

## II. Factors shaping the future of world trade

The world is changing with extraordinary rapidity, driven by many influences, including shifts in production and consumption patterns, continuing technological innovation, new ways of doing business and, of course, policy. The *World Trade Report 2013* focuses on how trade is both a cause and an effect of change and looks into the factors shaping the future of world trade.



# A. Introduction

Long-term forecasts are chronically difficult. It is unlikely that “revolutionary” events, such as the explosion of communication and interactive facilities that shape our current way of life, from social networking to international offshoring, could have been predicted 20 years ago with any degree of precision. Nevertheless, even though attempts to predict the future may, to a large extent, rely on extrapolations of current trends, these efforts may help to take stock of important developments and identify challenges arising from changes that we are likely to face.

The focus of this report is on the future of trade. This does not imply that more trade is always better. After all, trade is but one means to achieve higher living standards. It is important to understand the channels through which trade can improve economic welfare along with other growth determinants, and a large literature exists in this regard. However, trade depends on a range of factors that may change in the future and influence not only the extent but also the nature and impact of trade as we know it today. What are these factors that will shape world trade in the decades ahead? What does this imply for policy both at the national and international levels, including in the World Trade Organization?

A report that seeks to analyse the factors that will shape world trade over the next decades needs to focus on trends in fundamental factors rather than cyclical developments. Trade is principally driven by countries' production possibilities, which can be described, for instance, by technology and endowments of labour, capital and natural resources, the demand for traded goods and services (which depends on people's preferences and incomes), as well as trade costs, both geography- and policy-related. Depending on how these fundamental driving forces of world trade develop in the future, the nature, volume, composition and geography of trade, as well as its effect on countries' social and economic fabric, will change. This may reinforce, moderate or reverse currently observed trends, such as the increased fragmentation of production and trade in intermediate goods, the rising importance of trade in services or the continued growth in trade relationships between developing countries.

Trade does not take place in a vacuum, and evolving societal concerns may have an impact on trade and trade policy as well. Changing patterns of economic activity, new trade frictions and the broader context in which trade is embedded may call for enhanced and new areas of cooperation in order for trade to continue to function as the "transmission belt" balancing supply and demand disequilibria across the globe.

The first substantive section of this report (Section B) begins by looking at factors that have shaped global trade in economic history, focusing on pivotal events that have influenced the path of commercial exchanges, often in an unpredictable manner (B.1). These may range from the use of steam power in ocean shipping and the opening of the Suez and Panama Canals to events in recent history, such as market reforms in China and the arrival of the internet. Following the historical perspective, we turn to current developments, highlighting a number of principal trends that continue to transform international trade (B.2). We analyse the changing geographical distribution (new players in global trade and regionalization), composition (increased importance of services, technological content of exports) and nature

of trade (role of big firms, trade within firms and global supply chains). The latter discussion also emphasizes how the perspective may change when trade is considered in value-added terms rather than gross flows. Finally, we consider possible future scenarios (B.3). We review the literature in this regard and provide suitable simulations in order to gain a comprehensive and consistent overview of possible global scenarios and in order to illustrate the sensitivity of economic and trade outcomes to the underlying assumptions about key inputs to the model.

In light of the extensive data requirements and technical sophistication of such simulation models, the assumptions about fundamental economic factors shaping international trade are kept reasonably simple. In reality, each of these factors, notably demographic change, investment, technological progress, developments in the transportation and energy/natural resource sectors, as well as institutions, are capable of affecting international trade in multiple, complex ways that merit a more detailed discussion. This is undertaken in Section C. Besides these fundamental economic factors, trade policy has shaped and will continue to influence economic and trade outcomes.

Trade policy is affected by a multitude of factors, including the underlying conditions for trade described in Section C. For example, changes in the age structure of the population, a growing middle class and institutional development may lead to changes in trade policy preferences and the sphere for political influence. While it is difficult to predict specific trade policies on this basis, it is nevertheless useful to analyse current and prospective developments in society that could motivate policy-makers to enact certain measures in the future or alter existing trade policy. The forces driving such policy action are usually less well represented in global trade models and relate to wider societal concerns, such as justice and livelihoods, environmental quality and macroeconomic stability. The broader social, environmental and economic context may thus influence people's perceptions about the causes and consequences of trade and lead to policy responses affecting the prospects for trade openness. These issues are covered in Section D.

To varying degrees, all of the relationships discussed in Sections C and D are endogenous, with "everything affecting everything else", particularly in the long run. For example, the quality of institutions both encourages international trade and is further enhanced by these exchanges. Similarly, income inequalities may be affected by international trade and contribute to people's attitudes towards trade openness. We note this potential for two-way relationships as we go along.

The principal objective of Sections C and D is to gain a better understanding of the channels through which

developments in each of these areas can affect the overall nature of international trade. Another objective in each section is to illustrate trends and patterns, determinants and possible future scenarios for each factor and policy concern discussed. This allows us to assess the extent to which possible developments in these areas are likely to affect currently observed trends in international trade in the future.

