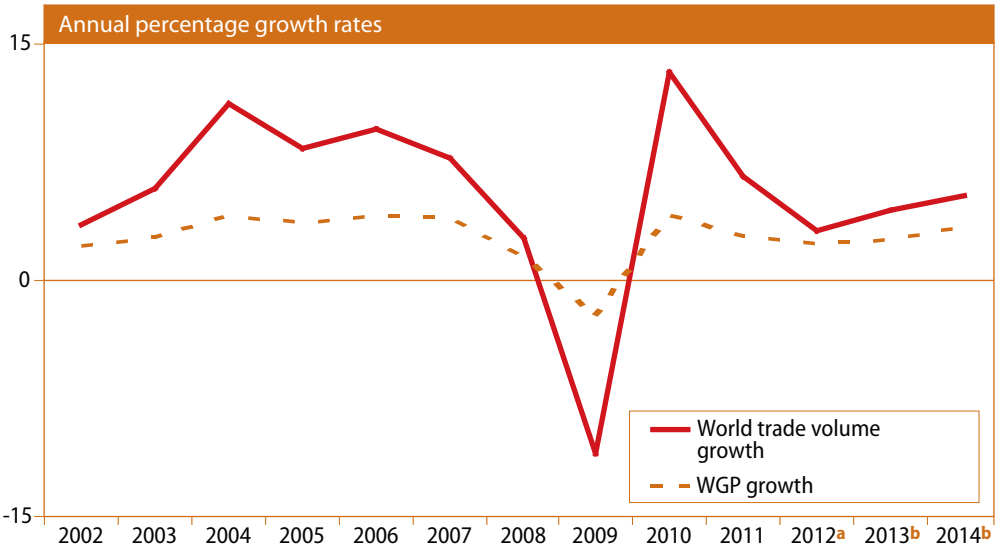
Chapter 2
International trade

Sharp slowdown of world merchandise trade

The vigorous recovery in world trade in the immediate aftermath of the Great Recession has quickly lost its momentum. Growth of world trade, as measured in the volume of world imports and exports, moderated sharply for the second year in a row, dropping from 12.6 per cent in 2010 to 6.4 per cent in 2011 and 3.2 per cent in 2012 (figure II.1). The deceleration of world trade has been closely associated with the weakening of global demand, resulting mainly from stalling economic activity in Europe and anaemic aggregate demand in the United States of America and Japan. Developing countries and the economies in transition are increasingly feeling the effects of the slowdown through integrated global networks of production and trade. As a result, global output and trade have slowed in tandem.

Figure II.1
Synchronized slowdown of world merchandise trade and output, 2002-2014



Source: UN/DESA.
a Partly estimated.
b Projections.

Weak demand has spread through global networks of production and trade

In the euro area, import demand in countries such as Italy, Greece, Portugal and Spain started to contract in late 2011, as austerity measures combined with the woes of debt distress and bank fragility to cause a drop in aggregate demand. Import demand of these countries contracted by more than 6 per cent in real terms in 2012, and declined by more than 20 per cent in nominal terms[1] during several months of the year. By the first quarter

1 Nominal terms are in United States dollars.

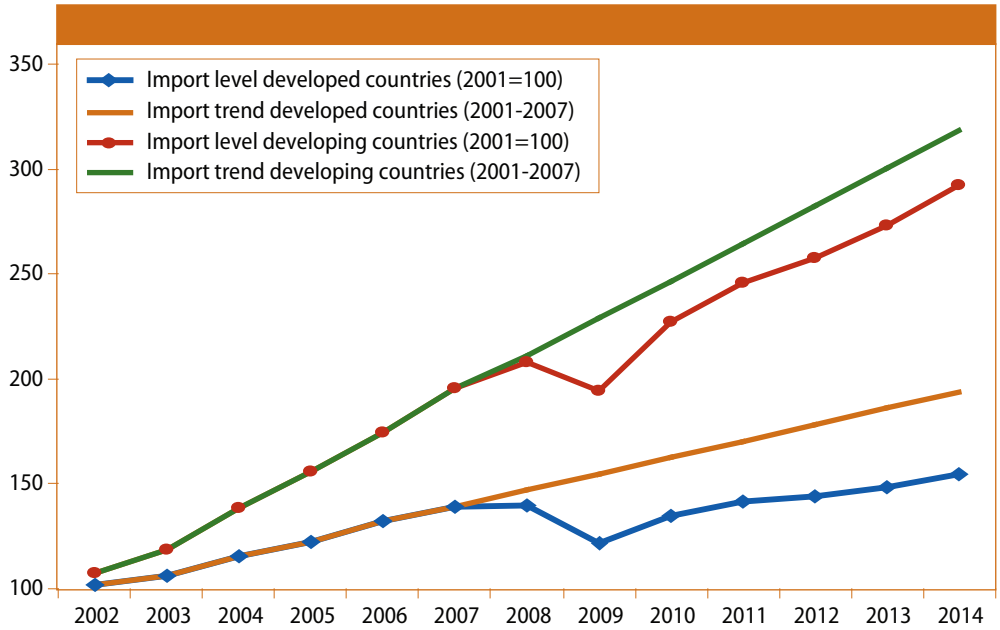
of 2012, weak demand had spread to the rest of Europe. Imports by France and Germany plummeted by more than 10 per cent in nominal terms (annualized rate) during the second quarter of the year, but expanded modestly in real terms over the year. As intraregional trade accounts for about 70 per cent of total European Union (EU) trade, this was also reflected in commensurate export declines in most European countries. Import demand also slowed significantly in the United States and Japan, especially during the second half of 2012.

As a result, East Asian countries, such as the Republic of Korea, Singapore and Taiwan Province of China that have strong trade ties with the major developed countries, saw their exports decline during most of 2012. China's export volume growth also decelerated and came to a halt in mid-2012, along with other emerging countries such as Brazil and India. Further down the global value chain, primary commodity-exporting countries followed suit, with many registering export declines in the second half of 2012. In turn, weaker exports and GDP growth have depressed import demand in developing countries, further softening trade with developed economies.

Import demand is drifting further below pre-crisis trends

Four years after the start of the Great Recession, external demand, as measured by the volume of world imports, is still far below pre-crisis trend levels, which now appear unsustainable, especially for developed countries. In the baseline outlook (see chapter I), global economic activity is expected to remain weak in 2013 before picking up modestly in 2014. As a result, international trade will likely continue drifting further below trend levels in both developed and, to a lesser extent, in developing countries (figure II.2). In 2009, the import volume of developed countries dropped 26 per cent below the pre-crisis trend level. The gap narrowed slightly in 2010-2011, but widened again in 2012. In the baseline scenario, the gap is expected to remain as large as 25 per cent in 2014. The import volume of developing countries also fell well below the trend (about 17 per cent) in 2009, but recovered more strongly during 2010-2011, reducing the gap to 7 per cent. As the global economic recovery is expected to remain elusive, however, the gap is also expected to widen further to 9 per cent for developing countries in 2014.

Figure II.2
Imports of developed and developing countries, 2000-2014



Source: UN/DESA.
a Partly estimated.
b Projections.

Nonetheless, as their economies and export sectors continue to show greater resilience, the share of developing countries in world trade has increased by 6 percentage points over the last five years, reaching 42 per cent in 2012. Furthermore, developing country import growth currently contributes to about half of world import demand growth, compared to 43 per cent before the crisis. Trade in developing countries—with their high potential growth and increasing integration into global supply chains—is expected to grow faster than in developed economies. However, the potential economic gains for these countries may be accompanied by increasing contributions to the already steadily rising global carbon emissions (box II.1). Global economic woes could further complicate

Box II.1

Global production chains, freight transport and climate change

International trade is a driver of economic growth in many countries and a pillar of globalization. Simultaneously, the transport of traded goods, intensified by the rise of global production chains and multinational corporations (MNCs) that generate growing flows of trade in tasks and intrafirm trade, produces significant carbon dioxide (CO_2) emissions. This negative externality associated with the environmentally suboptimal organization of global production chains and international trade flows is, by and large, ignored by policymakers.

Currently, about 90 per cent of merchandise trade (excluding intra-EU trade) is shipped by sea. As maritime shipping only accounts for 2.7 per cent of global CO_2 emissions,[a] the significance of trade-related emissions is sometimes downplayed.[b] The picture changes drastically, however, when considering intra-EU trade and transport of goods from ports to their destination using emission-intensive modes of transportation. Internationally traded goods are estimated to generate on average 50 per cent more CO_2 emissions than locally traded goods. The estimate is much higher for traded manufactured goods, especially for electronics and machinery, which represent a significant share of intrafirm trade.[c] As traded goods embody about 21 per cent of global CO_2 emissions,[d] transport associated with merchandise trade alone may thus contribute to more than 7 per cent of global CO_2 emissions.[e]

Over the past four decades, the volume of merchandise trade has grown at an annual rate of 5 per cent, about 2 per cent faster than global economic growth. Rapid trade growth partly stems from the globalization of consumption and, more importantly, of production. The latter is supported by the rise in global production chains' integration of capital and advanced technologies from developed countries and cheap labour from developing countries. While efficient and profitable from the point of view of MNCs, this restructuring of production processes has given rise to a vast expansion of intrafirm trade, which currently accounts for almost 50 per cent of imports in the United States and probably about one third of total international trade.[f]

Expanding world trade is bound to come with greater environmental costs if left unabated. In the absence of counteracting policies (see below) and if both the trade volume and trade-related CO_2 emissions would continue to grow at an annual rate of 5 per cent, both would double within 15 years. The share of trade in world gross product (WGP) would continue to increase, fostering the expansion of transport and CO_2 emissions (figure). Trade volume would increase from more than 10 billions tons (Bt) in 2011 to over 20 Bt in 2026 and trade-related CO_2 emissions would rise from 2.2 gigatons (Gt) to 4.4 Gt during the same period. Faced with these trends that move away from climate change mitigation targets, policymakers are actively promoting measures that are to reduce emissions generated by freight transport. Thus far, however, the approach is focused only on the transport sector without taking into account the broader implications of the environmentally damaging organization of global production chains and steadily increasing trade flows.

a International Maritime Organization, "Second IMO GHG Study 2009", available from http://www.imo.org/blast/blastDataHelper.asp?data_id=27795&filename=GHGStudyFINAL.pdf.

b See World Trade Organization, "The impact of trade opening on climate change", available from http://www.wto.org/english/tratop_e/envir_e/climate_impact_e.htm.

c Anca D. Cristea and others, "Trade and the greenhouse gas emissions from international freight transport", NBER Working Paper, No. 17117 (Cambridge, Massachusetts: National Bureau of Economic Research, June 2011).

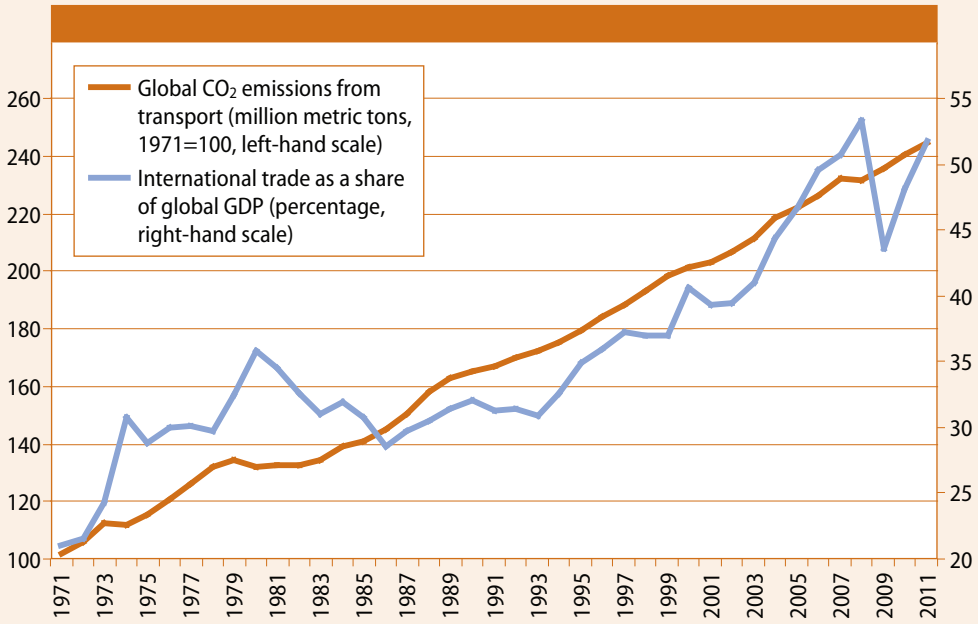
d Glen P. Peters and Edgar G. Hertwich, "CO_2 embodied in international trade with implications for global climate policy", *Environmental Science & Technology*, vol. 42, No. 5 (1 March 2008), pp. 1401-1407.

e See Stern Review on the Economics of Climate Change, available from http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm.

f Rainer Lanz and Sébastien Miroudo, "Intra-firm trade: patterns, determinants and policy implications", OECD Trade Policy Paper, No. 114 (24 June 2011).

Box II.1 (cont'd)

CO_2 emissions from transport and share of international trade in world gross product move in tandem



Source: World Bank.

Promoting sustainability in freight transport

About 80 per cent of merchandise trade (including intra-EU trade) is shipped by sea. This is a relatively energy-efficient mode of transport that has expanded at an average annual rate of 3 per cent over the last 30 years. If seaborne trade would continue to grow at this pace without any global action being taken to reduce CO_2 emissions in that sector, seaborne trade and related CO_2 emissions would double by 2035.

