

# FRBSF ECONOMIC LETTER

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## Is There a Role for International Policy Coordination?

As the U.S. struggles with its first economic slowdown in a decade, so do most of the major industrialized countries. Japan is sliding again into recession, with third quarter GDP growth of  $-2.2\%$ . Europe also seems to be slowing, with a third quarter growth rate of  $0.4\%$  for the euro area as a whole, and  $-0.6\%$  for Germany in particular.

This concurrent slowdown may not seem so surprising, given the increasing globalization and integration of the world's economies. For example, it may be that countries now face common shocks, such as a change in oil prices or a productivity slowdown; or, it is possible that the U.S. recession is spilling over to our major trading partners, as our demand for imports flags.

In light of these possibilities, some have argued that macroeconomic policymakers need to take such common shocks and spillovers into consideration—and some even argue that it is appropriate to coordinate economic policies among countries. This topic of policy coordination, which received fairly little attention from researchers in the last ten years or so, has re-emerged as an important area of study. This *Economic Letter* examines the literature in this field, especially the recent and influential work of Obstfeld and Rogoff (2001). Their paper offers a very different perspective from the older literature on the topic, showing that increasing economic integration may not, ironically, mandate greater policy coordination.

### The common wisdom on policy coordination

A classic contribution to the literature on policy coordination is by Oudiz and Sachs (1984). Their main finding was that international coordination can improve welfare by offsetting the cross-border spillover effects of national policy. For example, suppose a global shock lowers demand in a number of small countries at the same time. An individual country may be tempted to increase its money supply as a way to stimulate demand and production. In a small country this works by lowering domestic interest rates, which makes domestic currency assets less appealing. The resulting outflow of capital from the country lowers the value of the domestic currency. This exchange rate depreciation in turn makes domestic goods relatively cheap compared to foreign goods and raises demand for them. Domestic production rises to meet this rising demand.

The effectiveness of this policy response may be undercut, however, if other countries follow the same course. The reason is that when demand for domestic goods rises because of this kind of policy stimulus, it does so at the expense of lower demand for foreign goods. This is an example of a negative spillover, and such a policy is commonly referred to as "beggar thy neighbor." So, as individual countries try to manipulate the exchange rate in their favor, their competing monetary expansions will tend to cancel each other out and limit the policies' effectiveness. As a result, countries will tend to increase their money supplies excessively, and the main effect will be to generate excessive inflation rather than to stimulate output. In such a case there is a role for international coordination, where both countries agree not to pursue such "beggar thy neighbor" policies against each other.

Oudiz and Sachs argued that the gains from coordination depend critically on the degree of integration in goods and asset markets, because this integration determines the size of the spillovers. If goods markets are not integrated, so that exports are a small fraction of a country's total output level, a currency depreciation raising exports a certain percentage will have a small effect on output in absolute terms, so the international implications of any policy just wouldn't matter very much. The same is true if asset markets are not integrated, so that capital does not flow easily in and out of countries in response to interest rates. Then the monetary policy described above will not have a large effect on exchange rates or on foreign demand for domestic goods.

When Oudiz and Sachs quantified their model, they found that U.S. merchandise exports to Europe amounted only to  $1.6\%$  of U.S. GNP. As a result, the gains from coordination were estimated to be only about  $0.5$  percentage points of GDP for the U.S. The lesson was that since international integration was actually quite low, there was little or no role for policy coordination.

### A new approach

Now that 20 years have passed and goods and asset markets seem to have become more integrated, it is natural to ask whether there is still little role for policy coordination. Recent research has a surprising answer. Obstfeld and Rogoff (2001) suggest

that increasing integration in international markets does not necessarily make coordination more appealing. This conclusion arises from a model that is quite different from those in the earlier literature, in that it is based more firmly upon microeconomic foundations. In particular, people in the economy are assumed to make their consumption and labor supply decisions in order to maximize their welfare. The role of government policy comes in when the economy has imperfections or “distortions” that prevent people from acting in their own interest and achieving the highest level of welfare on their own. This model includes two types of distortions, and the authors show how they lead to two different types of effects within the context of a shock that lowers the production technology—that is a negative productivity shock.

