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THE GLOBAL FINANCIAL CRISIS AND ITS IMPACT ON TRADE: THE WORLD AND THE EUROPEAN EMERGING ECONOMIES

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UNITED NATIONS

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The Global Financial Crisis and Its Impact on Trade: The World and the European Emerging Economies[1]

Robert C. Shelburne

Abstract

This paper describes how the global financial crisis of 2007-2010 impacted trade both globally and more specifically for the European emerging economies, which in terms of GDP decline, were the most negatively impacted economies in the world. Just as with GDP, the trade of the European emerging economies was more severely impacted by the crisis than the trade for other regions of the world; exports for over one half of these economies declined by more than 50 per cent between the third quarter of 2008 and the first quarter of 2009. The terms of trade of the energy-rich economies deteriorated significantly. Despite these large declines, the geographical and sectoral distribution of their trade remained relatively stable. Most of these economies adjusted to the shock with a currency depreciation of about 20 per cent. The current account deficits of many of these economies which were quite large prior to the crisis were reduced significantly. Although there were some increases in protectionist measures and they did have a beggar-thy-neighbor component, in many cases these measures reflected macroeconomic policy failures, especially regarding the coordination of fiscal stimulus programs, and may have been welfare improving second best policies. The crisis is unlikely to result in major design changes in the world trading system, although the opposite is true for the world financial system.

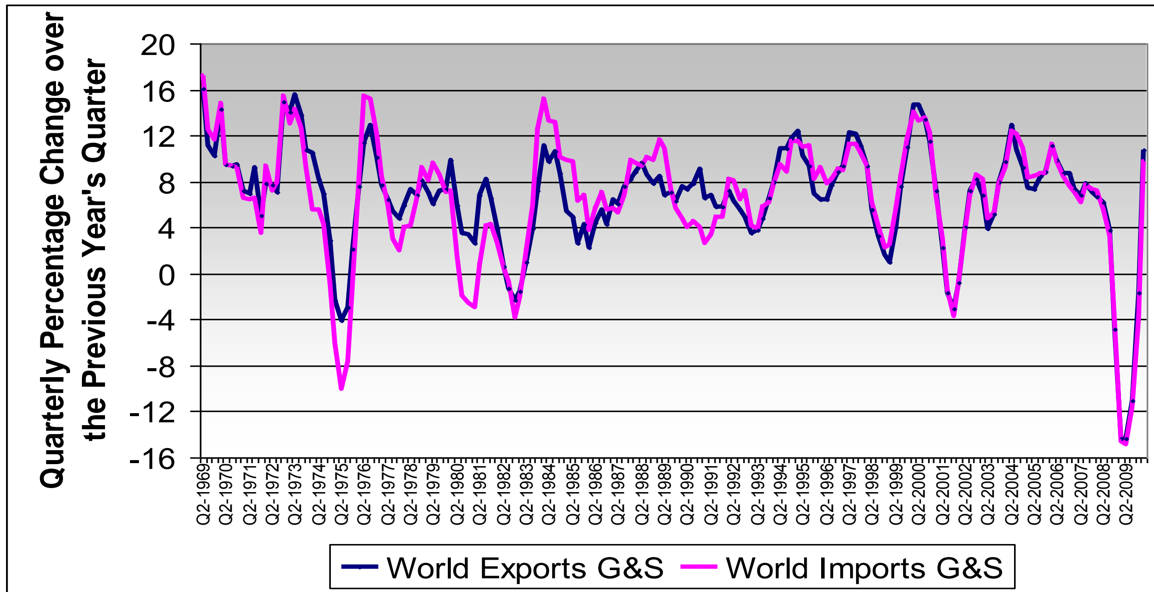
Introduction

The world economy in 2008-09 experienced its most severe financial shock since the "Great Depression" of the 1930s and the deepest economic downturn since the Second World War. Although national financial crises occur fairly periodically, global financial crises are extremely rare, this being only the third such global crisis since the "Long Depression" of 1873-79.[2] Concomitant with the current "Great Recession" was a "Great Trade Collapse" whereby world trade declined rapidly beginning in the third quarter of 2008 through the second quarter of 2009. As shown in figure 1, the decline was the largest in the last forty years, although not significantly larger than the one which accompanied the first oil price shock and recession of 1973-74; significant but smaller declines in trade also occurred in 1982 and 2001.

[1] This paper summaries several lectures presented at the Azerbaijan/UNCTAD Diplomatic Academy on Key Issues on the International Agenda, Baku, Azerbaijan, August, 2010.The author expresses his appreciation for comments received from conference participants.

[2] Numerous explanations for the 1873 crisis have been put forth but the US and European demonetization of silver is foremost.

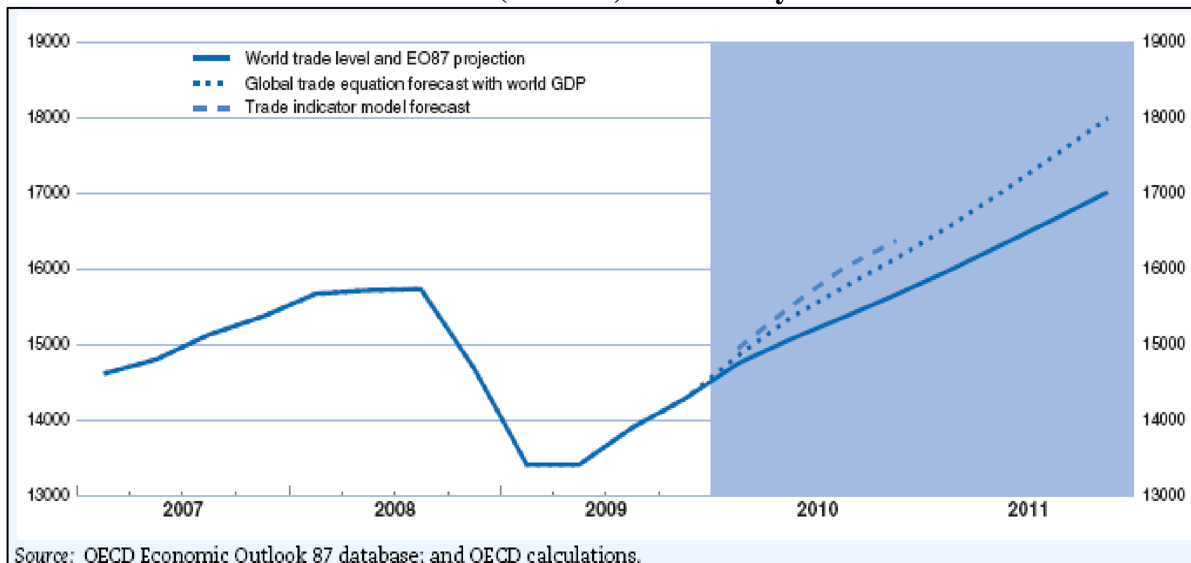
Figure 1
Real Export and Import Growth of Goods and Services Q2-1968 to Q2-2010



Source: Calculations of the author using OECD Data, 2005 real dollars.

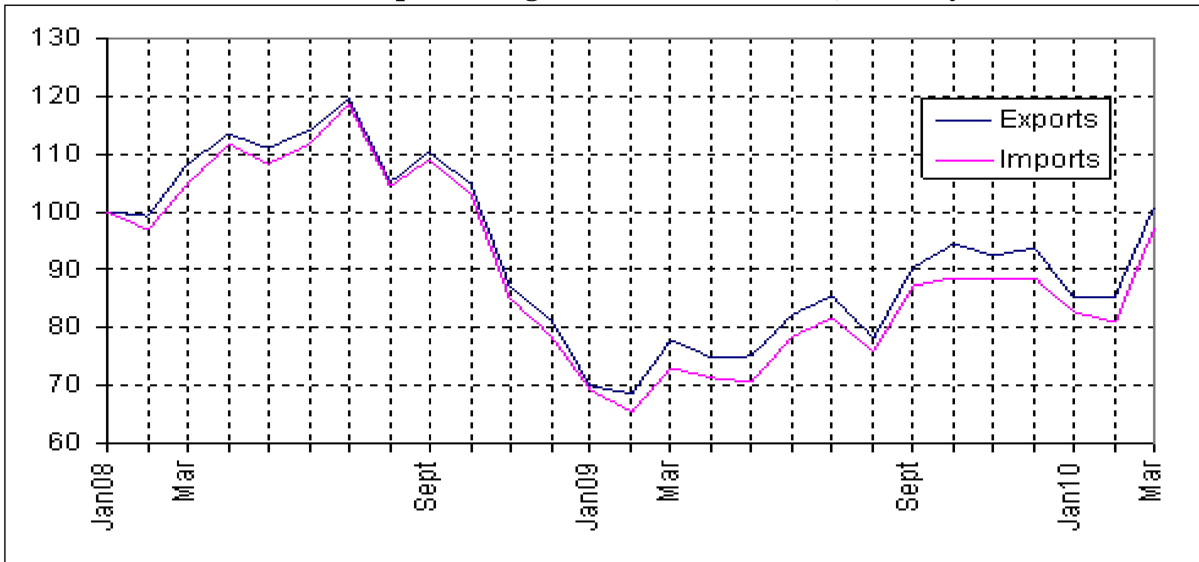
By the third quarter of 2009 as the global economic recovery began, there was a rapid bounce-back in trade; this followed the basic historical pattern of most of the other steep declines which were followed by a steep recovery as well. For the year 2009, world trade declined in real or volume terms by 12.2 per cent. Because of significant price declines, especially for primary commodities such as petroleum and minerals, the decline in dollar terms was 23 per cent. The current forecast is for growth to resume its pre-crisis growth trend and for the volume of trade to increase by 9.5 per cent in 2010. At this rate the volume of world trade will probably reach its pre-crisis peak obtained in mid-2008 sometime in the spring of 2011 (figure 2). On a monthly basis the decline in trade was larger (see figure 3); the value of trade was its lowest in February 2009 when it was 42 per cent lower than its peak in July 2008.

Figure 2
World Trade (Volume) Forecast by OECD



Source: OECD Economic Outlook 87 database; and OECD calculations.

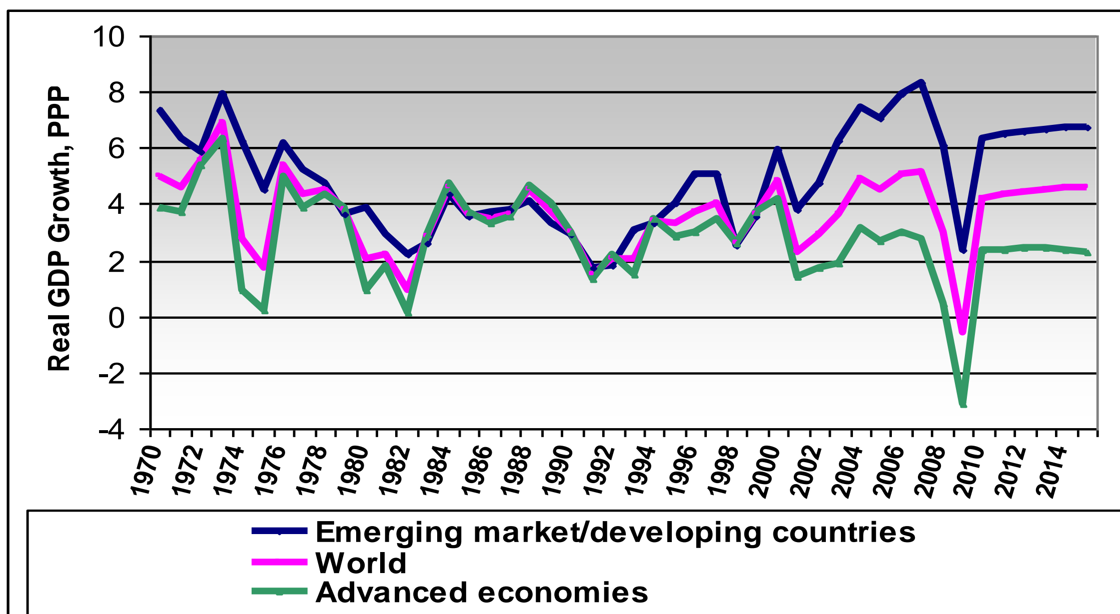
Figure 3
World Merchandise Trade
(70 Economies Representing 90% of World Trade, January=100)



Source: WTO

The recent crisis was notable in that it affected much of the world and for that reason has rightly been described as a global crisis. It is true that much of the developing world escaped from entering actual recessions in the sense of actually having negative growth, but the developing world's decline in GDP from their pre-crisis levels of about six percentage points was roughly similar to that of the advanced economies (figure 4). In addition many of the exports of the developing world go to the advanced economies and so for that reason changes in their exports would be more closely related to GDP changes in the advanced economies than in their own economies.

