Trade, Economic Structure and the Great Recession: The Example of Central, Eastern and Southeastern Europe[1]

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As measured by the most recent monthly data, the trade collapse that had started in late 2008 has shifted into a rapid recovery phase. The simplest explanation that fits the facts is that trade has followed the sectoral composition of the recession. The recession has caused particularly strong declines of trade flows in heavy manufacturing, i.e. machinery, vehicles and related raw materials. This has translated into a deep manufacturing recession and an even stronger drop in trade. In particular, for CESEE countries these sectors are far more important in the composition of trade than they are in the composition of GDP.

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1 Introduction

The current recession has hit Central, Eastern and Southeastern Europe (CESEE) strongly, with the dramatic collapse in international trade playing a major role. Against that background, this short study sheds some light on recent trade developments of selected CESEE countries.

Chart 1 presents the pattern of OECD trade as the crisis unfolded, measured as three-month moving averages of import growth. Trade started to decline in May 2008 and turned negative in October 2008, when the collapse of Lehman Brothers and the consequent global reappraisal of risks compounded the global demand shock caused by falling U.S. demand. The trough in trade was reached in January 2009, yet positive import growth was not reached again before July 2009.

Mineral fuels, crude materials, manufactured goods and machinery and transport equipment experienced the most severe drops in trade. OECD imports in these categories showed record declines between 11% and 15% at the height of the trade collapse (from December 2008 to January 2009). In May 2009, when global trade volumes reached the trough, these categories were between 49% (mineral fuels) and 34% (machinery and transport equipment) below their previous levels in annual terms (see chart 1).

The trends in trade in late 2008, first spotted in early 2009, triggered consternation and raised intense discussions among academics, policy makers and businessmen alike. Through the summer of 2009, discussion ranged from worries about export credit shortfalls to resurgent import protection. The focus has been on finding the cause, and the assumption has been that the collapse in trade is unprecedented, inconsistent with the general level of economic downturn, and indicative of a trade-related set of problems calling for trade-specific solutions. As much as the collapse in trade has appeared to be exaggerated compared to changes in GDP, we can also expect to witness a rebound in trade which is greater than the

[1] *This short analysis is based on the article "Follow the bouncing ball – trade and the great recession redux" by the authors in the Ebook "The Great Trade Collapse" edited by Richard Baldwin and published online on November 27, 2009, at http://www.voxeu.org/index.php?q=node/4297.*

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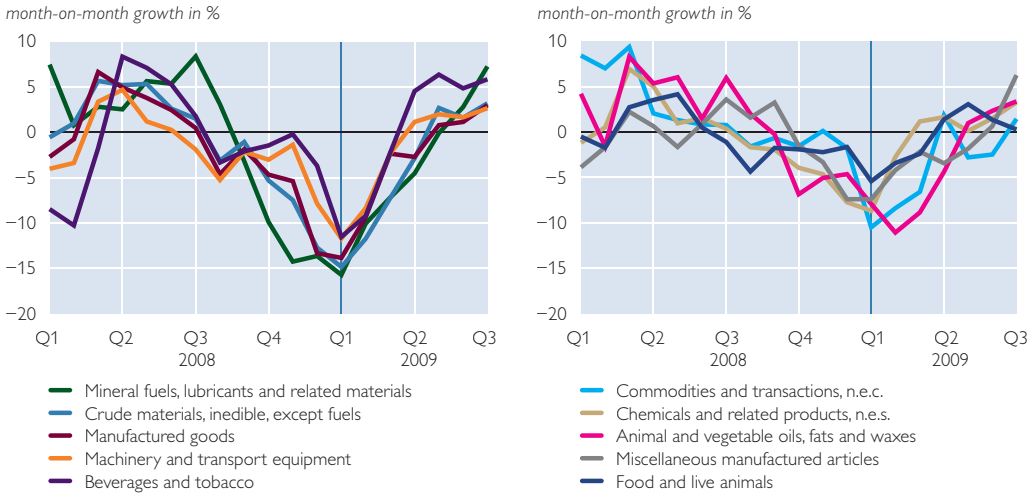
Chart 1

OECD Import Growth by Product Categories, Based on 3-Month Moving Averages



Source: OECD.

corresponding recovery in GDP levels. The explanation behind this is that trade has followed the sector composition of the recession, i.e. countries more exposed in their production and trade patterns to durable consumption and investment goods were hit harder than countries with a different pattern of specialization.