The International Maritime Organization (IMO) asserts that measures affecting ship and fuel technology could improve energy efficiency and reduce the emission intensity (CO_2/ton-mile) by 25 to 75 per cent below current levels. As mandated under the United Nations Framework Convention on Climate Change (UNFCCC), IMO adopted in 2011 a set of global rules to control CO_2 emissions from international shipping. The package included technical and operational measures in the form of the Energy Efficiency Design Index (EEDI) and the Ship Energy Efficiency Management Plan (SEEMP). These measures will enter into force in 2013 and apply to all ships of 400 gross tonnage and above. However, the EEDI will only apply to new ships. Given the long life cycle of ships and the relatively young average age of the current fleet, emission reduction due to EEDI will not materialize in the near future.

The shipping industry is also taking action. This year, for instance, SinoPacific Shipbuilding Group launched a new generation of fuel-saving and environmentally friendly bulk carriers, which reduce fuel consumption by 13 per cent compared to the equivalent size bulk carriers currently operating.

Various opportunities have further emerged for improving environmental sustainability in ports, such as: enhanced port infrastructure and efficient terminal layout designs that reduce time and processes required to move cargo; switching to greener modes of transport for hinterland access, such as by rail or inland waterways; the adoption of energy efficiency programmes; and the use of renewable energy. By implementing such measures, the Rotterdam Shortsea Terminal reduced its CO_2 emission by nearly 70 per cent.[g]

Efforts to achieve sustainability in maritime transport demand an integral approach, as international trade is carried through multimodal transportation systems. CO_2 emissions largely emanate from land modes, in particular haulage by road, which is projected to expand significantly in

g Harry Geerlings and Ron van Duin, "A new method for assessing CO_2-emissions from container terminals: a promising approach applied in Rotterdam", Journal of Cleaner Production, vol. 19, Issues 6-7 (April-May 2011), pp. 657-666.

Box II.1 (cont'd)

developing countries in the next decades. The rate of surface freight activity worldwide—including rail, medium-duty truck and heavy truck (in trillions of ton-kilometres)—is expected to increase by an average annual rate of 2.3 per cent and double within the next thirty years.[h] With these trends, trade-driven economic growth and environmental sustainability will remain incompatible objectives, unless emissions from land freight transport are more effectively addressed.

There are ways to improve sustainability in land freight transport and logistics through a comprehensive and integrated approach, but this may require trading off energy efficiency gains with transport costs and, potentially, the speed and reliability of services. This entails, inter alia, optimizing the performance of multimodal logistics chains, improving the competitiveness of environmentally friendly modes of transport, leveraging technologies capable of improving energy efficiency, logistical efficiency, and reducing emissions, as well as creating integrated transport networks and dedicated freight corridors that are efficient and environmentally friendly.

Initiatives are being developed at the industry level to improve energy efficiency in vehicles and expand the use of ICT-driven applications to optimize operations. By reducing fuel consumption, kilometres driven, and frequency of vehicles travelling empty or partially loaded, the latter could help achieve a 16 per cent global reduction in land freight transport emissions by 2020.[i]

Current efforts to reduce CO_2 emissions from freight transport are, however, insufficient to achieve the energy and environmental sustainability required by internationally agreed climate targets. Greater efforts are needed to reach more integrated approaches that encompass all modes of transportation. Multilateral approaches that jointly address economic and environmental challenges are required to ensure the coherence between international trade, transport and environmental policies.

h World Business Council for Sustainable Development, "Mobility 2030: Meeting the Challenges to Sustainability", The Sustainable Mobility Project (Geneva, July 2004), available from http://www.wbcsd.org/web/publications/mobility/mobility-full.pdf.

i The Climate Group, "Smart 2020: Enabling the low carbon economy in the information age", a report by The Climate Group on behalf of the Global eSustainability Initiative, 2008, available from http://www.smart2020.org/_assets/files/02_Smart2020Report.pdf.

reaching an agreement in the climate negotiations, illustrated by the inadequate progress in setting sufficiently ambitious binding carbon targets for all countries at the Eighteenth Conference of Parties (COP-18) to the United Nations Framework Convention on Climate Change (UNFCCC).

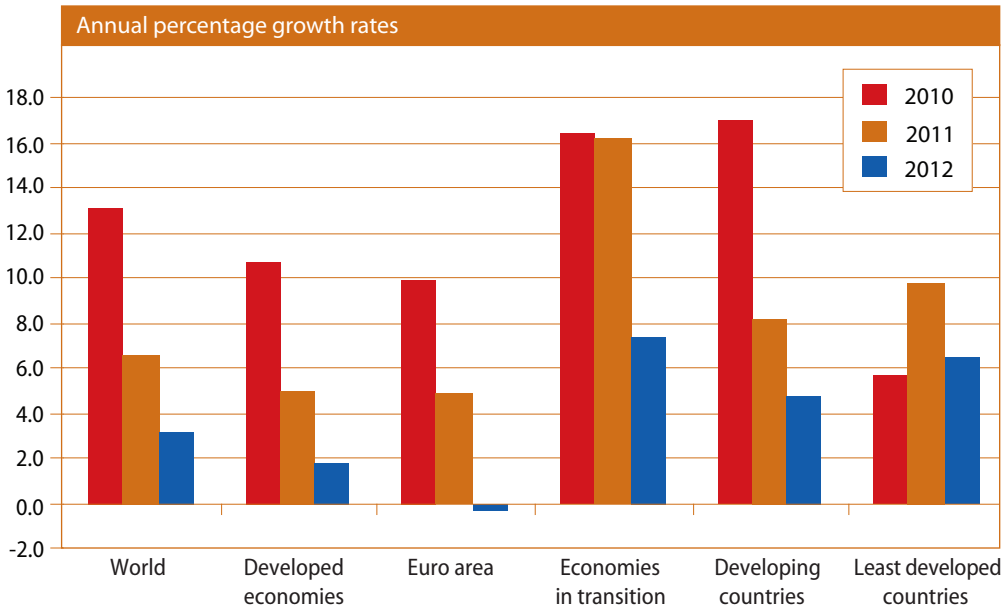
Regional trade patterns

Import demand declined across all groups of countries and regions in 2012, except Africa (figures II.3 and II.4). Although trade flows remained robust in most regions during the first half of the year, the contagion of downward-spiralling demand progressively spread from Europe and other developed economies to the rest of the world during the second half of 2012.

As its economy fell back into recession, import volume in the euro area contracted by 0.1 per cent in 2012, after having increased by 4.8 per cent in the previous year. Subdued growth in import volume in core euro area countries did not completely offset sharp declines in periphery countries that had been weakened by hard-hitting austerity measures. Export volume growth decelerated from 6.9 per cent in 2011 to 2.8 per cent in 2012, and remained positive, even in the debt-distressed countries. Unlike in the euro area, import demand slightly increased in the United Kingdom of Great Britain and Northern Ireland, despite severe fiscal austerity measures. Exports from the United Kingdom declined, however, contributing to the economic downturn. Growth in the volume of exports from the EU at large (all 27 members) decelerated to 2.3 per cent in 2012, but remained positive, helped by comparatively stronger demand from other regions and a weaker euro.

In North America, import volume growth decelerated from 5.2 per cent in 2011 to 3.1 per cent in 2012. Exports remained a driver of economic activity, despite a

Figure II.3
Import volume growth by groups of countries, 2010-2012



Source: UN/DESA.

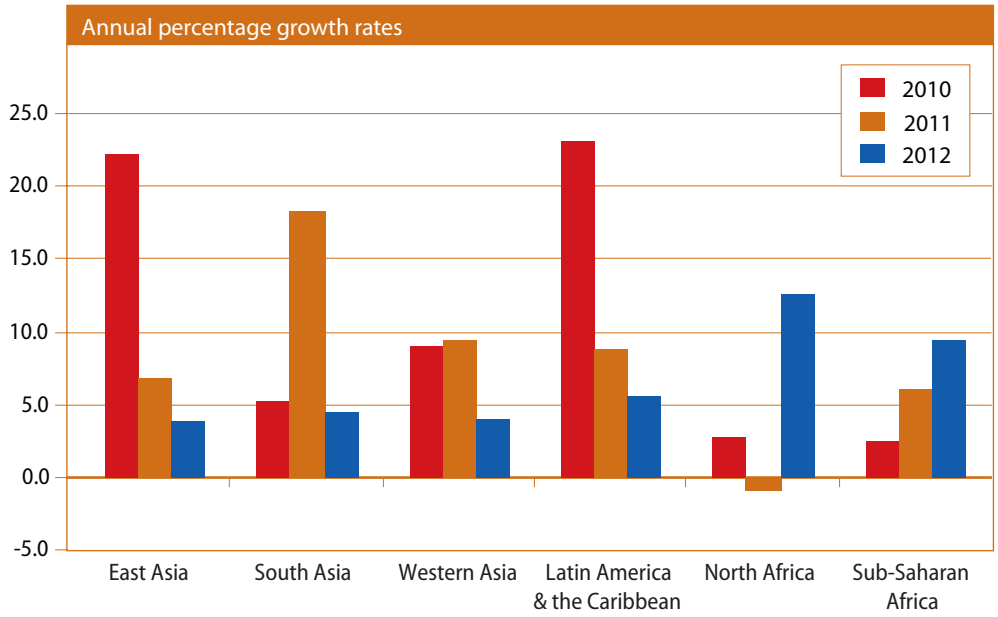
drop in volume growth from 6.3 per cent in 2011 to 3.7 per cent in 2012. Japan's exports rebounded weakly by 0.8 per cent in 2012. As its economy recovered from the destruction inflicted by the 2011 earthquake, tsunami and nuclear disasters, import volume growth stood at a steady 5 per cent, despite turning negative for several months in the second half of 2012.

Import demand slows more strongly in East and South Asia than other developing country regions

In East and South Asia, the growth of import demand slowed more than in other developing country regions in 2012. Nonetheless, these two populous subregions remain key drivers of trade growth, especially among developing regions, including through their mediating role in global value chains. In most East Asian countries, export growth decelerated slightly more than import growth in 2012, leading to smaller trade surpluses. Weaker demand from developed countries and China was transmitted through global production networks and lowered prices of primary commodities, such as rubber and copper, leading to a deceleration of Asian export growth from 6.9 per cent in 2011 to 3.4 per cent in 2012. Chinese export and import volumes have expanded at an annual rate of about 6 per cent in 2012, much lower than the average annual rate of above 20 per cent during the 2000s. Import demand growth stalled sharply in South Asia, dropping from 18.3 per cent in 2011 to 3.8 per cent in 2012, partly as a consequence of currency depreciations in the region. Export volumes also declined significantly, especially in the Islamic Republic of Iran as a consequence of international sanctions.

As oil prices reached a record yearly average in 2012, oil-exporting countries in Western Asia registered unprecedented trade surpluses. Energy exporters in the Commonwealth of Independent States (CIS) also kept up trade surpluses, despite the fact that import demand increased faster than exports in 2012 (7.9 per cent and 3.8 per cent, respectively). Exporters of non-energy commodities were more severely affected by declining prices, especially for metals, minerals and agricultural raw materials, reflecting deteriorating global growth prospects. Although weakening external demand affected exports

Figure II.4
Import volume growth in selected regions, 2010-2012



Source: UN/DESA.

in several countries in South America, import demand growth in the Caribbean and Latin America at large remained robust at over 5 per cent in 2012. In Africa, import and export volume growth declined slightly in most countries in 2012. However, a small number of significant outliers, such as Libya and Nigeria, experienced a spectacular rebound after having faced steep export declines in 2011. Owing to these exceptional rebounds, Africa was the only region which saw its growth rate of trade volume increase in 2012.

Primary commodity markets

Monetary easing heightens commodity price volatility

Underpinned by initially strengthening industrial activity,[2] strong demand from developing countries, and more optimistic market sentiment following the European Central Bank's (ECB) long-term refinancing operations (LTROs),[3] the United Nations Conference on Trade and Development price index[4] rose significantly in the first quarter of 2012 for three groups of commodities: all food;[5] agricultural raw materials; and minerals, ores and metals. From the second quarter on, however, prices fell as a result of the economic slowdown in China and the intensification of sovereign debt crises in the euro area.

Adverse weather pushed up food prices

Prices of food and base metals and ores diverged in the third quarter. The food market tightened because of supply disruptions created by adverse weather in the United States, Australia and the Black Sea region. The surge in maize, wheat and soybean prices put a strain on the food market. By contrast, the prices of many important base metals

2 World Bank, *Global Economic Prospects: Managing Growth in a Volatile World*, vol. 5 (Washington, D.C., June 2012).

3 See United Nations, Economic and Social Council, World economic situation and prospects as of mid-2012 (E/2012/72).

4 Unless otherwise stated, all indices used in this section are United Nations Conference on Trade and Development (UNCTAD) price indices, measured in United States dollars.

5 The category of all food includes food, tropical beverages, and vegetable oilseeds and oils.

and ores continued their downward trend in July and August of 2012 as global economic prospects remained gloomy. Copper prices declined significantly compared with 2011. At the same time, productive investment in aluminium, nickel and zinc markets over the last decade have increased supply, exerting long-term downward pressure on prices.

