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Programme Paper IE PP 2009/04

Risk Mitigation Takes on a More Significant Role as Globalization Amplifies the Impact of World Cycles

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October 2009

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Key Points

- The financial crisis and global recession have provided many lessons in terms of risk mitigation strategies as well as highlighting the need to improve assessment of systemic risk and macro prudential oversight.
- Apart from providing a stark warning that the business cycle has not disappeared, the global recession has also revealed how country risk has been influenced by globalization in ways that were obscured by the ‘great moderation’: global-scale industries may be efficient and boost global productivity but high concentrations of them can leave individual countries dangerously exposed to cycles in world demand over which they have little control. Events have amply demonstrated that countries can no longer afford banks ‘too big’ for national taxpayers to support in a crisis, but they may also not be able to afford exposure to global manufacturing industries ‘too big’ to support in a downturn. It is not just banks that are viewed as ‘global in life and national in death’ but car companies – and other industries – as well.
- Certainly countries that are particularly dependent on global cyclical industries, such as Germany and Japan, were exceptionally hard hit at the outset of the crisis – indeed, more than those weighted towards financial services, such as the US and UK. High-price durable and investment goods producers have seen output fall by about 30% during 2009 (indeed some have lost far more) compared with a drop of just 5% or so in non-cyclical industries and similar, small losses in services such as retailing. Cyclical goods account for nearly 80% of Japan’s exports and they are even more important in the German economy, in spite of its more diverse export mix, as total exports are almost 50% of GDP.
- In view of 2009’s deep recession and the realization of the grave risks that some countries face if global cycles similar to this one recur, what response may be expected and is there a role for risk mitigation policies beyond setting aside even more financial resources as a form of insurance in case of emergencies? Should Japan diversify exports? Might Germany boost consumption and non-cyclical services to reduce export exposure and the risk from trade shocks? Ultimately, the argument for diversification versus specialization must be considered in the wider context of the need to manage national

risks as well as international repercussions and contagion. Yet industry dispersion might serve to reduce global productivity.

- As restructuring and migration of global industries continues apace, it is important to ask whether these trends might increase global instability if they overwhelm an individual country's ability to cope with the impact. In order to minimize such risks, host countries for global-scale cyclical industries ideally should have a large domestic market and non-cyclical sectors to damp external shocks (low export/GDP ratio) as well as strong financial resources to enable companies and the economy as a whole to survive impacts of severe downturns and pay for substantial policy responses. In the past, the US, and to some extent Japan and Germany, best fulfilled these criteria but the obvious candidate to take up more of the global risk now is China.
- Does China realize the implications of encouraging such a trend towards concentration of global-scale industries? Would China be able to absorb the impact, and bear the cost, of global cycles and, possibly, future shocks on a scale similar to that just seen or worse?
- Pursuing still greater industry concentration requires tough appraisal of the policies required to manage potential risks, such as financial provisioning and fiscal flexibility. The alternative is to encourage dispersion, more closely matching the scale of businesses to local markets and countries' ability to bear risk, even if this means failing to maximize global productivity. But maintaining dispersion would almost certainly require intervention and/or non-market solutions. These could be seen, rightly or wrongly, as a form of protectionism through the manipulation of the international structure of industry.
- The implications of these choices for the next phase of global industry development – and for international relations, trade and industry policy, productivity, inflation etc. – are very different and need careful consideration. The alternative scenarios, and the management of risk mitigation, will influence the outlook for global cycles versus stability. These issues also play a prominent role in deepening the analysis of systemic risk and determining the toolbox for macro prudential oversight – the most difficult but critical part of recommendations regarding the post-crisis regulatory and supervisory framework.

Introduction

Events of the last two years, since the Western banking crisis first broke out in public in August 2007, have obviously led to unexpected outcomes, including not only the financial crash and an unexpectedly deep global recession but also the fact that *relative* economic impacts across the major economies were not as predicted. There are important lessons here for the future of global industries and for both national and international risk management policies.

As an example of the surprising outcomes across the major advanced economies, Germany and Japan emerged as the most severely hit by the immediate impact of the global crisis. At the low point of the downturn in the first quarter of 2009, GDP fell by around 7% in Germany and 8% in Japan (actually quite similar to the results for bankrupt Iceland and distressed parts of Eastern Europe), compared with losses of 3–5% for the US and EU average. Estimates for the full year have improved slightly thanks to a rebound in GDP from the second quarter but the figures still suggest a more severe recession than that experienced in, say, the US or France. These data contrast sharply with forecasts from late 2008 and early 2009, when it was widely believed that Germany and Japan would weather the recession in far better shape than countries which were more exposed to the turbulence in the financial sector, such as the US and the UK. This was a serious error of judgment (in both country and global forecasts) that ignored mounting evidence of a massive loss in trade and industry in late 2008.

