The Impact on Developing Countries of an OECD Recession

The global financial crisis and evolving recession in the developed countries and emerging economies will affect developing countries through two major channels: changes in international trade flows and world prices; and movements in global capital flows and foreign investment away from developing countries.

Through the first channel, the demand for exports from developing countries will fall and the beneficial terms-of-trade trends that have recently favoured net exporters of primary commodities will turn negative. The demand for oil will fall, lowering the world price, helping oil importers while hurting oil exporters. In addition to the trade channel, the crisis in financial institutions is causing movements in global capital flows and foreign investment away from developing countries, forcing them to make difficult macroeconomic adjustments. While both channels are potentially important, this briefing focuses on the first: changes in international trade flows and world prices.

The GLOBE model

We use a global model of world production and trade to simulate the impact on developing countries of a recession in the rich countries, focusing only on changes in commodity trade and prices, and ignoring impacts that work through financial markets and investment flows. Even with this narrow focus, the results indicate that: (1) world trade shrinks significantly and the prices of developing country exports fall; (2) the price of oil falls significantly; (3) developing countries generally lose, but the losses are partially offset for oil importers by the price fall, and overall losses from commodity trade changes alone are modest.

How these trade shocks affect economic performance and welfare in low-income countries depends on country-specific characteristics, especially initial trade patterns, and requires a differentiated analysis across countries. Our study uses a multi-country, multi-sector model that simulates the impact of a slowdown in economic activity in the developed countries on world trade, prices, production, demand, and welfare across the globe, with a focus on the least developed countries in sub-Saharan Africa and Asia. The model, called GLOBE, distinguishes 32 regions including 28 developing countries and regions.

A number of simulations were done to measure the impacts on world trade and welfare in poor countries of a recession in the rich countries. We report the results of a single simulation with a decline of five per cent in gross domestic product (GDP) of the high-income countries. In designing the simulation we focused only on changes in trade and world prices, assuming no changes in capital flows, foreign investment, or current account balances. The simulation captures the causal chain operating through changes in trade alone, leaving aside effects working through financial flows and macro adjustment.

Findings

The fall in GDP in high-income regions reduces their demand for goods and services from all regions and generates a terms-of-trade deterioration for all other countries. The value of world trade contracts by 5.6 per cent, and exports from all developing countries fall by about US$71 billion. The average world market price of fuels drops markedly, and the prices of other primary commodities exported by developing countries and regions.

Figure 1 (overleaf) indicates the impacts on the export earnings of developing countries and regions in the model, with the countries ranked by the size of the impact. The largest impact is on oil exporters, but export earnings of non-oil exporters also fall. A 5 per cent decline in...
rich-country GDP generates a decline in export earnings of non-oil exporters of about -3 to -7 per cent, a response elasticity of -0.3 to -1.4. Even ignoring financial flows, global trade is very responsive to changes in income in the rich countries and the poorest countries are exposed to the shock.

The effects on aggregate welfare (measured by the total supply of goods and services available in the country or region) follow the changes in export earnings, with oil exporters losing the most. The impact on oil-importing developing countries is mixed, with the loss of export markets partially offset by the gain from importing cheaper oil. The welfare declines are large for oil exporters (-3 to -5 per cent) and smaller for oil importers with a diversified export structure.

What should we do?

Given the heterogeneity of initial conditions in the developing countries, designing good policy responses to adapt to the trade changes requires detailed country knowledge.

While significant, the shocks that work only through the trade channel appear to be manageable for the poor countries. Modest increases in foreign aid would suffice to compensate them for the net losses in welfare arising only from shocks to global commodity markets. However, this optimistic conclusion assumes no increase in protectionism in the rich countries, which would exacerbate the impact on global markets from a recession in the rich countries and lead to steeper declines in world trade.

In addition, many developing countries are potentially sensitive to changes in financial flows and investment arising from the global financial crisis. Analysis of these potential impacts is beyond the scope of our study, requiring macro analysis of differing exposure and response to changes in global financial markets.

Further reading


Figure 1: Per cent change in export earnings by developing countries

Source: Robinson and Willenbockel (2009)