

DOLLARIZATION: THE CASE OF ZIMBABWE

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This article investigates the recent monetary experience of Zimbabwe with dollarization. It shows how dollarization has allowed Zimbabwe to quash hyperinflation, restore stability, increase budgetary discipline, and reestablish monetary credibility. Zimbabwe's hyperinflationary past and the stabilization measures taken by the government are outlined, and the consequences defined. Problems arising from a lack of financial integration, an error in the choice of currency to dollarize under, and the inability of the government to enter into a formal dollarization agreement are discussed.

Choice in Currency

In his 1976 classic *Choice in Currency*, F. A. Hayek argued that “the pressure for more and cheaper money” led governments to monopolize the issuance of money and made inflation inevitable. He asked, “Why should we not let people choose freely what money they want to use?”

The purpose of this article is to investigate Zimbabwe's experience with choice in currency, given its recent history of hyperinflation and

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its program of dollarization undertaken in 2008.¹ We begin by setting the scene and describing the main events of Zimbabwe's recent history. The actions taken by the inclusive government to end the tyranny of hyperinflation are outlined, and the consequences of the decision to allow choice in currency are analyzed. The relevant question is: Has choice in currency or what the authorities have called "a multicurrency regime" stopped hyperinflation and helped protect the value of money? In a word, has dollarization worked?

The Monetary System Prior to the Multicurrency Regime

After the breakup of the Federation of Rhodesia and Nyasaland, and consequently the termination of the currency union between Northern and Southern Rhodesia and Nyasaland (now Zambia, Zimbabwe and Malawi), the Parliament of Southern Rhodesia enacted the "Reserve Bank of Rhodesia Act" on November 16, 1964, creating a central bank, the Reserve Bank of Rhodesia, and replacing the Central African pound with the Rhodesian pound. Upon achievement of *de jure* independence—that is, independence recognized by the international community, including the United Kingdom—and the attainment of majority rule, on April 18, 1980, the Reserve Bank of Rhodesia became what is today known as the Reserve Bank of Zimbabwe, headquartered in the capital city, Harare.

The country was a part of the sterling area from its inception in 1931 up until Rhodesia's expulsion on November 11, 1965, when the government of Prime Minister Ian Smith unilaterally declared independence from the United Kingdom, whereupon the Rhodesian pound was replaced with the Rhodesian dollar.

Zimbabwe has a history of exchange controls which extends, by some accounts, to 1947 (Bond 1996). On February 23, 1961, during the latter days of the Federation of Rhodesia and Nyasaland, exchange controls were extended to the sterling area and this

¹Dollarization is the concrete manifestation of Hayek's program of choice in currency, by legalizing currency substitution. This is an indirect acknowledgement of the role of money as private property. Hayek tackles the issue on an individual level, but as this article will show, and as others have shown, choice in currency has benefits for the entirety of the state—unless the ruling elite sees low levels of inflation, credible monetary policy, and economic stability as negatives.

arrangement was carried over to the successor states of the Federation when it dissolved. In 1980, the Zimbabwe dollar was tied to a flexible basket of currencies in which the Zimbabwe dollar had a crawling band of ± 2 percent of the dollar. It was valued at US\$1.47 at the time of de jure independence. In 1994, the flexible basket was replaced with an independent float, but from 1999 onward, the Zimbabwe dollar was pegged to the U.S. dollar until the Zimbabwe dollar was taken out of circulation in 2009.² On November 30, 2002, more exchange controls were put in place when the government closed all *bureaux de change*, limiting licenses to deal in foreign exchange to banks, further affecting the convertibility of the Zimbabwe dollar.

The Crisis

Like a Siren whose sweet song seduces ships' captains, luring them and their charges to oblivion, the mania for printing money brought Zimbabwe's economy within an inch of annihilation. Confounding money with wealth, ravaging incomes, destroying the basis of savings, enshrining the god of consumption, ruining creditors, impoverishing many, enriching a few, undermining exchange with other nations, fostering uncertainty, causing millions to flee,³ and smothering productive forces, the government of Zimbabwe achieved, through the debauching of the currency, a feat of frightful devastation.