In addition to geographic divergence, it is also important to recognize the varying sectoral impacts of the crisis. This year's fall in global GDP in current prices may be of the order of 1–3% (equivalent to some US\$1–2 trillion). This is highly unusual but it is notably dwarfed by business losses and the decline in wealth; in fact, the recession has probably cost businesses some US\$15 trillion in lost revenues in 2009 alone. Both business revenues and investment spending have fallen by 20-30%, a drop similar to that in exports (a loss of US\$3-4 trillion in export earnings). How did this happen? In the wake of the Lehman Brothers bankruptcy, the freezing up of money markets, business investment and trade credit, adding to already weakening consumer demand for high-price durables (chiefly cars), led to an additional and unprecedented collapse in world trade. Failure to understand the significance of this global slump and the duration of dislocation effects through 2009 lay behind most forecasters' mistakes – perhaps they simply found turbulence on this scale and depth almost inconceivable.

During the first months of 2009, exports from Germany and Japan (as well as other major trading nations such as Singapore and Korea), fell by as much as 40% – and even in the third quarter of 2009, they remained around 20-30% below their 2008 peaks. At least in terms of the impact on output, *over-reliance on manufacturing trade proved to be even more damaging than over exposure to a large financial sector during the worst of the crisis.*

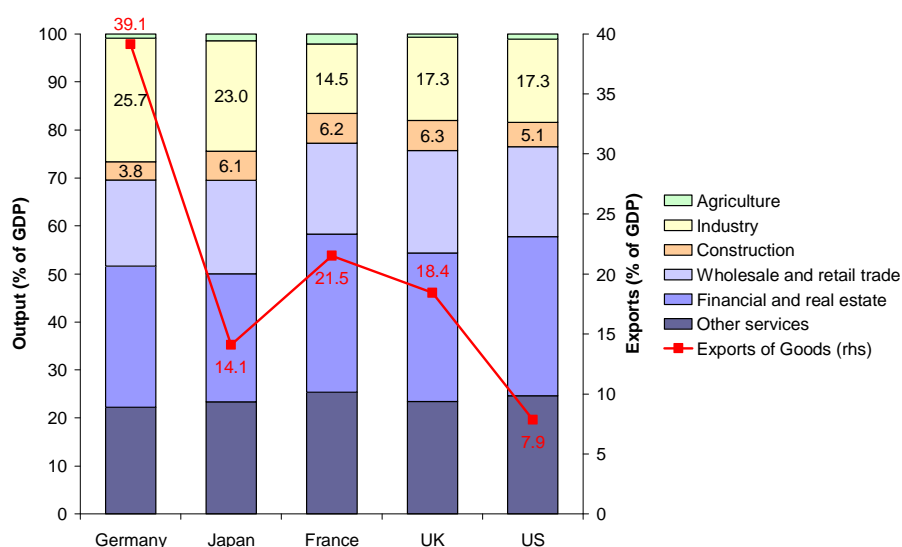
This paper will examine the role of cyclical industries and trade in determining the depth of the recession in each of the world's most important economies, looking particularly at comparisons of Germany and Japan with the US, China, France and the UK, but also at the outcomes for various emerging markets. Although specialization in global cyclical industries has helped Germany and Japan to sustain dynamic manufacturing sectors and become two of the world's most successful exporters, the inherent volatility of these industries in times of crisis indicates the need to carefully examine the implications of excessive dependence on global demand and possible ways of provisioning for or alleviating such risks in the future. Spurred by the crisis experience, mature economies may seek to limit the risk of hosting global-scale industries: this could serve to accelerate the de-industrialization of the mature economies and encourage an even greater accumulation of global manufacturing in China, in spite of previous complaints about this trend. Alternatively, concentration could be discouraged: arguably, a dispersed industrial structure might improve national stability although at a cost in terms of global efficiency, and at the risk of appearing to encourage protectionism.

Dependence on cyclical industries

Cyclical goods manufacturing actually accounts for the largest share of industrial production in most advanced economies. In Japan, for example, these goods represent approximately 75% of the final demand for industrial products. This means that the performance of industry as a whole can serve as a reasonable proxy for how cyclical goods behave in relation to the rest of the economy.

As a share of total output, the importance of the industrial sector in Germany and Japan is clear: it is around one-quarter of GDP, well ahead of the comparable figures for other advanced economies such as France, the UK and the US. In both cases, this comes at the expense of the service sector given the low shares of agriculture and construction.

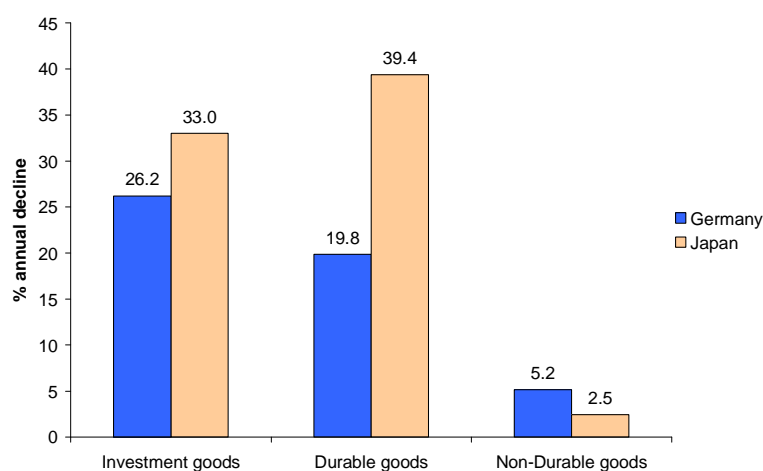
Figure 1: GDP by output



Source: OECD

Across the different categories within industrial production, it is easy to see how investment and durable goods have taken the biggest hit in the recession, while non-durables have remained more stable. For example, in Japan, where more specific information is available, some sectors such as machinery, vehicles and iron and steel products have suffered declines of more than 40% over the course of 2009. On the other hand, non-durables such as food and fuel have seen only modest falls in production, or even slight increases.