In September, several major central banks engaged in further unconventional monetary policies to revive their economies. While the full impact of these policies on employment generation and economic growth remains unclear, commodity markets responded quickly, with the prices of gold and key base metals rising significantly.[6]

Food and agricultural commodities

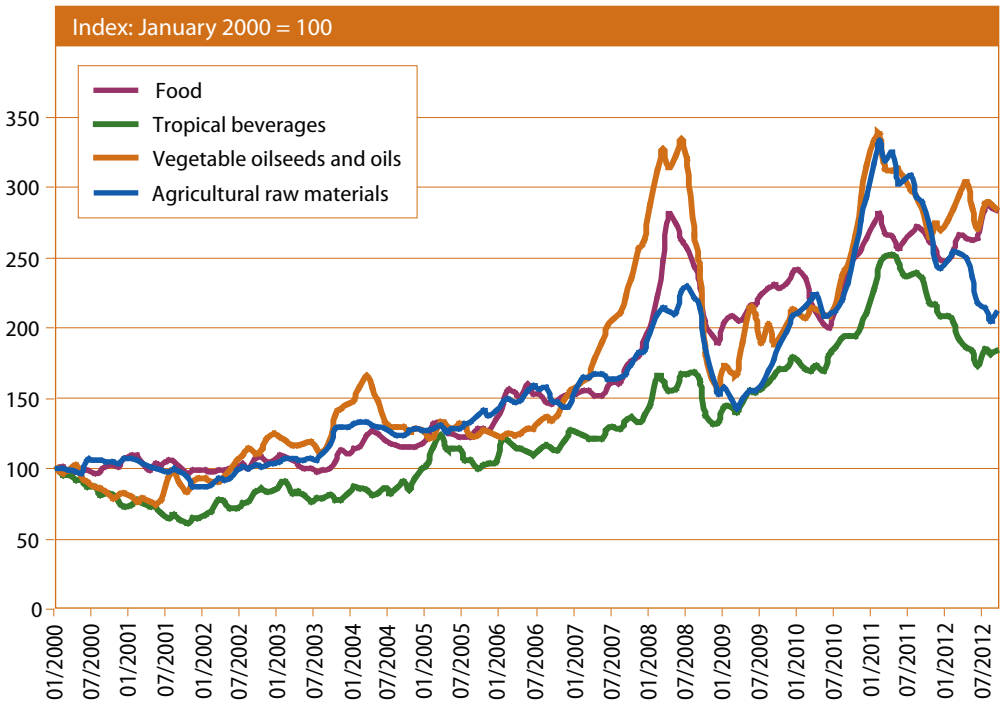
Food prices surged throughout 2012

During the first nine months of 2012, the food price index remained high, despite short-term price fluctuations. Led by high prices of maize, wheat and soybeans, the price index rose sharply to 283 points in July 2012, an increase of 11 per cent from January 2012. However, the price pattern differed within various commodity sub-groups.

Maize and wheat stocks fell to four-to-six-year lows

During the first quarter of 2012, the food price index rose by around 7 per cent. Prices stabilized in the following three months before jumping to a record high in July, mainly resulting from tight maize and wheat supply and low stock levels. In the United States, severe drought in the corn belt reduced yield prospects and drove the price of maize to an all-time high in July. Poor weather also adversely affected the outlook for

Figure II.5
Agricultural commodities price indices, January 2000-September 2012



Source: UNCTAD.

6 In September 2012, the average gold price surged to $1,744 an ounce, 1.6 per cent lower than its historical peak in September 2011. The prices of copper, aluminium, nickel, lead, zinc and tin also rose considerably compared to August 2012.

wheat production in Kazakhstan, the Russian Federation and Ukraine. Global stocks for maize and wheat are expected to fall to six- and four-year lows, respectively, by the end of 2012/2013.[7]

The price of rice continued to be relatively stable, however, as stock levels remain high and supply and demand are broadly in balance. The rice-pledging programme in Thailand—which subsidizes farmers by setting a fixed price for their rice harvests—significantly reduced the country's rice exports in 2011. To date, the impact of this government policy on the global rice market is limited thanks to adequate rice stocks and stable supply from other major exporting countries such as India and Viet Nam. However, the dynamics of the world rice market might change quickly if other exporting countries also intervene in the market through policy measures, such as subsidies or export bans/restrictions.

The Group of Twenty fosters transparency in physical food markets, but stops short of interfering with derivatives markets

The spike in major cereal prices has raised concerns that another food crisis may be in the offing. The countries of the Group of Twenty (G20) are closely monitoring global food markets through the Agricultural Market Information System (AMIS) launched in June 2011. While increased transparency may contribute to a better alignment of spot prices with fundamentals in physical markets, it does not address the instability caused by financial speculation in derivatives markets, and may thus limit the effectiveness of this initiative.[8]

High maize prices have also revived the debate on using grains as feedstock to produce biofuels. Under increasing calls for adjustments in the EU and United States biofuel policies, the European Commission has proposed to cap crop-based biofuels to 5 per cent of transport fuel until 2020.[9]

The vegetable oilseeds and oils price index soared by 10 per cent during the four months to April 2012. The index jumped again in the third quarter, mainly driven by soybean prices, which reached a record high of $684 per ton, an increase of 21 per cent from June 2012. A combination of factors contributed to the price surge: concerns about reduced United States supply caused by adverse weather conditions, robust demand from Asia, and tight stocks.

During the first half of 2012, the tropical beverages price index continued its downward trend, which started in May 2011, with only a slight recovery in the third quarter of 2012. Coffee prices fell by 33 per cent from their peak of $2.13 in April 2011 down to $1.42 per pound in June 2012.[10] In July, coffee prices rebounded to $1.52 a pound, owing to concerns over the impact of heavy rainfall on Brazil's coffee supply.

The price of cocoa beans fluctuated between $1.03 and $1.07 per pound during the 7 months to July 2012. The relatively stable prices resulted from the offsetting effects of an expected production decline in West Africa, caused by erratic weather, as well as a sharp fall in cocoa grindings in Europe and North America—both affected by the economic crisis—versus resilient demand growth in emerging markets.[11] In August

7 International Grains Council, Grain Market Report, GMR No. 427, 25 October 2012.

8 See UNCTAD, *Price Formation in Financialized Commodity Markets: The Role of Information* (United Nations publication, UNCTAD/GDS/2011/1).

9 See Barbara Lewis and Michele Kambas, "EU Commission to cap food-based biofuels in major shift", Reuters, 17 September 2012, available from http://www.reuters.com/article/2012/09/17/us-eu-biofuel-idUSBRE88G0IL20120917.

10 The coffee prices refer to coffee composite indicator prices which consist of the prices for Arabica and Robusta coffee.

11 In August 2012, the International Cocoa Organization forecast that world cocoa bean production would decline by 8.1 per cent during the 2011/2012 cocoa season compared to the previous season, and reach 3.962 million tons.

and September, prices increased based on uncertainties surrounding the supply from Côte d'Ivoire, which started to reform its cocoa marketing system in early 2012.

The agricultural raw materials price index recovered briefly during the first two months of 2012 before declining steadily in the subsequent six months. In September, the price index rebounded slightly after reaching a 33-month low in August. Cotton prices exhibited a similar trend. Various factors contributed to the bearish market, including the expected surge in global stocks, a supply surplus, renewed concerns over the euro area economy and the strengthening of the United States dollar.[12]

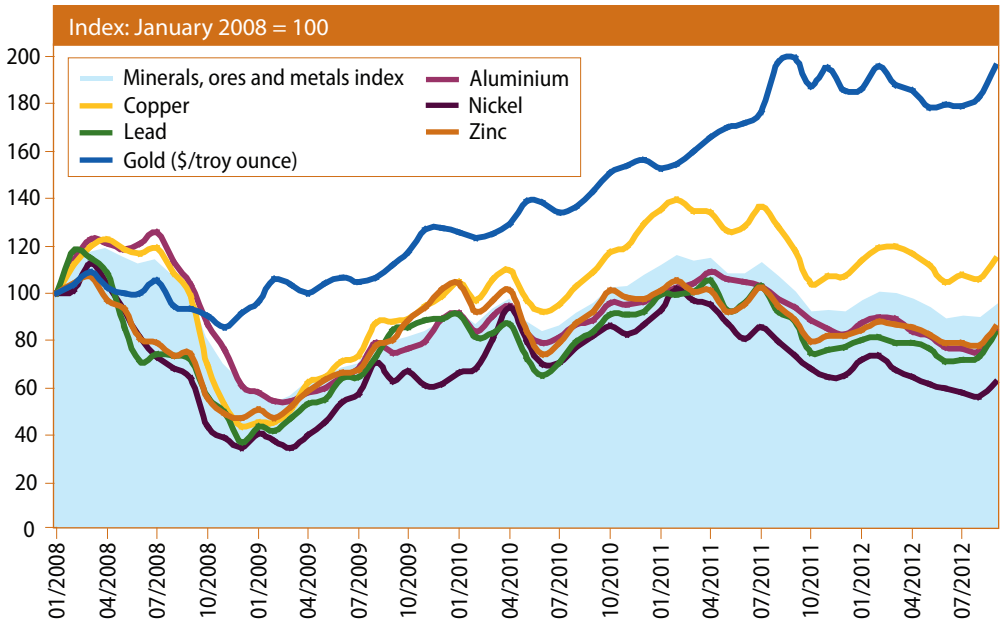
Minerals, ores and metals

Prices of metals proved to be sensitive to monetary easing, while being depressed by the weakening global economy

The minerals, ores and metals price index rebounded in 2012 in the wake of the LTRO, before declining in the second quarter, mainly owing to worsening global economic prospects, reaching a two-year low in July. Following monetary easing in major developed economies, the price index rose again in September. (See box II.2 for an assessment of the influence of financial factors on markets for minerals and metals in particular.)

Copper prices fluctuated as a result of volatile world economic prospects. In the first quarter, the average London Metal Exchange (LME) cash price surged to $8,307 per ton, up 11 per cent from its level in the fourth quarter of 2011. The surge was driven by abundant liquidity in financial markets, as well as by strong demand from China (partly for stockpiling). The average LME cash price decreased by 5 per cent during the second quarter. Though copper prices rebounded in the third quarter, they were still 14 per cent below levels reached in the same period in 2011.

Figure II.6
Price indices of selected metals, January 2008-September 2012[a]



Source: UNCTAD.
a Gold is not included in the UNCTAD minerals, ores and metals price index.

12 According to the International Cotton Advisory Committee (ICAC) press release of 1 June 2012, global cotton stocks would represent 61 per cent of global consumption by the end of July 2013, the highest stocks-to-use ratio reached since 1998/99.

Prices of nickel, aluminium, lead and zinc climbed in early 2012, driven by strong demand and the then prevailing optimism about global economic prospects. Since March, however, sluggish demand, coupled with oversupply, has pushed prices downward. The price of nickel, a crucial raw material in the production of stainless steel, hit a 38-month low in August 2012. Chronic oversupply, high stocks and weakened demand have driven the average aluminium cash price on the LME down to $1,838 per ton, the lowest level since October 2009. In June and August 2012, the prices of lead and zinc hit their lowest levels since August 2010.[13] In September, however, the prices of these metals surged sharply at the announcement of further monetary easing by the central banks of several developed economies.

Box II.2

Financial investment and physical commodity holdings

Financial investors continue venturing into commodity markets. Commodity assets under management (AUM) increased almost fortyfold between 2001 and April 2011, when they reached a record of $458 billion. Assets declined sharply thereafter but rebounded to reach $439 billion in September 2012, 11 per cent above their level at the beginning of the year.[a] Since mid-2008, financial investors have been looking for new ways to access commodities as an asset class. They became less interested in traditional broad-based passive index investment instruments, which only allow betting on rising prices. Instead, to optimize investment strategies in unstable markets, financial investors have increasingly opted for more active instruments, allowing bets on both rising and declining prices.[b] As a result, index investment as a share of total commodity AUM declined from 65-85 per cent in 2005-2007 to 32 per cent in September 2012.[c]

Exchange-traded products (ETPs), particularly futures-based exchange-traded funds (ETFs), have become the largest investment vehicles in commodity markets (figure). ETFs issue shares which are traded like equities on a securities exchange. Physically-backed ETFs have also become increasingly attractive for financial investors, because they offer the advantage of establishing a direct link between financial investment and physical inventories and thereby give investors direct exposure to commodity spot prices. This avoids uncertainty related to possible differences between spot prices and prices of futures contracts, to which traditional index funds and futures-based ETFs are exposed.