With two key events, the ship yawed off course:

1. The resolution of the government to enter into the Second Congo War in 1998 on the side of Laurent Kabila, in his rebellion against the dictator Mobutu Sese Seko in Zaire (now the Democratic Republic of the Congo). Without having budgeted for the war, without the surplus to finance such a war, without the will to raise taxes sufficiently to meet the costs of the war, and without the intention to make known the commercial arrangements made by the military with Kabila, or the final

²The Zimbabwe dollar crashed on two occasions prior to the crash upon which this study is based: in 1983 and in 1991 (Frankel and Rose 1996).

³Zimbabwean economist Eric Bloch estimates that in the past decade, some 4.2 million people fled the specter of starvation, fleeing to South Africa (some 3 million), the United Kingdom (over 300,000), and Canada, Australia, New Zealand, and various other countries of the English-speaking world.

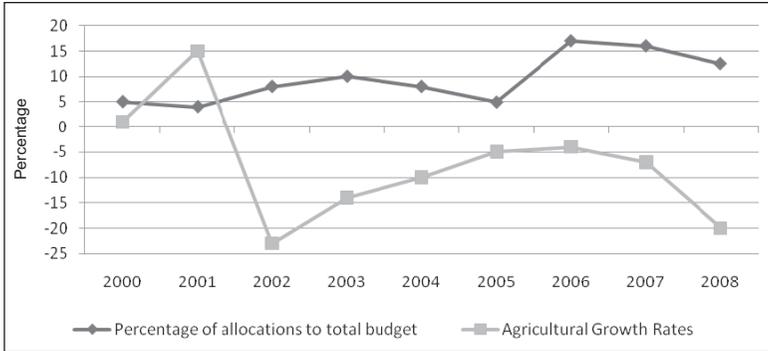
costs of the four-year war, the government began its voyage to perdition.

2. The land expropriation program of 2000 when government-sponsored veterans of the war for Zimbabwe's independence invaded nearly all 4,500 white-owned commercial farms and forcibly appropriated them for war veterans and the kakistocracy of politicians and the security establishment (Richardson 2005). The commercial farms were broken up, their productivity plunged by half between 2000 and 2007, the expertise of the white farmers was lost to foreign nations, and the specter of forcible expropriations haunted all prospective investors causing foreign direct investment to whittle down from US\$400 million in 1998 to US\$30 million in 2007. Shortly after the land expropriations began, the United Kingdom, the United States, and the European Union instituted sanctions. The Bush administration enacted the "Zimbabwe Democracy and Economic Recovery Act" in 2001, linking financial support with democratic reforms and soon after, the International Monetary Fund withdrew support alongside the European Union (Chengu 2009).

The second point deserves some clarification as to its impact on inflation. Given the rapid deterioration in foreign aid and financial support, as a consequence of the blatant violation of property rights, the government felt obliged, at pain of admitting defeat, to increase its expenditure to include financial support for its land redistribution program and to engage in inflationary policies to abate the storm of discontent from its citizens. Through the "Farm Mechanization Program," among other such initiatives, the government and the Reserve Bank offered "free and concessional facilities" to the "new farmers" (Biti 2009b). Importantly, no financial institution in Zimbabwe recognized this forcible transference of land ownership, making it well nigh impossible for new farmers to access credit. Figure 1 demonstrates the deepening entrenchment of the state in the agricultural sector.

By 2003, the Zimbabwe dollar had deteriorated to the point where the cost of issuing it in the form of regular notes and coins was greater than the face value, resulting in the government issuing the Zimbabwe dollar by way of time-limited "bearer checks" on lower-quality paper, with very high denominations. The bearer checks were

FIGURE 1
BUDGETARY ALLOCATIONS TO AGRICULTURE VS.
AGRICULTURE GROWTH 2000–2009



SOURCE: Biti (2009)b

to circulate up to 2009 when the government took the dollar out of circulation. In 2003, changes to monetary policy and alleged risky practices by certain banks resulted in a liquidity crunch that affected 40 percent of the banking system and cost the system approximately Z\$2 trillion (US\$350 million) and forced the Reserve Bank to close several locally owned banks (Kwesa 2009). This experience is in line with the literature of system-wide bank runs and payments problems in central bank regimes (Bogetic 2000).

