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MONETARY DUALISM FOR STABILIZATION AND STRUCTURAL REFORM: A CUBAN EXPERIMENT

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MONETARY DUALISM FOR STABILIZATION AND STRUCTURAL REFORM: A CUBAN EXPERIMENT[1]

ABSTRACT

Cuba's economy has been bifurcated. On the one hand, labor redundancies and the rationing of goods and services characterized the peso economy. For many years Cubans held more pesos than they either wanted or could spend. The dollar segment of the economy, on the other hand, is characterized by market-determined prices and it absorbs much of the labor redundancy that spills over from the peso part of the economy. The dual monetary policy, in effect from 1992, is shown to be a positive element for two reasons. First, this gradual dollarization has provided a cushioned landing for economic adjustment. Second, dollarization removes discretionary control from state institutions that to-date have demonstrated their inability or unwillingness to wield such powers in appropriate ways.

1. INTRODUCTION

Macro-fiscal disequilibrium, price instability, and external imbalances have frequently been corrected with policies that included significant reductions in government expenditures, especially in the form of direct employment. Over the years, stabilization policies tended to focus mainly on variables directly managed by governments, such as those comprised in the menus of fiscal and monetary policy. Then, the realm of adjustment policies expanded as some of the causes of disequilibrium spilled over the typical choice set of the macroeconomic policymaker, especially when the public-sector activities were no longer limited to the production of public goods but also included state-owned enterprises (SOEs). Many of these SOEs depended on government subsidies, and contributed to the deepening of disequilibria. As the size of government grew also by the expansion of public programs in health, education, and social security and welfare, the level of employment became an indispensable target of adjustment programs. Policy reform started to include not only the old stabilization measures but also institutional changes such as privatization, government modernization, and trade liberalization.

Upon the disappearance of socialism in Central and Eastern Europe and the disintegration of the Soviet Union, the realm of economic reform was further expanded to areas such as revamping the legal system to establish and guarantee property rights and contractual security, privatizing and restructuring old socialist enterprises, developing a financial sector, recreating a commercial sector, and re-defining the role of the central government. With these changes and the global push in favor of private sector-based market economies, a new set of problems has arisen for economic reformers. Stabilization was still necessary but there was also a need for structural reforms. Stabilization measures, such as significant layoffs, tend to be unpopular, while structural reform measures, such as the liberalization of commerce and trade, can be more popular. Although stabilization and structural reform can be highly complementary, they can also follow separate trajectories and reach various degrees of success or failure independently (Hernández-Catá, 1995, p. 117).

The objective of this paper is to evaluate how a dual monetary regime can facilitate the management of stabilization policies that must be implemented at the same time a country undertakes the structural reforms required for a transition from a socialist or at least heavily state-dominated economy to a full market economy. Monetary dualism is defined in this paper as a monetary regime where two currencies co-exist in an economy — its own national currency with the currency of another country.[2]

The paper draws from the evolution of the Cuban economy since 1959, the crisis created in 1991 when Soviet subsidies disappeared, and the stabilization measures taken by the government to limit the depth of the crisis. Besides this Introduction, the paper has six sections. Section 2 reviews the genesis, dynamics, and transmission mechanisms of disequilibria in economies with highly centralized governments. Section 3 explains how disequilibria came about in Cuba, describes the monetary regimes the country had prior to socialist central planning, and discusses Cuba's serendipitous discovery of monetary dualism to reduce the pains of a drastic stabilization policy. Section 4 contains a brief discussion of Panama's monetary regime and some views on advantages and disadvantages of dual regimes. Section 5 explores the "rules versus discretion" controversy. Section 6 provides the conclusion.

2. DIFFERENT DIMENSIONS OF DISEQUILIBRIUM

In economies where the government plays a dominant role as policymaker, market regulator, owner of enterprises, and principal investor and employer, employment is often generated as a result of political instead of economic factors. In most cases, this results from government promises to create a large number of jobs rapidly, regardless of the economic feasibility or costs of such an endeavor. Later, these economies will suffer from a large fiscal deficit, disequilibrium in the balance of payments, and inflation. In severe cases, when foreign exchange reserves are depleted, international credit is no longer available, and net capital flows are negative, budget deficits are financed by printing money as needed. Typically, economic growth comes to a halt, unemployment can no longer be disguised by the artificial creation of jobs, and living standards may fall.

In order to resume growth, according to the most frequent prescriptive practice, these economies must first reach a degree of stabilization and then undertake a structural reform program that will change the fundamental ways in which the country allocates its resources. The typical recipe for stabilization includes as a *sine qua non* a drastic reduction in government expenditures. If the country has already gone through several adjustment episodes, in which non-labor expenditures were reduced, there will be nothing else to cut but the level of employment itself.

