Summary for non-specialists
Occasional Papers No. 112 / July 2012
Occasional Papers index

Measuring the macroeconomic resilience of industrial sectors in the EU and assessing the role of product market regulations

There is now a consensus in the economic profession that economic stability fosters long-term growth. Stability implies less uncertainty in forecasting future economic conditions and therefore allows for more efficient investment decisions and a more efficient allocation of resources. The resilience of firms and economic sectors to shocks – that is the insulation of their output from exogenous shocks - is crucial to determine macroeconomic stability.

The literature has discussed extensively the role that institutions play in ensuring the unfettered functioning of markets and the rapid and efficient adjustment of economic activity in the face of economic shocks. Product market restrictions (including barriers to entrepreneurship, barriers to trade and investment, and state controls) hinder price and wage flexibility and prevent markets from re-adjusting rapidly following a shock. In addition, by facilitating entry and exit, product market reforms also ensure a more efficient reallocation of resources within and across sectors and may give firms greater incentives to adopt more efficient and flexible production techniques. Finally, product market restrictions may lead to market segmentation, thus delaying the process of economic integration within the European Union. Market segmentation within the EU hinders adjustment of relative prices and hence the movement of factors of production across countries, which is crucial when shocks hit countries in different ways.

This study examines the characteristics of sectoral business cycles in EU countries and investigates the reasons which may explain differences in the adjustment capacity of sectors and countries to common economic shocks; broadly defined as unforeseen changes to business conditions. In particular, it evaluates the role played by institutional factors and product market reforms in accelerating this adjustment capacity. We find that product market regulations at the national level affect resilience: for example, country differences within industrial sub-sectors appear to be explained by how far product market reforms have advanced. Thus, countries which have advanced more in terms of product market reforms, such as Denmark, rank at the top of the resilience ranking.

Besides product market regulations, two other variables are important in explaining resilience: financial development and openness to trade. While it is generally accepted that openness and financial development help to boost efficiency and competitiveness, the negative association between these two variables and resilience merely suggests that more open countries are more exposed to external shocks. The fact that openness to trade and financial

development matter, suggest that product markets reforms become even more pressing as countries open up to trade in goods, and financial services.

Our results also demonstrate the presence of important differences within industry. For example, the chemicals, the mining and the textiles sub-sectors are more resilient than, the motor vehicle sub-sector. Indeed, the motor vehicle sub-sector is consistently found to be the least resilient sector in the EU. When the sectors are grouped into those manufacturing consumer, investment, or intermediate goods, we find that consumer goods sectors are significantly more resilient, while investment goods are less resilient. This may be due to the fact that the income elasticity of demand is higher for investment goods than for consumer goods, and therefore demand for investment goods fluctuates with the business cycle.

Differences in resilience across sectors also help us to interpret the ranking of countries in terms of resilience. Since we find, for example, that the car industry, or more generally the investment-goods sector are less resilient, one would expect countries with large automobile industry or investment goods sectors to be less resilient to shocks. Indeed, our estimates confirm this intuition, and imply, for example, that Germany and France, which have very large automobile sectors, rank relatively lower in terms of overall resilience. However, the results indicate that country-specific structural characteristics such as the level of product market regulations have a stronger impact on resilience than sectoral composition effects.

Examination of the 2008-09 downturn confirms that product market regulations play a significant role in determining the individual sector response to the shock. The least resilient sectors appear to be the motor vehicle and basic metals sectors. At the other end of the spectrum we have food and beverages, computer and electrical equipment. In terms of countries, Denmark comes again at the top of the ranking, while at the bottom we have countries which have advanced very little in product market reforms, such as Belgium, Greece, and Hungary.

A variable which is important in explaining the level of resilience in the last recession is the level of debt. We find that countries with higher debt levels appear to be less resilient to shocks, probably because they had little room to implement discretionary fiscal policies. High debt levels may also hinder the adjustment process by increasing uncertainty about the direction of future policies.

Overall the findings stress the importance of pursuing decisive and timely product market reforms, especially in view of the process of international integration. This process is not likely to be reversed, given the undeniable benefits of integration, hence it must be accompanied by reforms that increase the flexibility of markets and reinforce their adjustment capacity. At the sectoral level, the study identifies the fragility of some sectors (e.g. motor vehicles), as well as the higher resilience of consumer goods compared with investment goods, which can justify well-targeted fiscal stabilization policies, in the presence of exceptional shocks, for countries with sound fiscal positions.

The work has revealed a number of avenues for improvement and interesting questions for future research. Depending on data availability the work can be extended to cover other sectors in more detail, for example services. In addition, in order to be able to extract more information concerning sectoral differences, more sectoral data is required, both covering product market reforms, and other characteristics including from labour markets at a sectoral level.