Until recently, physically-backed ETFs were confined to precious metals. In 2010, however, some European banks started to offer such vehicles related to industrial metals, especially copper. While accumulated investment has remained limited, this situation could change rapidly. At the time of writing in November 2012, the United States Securities and Exchange Commission (SEC) was deliberating whether to approve two requests to list and trade physically-backed copper ETFs.[d] Opponents of the approval, which include large industrial firms, have expressed concern that the resulting large purchase of physical copper holdings would cause rising prices and reduced availability of physical copper. Such concerns are related to recent events in aluminium markets where the arrival of investment banks was followed by a record-level surge of the premium that consumers pay for metal—surpassing the benchmark price set at the London Metal Exchange (LME), the world's leading exchange for non-ferrous metals.[e] This surge led to fears that allowing financial investors to accumulate and store physical copper holdings could lead to inflated prices that would destabilize the market and, ultimately, disrupt metal supply and industrial production. Sizeable effects could indeed occur, given that the two planned ETFs combined would absorb more than 180,000 metric

a Barclays, The Commodity Investor, October 2012.

b UNCTAD, *Trade and Development Report 2011: Post-crisis policy challenges in the world economy* (United Nations publication, Sales No. E.11.II.D.3), chap. V.

c Barclays, The Commodity Investor, *op. cit.*

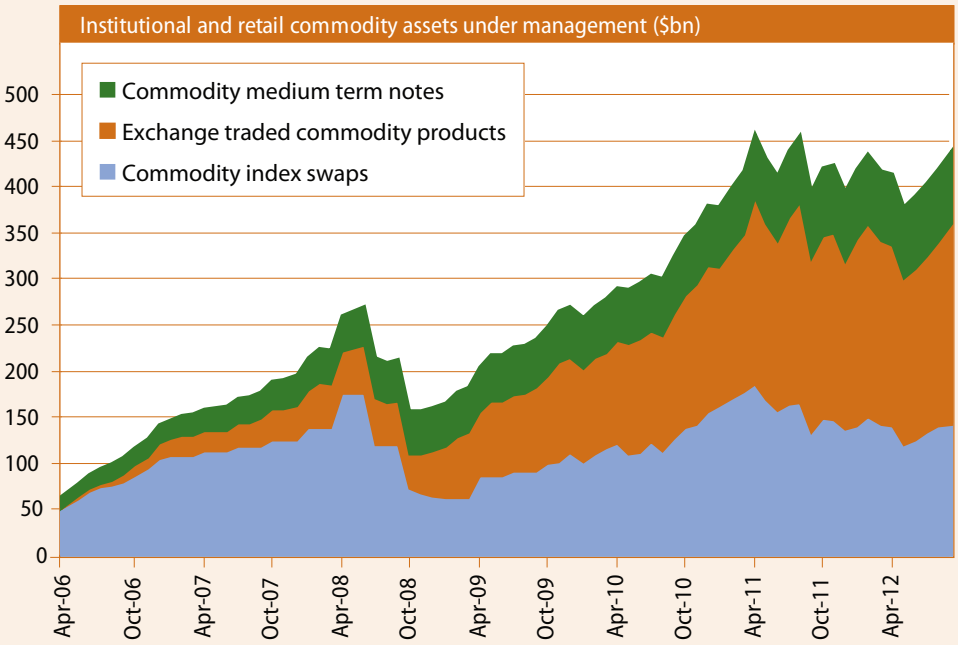
d See Securities and Exchange Commission Release No. 34–67965; SR–NYCEArca-2012-28, 2 October 2012, available from http://www.sec.gov/rules/sro/nysearca/2012/34-67965.pdf.

e Jack Farchy, "Banks force aluminium market shake-up", *Financial Times*, 12 September 2012, available from http://www.ft.com/intl/cms/s/0/c3b3e02e-fcf3-11e1-a4f2-00144feabdc0.html#axzz2DXWwGjEH.

13 According to the International Lead and Zinc Study Group, supply exceeded demand by 49,000 tons (about 0.8 per cent of demand) and 135,000 tons (about 1.9 per cent of demand), respectively, in the global refined lead and zinc metal market during the first seven months of 2012.

Box II.2 (cont'd)

Exchange traded commodity products gaining market share after the global financial crisis



Source: Barclays.

tons of copper,[f] which corresponds to about 80 per cent of recorded copper inventories held at the LME global network of warehouses in mid-September 2012.[g]

But even if the Securities and Exchange Commission eventually rejects approval of these two ETFs, the physical commodity operations of financial investors are likely to continue affecting prices through other mechanisms. Ownership of warehouses or storage tanks, for instance, allow banks to realize certain profits based on so-called contango financing. "Contango" indicates situations in which prices of futures contracts with more distant delivery dates exceed those of near-term contracts. When markets are well supplied, producers would normally reduce their activities to support prices. However, banks may encourage producers to maintain their level of activity by accepting their inventory as collateral for secured financing. The encumbered collateral, which would be kept off market and hedged through derivatives, would not only generate inventory fee revenues, but also end up yielding a positive return on derivatives for banks because of the forward contango structure.[h] The fact that banks can modulate the level of stored physical commodities independently of market fundamentals tends to add to price volatility. More generally, the fact that these inventories typically remain unreported creates information asymmetry in the market and makes it impossible for commercial market participants to determine the price that would solely reflect supply and demand fundamentals. Ultimately, banks' efforts to expand their business activities to include the management of physical commodity inventories create information asymmetries and increase the risk of the emergence of conflicts of interest and perverse incentives detrimental to other market participants. Considering all of the above elements together raises doubts on the social value of these new financial instruments and practices.

f Josephine Mason, "Copper users attack ETF plans ahead of SEC ruling", Reuters, 20 July 2012, available from http://in.reuters.com/article/2012/07/19/copper-etf-jpmorgan-idINL2E8IJF7P20120719. See also Vandenburg & Feliu LLP, "Comments of Vandenberg & Feliu LPP on proposed rule change to list and trade shares of the JPM XF Physical Copper Trust pursuant to NYSE Arca equities rule 8.201", 9 May 2012, available from http://www.sec.gov/comments/sr-nysearca-2012-28/nysearca201228-1.pdf.

g Chris Kelly and Silvia Antonioli, "Copper hits new 4-1/2 month top, demand worries resurface", Reuters, 19 September 2012, available from http://af.reuters.com/article/metalsNews/idAFL5E8KJA2W20120919.

h Izabella Kaminska, "Outing the aluminum squeeze, Deripaska style", *Financial Times*, 13 September 2012, available from http://ftalphaville.ft.com/blog/2012/09/13/1159071/outing-the-aluminum-squeeze-deripaska-style/.

After reaching $1,743 per ounce in February 2012, gold prices retreated in the following months, owing to weaker demand from the jewellery industry and from investors. The price of gold quickly recovered and hit a 12-month high in September as expansionary monetary policies in major developed economies renewed inflation concerns.

The first four months of 2012 saw little movement in iron ore prices, with spot prices in Brazil fluctuating about $144 per dry metric ton.[14] Since May 2012, however, prices dropped sharply and hit a 34-month low in September. The plunge was caused in large part by the shrinking demand for steel from China's construction and manufacturing industries, high levels of Chinese stocks, and sufficient iron ore supply. The financial turbulence in the euro area and slowdown of other emerging economies, such as Brazil, also contributed to the price decline.

The oil market

Average oil prices reached record highs despite weak demand growth and excess supply

Global oil demand continued to increase at an annual rate of about 1 per cent in 2012, mirroring the global economic slowdown. Anaemic growth in developed economies has led to a 0.6 per cent decline in oil demand from the Organization for Economic Cooperation and Development (OECD) countries. Weakening economic growth in emerging economies, particularly China and India, capped oil demand growth from non-OECD countries at 2.8 per cent. Global oil production, in contrast, increased by 3 per cent to an average of 90.8 million barrels per day (mbd) during the first nine months of the year, thereby generating excess supply of more than 1 mbd on average during that period. This rare situation mainly resulted from the substantial production increase of 6 per cent in the Organization of the Petroleum Exporting Countries (OPEC). The sanctions-induced decline in Iranian oil output by 0.8 mbd was more than compensated for by the 1.3 mbd of Libyan crude that returned to international markets in early January, and by the activation of almost 2 mbd of Saudi spare capacity since the beginning of the Arab Spring. As a consequence, oil stocks in the OECD countries and major emerging countries increased slightly over the first half of 2012.

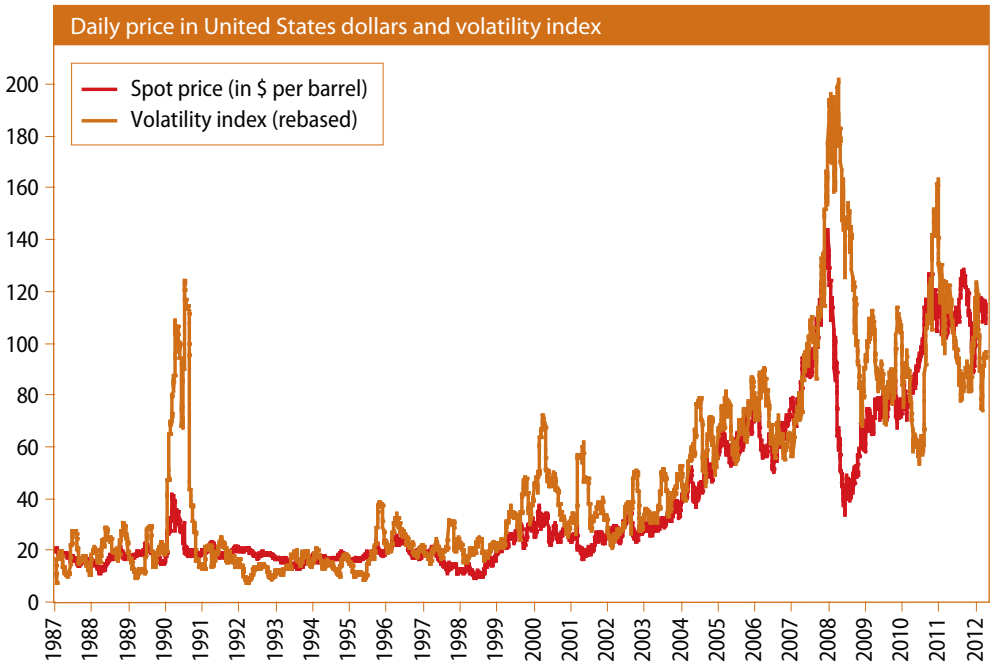
Abundant financial market liquidity and geopolitical tensions are keeping prices high and volatile

During the first three quarters of 2012, the average price of oil remained almost unchanged with respect to last year. Brent, for instance, averaged $112 per barrel (pb), compared with $111 for 2011 as a whole, and the average spread between Western Texas Intermediate and Brent crudes stayed around $16. Prices remained volatile, however, with Brent fluctuating within a band of $40, and one out of every five trading days ending with a price change in excess of $2, excluding intraday volatility (figure II.7). Quantitative easing measures, the imposition of sanctions on Iranian oil exports, and certain declarations by political leaders in the Middle East punctuated most of the significant turnarounds in the oil market.

Following the first LTRO of the ECB on 21 December 2011, stock markets surged in January. The year thus started with abundant liquidity in financial markets and misperceptions about a rapid economic recovery. A portion of the liquidity injected into the financial system ended up being invested in commodity derivatives markets. Daily volumes for monthly Brent crude futures contracts increased by 49 per cent in the six months following the first LTRO (figure II.8). In a context of near-zero interest rates, the rising risk premium on oil prices associated with growing tensions in the Middle East attracted further speculative trading in derivatives markets, increasing hedging costs for physical

14 The pricing mechanisms of iron ore have experienced a fundamental change in recent years. In 2010, a quarterly index-based pricing mechanism was substituted for a decades-long annual benchmark pricing system. With shorter pricing cycles, the price volatility has increased and promoted the rapid expansion of iron ore derivative markets in the past two years. Currently, there are a large number of published iron ore prices and indices, such as The Steel Index (TSI), Metal Bulletin and Platts. In this section, iron ore prices for Brazil (IMF estimates) were used as a reference.

Figure II.7
Increasing volatility of the Brent oil price,1987-2012



Source: UN/DESA, based on data from the United States Energy Intelligence Agency.

Note: Volatility is measured as a 40-day moving average of the standard deviation of the nominal oil price.

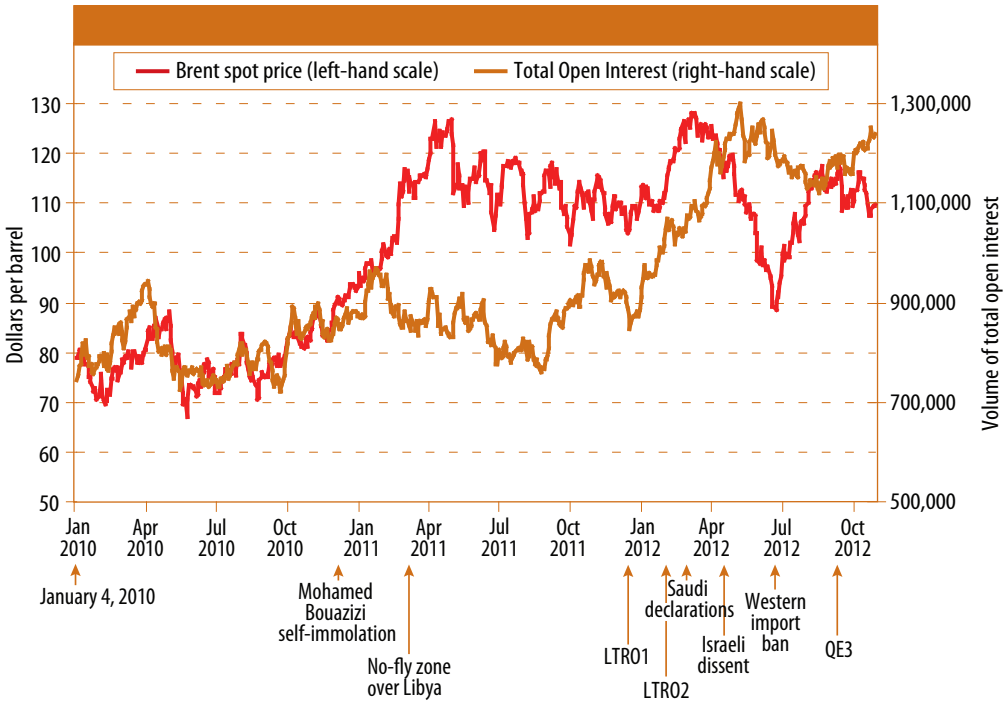
traders. As futures prices are used by many traders as a reference to price transactions in the spot market,[15] the Brent spot price rose, hovering above $120 from mid-February to mid-April. The possibility of a Hormuz Strait blockade, trapping 20 per cent of global oil supply (or 17 mbd) and a significant share of world liquefied natural gas supply in the Gulf region, also strengthened incentives for preventive hoarding by physical traders. Despite oversupply reaching 0.9 mbd during the first quarter, Brent price peaked at $128 in mid-March.

