
FRBSF WEEKLY LETTER

Number 94-38, November 4, 1994

Explaining Asia's Low Inflation

One feature of the Asia-Pacific Basin that distinguishes it from most developing regions of the world is its relatively low inflation. In the 1980s, inflation in the region averaged 7 percent, close to the average for industrialized countries, but well below the average of nearly 30 percent for developing countries as a group, or the average of 55 percent for Latin America. Asia's success in curbing inflation is of particular interest, because of the light it might shed on alternative explanations for low inflation, including central bank independence and domestic conditions that affect the incentives for price stability.

This *Weekly Letter* examines the relationship between central bank independence and inflation for seven emerging economies in Asia and finds that the relationship is quite weak. Instead, it is argued that low inflation largely reflects domestic conditions conducive to price stability.

Legal central bank independence and inflation

A central bank is "independent" if it can make monetary policy decisions that are free from political pressure and that can be overruled only with great difficulty (for example, through legislation). Such independence may be achieved either by giving the central bank an unambiguous mandate for low inflation, or by giving the central bank autonomy along various dimensions, such as budgeting, policymaking, and the tenure of the central bank chief executive officer (CEO). The argument that central bank independence may contribute to lower inflation rests on the premise that monetary policies to guarantee lower inflation may be politically unpopular. Politicians seeking reelection may prefer monetary policies that stimulate the economy in the short run regardless of the impact on inflation. A central bank that is not independent may be unable to resist pressures for inflationary stimulus, whereas a central bank that is independent might be able to do so.

The evidence that central bank independence can lead to lower inflation is mixed. On the one hand, Germany's central bank has the greatest degree of legal independence and has experienced consistently low inflation. It can be argued that the U.S. disinflation of the early 1980s might have been much more difficult if the Fed had not had the independence to pursue such a disinflationary policy, although this argument does little to explain the high inflation of the 1970s. Moreover, Japan's central bank has little formal independence and one of the lowest rates of inflation among industrialized countries.

To analyze the relationship between central bank independence and inflation more systematically, Cukierman, Webb, and Neyapti (CWN, 1992) construct an index of central bank legal independence. The index labels a central bank as more independent if: (i) its CEO has a relatively long term of office and is not easy to remove; (ii) it has authority to set monetary policy even if its views conflict with the executive branch; (iii) price stability is its major or only objective; (iv) its lending to the public sector is restricted. CWN's results indicate that legal independence is associated with low inflation for industrialized countries, but not for developing countries.

The implications of CWN's results for developing (or rapidly growing) Asian economies are unclear. (We will refer to these economies as emerging Asian economies.) On the one hand, the results for all developing countries suggest that no relationship between legal independence and inflation will be found in the emerging Asian economies. On the other hand, average inflation in emerging Asian economies is much lower than in developing countries as a group, and close to that of industrialized countries. As in the industrial countries, legal independence may be associated with low inflation in Asia as well.

PACIFIC BASIN NOTES

Pacific Basin Notes appears on an occasional basis. It is prepared under the auspices of the Center for Pacific Basin Monetary and Economic Studies within the FRBSF's Economic Research Department.

FRBSF

To assess the relationship between central bank independence and inflation in emerging Asian economies, Figure 1 presents CWN's legal independence index values and average inflation for 1980–1989 for several emerging Asian economies: Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand; Hong Kong is excluded because it had no central bank in the 1980s, and China is excluded because it had significant price controls over the period. An index value of ten signifies full independence. For comparison, the corresponding values for the U.S., Germany, Japan, and the average for all developing economies also are presented.

Two broad conclusions emerge. *First, central banks in emerging Asian economies are not usually independent.* In particular, the independence index value among emerging Asian economies is about 3 on average, slightly lower than the 3.3 average for all developing countries, and well below Germany's 6.9 or the U.S.'s 4.8. However, average inflation in emerging Asian economies was much lower than the 29 percent rate for all developing countries. The contrast is even more striking comparing the emerging Asian economies to Latin America (not shown), where the index averaged 3.6 and inflation averaged 55 percent.