The discussion in Section C on fundamental economic factors combines supply factors, such as endowments of labour, capital and natural resources as well as technology, the demand side (changes in preferences, incomes) and trade costs. Individual factors may affect global trade predominantly in one area (e.g. the effect of transport on trade costs), two areas (e.g. the quality of institutions can shape comparative advantage and reduce trade costs) or all areas (with technology, for example, affecting supply, demand and trade costs). Specifically, the discussion is organized as follows:

- Demographic change (C.1) is likely to affect trade patterns through both the supply and demand channels, via changes in the size and composition of the labour force (ageing, migration, education, new entrants), for example, and changes in saving and consumption behaviour (e.g. global middle class, spending of savings in old age and increased demand for health, leisure and travel services).
- Investment in physical capital (C.2) leads to capital accumulation and technological progress, and hence economic growth. It may shift comparative advantage towards relatively capital-intensive activities and may also reduce trade costs through investments in public infrastructure. Both domestic savings and capital flows from abroad matter and are related, in turn, to demographic and institutional factors, among other things.
- Technology (C.3) is a crucial determinant of trade (and vice versa). Besides differences in resource endowments, trade occurs because technological knowledge differs across countries and firms. Incentives to innovate, technology transfer and the geographical reach of “knowledge spillovers” can change trade patterns. Technological progress also affects consumption possibilities and trade costs. Advances in transport and in information and communication technologies (ICT) reduce trade costs and hence facilitate participation in complex production networks. ICT also enables new forms of consumption, e.g. via cross-border trade. Remote education or distance learning may also improve the accumulation of know-how. Technology also plays a role in alleviating scarcity in natural resources and addressing environmental challenges, such as climate change, which have the potential to put pressure on the expansion of trade and economic activity.
- Endowments in energy and other natural resources, such as land and water (C.4), are unevenly distributed around the globe. Volatility in prices and uncertainty in supply can have consequences for global production and international trade. So too can the negative environmental externalities associated with resource extraction. The appropriate pricing of these externalities may therefore become important. It must also be asked whether natural resource scarcity, notably with regard to non-renewables, may limit economic growth and commercial exchange, and to what extent technological progress can offer relief.
- Transport (C.5) is a major component of trade costs. As such, transport costs affect the volume, direction and composition of trade as well as the tradability of goods themselves. Transport costs depend on a range of factors, such as geography, fuel costs, infrastructure and regulatory issues. Fuel cost increases could exert pressure on the geographical fragmentation of production and result in reductions of the length of global supply chains. At the same time, progress in transport technology, new routes and improvements in trade infrastructure could further reduce the costs of shipping.
- Institutions (C.6) are a determinant of comparative advantage, allowing for specialization in certain kinds of activities. They also affect trade costs, for instance in relation to contract enforcement. The discussion therefore spans political, economic and cultural institutions and highlights the two-way nature of the relationship for several aspects of institutional quality and trade openness.

In Section D, we elaborate on the wider societal context in which trade takes place. Although some of the issues raised, such as income inequality, can have a “direct” impact on growth perspectives and ultimately trade patterns, the focus in this section is on public perceptions and policies and their potential impact on trade. In many instances, it is the actual or perceived impact of trade on societal concerns, such as the uneven distribution of benefits, which shapes attitudes towards trade openness and related policy responses. The section comprises three parts:

- Social concerns (D.1) related to income inequality and jobs, such as the loss of manufacturing employment and the social costs related to it, affect politics and attitudes towards further economic integration. This begs the question to what extent trade openness affects unemployment and the distribution of incomes both within and across countries. Future developments will depend on whether such perceptions lead to protectionist pressures on the one hand, or to the implementation of policy measures that strengthen balanced outcomes and positive employment effects on the other.

- Environmental problems place a burden on economic well-being, and many countries seek to pursue green growth strategies and policies (D.2). Such measures may increase production costs in affected sectors. By the same token, competitive pressures are sometimes seen as preventing environmental costs from being incorporated into market prices, and this can create resistance to trade openness. Lack of information as to the true objective and impact of environmental measures can create additional tensions. The situation is further complicated by the global scope of certain environmental problems, which require global cooperation and may invite free-riding, with certain parties relying on others to tackle the issue.
- Macroeconomic and financial shocks (D.3), despite their “short-term” nature, can cast a shadow on long-term developments. A lack of finance as the “greasing oil” of trade as well as turmoil in currency markets can cripple and distort international transactions. While eventually exchange rates may adjust and credit crunches may be alleviated through restructuring in the financial sector, long periods of instability can lead to changes in the macro-financial environment, including via regulation and other forms of policy intervention. These may hurt certain traders disproportionately. Also, perceptions of unfair monetary competition can lead to pressures for trade policy responses.

From the discussions in Sections B, C and D, it emerges that a continuing closer integration of the world economy, although the most likely scenario, cannot be taken for granted. Nor is the nature of economic integration necessarily going to stay the same. The final part of the report (Section E) therefore recaps main trends in global trade that are likely to raise challenges for the multilateral trading system (E.1), analyses these challenges in more detail (E.2) and explores what the WTO could do about them (E.3). The discussion is structured according to the implications for the WTO’s agenda, its own governance structure and its wider role in the global institutional environment.

In terms of its agenda, the WTO may need to adjust in order to reflect 21<sup>st</sup>-century policy concerns, many of which are currently addressed at the regional level, where the spread of integrated supply chains is particularly intense. These include further opening of trade in services, trade facilitation and regulatory cooperation. In order to retain legitimacy in a possible expansion of its agenda, the WTO needs to take account of the emergence of new trading powers and the diversity of interests of countries at different levels of development. This may give rise to institutional reform at several levels in the WTO’s own governance structure.

In the context of the WTO’s contribution to the global institutional framework, the WTO’s traditional role may stay relevant and even need further strengthening in order to effectively combat protectionist tendencies that may arise from short-sighted pressures (and that eventually may backfire given the increasing import content of countries’ exports). At the same time, such activities may call for an improved coordination between different international regimes, as some policies may be enacted in response to measures taken in other policy areas, such as climate change. Some domestic policy areas may also call for intensified international coordination, including WTO involvement, e.g. in the areas of Aid for Trade or trade finance.