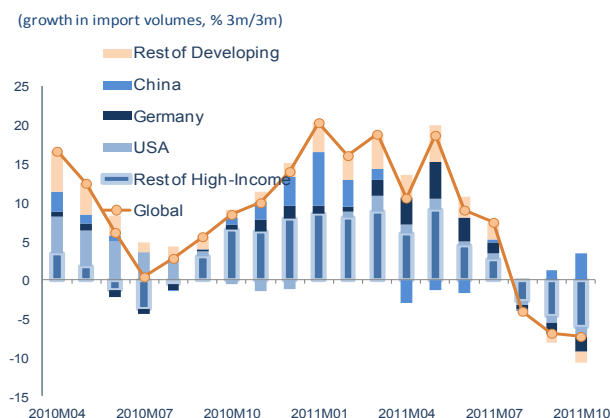


## Trade Annex

**A year of shifting fortunes in global trade expansion.** The volume of global trade (merchandise and services) is estimated to have expanded by 6.4 percent in 2011— over a percentage point above its ten-year average. However, performance across the year was not uniform. In the first quarter global trade growth was expanding at a historically high pace. However, the strong performance at the beginning of the year was punctured by multiple shocks to the global economy.

**The Tohoku quake rattled supply chains, particularly in East Asia.** The disruptions to supply chains that occurred in the wake of the Tohoku quake dealt a severe blow to trade in capital goods and electronic appliances. Though many regions were affected, the impact was most pronounced in East Asia (and in particular China), as many Japanese firms are vertically integrated with production networks in the region. Indeed, global trade decelerated rapidly from a high annualized pace of 22.6 percent (3m/3m, saar) in March to 12.4 percent (3m/3m, saar) in April (figure Trade.1). Much of this drop in growth was driven by a 6.5 percent contraction in import demand from East Asia. China's import demand fell by 11.3 percent and South Korea's by 13.7 percent.

**Figure Trade.1 Global trade expansion interrupted by multiple shocks**



Source: World Bank.

As sharp as the April trade contraction was, its rebound in May was equally strong, as much of the production capacity that had been sidelined in Japan was restored or replaced elsewhere, and the back log of unfilled orders boosted the expansion in trade, with trade growing at a 19 percent (3m/3m, saar) pace in April (30% in East Asia).

**Global economic uncertainty rises, dampening what had looked like a robust recovery.** Just as the effects of the Tohoku quake were dissipating, global economic uncertainty rose with the escalation of the Eurozone debt crisis, downward revisions to estimates of US growth, and contentious US debt ceiling discussions that led to a downgrade of US sovereign debt by S&P (see main text and finance annex for detailed discussion). The associated uncertainty and risk aversion had a rapid impact on the real economy, with global trade growth turning negative in August.

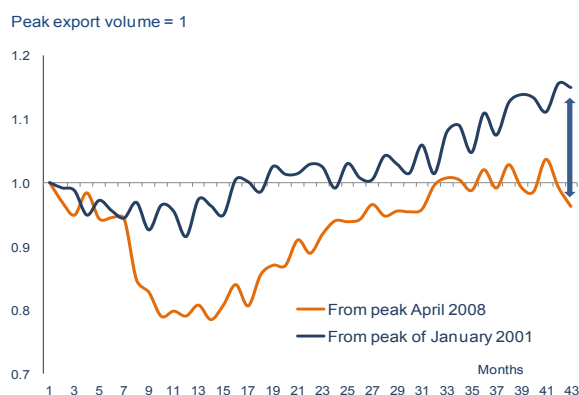
The slowdown in global trade volumes was more marked in high-income countries. High-income countries' contribution to global trade fell by 24.0 percentage points from May to October (from 14.7% to minus 9.3%), while developing countries' contribution to trade growth fell by only 0.9 percentage points (2.9% to 2.0%). The slowdown in global trade has been stronger in Europe, with imports volumes of European Union member states falling at a 17.4 percent (3m/3m), and 20.9% (3m/3m) annualized pace in September and October respectively, amid slowing industrial production and weakening order books (see Industrial production annex). In the US the deceleration has been less marked than in Europe, with import demand falling at 7.8 percent (3m/3m, saar) and 9.5 percent (3m/3m, saar) annualized pace in September and October respectively. And in developing countries, supported by a rebound in China's imports volumes, imports increased at an annualized pace of 0.6 percent and 6.4 percent

(3m/3m, saar) in the three months to September and October respectively.

