

THE OPEN ECONOMY OF PANAMA: A MONETARY APPROACH

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ABSTRACT

The dollar has been the unit of exchange in Panama since 1904. This has had a dramatic effect on economic and development policy. A basic model with a simple system of three relationships is used to evaluate the monetary implications of a country where the currency must be imported from abroad. The model examines the impact of changes in the country's balance of payments on the money supply, economic output, and import capacity. The study finds that the use of the dollar as the sole unit of exchange creates economic stability at the expense of reduced autonomy and flexibility in policy making. The Panamanian experience is of particular relevance to other heavily indebted nations searching for a formula to control hyperinflation.

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CHAPTER 1

INTRODUCTION

Monetary policy in Panama is dominated by the facts that (1) the US dollar is the legal tender and (2) the domestic issue of currency is restricted to an insignificant amount of coinage. The coins are distinct from quarters, dimes, etc., but are identical in shape. The currency is referred to as the "balboa" for nationalistic reasons, even though the unit of exchange is the US dollar.

The purpose of the paper is to illustrate that the use of the dollar as the local currency has had a dramatic impact on economic policy and development. Although the effects of the use of the US dollar as currency in Panama has had both positive and negative consequences for the economy, the results of this study indicate that the use of the US dollar as legal tender in Panama has served the country well.

The dollarization of the economy has created a monetary environment akin to the classic gold standard. In this case, the money supply must be imported from abroad and the extension of domestic credit must be secured by foreign exchange. Therefore, the determination of the monetary base and income is reliant on inflows of foreign exchange from the balance of payments. This has created an environment of long term price stability, unprecedented in many small highly indebted nations. Expansionary fiscal policy is limited to the availability of foreign exchange and the private sector's role in the determination of monetary conditions becomes critical. Private sector banks, principally foreign institutions, have been instrumental in supplying net credit to the Panamanian economy.

In the fixed exchange rate case of Panama, the effectiveness of monetary policy as directed by the monetary authorities is limited. This has imposed rigid constraints on the government's ability to alter its mix of economic policy instruments to influence employment creation. Examination of price and productivity factors in both Panama

and the US suggests that the rigid conversion of currency at par has hindered economic adjustment. With limited downward potential for a reduction in wages, an overvaluation of the balboa relative to a theoretical market based exchange rate has heightened unemployment.

CHAPTER 2

HISTORY

2.1. The Monetary Agreement

In 1904, one year after independence from Colombia, the Republic of Panama instituted a monetary convention that remains virtually unchanged. The agreement stipulated that the US dollar would be the primary unit of exchange, although Colombian pesos were permitted to circulate. The only substantive change in the monetary accord since 1904 has been the progressive decline in the importance of the Colombian peso. Today, the US dollar is the sole unit of exchange.¹

The dollar was chosen as the currency medium to both comply with the wishes of W.H. Taft, then US Secretary of War and acting director of the Isthmian Canal Commission, but more importantly to establish a secured currency. Taft's recommendation was for currency unity between the sovereign Republic of Panama and the Isthmian Canal. The Isthmian Canal, or the Canal Zone, was a US territory consisting of 5 miles on each side of the interoceanic waterway. This territory was leased for complete use of the US authorities in exchange for \$2 million per annum.

The Panamanian authorities chose to use the US dollar as the unit of exchange primarily to ensure currency stability during the early years of the Country's existence without resorting to a gold standard. The cost of issuing a Panamanian currency backed by gold would have been prohibitively expensive for the new nation.²

2.2. Structure of the Banking System

The structure of the banking system is a function of the Monetary Agreement of 1904 and is an important determinant in monetary operations of the Republic. The banking system is composed of Banco Nacional de Panama (BNP), the National Banking Commission, and both foreign and domestic commercial banks.

BNP performs many of the same functions it did at its inception in 1904. The Bank is both a commercial bank and a quasi-central bank. However, BNP is technically a commercial bank that is owned and operated by the government. The institution provides banking services to the private sector similar to any domestic commercial bank, such as checking, savings, and lending. The Bank also performs banking functions on behalf of the public sector. These include, acting as: (1) agent in Republic syndications, (2) depository of reserve requirements of the banking system, (3) a commercial and industrial development financial institution, (4) an agricultural development financial institution, and (5) a clearing agent on behalf of the government.³ However, BNP does not engage in some traditional central banking functions such as currency issuance, exchange rate intervention, and open market operations.

The commercial banking sector and the National Banking Commission play a key role in the determination of monetary policy. The commercial banking sector provides a substantial portion of the domestic credit available for local development. These activities are regulated by the National Banking Commission. The National Banking Commission was established in 1970 to simultaneously promote Panama as an international banking center and ensure solvency and efficiency in its operations.

In 1970, the Commission established three distinct licensing agreements under which commercial banks must operate. The Commission has retained the authority to grant and revoke licenses in all three categories. Banks can operate in Panama under one of the following arrangements: (1) a general license bank that can engage in domestic and foreign activities, (2) an offshore bank that can engage exclusively in foreign business, and (3) a representative office of foreign banks.

