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# FRBSF WEEKLY LETTER

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## Monetary Policy in a Dynamic, Global Environment

*The following is adapted from a speech given by Robert T. Parry, President and Chief Executive Officer of the Federal Reserve Bank of San Francisco, on September 11, 1995, to the Annual Meeting of the National Association of Business Economists.*

In the last twenty years, "change" has been the byword in both domestic and international markets. For example, dramatic advances in technology have revolutionized U.S. financial markets. And there's the equally dramatic surge in international trade—as countries all over the world have opened their markets to greater cross-border flows of goods and financial assets.

Some observers argue that these changes have essentially *disarmed* U.S. monetary policy. That is, they question whether the Fed still has the ability to pursue a low-inflation policy in this dynamic environment. In fact, one commentator pushed the point so far as to call the Fed a "toothless tiger on inflation."

To answer such comments, I want to address three questions that arise about monetary policy's effectiveness in a dynamic, global environment. First, have the changes in our domestic financial market weakened the Fed's ability to affect aggregate demand? Second, has the globalization of financial markets exposed U.S. interest rates, and hence monetary policy, to undue influence from abroad? And finally, has global competition broken the link between domestic monetary policy and domestic inflation? The answers lead to two major points: first, that monetary policy certainly *is* still effective; and second, that the Fed's commitment to lowering inflation is as strong and as necessary as ever.

**Changes in U.S. financial markets.** Over the last two decades, deregulation, vastly improved information and communications technology, and advances in our understanding of finance have combined to accelerate the pace of financial innovation. These innovations have had far-

reaching consequences. New instruments and markets reduce the costs of bringing borrowers and savers together and increase the opportunities to manage the risk. At the same time, changes in financial markets have affected the links between monetary policy and the economy.

But have these changes actually altered the Fed's ability to conduct monetary policy? The answer is a categorical "No." First of all, even *with* these changes, the Fed still can affect short-term interest rates—that means, we still have an impact on the cost of borrowing from banks, from other intermediaries, and directly in capital markets. Second, there's no strong evidence that aggregate demand has become any *less* sensitive to monetary policy. Let me give you an example from the housing industry that shows how financial innovations have "cut both ways": the elimination of Reg Q deposit ceilings has *lessened* the adverse disintermediation effect on the housing industry, but this is to some extent counterbalanced by the introduction of ARMs, which have arguably *increased* the price sensitivity of housing to monetary policy. Furthermore, when we put the issue to the empirical test, the results indicate that the magnitude of interest rate changes needed to achieve a given effect on output is about the same now as it was in the 1960s and 1970s. Third, and perhaps most important, even if continuing financial innovation *does* make demand less sensitive to policy, the Fed can *always* adjust its response to compensate for the change—when the economy needs to slow down, the Fed can just step a little harder on the brakes; and when it needs to speed up, it can just push harder on the accelerator.

**The effectiveness of U.S. monetary policy in the new world marketplace.** In the last 25 years, international trade in goods and services has burgeoned as the cost of transportation and communication has shrunk and as trade barriers have fallen. Financial markets have become more global as well, prompted by deregulation, technology, and ingenuity. Every day, over a trillion

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dollars' worth of transactions take place on foreign exchange markets. And we've all heard about the pools of money that race around the world's stock, bond, and currency markets in search of the highest returns each day. But does the globalization of financial markets expose U.S. interest rates to undue influence from abroad? In other words, does the U.S. economy's openness undermine the Fed's ability to conduct monetary policy?

Again, the answer is in the negative—for three reasons. Two are related to characteristics of the U.S. in the global economy; the third is related to our policy choice of flexible exchange rates.

The first characteristic is the sheer size of the U.S. economy. It's still the largest in the world—by far—and that goes for both output and financial activity. This country accounts for roughly 20–25 percent of total world output and—as best as can be measured—roughly 50 percent of global financial wealth.

The second characteristic is that we're not as integrated into the global financial marketplace as you might think. Well over 95 percent of the assets Americans own are domestic assets. At the end of 1993, foreigners owned only about 6 percent of U.S. stocks, 14 percent of U.S. corporate bonds, and virtually no U.S. municipal bonds. So, although financial capital can race around the globe almost instantly, the overwhelming majority of the assets owned by Americans are still American assets—and the overwhelming majority of American-based assets are still owned by American citizens. Therefore these two characteristics of the U.S. economy—its sheer size and what we economists call “a home bias”—limit the impact of foreign developments.

But an even more important reason why foreign developments don't unduly influence U.S. interest rates, despite increasing international capital movements, is that we have a *flexible*—rather than a fixed—exchange rate policy. The logic behind this point is that as long as the exchange rate can adjust to foreign disturbances—such as a shift in preferences away from U.S. assets towards foreign assets—there's less pressure on U.S. interest rates to adjust.