**Current recovery lags behind the previous recession.**

With the recent sharp deceleration in the pace of global trade volume growth, world trade is falling once again below its pre-crisis peak volumes a milestone that it reached in December 2010. In contrast, 39 months after the previous recession in global trade in 2001, trade was some 13 percent above pre-crisis peak levels (figure Trade.2). Given the greater depth of the 2008 recession, it took twice as long during the current recovery to regain pre-crisis levels of trade activity as it did in 2001 recession (32 vs 16 months).

**Figure Trade.2 Trade recovery in current crisis still lags behind previous crisis**



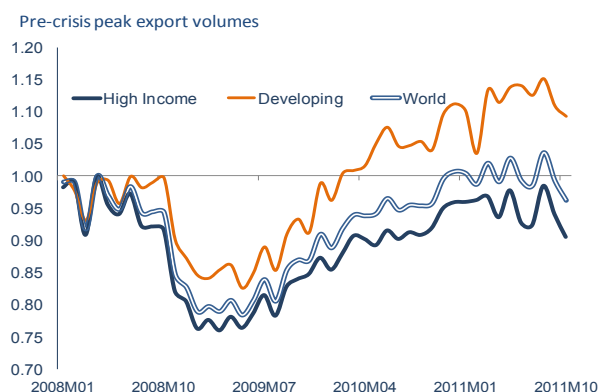
Source: World Bank.

Most of the weakness in global trade volumes reflects the relatively sluggish recovery in high-income countries. As of October 2011, developing country exports were 9.2 percent above their pre-crisis peaks, while high-income exports had fallen to 9.4 percent below their pre-crisis peak volumes, having previously reached 1.5% of their peak volumes in May 2011 (figure Trade.3).

**Regional exports have slowed sharply, but growth has remained in positive territory through August**

South Asia's exports, driven mostly by soaring Indian trade with China, eclipsed the performance of any other developing region in the first three quarters of 2011 (South Asian

**Figure Trade.3 Recovery of exports in high-income countries lags behind that of developing countries**



Source: World Bank.

**Table Trade.1 Regional export growth slowed sharply in the third quarter**  
(Merchandise export volume growth, seasonally adjusted annualized rates, unless otherwise stated)

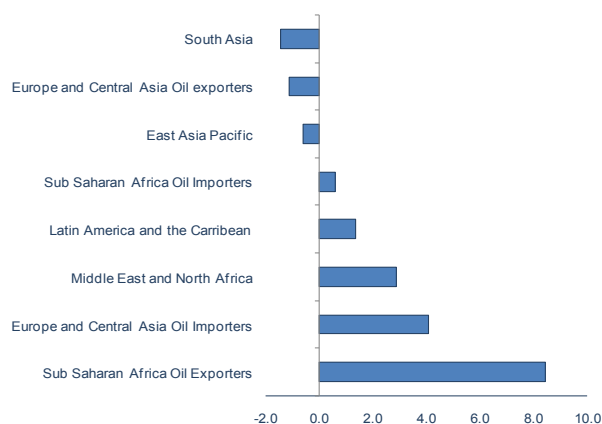
	2007	2008	2009	2010 Q1	2011			(month-on-month growth)	
					Q2	Q3	October	November	
Developing	10.7	3.9	-8.8	18.5	-15	16	-1.2	-1.2	
East Asia & Pacific	14.5	5.3	-8.4	24.3	-1.4	18.7	-1.6	-0.9	4.0
Europe & Central Asia	10.7	3.2	-11.6	12.1	10.5	15.1	-6.8	3.0	
Latin America & Caribbean	4.6	-1.8	-7	12.3	4.3	14.2	1.1	1.4	
Middle-East & North Africa	5.9	6.2	-12	13.5	-20.8	0.8			
South Asia	8.1	7.1	0.4	19.2	23.8	24.8	-9.7	-10.9	10.3
Sub-Saharan Africa	9.4	5.5	-12.8	10.2	14	9.2			

Source: World Bank.

exports grew at about 24% for the first two quarters of 2011. Nevertheless, the region like all other developing regions saw export demand plummet in the third quarter as global uncertainty picked up and its export volumes actually declined 9.6 in the 3 months ending September 2011. Most developing regions (except the Middle-East & North Africa where activity was interrupted by the Arab Spring) saw their export growth decline from double digit rates to negative ground in the third quarter, with Latin America performing best. Third quarter performance in Europe and Central Asia (-6.8 percent) was among the worst (-6.8 percent), reflecting their close trading ties with high-income Europe, the epi-center of current financial market turmoil (table Trade.1).