In an effort to sanitize the land expropriation program, the government issued 99-year leases in November 2006, but reserved the right to cancel the lease if a farm was unproductive (Ploch 2009). This provision preserved the reluctance of financial institutions to accept the new leases as collateral. Large tracts of farmland remain unfarmed as a result of inefficiencies and a dearth of credit for new farmers, which created food shortages, stimulated demand for foreign food products, and caused speculation in prices. To combat this, the government introduced a price freeze from March 1 to June 30, 2007, which had the predictable effect of further decreasing agricultural production, with seed and fertilizer producers keeping their produce off the market.

Consequently, the Reserve Bank of Zimbabwe's powers grew to include purchase of farm implements and coordination of input,

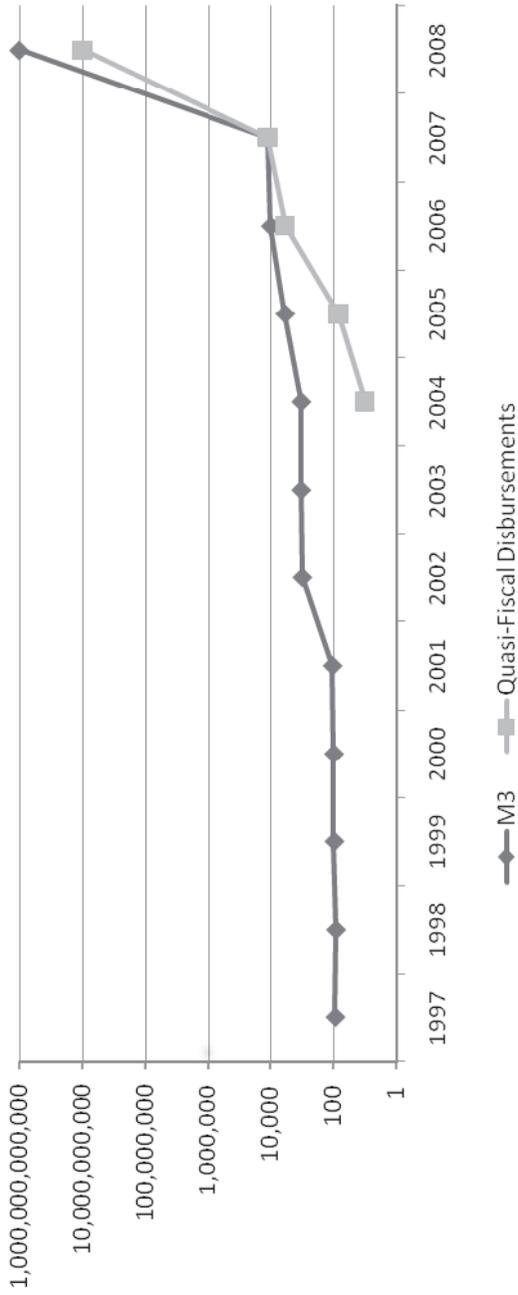
financial, and technical support programs for new farmers. This policy agenda was hailed as a heterodox approach to economics that would prove superior to the West. The increased government expenditure was founded upon high taxes and the printing of money by an all-too-eager Reserve Bank. Taxes can only go so high, and the ravenous appetite of government for agricultural expenditures and defense spending would eventually overwhelm the counteracting influence of taxes. The increased role of the Reserve Bank in the economy amounted to a policy coup d'état in which the Reserve Bank arrogated the powers of the Finance Ministry.

The current finance minister, Tendai Biti, noted that “high inflation was primarily driven by high money supply growth on account of expansionary quasi-fiscal activities by the Central Bank. This pro-inflationary macroeconomic policy was compounded by speculative activities in financial markets and the underlying severe supply constraints in the economy” (Biti 2009b). Figure 2 shows the sharp increase in the broad money supply (M3) along with quasi-fiscal disbursements in 2007–2008, when price inflation exploded.

Under this new regime of concentrated economic power, the Reserve Bank increased currency in circulation at escalating rates, with the period from January 2005 to May 2007 noteworthy for exceeding the peak of the efforts of the German central bank's printing presses in January 1921 to May 1923 (Hanke 2008).

On April 1, 2006, the second Zimbabwe dollar came into being, valued at 1 revalued dollar to 1,000 old Zimbabwe dollars, and subdivided into 100 cents, though the cents were never used. The new Zimbabwe dollar was devalued by 60 percent against the U.S. dollar. On September 6, 2007, the Zimbabwe dollar was again devalued, this time by 92 percent. On August 1, 2008, Zimbabwe had yet another currency, a third, valued at 10 billion of the second crop of Zimbabwe dollars. About that time, the German printing press Giesecke & Devrient GmbH ceased delivery of the bearer checks due to the inability of the government to pay for them. The bearer checks used by the government for the third Zimbabwe dollar had already been printed by Giesecke & Devrient and were delivered. The government then agreed to have Jura JSP, an Austrian company, provide the Reserve Bank with software and licenses to design and print currency.