The Commission can act as a monetary agent by altering reserve and capital requirements to respond to domestic liquidity needs. The Commission can manipulate changes on reserves of sight and time deposits from between 5 and 25 percent.⁴

Although changes in reserve and capital requirements can substantially influence monetary policy, they are made infrequently and inconsequentially. This has provided stability for domestic and foreign banks and has promoted the development of Panama's banking system.

Subsequent to the enactment of the 1970 Banking Law, Panama began to develop rapidly into an international banking center. Deposits of foreign banks increased from \$0.4 billion in 1970 to a peak of \$27.0 billion in 1982. Many factors contributed to the rapid development of Panama as a major international financial center. First, the use of the US dollar in transactions and operations eliminated exchange rate risk for US banks and limited it for other foreign institutions. Second, no restrictions existed on capital account flows.⁵ Third, communications networks were well established, providing easy access to home offices and international clients. Finally, Panama's geographic location between North and South America and its established position as a major conduit of international trade (the Canal) enhanced the development as an international financial center.⁶ The importance of the growth of the foreign private banking sector in Panama as an implicit agent of monetary policy is underscored by the continued expansion of credit provided to both the domestic public and private sectors. This subject will be explored in greater depth.

CHAPTER 3
BALANCE OF PAYMENTS, MONEY SUPPLY, AND INCOME
DETERMINATION

3.1. The Theoretical Overview of the Balance of Payments Approach to Monetary Policy

The use of the dollar as the legal tender in Panama prevents the authorities from engaging in monetary creation. This creates an environment where the Republic is critically dependent on resource exchanges with its trading partners and other external participants in the economy. These external flows literally provide the currency with which domestic and external purchases can be made and credit extended. Therefore, access to current and capital flows from abroad determines the potential for credit expansion, import purchases, and economic growth. The domestic dependence on the US dollar as the unit of exchange also leads to the avoidance of a "foreign exchange" gap prevalent among many developing countries.⁷ This provides for an automatic adjustment of current, capital, and reserve flows in the balance of payments. In other words, the prospect for a shortfall of foreign exchange is eliminated, due to the fact that imported dollars become the local currency.

The domestic money supply is then determined by the foreign exchange reserves held by both private participants in the Panamanian economy and the monetary authorities. Reserves held by the monetary authorities are less critical in Panama than in a country that actively supports its local currency through foreign exchange market intervention.⁸ Additionally, the majority of capital flows and previously accumulated reserves are controlled by the private sector. This supports the notion that monetary policy is determined through the private sector's supply and demand for capital, rather than the public sector monetary authorities. This will be studied more extensively later in the paper.

The use of the US dollar as the medium of exchange restricts the authorities' powers over monetary policy. The private sector through its commercial banks becomes the major provider of credit. The authorities can influence the money supply only indirectly through restrictions on the banking sector and changes in macroeconomic policy. These changes would ultimately affect non-public sector entities in their decisions to invest or hold deposits in Panama.

Foreign exchange reserves held by the monetary authorities change in tandem with events determined to a large extent outside of Panama. These events are marked predominantly by changes in voluntary capital flows and simultaneous adjustments in current flows. Between 1970 and 1982, Panama ran continual current account deficits, averaging \$146 million per annum during the period. These deficits plus reserve accumulations on the part of the monetary authorities were largely financed through capital flows from foreign commercial banks. During the same period, the capital account averaged an annual surplus of \$72 million. Between 1983 and 1987, a decline in net capital flows is indicated by a shift in the capital account from a surplus to an average annual deficit of \$174 million. The average current account swung from a deficit to a surplus of \$310 million to compensate for the deterioration in the capital account. The characteristics of current and capital flows are evaluated in greater detail in appendix 1.

Foreign exchange reserves held by non-public entities are observed as deposits in the domestic banking system. These deposits affect the Panamanian money supply outside of the authorities' jurisdiction. Therefore, commercial banks, intermediaries of capital flows, play a critical role in the determination of the money supply and monetary policy in Panama. This should establish a close relationship between banks and the monetary authorities.

In Panama, a small open economy, the supply and demand of money shifts in tandem with changes in the external accounts and ultimately determines the potential or

equilibrium growth. In a closed economy or an open economy with flexible exchange rates, short term monetary fluctuations can deviate substantially from the long run supply and demand for money that is determined by the long run equilibrium GDP. In a closed economy, monetary creation can be undertaken by the authorities regardless of the demand for credit, e.g. the former Soviet Union. Whereas, in an open economy with flexible exchange rates, monetary creation can be offset by changes in the value of the exchange rates, e.g. Brazil. In these groups of countries, substantial and continued short term deviations from the long run prospects can sufficiently alter the structure of economic incentives. This can ultimately affect long run growth prospects. However, the use of the dollar as the currency in Panama and the relatively free flow of current and capital transactions creates the long run monetary characteristics in the short term. This prevents monetary disturbances that can lead to deviations from the long term growth potential.⁹