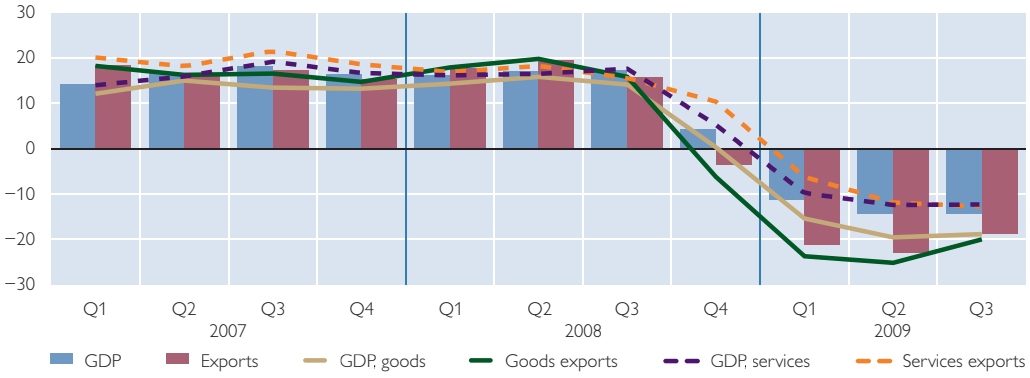
2 Recent Studies Focusing on the Composition Effect

In the emerging academic literature on trade and the crisis, the papers closest to the points we highlight here focus on the sector composition of the downturn and of trade. One set of explanations for the increased sensitivity of trade to GDP swings includes increased complexity in production. Freund (2009), for example, highlights fragmentation in production. She also notes that durable goods are most affected, historically, by financial downturns. This includes iron and steel. McKibbin and Stoeckel (2009) work with a computational general equilibrium (CGE) model modified to include elements of the financial crisis. They find that the drop in durables is much higher than for nondurables. In addition, the bursting of the housing bubble was identified as being most responsible for the drop in consumption and imports, while the change in the assessment of risk was largely responsible for the drop in investment. Also working with a CGE model, Bénassy-Quéré et al. (2009) emphasize that a large part of the recent drop in the level of trade is linked to price rather than volume effects (mostly related to the recent large decreases in oil and commodity prices). They also stress the importance of using appropriate price deflators. GDP price deflators can lead to substantial overestimating of trade volume changes in economic downturns. Willenbockel and Robinson (2009) also use a CGE model, focusing on developing countries and the collapse in global commodity prices as the downturn unfolded. Borchert and Mattoo (2009) focus instead on the relative stability of trade in the crisis. Indeed, in the case of India, the relative service intensity of India's trade profile served to dampen swings in total trade during the crisis.

Chart 2

CESEE EU Member States: GDP and Exports

annual change in %, current prices



Source: Eurostat.

