# **World Economic Vulnerability Monitor**

No. 3 UN/DESA February 2010

### Highlights ...

- ♦ The extreme trade shocks experienced during the current global economic crisis will be only partially offset by the projected recovery of global demand and the rebound in commodity prices in 2010. Under relatively optimistic assumptions, it may take most countries about two years to regain the momentum lost during 2008-2009.
- Countries heavily dependent upon exports of energy and minerals suffered the strongest trade shocks during the crisis and would need to diversify their economies if they are to make themselves less vulnerable to volatility in world markets.
- ♦ Many least developed countries are net importers of food and energy; rising food and oil prices are therefore expected largely to offset gains from rebounding world trade in 2010.

## World trade recovers, but developing country vulnerability to commodity price swings remains

### Unequal distribution of the gains from rebounding world trade in 2010

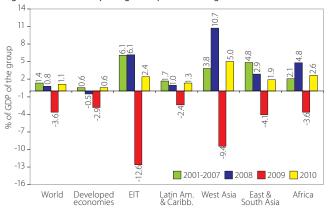
The financial crisis caused a free fall in world trade from the end of 2008 until the second quarter of 2009. During that period, trade flows fell at annualized rates of between 30 and 50 per cent, with Asian exporters being hit the hardest. This free fall has since been halted and a rebound is now visible. Nonetheless, world trade volume fell 13 per cent for the year 2009 (see United Nations World Economic Situation and Prospects (WESP) 2010, available at http://www.un.org/esa/policy/wess/wesp2010files/wesp2010.pdf). The financial crisis also caused a collapse of commodity prices. At the height of the crisis, oil prices had plummeted by as much as 70 per cent from their peak pre-crisis levels and prices of food products and metals also declined sharply. Along with the recovery in global demand, commodity prices similarly rebounded from the second quarter of 2009, although they remain below pre-crisis peak levels. The United Nations projects a modest recovery of the global economy in 2010 and a mild recovery in world trade volume of 5 per cent. Commodity prices are expected to remain volatile but should show modest further increases in the outlook given the projected mild recovery in global demand.

The gains and losses from these stark swings in world trade conditions are distributed unevenly across countries. In this issue, the findings of the World Economic Vulnerability Monitor No. 1 are updated and extended to cover expected trends for 2010. Trade shocks are defined as the change in the demand for exports (in volume terms) plus the change in export prices, minus the change in import prices, and are expressed relative to the size (i.e., gross domestic product (GDP)) of each economy or bloc (see http://www.un.org/esa/policy/publications/wespwevm/Monitor3.pdf for the methodology).

For the world as a whole, the drop in trade activity in 2009 and the fall in commodity prices added to a contraction of trade flows equivalent to 3.6 per cent of world gross product (WGP). Such a degree of falloff in world trade has not been seen in decades and has had a significant bearing on the world's income and employment. More importantly, the impact of this trade shock is likely to have a more lasting effect on economies that were more vulnerable structurally.

The projected recovery of world economic activity in 2010 is expected to yield trade gains for all regional groups, but will only partly offset the (in some cases dramatic) losses of 2009. The most affected groups in 2009 were the economies in transition (EITs) and Western Asia, who witnessed adverse shocks of 12.6 and 9.4 per cent of each region's GDP, respectively. Countries in these groups are expected to see trade gains in 2010, but to a far lesser extent than the losses suffered during the global recession due mostly to the fall of oil revenues.

Figure 1: Trade shocks per region as per cent of regional income



Source: UN-DESA estimates based on observed data series to 2008 and estimations and projections using the World Economic Vulnerability analytical framework for 2009–2010. Projections use the WESP 2010 baseline forecasts for global trends in trade volumes and commodity prices.

Note: Complete data set available at http://www.un.org/esa/policy/publications/dpad\_wespwevm.html/monitor3\_dataset.xls

rienced negative shocks because of a high dependence on food or energy imports, or both. Conversely, the decline in commodity prices during the second half of 2008 and the first half of 2009 helped offset the adverse effects from the continued decline in export demand. The net result is that many LDCs experienced moderate positive trade shocks during the crisis but are not expected to obtain significant gains from the recovery in 2010 owing to the expected rise in commodity prices.

