

FRBSF WEEKLY LETTER

Number 94-25, July 15, 1994

Should the Central Bank Be Responsible for Regional Stabilization?

In a recent editorial, a prominent West Coast newspaper suggested that the Federal Reserve's decision to tighten monetary policy was premature, partly on the grounds that the California economy remains weak. It pointed out that although the economy in other parts of the country is doing quite well, the recovery in California continues to lag behind, and it suggested that the Fed should have kept interest rates low in order to address this regional imbalance.

The editorial raises the question what role monetary policy should play in responding to regional recessions. This *Weekly Letter* discusses some basic principles of the theory of regional stabilization policy. First, it explains why the Federal Reserve System cannot engage in region-specific monetary policies. Second, it discusses the problems associated with a policy of *systematically* easing whenever *some* region of the country experiences a local recession. Finally, it explains why fiscal policy is better suited to the problem of regional stabilization.

The recovery in California and across the nation

First, we consider whether the continuing weakness in California represents a local problem or reflects a general weakness in the national economy. Figure 1 shows three measures of the civilian unemployment rate for the period since 1989: one for the United States, another for California, and a third for all states except California. While the recession in California began around the same time as the national recession, the recovery in California started later than the national recovery and has proceeded at a slower rate. Unemployment rates for the nation as a whole and for the U.S. excluding California began falling in the middle of 1992 and are now in the vicinity of the "natural rate" of unemployment (which is the long-term unemployment rate around which the economy fluctuates and which economists estimate to be somewhere around 6 to 6.75 percent). In California, however, the unemployment rate peaked near the end of 1992 and has fallen only gradually since then.

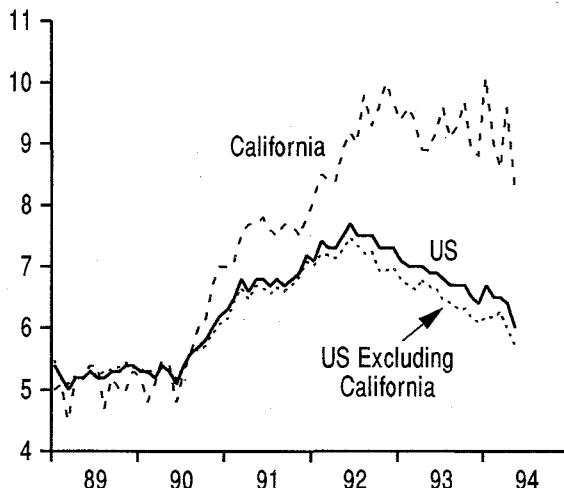
This suggests that the continuing weakness in California is not a symptom of a slow recovery throughout the nation. Instead, California appears to be suffering from lingering regional problems, especially defense and aerospace cutbacks and weakness in commercial real estate (see Sherwood-Call 1993 and Cromwell 1994).

Why the Fed cannot target regions

The problem of regionally oriented monetary policy can be analyzed using a framework developed by international economists to study the effects of international trade in financial assets on the power of monetary and fiscal policies. Instead of focusing on financial flows across countries, we focus on financial flows across states. When viewed in this context, California has two special features. First, there are no barriers to the flow of financial assets across state borders, so investors will buy a security wherever it offers the highest yield. Second, since California uses the same currency as the rest of the nation, its exchange rate with respect to the other states is irrevocably fixed at one; that is, you can always trade California dollars for New York dollars one for one.

Figure 1
Unemployment Rates

Percent



FRBSF

Since there are no barriers to the flow of financial assets across states, interest rates on securities are equalized across locations within the U.S. For example, in the market for U.S. Treasury bills, investors can choose between brokers in San Francisco and New York. The transaction costs of trading in the two markets are essentially the same, so this will not affect the choice of where to buy the security. Bills sold in New York are denominated in the same currency and backed by the same government as those sold in San Francisco, so inflation and sovereign risk will not affect the choice of the location. Finally, the exchange rate between New York dollars and California dollars is irrevocably fixed at one, so exchange risk will not affect the choice of location. If brokers in New York quoted a lower yield than brokers in San Francisco, investors would sell bills in New York and buy them in San Francisco. This would reduce the yield on bills sold in San Francisco and increase the yield on bills sold in New York. Investors would continue this operation until the yields were equalized.