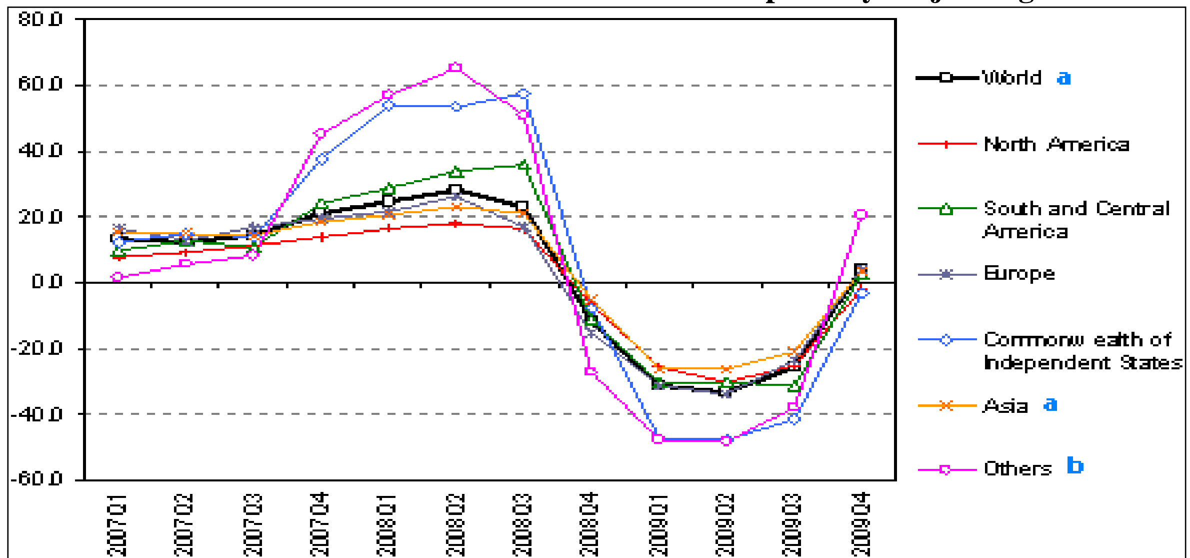
Figure 4
Real GDP Growth 1970-2015



Source: IMF includes forecast for 2010-2014.

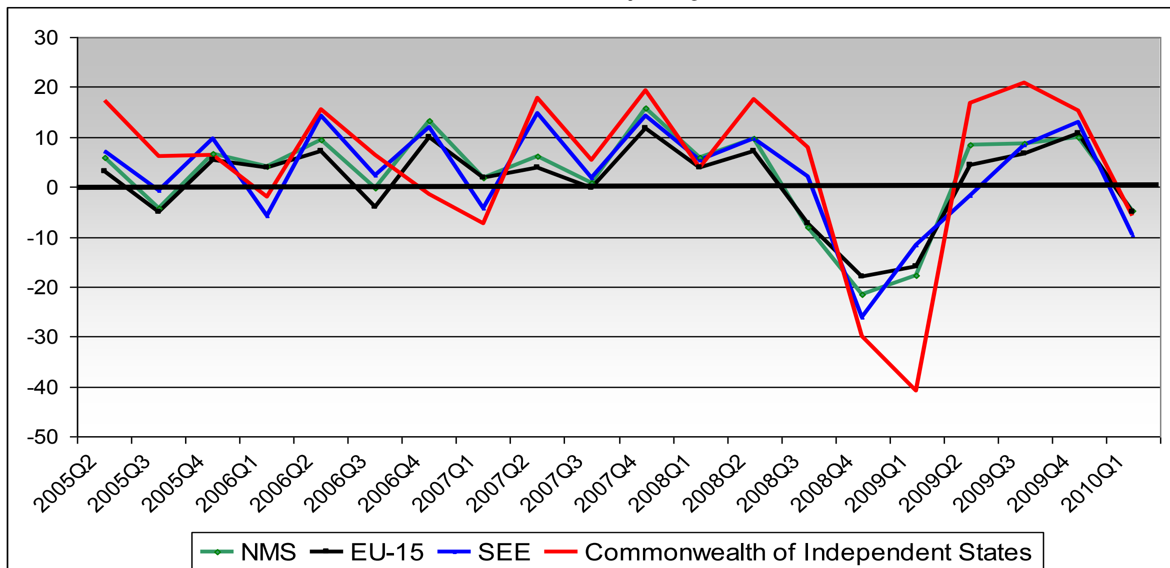
Export growth had been increasing at a roughly similar rate in most of the world's major geographical regions in the two years prior to the crisis (figure 5). However, one region that stood out for its relatively rapid export growth was the CIS. This had more to do with values than volumes as the price of its oil and gas exports had increased substantially during this period. During the crisis, however, the GDP declines in the CIS were some of the largest in the world, and the global price of their main export, oil (and to a lesser degree gas) collapsed. As a result the declines in trade were quite large and certainly above the world average. (Note the other region labeled as "others" in figure 5 that also experienced such large volatility includes the oil-rich states of the middle-east).

Figure 5
Growth and Decline of Nominal Merchandise Exports by Major Region



Source: WTO

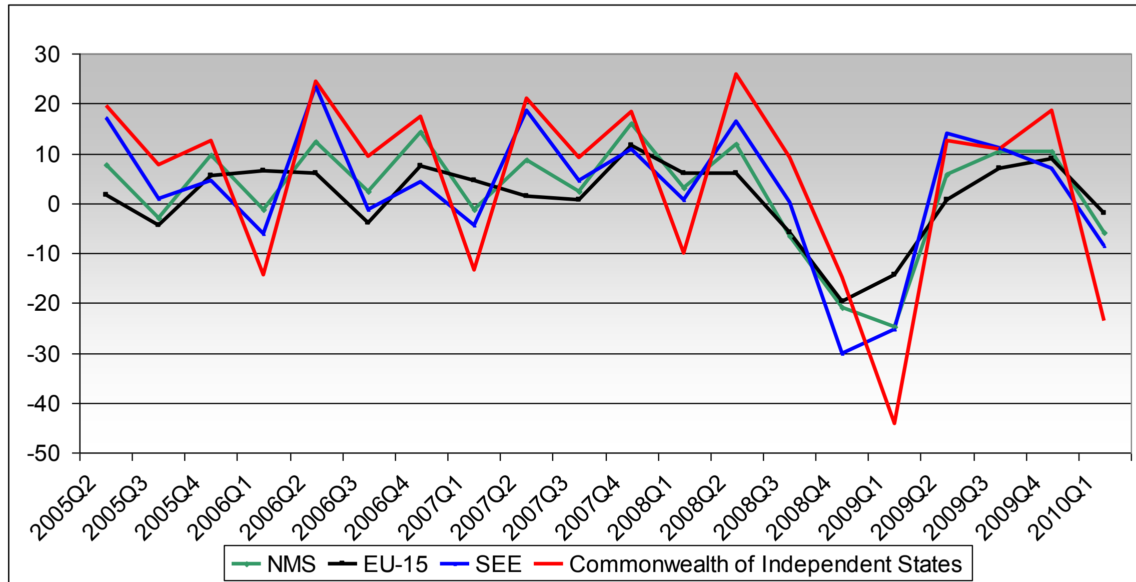
Figure 6
Quarterly Merchandise Exports for Major European Regions
(Not Seasonally Adjusted)



Source: Based upon data from the WTO.

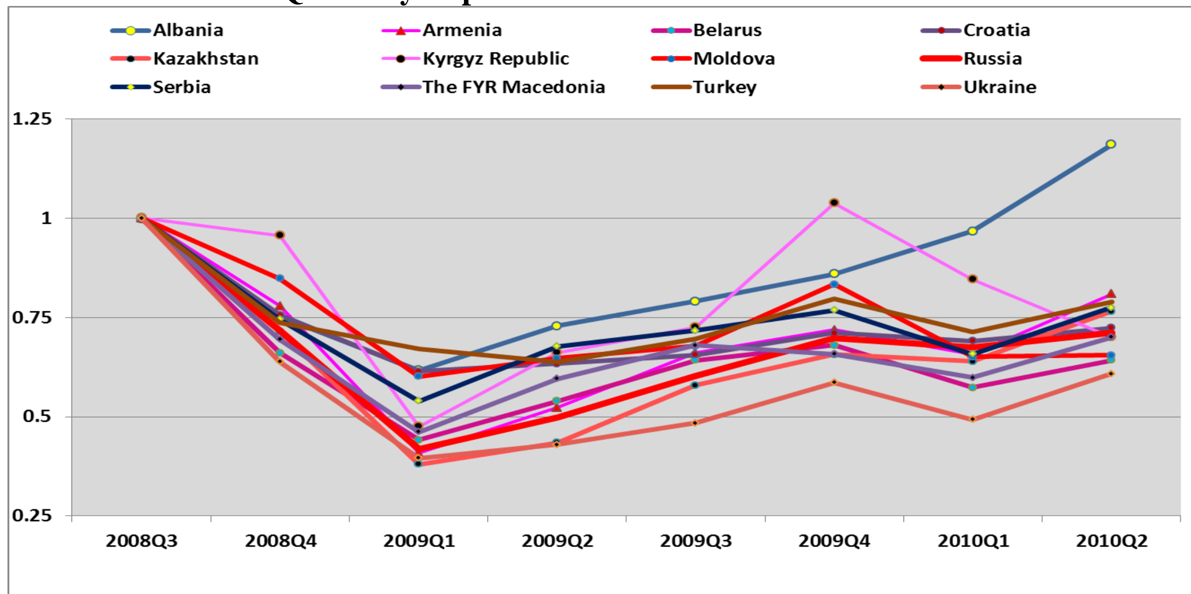
Figures 6 and 7 provide quarterly non-seasonally adjusted merchandise trade for the four major European regions: the EU-15 (EU prior to 2004), the 12 EU new member states (NMS), south-east Europe (SEE), and the CIS.[3] Trade in the EU-15, NMS and SEE had been growing at a roughly similar rate prior to the crisis and also declined and rebounded by a roughly similar amount. Trade had been growing faster for the CIS prior to the crisis, fell much steeper than for the other three regions and has rebounded faster.

Figure 7
Quarterly Merchandise Imports for Major European Regions
(Not Seasonally Adjusted)



Source: Based upon data from the WTO.

Figure 8
Quarterly Export Indices for Selected EEE Economies



[3] The regional grouping CIS refers to the former members of the Soviet Union minus the Baltic economies and does not refer to the institutional arrangement of that name which does not include Georgia. The term economies in transition (EiT) refers to both the SEE and CIS.

During the worst phase of the crisis, trade in the more severely impacted European emerging economies (EEE) had fallen to about half of what it had been the year before (figure 8). By mid-2010 most of the EiT have export levels at least 25 per cent below those in the third quarter of 2008 when exports peaked for most of these economies. For example, in Russia its exports during the first half of 2009 were only about half and its imports about three-fifths of what they had been during the corresponding month in 2008 (figure 9).

Figure 9
Russian Exports and Imports in the First Half of 2008 and 2009

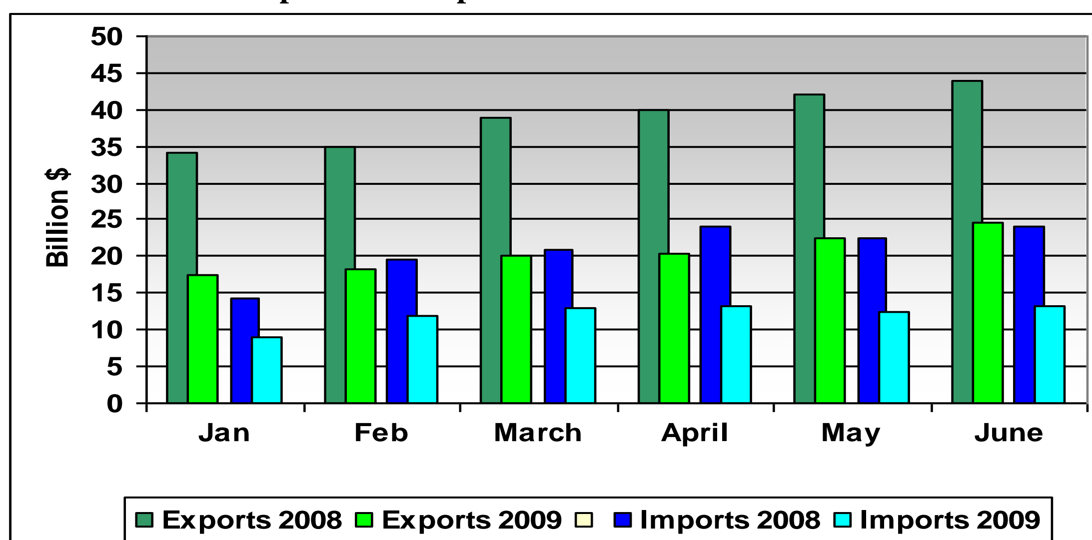
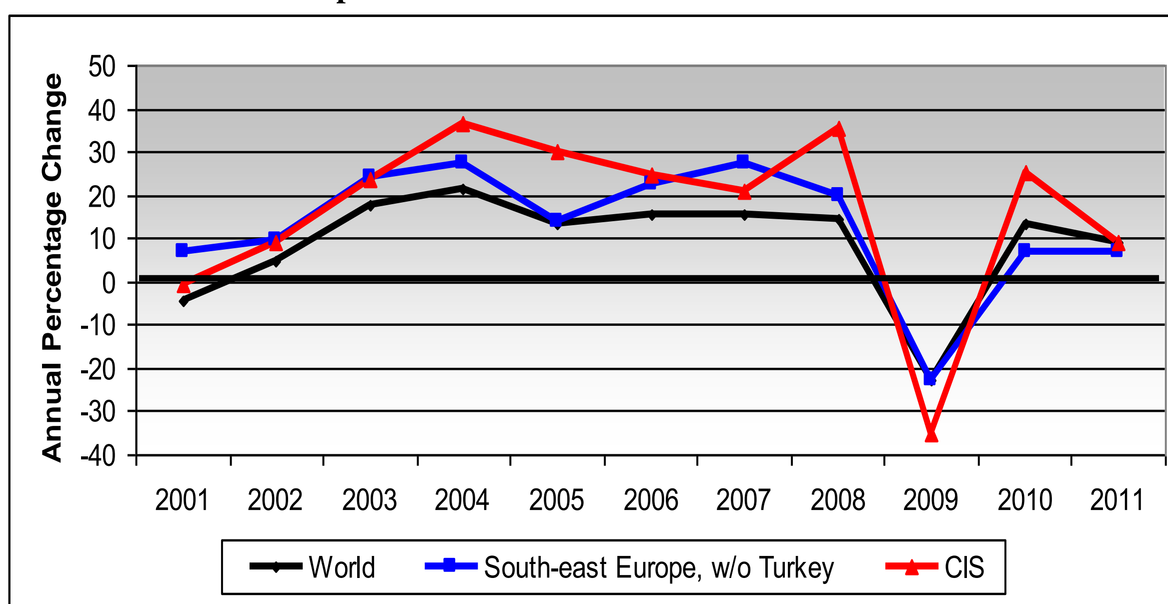


Figure 10
Annual Export Growth of the Transition Economies 2001-2011



Source: UN/Project Link; includes forecast for 2010 and 2011.