FIGURE 2
M3 AND QUASI-FISCAL DISBURSEMENTS, 1997–2008



NOTE: Prior to 2004, quasi-fiscal disbursements were zero.
SOURCE: Biti (2009b)

TABLE 1
 RBZ BALANCE SHEET, JANUARY 2008
 (TRILLIONS OF ZIMBABWE DOLLARS)

Assets		Liabilities	
Gold	0.1	Notes and coins in circulation	339.8
Other foreign assets	5.2	Bankers' deposits	108.5
Treasury bills discounted	0.0	Government deposits	0.0
Other bills discounted	0.0	Other deposits	108.5
Loans to government	39.4	Foreign loans	16.7
Other loans	64.2	Other	0.0
Investments in govt. stock	0.0	Capital and reserves	0.0
Other investments	298.3	Other	609.9
Other assets	776.2		
Total Assets	1,183.4	Total Liabilities and Capital	1,183.4

SOURCE: Hanke (2008).

The Reserve Bank inflated not only the supply of currency but its own staff numbers, doubling its staff from 618 to 1,360 between 2001 and 2007, the highest such increase in the world at that time (Hanke 2008). To date, the Reserve Bank has a staff of about 2,400, but is making efforts to cut 2,000 jobs. The Reserve Bank of Zimbabwe balance sheet as seen in Hanke (2008) is enough to demonstrate the frightful levels to which central banking in Zimbabwe had reduced itself.

The accumulated impact of the vast and unaccounted-for expenditures of the Second Congo War and the inflationary policies of the Reserve Bank pushed Zimbabwe into the depths of hyperinflation in the month of February 2007. The wild lurches of hyperinflation from March 2007 to November 2008 are reported in Table 2, which is based on Reserve Bank data and calculations for August–November by Hanke and Kwok (2009).

TABLE 2
HYPERINFLATION IN ZIMBABWE, 2007–2008

Date	Monthly Inflation Rate (%)	Annual Inflation Rate (%)
March 2007	50.54	2,200.20
April 2007	100.70	3,713.90
May 2007	55.40	4,530.00
June 2007	86.20	7,251.10
July 2007	31.60	7,634.80
August 2007	11.80	6,592.80
September 2007	38.70	7,982.10
October 2007	135.62	14,840.65
November 2007	131.42	26,470.78
December 2007	240.06	66,212.30
January 2008	120.83	100,580.16
February 2008	125.86	164,900.29
March 2008	281.29	417,823.13
April 2008	212.54	650,599.00
May 2008	433.40	2,233,713.43
June 2008	839.30	11,268,758.90
July 2008	2,600.24	231,150,888.87
August 2008	3,190.00	9,690,000,000.00
September 2008	12,400.00	471,000,000,000.00
October 2008	690,000,000.00	3,840,000,000,000,000.00
14 November 2008	79,600,000,000.00	89,700,000,000,000,000,000.00

SOURCE: Hanke and Kwok (2009: 355).

These figures beggar belief. Though for the three months of July, August, and September 2007, the monthly inflation rate fell below the 50 percent monthly inflation rate Philip Cagan (1956) identified as the threshold of hyperinflation, the history of inflation from that point is largely one of ever-transcending levels, peaking in November 2008, with a monthly rate of 79.6 billion percent.

The industrial base was broken up and per capita GDP tumbled from a 1997–2002 average of US\$720 to about US\$265 by 2008, as formal unemployment soared to 60 percent. As sub-Saharan Africa's economy burgeoned, Zimbabwe's real GDP contracted by 40 percent between 2000 and 2007, and by 48 percent by the end of 2008,

having grown at an average of 3.9 percent in the 1980s and 1990s (Biti 2009b).⁴

The Multicurrency Regime

Toward the end the Zimbabwe's hyperinflation, non-cash transactions, which had come to be the dominant form of transaction, had come to a halt and the Zimbabwe Stock Exchange had closed. At first covertly and then with increasing openness, and then finally, with the assent of the government in February 2009, Thiers' Law asserted itself, as foreign currencies—the rand, euro, pound, U.S. dollar, metical, and kwacha—replaced the Zimbabwe dollar.⁵

