).
- 169. François and Wooton (2010).
- 170. Pigato (2001).
- 171. Kunaka (2011) and Sobrado et al. (2014).
- 172. World Bank (2012).
- 173. Brenton and Gillson (2014).
- 174. World Economic Forum (2012).
- 175. Mbeng Mezui et al. (2013).
- 176. There are other commodity exchanges in Kenya, namely the Nairobi Coffee Exchange and the Tea Auction.
- 177. Qiang et al. (2013).
- 178. Mbeng Mezui et al. (2013).
- 179. Qiang et al. (2013).
- 180. Dalberg (2012).
- 181. Mitchell and Ashley (2010).
- 182. WTO-OECD (2013).
- 183. OECD (2012).
- 184. Calí (2015).
- 185. Calí (2014).
- 186. Anderson, Ivanic and Martin (2013).
- 187. See World Bank (2015d).
- 188. See Ahmer Ahmed et al. (2012).
- 189. World Bank (2015c).
- 190. See Dihel (2015).
- 191. Kunaka (2011).
- 192. An exception perhaps is a recent report by the World Bank (2015b) which integrates trade issues into a broader analysis of poverty and vulnerability.
- 193. OECD (2012).
- 194. Brenton et al (2013). Rwanda, for example, has recognized the importance of small-scale trade for economic development and broader macroeconomic balances, based upon extensive and ongoing survey work by the National Bank of Rwanda, and has developed a National Cross-Border Trade Strategy. Similarly, Uganda, through the Uganda Bureau of Statistics, has been collecting detailed information on small-scale trade at its borders, including those with DRC, to inform its trade and borders policies. COMESA has developed the Simplified Trade Regime for small-scale trade.
- 195. It is expensive and time-consuming to collect household consumption data to measure poverty of households. A new methodology paired with new technology allows measuring consumption in a cost- and time-efficient way while still being comparable to full consumption surveys. The goal is achieved by collecting only a subset of items from each household; but administering different items to different households so that the full consumption can be estimated within the survey. In addition, the survey is carried out using tablets, which combines several advantages. It is cost-efficient, can be monitored in real-time and can

provide a significantly cleaner dataset, especially with respect to number-heavy data like quantities and values of consumption items. This combination allows estimating consumption aggregates within days rather than months. This approach has been developed by Pape and Mistiaen (2015) and applied effectively in Somalia and South Sudan.

- 196. See World Bank (2015c) for further discussion. Mystery shoppers are prospective customers who are used to inquire about the availability and pricing or products and services, who then report back on their experiences in a consistent and comparable way. Crowd-sourcing gathers information from large groups of people via mobile or internet-based devices to gauge the pricing and quality of different goods and services. In that report it is shown how crowd-sourcing information from poor small-scale traders can provide information on delays and costs in getting across borders. Farmers can provide information on the costs of seeds and fertilizers and the prices they receive for the produce.
- 197. Ianchovichina and Martin (2001).
- 198. WTO (2012).

- 199. Tang and Wei (2009).
- 200. Handley and Limão (2014).
- 201. Flexibilities in the WTO have been extensively discussed in WTO (2009).
- 202. Wolfe (2003).
- 203. Busse et al. (2012); OECD and WTO (2013); ODI (2012). Calí and te Velde (2011).
- 204. In 2011, the Basel Committee agreed to modify its rules on short-term, self-liquidating trade finance instruments to reduce the risk weighting on low-income countries (which proved to be no more risky than other countries), and to allow for capital requirements to be matched with the effective product maturity (hence waiving the one-year maturity floor applying to letters of credit and the like). In 2013 and 2014, the Basel Committee took further favorable decisions with regard to the treatment of trade finance instruments traditionally used by poor countries, such as letters of credit, regarding liquidity requirement and the leverage ratio.

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The expansion of international trade has been essential to development and reducing poverty but the relationship between economic growth, poverty reduction and trade is not a simple one. This publication looks into this relationship and examines the challenges poor people face in benefiting from trade opportunities. Written jointly by the World Bank Group and the World Trade Organization, the publication examines trade and poverty across four dimensions: rural poverty; the informal economy; the impact of fragility and conflict; and gender. The publication looks at how trade could make a greater contribution to ending poverty through increasing efforts to lower trade costs, improve the enabling environment, implement trade policy in conjunction with other areas of policy, better manage risks faced by the poor, and improve data used for policy-making.