At the end of March, Saudi officials intervened in the hope of shaping expectations and declared they would "correct the myth that there is, or could be, a shortage".[16] As Saudi spare capacity is insufficient to compensate for a supply shortage of such magnitude,

15 See the evidence presented in UNCTAD, *Trade and Development Report 2011: Post-crisis policy challenges in the world economy* (United Nations publication, Sales No. E.11.II.D.3), chap. V and *Price Formation in Financialized Commodity Markets, op. cit*. A number of studies also stress the growing financialization of commodity markets, that is, the growing correlation existing between commodity and other financial markets as a consequence of the diminishing influence of physical traders and the rising influence of money managers devising trading strategies based on high-frequency trading. See David Bicchetti and Nicolas Maystre, "The synchronized and long-lasting structural change on commodity markets: evidence from high frequency data", UNCTAD Discussion Paper, No. 208 (UNCTAD/OSG/DP/2012/2); Michael Greenberger, "The relationship of unregulated excessive speculation to oil market price volatility", paper prepared for the International Energy Forum, (The University of Maryland, Center for Health & Homeland Security, 15 January 2012); Robert A. Kaufmann, "The role of market fundamentals and speculation in recent price changes for crude oil," *Energy Policy*, vol. 39, No. 1 (January), pp. 105-115; Robert Pollin and James Heintz, "How Wall Street speculation is driving up gasoline prices today", PERI Research Brief (University of Massachusetts Amherst, Political Economy Research Institute, June 2011); and Kenneth J. Singleton, "Investor flows and the 2008 boom/bust in oil prices", 23 March 2011, available from http://ssrn.com/abstract=1793449. For a summary of the controversy, see *World Economic Situation and Prospects 2010* (United Nations publications, Sales No. E.10.II.C.1), box II.1.

16 Ali Naimi, "Saudi Arabia will act to lower soaring oil prices", *Financial Times*, 28 March 2012), available from www.ft.com/cms/s/0/9e1ccb48-781c-11e1-b237-00144feab49a.html#axzz2DXWwGjEH.

Figure II.8
Brent price and open interest in daily volumes for ICE Brent crude futures, January 2010-November 2012



Source: United States Energy Intelligence Agency and Intercontinental Exchange (ICE).

and additional output would itself be trapped in the Gulf region given that half of Saudi exports transit through the Hormuz Strait, these declarations seem to have had a limited effect.

Temporarily fading geopolitical risks and use of Saudi spare capacity cause short-lived price plunge

At the end of April, dissent in the Israeli security establishment surfaced and weakened fears for an imminent military strike at the time, causing a decline in the Brent price. The fall accelerated as Saudi output increased in anticipation of the ban on Iranian oil imports imposed by the EU and the United States that came into force on 28 June. The Brent price continued to decline until the third week of June, bottoming below trend at $88. In late June, the price of Brent jumped by 7 per cent at the announcement that a bank recapitalization agreement had been reached in the euro area[17] and then continued rising to above $110 in August, hovering around its yearly average annual price during the subsequent months.

To a lesser extent, other events also affected oil price developments. The ban on Syrian crude oil exports imposed by the United States and the EU at the end of 2011, South Sudan's shut down of oil production in January 2012, supply outages in other countries, and rising demand in Japan all exerted upward pressures on oil prices. On balance, however, market conditions were characterized by excess supply during the first three quarters of the year, not warranting the record-high average oil price observed during that period. It is therefore likely that abundant liquidity in financialized commodity markets had a disproportionate and distorting effect on oil prices.

Oil demand is expected to remain subdued in 2013

In the outlook, global oil demand is assumed to further expand by 1 per cent in 2013, to 90.5 mbd, as declining demand from OECD countries partly offsets growing

17 See UNCTAD, "Don't blame the physical markets: financialization is the root cause of oil and commodity price volatility", Policy Brief, No. 25 (September 2012).

demand in emerging markets. On the supply side, non-OPEC countries are expected to post an increase in output of 1.3 per cent in 2013, to 53.9 mbd, driven by expanding output in Canada and the United States. Supply in non-OECD countries, which provide about 55 per cent of non-OPEC output, is expected to rise by 0.4 percent as oil production increases in Brazil and in countries of the former Soviet Union.

As a consequence, the Brent price is assumed to average $105 pb in 2013 in a market in which prices continue to be strongly influenced by the risk premium associated with geopolitical tensions, tight spare capacity among OPEC producers, and financial market conditions. The outlook is subject to significant uncertainty. A blockade of the Hormuz Strait could create major supply shortages and trigger unprecedented price surges. Decreasing tensions in the Middle East or weaker-than-expected economic activity in developing countries, in contrast, would create significant downward pressure on oil prices.

Volatile terms of trade

Terms of trade improved for mineral and oil exporters

Trade affects national income through two channels: the prices of exports and imports and the volume of demand.[18] Changes in the terms of trade, which is defined as the ratio of export prices over import prices, provide a synthetic measure of international price shocks associated with trade. Among developing countries, exporters of oil and other minerals and mining products have enjoyed strong improvements in their terms of trade since 2000. For exporters of agricultural products the terms of trade remained fairly stable, while they deteriorated for countries exporting manufactures (figure II.9). Non-agricultural commodity exporters saw the strongest declines in the terms of trade during the height of the global financial crisis, but recovered rapidly thereafter. The swings for exporters of agricultural commodities and manufactures were much less pronounced.

Energy exporters face the sharpest terms-of-trade fluctuations

The magnitude of trade shocks resulting from changes in both prices and volumes has varied greatly across regions and country groups with different export structures (figures II.10a and II.10b).[19] Across all regions, the negative trade shock in 2009 was followed by a strong rebound in 2010-2011. The shock of 2009 resulted primarily from the stark decline in global demand (more than 3 percent of WGP), as well as from falling import and export prices in every region (for the world as a whole, the terms of trade shocks are netted out). Economies in transition, Africa and Western Asia had to cope with the largest trade shocks.

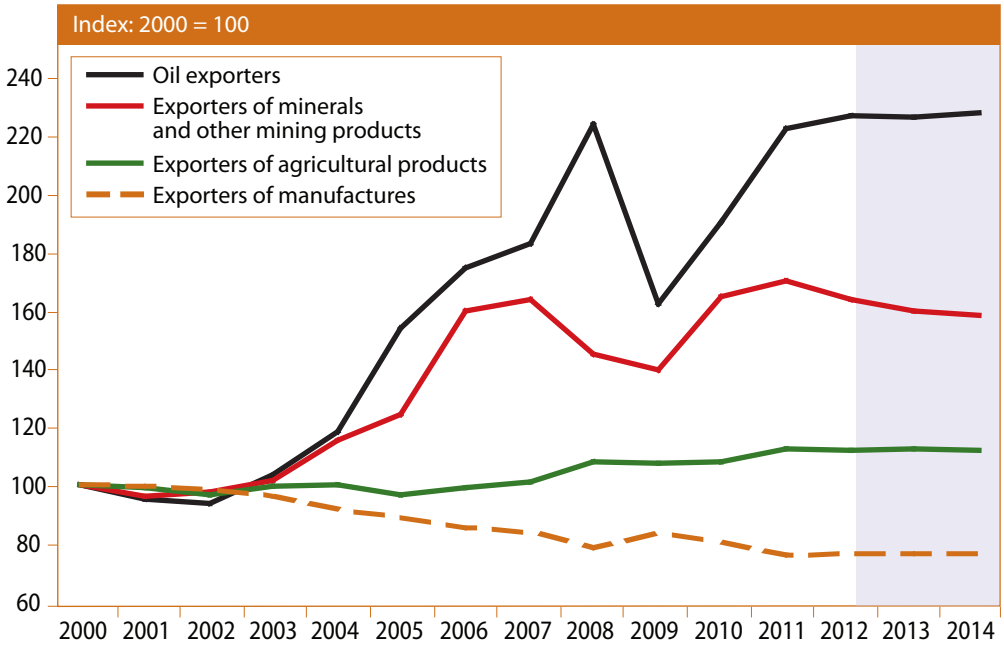
Non-oil commodity exporters also faced sharp price swings

Energy exporters faced the sharpest price fluctuations over the last few years. Mineral and agricultural exporters also faced strong swings in export prices, but in many cases these were mitigated in terms of their impact on the trade balance by parallel swings in energy prices on the import side. Least developed countries (LDCs) as a group do not seem to have been affected as severely by terms-of-trade shocks, but this relatively milder impact mainly reflects the large heterogeneity in export dependence within this group, which is composed of energy and minerals exporters among a number of African LDCs, agricultural exporters among other African LDCs, and agriculture and manufacturing exporters in Asia. Individually, these countries tend to be highly vulnerable to trade shocks.

18 The effects of each of these factors can be quantified with some degree of accuracy by combining information from COMTRADE (import and export structure), UNCTAD and other sources (international prices), Netherlands Bureau for Economic Policy Analysis (CPB) and other sources (volume changes of imports and exports). See the World Economic Vulnerability Monitor technical note available from http://www.un.org/en/development/desa/policy/publications/wevm/monitor_note.pdf.

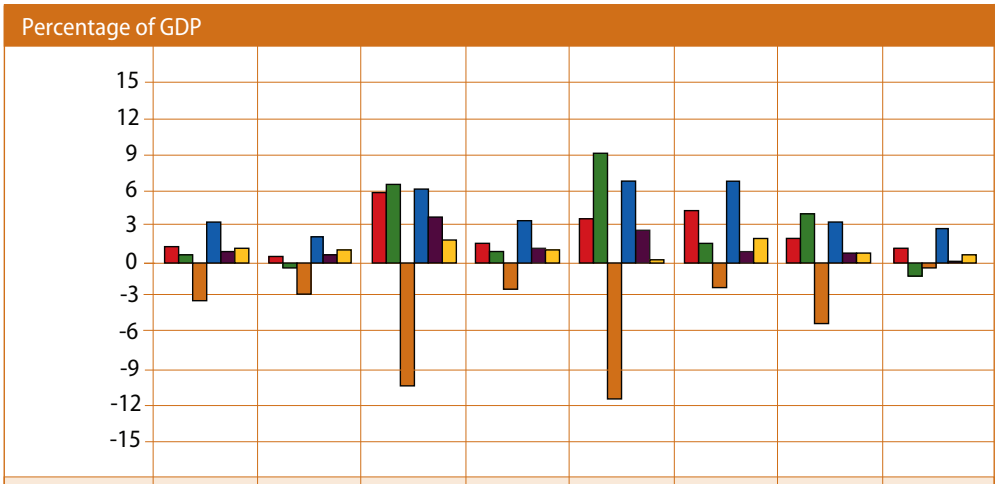
19 For more details about the estimation of trade shocks, see the World Economic Vulnerability Monitor technical note, ibid.

Figure II.9
Barter terms of trade of selected groups of countries by export structure, 2000-2014



Source: UNCTAD and UN/DESA World Economic Vulnerability Monitor.

Figure II.10a
Trade shocks by main geographic regions and country groupings, 2001-2014

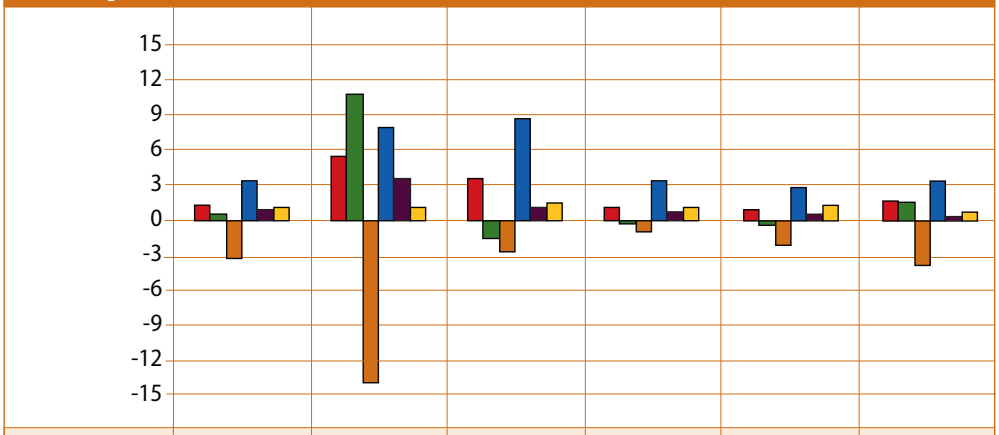


	World	Developed Economies	EiT	Latin Am.	West Asia	East + South Asia	Africa	LDCs
2001-07	1.3	0.6	5.8	1.6	3.7	4.4	2.0	1.1
2008	0.6	-0.4	6.5	0.9	9.1	1.6	4.1	-1.2
2009	-3.2	-2.7	-10.3	-2.2	-11.4	-2.1	-5.1	-0.4
2010	3.3	2.1	6.2	3.5	6.7	6.8	3.4	2.8
2011-2012	0.9	0.6	3.8	1.1	2.7	0.9	0.8	-0.2
2013-2014	1.2	1.0	1.8	1.0	0.2	1.9	0.8	0.6

Source: UN DESA World Economic Vulnerability Monitor (WEVUM), available from http://www.un.org/en/development/desa/policy/publications/wevm.shtml. Data for 2013 and 2014 are baseline United Nations projections.

Figure II.10b
Trade shocks by country groupings according to export specialization, 2001–2014

Percentage of GDP



	World	Energy (>40%)	Minerals (>40%)	Agriculture (>40%)	Manufact. (>50%)	Diversif.
2001-07	1.3	5.6	3.5	1.1	1.0	1.7
2008	0.6	10.7	-1.4	-0.1	-0.4	1.7
2009	-3.2	-13.8	-2.7	-0.9	-2.1	-3.9
2010	3.3	8.0	8.7	3.4	2.8	3.4
2011-2012	0.9	3.6	1.1	0.8	0.7	0.4
2013-2014	1.0	1.1	1.5	1.1	1.2	0.8

Source: UN DESA World Economic Vulnerability Monitor (WEVUM), available from http://www.un.org/en/development/desa/policy/publications/wevm.shtml. Data for 2013 and 2014 are baseline United Nations projections.