The new government arose from the contested elections of 2008. Having signed a “Global Political Agreement” on September 15, 2008, the ruling party, the Zimbabwe African National Union-Patriotic Front (ZANU-PF), agreed to share power in an inclusive government with the main opposition parties—the two “Movement for Democratic Change” (MDC) factions, the MDC-T, led by Morgan Tsvangirai, who became the prime minister, and the MDC led by Arthur Mutambara, who became the deputy prime minister, with Robert Mugabe remaining as president. The inclusive government formally took power on February 11, 2009. That month, under its Short-Term Economic Recovery Program (STERP), the government consented to transactions in foreign currency and to the full dollarization of Zimbabwe, though without any formal agreements.

The Zimbabwe dollar remained legal tender, and a new reincarnation of it emerged on February 2, 2009. One trillion Zimbabwe dollars (of the third incarnation) were worth one new Zimbabwe dollar. The Zimbabwe dollar had been all but dumped. Tendai Biti, the newly installed minister of finance, acknowledged in his first mid-term budget reviews that “since February this year, the Zimbabwe dollar is no longer a currency that the public and any trader will

⁴This ragged land resembled the tragic Russia of Nekrassov's imagination: “The year doesn't matter/ The land's not important/ But seven good peasants/ Once met on a high-road. From Province 'Hard-Battered'/ From District 'Most Wretched'/ From 'Destitute' Parish/ From neighbouring hamlets/ 'Patched,' 'Barefoot,' and 'Shabby'/ 'Bleak,' 'Burnt-Out,' and 'Hungry'/ From 'Harvestless' also/ They met and disputed/ Of who can, in Russia/ Be happy and free?” (Nekrassov [1917] 2006: 9).

⁵Thiers' Law deals with good money chasing out bad money, whereas Gresham's Law is about bad money chasing out good (see Mises 2006).

accept. Our national currency has, thus, become moribund” (Biti 2009a). On April 12, 2009, the Zimbabwe dollar was suspended as legal tender.

Despite the proximity of South Africa, the U.S. dollar was adopted as the currency in which the government would conduct all its transactions. Other currencies, heretofore mentioned, were also allowed to circulate in the country, being used for contracts between private parties. Initially, the U.S. dollar and the rand competed equally across the country as the primary currencies in use.

The new multicurrency regime implied that the Reserve Bank could no longer exercise an independent monetary stance, and that, effectively, the monetary policy of the main-currency country, the United States, would become the monetary policy of Zimbabwe, with the monetary policies of the other currency countries acting to iron out any negative outcomes from U.S. monetary policy.

The Aftermath of Dollarization

Monthly inflation turned negative between January and May 2009: -2.3 percent for January, -3.1 percent for February, -3.0 percent for March, -1.1 percent for April, and -1.0 percent for May (Kwesu 2009). Since July 2008, the Central Statistics Office has not released annual inflation rates. FBC Bank Ltd., in December 2009, estimated that annual inflation for that year stood at -4.74 percent (Kwesu, 2009). Perhaps inflation levels could have fallen even more were it not for the “cost pressures emanating from monopolistic tariff levels of public enterprises and local authorities” (Biti 2009b). GDP real growth rate, which in 2006 had been -4.6 percent and in 2008 -14.4 percent, rose to 3.7 percent in 2009, and even the beleaguered agricultural sector posted gains of 24.3 percent in productivity (Biti 2009b).

During this time, bank failures, which had plagued the country, most perceptibly in 2003 when several banks failed, resulting in losses of about US\$350 million, did not trouble the country. Having eliminated the Zimbabwe dollar, banks were forced to adopt more competitive and transparent practices and this, among other benefits, caused the banking system to stabilize.

However, dollarization was not backed up by significant foreign reserves, so that domestic money balances remained quoted in Zimbabwe dollars until the suspension of the Zimbabwe dollar.

Convertibility remained a great problem in the early days of dollarization. When the Zimbabwe Stock Exchange reopened on February 18 (Ploch 2009), valuations were dollarized at the third tier black market rate, which rendered them practically valueless to many shareholders.