Figure 2: Annual declines in manufactured goods in 2009

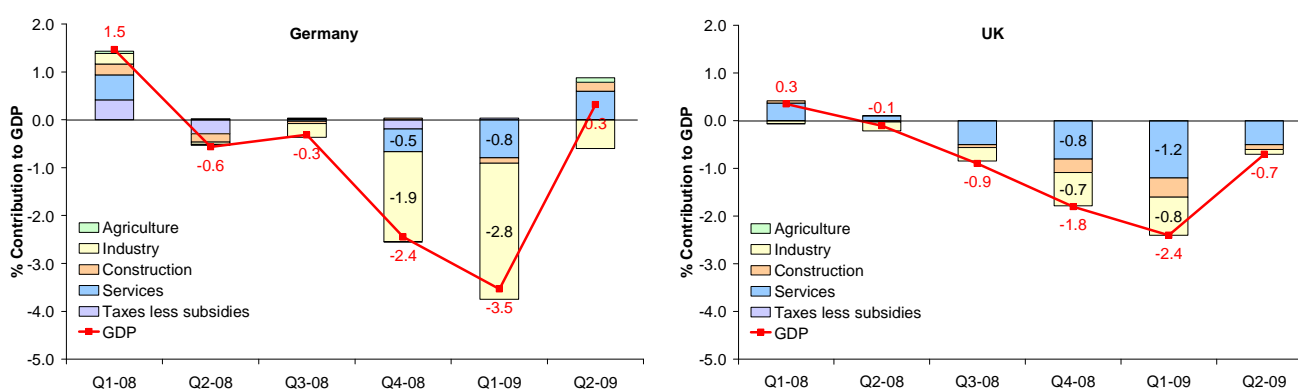


Sources: DeStatis, Japan Statistics Bureau

If the contraction in the cyclical goods sector is responsible for the overall fall in industrial production, how has this affected total output in the economy? An analysis of quarterly GDP in terms of output (in other words, the supply side of the economy) gives a clear indication of the extent to which the industrial sector has been the main contributor to the fall in GDP.

In Germany, during the two quarters where output fell the most (Q4-08 and Q1-09), industry accounted for around 80% of the drop despite representing only a quarter of total GDP. This stands in stark contrast to the more service- and finance-oriented UK economy, where a substantial drop in industrial activity only contributed less than half the loss in output.

Figure 3: Contributions to GDP by output for Germany and the UK



Sources: OECD, DeStatis, ONS

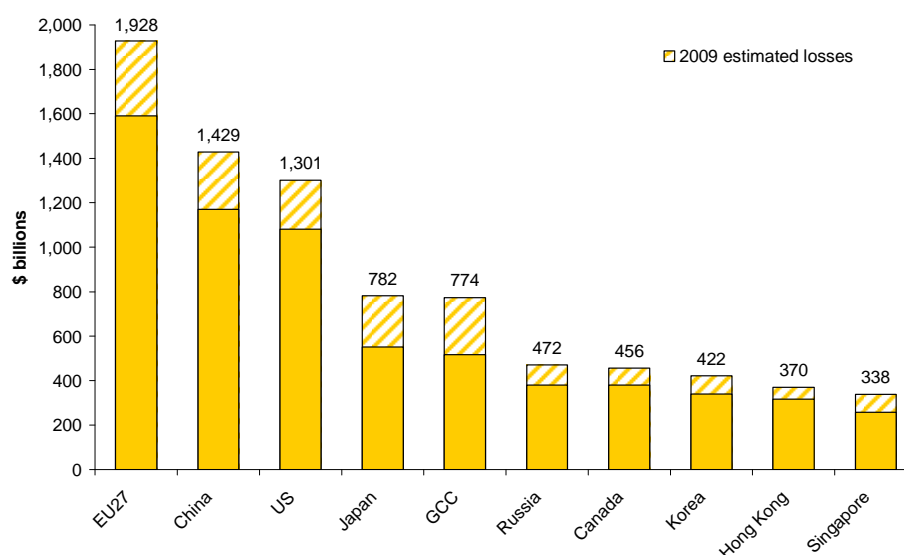
The role of trade in determining the scale of countries' recessions

Contagion through trade has played an important role in generating a global recession and also in the varying impacts seen across leading economies. Both Germany and Japan rank among the world's top five trading nations. They have also recorded persistently large trade surpluses over a long period, a result of the heavy emphasis placed on export competitiveness as part of their overall economic growth strategies.