The first distortion is the assumption that wages are set ahead of time in contracts, so that they cannot adjust quickly to new economic conditions—in other words, that wages are “sticky.” This is a problem, because when the shock to production technology lowers workers’ productivity, the response that best preserves welfare is to reduce wages, so that workers will be induced to work less and enjoy more leisure during this time that labor is less fruitful.

To eliminate the effects of the wage distortion, policymakers can try to mimic the outcome when wages are able to fall. They can do so by increasing the money supply, which raises the price level in the economy. Workers see that they must pay more for goods, but that their wages in contrast are not rising, so this policy move has the same effect on their labor supply decision as a fall in their wage, since it is the ratio of wage to price that matters for this decision.

This policy achieves its effect solely through manipulating the domestic labor market, unlike the “beggary thy neighbor” policy, so the policymaker is not trying to manipulate the foreign exchange rate and hence conditions in the foreign market. Two countries can implement this policy at the same time without limiting the other’s ability to achieve the desired outcome. As a result, the negative spillovers of the “beggary thy neighbor” policy do not occur, and there is no need for international policy coordination.

Spillovers do play a role in the second type of distortion in the Obstfeld-Rogoff model. This second distortion has to do with the fact that a shock to the technology of one country will tend to lower the wealth and welfare of that country relative to a second country that did not experience the shock. The fact that such shocks hit one country sometimes and another country other times suggests that there might be gains if there were

some way for the countries to provide insurance to each other. For example, when Country A is hit, Country B sends goods to Country A to help boost its welfare level. Of course, Country A stands ready to help when Country B is hit with a negative shock. This arrangement is referred to as international “risk pooling.”

The benefits of risk pooling create another role for coordination of national economic policies. In particular, when Country A is hit by the productivity shock, a coordinated set of national monetary policies could aim to raise the value of Country A’s currency. This would raise the price of domestic goods relative to foreign goods, meaning that the residents of Country A could import an extra amount of foreign goods in exchange for their smaller amount of domestic exports. This would boost the level of Country A’s consumption and welfare.

#### Some new conclusions

The analysis in Obstfeld and Rogoff leads to two conclusions that differ significantly from those of earlier literature. First, it suggests that global shocks do not provide any justification for policy coordination. If shocks always affect countries equally, then one country cannot help insure the other against such shocks. Since there is no benefit from policies aimed at pooling risk, monetary policy in each country is free to focus solely upon dealing with its own labor market distortions. Recall that since this objective does not rely upon changing the exchange rate or conditions in the foreign country, this does not require any international coordination.

Second, international integration in markets may decrease the need for policy coordination rather than increase it. Consider integration in goods markets. Researchers have found that trade in goods may have its own built-in mechanisms that can help insure a country against country-specific output shocks. For example, if a country is hit by a fall in its production, the relative scarcity of domestic goods would induce a rise in their relative price. This may be able to compensate domestic agents for the fact they have a smaller quantity of domestic goods to consume and export. In particular, they will be able to import more foreign goods for the smaller quantity of domestic exports and thereby enjoy a level of consumption and utility comparable to the foreign country. This means that goods markets can do the job of pooling risk internationally, and that would leave policymakers free to focus solely upon eliminating the distortions created by sticky wages, which, as we saw, need not involve policy coordination.

This conclusion stands in sharp contrast to earlier literature, notably Oudiz and Sachs (1984), which concluded that the need for coordination was small

precisely because the degree of goods trade was small. But here the conclusion is that the need for coordination is small when goods market integration is high.

Consider also the role of asset markets. Suppose people could buy and sell insurance policies internationally that insured them against productivity shocks hitting their country, or suppose they could buy and sell assets that paid off contingent upon such shocks. If private markets could do this, then they would be able to take care of the risk pooling, and the policymakers would not need to worry about this objective. Again, policymakers could focus solely on eliminating the sticky wage distortion, which requires no coordination.

Clearly asset markets remain far from this level of sophistication and integration, but international trade in various types of assets definitely is on the rise, with international capital flows ballooning over the last decade. One gets the impression that international integration has progressed faster in asset markets than in goods markets, so that this type of integration may be even more important for risk sharing than the goods market integration.

Nevertheless, integration in both markets work in the same direction here. A high level of integration, be it in either asset markets or goods markets, indicates there is less need for explicit international policy coordination to pool national risks. Contrary to the prognostications of some analysts, as the age of globalism progresses we ironically may see less international coordination rather than more.

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