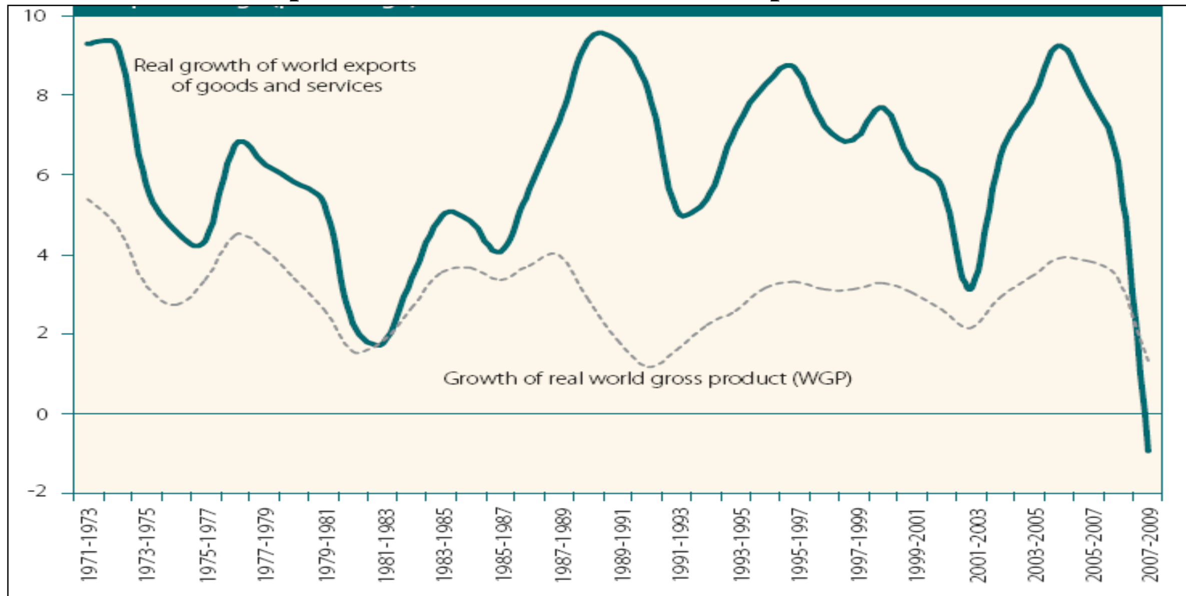
Figure 10 provides a longer-run perspective on exports from the Economies in Transition (EiT). On an annual value basis, over the last decade trade had been growing faster in the economies in transition than in the rest of the world. During 2009 the CIS economies experienced a decline of 35 per cent in its exports, and the south-east European

economies experienced a decline of 23 per cent, which was similar to the world-wide decline.

What Explains the Rapid Decline and Rebound in Trade?

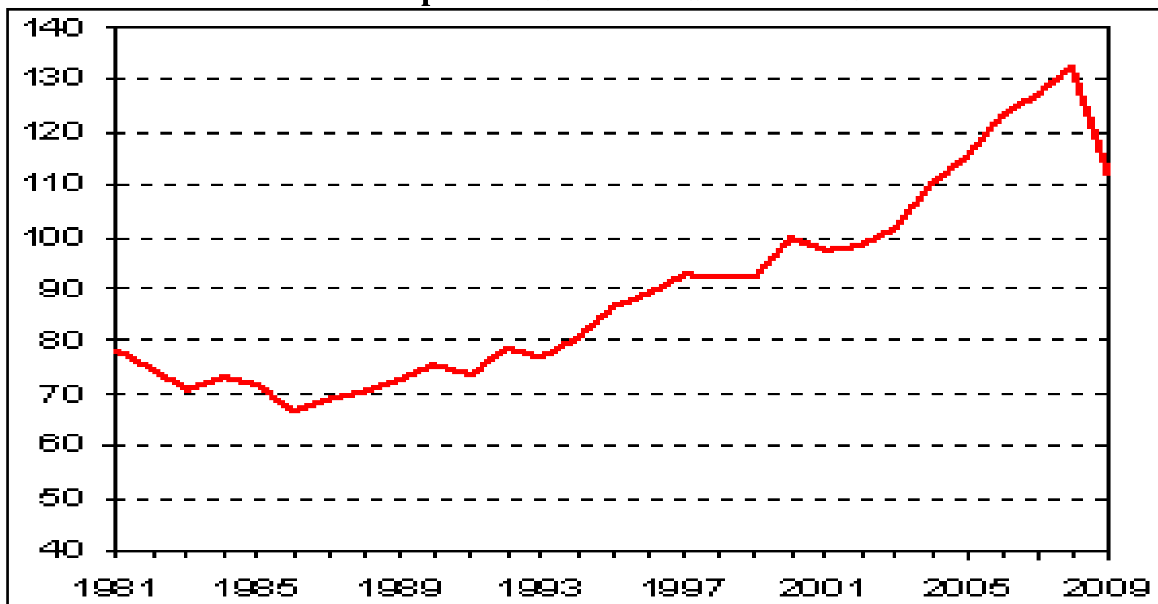
The major factor explaining the decline in trade during the crisis was the decline in demand (or more generally GDP). Over the last 50 years world trade has grown approximately twice as fast as world GDP; between 1980 and 2008 real world exports of goods and services increased annually by 6.3 per cent while world GDP increased by 2.9 per cent (see figure 11).

Figure 11
Comparison of the Growth in World Exports and World GDP



Source: World Economic and Social Survey, United Nations, 2010.

Figure 12
World Exports of Goods and Services to GDP



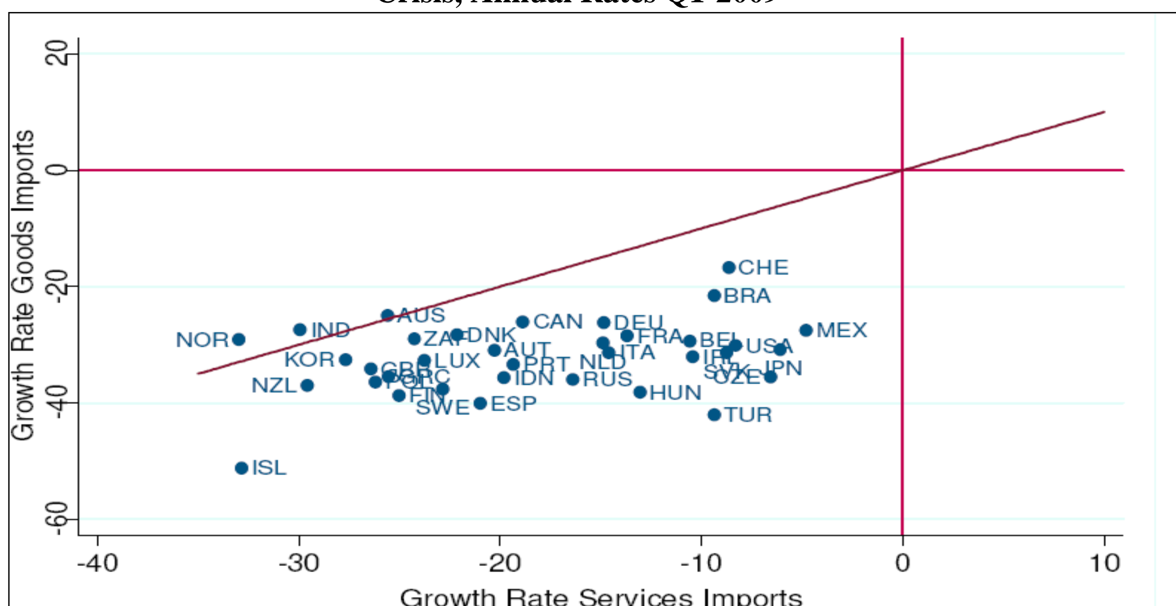
Source: WTO

As a result, the trade to GDP of the world has been increasing (figure 12). The percentage change in trade that results from a percentage change in GDP is known as the elasticity of trade to GDP. For the world as a whole this elasticity has been close to two over the last several decades but more recently may have increased to almost three. It appears to be increasing for a number of reasons but one of the most important is the increasing degree of international outsourcing or fragmentation of production.

However in the short-run trade flows are even more volatile than GDP and therefore the short-term trade elasticity is greater than the long-term elasticity. Thus during an economic downturn like the current one it is to be expected that trade will decline sharply during the downturn phase and rebound swiftly during the recovery. On average during previous global downturns, the declines in the rate of trade growth have been approximately four times as large as the declines in GDP growth.[4] This is due to the fact that during downturns the production of merchandise falls more than that of services and trade is primarily goods while GDP is primarily services.

Consistent with this fact is the tendency for trade in services to decline by only about half as much as the decline in merchandise trade. In figure 13 the change in merchandise trade is compared to the change in services trade for a sample of countries (which includes some of the EEE); most of the points are to the right of the 45-degree line which shows that the decline in services was smaller.[5] Therefore some of the cross-country difference in the size of the decline in trade during the current crisis can be explained by the proportion of their trade that is composed of services. This suggests that if countries want to reduce the volatility of their exports it would make sense to try to increase their exports of services.

Figure 13
Relationship between Changes in Merchandise and Services Trade during the Crisis, Annual Rates Q1-2009



Source: Aaditya Mattoo and Ingo Borchert, Services Trade- The Collapse that Wasn't, 2009.

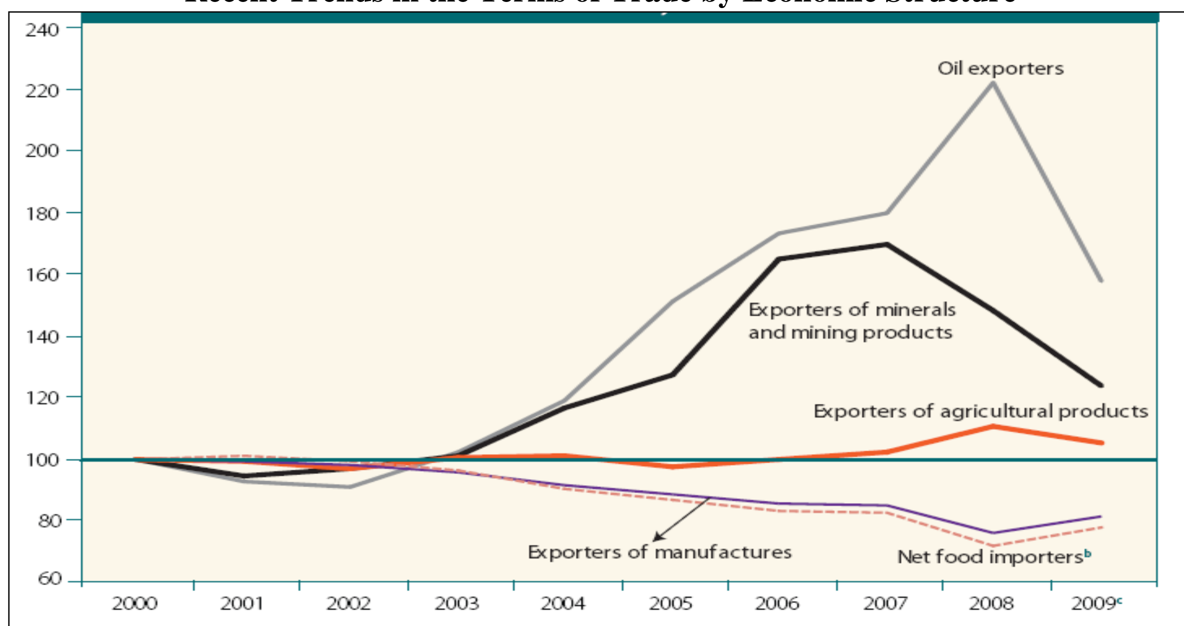
[4] Caroline Freund, Trade Responds to Global Crises: Historical Evidence, World Bank working paper, 2009.
[5] Ingo Borchert and Aaditya Mattoo, Services Trade – The Decline that Wasn't, in Richard Baldwin (ed.), The Great Trade Collapse: Causes, Consequences and Prospects, VoxEU, 2009.

