Costa Rica During the Global Recession: Fiscal Stimulus with Tight Monetary Policy

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Introduction: Macroeconomic Policy

Before the second half of 2008, macroeconomic policy-making in many countries relied mostly on monetary policy, with the interest rate as the most important policy instrument: lower during a downturn and higher during an upswing. Open market operations – in which the central bank buys or sells government securities in the open market in order to decrease or increase the money supply -- became the preferred and most frequently utilized means to generate changes in the relevant rate. In the United States, policy makers set a target for the federal funds rate, while in other countries authorities attempt to influence or set a short-term rate (also known as the policy rate) that captures the cost of funds in some sort of inter-bank market.

Economic authorities had seemingly given up in their attempts to control monetary aggregates, as it became clear that the notion of money supply was rapidly evolving as a result of an increasing use of various non-money means of payment (debit and credit cards, for example), as well as the use of the internet. Money demand, on the other hand, had been quite volatile, rendering almost impossible the task of estimating the gap between money supply and money demand. Given this context, mainstream theorists and policy-makers agreed that the most practical option was to focus on the interest rate as a major device for controlling economic activity.

In analytical and econometric models, the main policy lever became the federal funds rate in the U.S. (or some sort of short-term inter-bank rate in other countries), while the money supply was allowed to adjust endogenously along with other dependent variables. This style of both model-building and policy-making was promoted along with an emphasis on central bank independence and low inflation as the overwhelmingly most important policy goal of the central bank.[1] The emphasis that this view placed on the use of the interest rate and on inflation control led to a denial of the relevance and usefulness of fiscal policy (Arestis and Sawyer, 2003b). But by the time the financial crisis exploded in the third quarter of 2008, it was clear that fiscal stimulus was critical to prevent a deep recession. Some economists had started to push for expansionary fiscal policy well before then.[2] And it was then that the International Monetary Fund (IMF) started advocating the need to use fiscal stimulus to put the world economy back in business.[3] However, this stimulus was not to be applied by all economies: only those with "strong fundamentals" were supposed to be able to make use of such an instrument.[4]

As world economic growth continued to decelerate, the IMF began to allow some countries to relax the fiscal targets in their Standby Arrangements with the Fund. However, the effect of the fiscal stimulus may not be fully felt if it is combined with a restrictive monetary policy.

Unfortunately, as we will see in the case of Costa Rica, various stand-by arrangements have allowed the application of expansionary fiscal stimulus, only to partially offset their benefit with tight

[1] This approach has been referred to by several post-keynesian and structuralist authors as "new consensus macroeconomics" (Arestis and Sawyer, 2003a; Epstein and Yeldan, 2008). However, mainstream authors have been writing about this "new" consensus or synthesis for several years already (Clarida, Gali and Gertler, 1999; Romer, 2000; McCallum, 2001).
[2] See for example Appelbaum, Baker and Schmitt (2008).
[3] See Strauss-Kahn, D. (2009).
[4] Strauss-Kahn (2009) warns that: "Of course, not every country can undertake fiscal stimulus. (…) Some will need to contract their budgets rather than expand them."

monetary policy. This seems to indicate fears that easy money could lead to higher inflation or balance of payments disequilibria: the spirit of the above-mentioned "new consensus macroeconomics" seems to still be present. But the truth is, as economist Paul Krugman has put it, inflation should not be a major concern while the recession is still deepening.[5] On the other hand, with the support that the IMF requested from the G20, the Fund should have plenty of resources to address potential balance of payments crises in the emerging world. [6]

The Case of Costa Rica

Costa Rica presents an interesting case of an economy where a significant stimulus package was implemented, while maintaining tight monetary policy out of the fear of higher inflation rates and, potentially, a balance of payments crisis. As will be discussed below, the IMF even went so far as to praise the Costa Rican fiscal efforts, while issuing strong warnings against a softer approach to monetary aggregates.

This case also provides a clear example of the complications arising when authorities attempt to control the exchange rate and the money supply (or the interest rate), within the context of an open capital account. But in an economy as open as that of Costa Rica (which has become accustomed to very predictable and gradual movements in the exchange rate), it is difficult (and probably also dangerous) to give up control over the real exchange rate.