**Oil exporters have enjoyed large terms of trade gains.** As discussed in more detail in the Commodity Annex, the rise in oil prices boosted oil exporters’ terms of trade from January to September (figure Trade.4). Sub-Saharan African oil exporters gained the most (8.5% of GDP), while oil importers in every region except Sub-Saharan Africa experienced a decline in their terms of trade (many of the oil importers in Sub-Saharan Africa are exporters of metals and minerals, which also have seen increases in international prices).

**Figure Trade.4 The recovery in prices has favored oil exporters**  
(Terms of trade changes as a share of GDP, percent)



Source: World Bank.

## Outlook and Risks

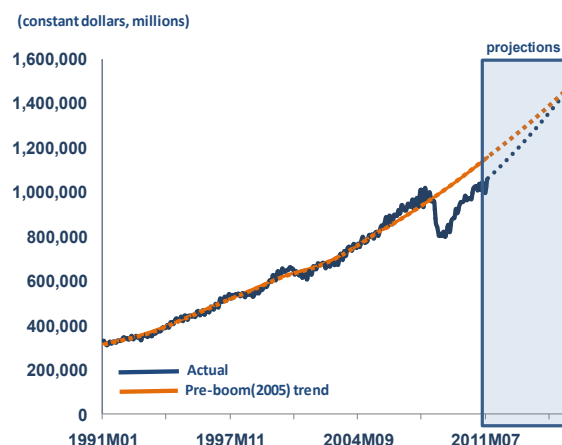
### Outlook

The volume of global trade (merchandise and services) is estimated to have expanded by 6.6 percent in 2011. The sharp slowdown in growth in the second half of 2011, will have negative impacts on whole-year growth statistics in 2012 – even if, as we expect quarterly trade growth rates within year to return positive. This negative carry-over will reduce annual growth to around 5.2 percent in 2012, before it picks up to around 7.2 percent in 2013.

This rate of growth in 2012 is below the average 5.5% growth between 1991 and 2011, though it exceeds it in 2013. However, even with this growth, global trade will remain well short of the level it would have attained had the 2008/09 recession not occurred. Indeed, at a growth rate of 7.5% it would require some four years for trade to reach trend volumes (figure Trade.5).

As has been the case throughout the recovery, trade growth in developing countries (between 8-10%) is projected to be higher than in high-income countries (between 5 to 7%) over the forecast horizon. However, with high-income countries still accounting for some two-thirds of global trade flows, trade developments in

**Figure Trade.5 It could take four years for global trade to catch-up with pre-boom trend volume.**



Source: World Bank.

developing countries over the forecast horizon will not be decoupled from the growth trajectory of high-income countries.

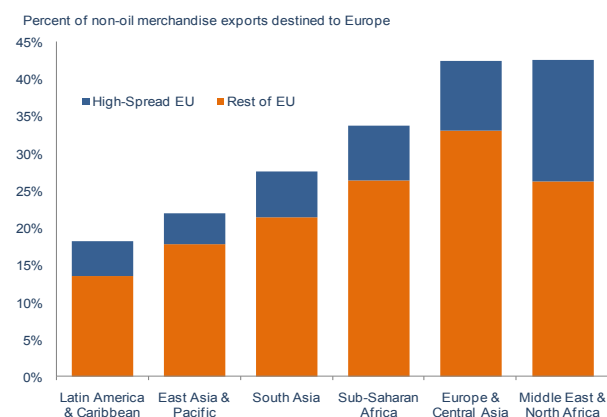
### Risks

An escalation of the debt crisis in the Eurozone (beyond what is currently envisaged under the baseline assumptions) would have strong negative effects on global trade. In the scenario of a contained crisis in some smaller euro-area countries described in the main text, global trade growth will slowdown to between 0.9 and 1.8 percent in 2012 depending on the extent of confidence effects. In the scenario, where several larger European economies also become involved global trade would contract between 4 to 6 percent.

#### *Vulnerabilities to slow down in Europe differ by region.*

Thanks to their proximity, cultural links and existing preferential trade agreement Europe and Central Asia, and the Middle East and North Africa are the developing regions with the closest trade linkages with the European Union and would be hardest hit (figure Trade.6). In total, some 43% of exports for each of these two regions are destined for the European Union. Latin America and the Caribbean are the least dependent on Europe - accounting for only 18% of their exports. Hence, while all developing countries will be impacted by a slowdown in