Studies have also shown that economic sectors that are intensive in trade (i.e., a high percentage of production is exported or consumption is imported) are also sectors that are intensive in the use of credit (i.e., things like vehicles, consumer durables, and investment goods). Thus a financial crisis that impairs the banking system is likely to have a significant impact on sales of these tradeable items as customers cannot find financing. This is another reason why trade flows are likely to decline by more than GDP during a crisis.

Terms of Trade Changes During the Financial Crisis

The global crisis resulted in significant changes in countries' terms of trade (i.e., the price of their exports relative to imports). Oil exporters suffered the largest declines in their terms of trade as the price of energy experienced some of the largest price declines of any commodity; as a result the energy-rich CIS were particularly hard hit (figure 14). A decline in the terms of trade implies an additional decline in the economic welfare of a country since calculations of real GDP ignore price changes. Thus on top of the very large declines in GDP the actual basket of goods available to the people in the energy-rich CIS were even larger than the GDP declines would suggest. In addition, although the energy-rich economies of central Asia fared relatively well (compared to the other transition economies) in terms of GDP growth, they nevertheless experienced a much more significant decline in economic welfare. Those with sovereign wealth funds or significant international reserves were able to absorb much of this decline.

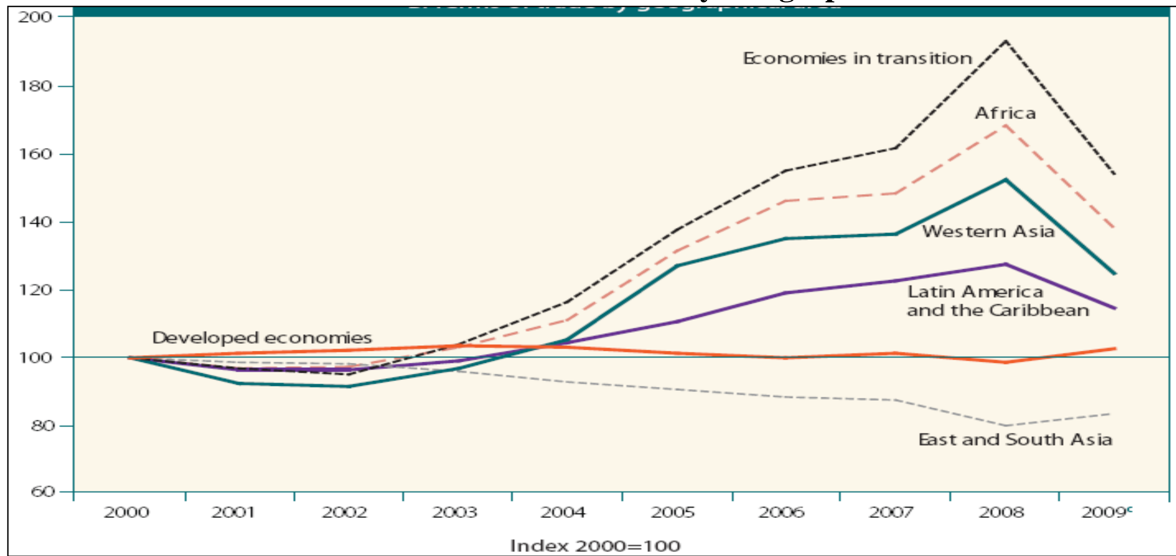
Figure 14
Recent Trends in the Terms of Trade by Economic Structure



Source: UN, World Economic Situation and Prospects, 2010.

Similarly, the terms of trade by geographical region are given in figure 15. As is clear, the transition economies (where Russia is heavily weighted) experienced a significant decline beginning in mid-2008. Nevertheless as both figures 14 and 15 show, the transition economies had experienced a very large improvement in their terms of trade in the years prior to the crisis and thus even after the deterioration during the crisis their terms of trade have improved significantly over the medium term.

Figure 15
Recent Trends in Terms of Trade by Geographical Area

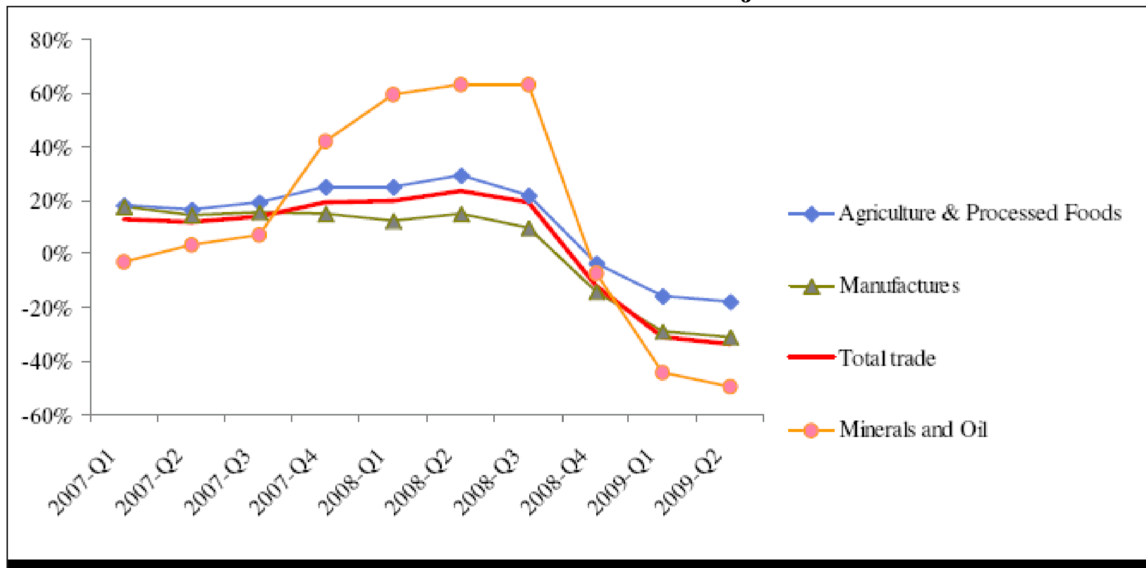


Source: UN, World Economic Situation and Prospects, 2010.

Sectoral and Geographical Changes during the Crisis

Since the prices of some goods fell much more than others and since some sectors (consumer durables and machinery) were more impacted by others, there were significant differences in the size of the trade declines by sector. Agricultural products experienced the smallest declines while oil and minerals experienced the largest.

Figure 16
Effect of the Global Crisis on the Major Sectors of Trade



Source: Richard Baldwin, The Great Trade Collapse, 2009.

Table 1 provides the change in the sectoral distribution of Russian trade (exports and imports) between the first quarter of 2008 and the first quarter of 2009. Given the very large declines in the value of trade during this period (-45.4 per cent), it is somewhat surprising that the sectoral distribution of trade did not change more. Export shares by sector changed

very little while the changes for imports were greater. More specifically, as one would expect, imports of consumer durable and machinery fell by more than imports of non-durables.

Table 1
Effect of Crisis on Sectoral Distribution of Russian Trade

	Sectoral Shares for Russian Trade	
Exports	**Q1+Q2, 2008**	**Q1+Q2, 2009**
Coal, Oil, Gas	52.9	49.7
Machinery	4.6	5.2
Other	42.5	45.1
Imports		
Machinery, Cars	64.5	48.5
Food	13.2	18.8
Other	22.3	32.7

Since the global crisis resulted in significant differences in countries' GDP growth rates, significant price changes for different goods, and large changes in product demands, it is not surprising that the geographical distribution of a country's trade flows would change as well. Table 2 shows how Russia's trade amongst several regions changed during the crisis. The declines with the CIS and Europe which were especially impacted by the crisis were generally greater than the changes with China and some of the developing countries. Nevertheless, the geographical trade shares, like the sectoral export and import shares, seem remarkably stable given the very large disruption in trade flows.

Table 2
Effect of Crisis on Geographical Distribution of Russian Trade

	Russian Trade Shares (%) by Region		
	Q1+Q2, 2008	**Q1+Q2, 2009**	**Change**
CIS	15.1	14.6	-47.3
EU	53.4	50.2	-48.7
China	7.2	8.3	-37.1
Other	24.3	26.9	-30.4
Total	100	100	-45.4

Generally there is no evidence to suggest that trade declined by less within a preferential trading area than with countries outside these areas. Clearly that was not the case for Russia as it trade with the other CIS, with which it has numerous trade agreements, declined by a similar amount as that with the rest of the world.

Trade Finance and the Global Crisis

Depending on the country and sector, approximately 10 to 50 per cent of trade is dependent on some form of bank financing. Generally the importer finds a domestic bank willing to pay the exporter once the goods are shipped or once they are delivered to the importer. The importer's bank, by providing the exporter a letter of credit, has essentially guaranteed payment to the exporter and has thereby assumed (most of) the risk that the importer will not pay. For trade which does not rely on bank financing, the exporter normally assumes the risk by agreeing to let the importer pay after some specified time period which will give the importer time to sell the goods to its customers.[6] In these cases, even when there is a bank letter of credit, there is still some risk of non-payment and to protect against this exporters may take out some insurance from their official export credit agencies or private sector insurance companies. In only a small percentage of cases does the importer pay in advance for the goods.

During the recent crisis, as global capital markets froze, the availability of bank financing for trade declined and where available its costs increased considerably (five percentage points above policy rates). This increasing difficulty in obtaining trade finance was a contributing factor explaining the large declines in trade during the crisis. In addition, as uncertainty increased during the crisis, exporters became less willing to give importers the goods on credit and increasingly demanded bank financing (i.e., a letter of credit) just as the availability of this financing was declining. In addition, since significant concerns developed about the solvency of the banking systems in some economies such as Kazakhstan and Ukraine, exporters or even foreign government export-promotion agencies began to question the reliability of the banks providing the letters of credit. This drying up of trade finance was not a new phenomenon, it generally has occurred during typical emerging market financial crisis, the Asian crisis of the late 1990s being an example.[7] Note that services trade is usually less dependent on bank financing, and this was another factor explaining why the declines in services trade were smaller than for merchandise trade.

In addition much trade is invoiced in either dollars or euros, which requires that the importer obtain foreign currency. During a global crisis, capital has a tendency to leave emerging economies and move to the perceived safe-haven of the advanced economies; as a result foreign exchange may be in short supply, which can further restrict trade. At the April 2009 meeting of the G-20 in London, there was an agreement to address the shortfall in trade financing by significantly increasing (by $250 billion) the amount provided by multilateral development banks and government agencies. For the European region, the European Bank for Reconstruction and Development (EBRD) almost doubled the amount of money available for this purpose.

Exchange Rates and the Crisis

The crisis resulted in significant depreciations in the EEE currencies versus the not only the US dollar but even the euro which declined significantly versus the dollar as well.

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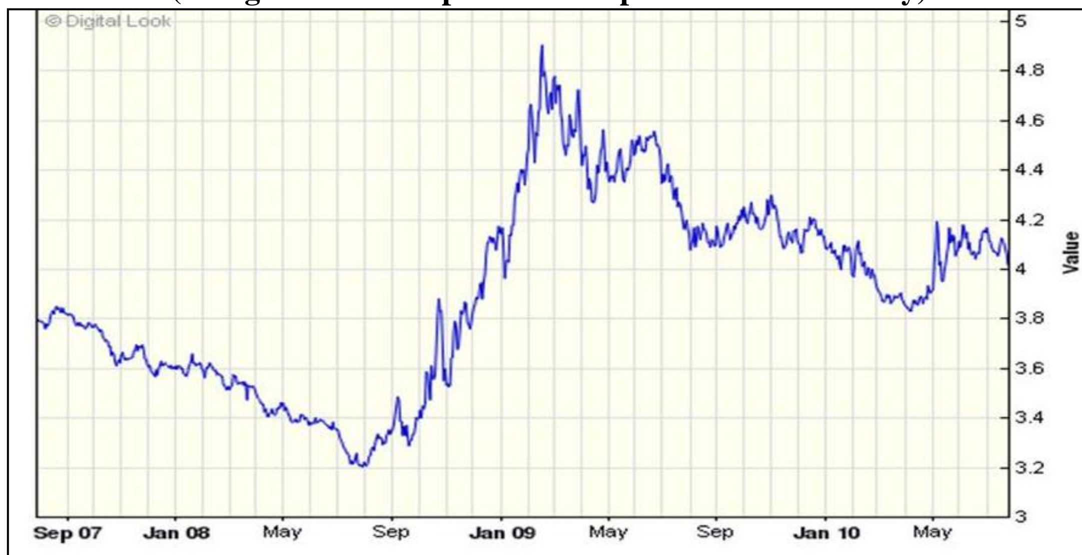
[6] The exporter may be more willing to assume the risks when the trade is intra-firm trade which is estimated to account for approximately one third of world trade.

[7] For an analysis of trade finance during the Asian crisis and some proposals for improving the system see, Marc Auboin and Moritz Meier-Ewert, Improving the Availability of Trade Finance during Financial Crises, WTO Publication (ISBN 92-870-1238-5), Geneva, 2003.