A centrally planned economy in the Stalinist tradition presents an extreme case of government power over an economy. These economies are characterized by virtually no markets or private sector, almost no autonomy in the management of public enterprises, and a central budget system that often eliminates financial accountability at the enterprise level. These conditions introduce some variations with respect to less dominant governments. One of the differences is that inflation is not easily observed in the presence of rationing and strict price controls, since nominal prices and wages tend to remain fixed for indefinite periods of time and changes in the purchasing power of the currency are rarely measured and never published or acknowledged. In such cases, inflationary pressures must be indirectly observed by the intensity of scarcity of consumer and intermediate goods and by the predominant level of prices in black markets, when they are tolerated. Relevant statistics on the workings of such markets are never collected, much less published. Another difference is that in this kind of economy, price distortions tend to be more widely

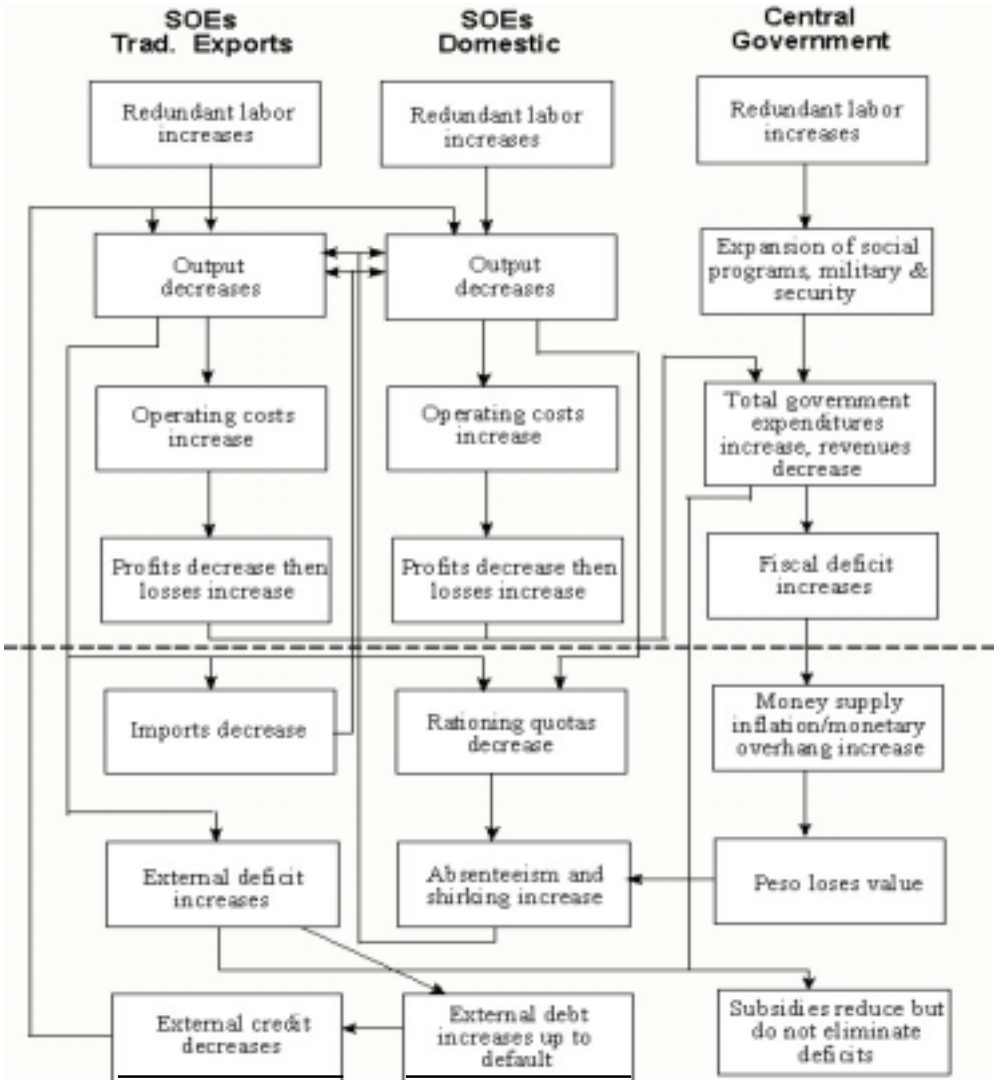
spread and more significant than in economies that, even if suffering from intense government intervention, have to operate with a degree of market freedom.

The most salient form of disequilibrium of a centrally planned economy is measured by the gap between demand and supply at the level of current (controlled) prices, which is what creates the perceived permanent scarcity of all kinds of goods and services. The level and rate of growth of the monetary "overhang" — that part of the money supply that does not find a way to circulate in an economy overwhelmed by scarcity — represent additional indicators of past and present inflationary pressures. When black markets are tolerated or free markets allowed to operate even within certain restrictions, inflation becomes apparent. Otherwise, in lieu of the typical upward inflationary spiral as reflected in price indexes, we can observe a downward recessionary spiral reflected in levels of output.

The mechanism is relatively simple. First, the government policy of rapidly creating employment, even if artificially, generates redundant labor in all kinds of organizations and enterprises and disturbs the operating efficiency of production, reducing overall productivity. Second, as stable employment becomes a worker's right, managers lose their ability to reward good, highly productive employees and to correct the least efficient ones. With labor discipline and traditional work ethics breaking down, and shirking and absenteeism becoming widespread, physical production is disrupted in many ways: Output decreases, quality deteriorates, and deliveries become increasingly unreliable. Virtually all organizations are affected by increasing costs, shrinking revenues, and the concomitant operating losses. When the above scenario is prevalent in an economy dominated by state monopolies, with little or no competition from other sources (either a domestic private sector or imports), the inefficiency of each enterprise is transmitted to the other enterprises and only a stern form of management and planning discipline, even political repression, could avoid a major collapse of the economy. As the levels of output decrease across the board, rationing quotas for consumers cannot be fulfilled. In the presence of highly repressed black markets, consumers may be left with cash balances at unwanted levels, creating the "monetary overhang." Real wages decrease as a result, as do incentives to work. Absenteeism accelerates. The domestic currency loses value as the circular causation cycles continue indefinitely, as the fiscal deficit widens, and as the level of external indebtedness grows until it reaches default proportions. Without external assistance, the government is forced to implement its own structural adjustment program.