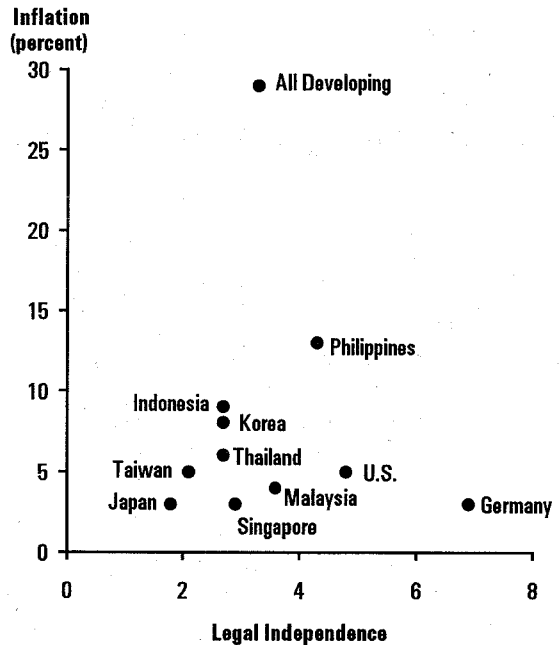
Second, among the emerging Asian economies, a higher central bank independence index value is not associated with lower inflation. For example, the Philippines has the largest legal independence index in the region and the highest rate of inflation. Taiwan's independence index is among the lowest in the region, but so is its inflation rate.

These results suggest that central bank independence does not explain low inflation in emerging Asian economies. This may be partly because the legal independence index is an imperfect measure of actual independence, and also because legal independence may not be necessary to guarantee low inflation if there are incentives to maintain price stability, or if there is less pressure on central banks to inflate.

Incentives for price stability

The policies of Asian central banks might have led to low inflation if there were a strong incentive at all levels of government to maintain price stability as a result of the openness of their economies. In particular, it can be argued that emerging Asian economies have depended very heavily on international trade as the basis for their economic success, and they have maintained their

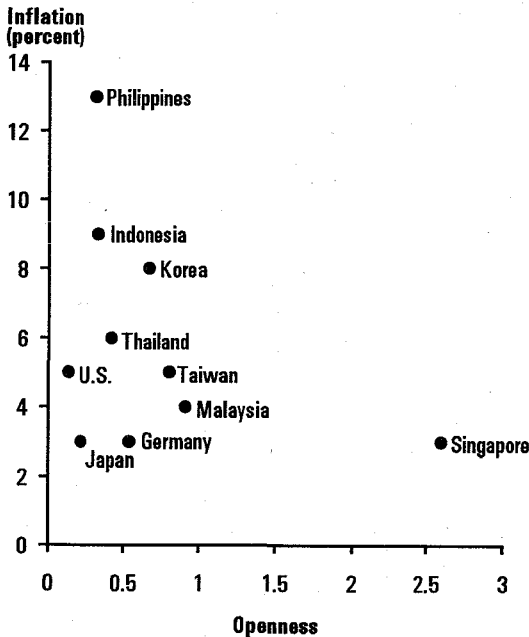
Figure 1
Central Bank Legal Independence
and Annual Inflation



international competitiveness by avoiding excessive inflation. As noted by Edwards (1989, Chapter 6) in many developing economies, high inflation has been associated with real exchange rate appreciation and a corresponding loss of competitiveness. Romer (1993) also argues that open economies have less incentive to stimulate the economy, partly because any given increase in output will be associated with more inflation in open economies than in closed economies.

To assess the plausibility of the argument that openness will be associated with less inflation, Figure 2 illustrates the relationship between the size of the trade sector in 1985 and average inflation in 1980–1989 in Asian economies. It is apparent not only that emerging Asian economies are highly open—the ratio of exports plus imports to GNP ranges from a low of about 30 percent for the Philippines and Indonesia to a high of 260 percent for Singapore—but also that in these economies openness is associated with low inflation—the Philippines and Indonesia have the highest rates of inflation and Singapore the lowest. (In fact, Asian economies are on average more open and have far less inflation than Latin American economies.) Figure 2 thus supports the view that the greater openness of these economies gives them a greater incentive to curb inflation. Using more formal statistical analysis, Romer (1993) shows that openness (as measured by the ratio of imports to output) appears to lead to lower inflation in a large sample of countries for the period since 1973.