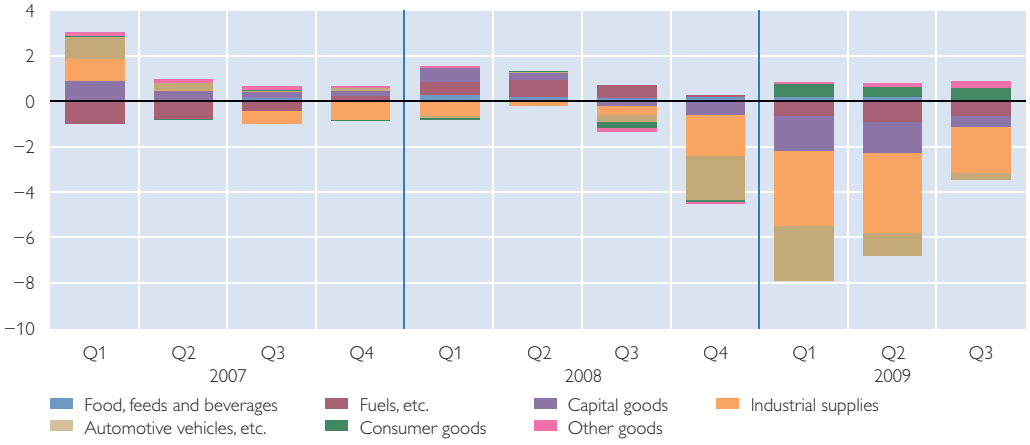
3 The Sectoral Pattern of the Recession

Chart 2 presents a quarterly breakdown of GDP and export trends as the recession unfolded in the ten CESEE EU Members States[3] in 2008 and early 2009. For the region, GDP was down at an annual rate of 11.4% in the first quarter of 2009, while exports fell by 21.2% at an annual rate. This raises the issue of the composition of the fall in CESEE GDP. Production of goods was down at an annualized 15.5% in the first quarter of 2009. Services production, on the other hand, fell at an annualized 9.8% in the first quarter of 2009. Correspondingly, according to balance of payments data, exports of goods were down a striking 23.8%

Chart 3

Absolute Change in Exports by End-Use Categories in the CESEE EU Member States

change on previous year in percentage points of GDP



Source: Eurostat.

Note: Nominal exports divided by GDP.

[3] *Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia and Slovakia.*

in the first quarter of 2009, while services exports decreased by only 6.3% (see chart 2).

To better understand what has been happening to total trade flows in goods, we now turn to a more detailed discussion of the sector composition of production and trade. Chart 3 presents the year-on-year change in CESEE Member States' goods exports by major end-use category.[4]

As is evident from chart 3, investment and durable goods as well as industrial supplies accounted for the lion's share of the overall drop. Indeed, in the fourth quarter of 2008, motor vehicles alone accounted for one-third of the total decline. In the first two quarters of 2009, industrial supplies accounted for about 40% of the decline. Basically, the recession has been hardest on heavy manufacturing, i.e. machinery, vehicles and related raw materials. This has translated into a deep manufacturing recession, and a correspondingly pronounced drop in trade.

4 Structural Differences between Production and Trade

An important point to keep in mind is that manufacturing has a much greater weight in total trade values than it does in domestic GDP. While this is obviously true for the OECD countries, it also holds for major emerging and developing economies and the CESEE countries as well. This is illustrated in chart 4 below.

In chart 4, we present a breakdown of EU patterns of production and trade by major sector, separately for the EU-15 (the countries that joined the EU prior to 2004) and the CESEE EU members (in this chart, excluding Bulgaria and Romania for reasons of data availability) in 2005.[5] The first column presents GDP shares, while the second and third columns present export and import shares. 66% of total value added in the EU-15 is in services, while these activities account for only 17% of exports and 22% of imports. Manufacturing (inclusive of transport equipment) dominates both exports (81%) and imports (75%), yet is only 30% of domestic value added. Indeed, a great deal of domestic value added is in sectors that, on a gross value basis, contribute relatively little to the external accounts. The following figures refer to the CESEE EU Member States: 48% of total value added is in services, while only 10% of exports and 13% of imports are services. In contrast, 88% of exports are manufactured goods (85% of imports) and as much as 43% of domestic value added is in manufacturing.