The chart on the following page shows the causal relationships dominating the dynamics of disequilibrium and should help clarify the most important interrelationships at play. The titles heading the three columns of boxes only apply until line 4, corresponding to "Profits decrease then losses increase" and "Fiscal deficit increases." Even though the chart is a reflection of the Cuban economy until the disappearance of the Soviet subsidies in 1991, it can be applied to cases in which an open economy loses its capacity to export as a result of the disruptions introduced by redundant labor and management inability to maintain traditional levels of productivity. Since capacity to import is critical, the export sector is defined separately from the sector that mainly produces for the internal market. In fact, disequilibria in the export sector acts as an accelerator and spreader of disequilibria in the entire economy via the reduction of exports and, consequently, the import capacity of the economy, which quickly affects production everywhere.

In order to regain equilibrium or to reduce the depth of the disequilibrium, it is necessary to implement drastic cuts in government employment. Depending on the specific country, the expenditure cuts could take several forms. They could affect central government programs such as education, health, or the military, with or without redundant labor, or target government-owned enterprises with redundant labor. These measures usually carry serious political consequences that all governments fear. In the least repressive



states, that is, those that enjoy a measure of civil liberties, public order might be imperiled by street demonstrations and riots. In the most repressive countries governments are even more fearful of the political consequences of adjustment policies because it is the place of employment where the government controls the workers and prevents political activities that are not under government control. Reducing public employment is losing control of the activities and whereabouts of the workers being laid off. The workers have limited opportunities of employment outside of the public sector, and not only have renewed reasons for civil protests, but also have free time to undertake them. For these reasons, governments facing austerity measures are reluctant to tamper with the level of employment. Economists, in general, are not known for their sensitivity to the political constraints of policy reform, providing their advice as if they were optimizing a policy package where political considerations not only are not allowed but are considered bothersome.

This situation becomes the Gordian Knot of equilibrium policies, especially when implemented in stagnant economies, since a drastic campaign to reduce unproductive employment cannot be complemented with a consistent creation of a similar number of jobs in other parts of the economy. Stagnation means that there is insufficient or no investment; therefore, new jobs cannot be created to absorb the laid-off workers. And what is worse, the resulting social and political upheaval may reduce even further the prospects of attracting investment in sufficient volumes to generate the needed jobs. The government's loss function

depends on the trade-off between inflation and unemployment, a sort of Phillip's curve with reverse causation. Instead of the level of employment being determined by monetary expansion, this one represents the inflationary consequences of arbitrary increases in employment. In contrast to the traditional Phillip's curve, this one does not vanish in the long run.

3. THE CUBAN EXPERIENCE

a. The Economic Crisis of the 1990s

Soviet subsidies became a permanent feature of the Cuban economy almost from the very beginning of socialism in 1961. Their importance is depicted in the chart, which also reflects the main components and dynamic elements of the Cuban economy until the disintegration of the Soviet Union in 1991. Though no reliable estimates of the volume of subsidies have ever been made public, the figure of 6 billion pesos per annum at the end of the 1980s seems plausible. This is equivalent to 30 or 35 percent of Cuba's GDP (Pérez-López, 1997). This level of subsidies not only helped keep the Cuban economy afloat, but also allowed for Cuba's magnificent display of lavish government programs in education and health. With the disintegration of the Soviet Union that started in 1991 and became a reality in 1992, Cuba lost the subsidies that had helped project the country as a showcase of socialism.

At the same time, Cuba's foreign trade with the former socialist bloc suffered a severe reduction with the disappearance of COMECON — the bloc's international trade group — and the switch from barter to a system of payments based on hard currencies. Exports fell 79 percent and imports decreased by 75 percent by the end of 1993. Official Cuban figures indicated a fall in GDP of 35 percent from 1989 through 1993 (Pérez-López, 1997). Gross revenues from sugar, however, Cuba's main foreign exchange earner, were reported to have fallen 73 percent in the same period, which presents an inconsistency that cannot be explained with the available information.[1] For a description and analysis of the crisis, see Rivero (1992), Alonso and Rathbone (1992), Mesa-Lago (1996), Pérez-López (1997), and Sanguinetty (1992, 1993).

As the crisis deepened, Cuba's state-owned enterprises did not reduce their labor costs proportionally to the loss of revenues. The government, committed to a full-employment policy regardless of productivity levels or financial losses, continued paying the same salaries to all workers employed before the crisis. Though the price control system installed since 1960 and the rationing regime in place since 1962 did not allow any form of consumer price flexibility or, at least, temporary adjustments, black-market transactions of consumer goods, mainly foodstuff, started to show clear signs of inflation. With the exception of a small farm sector (covering about 15 percent of all arable land and reportedly supplying approximately one-third of the country's level of produce), Cubans were not allowed to be self-employed or hold any form of private enterprise, a policy in place since 1968.

With the resurgence of the foreign tourist industry in Cuba in the early 1990s, rapidly developed by the government to avoid a total collapse of the economy, U.S. dollars started to circulate in the black market in large volumes. The main transfer mechanisms consisted of foreign tourists giving tips in dollars to Cuban workers in hotels and resorts, and paying prostitutes for their services. A less important mechanism consisted of black-market sales of goods stolen from government enterprises, mainly rum and cigars. The demand for U.S. dollars was a direct function of the expectations of further deterioration of the peso's purchasing power.
At the same time, U.S. dollars were entering the country via increasing numbers of Cuban exiles visiting and helping their relatives and friends to cope with the severe fall in the overall levels of consumption. The

U.S. dollars were used to obtain better food supplies in the black market first and restricted but legal free markets later, and to gain access to government-operated stores that, until recently, only catered to dollar-carrying tourists and diplomats (United Nations/ECLAC, 1997, p. 153). It is important to point out that a large proportion of the U.S. dollars entering the island were received directly by private citizens, without any government intervention. The government did not have the opportunity to intermediate and exchange all arriving U.S. dollars for decaying pesos.