Export diversification reduces vulnerability to trade shocks

Developing economies with greater export diversification have experienced milder trade shocks and been able to keep import levels relatively stable. This, in turn, has provided a more stable domestic policy environment, inter alia, because a large share of imports is used as inputs for manufacturing industries.

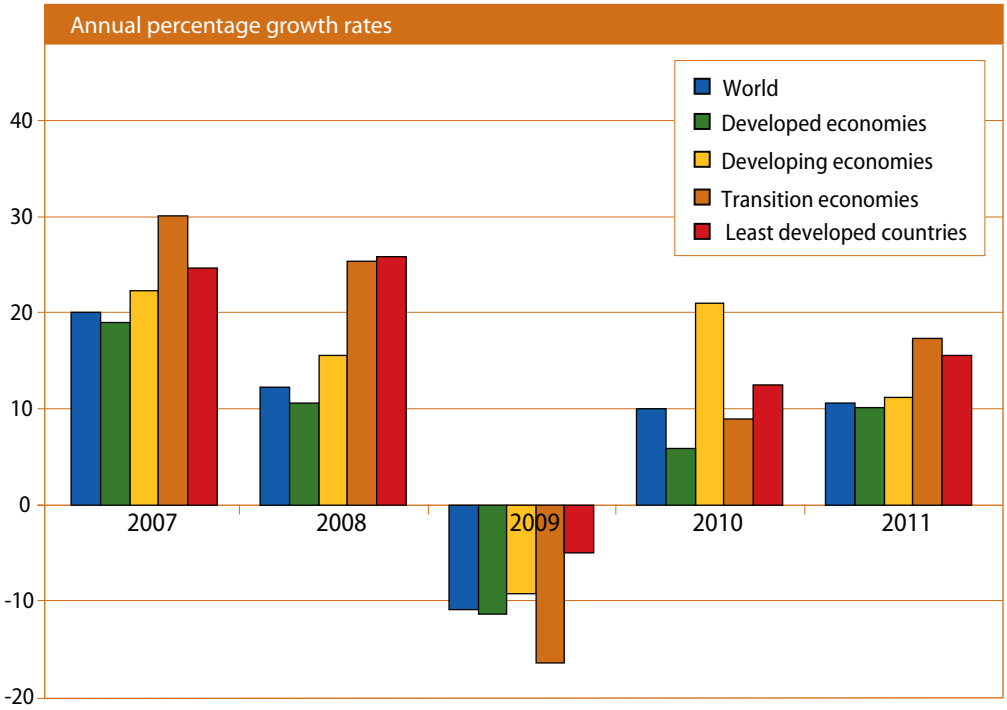
In the outlook, trade shock projections in 2013-2014 appear to be relatively mild. This reflects the fact that the estimated growth rates of trade volume per region are moderately positive, together with the fact that most commodity prices are assumed to experience a further correction from the spikes observed in 2010-2011. Under these conditions, countries with greater degrees of diversification may continue to benefit from relatively stable, albeit moderate, external demand.

Growing trade in services

The recovery of trade in services started to falter in the last quarter of 2011

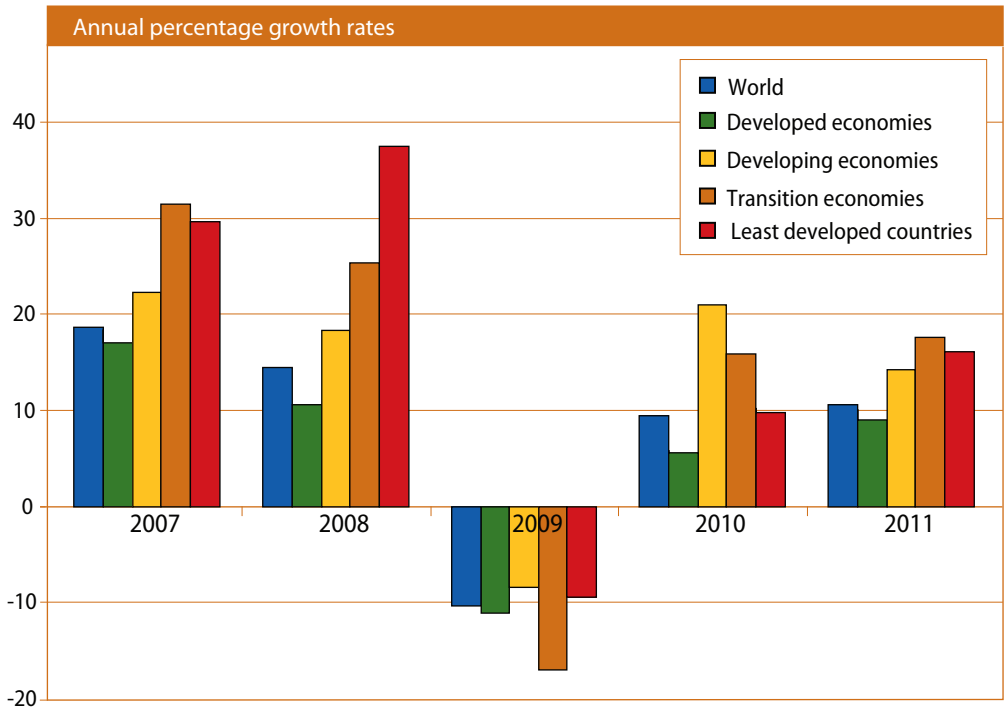
Trade in services experienced a robust recovery following the Great Recession, especially in developing countries. World services trade grew by almost 10 per cent in 2010, but remained subdued in developed countries. In 2011, the value of trade in services further increased by 10.6 per cent, surpassing its pre-crisis peak level by 8.0 per cent to reach $4.2 trillion. Its rate of growth converged across developed and developing countries as well as LDCs. Economies in transition registered growth rates close to 18 per cent in 2011, driven by the continuing boom of travel services in countries such as Azerbaijan, Georgia and Kazakhstan (figures II.11 and II.12).

Figure II.11
Services exports by major country groupings, 2007-2011



Source: UNCTAD.

Figure II.12
Services imports by major country groupings, 2007-2011



Source: UNCTAD.

In the fourth quarter of 2011, world services exports rose by only 3 per cent year-on-year, a drop of 8.5 per cent compared to the previous quarter. Expansion remained sluggish in the first quarter of 2012 and came to a halt in the second quarter, decelerating along with global output and merchandise trade.[20]

Developing countries see increasing market shares in world services trade

In 2011, the value of world services trade represented 12 per cent of WGP. Merchandise trade, in contrast, represented more than 50 per cent. The share of developing countries in total world services trade remains well below their share in total world merchandise trade, estimated at about 42 per cent. Over the last five years, however, the market share of developing countries in total world services trade increased by 5 percentage points. In 2011, the market shares of developing countries in world services exports and imports were 29.8 per cent and 36.3 per cent, respectively (table II.1). Developing countries thus remain net importers of services. Economies in transition and LDCs experienced fast growth in their tradable services industries over the last 15 years, but their share in world services trade has remained almost constant because of low initial levels. Their trade in services balance remains in deficit as well.

Services sectors recovered unevenly in the wake of the global financial crisis. High technology sectors, such as communication services and computer and information services, recovered swiftly because these sectors are still in the early stages of development in many developing countries and still have significant room for growth. Travel services have also been at the core of trade in services growth worldwide. Transport has been a leading sector in Africa and Latin America.

Table II.1
Shares and rankings of top regions and countries in trade in services

Exports				
	Share (percentage)		*World rank*	
	2007	*2011*	*2007*	*2011*
Regions				
Developed economies	71.7	67.3	1	1
Developing economies	25.7	29.8	2	2
Transition economies	2.6	2.9	3	3
Least developed countries	0.5	0.6	4	4
Top 10 exporters				
United States	14.1	14.1	1	1
United Kingdom	8.3	6.5	2	2
Germany	6.4	6.1	3	3
China	3.5	4.3	7	4
France	4.3	4.0	4	5
Japan	3.7	3.4	5	6
Spain	3.7	3.3	6	7
India	2.5	3.2	11	8

20 World trade estimates are aggregated from individual reporters' quarterly balance-of-payments statistics taken from the IMF and Eurostat, supplemented with estimates for missing data, as well as national sources. Quarterly figures may not add up to annual figures published elsewhere in World Trade Organization (WTO) or UNCTAD statistical publications or online databases, owing to statistical discrepancies.

Table II.1 (cont'd)

	Share (percentage)		World rank	
	2007	*2011*	*2007*	*2011*
Netherlands	3.2	3.2	9	9
Singapore	2.4	3.0	12	10
Other top developing country exporters				
Hong Kong SAR[a]	2.4	2.9	13	11
Korea, Republic of	2.1	2.2	15	15
Russian Federation	1.1	1.3	25	22
Taiwan Province of China	1.0	1.1	26	24
Thailand	0.9	1.0	27	26
Macao SAR[a]	0.4	0.9	40	27
Brazil	0.7	0.9	31	28
Turkey	0.8	0.9	29	29
Malaysia	0.8	0.8	28	32
Imports				
Regions				
Developed economies	66.4	60.1	1	1
Developing economies	30.4	36.3	2	2
Transition economies	3.2	3.6	3	3
Least developed countries	1.3	1.7	4	4
Top 10 importers				
United States	11.3	10.5	1	1
Germany	7.9	7.1	2	2
China	4.0	5.8	5	3
United Kingdom	6.1	4.3	3	4
Japan	4.6	4.1	4	5
France	3.9	3.5	6	6
India	2.2	3.1	14	7
Netherlands	3.0	2.9	8	8
Italy	3.7	2.8	7	9
Ireland	2.9	2.8	10	10
Other top developing country importers				
Singapore	2.3	2.8	13	11
Korea, Republic of	2.6	2.4	11	13
Russian Federation	1.8	2.2	17	15
Saudi Arabia	1.9	1.9	16	18
Brazil	1.1	1.9	26	19
China, Hong Kong SAR	1.3	1.4	20	21
Thailand	1.2	1.3	24	23
United Arab Emirates	1.0	1.2	28	24

Source: UNCTAD.

a Special Administrative Region of China.

Box II.3

International tourism

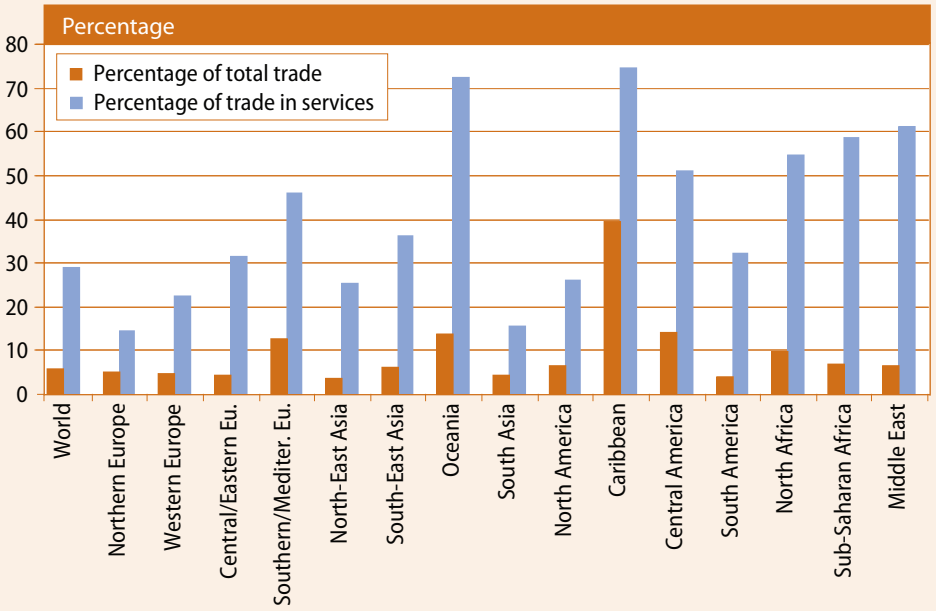
International tourism growth remains robust amid global slowdown

Despite persistent economic turbulence, international tourist arrivals expanded by 4 per cent during the first eight months of 2012 compared to the same period last year, reaching a record of 705 million overnight visitors. As a result, the milestone of one billion tourists should be reached by the end of the year. While still robust, growth of international tourist arrivals slightly decelerated over the last two years, from 6.6 per cent in 2010 to 5.0 per cent in 2011.

As tourists tend to cut more on spending than on travel in difficult times, international tourism receipts grew more modestly by 4 per cent in 2011, but nevertheless reached a record of $1 trillion. With revenues from international passenger transport estimated at $203 billion in 2011, total tourism receipts that registered as services exports in the balance of payments amounted to $1.2 trillion in 2011.

The export value of travel and passenger transport account for 30 per cent of the world's exports of commercial services and 5.5 per cent of overall exports of goods and services (figure A). As a worldwide export category, tourism ranks fifth after fuel, chemicals, food and automotive products.