Strong global growth up to mid-2008, linked to the boom in emerging market economies, and the pre-eminence of their export sectors led both countries to be confident about trade prospects even in the face of weakening OECD growth from around 2006. Furthermore, trade had been relatively immune to negative effects during the early stages of the banking crisis in mid-2007. Global demand and exports only weakened significantly over the summer of

2008 when commodity prices also began falling – in retrospect, early signs of the EU and US moving into recession and pulling world trade down with them.

Figure 4: World trade rankings by exports of goods (2008)



Source: WTO

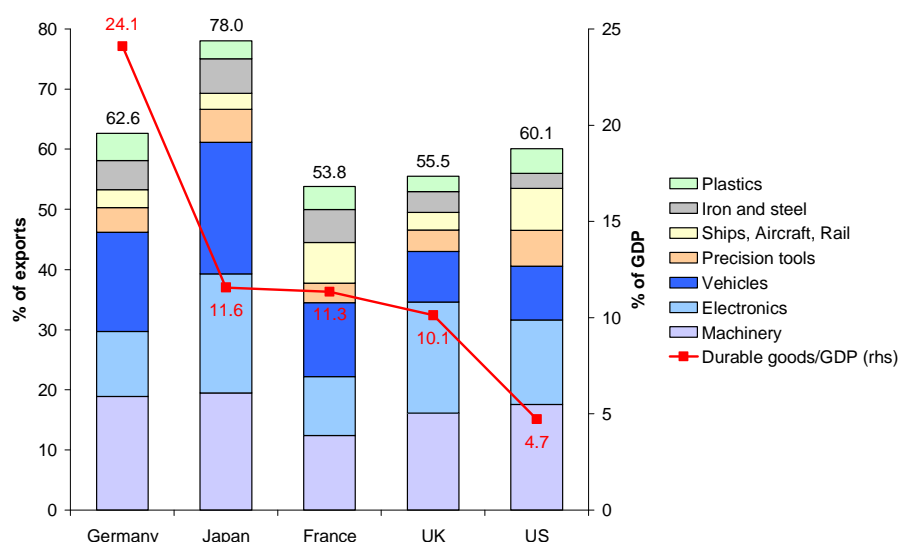
Perhaps analysts were then blinded by the shock of the financial turmoil that broke out in September 2008. Certainly they focused too heavily and exclusively on the financial-sector implications and problems of the US and UK, rather than paying attention to what was happening to companies and business investment, real demand in the global economy and thus world trade. But, for whatever reasons, neither Germany nor Japan expected such savage effects from the downturn and most forecasters continued to predict milder recessions for these countries compared to more financially vulnerable economies such as the US and UK. While estimates finally changed in the face of the early 2009 data (remaining low even after being slightly upgraded on improvements in the Q2 figures), to some extent there is still a sense of disbelief about the vulnerability of these two economies and world trade.

Table 1: Changes in IMF and OECD forecasts as recorded at mid-year

	IMF Oct 08	IMF Jul 09	IMF Diff.	OECD Dec 08	OECD Jun 09	OECD Diff.
Germany	0.0	-6.2	▼ 6.2	-0.8	-6.1	▼ 5.3
Japan	0.5	-6.0	▼ 6.5	-0.1	-6.8	▼ 6.7
France	0.2	-3.0	▼ 3.2	-0.4	-3.0	▼ 2.6
UK	-0.1	-4.2	▼ 4.1	-1.1	-4.3	▼ 3.2
US	0.1	-2.6	▼ 2.7	-0.9	-2.8	▼ 1.9

Closer scrutiny of the composition of each country's exports reveals a vastly different picture of how their dependency on cyclical goods actually affected trade performance. As can be seen in Figure 5, the share of investment and durable goods in Germany's exports was not significantly higher than that of France, the UK or the US, being slightly over 60% of the total. There was little difference in the mix of goods as well, given that machinery, electronics and vehicles made up an almost equal proportion of exports for all five countries (between two-thirds and three-quarters). However, Germany's share of durable and investment goods in GDP is a staggering 24%, well over twice that of Japan and France, and over five times the share of the US, which is less dependent on trade owing to the size of its domestic economy.

Figure 5: Share of cyclical goods in total exports and GDP



Source: ITC (2006 data)