Contrary to government wishes, and in contrast to the traditionally harsh repression against the holding of foreign currencies by Cuban nationals, the U.S. dollar invaded the Cuban economy in such a magnitude that the government finally gave up all forms of persecution and legalized its circulation and the holding of dollar balances. For the first time in three decades, in 1993 no Cuban would go to jail for holding U.S. dollars. This measure instantly allowed the comparison of the real value of the Cuban peso to the U.S. dollar, which has reached a rate of exchange of 130 to 1 (United Nations/ECLAC, 1997, p. 153), or a reduction of 99 percent since early 1958, when both currencies traded at par.[2] The legalization of the U.S. dollar also caused a windfall for the Cuban government and Cuban citizens with relatives overseas, as the latter started to remit amounts of foreign exchange on the order of hundreds of millions of dollars. The reduction in the purchasing power of the peso and the government's inability to stabilize the levels of supply of rationed goods had created a real state of crisis for most families and the remittances came as a blessing for them as well as for the government. Those without relatives overseas had and still have much harder times.

In 1994, the government was increasingly concerned with the continuous debasement of the Cuban peso, the resulting absenteeism of government employees, and the ensuing inflation in the black markets. Cuban workers were losing their incentive to work since the rationing system had all but collapsed and the peso was worth almost nothing. Most workers were making less than 200 pesos, or US$1.54 per month, in 1994, while the rationed food supplies, still at the same prices of 1962, barely covered half of each month's requirements. The rest of the food needs were obtained in the free markets tolerated by the government (many of them operated by the armed forces, which also owned productive farms) with floating prices in pesos or dollars, or in the government-operated stores that only sell in dollars.

In order to reduce the government payroll and stabilize the value of the peso, and instead of laying off a sufficiently large number of redundant workers, the government decided to allow workers to become self-employed in 1993, with the understanding that this was temporary until the government called back the workers to their places of employment (United Nations/ECLAC, 1997, p. 199). Several hundred thousand workers voluntarily and happily abandoned their government-controlled jobs and joined the ranks of the self-employed, as the government granted licenses to operate in one of the officially allowed job categories. This, together with salary adjustments in enterprises that were partially idle or totally paralyzed, reduced or at least stopped the growth of the money supply in pesos and allowed the peso to recover a large proportion of its value, rising to an exchange rate of 20 pesos to the dollar, which has remained relatively stable since then. The size of this exchange rate correction can also be attributed to the increase in the supply of dollars as tourism and remittances from Cuban exiles grew rapidly, and the fact that government- or military-operated produce outlets and some restaurants were allowed to charge free prices, in most cases under monopolistic conditions.

As remittances grew in importance while state production capabilities continued their free fall, the government opened a national network of outlets to sell mostly imported goods in exchange for U.S. dollars. They are reported to charge customers a hefty markup on direct costs. These stores capture, on behalf of government sources, a large proportion of the remittances since they hold the monopoly on trade in imported goods.

b. A Monetary Bypass

Until now, the Cuban government has been able to navigate the economic crisis as a result of the rapid development of the tourist industry, with the support of some foreign investors/operators and the foreign remittances. There does not seem to be growth in the economy at large, however, but, despite the crisis, the government has been able to implement a partial stabilization of the economy by controlling expenditures without directly laying off workers.

How has the government achieved such a feat? It inadvertently created a monetary bypass that allowed part of the economy to operate under a new, stable currency, the U.S. dollar, while allowing the rest of the failed economic system to operate under the old, discredited currency, the peso. Instead of laying off thousands of workers to achieve a measure of fiscal balance and stabilize the peso, the government allowed the workers to "fire" themselves from unproductive peso-based activities and move to relatively more productive dollar-based jobs. Medical doctors and many college-educated professionals paid in pesos started working as doormen in hotels or as taxi drivers just for the tips in dollars. The private citizen was the main actor in this partial adjustment of the economy. Just by walking from high-status, low-pay positions to better-pay, low-status jobs they were correcting past irrationalities in education and employment policies.

Nonetheless, not enough jobs have been generated in the dollar sector to employ a large mass of workers and to significantly improve the national economy. This insufficiency in the presence of tens of thousands of dollar-carrying foreign tourists in Cuba has also contributed to the proliferation of prostitution and all kinds of complementary services, from rooms for rent by the hour to drug dealings. The volume of employment generated by these activities is still insufficient to stabilize the levels of consumption in the country, however. As a result, the Cuban government and the population are facing a severe crisis of crime in the streets that is attributed not simply to lack of employment, but to lack of means of basic support even for individuals who are technically employed but whose earnings are insufficient (see Orrio, 1998).