**Figure Trade.6 MENA & ECA regions remain the most exposed to a trade downturn in Europe**



Source: WITS, COMTRADE

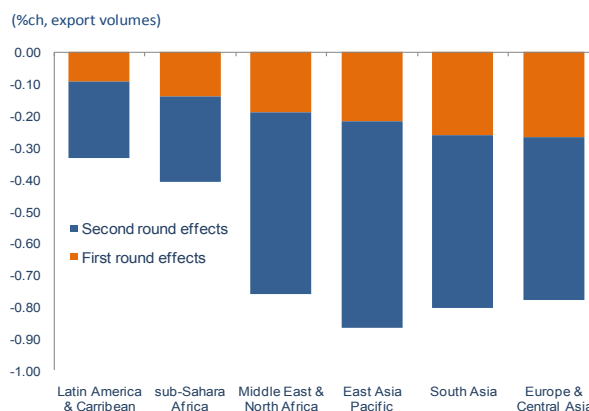
import demand from the EU, countries in the Middle East and North Africa as well as Europe and Central Asia could potentially suffer the greatest direct impacts.

The vulnerability of developing regions to a slowdown in Europe depends not only on the share of its exports going to Europe but also on the commodity composition of its exports to Europe. In addition, besides the first round effects of slowing demand from Europe, there will be second round demand slowdown effects from other regions, triggered by the initial EU slowdown.

To disentangle some of these effects we adapt the standard GTAP model to estimate the effects of a 1% reduction in EU consumption (say on account of increased precautionary savings due to a further escalation in the Eurozone debt situation).

Simulation results using the standard GTAP (Global Trade and Protection) general equilibrium model of world trade suggest that although first-round effects for Europe and Central Asia are largest (and in line with export shares), first round effects are also strong for South Asia, because South Asian exports to Europe (in particular textiles and clothing) are more sensitive to a decrease in consumer demand. Moreover, second round effects are actually much higher than first round effects for all regions. In particular, knock on effects

**Figure Trade.7 A slowdown in EU will have varying effects on developing country exports...**



Source: World Bank, GTAP.

(including reductions in derived demand from regions hit hardest in the first round) cut sharply into exports of East Asia & Pacific and to a lesser extent the Middle East and North Africa, even though for both regions the first round effects are relatively moderate (figure Trade.7).

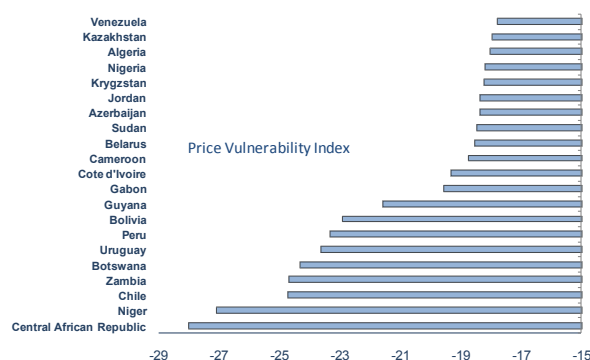
**Country vulnerabilities to a downturn in the global economy differ by the composition of exports.**

Another approach to determining which developing countries would be most vulnerable to a deterioration in conditions is to look at the price and volume sensitivity of their exports in the context of a global downturn.

Looking at the fluctuations in trade prices and volumes of 97 commodities (commodities disaggregated at the two-digit level of the Harmonized System) following the 2008 crisis, we can calculate the extent to which the exports of individual countries might be hit if a similar downturn were to be reproduced.

According to these calculations that exporters of industrial metals such as copper (Chile and Zambia), precious stones (e.g. Botswana and Central African Republic) and oil and gas (Algeria, Yemen, Venezuela, Nigeria, Saudi Arabia) suffer the largest declines in export prices. Prices of non-industrial commodities proved to be more resilient. Moreover, the total value of exports declined even more sharply for

**Figure Trade.8 Commodity exporters are most likely to see a sharper fall in their export prices during a global downturn...**



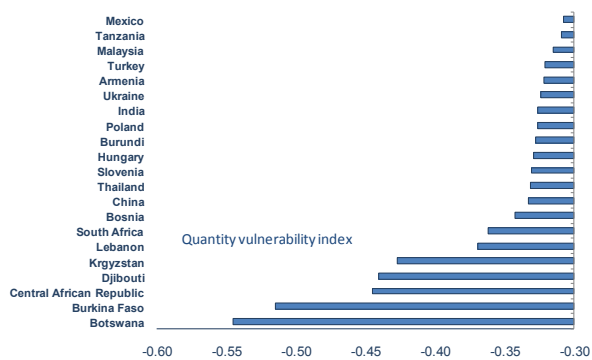
Source: World Bank.

industrial commodities, compared to other commodities (including food and oil) as fluctuations in the export volume of these commodities also were larger.