Trapped within this paradox (the difficulty of attaining both competitive real exchange rates and inflation rates closer to international levels), the central bank got caught between an overheating local economy and a global recession. The policies applied to cool down the system caused a credit crunch that became severely aggravated when foreign credit dried up due to the international financial crisis.

Tighter monetary policies and capital adequacy regulations on commercial banks, and the unavailability of foreign funding combined to cause a decline in domestic demand at a time when a fall in external demand was imminent. The central bank was more interested in attaining the inflation target than in shielding the economy from the impact of an international recession that was growing in depth and in complexity. The economic authorities did not realize (or act on) the fact that the monthly index of economic activity (IMAE) was showing lower year–over-year rates of growth since November 2007. As will be seen below, this trend continued to deepen until March 2009.

By the time the government announced the stimulus package in late January 2009, the IMAE had already seen four consecutive months of negative (and worsening) year-over-year rates of growth. Thus, in addition to the late fiscal reaction, the central bank continued with a tight monetary policy that made it difficult for producers to fully benefit from the fiscal stimulus.

In April 2009 the IMF announced that a stand-by agreement had been approved with Costa Rica for US$735 million. According to the press release, the program submitted by Costa Rican authorities plans to preserve stability and mitigate the impact of the crisis on growth and on household incomes

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[5] See Krugman (2009).

[6] See Weisbrot (2009) on the capacity of the IMF to help emerging countries evade potential balance of payments crises.

"by increasing exchange rate flexibility and exercising firm control of monetary policy in order to narrow the external current account deficit and lower inflation."[7] The release later added that the plan also contemplated higher fiscal spending to protect the vulnerable population, but the text of the stand-by agreement indicates clearly that: "However, the authorities should be prepared to delay or even withhold some of the stimulus if the current account deficit does not converge to a manageable level, financial shortfalls arise, and/or inflation pressures fail to abate."[8]

The stimulus package has not been delayed or withheld, but the fact that it is combined with monetary restraint reduces its effectiveness. The next section provides historical context, and examines some of the difficulties arising from the combination of countercyclical fiscal policy with procyclical monetary policy.

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[7] IMF (2009a).
[8] IMF (2009b).

Background: Recent Economic Developments

In 2006 and 2007, the Costa Rican GDP grew at an average annual rate of approximately 8.3 percent, which allowed for relatively low unemployment rates (4.6 percent in 2007)[9], and higher government revenues. This in turn brought the fiscal balance down to -1.4 percent of GDP in 2006, and generated a surplus of about 0.30 percent of GDP in 2007 (see Table 1).

Exports and tourism remained strong during those two years, and foreign capital kept flowing into the country. In spite of high import bills (due partly to high prices of oil and raw materials), the capital and financial account more than offset the current account deficit, giving rise to an accumulation of international monetary reserves in both 2006 and 2007.

In September 2007, in response to the slowdown of the U.S. economy, the Fed cut the Federal Funds rate by 50 basis points[10]; the gap between Costa Rican and U.S. interest rates rose. Between just the last quarter of 2007 and the first quarter of 2008, international monetary reserves increased by US$ 1.149 billion (3.85 percent of GDP).[11] In order to maintain the floor of the fluctuating bands for the domestic currency in the foreign exchange market, the Central Bank absorbed the excess dollars and the money supply rose.

The resulting rise in liquidity increased inflation in 2007 above 10 percent. In the face of rapidly rising commodity (including oil and food) prices, inflation increased to nearly 14 percent in the following year. Capital inflows continued vigorously throughout the first weeks of 2008, increasing the money supply, and making it difficult for the central bank to attain the stated inflation target. In January of 2008 the policy interest rate was cut by 275 basis points, on the theory that even though lowering interest rates would normally increase inflation, in this case it would contribute to lower inflation by reducing capital inflows. But capital inflows continued and international reserves kept accumulating until they reached a historic record: US$4,937 billion (16.5 percent of GDP) in April 2008.[12]

The conditions in the foreign sector, however, deteriorated very quickly. Flows of capital dried up in the second and third quarters of 2008 and international reserves declined by more than US$500 million. Exports had been slowing since the second half of 2007, and throughout 2008 they grew by only 6.2 percent, down from over 16 percent in both 2006 and 2007 (see Table 1). The Colón depreciated almost 11% from November 2007 to November 2008, and the Central Bank increased the policy interest rate from 5.52 percent in early January to 10 percent in August, where it has remained until the first quarter of 2009. The goal of this move was clearly to avoid capital flight in the face of a rising current account deficit, which reached 8.9 percent of GDP for 2008.

