Gains from Risk–Sharing in the EU

The new EU countries could gain more from financial integration than the EU-15

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In 2004 ten countries joined the European Union. In addition to political unification, the EU is moving toward a unified market with a joint economic policy, single currency, and reduced restrictions on flows of goods, services, labor, and capital.

Unrestricted international trade is widely believed to be one of the most beneficial aspects of economic integration. The merits of greater financial openness and larger cross-border flows of money are more often disputed because of the recent financial crises and following instability they brought to a number of the emerging markets. In addition, the economies within the euro-zone cannot reduce the impact of adverse country-specific events (such as sudden falls in output due to, for example, natural disasters) by monetary policy instruments at a country level. This, in turn, can lead to the further instability of individual economies and the economy of the Union as a whole unless mechanisms that allow diversifying country-specific shocks are in place.

Diversification of economic and financial risks within a group of countries is known in economic literature as "risk-sharing." In case of full risk-sharing, all country-specific output shocks are completely diversified across the group members so that individual country's output volatility is not reflected in that country's income (full income risk-sharing) or consumption (full consumption risk-sharing).

We estimate the benefits from financial integration from international risk-sharing among the 25 EU countries and do not discuss any other aspects of the integration that may improve the well-being of the EU residents. We compare potential gains form risk-sharing among country-members and determine the countries that would benefit the most under conditions of the larger Union fully achieving risk-sharing.

Domestic Macroeconomic Volatility Higher for the NMS

The ten new EU countries have generally higher and more volatile average GDP per capita growth rates (4.2% per year) compared to the rates of the EU-15 (2.5% per year). The variability of output growth is three times larger for the NMS than for the EU-15. Both the rate of per capita consumption growth and its variability follow a similar pattern.

Income risk-sharing gives insight on how effectively a country uses international asset markets to insure national income against country-specific output shocks and thus how well it is integrated into those markets. On average, the new EU countries have a larger degree of income risk-sharing than the EU-15 members. The average extent of income risk-sharing is 26% for the new members and 9% for the EU-15 (100% means full risk-sharing). This may not mean that the new EU countries are more open to capital flows. Instead, this may imply they mostly share risk within the EU, while the EU-15 countries are more likely to engage in risk-sharing with the rest of the world, including investing in North America and Asia.

All 25 countries will benefit from financial integration, and the total average welfare gains of the NMS could amount to 5.2%

Income risk-sharing would contribute to consumption risk-sharing (or "consumption smoothing"). On average, the EU-15 exhibits a much higher degree of consumption risk-sharing (47%) than the new EU countries (15%). A lot of consumption smoothing within the EU-15 is achieved through international transfers, national government spending, and corporate and private saving.

Larger Gains for the NMS

To quantify the potential benefits from risk-sharing, we estimate a welfare gain from risk-sharing as a permanent increase in the level of consumption of a representative individual when a country achieves full risk-sharing. We estimate total potential welfare gains the countries obtain from moving from financial autarky to full risk-sharing. The measure is estimated using GDP per capita data under the proposition that in autarky a country consumes its own GDP and under full risk-sharing it consumes a portion of pooled group-wide GDP. Judging from the estimated extent of risk-sharing, none of the economies we study is in financial autarky. Therefore, we also estimate unexploited gains from risk-sharing when a country moves from the actual level of consumption to the level under full risk-sharing conditions.

The countries with more volatile output should, in theory, gain relatively more than countries with stable output from pooling the individual output risks. In addition, a country whose output is counter-cyclical to other countries in the Union would be "compensated" for stabilizing the group-wide output.

We find that the new EU members could on average gain more from financial integration than the EU-15. The total average welfare gains amount to 5.2% (permanent increase in the level of per capita consumption) for the new EU countries and to 1.2% for the EU-15. The welfare gains are larger for smaller economies and are especially large for Lithuania, Estonia, Malta, the Czech Republic and Slovakia. The average unexploited welfare gains are again much larger for the NMS (6.6%) than those for the EU-15 (0.9%). The larger value of the gain for the NMS is primarily attributed to a higher volatility and sometimes the counter-cyclical pattern of output and consumption spending.

Thus, the empirical results show that if financial integration advances and the EU member countries move closer to full risk-sharing conditions, the welfare gains will be substantial for all the countries.

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