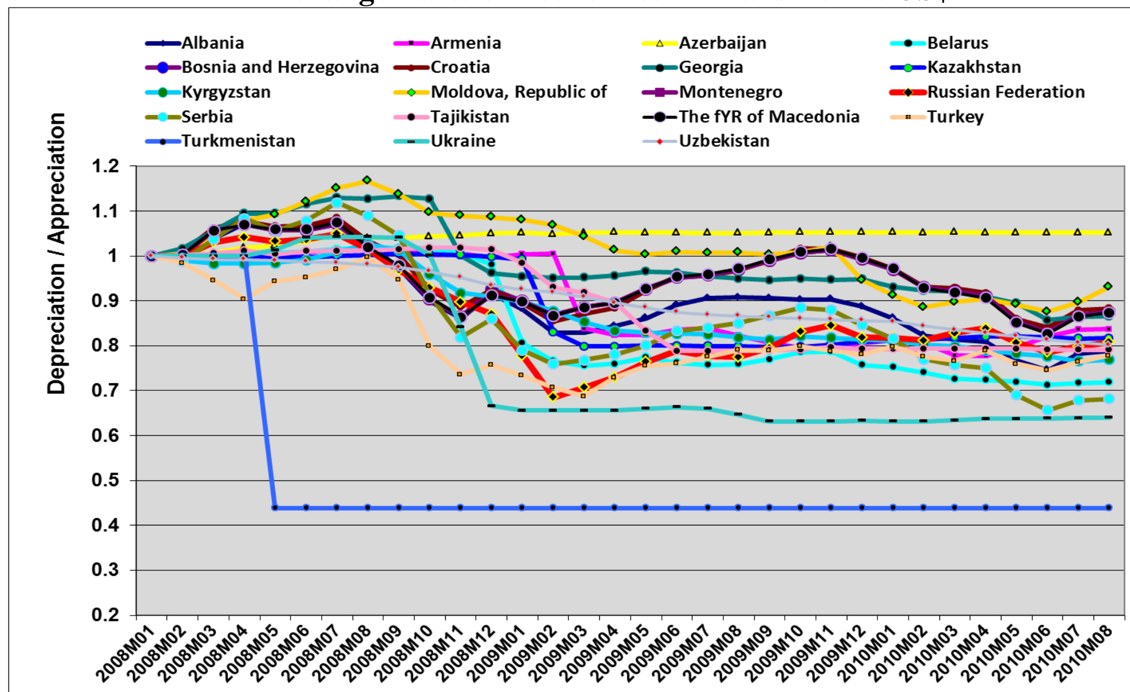
Generally most of the currencies of the transition economies have declined by about 20 per cent relative to the US dollar (see figures 17 and 18). This provided some boost in competitiveness for the region but given that foreign currency loans were significant in much of the region this worsened the debt situation of those borrowers. In fact, the large "balance sheet" impact of a depreciation on the borrowers with foreign-currency-denominated debt was the most important factor that limited the ability of EEE governments to adjust to the trade shock with a depreciation.

Figure 17
Exchange Rate: Euro vs Polish Zloty
(a larger number represents a depreciation of the zloty)



Source: Digital Look

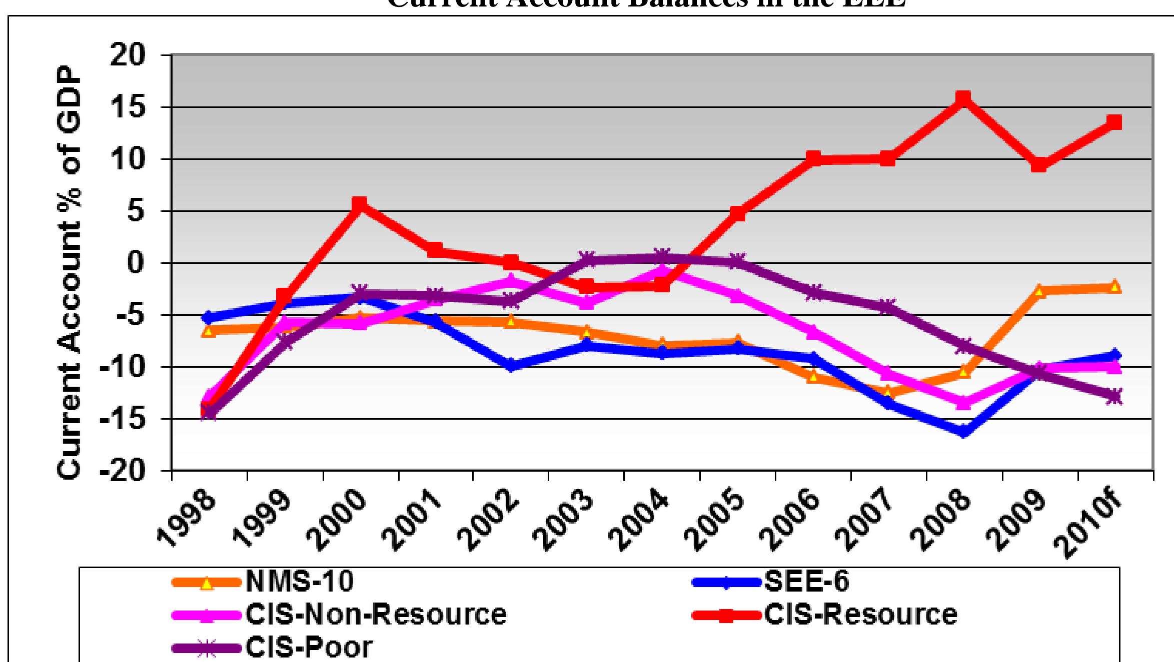
Figure 18
Exchange Rates of Economies in Transition vs US$



Trade Imbalances and the Financial Crisis

Another trade related issue connected to the financial crisis has been the issue of trade imbalances. Prior to the financial crisis there had been a growing problem of global imbalances. Essentially the average size of countries' surplus or deficits had been increasing. However, most of the attention was on those with the largest imbalances, which included the US on the deficit side and China and Japan on the surplus side. In the European emerging economies many of the non-resource-rich had some quite large current account deficits as a percentage of their GDPs while the resource-rich had some large surpluses. The average current account in the NMS, SEE and the non-resource rich CIS had reached over 10 per cent of GDP just before the global financial crisis began. [8]

Figure 19
Current Account Balances in the EEE



Some economists viewed these imbalances as worrisome, because in the past large current account deficits had been associated with debt or currency crises. Others were more sanguine and argued that the point of having open capital markets was to allow savings to go wherever in the world the rate of return on investment was the highest and large imbalances were a sign that global capital markets were operating efficiently. In retrospect, it appears that the large imbalances were a contributing factor in bringing about the financial crisis. The logic is that the large surpluses from the oil producers and Asian economies were recycled back to the advanced economies (in the form of reserve accumulation) and that in order to find a borrower for all these funds, interest rates had to be reduced to very low rates and creative ways had to be introduced that would qualify even questionable borrowers. The

[8] The vulnerability being created by this situation was described prior to the global crisis in Robert C. Shelburne, Current Account Deficits in European Emerging Markets. UNECE Discussion Paper No. 2008.2, Presented at the International Trade and Finance Association Conference at Universidade de Lisboa, Portugal, May 2008; and Robert C. Shelburne, A Note on the Changing Nature of Financial Vulnerability in the Transition Economies, an UNECE background note for the UN World Economic Situation and Prospects, Geneva, Switzerland, January 2007.

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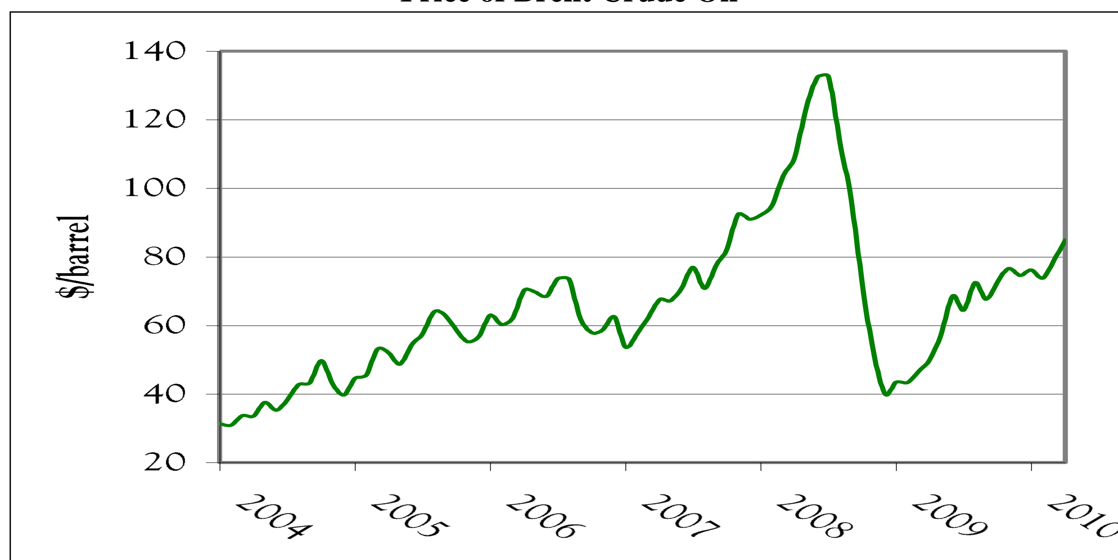
sub-prime loans were the result; they remained viable as long as housing prices continued to rise, but once housing prices started to fall the borrowers defaulted and the securities which had been created from them collapsed in value. This wiped out the asset side of the financial sector's balance sheets. (Surprisingly it turned out that European banks owned a large percentage of these US securities). Many observers believe that in order to keep the international financial system stable in the future, it will be necessary to avoid a reoccurrence of these large global imbalances.

The size of the trade imbalances declined during the financial crisis. This has been due to three main factors. As shown earlier, the volume of trade declined dramatically during between Q3-2008 and Q2-2009. If exports and imports both decline then it is most likely that the absolute difference between a country's exports and imports will also decline. The second factor was that the income declines in the surplus countries were smaller than those in the deficit countries. Since income is a primary factor that determines the level of imports, this meant that imports declined more in the deficit countries than in the surplus countries. A third factor was that the oil-rich economies were a significant source of surpluses; this includes many of those around the Caspian Sea. The financial crisis led to a collapse in the price of oil; its basic price fell from a peak of $130 a barrel in mid-2008 to $40 by the end of the year (figure 20). Not only did the revenue of these oil producers fall, but their governments needed funds to implement additional stimulus measures, and as a result their surpluses and international reserve accumulation declined dramatically.

Figure 20
Price of Brent Crude Oil



Source: US Department of Energy.

It should be clear that these three factors that led to a decline in trade imbalances were all related to the financial crisis and economic downturn. Therefore as an economic recovery begins to take hold it is likely that the size of trade imbalances will begin to reappear and this problem which contributed to the crisis will return.

What then will be necessary to address the problem of trade imbalances? In the medium- to long-term the faster growth which the surplus developing countries are experiencing (relative to the US) will work to reduce the imbalances. However this process

will take many years or even a decade or more to restore balance. It is unlikely that either financial markets or government policy makers will be willing to wait that long for a resolution of this problem. Although trade restrictions (such as those currently being discussed in the US against China) could lower imbalances, they introduce their own inefficiencies and could result is international discord. The most effective and practical solution requires a revaluation of exchange rates; more specifically, an appreciation of the surplus countries, primarily China, and a depreciation of the US dollar. Note that a depreciated currency is theoretically equivalent to a tariff on imports and a subsidy for exports, thus Chinese intervention that keeps its currency below the market equilibrium rate can reasonably be characterized as a type of "beggar-thy-neighbor" policy or a roundabout way of increasing tariffs. Given this, it follows that the current global economic governance structure is inadequate as it doesn't make a lot of sense to have international agreements about tariff policy (as with the WTO) if countries are not going to be restrained by some international agreement (at either the WTO or IMF) about exchange rate policy.

The fundamental problem is that countries have a tendency to believe that their exchange rate is their business, but an exchange rate is part of the global financial system and rates have to be set in a manner consistent with global financial stability and not at the rate a particular country desires. This results from what economists refer to as the n-1 problem; which is a technical way of saying that there are more countries than exchange rates, so each country cannot set its own rate. For example, if there were only two countries there would be only one exchange rate; thus each could not decide the rate they wanted but instead they would have to jointly agree on what the rate should be.

To reduce current imbalances, there is a need for several changes in government policy in the deficit and surplus economies. Where exchange rates are being set by governments (and maintained through currency intervention) this simply requires a change in government policy. Although the Chinese announced on June 19, 2010, that they will no longer fix their exchange rate to the dollar, they have not agreed to let it float freely, so there is a question as to how much they will allow it to appreciate which so far has been very little. For those economies whose exchange rates are market driven (i.e., their central banks are not intervening), exchange rate changes must be achieved by changes in government policy that affect variables that ultimately have an effect on the exchange rate. This includes measures that will increase savings in deficit countries (such as increasing taxes) and those that will increase investment or consumption in surplus countries.