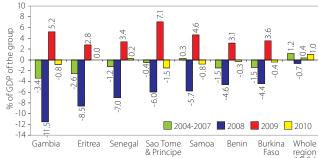
## Exporters of energy and minerals continue to face a volatile environment

It is generally argued that primary exporters are particularly vulnerable to external shocks inasmuch as their trade income reflects extreme fluctuations of commodity prices, which can be frequent and unpredictable. Meanwhile, manufacture and "diversified" exporters tend to face a more stable external stream of revenues, at least in normal times. Yet, during a global economic crisis such

Nonetheless, energy exporters will see strong positive trade shocks in 2010 thanks to rising oil prices (about 18 per cent compared with average levels in 2009). About two thirds of the trade gains for Western Asia, the EITs and Africa (5, 2.4 and 2.6 per cent of each region's GDP, respectively) are accounted for through improved terms of trade. The other region experiencing positive terms-of-trade shocks in the aggregate will be Latin America and the Caribbean. The gains of these regions are mirrored in terms-of-trade losses in developed economies and developing East and South Asia, where the losses will be between 0.25 and 0.5 per cent of their respective GDP. The latter regions will likely manage to experience overall positive shocks due to a global rise in trade demand equal to about 1 per cent of WGP.

The least developed countries (LDCs) remain the most vulnerable to volatility in global trade. During the commodity boom of 2007-2008, 31 out of 38 LDCs included in the analysis<sup>2</sup> expe-

Figure 2: Trade shocks in selected LDCs (per cent of GDP)



Source: See figure 1

Note: Figure 2 captures the particular circumstances facing most LDCs in that it selects the countries where energy and food represent more than 50 per cent of the import bill. These countries suffered major trade shocks during the commodity boom of 2008 and were not in a position to benefit from the trade bonanza during 2004-2007 either. Moreover, while they experienced positive trade shocks during the crisis on account of favourable terms of trade, they will not likely see positive effects from the configuration of prices expected during the recovery of 2010. The somehow distinctive performance of the LDCs as a whole is driven by four atypical countries which represent more than 50 per cent of the income of LDCs (oil exporters, Sudan and Yemen; manufacture exporter, Bangladesh; and gold exporter, United Republic of Tanzania).

as this, where an extraordinary contraction of global trade demand has taken place, most vulnerable countries continue to be primary exporters, particularly when trade shocks are measured relative to income.

Figures 3 to 8 highlight in stylized fashion the fact that primary commodity exporters tend to be much more vulnerable to swings in global trading conditions. This is true for developed and developing country regions alike, although the latter is typically much more strongly affected.<sup>3</sup>

#### **Developed economies**

Since most developed economies are predominantly exporters of manufactures, differences within this group are explained by other factors. In general, size and openness of the economy matters. Hence, smaller economies with relatively large external sectors, as well as economies whose trade relies heavily on the vitality of regional poles (such as Canada, attached to the United States in the Americas, and the new European Union member States, attached to Germany in Europe) were more affected than others during the crisis and are not expected to recover fully until a sustained push from global demand emerges.

- 1 Haiti, the only country in the Latin American region classified as an LDC, will face particular hardship due to the exacerbating effect of the earthquake in mid-January 2010.
- 2 There are 49 LDCs in total, 9 of which lack sufficient information and are hence not included in the analysis.
- 3 The convention used here is to consider as "diversified" those countries in which the export sector with the highest concentration is no greater than 40 per cent of the total (or 50 per cent of the total for manufactures since it covers a vast number of products). Otherwise, countries are considered export-specialized in the sector of greater concentration.