Meanwhile, enterprises in the peso segment of the economy are losing workers, and management systems, already damaged by almost 40 years of bad administration, are disintegrating. It will not be possible to restore old production capabilities in a short period of time. In synthesis, Cuba's economic future is heavily mortgaged because: 1) its productive capacity is severely limited and still decreasing, 2) the country has no natural resources that can be put to use in large volumes to finance its development, and 3) Cuba has a staggering external debt that even if renegotiated will represent a heavy burden in any reconstruction effort. This implies that Cuba's speed of economic recovery will depend on the volume of direct foreign investment attracted to the country. This simple equation will determine the success of Cuba's transition to a market economy.

c. The Elements of a Reform Program

Among all of the countries that belonged to the socialist bloc before its disappearance, Cuba possibly presents the most difficult and challenging case for radical reforms and the building of a market economy. Cuba's economic recovery will be severely constrained without external resources, and these resources will only be available in sufficient volumes through private investment, though multilateral and bilateral lending organizations would play an important role. If the government in charge of the transition to a market economy is competent and committed, the maximization of foreign direct investment will be the central axiom of its recovery agenda. The question is what set of measures the transition team must formu-

late and bring to fruition. In this equation, the monetary regime adopted by a transition government could represent the difference between secular stagnation and fast recovery.

The current crisis has created conditions representing strong incentives to invest in Cuba. One of them is the low cost of labor, which will remain low until it reaches a point at which the demand for it starts raising the level of wages toward international standards. Another attractive factor is the quality and level of skills of the Cuban labor force; the educational expansion experienced during the last 40 years is presumed to have produced a large pool of educated and highly competitive labor, though of unknown work ethic. A third factor is that the chronic pauperization of the Cuban worker and the needs accumulated during all these years have presumably generated incentives to work hard and make up for the years of deprivation in all aspects of consumption. Forty years of austerity do not seem to have reduced the traditional Cuban admiration for the consumption patterns of the United States.

One of the challenges for a transition government will be to formulate and implement the institutional reforms that will attract greater investment. In what follows, we will assume that the transition government will take all of the stabilization and structural measures required to create the right investment climate, including the liberalization of domestic and international trade, the divestiture of public enterprises, a fiscal policy that will not increase the number of government employees, complemented with the best possible tax structure and administration, and the concomitant changes in the legal system, even if temporary until a new constitutional framework replaces the current one.[3]

Within these terms, a decision has to be made regarding the type of monetary regime that Cuba should adopt in a transition period. Should the transition government continue with the current dual monetary system or should the economy return to a system were the peso reigned by itself? Is there a monetary regime that could help the country to achieve macroeconomic stability and structural reform and attract a large volume of investment at the same time? Exchange rate instability increases the uncertainty of business decisions at the firm level (Krugman, 1990, p. 76), but fixed exchange rates may not be feasible in Cuba for some time as the economy structurally adjusts to a free market system. Is there a monetary regime that could combine the advantages of a fixed rate environment with perfect mobility of capital? What kind of monetary system could provide both the advantages of exchange rate stability and the advantages of flexible rates?

The answers to the above questions lie in continuing the current dual monetary system, with both the peso and the U.S. dollar becoming unlimited legal tender. Current monetary dualism in Cuba has demonstrated that a system of competing currencies creates a monetary bypass or bridge for workers to perform a significant part of the adjustment as they leave unproductive activities in the peso area for productive, export-oriented activities where the dollar predominates. The dual system creates incentives for the workers to shift from unproductive sectors to productive ones, without the government implementing drastic cuts.

Moreno-Villalaz (1992) first offered the idea of a monetary system for Cuba similar to Panama's as an instrument to facilitate Cuba's transition to a market economy. Sanguinetty (1993a, 1993b) adapted Moreno-Villalaz's ideas to a dual monetary or currency substitution model. Monetary dualism will also serve to help the general public to separate the obsolete economic system inherited from socialism from the modern economic system to be created. The old system, associated with the peso, requires severe adjustments that should not be mixed or confused with the measures necessary to attract external resources for investments. Monetary dualism will allow the government to design and implement economic policies that have different objectives without interfering each other.

d. Monetary Dualism in Cuban History

The Cuban peso was born in 1915 when the U.S. dollar was already legal tender in the country (Pérez-Cubillas and Pazos, 1940, p. 27; Wallich, 1950). Monetary dualism existed legally in Cuba until 1950, upon the creation of the Cuban Central Bank (Banco Nacional de Cuba), and it was surprisingly revived in June 1993.

Each time, the development of the dollar-peso dualism followed a different path, but with essentially the same causes: the need to finance government expenditures. In 1915 the coinage of the Cuban peso generated a profit for the government in the form of seigniorage (Black, 1987). This was again the central motive in 1932, during the Machado administration, when the revenues from seigniorage were needed to resolve a fiscal crisis. It seems that the peso was born, or at least it developed, in fiscal sin.

Ironically, the reappearance of the peso-dollar dualism in 1993 follows a reverse order of events (peso first, dollar second) but a similar motive. As government deficits went out of control, "implicit" inflationary finance became imperative. As a result, the peso has been debased and the country must depend, once again, on the U.S. dollar to conduct more efficient transactions and to provide a more reliable means to store wealth.[4] The importance of the U.S. dollar was accurately described by Wallich (1950, pp. 41, 42) in words that may turn out to be prophetic:

The outstanding fact about the dollar circulation was undoubtedly the high degree of secular exchange stability it provided compared with what an independent currency might have offered. Through boom and depression, revolution and moratorium, the dollar gave Cuba an externally stable monetary system with a complete absence of exchange difficulties.... The outstanding characteristic of the dollar in Cuba was precisely that it could be neither stretched nor bent. In this sense businessmen are right when they speak of the dollar circulation as a great confidence-creating element.

Also in Wallich's words (1950, p. 42), "Cuba's money supply depended upon private bank lending and the automatic money-creating process of the balance of payments." This is valid today for the dollar side of the dual system, except that there will be no money creation by bank lending until the government creates or allows the creation of financial intermediaries.