In the European Emerging Economies the current account deficits had been financed not by government borrowing which is the more typical situation but by private sector borrowing. Public debt had hardly increased at all between 1999 and 2005 while private sector debt was growing rapidly (figure 21).[9] In fact, for the EEE the normally expected relationship between fiscal deficits and current account deficits was the exact opposite. Those economies with the largest government surpluses had the largest current account deficits (figure 22).

[9] The sample for this chart uses the 12 CIS economies plus Albania, Bosnia and Herzegovina, The fYR of Macedonia, Serbia, Turkey in south-east Europe, and Bulgaria, Latvia, Lithuania, and Romania in the NMS. Based upon World Bank data; short-term debt is considered as private sector debt.

Figure 21
Public and Private Debt in EEE

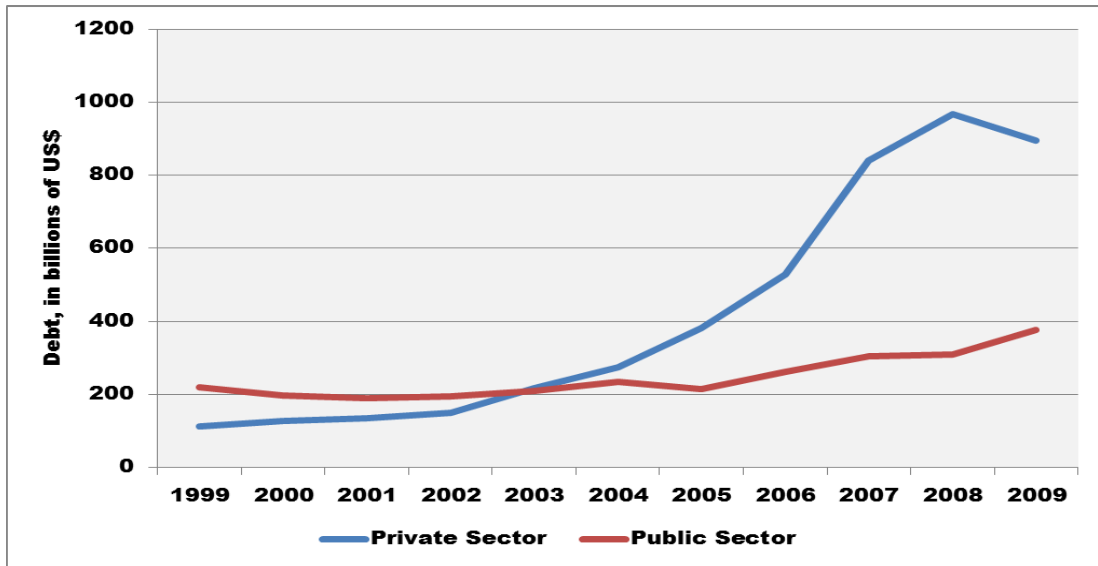
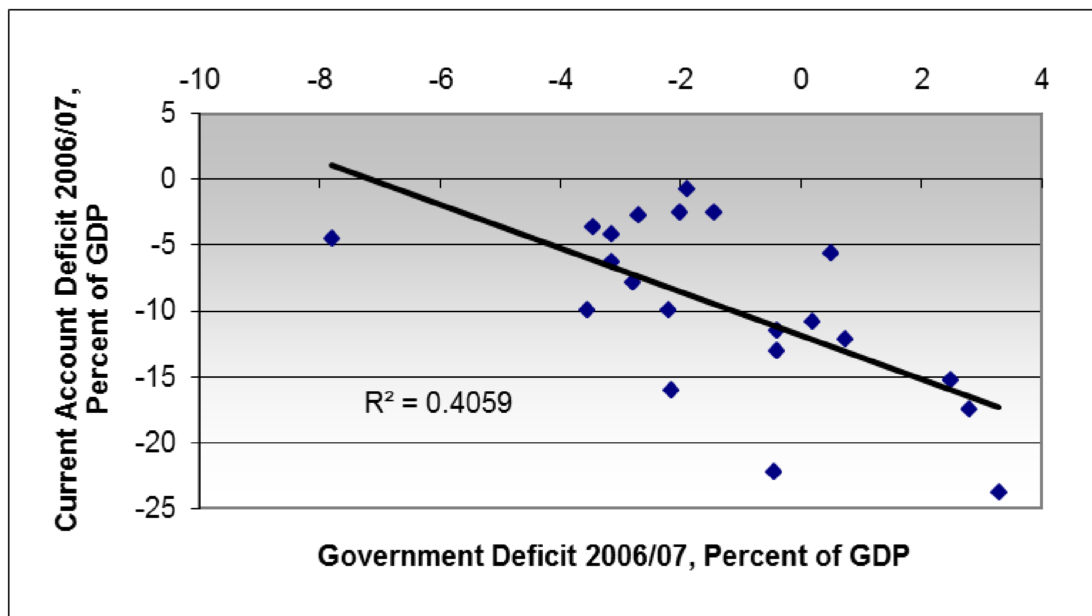


Figure 22
Current Account Deficits and Fiscal Deficits in the EEE



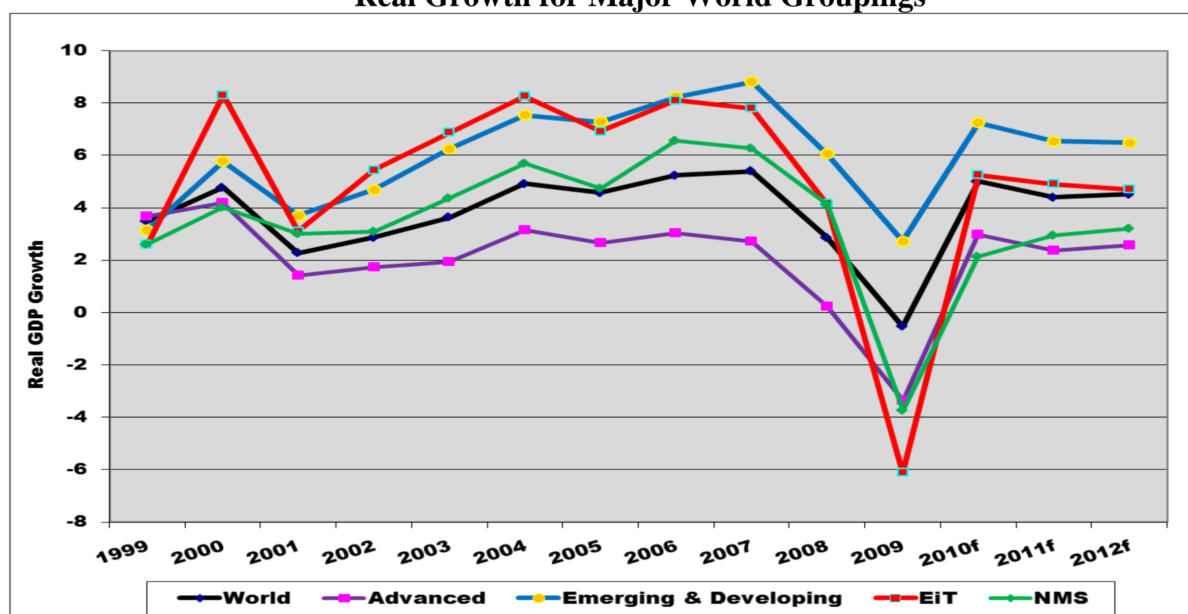
Domestic Policies to Address a Trade Shock

During the current global crisis, the European emerging economies were the most negatively impacted region in the world (figure 23).[10] The fact that this region was so devastated by the current economic and financial crisis was somewhat surprising in that the residents and financial institutions in these economies owned few of the sub-prime assets at the heart of the global financial crisis. Instead their vulnerability resulted from large declines

[10] Shelburne, Robert C. Shelburne, The Global Economic Crisis and the Transition Economies. Presented at the Project LINK Conference, Bangkok, Thailand, October 27, 2009.

in exports due to the significant declines in the GDP of their major trading partners, a rapid fall-off in remittances, the collapse in the price of commodities (especially oil), but most importantly from their dependence on external capital markets for financing their economic development. Many of them experienced a classic "sudden stop" once capital markets froze after the bankruptcy of Lehman Brothers in the autumn of 2008. This was true of many of the NMS and SEE that were overall net importers of capital, but was also true of some of the resource-rich economies (i.e., Kazakhstan and Russia) that were net exporters of capital. For this latter group the private sector was a large capital importer while the government was a capital exporter (through international reserve accumulation); when the private sector lost access to external capital markets the governments generally did not step in to provide their private sectors the external financing they needed. A vulnerability which these economies did not have, that is often associated with a sudden stop of this type, was a fiscal budget deficit; the external borrowing had been largely undertaken by the private financial sector. [11]

Figure 23
Real Growth for Major World Groupings



Several empirical studies have attempted to determine what variables were important in determining which countries of the world were the most negatively affected during the crisis. These studies have found that the most important factors that contributed to a large decline in GDP were: 1) large increases in credit growth prior to the crisis, 2) a high credit to deposit ratio in their financial sector, 3) a fixed exchange rate, 4) a high share of manufactures in their exports, and 5) a large fiscal deficit prior to the crisis. Generally these studies find that the financial channel was the most important transmission channel for the advanced economies and the trade and remittances channels were the most important for the

[11] The vulnerability being created by this situation was described prior to the global crisis in Robert C. Shelburne, Current Account Deficits in European Emerging Markets. UNECE Discussion Paper No. 2008.2, Presented at the International Trade and Finance Association Conference at Universidade de Lisboa, Portugal, May 2008; and Robert C. Shelburne, A Note on the Changing Nature of Financial Vulnerability in the Transition Economies, an UNECE background note for the UN World Economic Situation and Prospects, Geneva, Switzerland, January 2007.
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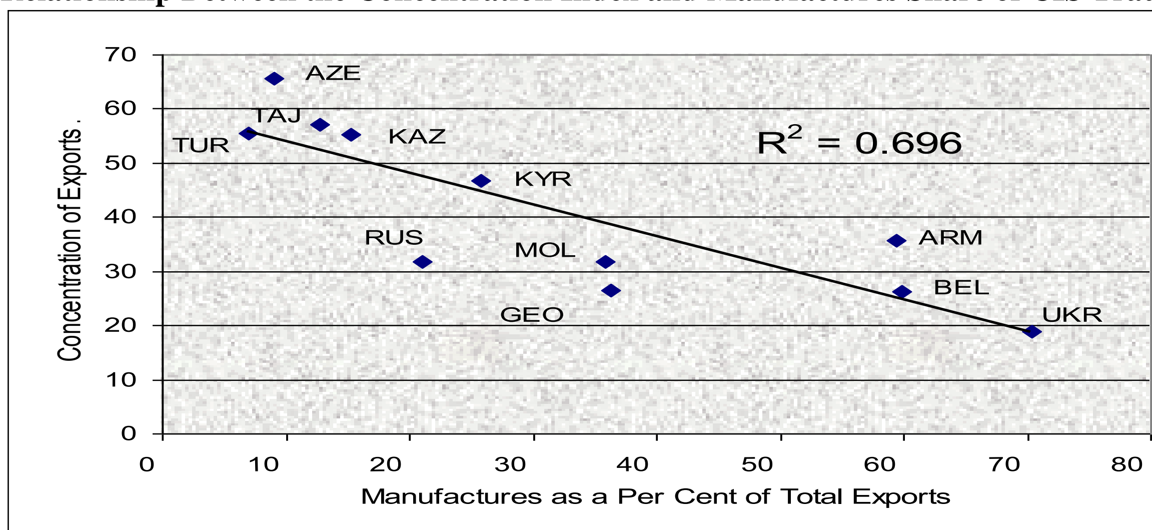
developing countries. The European emerging economies were particularly hard hit because all three channels were important for them.

There are a number of policies a country might consider to avoid a similar crisis in the future. Since this paper primarily addresses trade issues those policies related to improving domestic financial policies or to reducing a dependence on foreign borrowing are not discussed (but are obviously quite important). Instead the focus of this section is on how to avoid or minimize a negative trade shock. As revealed from the analysis of individual countries or from cross-national statistical studies, the exchange rate policy and export structure are two important variables. Having a flexible exchange rate that can depreciate when exports decline due to a foreign downturn is a fairly effective tool. The two countries in Europe that escaped from having a recession during this crisis were Poland and Albania. Both countries allowed their currencies to depreciate during the worst phase of the crisis. The Polish zloty was allowed to depreciate by 32 per cent (versus the US$) from its peak in early 2008 while the Albanian lek was allowed to depreciate 12 per cent (on a monthly average basis) between early 2008 and March of 2010. This allowed both export and import competing firms in these economies to remain competitive.

There is potentially a distinction that needs to be drawn between the optimal response to an external global trade shock (like the 2008-2009 crisis) and a more localized one. When crisis is global a depreciation might prove useful but does raise beggar-thy-neighbor concerns while that is not an important consideration if the crisis is local or related to a domestic shock. The reason that more of the European emerging economies did not use depreciation more extensively was that their residents had considerable debt denominated in foreign currency. Although there is an advantage to this during periods of strong growth it does create a vulnerability that can limit the tools available to a country during an economic downturn. There may be some theoretically optimal for the amount of foreign-currency denominated debt (as a percentage of total debt) but it is likely to vary by country and over time so realistically policy makers have a difficult task to determine whether the benefits during the good times outweigh the costs during the bad times.

