

Executive Summary

The past decades have witnessed a rapid globalisation of economic activity which has significantly changed the outlook of the world economy. An increasing number of firms, countries and other economic actors take part in today's global economy and all of them have become increasingly connected across borders. Globalisation results in a more efficient allocation of resources across countries and generates important welfare effects, including higher productivity and efficiency, increased average incomes and wages, greater competition, lower prices and increased product variety and quality. At the same time, the process of globalisation also raises concerns in many countries, and needs to be well managed to ensure its benefits are widely distributed.

Globalisation and the crisis

The recent economic crisis has underscored the power of globalisation but has also shown the vulnerability of the global economic system. Global linkages have increased the economic interdependence between countries and this facilitated the spread of the crisis. What started as a financial crisis in the United States turned rapidly into a global economic crisis, leading to a dramatic collapse of international trade and foreign direct investment.

The financial crisis started with payment difficulties in the subprime mortgage segment of the US property market which resulted from high mortgage debts and falling housing prices. Securitisation, which was intended to distribute risk across a larger number of players, made financial institutions increasingly interconnected as the globalisation of the financial sector had already multiplied their relationships across countries (see Section A). As a result, the financial crisis spread rapidly around the globe and also reached the real economy, resulting in dramatic drops in stock markets and a deterioration of business and consumer confidence affecting all economic operators (see Figures A.3.1, A.3.2 and A.4.1). Financial institutions were unwilling to lend to each other, while households cut back their consumption and started to save more; access to credit became more difficult and more costly, undermining corporate investment especially in small businesses.

Falling demand caused international trade and inward investment (including mergers and acquisitions) to contract, causing the crisis to spread over the entire global economy; trade in the OECD area fell on average by 25% between October 2008 and June 2009 (Figure A.5.1). While this fall in trade at the start of the crisis might have been similar to past downturns for individual countries, the synchronisation of the fall in trade was unprecedented as almost all OECD countries simultaneously reported drastic declines in trade (Figures A.6.1 and A.6.2). Foreign direct investment and mergers and acquisitions also dropped drastically (Figures A.7.1 and A.7.2).

The spread of global value chains

Global value chains, in particular, are believed to have played an important role in the spread of the crisis. Production processes have become increasingly fragmented as goods are produced sequentially in stages in different countries in so-called global value chains. Firms seek to optimise the production process by locating the various production stages across different sites according to the rule of comparative advantage, which contributes to the restructuring of activities across countries. As a consequence, outsourcing and offshoring of activities have been on the rise, especially in manufacturing industries characterised by modular production processes, but recently also in services (see Section L).

Global value chains have increased the economic interdependence between countries as intermediate inputs like parts and components are produced in one country and then exported to others for further production/and or assembly in final products. Such “vertical” trade involves arm’s length relationships with independent suppliers as well as intra-firm trade between headquarters and affiliates within multinational networks. The past decades have witnessed a steady growth in trade of intermediate inputs and in 2006, intermediate inputs represented 56% of trade in goods and 73% of services trade (Figure L.3.1). Correspondingly, the import content of exports has increased in almost all OECD countries, demonstrating the rising import dependency of countries in producing their exports, in particular from neighbouring countries and within geographical zones (Figures L.9.1, L.10.1 and L.10.2).

Global value chains can give rise to a domino effect in times of adverse shocks as lower exports of final goods directly lead to relatively smaller imports of intermediate inputs. Empirical evidence suggests that the industries that have been most affected by the crisis are also those characterised by global production networks (Figures A.10.1 and A.10.2). But global value chains do not fully account for the dramatic drop in trade recorded during the crisis and other factors have also contributed to the global depth of the trade crisis. This includes the collapse in international demand; the fiscal stimulus plans of national governments that were mainly targeted at supporting the non-tradable sector; the spread of “murky” protectionism; and the credit crunch, which directly aggravated problems in trade finance.

Trade flows within supply chains might be more resilient to adverse shocks since the development of global production networks entails large and often sunk costs. Furthermore, firms cannot easily drop or switch suppliers that produce very knowledge-intensive parts and components based on specific production technologies. Companies therefore consider alternatives very carefully before taking irrevocable steps to reduce their global value chain. Recent empirical evidence shows that firms are mainly reducing volumes instead of reducing their numbers of suppliers (Figure A.10.3).

The changing character of globalisation

International trade and foreign direct investment are still the two key channels for economic integration across borders (see Sections B, C and D). But while these economic linkages between countries are not new, their scale and complexity has substantially increased over the past decades due to, amongst others, the emergence of international

production networks. Global value chains have increased foreign direct investment flows and intra-firm trade, and have made them increasingly interdependent.

Within international trade, services trade has grown strongly in recent years although it still accounts for only a fraction of trade in goods (Figures B.1.1 and B.1.2). While the number of regional integration agreements has grown, the share of intra-regional trade in total trade has remained fairly constant over the past decade (Figure C.12.2). International investments, both direct and portfolio, have grown more strongly than international trade but are highly volatile at the same time (Figure B.1.1). International mergers and acquisitions that are largely undertaken to restructure firms' activities have contributed in particular to the strong surge in international investment flows (Figures D.10.1 and D.10.2).

