The Structural Determinants of External Vulnerability

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This paper studies the role of some country's structural characteristics, such as its degree of trade and capital openness, financial development, labor market flexibility, and firm entry flexibility in the amplification or smoothing of terms of trade shocks. Working with a panel sample of 90 countries and annual observations for the period 1974-2000, the paper applies an econometric methodology that isolates and standardizes the terms-of-trade shocks, estimates their impact on GDP, and examines how this impact depends on the domestic conditions outlined above.

Our basic results indicate that the two most important country characteristics affecting the terms-of-trade shocks' output impact are trade openness and labor market flexibility, the former magnifying the impact and the latter reducing it. Financial openness also shows a significant stabilizing effect, but weaker in magnitude. Further results indicate that the amplifying effect of trade openness and the smoothing effect of labor market flexibility we document come from the role of these characteristics during negative shocks: higher trade openness amplifies *negative* shocks while improvements in labor market flexibility reduces their impact. The role of labor market flexibility in the smoothing of negative shocks we document can be seen in Figure 1, which shows the cumulative output effect of a one-standard-deviation negative shock to terms of trade in a country with low and high labor market flexibility. As it is apparent, the output impact of the shock is much smaller in more flexible labor markets.

With respect to the role of domestic financial depth, although in our basic exercises we fail to find a significant effect of it on the output impact of terms-of-trade shocks, further exploration reveals a significant though more nuanced role for this structural characteristic. In particular, when we allow for interactions between financial depth and the other characteristics, we find that higher financial depth helps output stabilization when trade and financial openness are high and firm entry is unrestricted. This pattern of complementarity is not, however, present in the relationship between financial depth and labor market flexibility. In this case, financial depth has a stabilizing effect that compensates for the rigidity of labor markets. This suggests that domestic financial development matters most in high exposure environments, that is, in conditions of high trade and financial openness, limited labor market flexibility and unrestricted firm entry.

Figure 1

Cumulative output effect of a negative terms of trade shock in a country with low and high levels of labor market flexibility