Figure 24
Relationship Between the Concentration Index and Manufactures Share of CIS Trade



Source: Robert C. Shelburne and Oksana Pidufala. Evolving Trade Patterns in the CIS: The Role of Manufacturing, 2006.

The other major factor concerns the level of commodity and geographical concentration of the export sector. Clearly there is an advantage in diversification as it limits the risk from any one trade shock. Commodity concentration is a particular problem for many of the CIS and is the result of their minimal production and export of manufactured goods and heavy reliance on commodity exports, primarily oil and gas. As shown in figure 24, there is a strong correlation between export concentration and the manufactures share of exports for the region. Some form of industrial policy, perhaps combined with some form of preferential trade agreements may be necessary to address this situation.

Sectoral Interventions during the Financial Crisis

During the financial crisis some sectors were more impacted than others (Table 3). The uncertainty during the crisis caused consumers and businesses to postpone discretionary purchases, of which consumer durables and investment goods are the most important. In addition, these types of products are much more likely to be bought on credit than consumption non-durables, and once capital markets froze, financing was no longer available. In some countries, especially those with housing bubbles, the construction sector was also severely impacted.

Table 3
Domestic Production Changes by Sector (2009 compared to 2008)

	Agriculture	Industry	Construction	Services	GDP
Bulgaria	-3.3	-8.5	-7.2	-1.5	-5.0
Croatia	2.1	-8.5	-6.1	-5.5	-5.8
Czech Republic	11.1	-11.9	3.2	-2.8	-4.1
Estonia	-2.9	-23.8	-30.1	-13.7	-14.1
Hungary	-17.5	-15.9	-3.0	-2.3	-6.3
Latvia	3.5	-16.5	-33.6	-14.6	-18.0
Lithuania	3.1	-13.9	-43.3	-12.5	-14.8
Poland	2.2	-1.0	4.8	2.5	1.8
Romania	-0.5	-4.3	-13.6	-7.9	-7.1
Russia	0.3	-15.3	-17.0	-5.0	-7.9
Slovakia	10.2	-8.3	-1.8	-4.2	-4.7
Slovenia	-3.6	24.6	-9.4	-27.2	-7.8
Turkey	3.3	-7.2	-16.3	-10.4	-4.7
Ukraine	3.0	-20.8	-46.9	-7.4	-15.1

Source: Consensus Economics, July 19, 2010, p. 26-27; yellow cells are estimates by author.

In response to the fact that there were more serious downturns in some sectors than others, many governments chose to allocate some of the stimulus spending to these particularly hard hit sectors or provide subsidies to them either directly or to their customers (i.e., cash for clunkers, etc.). In other cases governments chose to try to protect these sectors with trade barriers. These sectoral interventions raised a number of trade related concerns. It is difficult to evaluate these activities. On the one hand there was an obvious logic to providing temporary support to specifically hard-hit sectors which were largely innocent by-standers (unlike the banks) during the crisis. Why allow bankruptcies and unemployment in sectors which would be needed once the crisis was over? On the other hand, since this support was provided largely on a national basis, competitors in others countries that did not

receive such support obviously felt these interventions were unfair and created their own distortions. WTO rules limited the trade distortions and in the EU rules limited government subsidies, but many felt the overall process was far from optimal. In addition to constraints provided by WTO agreements, a general spirit of cooperation was present and commitments by national leaders to avoid additional protectionist's barriers were equally important. What was apparent was that a set of rules that may be sensible for governing international competition during normal times may prove to be sub-optimal or even dysfunctional during crisis periods.

Most of the decline in trade volumes reflected less trade between established exporters and importers, and only a small share of the decline resulted in a termination of these relationships (i.e., the exporter deciding to simply withdraw from a market). This is likely to mean that the volume of trade will be able to recovery rather quickly.

Trade Protectionism during the Global Financial Crisis

During the last global financial crisis of the 1930s countries responded to the economic downturn by erecting significant trade barriers. These were thought to have been a significant factor that deepen and prolonged that crisis. In creating the GATT after World War II one of its chief objectives was to create a trading system that would avoid such an outcome if there should be another global crisis. Although there were numerous minor cases of backsliding during the current crisis, overall the disciplines created by the WTO did a remarkably good job in containing increased protectionism. However, even within the WTO rules there is significant flexibility for increasing barriers; for example tariffs can be increased if they are currently lower than the bound rate, safeguards can be imposed, and discretion can be used regarding various technical standards. It is estimated that current bound rates are twice current applied rates and the difference is significantly larger for developing countries. Thus clearly it was the threat of retaliation and the spirit of international cooperation that developed that contained protectionism more than WTO legal requirements. Exchange rate manipulation is a major weakness for the world trading system and the WTO has little influence over this. An additional factor that served to limit protectionist pressures was the large presence of multinationals in global trade. Although domestic employment considerations are politically important, business interests have significant political influence and generally support an open trade regime. As discussed in the previous section, there were often logical reasons for a number of policies that were labeled "protectionist" and these policies were the outcome of a compromise between the objective of maintaining an open trading system which avoided beggar-thy-neighbor policies and the need for governments to create additional aggregate demand. Ideally better international cooperation in addressing the shortfall in aggregate demand may have reduced this policy conflict and that is something policy makers may need to address in the coming years. However, given this failure in the area of international macroeconomic policy, the distortions or disruptions to trade that were temporality implemented may have been welfare increasing. As will be discussed in the next section, given that a crisis of this magnitude is a once in a 50 year event, given that the crisis did not result from a malfunction of the world trading system given the relative effectiveness of existing WTO rules in containing protectionism, and given the quick bounce-back in trade flows, this crisis is unlikely to result in any significant reform of the world's trading system.

The Long-run Implications of the Global Financial Crisis for the International Trade and Financial System

The global financial crisis of 2007-2010 is likely to have considerable implications for the design and operation of global, regional and national economic institutions. How is international economic policy-making likely to be affected? There is little question that the crisis will significantly alter the global financial system. The crisis has once again demonstrated the significant vulnerability that is associated with becoming dependent on external sources for development finance. Except for the natural resource rich CIS, most of the European emerging economies during 2000-2008 were running quite large current account deficits. The corresponding external capital inflows associated with these current account deficits allowed these economies to achieve investment rates much higher than would have been possible otherwise.[12] Net inflows of capital to the NMS and SEE which had reached over 8 per cent of GDP prior to the crisis were over twice the percentage level for other developing areas including even fast growing Asia. In 2006 and 2007 even the CIS had capital inflows greater than in any other developing world region except for the NMS and south-east Europe.[13] Nevertheless this reliance on external capital proved to be the most important underlying factor that caused the region to experience the economic crisis of 2007-2009 to a greater degree than any other region of the world economy. Not only was the region more dependent than elsewhere on capital inflows but the drop in capital inflows during the crisis was larger than elsewhere.

Capital flows to emerging /developing economies have been subject to a high degree of volatility over the last 40 years. The collapse of capital inflows to the European emerging economies in 2008-2009 had a number of strong similarities to the collapse in capital inflows to east-Asia in 1997-1998. Seven of the CIS (Armenia, Belarus, Georgia, Kyrgyzstan, Moldova, Tajikistan, and Ukraine), two of those in south-east Europe (Bosnia and Herzegovina, and Serbia) and four of the NMS (Hungary, Latvia, Poland,[14] and Romania) were forced to turn to the IMF for some type of assistance during the current economic crisis.[15] These experiences suggest that, given the current design of the world financial system, an over-reliance on external capital flows to finance development is not a prudent development strategy.[16] Thus even if these emerging economies once again are able to gain easy access to world capital markets, it will be a policy mistake for them to allow this dependence on foreign capital to return.

Despite these concerns about the ability of the international financial system to continuously provide external finance, there have been several recent reforms in the design and operation of the international financial system that have made it slightly more "development friendly". Given the high volatility in private international capital flows and

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[12] Robert C. Shelburne, Current Account Deficits in the EU New Member States: Causes and Consequences, *Intereconomics: Review of European Economic Policy*, March/April 2009, Vol. 44 (2), p. 90-95

[13] Robert C. Shelburne, *Financing Development in the UNECE Emerging Markets*, UNECE Annual Report, Geneva, 2008.

[14] Poland only requested a precautionary facility which was not used.

[15] Hungary, Latvia, and Romania concurrently received EU balance of payments assistance loans under Article 119 of the Treaty of Rome; this provision has now become Article 143 after the Lisbon Treaty went into force December 1, 2009.

[16] The EEE+NMS had been warned about the financial risks that were developing in the region several years before the current crisis but few policies to address these risks were implemented; for warnings see, UNECE, *Economic Survey of Europe*, 2005 No. 1, Geneva, 2005.

the large negative consequences during periods of reversals, the world needs a type of "lender of last resort" that can provide emergency funds to help replace private sector withdrawals. The IMF has primarily provided this service but its effectiveness has been limited because of limited resources.[17] At the London G-20 meeting in April 2009 the resources of the IMF were quadrupled (including the SDR increases) and this should allow it to play an enhanced role in stabilizing the international financial system. (In fact this increase was critical in containing the current global crisis).

The IMF had been highly criticized for the policies it had required (i.e., its conditionality) for providing support for decades up to and including the Asian financial crisis. During the current crisis this conditionality was relaxed considerably (largely for the EEE) in order to minimize the economic downturn in the borrowing nations.[18] Most observers view this as a significant improvement in IMF operations and one that makes the use of IMF resources more likely and thus the international monetary system more stable. During the current crisis, for the loans provided jointly by the IMF and the EU for EU countries, it has been argued that the EU advocated stronger conditionality than the IMF; and thus the IMF is even less committed to austerity than suggested by the conditionality imposed in the current crisis. According to this analysis, this difference is due to the IMF's more extensive experience in crisis management, the greater flexibility of its staff, and a more general mandate than the tight institutional constraints of the EU's Stability and Growth Pact.[19]

Most recently the IMF has suggested some support for the use of capital controls in order to reduce the boom/bust cycles caused by volatile private sector capital flows.[20] The IMF has also altered its quota allocations with additional reform being planned. The governance of the World Bank has perhaps been more democratic. In 2010 the developing and transition economies had 47.2% of the votes, which is only slightly less than their share of global GDP on a PPP basis; this is up from 44.6% as recently as 2008.[21] All of these changes in IMF governance, procedures and policy prescriptions are making the international financial system more supportive of development. However, even with these improvements the experiences of the EEE during the current crisis show that there are clear limits to the desirability of relying on external finance.

Besides the level of capital inflows the structure of those inflows is also important. Generally it is viewed that foreign direct investment (FDI) contributes more towards economic development than inflows of portfolio equity or debt. This is because FDI is generally associated with inflows of technology and managerial talent and is less subject to

[17] The fact that IMF resources had not kept up with the growth of the world economy and how this was limiting its ability to address crises is discussed in Robert C. Shelburne, Improving the Economic Performance of the Global Economy: The Challenges Ahead, *Global Economy Quarterly*, Vol. 3, No. 2 (June), 2002, pp.73-108.

[18] This change in conditionality was largely the result of the IMF's own appraisal of its previous operations; IMF Independent Evaluation Office, *Structural Conditionality in IMF-Supported Programs*, Washington, DC, 2007.

[19] Susanne Lütz and Matthias Kranke, *The European Rescue of the Washington Consensus? EU and IMF Lending to Central and Eastern European Countries*, London School of Economics Discussion Paper No. 22/2010.

[20] Something UNCTAD has been advocating for a long time.

[21] In terms of voting share at the World Bank, the US with 15.85% has less than its share of world GDP, Germany (4.0%) has about the same as its GDP, and France (3.75%) and the UK (3.75%) would appear to be over-represented.

volatility. As with capital flows generally, the European emerging economies were relatively successful in attracting FDI inflows. In the SEE (excluding Turkey) the stock of FDI as a percentage of GDP increased quite substantially from 14 per cent to 40 per cent between 2000 and 2008. In Turkey it only increased from 7 per cent to 10 per cent over this period. In the CIS the stock remained fairly constant at 16 per cent of GDP over this period, although it varies widely from being over 50 per cent in Georgia and Turkmenistan to only about 10 per cent in Belarus, Russia, and Uzbekistan.[22] Besides FDI being smaller and growing by less in the CIS than in SEE, an additional issue is that the inflows have been largely associated with natural resource extraction. Increasing FDI in their manufacturing and services sectors could contribute significantly to making the CIS more dynamic and diversified. The stock of FDI has been increasing and is quite high in the NMS with its level in most countries being in the range between 30 to 50 per cent of GDP.

The reforms required to increase FDI are primarily domestic as there are at this point no meaningful proposals under consideration as to how the global financial system might be altered to promote additional FDI. Creating a more inviting investment and business climate has been one of the major challenges facing the EEE since the beginning of the transition and remains an important issue for these economies. For example in Russia the price/earnings ratio of its stock market is almost half that of other comparable emerging markets, reflecting nervousness on the part of global investors about exposure to that market. Nevertheless, slow but incremental progress is being made as judged by such indicators as the EBRD transition score, the World Bank's Doing Business rankings, or the World Economic Forum (WEF) competitiveness index. Further required domestic reforms include strengthening legal systems and the rule of law, strengthening intellectual property rights, and easing investment requirements. Bilateral investment treaties have also been shown to have a positive impact on increasing FDI and may be able to substitute for weak domestic institutions.[23]

Given the potential risks of private sector capital inflows, other public sources of finance would be desirable for the EEE. These funds could come from sources such as a global carbon tax, a tax on financial or exchange market transactions, or on the exploitation of sea-bed resources. SDRs could be allocated based upon development needs instead of by IMF quotas.