Why then did Cuba found a central bank system in 1950? Even though the Banco Nacional de Cuba was not founded until 10 years after they wrote their important book, Pérez-Cubillas and Pazos (1940, pp. 38-41, 62, 6, 71, 74) suggest several reasons. One reason was to have a mechanism capable of stabilizing the exchange rate between the peso and the dollar. Once there was a peso circulating with the dollar, the rate of exchange between the two was bound to vary for different reasons, among them the seasonality of the sugar industry, the variations of the American and world sugar markets, all other factors affecting the balance of payments, and the changes in the supply of pesos. A second reason was to prevent capital flight by establishing exchange controls. It was felt that the export proceeds were not returning to the country in sufficient amounts, but the predominant ideas during those years made Pérez-Cubillas and Pazos think that the solution had to be based in a market intervention mechanism based on central banking.
A third reason for establishing a central bank was to provide "elasticidad" to the Cuban monetary system, i.e., flexibility to manage monetary aggregates to control the level of credit and enhance the government's ability to implement countercyclical or compensatory spending, as Keynes' ideas were becoming fashionable (Pérez-Cubillas and Pazos, 1940, pp. 68-69). A fourth reason for the creation of an independent monetary authority was gain from seigniorage, and a fifth reason was a matter of national prestige (Pérez-Cubillas and Pazos, 1940, pp. 39-40).

In addition, central banking was becoming increasingly fashionable in Latin American countries, as were different forms of government intervention in the economy, including Keynesian approaches to the business cycle and to the increasingly new topic of development policies to increase the economic powers of government via fiscal and monetary policies. Many influential sources also believed that a central bank was indispensable in order for Cuba to earn its economic independence (Martínez-Sáenz, 1959, p. 99).

4. IMPLEMENTING MONETARY DUALISM

a. Monetary Dualism

The basic mechanism to implement monetary dualism in Cuba is to allow the massive inflow of investment and tourist dollars to circulate in the economy along with the peso, and to let the exchange rate between both currencies float freely. Inadvertently, that was part of what the Cuban government did in 1993, but instead of investment dollars there were remittances from Cuban exiles.

The guiding principle of monetary dualism for Cuba would be the separation of domestic money from foreign money. The central objective of the foreign money (in the form of the U.S. dollar) would be to signal all economic agents, domestic and foreign, private and public, that Cuba is an open economy with a dependence on foreign trade and with even greater dependence on foreign currency for reconstruction and growth purposes. The free circulation of the dollar will serve to readjust the Cuban economy after three decades of chronic and severe price distortions in product and factor markets. The dollar will also serve to eliminate foreign exchange uncertainties, reducing the perceived risk of investors and subsequently making Cuba's investment climate more attractive. Price stability in the segment of the Cuban economy dominated by the dollar, namely, most of its investment and export sectors, will not be subject to the vagaries of discretionary monetary policies in a country without the banking tradition of countries such as the United States, Germany, the United Kingdom, and many other advanced and stable economies.

The presence of the competitive dollar system will force the government to be constantly concerned about fiscal equilibrium in the peso system. If the government does not reduce the fiscal deficit, public-sector real wages will decrease while dollar wages for private-sector employees will likely increase as the economy recovers. Under these circumstances, the public sector will lose employees to self-employment or to the private sector. In other words, disequilibrium is not feasible in the peso system in the long run as long as there is economic recovery fueled by a continuous influx of dollars and the concomitant investment activity and increase in employment. By not having any discretionary power over the dollar economy, the government must concentrate its attention on the development of the real economy. But even if there is not enough influx of dollars to generate employment in the private sector (not an unlikely scenario if other crucial conditions are not met in the transition), the system will still exert a force in the direction of equilibrium as inflation in pesos will continue to erode real wages. The process, however, will be slower because of lack of incentives to reallocate labor to the private economy. Without sufficient investment and resulting employment generation, the adjustment will have to come via increases in self-employment, more consistent with the development of a closed and stagnant economy of subsistence than with the development of a modern open economy. The performance of the transition government will then be more easily judged by its impact on the economy, as economic and fiscal management become more transparent.

Under monetary dualism, exchange rate instability does not affect the workings of the external sector. Gresham's Law, on the other hand, will not fully operate as long as two conditions are met. One condition

is that exchange rates must always be determined by supply and demand operating freely in both currencies. The other condition is that the rates fluctuate within a certain range. Expectations about future peso inflation would obviously expand the demand for dollar balances for wealth storage and speculation purposes, including hoarding outside the banking system.

Whether Gresham's Law holds or not depends on the transition government's performance in managing the stabilization policy in peso terms. The credibility of the peso will measure the credibility of the government as reflected in the private demand for pesos. But whatever that credibility, it will not affect the credibility of the economy at large from the point of view of foreign investment performance. The danger of government's incompetence will not affect the economic reconstruction of Cuba if it is protected by a set of well-designed rules instead of granting bureaucrats excessive discretionary powers. This form of monetary dualism provides the new government with limited discretionary powers, sufficient to fix the mess created by a socialist administration in the peso sector of the economy, but not enough to spoil the chances of a relatively fast economic reconstruction and recovery in the dollar sector.