The same principle applies to monetary policy. The Federal Reserve influences credit conditions primarily through transactions in the market for bank reserves. On any given day, individual banks may be above or below their desired reserve positions. Since reserves do not earn interest, banks that have a surplus will lend to banks that have a deficit. The yield on reserve lending is known as the federal funds rate, and it adjusts to equate supply and demand for loans. When the Federal Reserve wants interest rates to rise, it reduces the aggregate quantity of bank reserves, and this puts upward pressure on the federal funds rate. But like all other interest rates, the federal funds rate must be equalized across locations within the U.S. If the federal funds rate were lower in San Francisco than in New York, banks would borrow less expensive reserves in San Francisco and lend them at a profit in New York. This would put upward pressure on the federal funds rate in San Francisco and downward pressure on the federal funds rate in New York. Banks would continue this operation until the federal funds rates in San Francisco and New York were the same. Thus, interest rate equalization across locations within the U.S. implies that the Federal Reserve cannot conduct region-specific monetary policies.

This means that monetary policy is a blunt instrument. The Federal Reserve cannot simultaneously ease credit conditions in California while

taking a neutral stance in the Midwest, where local economies are booming. If the Federal Reserve wanted to ease credit conditions in California, it would have to ease credit conditions throughout the rest of the nation as well. This might improve conditions in California, but it would also generate inflationary pressures in much of the rest of the country, where unemployment is already near the natural rate. Monetary policy would be an appropriate instrument if the weakness in California were a symptom of weakness throughout the national economy. But California is lagging far behind the rest of the economy.

Inflationary bias of regionally oriented monetary policy

Furthermore, consider the consequences of a policy of systematically easing whenever any state is in recession. The problem with a policy of this kind is that in a heterogeneous multiregional economy such as the United States, there is almost always some state that is experiencing bad times, even when the national economy is doing well. To illustrate this, we collected data on unemployment rates in the largest 20 states (measured by the size of the labor force) over the period 1978 to 1994. For each month in the sample, we ranked the states according to their unemployment rates, and then we graphed the unemployment rate in the weakest state. The results are shown in Figure 2, along with the national unemployment rate. The shaded areas mark the dates of recessions, as determined by the National Bureau of Economic Research.

Figure 2 shows that there is often some state that has high unemployment even when the national economy is not in recession. If the Federal Reserve System were to ease credit conditions whenever some state had high unemployment, it would almost always be easing. Although a monetary expansion might increase output and employment in the weak region, it would aggravate inflationary pressures in the strong ones. Hence, a policy of this kind would produce a significant inflationary bias.

If California had its own currency and flexible exchange rates with respect to the rest of the U.S., it could conduct its own independent monetary policy, just as other countries do. For example, when the Bank of Canada lowers its bank rate, the Canadian dollar depreciates relative to the U.S. dollar. This reduces the price of Canadian goods relative to U.S. goods and shifts aggregate demand from the U.S. to Canada. To our knowledge, no one has proposed that California issue its own currency or establish its own central bank.

Regional fiscal policy

Although open capital flows among states frustrate regionally oriented monetary policy, they enhance regionally oriented fiscal policy. For example, if California were to undertake a fiscal expansion, local credit demands would increase. In the absence of capital flows, local interest rates would also increase, and some investment projects would be crowded out. But since capital is highly mobile across states, an expansion in California would attract capital from other parts of the country, and this would reduce the degree to which local investment projects are crowded out.

This means that fiscal policy can be targeted to specific regions. Unlike the Federal Reserve, state and federal fiscal authorities can simultaneously expand in some regions while contracting in others. Thus, fiscal efforts at regional stabilization do not suffer from the inflationary bias that plagues monetary policy.

In fact, the federal government already provides an important source of insurance against regional income shocks. When one part of the country experiences a local recession, its federal tax payments fall and its federal transfer receipts rise. These receipts include payments to state and local governments, social security benefits, food stamps, and supplementary secondary income payments, among others. At the same time, tax payments rise and transfer receipts fall in

booming regions, so the federal government automatically transfers resources from strong to weak regions. Xavier Sala-i-Martin and Jeffrey Sachs (1992) estimate that a one dollar reduction in a state's income results in a 34 cent reduction in federal tax payments and a 6 cent increase in federal transfer receipts. Thus the federal government absorbs roughly 40 percent of the fall in regional income. Since this operates primarily through the federal tax system, the policy is fully automatic and does not require discretionary action by Congress or the President.

State governments also can try to stabilize regional incomes by increasing spending during local recessions and cutting back during local booms. This is likely to be less effective than federal fiscal policy because individual states have to finance a spending increase by raising their own taxes. On the other hand, under the federal system, tax reductions and spending increases in weak states are partially financed by tax revenues from other regions. Even so, state level fiscal policy is a more flexible instrument than monetary policy.