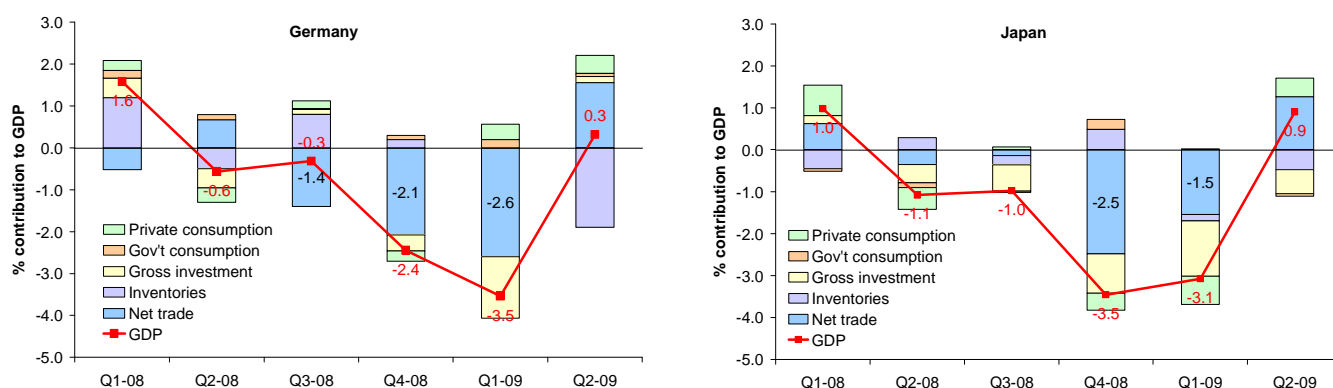
On the other hand, Japan's dependency on cyclical goods exports stands out from the rest: these represent nearly four-fifths of total exports. But given that Japan's trade is a much smaller percentage of its total output, its overall dependency on durable goods relative to GDP is not so high; it is roughly in line with those of France and the UK.

The contrast between Germany and Japan is evident. Whereas Japan does indeed suffer from too heavy a preponderance of cyclical goods over other types of exports, Germany's problem stems from its dependency on trade itself. Both suffer a similar impact from the global cycle but for somewhat different reasons, with varying implications for possible policies to alleviate

this risky dependence in the future should governments focus on this rather than policies to offset the impact on the local workforce and companies. Arguably, Germany needs to raise domestic demand (local consumption could be significantly higher to create a more balanced economy) while Japan needs to grow more non-cyclical industries, such as local services.

Lastly, a look at GDP in terms of expenditure (the demand side) shows how trade has been by far the most important general channel of transmission for Germany's and Japan's economic shock. Both countries suffered from significant negative net trade impacts during the height of the crisis – in other words, the fall in exports outpaced the fall in imports.¹ Overall, the quarterly trajectory of GDP was roughly similar in both countries, and contrasts markedly with the figures for countries that traditionally have trade deficits, such as the US and UK, where net trade actually made a positive contribution because imports fell more than exports.

Figure 6: Contributions to quarterly GDP by expenditure for Germany and Japan show trade and investment losses



Source: OECD, DeStatis, ESRI

Risks of over-reliance on global-scale industries

Just as the crisis has revealed that countries can no longer afford global banks bigger than their economic base (and taxpayers) can support, so too have the risks from global-scale industries been shown to be much greater than previously expected. Even relatively large countries can ill afford high concentrations of global industries that collapse when global demand drops.

¹ The very slow adjustment in imports to some extent reveals just how unexpected the drop in sales was in Germany and Japan – companies simply did not plan on there being such a massive loss and many had stocked raw materials and other inputs ready for production and sales that never materialised.

For example, Germany's and Japan's heavy reliance on global cyclical industries, compared to their relatively small home markets, has put their economies (and public-sector finances) in an unexpectedly vulnerable position, one which was largely unforeseen (certainly underestimated) as long as the financial crisis remained outside the real economy. Rather than providing a bulwark against financial turmoil, once the crisis spilled out into a collapse in demand for investment and durable goods, these countries' industrial bases were severely damaged.

This raises important questions about the need for re-examination of risk mitigation strategies to address the threat from external shocks, especially as this recession has highlighted that far from disappearing, global cycles could recur and even become larger as a result of globalization. While cyclical businesses and economies expect to cope with moderate volatility, swings on the scale just experienced were of a quite different order of magnitude and impacted at a national not just company level, bringing national economic and financial security into question.

In spite of their competitive strengths, the worldwide recession made it impossible for either Germany or Japan to find alternative export markets to make up for the lost trade with their major partners. Given the global scale of leading export industries, their domestic economies would simply not have been able to absorb the excess capacity even if there had been a bigger fiscal stimulus. As a result, key companies have been forced to absorb huge losses, whereas less export/manufacturing-intensive economies experienced a more moderate downturn.

A strong recovery in key sectors such as the vehicle and machinery producers seems unlikely given the still prevailing state of caution in business and consumer confidence. Arguably, some industries, such as ICT, are far better positioned to bounce back given the shorter life-cycle of their products: this sector tends to see vicious but short-lived cycles. But for other cyclical industries to return to their pre-crisis form, there must be clear and undisputable signs of a sustained recovery in global demand.

Japan's dilemma appears less complicated than Germany's given its better-balanced expenditure profile and low export/GDP ratio (see Box 1 for a more detailed examination of Germany's trade dependence). Diversifying towards non-cyclical goods and services, and into a broader spread of export markets, could be a feasible medium-term goal. Nevertheless, the longer-term reality of a rapidly ageing population will imply that businesses must keep the export option open given the limitations of the domestic market and the need to

achieve economies of scale in manufacturing. And Japanese business may be forced to move away from the industry sectors which it traditionally dominates. Past failure to achieve the same level of success with, for example, computers and telecommunications as with cars and electronics suggests possible difficulties in achieving diversification.