#### **Economies in transition**

As mentioned above, the energy exporters among the EITs experienced a dramatic adverse trade shock in 2009 and are expected to see a significant, though much less dramatic, recovery in 2010. Meanwhile, the exporters of manufactures suffered much smaller trade shocks during the crisis but they, too, are projected to benefit from rather small trade gains during the recovery. Exceptions to this pattern include Belarus, which despite its dominant manufacturing export sector still earns more than 30 per cent of total merchandise exports from trading energy, and the smaller and highly export-dependent EITs in South-Eastern Europe. The pattern of the diversified group (2 countries) is dominated by their import structure, more than 30 per cent of which comprises energy and agricultural products.

#### Latin America and the Caribbean

The Latin American and Caribbean region is paradigmatic of the stylized patterns described above. The most severe shocks of more than 10 per cent of GDP were felt by energy exporters in 2009, especially by Bolivia and Trinidad and Tobago, who have small economies and whose energy revenues are greater than 50 per cent of the total exports. These countries, along with Chile and Peru (which are mineral exporters), will in turn witness significant positive shocks of more than 3 per cent during the recovery in 2010. By contrast, more diversified economies suffered from much smaller trade shocks in all episodes. Manufacture exporters would show a similar pattern if one were to exclude Mexico, whose trade suffered disproportionately because of its extremely high dependence on economic activity in the United States.

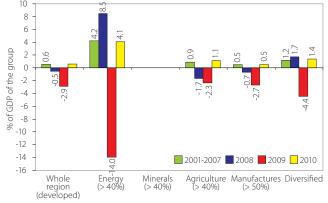
#### Western Asia

Most countries of Western Asia are principally energy exporters. Four are exporters of manufactures: Israel, Turkey, Jordan and Lebanon. Oil exporters suffered huge shocks during the crisis, but at the same time they are expected to see substantial trade gains during the recovery. The exporters of manufactures in the region, in contrast, experienced positive trade shocks during the crisis on account of improved terms of trade due to falling food and energy prices. The opposite was the case during the commodity price boom of 2008.

#### East and South Asia

The pattern of trade shocks among the countries of developing East and South Asia is similar to that of Latin America and the Caribbean, particularly regarding the volatility experienced by energy and mineral exporters. The group of exporters of agricultural products are mostly either small countries and/or belong to the LDCs, and show a performance similar to other countries with these characteristics. Manufacturing exporters are dominant, representing 90 per cent of the income of the region. Only Indonesia (accounting for almost 6 per cent of region's income) is classified as

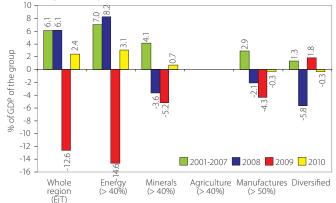
Figure 3: Developed economies: Trade shocks relative to income— Countries grouped by sector of export specialization



Source: See figure 1.

Note: Most countries (31 out of 35) are manufacture exporters; only 2 are agriculture exporters (Iceland and New Zealand); and only 2 are classified as either an energy exporter (Norway) or diversified (Australia). There are no countries specialized in exports of minerals in this group.

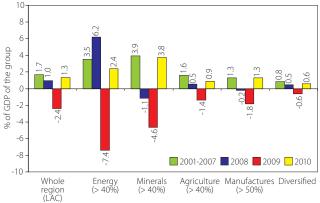
Figure 4: Economies in transition: Trade shocks relative to income-Countries grouped by sector of export specialization



Source: See figure 1.

Note: Most countries (12 out of 16 included in this study) are either energy exporters or manufacture exporters; only 2 countries are considered mineral exporters (Armenia and Tajikistan) and 2 are considered diversified (Georgia and Kyrgyzstan). There are no countries specialized in agricultural exports in this group.

Figure 5: Latin America and Caribbean: Trade shocks relative to income—Countries grouped by sector of export specialization



Source: See figure 1.