This logic is embodied in what's sometimes called the “unholy trinity” of international economics—that is, in principle, a country can't simultaneously have the following three things:

(i) freely mobile cross-border capital flows, (ii) a fixed or managed exchange rate, and (iii) an independent domestic monetary policy—or, in other words, control of domestic interest rates. So, with international capital mobility, something's got to give: either the interest rate or the exchange rate. We have a regime in which the exchange rate is what “gives.”

Let me illustrate the “unholy trinity” by looking at a group of countries that tried to maintain independent monetary policies with pegged exchange rates and ran into trouble—the European Monetary System. To put things most simply, for a number of years, the member countries of the EMS have had an exchange rate agreement that essentially pegged their currencies to the deutsche mark. At the same time, they increasingly allowed capital to move freely across each other's borders in search of the highest returns. That meant that each member country had only limited ability to set its interest rate differently from Germany's, the largest economy in the region.

This constraint was put to the test most dramatically in the early 1990s. As Germany fought inflation following reunification, other countries—including the U.K., Italy, Spain, Portugal, and eventually France—found the high German interest rates onerous. They ultimately chose to unlink their interest rates from Germany's, which meant they also had to let their exchange rates adjust by allowing their currencies to depreciate against the deutsche mark.

So, the European exchange rate crisis of the 1990s was a vivid illustration of the “unholy trinity”: in a world of internationally mobile capital, a country has to make a choice between targeting the exchange rate or maintaining control of domestic monetary policy and interest rates. In the U.S., our choice is clear: we want an *independent* monetary policy, and therefore a *flexible* exchange rate.

**Has global competition broken the link between domestic monetary policy and domestic inflation?** Some people have raised this issue because they believe that *foreign* capacity has a very big influence on the U.S. domestic price level. On that ground, they ask: Why should the Fed worry about constraints on U.S. capacity when domestic inflation depends on *world* capacity? There are three reasons why world capacity doesn't matter as much as you might

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think, which will sound familiar, because they're close parallels to the reasons why U.S. interest rates aren't unduly influenced by foreign interest rate gyrations.

Once again, since we're the largest economy in the world, by implication, there simply isn't enough world capacity to keep the prices of all of the goods we produce and consume from rising. Second, a large proportion of what we consume in the U.S. isn't affected by foreign trade. Roughly 90 percent of what Americans buy is made right here at home. For example, health care isn't traded internationally, and it amounts to 14 percent of GDP; other examples are most services, construction, and so on. All this goes to show that a very sizable part of our economy is not directly sensitive to foreign price factors.

Third, even when we consider goods that are traded internationally, the U.S. price level is largely insulated by our flexible exchange rate policy. In other words, the "unholy trinity" comes into play again: Since flexible exchange rates give us control over domestic interest rates—then flexible exchange rates *also* give us control over the domestic price level. Now a flexible exchange rate policy *doesn't* mean that specific industries aren't going to feel competitive pressures from low-cost foreign producers. But it *does* mean that, *on the macro level*, the more the U.S. tries to import, the more downward pressure there is on the foreign exchange *value* of the U.S. dollar. As a result, the dollar *cost* of foreign goods goes up, lessening the impact of *foreign costs* on the U.S. price level.

### **Hasn't globalization affected monetary policy at all?**

I would not want to leave anyone with the impression that the last twenty years of innovation and globalization have *not* presented some significant issues for monetary policymakers. On the contrary. We've had to make substantial adjustments in response to the changing environment. One example is the anomalous behavior of the monetary aggregates in recent years. As the distinction between transaction and savings bal-

ances has blurred, the monetary aggregates have become pretty unreliable as a means of assessing the current condition of financial markets and the trend of the economy. So the Fed must rely relatively more on other macroeconomic and financial variables as a guide to policy.

Another example is provided by flexible exchange rates themselves. Although they do lessen the macroeconomic effects of foreign shocks on the economy and permit monetary policy control, they don't solve all problems—and, in fact, they even create some problems of their own. For example, short-term currency speculation can sometimes produce excessive volatility in exchange rates. Furthermore, exchange rate changes have an effect on U.S. output and inflation through the trade balance. As a result, policymakers have to assess the sources of exchange rate volatility and anticipate the effects of the exchange rate on the economy when setting the path of monetary policy—certainly not an easy task. Finally, international capital mobility itself has added to the Fed's regulatory concerns about systemic risk to the financial sector—but that's another speech altogether.

So, while the dynamic, global environment continues to create challenges in how the Fed *formulates* policy, it has not undermined either the tools of policy—or its goals. While we have become a more open economy in recent decades, while international capital markets are becoming bigger, freer, and more volatile, and while the U.S. economy is indeed buffeted by foreign forces beyond our control, these developments have *not* made monetary policy a "toothless tiger." We have an *independent* monetary policy. We have an *effective* monetary policy. And let me assure you, we have a policy committed to promoting domestic price stability—because that's the greatest contribution the Fed can make to *economic* stability both for the United States and for the world.


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