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[9] Costa Rican Office of the Census. http://www.inec.go.cr/

[10] According to the Board of Governors of the Federal Reserve (2007), on September 18, 2007, the Federal Open Market Committee, decided to lower the federal funds rate 50 basis points, to 3.7 5 percent. This action started a downward trend that ended on December 16, 2008, with the decision to bring the federal funds rate to its current range of 0-0.25 percent.

[11] Banco Central de Costa Rica (2008).

[12] Banco Central de Costa Rica (2008).

Table 1
Costa Rica: Economic Indicators

Economic indicators	YEAR				
	2006	2007	2008	2009	2010
Real GDP (annual percent change)	8.8	7.8	2.9	0.5	1.5
Private consumption	5.7	7.4	4.6	1.6	Na
Gross fixed investment	10.8	18.0	12.6	-11.2	Na
Exports of goods (FOB)	14.1	14.8	2.9	-10.4	5.6
Imports of goods (CIF)	16.0	12.7	21.0	-19.8	5.2
Current Account (percent of GDP)	-4.5	-6.3	-8.9	-5.3	-5.3
Monetary Indicators (annual percent change)					
Broad money	25.3	16.3	18.3	11.8	9.6
Real change, Broad money	15.9	5.5	4.4	3.8	2.6
Monetary base	26.9	33.0	11.9	7.1	8.5
Real change, Monetary base	17.5	22.2	-2.0	-0.9	1.5
Lending interest rate	20.7	16.3	20.7		
Credit to private sector (local currency)	34.0	45.2	25.5	9.7	10.8
Real change in credit private sect	24.6	34.4	11.6	1.7	3.8
Credit to private sector (foreign currency)	22.3	30.0	37.9	8.6	10.5
Government (percent of GDP)					
General government overall balance	-1.4	0.3	-0.3	-3.2	-3.2
Combined Public sector debt	47.8	43.2	35.6	36.9	38.3
External public debt	13.2	10.5	9.0	9.1	10.0
Balance of Payments (millions U.S.$)					
Current account	-1023	-1647	-2640	-1602	-1656
Financial and capital account	1909	2435	2325	1602	1756
Direct investment	1371	1634	2000	1334	1353
Capital flows	390	591	325	268	403
Private net capital to commercial banks	-66	-830	315	68	0
Private net capital non-financial sector	738	1700	-126	4	-77
Errors and omissions	148	211	0	0	0
Change in Net Reserves (increase -)	-1034	-999	315	0	-100
Other information					
Net International Reserves (millions of USD)	3115.0	4114.0	3799.0	3799.0	3899.0
Exports (percent of GDP)	36.0	35.4	32.1	28.4	29.2
Imports (percent of GDP)	48.1	46.8	48.5	39.1	40.2
Consumer Price Index	9.4	10.8	13.9	8.0	7.0
Unemployment (in percent)	6.0	4.6	4.9	na	na

Source: International Monetary Fund, Banco Central de Costa Rica, and INEC.

The less favorable conditions in the foreign sector are explained by declining exports and foreign direct investment flows. Some of the latter were aimed at the development of new production facilities for export purposes, but an important portion of investment flows was associated with real estate development, especially in the tourist sector. In 2007, US$325 million was invested in new hotel facilities or in the expansion of the existing ones.[13,14]

Funding for these facilities was provided by U.S. banks, but the international crisis restricted the flows of credit for these projects. A US$800 million facility to be headed by Steve Case (founder of AOL) was originally scheduled to start in 2009, but has now been postponed until at least 2010. The construction of a St. Regis Hotel had to be put on hold after the collapse of Lehman Brothers, which was providing credit for the project. At least one more project has been put on hold in the same area as a result of the credit crisis in the U.S.[15] All of these projects also face serious doubts related to the flow of tourism: it is not clear at this moment how much demand there could be for these developments in the near future.

Recently the Central Bank lowered the GDP growth forecast for 2009 from positive 0.5 percent to negative 1.8 percent. This move was to be expected as the monthly index of economic activity (IMAE) had been showing negative rates of growth since October 2008, with the rates becoming more negative every month: by March 2009, the IMAE's rate of growth reached –6.2 percent. With exports and gross investment expected to fall 10.4 percent and 11.2 percent respectively in 2009, an injection of spending was required to prevent a deepening of the recession.