Figure A: **Tourism as a share of trade and trade in services by subregion**



During the first eight months of 2012, tourist arrivals increased by 7 per cent in Asia and the Pacific, boosted by rebounding Japanese inbound and outbound tourism as well as by the continued strong performance of other major source markets in South and South-East Asia. Growth of tourist arrivals in Europe declined from 6 per cent in 2011 to 3 per cent in 2012, with stronger performance in Central and Eastern Europe. Stalling tourism activity in Southern and Mediterranean Europe was partly created by the recovery of destinations in North Africa, which grew by 10 per cent following rebounding activity in Tunisia. In sub-Saharan Africa, tourist arrivals increased by 4 per cent, bringing the continental average growth rate to 6 per cent. The return of tourists to Egypt limited the decline of tourist arrivals in the Middle East to 1 per cent. The number of overnight visitors grew by 4 per cent in the Americas. While it expanded robustly by 6 per cent on average in Latin America, destinations in North America grew at 3 per cent, a relatively high rate for a mature subregion.

In terms of tourism expenditures abroad, demand from both emerging and advanced economy source markets during the first six to nine months of 2012 remained steady. Among the 10 major source markets, spending on overseas tourism rose by 30 per cent in China, 15 per cent in

Source: UNWTO (estimates based on data from 2010).

Note: International tourism, including travel and passenger transport.

Box II.3 (cont'd)

the Russian Federation, but also by 9 per cent in the United States, 7 per cent in Japan, 6 per cent in Canada, 5 per cent in Germany and 4 per cent in Australia.

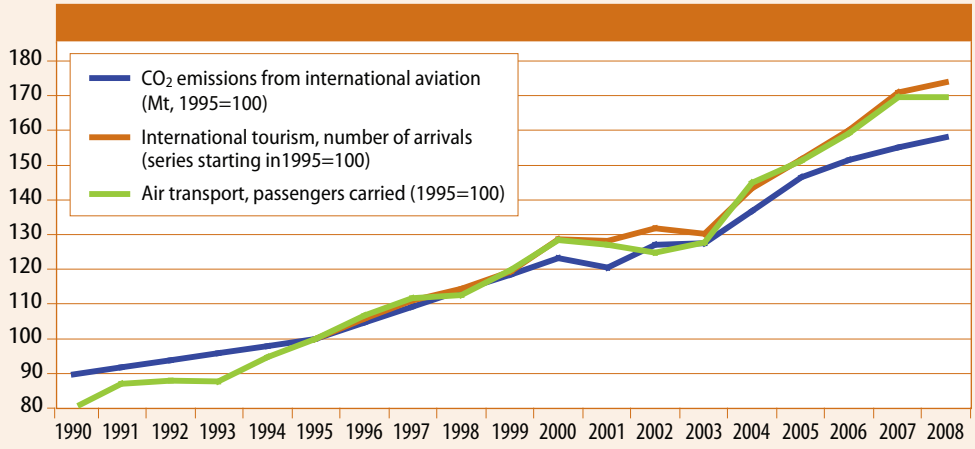
According to the latest survey of the World Tourism Organization (UNWTO) Panel of Experts, prospects for international tourism expansion are weakening, but remain positive. International tourism is expected to grow by 3 per cent to 4 per cent in 2012, before declining slightly in 2013.

Sustainable tourism

Travel and tourism are both victim and vector of climate change. Because climate so directly defines the length and quality of tourism seasons, affects tourism operations, and influences environmental conditions that both attract and deter visitors, the sector is considered to be highly climate sensitive. The effects of climate change therefore can have a significant impact on tourism business and destinations, particularly in the vulnerable small island developing States and least developed countries.

At the same time, travel and tourism help feed climate change by accounting for approximately 5 per cent of global carbon dioxide (CO_2) emissions, which are the main contributor to the greenhouse gas effect and global warming (see also box II.1).[a] Transport accounts for 75 per cent of CO_2 emissions by the tourism sector. Air travel emissions make up about 40 per cent of the total and are expanding at an average annual rate of 3.2 per cent. While slower than the growth in the number of air travel passengers and tourist arrivals, the trend keeps adding to CO_2 emissions (figure B).

Figure B: CO_2 emissions from air transport, passenger carried and tourist arrivals move in tandem



The G20 recently recognized the role of travel and tourism as "a vehicle for job creation, economic growth and development" and made the commitment to "work towards developing travel facilitation initiatives in support of job creation, quality work, poverty reduction and global growth".[b]

In efforts to curb emissions in the coming decades, the tourism industry continues to develop mitigation and adaptation strategies. In this regard, "The future we want",[c] the outcome document of the 2012 United Nations Conference on Sustainable Development (UNCSD, also known as "Rio+20"), emphasized the significant contribution that well-designed and well-managed tourism can make to advancing the three dimensions of sustainable development: economic, social and environmental.

The shift towards sustainable tourism can create jobs and reduce poverty, while also improving environmental outcomes. With tourism expected to expand in the coming decades, the challenge of cutting back emissions is even larger. Investing in the greening of tourism can reduce the costs related to energy, water and waste and enhance the value of biodiversity, ecosystems and cultural heritage, while at the same time curbing the expansion of tourism-related CO_2 emissions. Under a green growth scenario based on optimistic assumptions,[d] CO_2 emissions generated by tourism in 2050 would only be half compared to a business-as-usual scenario and they would have returned to their current level after an initial increase.

Sources: World Bank and International Transport Forum.

a World Tourism Organization and United Nations Environment Programme, *Climate Change and Tourism: Responding to Global Challenges* (Madrid, World Tourism Organization, 2008), available from http://www.unwto.org/sdt/news/en/pdf/climate2008.pdf.

b See the G20 Los Cabos Leaders Declaration of 19 June 2012, available from http://www.g20.utoronto.ca/2012/2012-0619-loscabos.html.

c See General Assembly resolution 66/288 of 27 July 2012, paras. 130 and 131, available from http://www.un.org/ga/search/view_doc.asp?symbol=%20A/RES/66/288.

d For a description of the optimistic assumptions and the green growth scenario, see United Nations Environment Programme, *Green Economy Report,* Part II: Investing in energy and resource efficiency: Tourism", annex 3, available from http://www.unep.org/greeneconomy/Portals/88/documents/ger/11.0_Tourism.pdf.

Recovery of service activities directly affected by the global financial crisis was more sluggish. Financial services were the most severely affected by the global financial turmoil. Construction services were hit by the bursting of the housing bubble in developed economies and transportation services growth stalled because of the weak rebound of global trade. International tourism receipts increased by 4 per cent in real terms in 2011 as it continued to recover from the losses incurred during the global crisis.

Developing and transition economies further improved their ranking among the world's top 10 exporters and importers of services during 2007-2011 (table II.1). China moved from the seventh to the fourth position in world exports, and from the fifth to the third position of world imports. China is a major contributor to Asian predominance (81 per cent) in total developing country services trade. In the top 10 developing countries and economies in transition, 6 of the top exporters also rank among the top 10 importers.

Trade policy developments

The Doha Round

Even negotiations for a smaller Doha Round package remain in a stalemate

The Doha Round of multilateral trade negotiations of the World Trade Organization (WTO), launched in November 2001, continues to be at a complete stalemate with no clear prospects for the foreseeable future. As requested at the Eighth WTO Ministerial Conference in December 2011, participants have been exploring the possibility of focusing on a limited number of negotiating areas as part of a likely "smaller package" to complete negotiations, probably by the time of the next WTO Ministerial Conference in Bali, Indonesia, at the end of 2013. The G20 Summit at Los Cabos in June 2012 also supported such a partial approach.

A smaller package could potentially reflect results of negotiations on trade facilitation—focused on strengthening multilateral rules and procedures to streamline the movement, release and clearance of goods at the border and in transit—where some tangible progress has been achieved. However, progress in negotiations is still challenged by many developing countries for whom trade facilitation efforts entail high implementation costs without any of their key trade and development concerns being addressed. An outcome on trade facilitation would therefore also require agreement on support measures, including financial and technical assistance, in order for developing countries to meet implementation costs. Such agreement is yet to be negotiated.

A smaller package would also cover results of negotiations on a plurilateral International Services Agreement (ISA), which has been contemplated by a group of about 20 countries. Some of them intend to negotiate the ISA as a closed agreement in which benefits will not be extended to all WTO members on a most favoured nation (MFN) basis. Although still in a consultation phase, such an approach, if implemented, would mean a critical departure from the "single undertaking" concept of the WTO, involving risks for the multilateral trading system based on the unconditional MFN treatment.

Therefore, completing the Round with a smaller package will be difficult. To be balanced and attractive for developing countries, LDCs in particular, any such package would need to be supplemented by meaningful provisions that are of interest to them, such as giving full duty-free and quota-free market access on a lasting basis for all LDCs, and elimination of developed-country subsidies on agricultural exports and cotton production.

Another important obstacle to the negotiation process is the perception—perhaps not wholly justified but yet increasingly widespread—that the Doha Round would be about an outdated set of twentieth century issues. As such, it would contribute too little, too late to the aspirations of globalizing businesses today and be inadequate to provide the enabling policy environment needed to support the inclusive and sustainable growth and development pathways called for by the G20 and numerous United Nations summits and high level conferences, including the Conference on Sustainable Development (Rio+20) and UNCTAD XIII.

The failure to complete the Doha Round is not only detrimental to the credibility of the multilateral trading system, but is also deterring progress in building consensus on other complex multilateral issues, such as the sustainable development agenda. More generally, the incapacity to reach comprehensive and balanced results in the Round for more than a decade reflects wider global governance deficits and eventually may call multilateralism itself into question as the preferred approach to solving global issues.

The Russian Federation joins the WTO

Apart from trade negotiations, there were several trade policy developments, mostly related to the accessions of countries still outside the WTO, including Montenegro, Samoa and Vanuatu. The accession of the Russian Federation on 22 August 2012 marked the completion of an 18-year-long negotiating process. With Russia's membership, the WTO now covers approximately 97 per cent of world trade and is closer to universal membership. The Russian Federation took on an array of commitments and obligations, ranging from binding import tariffs on agricultural and manufactured goods below currently applied rates to improved market access for foreign services providers in a number of sectors, such as telecommunications, transportation, financial and distribution services.

In general, Russia's accession package offers new trade opportunities for WTO members, particularly developing countries. It also contains an extensive set of systemic obligations serving as a multilateral basis for Russia's further integration into the world economy. On the other hand, the effects of WTO membership on Russia's domestic economy are not straightforward, particularly with regards to agriculture and several industrial sectors, and were subject to an intensive but inconclusive internal discussion prior to the ratification of the accession terms (see box IV.1 in chapter IV).

New guidelines facilitate accession of LDCs to the WTO

New guidelines on accessions of LDCs to the WTO were agreed to in July 2012. These guidelines are expected to streamline and facilitate accession of LDCs by offering them some additional policy space and flexibility. For example, acceding LDCs will be required to bind all their agricultural tariff lines at an overall average rate of 50 per cent, and 95 per cent of their non-agricultural tariff lines at an overall average rate of 35 per cent, while 5 per cent of their industrial tariff lines could be left unbound.

Preferential trade agreements

Fragmentation of trade rules undermines the consistency of the multilateral trading system

Against the deadlock in the Doha Round, the uncoordinated process of negotiating preferential bilateral and regional trade agreements (RTAs) has gained further momentum. According to recent WTO estimates, there are now almost 400 preferential trade agreements in force, with each WTO member belonging, on average, to 13 separate agreements. The expanding number of such agreements further adds to an already complex system of trade preferences with often substantially different regulatory frameworks across agreements. Despite expected overall benefits to their parties, the effects of RTAs in regard to trade relationships with third countries are often less positive. One issue of particular importance for small- and medium-sized enterprises is that the fragmentation of trade

rules brought by RTAs has the effect of increasing compliance costs for their participants. Multinational corporations (MNCs), by contrast, are in a better position to handle and exploit the regulatory maze. In more general terms, preferential trade agreements have also had the effect of weakening the multilateral trading system by including "WTO-plus" and "WTO-extra" rules with their own dispute settlement mechanisms.

Fragmentation of trade rules and regulations is more evident in regard to North-South agreements. While RTAs comprised of high-income markets are largely related to "deep" integration, often based on sophisticated regulatory frameworks of major developed markets, South-South RTAs more often reflect the dynamics and priorities of regional integration among developing countries. They are still focused on traditional market access issues like the reduction of tariffs, which remain relatively higher as compared to those in North-South trade (box II.4). Deeper integration is still an open issue in many South-South RTAs as it will require additional rule-making in the trade regulatory framework, especially with regard to non-tariff measures.

Twenty-first century agreements increasingly address the aspirations of globalizing businesses

The Trans-Pacific Partnership (TPP) is probably the most actively negotiated North-South RTA today. The TPP is being negotiated among 11 developed and developing countries[21] and is presented as a comprehensive and high-standard RTA aimed at almost full liberalization of trade in goods and services and establishing commitments that reach beyond multilateral rules under the WTO. It is also viewed by some as an alternative to the stalled Doha Round as a twenty-first century agreement that addresses new and cross-cutting issues reflecting the needs of an increasingly globalized economy and evolving global production and supply chains.

Apart from market access in goods and services, TPP negotiations are focused on setting rules that extend beyond those in the WTO and cover such areas as intellectual property rights, services, government procurement, investment, rules of origin, competition policy, labour and environmental standards. In addition, for the first time, rule-making is sought in completely new areas like state-owned enterprises, regulatory coherence and supply chain competitiveness.

Provisions on labour standards remain controversial

One of the most controversial issues that the TPP negotiations are trying to address relates to the scope and depth of provisions on labour standards and worker rights. According to some reports, TPP would require its participants to adopt and enforce the four internationally accepted labour rights that are contained in the 1998 International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work: the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of compulsory or forced labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation. These provisions would be enforceable under the TPP dispute settlement mechanism, while violations could be subject to potential trade sanctions.