Finally, the implementation of monetary dualism should consider the creation of a currency board. This institution is not a bank and would be limited to exchanging the U.S. dollar for a national certificate or note at a fixed rate. A currency board has the authority to issue local currency with a financial backing of at least 100 percent. Its main advantage is to isolate the monetary affairs of a country from plundering governments and politicians. The main disadvantage is that it severely restricts government flexibility in times of crisis generated by external shocks. In the Cuban case, a currency board might be an instrument of monetary credibility during the most difficult moments of the transition, and serve as an instrument to facilitate the flows of capital necessary for the reconstruction of the economy (Walters, 1987, pp. 740-742).

b. The Panamanian System

The Panamanian system is fully dollarized, not dual, despite the existence of a local fragmentary currency and the Panamanian translation of the word dollar, the Balboa. In this system, money functions like commodity money, the way money in fact circulated in the world for centuries under a fixed exchange rate (Cooper, 1986, p. 85). The reason to discuss it here is that it has characteristics similar to the dual system and, besides, it has worked reasonably well so far (Calvo, 1997, p. 168), which provides a great deal of reassurance that a dual system could serve Cuba equally well, at least during the initial recovery stages. Besides, the Panamanian case can also be considered for Cuba and other countries as an experimental approximation of a monetary union, in a similar fashion to the way in which the European Union is now undertaking its monetary integration.

The level of money supply in the Panamanian economy is endogenously determined by economic agents acting through the balance of payments. Disequilibria in the balance of payments are automatically corrected, without any intervention of a discretionary power. A reduction in exports, for instance, reduces money supply, *ceteris paribus*, and produces an excess demand of money in the affected sector that, by Walras Law, will have to be matched by an exchange of non-monetary assets by economic agents (private and public) or a corresponding reduction in expenditures (Moreno-Villalaz, 1992, p. 221).

The endogenous determination of the quantity of money contributes to the convergence between local and international inflation rates (Moreno-Villalaz, 1992, p. 222). The level of government expenditures is constrained by the capacity to generate revenues and to obtain dollar loans. Under these rules, the govern-

ment does not have the power to issue high-powered money for political or any other purposes, a chronic illness of Latin American economies and one of the disastrous conditions of the Cuban economy. Interest rates in Panama tend also to converge with international rates, with a differential that reflects country risk. This convergence of interest rates facilitates foreign investment without foreign exchange risks and the existence of clear and stable rules. The system allows a free flow of capital in and out of the country, including the withdrawal of profits (Moreno-Villalaz, 1992, pp. 222-223).

The cost of the Panamanian system has been estimated by Moreno-Villalaz (1992, pp. 224-225) as lower than the cost of a fiduciary system. Assuming a 10 percent interest rate foregone of the quantity of dollars circulating and five percent of seigniorage, the resulting figure (US$60 million) is still below the estimated cost of keeping foreign exchange reserves (US$82.5 million). The latter does not include the cost of administration of a central bank, nor the cost of printing and replacing the national currency. The system could be more cost-efficient with the introduction of currency boards (Walters, 1987, p. 740), also mentioned by Moreno-Villalaz (1992, p. 232). As these entities are limited to replacing the foreign currency at par with a national currency (there are no deposits or lending), part of the foreign currency can be put to earn interest while also protecting the country's wealth from the physical destruction of the "good" money.

5. RULES VERSUS DISCRETION

Most of the arguments about advantages and disadvantages of the proposed system of monetary dualism in Cuba have been part of the "rules versus discretion" controversy in monetary policy or, in a different form, the debate about free banking versus central banking. Despite some economists' contention that government intervention in managing the money supply is unanimously accepted by the profession (Klein, 1974), the debate about the pros and cons of each alternative begins with Walter Bagehot and Vera Smith in mid-nineteenth century England and continues today with many advocates on each side of the controversy. Among those who defend rules are Hayek (1976) and Friedman (1973).[5]

Perhaps the most persuasive reasoning against rules, and, by association, against monetary dualism, is that it severely limits the flexibility the policymaker may require "to respond rapidly to contingencies not foreseen or not describable in the potential rule" (Fischer, 1990, p. 1179). Under a flexible regime, the monetary authority can respond to external and unanticipated disturbances by managing monetary variables to affect output, employment, and inflation to minimize a single-period loss function. Nevertheless, the defense of discretion or flexibility has been severely weakened by the theory of dynamic inconsistency.[6]

Another argument against a U.S. dollar-based monetary dualism is that it depends on the soundness of U.S. monetary policy. If the U.S. monetary authority becomes more tolerant about inflation (to reduce the real value of the staggering public debt, for example), an economy using dollars would be directly affected since the value of its stock of money would be devalued at the same rate. Also, unexpected inflation would affect investment decisions in the same way that they would be affected in the United States, by increasing the general level of uncertainty, raising private investors' requirements for break-even rates of return in their investments, and, possibly, triggering capital flight. But, what are the real chances of this happening? In the short run, it does not seem likely and, in the worst-case scenario, it would hardly be as damaging as the host economy not being capable of attracting sufficient capital for its reconstruction. In the long run, as the dollar-using economy achieves higher levels of growth, an independent monetary system does not have to be ruled out if the authorities earn the credibility of private agents.

Although the list of possible disadvantages could be made much longer, we will finish with a third argument against dualism. This is based on nationalistic values or concerns about any country's sovereignty and it basically assumes that the honor or independence of the country depends on its ability to have its national sign on the currency declared as legal tender. The rebuttal of this argument follows the same lines as the idea that national prestige depends on having an airline even if it is a losing proposition. In very open economies that must grow at a rapid pace, which is heavily dependent on imports and foreign investment, why not import a monetary system if it serves the public good?