While the financial crisis will have significant implications for the design and operation of the international financial system, its implications for the world trading system are likely to be relatively minor. Although the crisis resulted in some increased trade barriers, for the most part they were relatively insignificant and temporary. The disciplines of the WTO proved to be quite effective in containing protectionist tendencies. Most policy experts therefore do not feel that the experiences during the crisis require any significant reforms of the WTO. Thus unlike the world financial system and the main international organization (IMF) that oversees it, the world trading system and the WTO are unlikely to be significantly altered based upon the financial crisis. Even the current Doha negotiations are unlikely to be significantly altered from their pre-crisis course. Given the regulatory failures of the advanced economies' financial systems, one might have expected the desirability of developing countries liberalizing their financial sectors to foreign investment

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[22] UNCTAD, World Investment Report, Geneva 2009.
[23] Matthias Busse, Jens Königer, and Peter Nunnenkamp, FDI Promotion through Bilateral Investment Treaties: More than a Bit?, *Review of World Economics*, Vol. 146(1), April 2010, pp.147-177.

under the General Agreement on Trade in Services to have been reduced, but that does not appear to have happened.

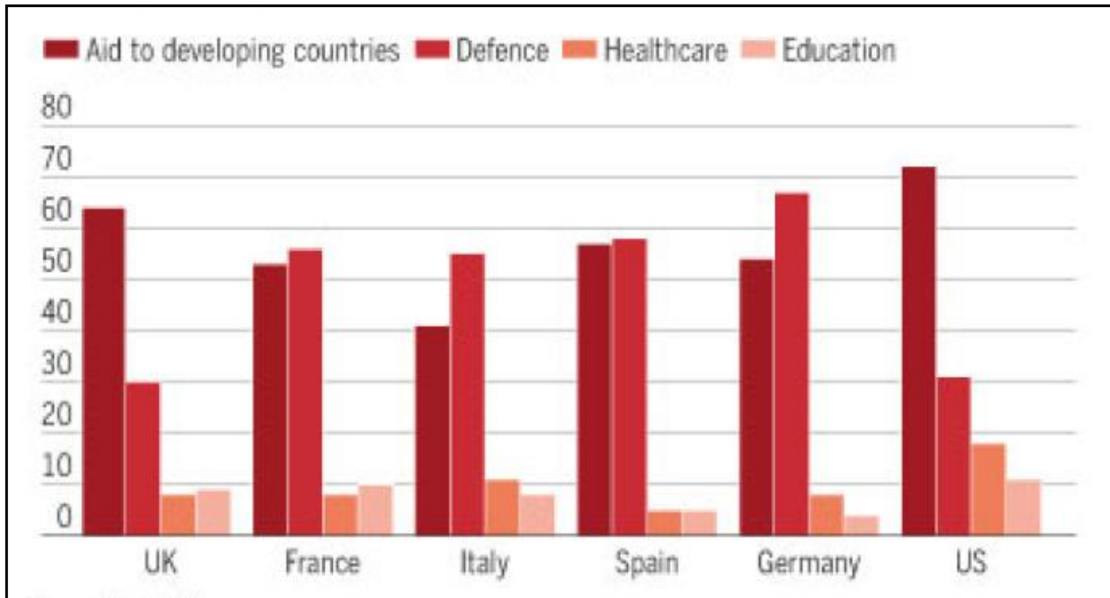
At the national level, although the crisis affected many countries through their trade accounts, there has been no real discussion about limiting the size of the traded sector. The major implication that has been drawn has been simply to reinforce what was believed before the crisis regarding the importance of diversification. And given that in countries where there is significant concentration, it is natural resource commodity concentration; for practical purposes this means the emphasis needs to be on increasing the size of manufacturing sectors. The reason for this advice is twofold. Given that some sectors were much more impacted than others, it makes sense to be diversified as a way of limiting large swings in particularly impacted sectors. Secondly, the commodity sectors experienced larger declines than for manufactured goods during the crisis so having a greater share of manufacturing would be a way to minimize export volatility.

The crisis may have implications for the level of development assistance including that for developing trade capacity, or more specifically the "Aid for Trade" initiative. The fiscal positions of the advanced economies which provide most of the aid have deteriorated due to the crisis. As a result, significant cut-backs are being implemented in government budgets, and foreign assistance is unlikely to be spared. In fact a recent Harris poll taken in the donor economies found that when given a choice, a majority of the public favored cutting aid to developing countries, and this was most often their first choice of what to cut (figure 25).[24] However, the UK government has so far ring-fenced foreign assistance from the deep budget cuts recently proposed by the newly elected conservative government but that is likely to be an exception. The OECD DAC donors have failed to meet their commitments made in 2005 at the Gleneagles G8 meeting and at the UN Millennium +5 Summit. Historical evidence shows that financial crises often lead to a decline in foreign assistance.[25] Over the 2001-2007 period, the transition economies received over $1.9 billion for Aid for Trade projects, which included improving the transport infrastructure and border crossing procedures, and assistance in complying with technical barriers to trade and sanitary and phytosanitary measures.

A further development that has come out of the global financial crisis that may have some long-run implications for the world trading system is that the G-20 effectively replaced the G-8 as the main global economic policy making group. To some degree this did represent a significant move towards making the governance of the global economy more democratic and thus representative of the interests of developing countries. Given an expectation that increased representation will be reflected in the decisions made by the group, this development could be viewed as an important step towards making the international economic order more development friendly. However, it is not clear at this point how this more general change in representation might impact specific economic policies.

[24] Tony Barber, Strong Public Support for Spending Cuts Across Europe, Financial Times, July 11, 2010.
[25] Hai-Anh Dang, Steve Knack, and Halsey Rodgers, *International Aid and Financial Crises in Donor Countries*, Work Bank Policy Research Paper 5162, Washington, US, 2009.

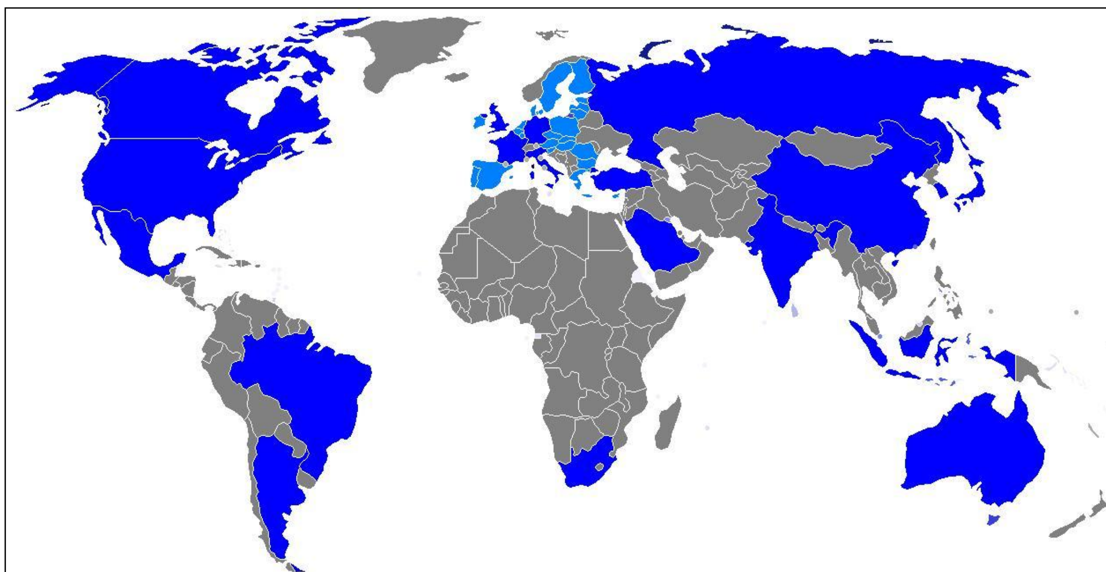
Figure 25
Public's View of What Should Be Cut



Source: Financial Times, July 11, 2010 based upon a Harris Poll.

The G-20 includes 19 countries and the EU as shown in figure 26, where the EU members which are only represented as part of the EU are given a lighter shade. If all of the EU members (the four countries in the 19 of the G-20 plus the other 23 EU members) are included in the totals, the G-20 accounts for 85 per cent of world GDP and 67 per cent of world population. Nevertheless 150 countries, mostly developing ones, are not represented. Given the difficulty in achieving efficient decision making with large groups, the G-20 might represent for the time being the best trade-off between efficiency and democratic representation.

Figure 26
The Members of the G-20



Finally it should be mentioned that it has been argued that the Asian financial crisis of 1997-98 provided a strong stimulus for strengthening regional economic initiatives in that region, both of a monetary nature (such as the Chiang Mia initiative) as well as trade integration with PTAs. Given that some of the EEE were particularly negatively impacted by this crisis, the question arises as to whether their common experience will stimulate them in the direction of further enhancing regional economic initiatives.[26] The status of regional trading arrangements in the EEE is discussed

References

Auboin, Marc and Moritz Meier-Ewert. 2003. *Improving the Availability of Trade Finance during Financial Crises*, WTO Publication (ISBN 92-870-1238-5), Geneva, 2003.

Barber, Tony. 2010. Strong Public Support for Spending Cuts Across Europe, Financial Times, July 11.

Baldwin, Richard. 2009. *The Great Trade Collapse: Causes, Consequences and Prospects,* VoxEU.org eBook, November.

Borchert, Ingo and Aaditya Mattoo. 2009. Services Trade – The Decline that Wasn't, in Richard Baldwin (ed.), *The Great Trade Collapse: Causes, Consequences and Prospects*, VoxEU eBook, 2009.

Busse, Matthias and Jens Königer, and Peter Nunnenkamp. 2010. FDI Promotion through Bilateral Investment Treaties: More than a Bit?, *Review of World Economics*, Vol. 146(1), April, pp.147-177.

Dang, Hai-Anh and Steve Knack, and Halsey Rodgers. 2009. *International Aid and Financial Crises in Donor Countries*, Work Bank Policy Research Paper 5162, Washington, DC.

Freund, Caroline. 2009. *Trade Responds to Global Crises: Historical Evidence*, World Bank Working Paper WPS5015.

IMF Independent Evaluation Office. 2007. *Structural Conditionality in IMF-Supported Programs*, IMF, Washington, DC.

Lütz, Susanne and Matthias Kranke.2010. *The European Rescue of the Washington Consensus? EU and IMF Lending to Central and Eastern European Countries*, London School of Economics Discussion Paper No. 22/2010.

Mattoo, Aaditya and Ingo Borchert. 2009. *Services Trade- The Collapse that Wasn't*, VOX, November.

[26] The status of regional trading arrangements in the EEE is discussed in another series of lectures and summarized in another discussion paper; Robert C. Shelburne, Regional Trade Integration in the Transition Economies, UNECE Discussion Paper No. 2010.3.

Shelburne, Robert C. 2010. Regional Trade Integration in the Transition Economies, UNECE Discussion Paper No. 2010.3.

Shelburne, Robert C. 2009. *The Global Economic Crisis and the Transition Economies*. Presented at the Project LINK Conference, Bangkok, Thailand, October 27.

Shelburne, Robert C. 2009. Current Account Deficits in the EU New Member States: Causes and Consequences, *Intereconomics: Review of European Economic Policy*, March/April, Vol. 44 (2), p. 90-95.

Shelburne, Robert C. 2008. *Financing Development in the UNECE Emerging Markets*, UNECE 2008 Annual Report, UN, Geneva.

Shelburne, Robert C. 2008. *Current Account Deficits in European Emerging Markets*. UNECE Discussion Paper No. 2008.2, Presented at the International Trade and Finance Association Conference at Universidade de Lisboa, Portugal, May 2008.

Shelburne, Robert C. 2007. *A Note on the Changing Nature of Financial Vulnerability in the Transition Economies*, an UNECE background note for the UN World Economic Situation and Prospects, Geneva, Switzerland, January.

Shelburne, Robert C. and Oksana Pidufala. 2006. *Evolving Trade Patterns in the CIS: The Role of Manufacturing*, UNECE Discussion Paper No. 2006.2, September. Presented at the International Trade and Finance Association conference, University of Lodz, Poland, May 2006, and at the European Trade Study Group, University of Vienna, September 2006, and at the UNCTAD trade seminar series, October 2006.

Shelburne, Robert C. 2002. Improving the Economic Performance of the Global Economy: The Challenges Ahead, *Global Economy Quarterly*, Vol. 3, No. 2 (June), pp.73-108. Presented as the Presidential Address to the International and Finance and Trade Association, Ramkhamhaeng University, Bangkok, Thailand, May 30.

United Nations. 2010. *World Economic and Social Survey: Retooling Global Development*, (E/2010/50/Rev. 1, ST/ESA/330), United Nations, New York.

UNCTAD. 2009. *World Investment Report*, UN, Geneva.

UNECE. 2005. *Economic Survey of Europe*, 2005 No. 1, UN, Geneva.