Attempts to enforce labour standards through trade agreements have a long history. This linkage has traditionally been strongly opposed by many developing countries on the grounds that it may serve to artificially increase production costs of domestic businesses and operations of MNCs, thus undermining their comparative advantage. However, at the same time they do strengthen human rights of workers in developing countries and may help increase the labour share of national income, which is exceedingly low in many of these countries. Providing these rights would appear to be consistent with the internationally agreed upon goal of promoting decent work. Nevertheless, developing

21 These are Australia, Brunei Darussalam, Canada, Chile, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, and Viet Nam. Thailand will also join TPP trade talks.

Box II.4

Import tariffs and South-South trade

Many developing countries have substantially reduced effective trade tariffs starting in the 1990s. The general trend of lowering tariffs in developing countries is likely to continue, especially with regard to South-South trade (both intraregional and interregional trade). In 2011, imports by developed countries were subject to an average tariff of about 1.2 per cent (see table). Imports entering developing countries and economies in transition were subject to an average tariff ranging from about 2.2 per cent for the economies in transition to about 7.8 per cent for developing countries in South Asia. Tariffs still represent an important obstacle to South-South trade, especially in regions where the regional integration process has been slower. Intraregional trade faces relatively low tariffs within the economies in transition, Latin America and the Caribbean and East Asia largely owing to the existing preferential trade agreements. On the other hand, tariffs are still an important policy issue for most of the other regions of Asia as well as for Africa. The average tariff applied to intraregional trade in South Asia is about 4 per cent, while that of sub-Saharan Africa is 3.5 per cent. Because very few South-South RTAs span different developing country regions, interregional trade is generally subject to higher tariffs than intraregional trade. Thus, higher tariffs are imposed by countries in South Asia and sub-Saharan Africa (especially on products originating from East Asia) and by countries in the regions comprising Northern Africa, Western Asia and Central Asia (especially versus products originating from Latin America and the Caribbean).

Source: UNCTAD TRAINS database.

Effective trade-weighted tariffs by main regions and country groupings in 2011
(Changes from 2005 through 2011 are indicated in parentheses)

Percentage

Importer	*Exporting region*							
	High-income countries	*Economies in transition*	*East Asia*	*South Asia*	*Northern Africa, Western Asia and Central Asia*	*Latin America and the Caribbean*	*Sub-Saharan Africa*	***Average tariff imposed on imports***
High-income countries	0.9	0.4	2.2	2.8	0.5	0.7	0.8	1.2
	-(0.1)	-(0.4)	-(0.3)	-(0.5)	-(0.2)	-(0.4)	(0.2)	-(0.1)
Economies in transition	2.3	0.7	4.1	4.6	2.8	2.0	0.5	2.2
	(0.0)	-(1.3)	-(0.4)	-(0.9)	(0.0)	-(0.7)	-(1.4)	-(0.3)
East Asia	4.6	2.4	2.1	1.8	0.5	1.5	0.4	3.6
	-(0.7)	-(2.0)	-(2.0)	-(1.2)	-(0.6)	-(1.5)	-(1.7)	-(1.2)
South Asia	7.9	7.0	13.1	4.0	2.5	2.1	3.3	7.8
	-(5.2)	-(6.8)	-(5.0)	-(5.9)	-(9.0)	-(19.2)	-(10.6)	-(6.1)
Northern Africa, Western Asia and Central Asia	4.6	4.7	7.1	5.0	3.5	9.8	3.7	5.1
	-(0.3)	(1.4)	-(1.5)	-(0.2)	-(0.3)	-(0.4)	-(1.3)	-(0.1)
Latin America and the Caribbean	4.0	3.2	7.7	7.6	4.0	1.1	1.3	4.0
	-(0.2)	-(1.7)	-(0.9)	-(2.3)	(0.9)	-(0.8)	-(0.9)	-(0.2)
Sub-Saharan Africa	6.5	4.3	10.5	6.3	8.4	8.7	3.5	6.9
	-(0.1)	-(2.3)	-(1.5)	-(0.6)	(0.3)	-(1.0)	-(1.0)	-(0.2)
Average tariff faced by exports	2.1	1.0	3.2	3.2	1.2	1.2	1.3	
	-(0.1)	-(0.6)	-(0.1)	-(0.8)	-(0.3)	-(0.5)	-(0.5)	

countries' market access could be made less predictable under the threat of trade sanctions. It is often alleged that the linkage between trade and labour standards is a disguise for protectionism in developed countries. However, it is also alleged that the concern for developing countries' comparative advantage is a disguise for protecting the economic rents of the elites in the developing economies. Recently, provisions related to the enforcement of labour standards have been included in several bilateral preferential North-South agreements, reflecting developed countries' negotiating priorities that mostly stem from domestic concerns about losing jobs to low-wage countries.

Protectionist pressures

Existing trade restrictions are removed, but slowly

The joint WTO-OECD-UNCTAD monitoring report on G20 trade and investment measures of 31 October 2012 showed a certain slowdown of trade-restrictive measures with 71 new import restrictions taken in mid-May through mid-October of 2012, affecting around 0.4 per cent of total G20 merchandise imports, or 0.3 per cent of world imports. These involved mostly non-tariff measures, including trade remedy actions (like anti-dumping and countervailing measures), import licensing and customs controls. There are growing concerns about the proliferation of non-tariff measures implemented through technical requirements, like standards and sanitary and phytosanitary regulations. The sectors most heavily affected in terms of trade coverage were electrical machinery, mineral fuels and oils, fertilizers, chemical products, machinery and mechanical appliances, and plastics.[22] On the other hand, the number of new export restrictions had declined significantly from that reported in previous monitoring reports.

The trend of slow removal of existing measures continued, in compliance with G20 commitments. Yet, only 21 per cent of trade restrictions introduced since the start of the crisis in October 2008 have been eliminated. Those measures related to the termination of trade remedy actions and phasing out temporary tariff increases. Overall, the trade coverage of the remaining restrictive measures put in place beginning in October 2008 is about 3.5 per cent of world merchandise imports.[23]

The G20 recognizes the role of global value chains, but unchecked growth of intrafirm trade is environmentally suboptimal

With government budget cuts, persistent high unemployment and expected slowing global output growth, the threat of protectionist pressures is likely to increase. This trend is also supported by what is appearing as an escalation of trade frictions and disputes between major trading countries. To a large extent, such disputes are fuelled by traditional bilateral trade imbalance concerns and accusations of unfair trade practices that are linked to job losses in importing countries. However, these traditional arguments neither recognize the growing importance of global value and supply chains, which are increasingly shaping the flows of international trade and foreign direct investment, nor do they show awareness of the related environmental challenges. In this regard, the recognition of the role of such chains in fostering economic growth, employment and development by Leaders at the G20 Summit at Los Cabos is significant. The G20 also emphasized the

22 It was estimated that if the trade restrictive measures were implemented in all advanced economies, the developing economies in Asia and the Pacific could experience an export loss of over $27 billion. In this case, least developed countries, land-locked developing countries and small island developing States could face a significant contraction in their exports to the advanced economies as compared to the baseline scenario. See Sudip Ranjan Basu and others, "Euro zone debt crisis: scenario analysis and implications for developing Asia-Pacific", MPDD Working paper, No. WP/12/03 (UNCTAD, Macroeconomic Policy and Development Division).

23 See Organization for Economic Cooperation and Development (OECD), UNCTAD and WTO, "Reports on G20 Trade and Investment Measures (mid-May to mid-October 2012)", 31 October 2012, available from http://www.oecd.org/daf/internationalinvestment/8thG20report.pdf.

need to enhance the participation of developing countries in such chains. Measuring the precise contribution of global value chains to growth of world trade and output remains a challenge (box II.5).[24] This also hampers assessment of environmental implications of expanding trade and production through global value chains (see box II.1). Unchecked growth of trade in intermediate goods and intrafirm trade is environmentally detrimental, inter alia, because freight transport is a major contributor to global CO_2 emissions and, hence, to climate change. The prevailing sectoral policy approach to climate change mitigation further hinders a precise assessment of CO_2 emissions along global value chains. The rapid growth of global supply chains will require a different, more integral approach if policymakers are to adequately identify and address trade-offs between the economic and environmental costs and benefits associated with international trade.

Box II.5

Measuring trade in value added

Recently, economists and statisticians have been paying increasing attention to measuring the value added of international trade and the implications for economic analysis.[a] Conventional international trade statistics record trade flows between countries on the basis of the gross value of traded goods and services. However, as a result of the rapid expansion of global production chains, an exported final product usually contains a significant share of imported intermediate goods, such as parts and components, which may have crossed borders many times. Hence, conventional trade statistics likely overestimate the true contribution of international trade flows to economic activity. An iPhone exported from China to the United States, for instance, is adding $200 to the record of Chinese exports, whereas only about $10 of value added is generated in China where it is assembled. The remaining value stems from immediate parts and components imported from Japan, the Republic of Korea and other countries.

In general, along with the increasing geographical fragmentation of global manufacturing processes, intrafirm trade and trade in intermediate goods have been growing rapidly, accounting for nearly 50 per cent of total international merchandise trade. Conventional trade statistics may thus provide an inaccurate picture of actual trade linkages between countries and be a highly imperfect guide for trade, macroeconomic and development policies.

In response to these challenges, work coordinated through the United Nations Statistical Commission and various research institutes, as well a WTO-OECD joint initiative,[b] are under way to formulate a new metric that identifies trade in value added. Under this approach, trade flows across countries are measured on a net basis, that is, obtaining the domestically generated value added of exported goods by subtracting the value of imported intermediates from the total export value.

Measuring trade in terms of value added provides a substantially different picture of bilateral trade patterns. For instance, by conventional measures, China records a large bilateral trade surplus with the United States of around $200 billion per year. In value added terms, however, China's surplus with the United States would be 40 per cent smaller. In contrast, the bilateral trade surplus of the Republic of Korea and Japan with the United States would be about 40 per cent larger, because those two countries are large exporters of intermediate products. Furthermore, China's trade surplus with Japan would turn into a deficit.

a For example, World Trade Organization and Institute of Developing Economies-JETRO, "Trade patterns and global value chains in East Asia: from trade in goods to trade in tasks" (Geneva, 2011), available from http://www.wto.org/english/res_e/booksp_e/stat_tradepat_globvalchains_e.pdf; and Robert Koopman, Zhi Wang, and Shang-Jin Wei, "Estimating domestic value added in exports when processing trade is prevalent," *Journal of Development Economics*, forthcoming. Available from http://www.ecb.europa.eu/home/pdf/research/compnet/DEVEC_1670.pdf?57a5265fab96f74f6f7a2ab0464575d3.

b See OECD, "Measuring Trade in Value-Added: An OECD-WTO joint initiative", available from http://www.oecd.org/sti/industryandglobalisation/measuringtradeinvalue-addedanoecd-wtojointinitiative.htm.

24 See the G20 Los Cabos Summit Leaders Declaration of 19 June 2012, para. 29: "We value the discussion held by our Trade Ministers in Puerto Vallarta on the relevance of regional and global value chains to world trade, recognizing their role in fostering economic growth, employment and development and emphasizing the need to enhance the participation of developing countries in such value chains. We encourage a deepening of these discussions in the WTO, UNCTAD and OECD within their respective mandates, and we call on them to accelerate their work on analyzing the functioning of global value chains and their relationship with trade and investment flows, development and jobs, as well as on how to measure trade flows, to better understand how our actions affect our countries and others, and to report on progress under Russia's Presidency." Available from http://www.g20.utoronto.ca/2012/2012-0619-loscabos.html.

Box II.5 (cont'd)

Measuring bilateral trade in terms of value added would better identify the degree to which countries are connected through trade. If charted out through the full global value chain, such measuring would provide a more accurate basis to assess the transmission of changes in economic conditions from one country to another that occurs through trade channels. It would potentially also alter assessments of policy spillover effects, such as exchange rate adjustments. Many large-scale econometric models of the world economy, such as the United Nations World Economic Forecasting Model, contain a bilateral trade matrix linking individual country models together. The parameters of this matrix are key for the analysis of policy studies and significantly influence outcomes of the alternative scenarios simulated using the model. If this matrix is re-estimated using new data on trade in value added, the resulting policy analysis and model simulations could be significantly different, altering our understanding of the spillover effects of national policies.

New trade statistics would also affect other important measures guiding macroeconomic policymaking. The real effective exchange rate (REER), for instance, is used as a proxy measure of international competitiveness. It is measured using bilateral trade shares as weights for shifts in the value of the national currency against that of major trading partners. Using shares of trade in value added as weights could thus shed a different light on a country's competitiveness with its various trading partners, especially if its exports contain significant amounts of imported inputs. By the same token, the revealed comparative advantage of individual countries, as measured by the share of a sector in the country's total exports relative to the world average share of this sector, would also be more accurately estimated.

However, because the new trade statistics only redistributes net bilateral trade flows by adjusting both the exports and imports of individual trading partners, each country's overall current-account balance and, thus, global imbalances would remain unchanged. Nonetheless, it would not be immaterial to policymakers, however, as the effects of rebalancing policy actions can be quantitatively different from that anticipated when using conventional trade statistics. For example, a policy to stimulate consumption in China, along with a revaluation of the renminbi against the United States dollar, would be expected to lead to a substantial reduction in the current-account deficit of the United States on the basis of the large bilateral trade imbalance between these two economies (as measured conventionally). Based on the new approach, however, China has a smaller bilateral trade surplus with the United States and a deficit instead of a surplus with Japan. So the same policy action would be expected to lead to a much more muted narrowing of the trade deficit of the United States with China, while it would widen China's deficit with Japan.