BOX 1: Germany needs to review arguments for rebalancing

Arguments in favour of rebalancing Europe's largest economy are hardly new and have typically focussed on external impacts of a demand-lite Germany. However, the issue has attracted renewed interest and increased punch due to the crisis, which has shown just how vulnerable Germany itself has become to global cycles as consumption has stagnated for a decade while exports have risen to nearly 50% of GDP (Figure A1). Even though the government has alleviated the burden of Germany's export-driven recession on households, at considerable cost in terms of rising public debt, GDP has dropped markedly and underemployment has shot up: Germany is not China.

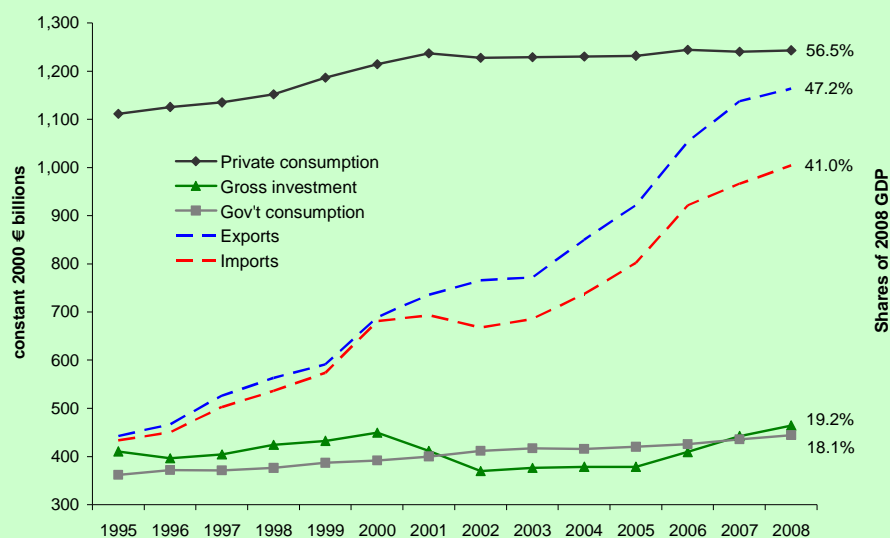
As this response demonstrates, much greater policy flexibility and more substantial financial provisioning are required to address the burgeoning scale of external threats. But it is not just this insurance that needs to be upgraded, risks should be reduced as well. Past emphasis on export performance and competitiveness has arguably been excessive and a contributory factor to the unbalanced development of internal demand and, ultimately, the unexpectedly high cost of intervention to alleviate the impacts of a trade shock. Although this recession was exceptional, cycles will recur and they may be both more global and substantial than in the past.

If economic growth had been more balanced, with consumption and investment rising by an average 2–3% per annum in real terms over the last decade, rather than remaining static, the export share in GDP might have stabilized at close to 40% (still higher than those of other large mature economies and greater than China's). In this case, GDP (in current prices) would have been approximately €200–300 billion (around 10%) higher by 2008. The trade surplus would probably have disappeared, with Germany importing an extra €150–200 billion or so from its trade partners, in turn boosting their growth and reducing Euro area internal imbalances. This would have been a healthier outcome both for Germany and its partners.

Although low growth in consumption may partly be explained by the stable (and ageing) population, it also reflects lack of progress for poorer, low-income consumers. Furthermore, reflecting the lack of development in the

economy, German investment rates are among the lowest in the OECD, having dropped below 20% after 2000 – just as the trade gap began to widen.

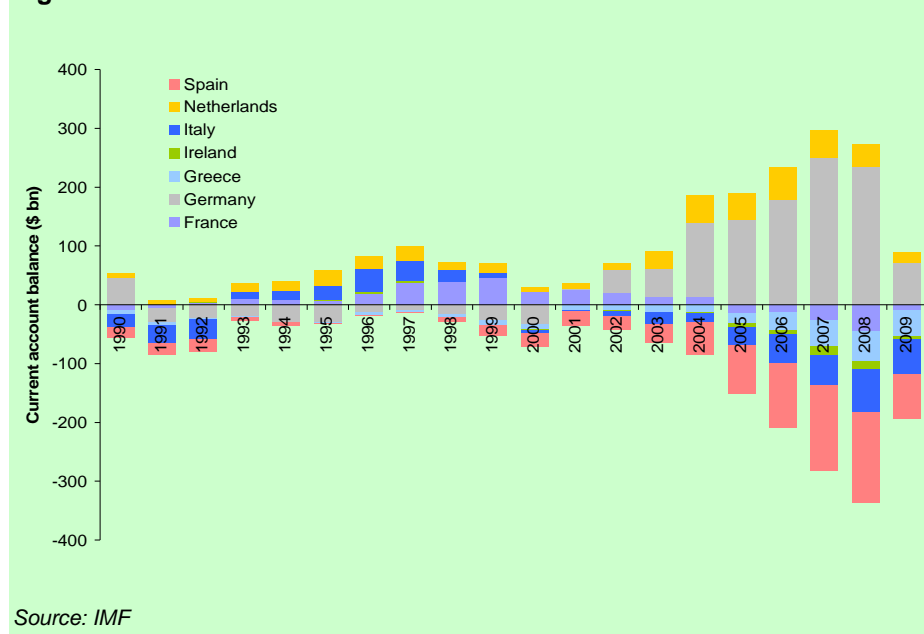
Figure A1: German GDP components in constant euros