In Panama, the short term monetary transmission mechanism begins with the balance of payments. The money supply adjusts to shifts in the balance of payments. Higher capital or current inflows will increase the supply of money in the economy. Subsequently, the demand for money will compensate for an excess or a dearth of liquidity. The change in the demand for money will then directly impact the capacity for growth. For example, subsequent to the conclusion of the Carter/Torrijos Panama Canal Treaty in 1978, export earnings increased by over \$200 million, heightening the available liquidity. This in turn stimulated demand for both imports and domestic goods and services. Imports grew by 9.1 percent in 1978 versus 0.9 percent growth in 1977. In this case, increased liquidity led to an expansionary effect in the national income accounts and an equilibrating effect in the balance of payments. In 1978, real GDP expanded by 9.8 percent, up from a mere 1.1 percent the previous year. The increase in imports led to higher domestic activity, which mitigated the expansionary monetary effect of excessively large trade surpluses.

Temporary differences between the supply and demand for money will lead to adjustments in cash and nonmonetary assets held by participants in the Panamanian economy. When the supply of money increases rapidly from a change in the balance of payments, supply will temporarily exceed demand. Individuals, corporations, and the government will immediately reduce their cash holdings and purchase nonmonetary assets. This temporary change in monetary equilibrium can be initiated from a number of different external and domestic shocks: exports, imports, capital flows, domestic prices, and fiscal expansion. The mechanism of adjustment would be similar for all of the aforementioned disturbances. The only difference would be the origin of the shock. The re-equilibrating process could occur domestically or externally.¹⁰

An excess of money could be diverted to the purchase of foreign goods or securities. The purchase of foreign goods or imports would reduce the trade balance and the supply of money, as previously illustrated in the example of the Panama Canal. Similarly, the purchase of foreign assets would be recorded as a capital outflow, reducing the liquidity from abroad.

Alternatively, the economic agents could purchase domestic goods or securities. The purchase of locally produced goods would lead to higher domestic price levels and output. These factors would create a greater demand for imports, as domestic price increases make foreign goods relatively cheaper and output with a heightening of relative purchasing power. Higher domestic prices would also translate into a higher nominal demand for cash balances, assuming that real cash balances remain constant. This would mitigate the effect of an expansion in the money supply.

Similarly, an increase in purchases of domestic securities would result in rising bond prices and lower rates of return. As domestic yields fall, demand for foreign securities would increase.¹¹ This demand would easily be met owing to Panama's open capital account. With the substitution of foreign securities for domestic ones, the supply of money would fall. This drop would be attributed to greater capital outflows

in the balance of payments and a reduction in the availability of money. Panamanian and US interest rates would also tend to converge.

3.2. The Empirical Model for the Panamanian Case

A basic model with a simple system of three relationships is used to evaluate the monetary approach to the balance of payments in the case of Panama. The simple model of three non-simultaneous solution equations examines both the effects of the balance of payments on the domestic economy and the self-regulating mechanism where a change in demand impacts the balance of payments. The first relationship establishes the fact the changes in the country's balance of payments performance affects the money supply. Secondly, an increase in the supply of money is evaluated within the context of its positive influence on economic output. Finally, the relationship between an increase in economic output and demand for imports is established. The third relationship completes the system of equations, owing to the return to the balance of payments through the demand for imports. In other words, an increase in imports from heightened income would lead to a deterioration in the balance of payments, the money supply, and future income growth.

3.2.1. Money Supply and the Balance of Payments

The first approach in establishing the transmission mechanism between the balance of payments and economic output is to evaluate the effects of external inflows on the available money supply. The following ordinary least squares regression uses money (M2) as the dependent variable and balance of payments credit items as the primary independent variable. The balance of payments credit items are defined as exports of goods and services plus net capital flows. The use of the lagged dependent variable

improves the explanatory power of the equation. The estimated relationship is (see Note at end of chapter):

$$\ln L = c_1 + a_1 \ln (X+K) + a_2 \ln L(-1)$$

Coefficient:	0.5	0.1	0.8
T tests:	2.7	1.9	13.8

$$\text{Durbin-Watson} = 1.63$$

$$R \text{ square, adjusted} = .99$$

Where L, X, and K represent money, exports of goods and services, and net capital flows.

The explanatory coefficients are all statistically significant. This combined with the positive coefficient for a_1 suggests that a relationship between changes in balance of payments credit flows positively impacts change in the domestic availability of money.

3.2.2. Money Supply and Income

This section will examine the direct relation of money to national income both qualitatively and empirically. Graph 1 illustrates the close relation between nominal GDP and broad money, as represented by M2. However, it is also useful to evaluate the money supply in relation to national income or money as a percentage of nominal GDP. This relation is illustrated in graph 2. This graph shows a clear increase in the amount of money in circulation relative to the size of the economy between 1970 and 1987.

The advance of money relative to nominal GDP is consistent with the theory that as financial intermediation deepens the ratio of money to income should increase.