Note: The countries in the region are relatively evenly distributed across categories of export specialization. Most, however, are exporters of agricultural and manufactured products (20), 5 are energy exporters, and the groups of diversified and mineral exporters each comprise 3 countries.

diversified. The annualized data for the exporters of manufactures disguise the strong swings in trade volumes throughout the year. Regional trade in manufactures suffered heavily between the end of 2008 and the second quarter of 2009 and was also reflected in the free fall of global industrial production and world trade during that period. The steep downturn was followed, however, by a strong rebound during the rest of 2009. This shows that countries specializing in industrial production can also suffer from global shocks caused by a failure of global aggregate demand. Nonetheless, the longer trend shows that these countries and countries with more diversified export structures tend to suffer much milder trade shocks than primary commodity exporters.

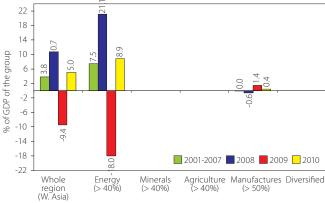
#### Africa

Energy exporters in Africa also show dramatic trade shocks averaging a positive 10 per cent of GDP in 2008 and a negative shock of similar magnitude in 2009. Mineral exporters in Africa witnessed a positive trade shock in 2009, mainly thanks to the fall of import prices in energy- and food-dependent countries and the rise of gold prices favouring large exporters like the United Republic of Tanzania and Mali, which represent more than one third of total exports of this subgroup. Similarly, exporters of agricultural products (both larger economies such as Kenya, Ghana and Ethiopia and several smaller LDCs) saw strongly improved terms of trade in 2009 along with the decline in world oil and food prices. Meanwhile, exporters of manufactures and diversified exporters (which account for 11 of the 45 African countries included in this study) show a diverse picture: on balance moderate but positive trade shocks during both crisis and recovery. During the crisis, positive terms-of-trade effects offset the decline in export volumes.

#### **Summary**

While the trade shocks experienced during the global crisis have been sizeable, it does not necessarily follow that countries suffered commensurate losses (or gains) in output or employment. Some countries have been able to weather the "trade storm" better than others: for instance, by virtue of possessing international reserves or by being able to access external financing. Others, including many LDCs, are much more vulnerable, especially to sharp swings in commodity prices, as their economies either rely heavily on a few (primary) export commodities, are highly dependent on food and energy imports, or both. Creating a more stable trading environment should therefore begin at home through the provision of infrastructure, education and industrial policy incentives that would serve to create a more diversified production and trading capacity. Such efforts may only succeed, however, if they are also supported by the international community in terms of ensuring greater market access and through development assistance, especially for the poorest countries.

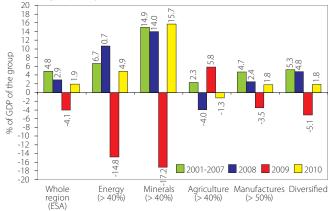
Figure 6: Western Asia: Trade shocks relative to income— Countries grouped by sector of export specialization



Source: See figure 1.

*Note*: Among the countries included in this study, none are specialized in exports of agricultural or mineral products, or are characterized as diversified. 9 countries are energy exporters and 4 are manufacture exporters, where Israel and Turkey make up 90 per cent of the subgroup's trade.

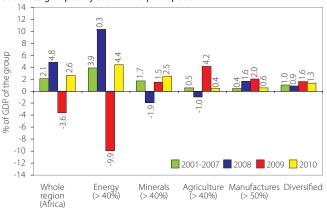
Figure 7: East and South Asia: Trade shocks relative to income— Countries grouped by sector of export specialization



Source: See figure 1.

*Note*: Most countries (16 out of 27 included in this study) are manufacture exporters; 6 (very small) countries are agriculture exporters; 2 are energy exporters, 2 are mineral exporters; and only 1 (Indonesia) is classified as diversified.

Figure 8: Africa: Trade shocks relative to income— Countries grouped by sector of export specialization



Source: See figure 1.

*Note*: The groups of export specialization in this region are well distributed among countries: each comprise at least 8 countries, with the exception of the diversified group which comprises only 3. The study includes 44 countries.