Figure 2
Openness and Annual Inflation



Less pressure to inflate

Apart from having an economic incentive to maintain price stability, the pressures to inflate on central banks in emerging Asian economies also have been smaller than in other regions. One reason is that these economies have grown very fast as a result of increases in their productive capacity; this minimizes the pressure to boost economic growth through inflation.

Another reason is that budget deficits in emerging Asian economies are by and large sustainable, or easily financed, so that the pressure on Asian central banks to inflate in order to finance deficits is small. In some cases, the size of budget deficits is limited by law. For example, in Thailand, deficits are limited to a small percentage of the year's total expenditure, and there is a cap on the percentage of the budget that can be spent servicing the foreign public debt. Budget authorities also consult the central bank to assess the inflationary impact of budget deficits. In Indonesia, expenditures have been limited to the amount financed by domestic revenues and foreign aid since 1967.

Budget deficits also have been curbed by insulating the budget process from political pressure. For example, in Thailand and Indonesia, detailed

budget formulation is primarily the responsibility of civil servants rather than politicians, and parliamentary rules restrict the legislature's ability to alter the budget. The more successful Asian economies also have been able to avoid central bank subsidies to banks or large state enterprises. This type of financing often is not reflected in the budget estimates, but it can be highly inflationary.

In Asia, the inflationary impact of budget deficits has been limited even in those cases where the deficits are large. For example, Malaysia's very rapid growth and high rates of private saving allowed it to sustain large deficits (averaging 11 percent of GNP) without triggering inflation. Rapid growth and private saving increased the demand for money and domestic financial assets, thus raising the proportion of the deficit that could be financed by printing money without inflation, as well as the overall level of government borrowing that was willingly financed by domestic and foreign residents. (See World Bank 1993 for more details on the points raised in this section.)

Conclusions

The example of Asian economies highlights some of the conditions under which countries may achieve low inflation in the absence of central bank independence. These countries achieved low inflation in part because the need to keep the large trade sector competitive created strong incentives for maintaining price stability. In addition, rapid growth and sustainable budget deficits reduced the pressures on central banks to inflate.

Ramon Moreno
Senior Economist

References

Cukierman, Alex, Steven B. Webb and, Bilin Neyapti. 1992. "Measuring the Independence of Central Banks and Its Effects on Policy Outcomes." *The World Bank Economic Review* 6(3), pp. 353-398.

Edwards, Sebastian. 1989. *Real Exchange Rates, Devaluation and Adjustments*. Cambridge, Mass., The MIT Press.

Romer, David. 1993. "Openness and Inflation." *Quarterly Journal of Economics* 108(4), pp. 869-904.

World Bank. 1993. *The East Asian Miracle*. New York: Oxford University Press.

Research Department Federal Reserve Bank of San Francisco

P.O. Box 7702
San Francisco, CA 94120

Printed on recycled paper
with soybean inks. 

Index to Recent Issues of *FRBSF Weekly Letter*

DATE	NUMBER	TITLE	AUTHOR
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
7/15	94-25	Should the Central Bank Be Responsible for Regional Stabilization?	Cogley/Schaan
7/22	94-26	Interstate Banking and Risk	Levonian
8/5	94-27	A Primer on Monetary Policy Part I: Goals and Instruments	Walsh
8/19	94-28	A Primer on Monetary Policy Part II: Targets and Indicators	Walsh
9/2	94-29	Linkages of National Interest Rates	Throop
9/9	94-30	Regional Income Divergence in the 1980s	Sherwood-Call
9/16	94-31	Exchange Rate Arrangements in the Pacific Basin	Glick
9/23	94-32	How Bad is the "Bad Loan Problem" in Japan?	Huh/Kim
9/30	94-33	Measuring the Cost of "Financial Repression"	Huh/Kim
10/7	94-34	The Recent Behavior of Interest Rates	Trehan
10/14	94-35	Risk-Based Capital Requirements and Loan Growth	Laderman
10/21	94-36	Growth and Government Policy: Lessons from Hong Kong and Singapore	Kasa
10/28	94-37	Bank Business Lending Bounces Back	Zimmerman

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