The Fiscal Response to the International Crisis

In February 2009, the Costa Rican government launched the "Plan Escudo," a rescue package supposedly designed to serve as a "shield" against the global crisis. Although many criticized the program for its lack of precision in terms of the expected impact on the economy, it did seem to provide considerable stimulus to a depressed aggregate demand. According to the formal request for a Standby Arrangement with the IMF, the stimulus package was expected to be about 2.8 percent of the 2009 GDP, as shown in Table 2[16]:

Table 2
Costa Rica: Estimated Effect of Stimulus Package

Concept of spending	***Percent of GDP***
Increase in government's wage bill and central government transfers	2.00
Increase in public investment	0.80
TOTAL EFFECT OF STIMULUS PACKAGE:	***2.80***

Source: IMF (2009b).

[13] BCCR (2008).

[14] Total real estate investment reached US$638.8 million in 2007, with US$131.9 associated to tourist sector. In 2006 real estate investment was US$373.5 (BCCR, 2008). Tourism is the single most important source of foreign exchange revenue; in 2007 the ratio of tourist income to exports reached about 15 percent.

[15] See Property Wire (2008). Also Nuwire investor (2009).

[16] See IMF (2009).The government also recapitalized state owned commercial banks (a contribution that amounts to about 0.4 percent of GDP). Foreign funding from the World Bank and the Inter American Development Bank was expected to reach US$1billion (IMF, 2009; p.11).

This would be expected to have an important impact on the national economy, although it should be noted that not all infrastructure investment is to be done at once, so this segment will take some time to make its effect felt. According to an IMF report, Costa Rica ranks second in Latin America, in the use of countercyclical fiscal policy to alleviate the effects of the global crisis.[17] Still, as mentioned above, the evolution of the IMAE index tells us that the recession seems to be deepening, in spite of the stimulus package. Of course, part of the expected impact of the public spending may have been affected by delays in implementation of various elements of the package. But a closer look at the behavior of the credit and monetary variables suggests that the effect of the stimulus package may have been offset by a tight monetary policy.

A Credit Crunch

As noted above, during the end of 2007, and beginning of 2008 Costa Rica received a substantial amount of capital inflows from the rest of the world. In order to avoid a drastic appreciation of the Colón, the central bank absorbed the excess supply in the foreign exchange market, and international monetary reserves increased until they reached record levels. In order to mitigate the accumulation of foreign reserves (and reduce potential inflationary effects), the bank decided to reduce the policy interest rate.

Table 3
Costa Rica: Basic Interest Rates (end of month)

Month	2006	2007	2008	2009
January	15.25	10.75	7.25	11.25
February	15.25	9.75	5.50	12.00
March	15.25	8.00	5.25	11.75
April	15.25	7.50	4.25	11.50
May	13.75	7.25	5.00	
June	13.50	7.25	5.50	
July	13.75	7.25	7.00	
August	13.75	7.25	8.50	
September	13.50	7.25	9.25	
October	13.25	7.00	10.50	
November	11.25	7.00	11.00	
December	11.25	7.00	11.50	

Source: Banco Central de Costa Rica

Table 3 shows how the basic[18] interest rate declined from 8 percent in March 2007 to 4.25 percent in April 2008.[19] The move was not very effective in reducing capital inflows (and the corresponding increase in foreign exchange reserves), but did have the effect of increasing credit to the private sector and increasing the current account deficit. As may be seen in Table 1, credit to the private sector in local currency rose by more than 45 percent in 2007, and continued to increase throughout

[17] See La Nacion (2009a).
[18] The "basic" interest rate is a weighted average of the rates charged by the Costa Rican financial system. There is a strong positive relationship between this basic rate and the "policy" rate that the central bank sets. Most loan contracts are based on interest rates that adjust as a result of changes in the basic rate.
[19] With inflation rates close to 11% and 14% in 2007 and 2008, respectively, real interest rates became negative throughout part of 2007 and 2008.

the first half of 2008. The current account deficit rose to 6.3 percent of GDP in 2007 and almost 9 percent in 2008.