Conclusion

While a monetary expansion might reduce unemployment in weak regions, it would also aggravate inflationary pressure in strong ones. Systematic use of monetary policy for regional stabilization would therefore impart an inflationary bias in an economy with many heterogeneous regions. Fiscal policy does not suffer from this inflationary bias, since the fiscal authorities can simultaneously expand in weak regions and contract in strong ones. Hence the problem of regional stabilization should be assigned to the fiscal authorities.

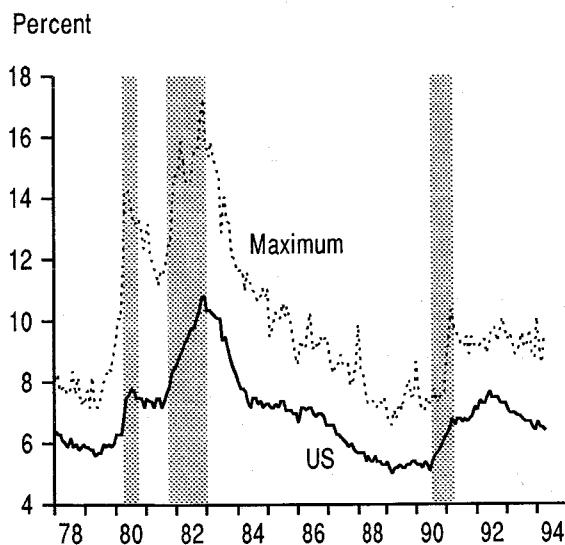
Timothy Cogley
Senior Economist

Desiree Schaan
Research Associate

References

- Cromwell, Brian. 1994. "California Recession and Recovery." *FRBSF Weekly Letter* (April 29).
- Sala-i-Martin, Xavier and Jeffrey Sachs. 1992. "Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States." Working Paper No. 632, Center for Economic Policy Research (March).
- Sherwood-Call, Carolyn. 1993. "Whither California?" *FRBSF Weekly Letter* (August 8).

Figure 2
Maximum Unemployment Rates



Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.

Editorial comments may be addressed to the editor or to the author. . . . Free copies of Federal Reserve publications can be obtained from the Public Information Department, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 974-2246, Fax (415) 974-3341.

**Research Department
Federal Reserve
Bank of
San Francisco**

P.O. Box 7702
San Francisco, CA 94120

BULK RATE MAIL
U.S. POSTAGE
PAID
PERMIT NO. 752
San Francisco, Calif.

Printed on recycled paper 

Index to Recent Issues of *FRBSF Weekly Letter*

DATE	NUMBER	TITLE	AUTHOR
1/7	94-01	Market Risk and Bank Capital: Part 1	Levonian
1/14	94-02	Market Risk and Bank Capital: Part 2	Levonian
1/21	94-03	The Real Effects of Exchange Rates	Throop
1/28	94-04	Banking Market Structure in the West	Laderman
2/4	94-05	Is There a Cost to Having an Independent Central Bank?	Walsh
2/11	94-06	Stock Prices and Bank Lending Behavior in Japan	Kim/Moreno
2/18	94-07	Taiwan at the Crossroads	Cheng
2/25	94-08	1994 District Agricultural Outlook	Dean
3/4	94-09	Monetary Policy in the 1990s	Parry
3/11	94-10	The IPO Underpricing Puzzle	Booth
3/18	94-11	New Measures of the Work Force	Motley
3/25	94-12	Industry Effects: Stock Returns of Banks and Nonfinancial Firms	Neuberger
4/1	94-13	Monetary Policy in a Low Inflation Regime	Cogley
4/8	94-14	Measuring the Gains from International Portfolio Diversification	Kasa
4/15	94-15	Interstate Banking in the West	Furlong
4/21	94-16	California Banks Playing Catch-up	Furlong/Soller
4/29	94-17	California Recession and Recovery	Cromwell
5/6	94-18	Just-In-Time Inventory Management: Has It Made a Difference?	Huh
5/13	94-19	GATS and Banking in the Pacific Basin	Moreno
5/20	94-20	The Persistence of the Prime Rate	Booth
5/27	94-21	A Market-Based Approach to CRA	Neuberger/Schmidt
6/10	94-22	Manufacturing Bias in Regional Policy	Schmidt
6/24	94-23	An "Intermountain Miracle"?	Sherwood-Call/Schmidt
7/1	94-24	Trade and Growth: Some Recent Evidence	Trehan

The *FRBSF Weekly Letter* appears on an abbreviated schedule in June, July, August, and December.