Source: OECD

Much of the trade surplus generated in Germany was recycled into capital outflows, notably to Eastern Europe where it fuelled credit booms, with disastrous results for highly leveraged borrowers once the crisis broke. Less obvious is the fact that Germany's surpluses also have their counterpart across other Euro area economies such as Greece, Portugal, Italy and especially Spain. Although the Euro area appears balanced versus the rest of the world, thus attracting less criticism than, say, China or Japan, in fact it has significant internal imbalances. Given the inability to use exchange rates to modify trade within the Euro area, members must rely on other policies to adjust imbalances. While the US may berate China for not revaluing, in the Euro area it tends to be Germany that lectures its weaker trade partners on the need to boost wage competitiveness and skills.

Efforts to limit the impact of the crisis on jobs and business have stabilized the economy but a very high cost for public finances, which will cause stress in the domestic economy for years to come. This stress, together with the experience of a severe shock for export businesses, may persuade Germany to reconsider the cost of pursuing such a heavily export-oriented growth strategy and to examine instead the possible alternatives for a more secure, domestic oriented development in the future.

Figure A2: Euro area imbalances

Conclusions: focus on risk mitigation strategies as crisis highlights vulnerability to global cycles

Increasing interdependence has been a key factor in making countries ever more vulnerable to contagion from disturbances in the world economy. Just as the threat of flu pandemics has escalated with globalization and the rise of mass travel and tourism, so too will financial and economic turbulence transmit rapidly into impacts around the world. All these interactions and threats require a commensurate global policy response and they need to be built into risk assessment models and macro prudential oversight.

The economic risks might be even greater were it not for the fact that international companies actively manage their own supply chain security, diversifying across producers and suppliers in order to reduce dependency and create a form of insurance policy. And banks are now being required to undertake stress-testing under extreme scenarios and increase provisioning to meet implied risks. However, national governments have been less active in undertaking similar security assessments and scenario stress-testing to examine not just traditional concerns such as military, energy and food security but broader macroeconomic and financial threats. Risks go deeper, beyond public-sector and external finances, exchange rates, commodity prices and inflation, to an economy's structure, including excessive dependency on external demand and on specific industries that may create unaffordable turbulence in the face of future shocks. Given the crisis

experience, it is easier to appreciate the need for improved mechanisms to maintain stability and resilience in view of the potential recurrence of global cycles and shocks.

While there has been previous discussion in Europe of the potential for asymmetric impacts from shocks, this was mainly in the context of the single currency and definition of an optimal currency zone. The growing scale of the risk from global specialization and global demand cycles was not identified, and certainly previous provisioning and policy mechanisms to address the impact of business cycles were inadequate to address this downturn.

The crisis has highlighted the risks posed by both global cyclical industries and large global banks. Should these continue to be concentrated in a few specialist economies in order to achieve maximum global productivity benefits (the dividend from global trade) and economies of scale? Or should the risks of real world volatility and vulnerability be taken into account, implying that it might be preferable to forgo some productivity and price benefits as a form of 'insurance premium' for reducing country-specific risk by spreading business more evenly around the world?

These are trade-offs that the global recession has revealed all too clearly, with stark implications in terms of industrial impacts for Germany and Japan and in terms of global finance for the US and UK – and in terms of the public-sector costs for all these countries. At the heart of the dilemma is that the boom-bust cycle has laid bare both rewards and risks from global business organization for national economies in ways that both naive pro-trade lobbyists and anti-globalization protesters failed to grasp.

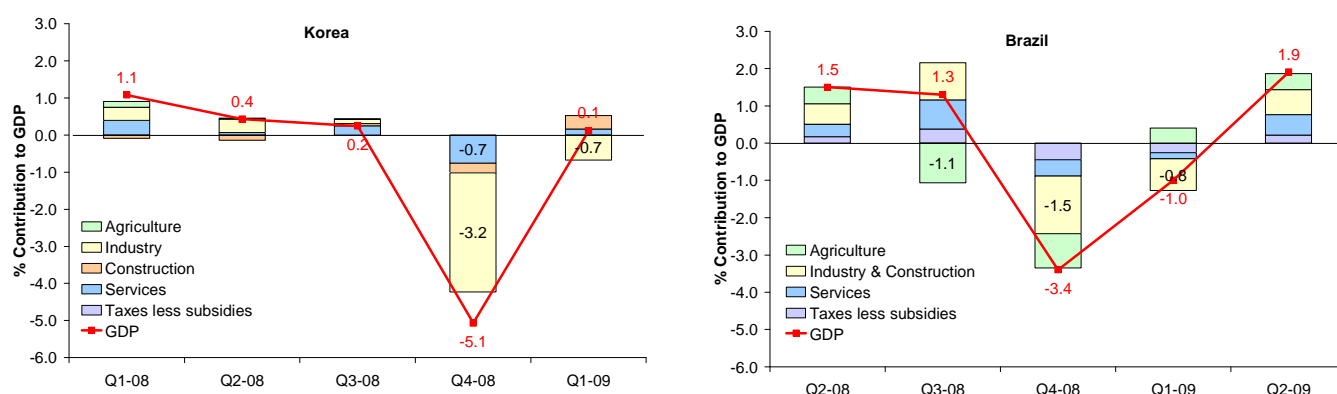
Inasmuch as there has been a debate over the consequences of globalization for economic stability, this has focused chiefly on the effects of the liberalization of capital – what is generally referred to as 'financial' globalization. In this sense, the benefits of free-flowing capital and floating currencies must be weighed against the risks of sudden reversals of foreign investment and currency devaluations. The verdict is still out on this score, given the high frequency of financial crises since the 1980s and the more severe shocks witnessed by countries which opened up too far, too quickly. On the other hand, there was greater consensus when it came to real 'trade' globalization: freer trade led to faster growth, particularly for developing countries benefiting from growing exports of manufactures and commodities.