The lower interest rate attempted to keep the stated inflation target within striking distance, but by lowering it, the monetary authorities ended up overheating the economy.[20] By April 2008 the state-owned banks (which serve the largest share of the local market) had lent all they were able to lend with their existing capital adequacy,[21] and the private banking sector was facing a similar situation.[22] As seen in Table 3, in a span of only four months the basic interest rate doubled, and by February 2009 the rate was almost three times as high as it had been in April 2008. Thus, by mid-2008 credit was no longer available as the financial system had burned all available fuel.

In previous business cycles, the Costa Rican banking system had addressed scarce liquidity by means of foreign funding, but this time that option was no longer available due to the global financial crisis: foreign banks were reluctant to provide credit to local banks, and when the funding was available, it was to be provided only at high interest rates.[23]

Representatives from private and state banks, as well as from various producer organizations, suggested reducing the legal reserve requirement.[24] The Central Bank responded by providing certain flexibilities in the way commercial banks handle their reserves,[25] but the move seems to have been insufficient as the economy has continued to slow.

Monetary policy has remained tight, even in the face of a severe international recession. The stimulus package helped capitalize the state-owned commercial banks, but interest rates have remained high. In the end, the fiscal stimulus may be large, but restrictive conditions in the credit markets definitely limit the potential impact of countercyclical fiscal policy. Moreover, the IMF has praised Costa Rica for its fiscal effort, while insisting that monetary policy remain tight due to the lack of flexibility of the foreign exchange regime.[26] The IMF's argument is that lower interest rates would lead to an increase of the current account deficit, and that the central bank would then lose international reserves, thereby increasing the risk of a balance of payments crisis. But of course, a balance of payments crisis need not occur if the IMF were to provide the necessary resources to prevent a total drain on international reserves. It is worth noting that the Fund has provided US$ 47 billion to Mexico through its Flexible Credit Line, which does not require conditionality.[27] This together with US$30 billion in a currency swap arrangement through the U.S. Federal Reserve,[28] has guaranteed that Mexico will not face a balance of payments crisis or a run on its currency.

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[20] This is a typical illustration of the difficulties posed by the so-called problem of the "trilemma" or "impossible trinity" of monetary policy. See Cordero (2008) for an analytical exposition of this condition.

[21] La Nación (2008b), July 24, 2008.

[22] La Nación (2008a), July 10, 2008.

[23] La Nación (2008a).

[24] La Nación (2009b).

[25] See Banco Central (2009b), and La Nación (2009c).

[26] La Nacion (2009d).

[27] See IMF (2009c).

[28] Banco de México (2009). "Press Release: Banco de México announces the extention of swap line with the U.S. Federal Reserve", June 25.

Conclusion

After a vigorous spurt of growth in Costa Rica, the drop in U.S. interest rates led to massive capital inflows which put the central bank's inflation targets at risk. The policy measures adopted by the central bank – lowering policy interest rates in an attempt to reduce capital inflows -- led to an aggressive expansion of domestic credit that quickly brought banks to the limits of their capital adequacy ratios. As a result, a credit crunch developed, which caused domestic demand in Costa Rica to slow even before the economy was hit by the impact of the global recession. By the time the global slowdown had begun to affect the domestic economy, production was already declining – which the central bank did not attempt to prevent.

The government designed a stimulus package (the "Plan Escudo"), but it has not prevented further economic deterioration, due to the continuation of tight monetary policy. Although the IMF has praised the Costa Rican government's countercyclical fiscal policy, the Standby Arrangement insists on the need to prevent inflation and protect the economy against an eventual balance of payments crisis. In the end, the potential favorable effects of expansionary fiscal policy have been hamstrung by restrictions on the monetary end of the economy.

An interesting question arises here: what options did the Central Bank have in early 2008 to avoid inflation (due to huge accumulation of international reserves), without causing the economy to overheat?

As shown above, the bank attempted to stop capital inflows by reducing the local interest rate, which lead to an explosion of credit in the private sector. Instead, the monetary authorities could have allowed the currency to depreciate temporarily. Alternatively, the authorities could have combined the interest rate reduction with either higher legal reserve requirements in commercial banks or some temporary controls on capital inflows. Finally, another option would have been to simply maintain the spread between local and foreign interest rate, and allow for a higher inflation target. Had the central bank taken any of these actions, the economy would not have burned all its fuel in the first few months of 2008, and would have had more room for stimulus when the international crisis actually hit.

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