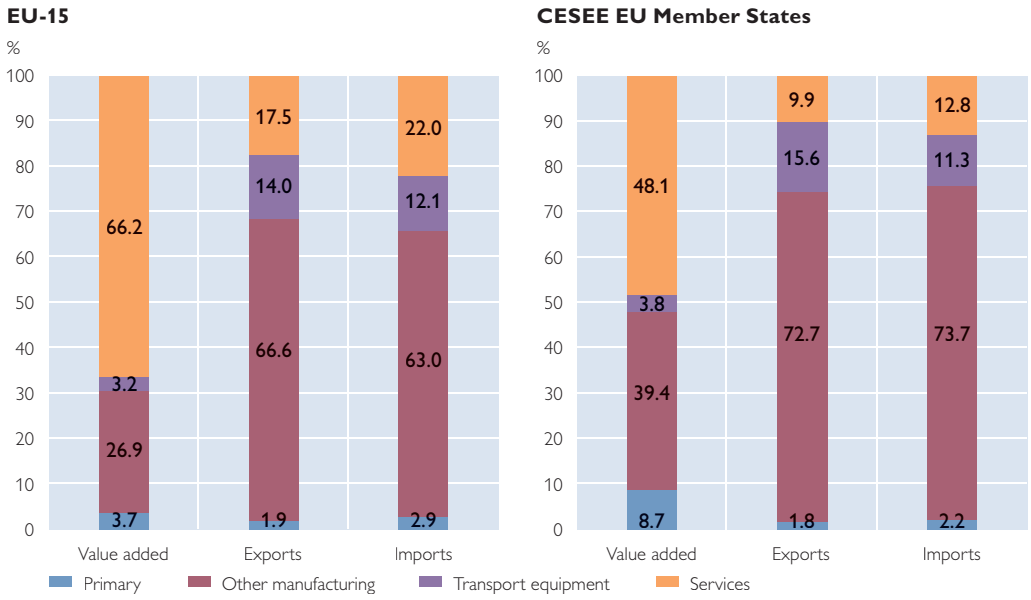
Such patterns mean that a global recession that hits industrial goods sectors the hardest will also have a disproportionate impact on trade relative to GDP. In addition, for countries where for historical reasons value added is concentrated in industrial supply and machinery sectors (like in much of CESEE), the impact of the recession on GDP must be greater than in more service-based economies. As a consequence, the CESEE EU Members States are particularly strongly exposed to trade shocks and thus affected during the current recession, which has been to a considerable extent associated with the collapse in world trade.

[4] *Due to the lack of real data, we divided nominal export flows by GDP in order to eliminate the effect of exchange rate fluctuations and similar price effects.*

[5] *This is based on the EU KLEMS database, which is unique in combining trade and production data for services and goods, albeit at the cost of being already outdated to some extent. However, economic structures do not change too rapidly, therefore we chose to use these data despite this shortcoming.*

Chart 4

Structure of GDP and Trade in 2005



Source: EU KLEMS database (Timmer et al., 2007).

5 Concluding Remarks

There are potentially important public policy questions lurking behind the trade-recession linkages. Has the recession been compounded by a set of trade-specific problems and issues? If so, how big are these, and should we be worried? In confronting these questions, we need to be careful when comparing real and nominal changes in trade. We have clearly witnessed a dramatic drop in world trade, and may also see an equally dramatic surge. For policy purposes though, an important question is whether the decline is out of line with the global shock to GDP and the underlying credit crisis. At the moment, trade seems to be a victim, but one reflecting nontrade weaknesses in credit and demand.

The countries with the greatest trade shocks were also more exposed to sectors hit hard by the recession, such as the CESEE EU Member States. Owing to their status as catching-up economies, they are on average more heavily exposed to manufacturing sectors than many other economies. Also within the region, the pattern of crisis response is corresponding closely to structural features of individual countries (with the exception of the Baltic states). A comparison between for example Poland (the only EU member which did not enter into recession in 2008/2009 and had a projected growth downturn of 5.5 percentage points between 2007 and 2009) and the Czech Republic (with a projected growth downturn of 10 percentage points) makes clear that structural features matter in this respect: While industry accounts for 30% of GDP in Poland (average from 2006 to 2008) and is thus below the region's average, it represents 38% of GDP in the Czech Republic. This should not lead us to dismiss the region's specialization on (often heavy) machinery and transport equipment and its pronounced export orientation, which was observed over the past one and a half decades. On the contrary, this form of specialization coupled with export orientation proved extremely

helpful. It allowed these countries to exploit their unique geographic location and their highly qualified labor force and set them on an unprecedented growth path up until 2008. In the present situation, they have so far been victims of the general pattern of recession rather than of misconceived industrial policy decisions at the beginning of their catching-up process.

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