While the anti-globalization movement did raise questions over issues such as fair trade and impacts on poverty and the environment, mainstream macroeconomic arguments that questioned unrestricted trade globalization

were few and far between. The least considered scenario was that trade shocks could lead to massive dislocation effects on productive capacity, something which had not been witnessed since the Great Depression. After all, no crisis since the 1930s had been ‘super-synchronized’ until 2008. While one region in the world was feeling the pinch, it could always rely on the availability of export markets elsewhere to be pulled out of recession. However, the collapse of trade in late 2008 was not only rapid and global but on a scale exceeding even that experienced during the Great Depression over the same time-span.

Nevertheless, in spite of the global shock to financial markets and trade, the GDP impacts of the crisis were not uniform: some economies were more sheltered than others. For those countries that were relatively immune to the direct impact of financial turbulence, a resilient domestic economy heavily weighted towards a less vulnerable mix of services and non-cyclical industries was able to offer at least partial insulation from the trade shock (e.g. France, Brazil and the larger Asian emergers). In contrast, countries with high export-to-GDP ratios and/or a heavy bias towards cyclical manufacturing could not avoid big losses. Germany and Japan are the obvious examples of vulnerability across the advanced economies but others include Korea, Taiwan and Mexico.

Figure 7: Contributions to quarterly GDP by output for Korea and Brazil showing greater diversification in Brazil



Source: OECD, IBGE

Examples of vulnerability to global cycles can also be seen among the commodity-dependent exporters, although to a large extent this risk and the potential for volatility in export revenues were well understood before the crisis (they did not come as a surprise last year). Many of the commodity economies have pursued fairly cautious budget policies – including, for

example, the build-up of FX reserves and sovereign wealth funds – but in terms of other macro adjustments, there may be tough limits to potential diversification to reduce the risk of export revenue volatility.

For individual countries as well as regions, the impacts of the crisis have highlighted the need to pay greater attention to internal balance and diversification across both demand and supply. In a way this is a new form of the old problem of avoiding the ‘one crop economy’ trap. Excess dependency on industries that are highly vulnerable to big global cycles may need to be tempered, especially if countries want to avoid large disruption to public finances. Acceptable and sufficient risk mitigation policies (financial provisioning and fiscal flexibility) must be put in place to cope with the consequences of major downturns. Risk mitigation has taken on a new urgency and a more significant role.

If some countries decide that the best option for them is to reduce their exposure to cyclical industries (whether in banking, cars or machine tools), such withdrawals could lead to an even greater concentration of global cyclical industry supply. China would become even more dominant in this case but also the epicentre of global cyclical risk.

The opposite scenario would involve a gradual dispersion of industry across countries but it is difficult to picture such a readjustment of supply and production without coordinated intervention. The fact that countries such as Germany and Japan have maintained their world-class status despite appreciating currencies and high wage rates proves just how important factors such as technological know-how, the availability of highly skilled labour and even history may be. Moreover, establishing globally recognized brands is a slow process which typically has to overcome persisting stereotypes of quality and reliability. There is no reason for leading exporters to limit sales and lose market share, and no incentive to move voluntarily to redirecting business towards less lucrative products and markets. The answer must be to expand new areas of business as the key to reducing dependency, not to cut existing business.

Ultimately policy-makers must decide whether continuing dependency on cyclical industries is worthwhile relative to the risk posed by sporadic global cycles. Should the belief persist that the current crisis is a once-in-a-century event, then there seems little reason to worry about another all-out collapse in world trade and business activity. And if existing trade imbalances appear to be manageable after all, there is little need for a major readjustment in global production either. But the lessons of the recent crisis suggest that countries

which fail to grasp the complex linkages between economic structures and global shocks may end up paying dearly for inadequate risk analysis and mitigation policies should cycles recur.

Finally, there is a global as well as country perspective to the greater than expected risks and costs of global cycles, and the relationship with the chosen means (and affordability) of risk mitigation. These issues need to be taken into consideration when moving towards bolstering macro prudential oversight and assessment of systemic risk.