All of the above arguments assume the existence of a responsible and competent policymaker, one with a commitment to the public interest or, more rigorously, one whose single-period and inter-temporal loss functions are identical to the corresponding loss functions of private agents. But this is exactly the crux of the matter. What are the chances of having such a policymaker in a country dominated by an absolute dictator for several decades? What level of credibility can a government team muster during a post-socialist transition in such a country? Even in the context of more advanced political and economic systems, there are serious doubts about the risks of assuming such a policymaker. Milton Friedman, in a comment on an earlier draft of the paper by Fischer (1990, p. 1181), implicitly indicates that the behavior of the U.S. Federal Reserve System from its birth can be more realistically described by loss functions that include such unorthodox variables as avoiding accountability and achieving public prestige, than by inflation and deviation from target output as variables.

Cuba's monetary history from March 1952, when Batista deposed the constitutional government, until today, accurately fits this condition, and there is no guarantee of the managerial competence and integrity of a future administration in Cuba. Therefore, the main advantage of monetary dualism or currency substitution is that it limits the power of any administration to issue high-powered money or mishandle the part of the economy that must grow faster and critically depends on foreign exchange, especially during the transition. Dualism, as stated earlier, will give enough discretionary power to the monetary authorities to clean up the current situation and nothing else.

Another major advantage is that monetary dualism serves to convey to the public in a post-socialist transition the idea that there are two economic systems: one that has to be dismantled (represented by the domestic currency) and one that has to be created (represented by the U.S. dollar). The old system requires severe adjustments, whose pains must be kept separate from the costs of creating new opportunities on the market or dollar side of the economy. The dollar side will also serve to convey the idea that the country is an open economy. Therefore, monetary dualism would generate clear market signals to encourage the free realignment of resources in the Cuban economy, after decades of the random distortions created by central planning and whimsical administration. Workers would be free and encouraged to move to export industries and this might require the reduction of manpower dedicated to internal security and the military. It may also reduce the ranks of the bureaucracy and even the levels of employment in the social programs. In the latter case, the level of reduction will depend on the level of productivity that can be achieved in the private enterprises and their ability to pay taxes. How much of the social programs can be kept will directly depend on the degree of success of the transition in creating employment with levels of productivity high enough to generate the required fiscal base. This critical relationship should be explained to the Cuban population so that everyone will keep in mind that the resources to sustain social programs must be produced somewhere in the economy, and that there is no such thing as a free lunch.

6. CONCLUSION

An interesting facet of socialist economies, and in general of economies with a high degree of centralization of economic power, is that they lend themselves to scientific scrutiny because of their unintended, *ex post* experimental aspect. Especially during crisis or during implementation of reform programs, these economies offer unique research opportunities. The reason for this is that the extreme concentration of economic power and the very predominance of political over economic considerations in the implementation of public policies create situations that are less frequent or could not otherwise exist in more open, participatory societies. In some cases, the resulting disequilibria reach extreme conditions, which produces scenarios not available through the study of well-behaved, economic states of static or dynamic equilibrium. Cuba's adjustment policies after the 1990s crisis is a case in point, even if the government pursued such a policy reluctantly as a result of the combination of fear of losing political control and the ideological atavisms of the regime. Interestingly, it was the workers-consumers who made a collective economic decision for which no organization is needed; they chose the U.S. dollar as a better currency than the peso, and the force of this decision was such that there was nothing the government could do. Many might miss the value of such an achievement, probably because they do not know the ubiquitously repressive nature of the Cuban government and its history. The phenomenon is also proof that *homo economicus* may be alive and well in Cuba despite 40 years of life under extremely constrained choice sets, as consumers, workers, and entrepreneurs. Ironically, it was people's choice, struggling for meager improvements of their standards of living, that forcefully assisted a reluctant government to find a solution, albeit partial and incomplete, to a very serious crisis, one that even threatened its own political survival.

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NOTES

[1] All of these figures are reported in current pesos, with no information whatsoever on implicit deflators. If the GDP official figures are adjusted by the current rate of exchange of 20 pesos per dollar, the level of GDP becomes ridiculously small.

[2] Traditionally, the Cuban peso had been freely convertible with a rate of exchange to the U.S. dollar of 1:1, but the economic policies of Batista's government caused an overvaluation of the national currency that accelerated under Castro's administration.

[3] Fiscal revenues in the beginning of a transition government can be expected to be insufficient to sustain the social programs created by the revolution (see Mesa-Lago, 1993), plus the armed and security forces. In fact, a great proportion of the necessary adjustment is already taking place as part of the armed forces is dedicated to productive activities and the social programs are being reduced.

[4] Exchange rate reports put the dollar price in Cuba today at about 20 pesos. In 1958 the two currencies were generally at par, with some fluctuation. When the Banco Nacional was created in 1950, Cuba's international reserves were about US$800 million, equivalent to a year of its international trade. They were almost depleted by the Batista government at the end of 1958, as a result of a spending program to gain popular support, and the National Bank was forced to impose some exchange controls limited to movements of capital. This plus the flight of capital triggered by the advent of Castro's revolution started the decline of the Cuban peso reflected by the extension of exchange controls in 1959. In the early 1960s the dollar soon reached a price of three pesos, and by the mid-1960s the exchange was six to one on the black market. These dollars, however, were not used as a means of circulation in the black market, but as a store of wealth and a means to transfer wealth to the U.S. through triangular or quadrangular transactions highly penalized by the Cuban government.

[5] Fischer (1990) and Goodhart (1991) provide important reading material on this controversy.

[6] The theory proposes that as long as the government does not have the power to make certain decisions, private agents will never expect it to make decisions that will turn out to be sub-optimal