The internationalisation of technology is also an important characteristic of today's globalisation process (see Sections F, G and H). Technology flows between countries have grown and cross-border relationships between countries have grown in many ways. International co-operation in science, technology and innovation is on the rise as illustrated by several indicators along different dimensions, including patents (Figures F.5.1 and F.5.2), co-authorship of scientific publications (Figure F.6.1) and formal co-operation arrangements (Figure F.5.3). Flows of human capital also contribute to the internationalisation of technology through increased international mobility and rising numbers of foreign students and researchers in countries (Figures G.1.1 to G.4.3). Environmental technologies and knowledge are increasingly exchanged across borders as countries collaborate to tackle global environmental challenges (Figures H.1.1 and H.2.2).

The current globalisation process is spreading more widely and includes a growing number of countries. China, in particular, has become a major trading partner for most OECD countries and its market share in OECD export markets has risen significantly (Figures C.4.1 and C.5.1). China and the other BRIICS countries (Brazil, Russia, India, Indonesia and South Africa) have become important players in international investments both as hosts and investors (Figures B.5.3 and B.5.4) and also participate actively in global technology networks. Global value chains increasingly include emerging countries as locations of R&D and innovation activities, reflecting the increased capacity of these countries in research and innovation (Figure F.1.1). The economic crisis has hit some emerging countries hard although the economic dynamism of some of them, notably China and India, has contributed to the current recovery in the OECD area (Figure A.4.2).

The key role of multinationals

Multinational enterprises (MNEs) are the most important driver of globalisation, as they embody simultaneously the international transfer of capital, highly skilled labour, technology, and final and intermediate products (see Sections I, J and K). Due to their global reach, MNEs are able to shift activities within their multinational networks according to changing demand and cost conditions in order to co-ordinate production and distribution across many countries. Their affiliates abroad serve not only local markets in the host country but often also serve other neighbouring markets and, additionally, produce inputs for other affiliates in the multinational network. This intra-firm trade, i.e. cross-border trade between MNEs and their affiliates, accounts for an increasing share of international trade (Figures J.6.1 and J.6.2).

MNEs play a crucial role in the internationalisation of technology, since they develop and transfer proprietary knowledge which gives them a competitive edge. In addition, MNE headquarters largely fund R&D investments of their affiliates abroad (Figure F.2.3), resulting in an increasing share of R&D investments by these foreign affiliates in host countries. In some smaller countries, MNEs account for the majority of R&D investment (Figure K.2.1). MNEs play an important role in R&D investments across the world: the largest R&D spending MNEs are positioned among the top 10 countries investing in R&D in 2008, and the aggregate spending of the world's eight largest MNEs in 2008 was larger than the R&D investments of all individual countries, except for the United States and Japan (Figure F.3.1).

Firm-specific knowledge and the corresponding production technologies that provide the core strength and rationale for MNEs differentiate them from firms under national control: foreign affiliates are observed to be significantly larger (Figures J.1.1 and J.1.2), more capital-intensive (Figures J.2.1 and J.2.2), and hence more labour-productive than national firms (Figures J.3.1 and J.3.2). Due to these distinctive characteristics, MNEs are responsible for a large share of employment, turnover and value added created in host countries (Figures I.1.1 and I.1.2), especially in high-technology industries in manufacturing (Figure I.4.3). However, the benefits of MNEs do not accrue only to host countries but increasingly also to the home countries because of the positive effects of outward foreign direct investment on economies, notably in enabling MNEs to tap into foreign technology and knowledge (Figure K.7.1).

A need for policy change?

The changing characteristics of current globalisation and the emerging spread of global value chains call for a rethinking of government policies. Traditional policies related to globalisation aim at enhancing competitiveness in the international economy, so as to safeguard employment and added value. These policies are often still focused on specific industries (manufacturing, services, high technology, etc.).

However, following the international fragmentation of production, this industry dimension seems less and less valid. Given that stages and activities of the production process are located across different countries, competitiveness and comparative advantage might increasingly have to be interpreted in terms of activities instead of industries. How can policies in different areas (industry, innovation, attractiveness) better reflect this change and provide governments with effective policy tools?

MNEs are forceful actors in the current globalisation process, and often limit the effectiveness and success of government policies. Countries need to take this changing reality into account and explore how policies can be designed that benefit both the country and the multinational. Facilitating the location of hubs and decision centres is particularly important, as these centres direct the technology and investment flows within MNEs networks.

The internationalisation of technology particularly to emerging countries like China and India also raises questions about the long-term future of high-technology activities in more developed countries. How can countries safeguard their home-based R&D investments while at the same time being connected to global research centres?

Questions also remain about the interdependence of the economic crisis and global value chains. Until now adjustments in the global value chains have mainly been in trade volumes rather than in number of suppliers. However, it remains to be seen what the long-term impacts of the crisis on global value chains will be and how these will bounce back following the crisis. These and other questions will be explored in OECD work on economic globalisation over the coming years.