It follows from this analysis that major industrial commodity exporters like Chile, Botswana and CAF are likely to suffer large price and earnings swings and therefore be exposed to large swings in current account balances, government deficits and currency swings (figure Trade.8). Further, the negative income effects and loss in foreign currency earnings can in some instances provoke a significant deceleration in domestic demand and therefore GDP. Indeed, these secondary effects could be long-lasting if reduced export earning caused countries to delay the import of productivity and growth enhancing capital goods (Go and Timmer, 2010).

On the demand side, manufacturing goods saw the sharpest drop in volumes, with the demand for machinery, capital goods and durable goods dropping most as given uncertain prospects investors and consumers delay capital expenditures and big-ticket purchases (figure Trade.9). Countries more reliant on manufactures (such as China, India, Malaysia, Philippines, Thailand, and Turkey) may not see as large swings in their nominal balances, but are more likely to see bigger hits to GDP as the volume of exports falls relatively sharply.

**Figure Trade.9 Manufactured goods and precious mineral exporters likely to see a sharper fall in demand during downturn**



Source: World Bank.

In comparing the two effects – price and volume - Haddad and Harrison (2010) find that overall the impact from the volume effect is stronger, thus implying that countries vulnerable through the volume channel are more likely to experience greater down turns in their export receipts.

**Developing country trade financing remains vulnerable to Eurozone financial crisis.** Even for developing countries whose banking sectors are less integrated with the banking sector in the Eurozone, the ongoing debt crisis in the zone threatens to impact them indirectly through the trade finance channel. This is all the more important as European banks are major players in global trade finance. According to data from Dealogic, while US and Japanese banks accounted for 5 percent and 4 percent respectively of global trade finance in Q3 2011, large Euro Area banks alone accounted for at least 36 percent of the total. Over that period French and Spanish banks accounted for some 40 percent of trade credit to Latin America and Asia. Recent calls by regulators to European banks to shore-up their capital adequacy ratios albeit necessary could lead to significant deleveraging. The typical short-term maturity of trade finance lends itself to being cut. And indeed, there is already indication that this is taking place with developing regions being hit harder. Using data from Dealogic (figure Trade.10), we observe that while high-income countries trade financing volumes fell by 7.8

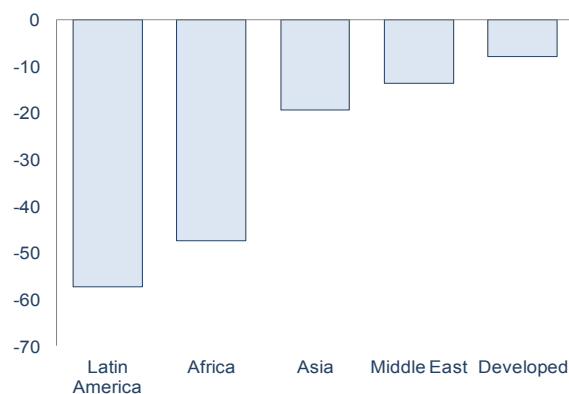
percent between the first half of 2011 and the second half of 2011 (when the Euro Area crisis escalated), for developing countries the fall was 42 percent with the sharpest declines occurring in Latin America and the Caribbean (57.3 percent), and in Africa (47.5 percent). Further evidence of this is observed by the increase in trade finance demand provided by multilateral development banks, including the International Finance Corporation.

***A further slowdown in the global economy risks a rise in trade protectionist measures.***

In general, during periods of economic downturns the application of trade defensive measures rise, as governments, pressured by the prospects of higher unemployment or existing macroeconomic imbalances, pursue mercantilistic policies to protect domestic industries (and employment) and or gain market shares. Indeed, during the recent recession, the incidence of trade restrictive measures implemented by G-20 economies rose by some 175 new measures over the 11-month period between April 2009 to February 2010, according to the World Trade Organization (WTO). While the number of new measures implemented continued to increase during 2010, there are worrying signs that since the latter half of 2011, as global economic conditions deteriorated, the incidence of trade restrictive measures is picking pace. Indeed, according to the latest Global Trade Alerts report, the number of harmful trade measures implemented in the third quarter 2011 increased by 12.5% (q/q).

However, the unilateral implementation of trade measures has the potential to trigger tit-for-tat trade policy responses. A multilateral approach offers the best prospect (Hoekman, 2011). By one estimate, the gains to accepting what is already on the table as regards the market access gains from the Doha Development Agenda amounts to a conservative estimate of \$160bn per year (Laborde, Martin, and van der Mensbrugge).

**Figure Trade.10 Decline in trade finance volumes between first and second half of 2011.**



**Source: Dealogic and World Bank staff calculations**

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