Discussion to the paper by František Brázdik

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Brazdik takes a modeling approach to study an accession process of a small open economy into a common currency area. The analysis is motivated by the future transition of the Czech Republic into the Eurozone. His formal quantitative approach allows evaluating the costs of alternative accession scenarios which can help shape political strategic thinking about the timing and duration of the accession process.

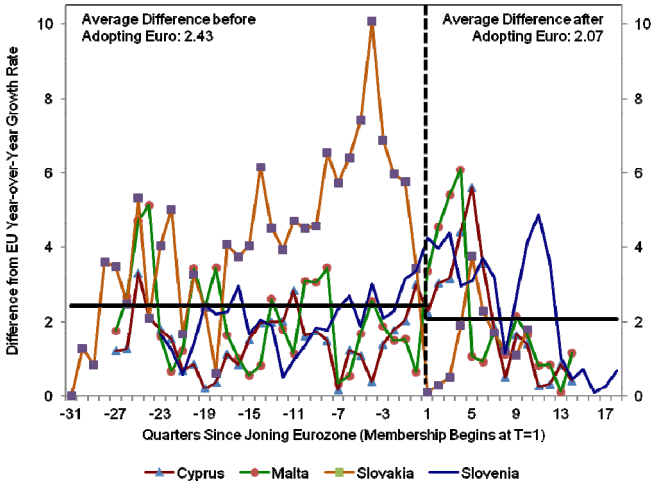
Policy transparency is one of the prerequisites for a smooth transition from one currency and policy regime to another. Brazdik introduces this phenomenon by augmenting the two-country model with a binary regime indicator and a so-called information buffer that allows households to respond to anticipated information about future periods. He demonstrates how effective communication and credibility of the phasing of the accession process can minimize counterproductive economic uncertainty. As a result of policy transparency, private sector agents have enough time to get ready and adjust to the new environment (e.g. new units of account or credit contract conditions), which smoothes their consumption and increases welfare.

Transition to the new monetary regime is then modeled as the realization of shocks that move through the information buffer. Essentially, the regime change is announced ahead of time and this announcement is filtered through households' information buffer so that expectations may be developed given the impending regime switch. The variance of the information shocks is zero, indicating that households find the announcement completely credible, but the variance could potentially be adjusted to reflect uncertainty regarding the credibility of the announcement.

Having a formal model allows policymakers to evaluate the effect of regime switches on macroeconomic stability. Here, the author measures stability with a per-period loss function that is a weighted sum of the volatility of inflation, output, and interest rates. The loss function is weighted according to subjective (ad hoc) preferences of the monetary authority. Brazdik uses a variance decomposition to identify the changes in business cycle behavior. He cites two major points regarding shifts in macroeconomic volatility. First, foreign shocks become the main source of volatility in the domestic economy once the exchange rate becomes targeted. Intuitively, it is because the exchange rate loses its role as a nominal buffer and the exchange rate risk premium, which is the main source of its volatility, is eliminated. The profits of import businesses become more susceptible to foreign shocks such as price changes. Second, the domestic interest rate becomes more volatile as it takes on the role of nominal buffer in place of the exchange rate. It becomes more responsive to foreign shocks because exchange rate volatility is deliberately reduced.

Particularly useful is the section on business cycle correlations which establishes causal relationships between announced regime changes and fluctuations in the business cycle. As the author notes, business cycle synchronization is a necessary precondition for optimal functioning of common currency areas. The model allows

Figure 1



one to see the mechanism of how synchronization takes place. There are many testable hypothesis put forward regarding business cycle synchronization. Brazdik posits, for example, that there are significant changes in the correlations of foreign and domestic interest rates, inflation rates, and exchange rates.

Any model can be challenged and this one is not an exception. The applicability of the model in this paper to policymakers hinges upon its ability to match features of the data. There are six countries (in chronological order: Greece, Slovenia, Cyprus, Malta, Slovakia, and Estonia) that have joined the Eurozone since its inception in 1999. These six countries provide a data set on which the conclusions of Brazdik's model may be empirically tested. As an example, I show in *Figure 1* the difference between year-over-year GDP growth rates of the Eurozone and four individual member nations that joined after the currency was formed (I omit Greece because it joined less than two years after inception and Estonia because it joined within the past two years).

This figure shows a small level of business cycle synchronization for new Eurozone members prior to accession. That the average deviation of new member countries from Eurozone GDP falls in absolute value from 2.43 percent to 2.07 percent after the currency is adopted suggests that there is a force, as Brazdik's model suggests, that may help synchronization of business cycles. But is it a significant force? Is there a clear causality from the adoption of the common currency to business cycle synchronization? For a first approximation, the data seem to support the predictions of Brazdik's model. Upon close inspection it seems that the pre-accession average values are sensitive to Slovakia's above-average growth and that removing them from the sample reverses the results. That is, the average deviation from the EU trend increases after accession, meaning that synchronization (of output) had not in fact taken place. Perhaps synchronization does in fact take place but is observed in the level of inflation or in other important national account components. More empirical work is necessary to demonstrate the validity of Brazdik's model before it can be used in the policy process.