Dollarization, though it benefited the general public, did have an adverse effect on most businesses. Low confidence in the financial institutions of the country caused the public to keep their foreign currency transactions outside the financial system. Slowly however, the discipline brought about by dollarization caused a change in the practice of financial institutions, and confidence in them increased. Total bank deposits, which had fallen to US\$200 million in December 2007, rose from their December 2008 level of US\$290 million by 141 percent to US\$700 million as June 30, 2009. By the end of 2009, total bank deposits stood at US\$1.5 billion (Kwesa 2009). News reports from various, as yet unpublished, studies put current total deposits at US\$1.8 billion, in contrast with Zambia with total deposits of US\$2 billion and Botswana with US\$5 billion.

Nevertheless, these achievements were offset by the highly transactional nature of the deposits—that is, they stayed in the bank only so long as they were not needed to make payments, for about 30 days—which proscribed long-term lending (Kwesa 2009). Businesses, rather than borrow, have been forced to raise capital from their own activities, or, when they are able, and few are, they can borrow from foreign-based financial institutions, which are generally South African or offshore. Since long-term credit is absent in Zimbabwe, the pool of buyers and sellers of nonessential goods is naturally very small, competition is restricted, expansion is hindered, and the price of Zimbabwean goods is generally higher than that of imports.

Given that the Reserve Bank of Zimbabwe had ceased to exist as a lender of last resort and deposits were highly transactional in nature, loans-to-deposit ratios fell in the first six months of 2009 to 30 percent compared to 41 percent in 2008, and an average of 36 percent between 2003 and 2008. There were no money market instruments and interbank trading was limited to cash settlements. Consequently, structured deals between banks were concluded by matching deficits to surpluses for short terms (Kwesa 2009).

Total loans and advances rose by 60 percent, from US\$120 million in December 2008 to US\$200 million in June 2009. With the high demand for loans and their short supply, lending rates averaged, in 2009, at a London Interbank Offered Rate (LIBOR) + margins of approximately 10 percent (Kwesa 2009). In smaller banks, interest rates can be as much as 30 percent.

Without a lender of last resort, total loans have increased, even as the loans-to-deposits ratio has fallen. However, the dislocation of the Zimbabwean financial sector from the international credit markets, among other factors, hinders the ability of the financial markets to draw from an international pool of funds, resulting in an especially harsh credit environment.

Fiscal prudence, forced upon the government by the closure of the printing presses, has been a boon for a highly indebted economy. In March 2009, the inclusive government adopted “cash budgeting,” which, quite simply, means that government spends and lends only what it has in cash. Tendai Biti (2009c) expressed it best: “We will eat what we gather.” Though, it is true that the excesses of hyperinflation allowed the government to redeem its entire domestic debt by February 2009, Zimbabwe’s total external debt including arrears, hung over the economy like the sword of Damocles. As of October 31, 2009, it amounted to more than US\$5.4 billion against cumulative tax revenues of US\$685 million (Biti 2010).⁶

Various other things can be noted: a few banks, like Stanbic, have resumed using automated teller machines (ATMs), and the ATMs that are operating have been largely limited to dollars. The scarcity of money in Zimbabwe has compelled many banks to transfer money abroad only when there is sufficient reason—that is, one must tell the bank what one plans to use the money for, though the simple device of providing an invoice is enough to get round that problem. Checks have been in limited use, because few people have sufficient deposits to meet the massive requirements to keep a checking account. Debit cards have been virtually nonexistent and credit cards have never broken into the Zimbabwean credit market. Most payments are still in cash or through bank transfers.

⁶Of the total external debt, the government owes US\$2.34 billion, including US\$895.7 million owed by parastatals and US\$568.8 million owed by the Reserve Bank; the private sector owes US\$34.4 million (Biti 2010).

The Optimum Currency Area?

A local and global credit crunch and distrust of President Robert Mugabe and ZANU-PF have limited the amount of trade conducted between the United States and Zimbabwe. Arbitrage is, therefore, inconsequential, limiting the flow of goods and dollars between the United States and Zimbabwe.⁷ This situation has resulted in significant price differentials between the United States and Zimbabwe and a shortage of U.S. dollars, at least in the form of coins. Rands are in even shorter supply.

The absence of coins for small change was an unexpected and, at first glance, a rather trifling problem. The retail sector is often unable to give customer's change, forcing customers to purchase additional goods, normally sweets, biscuits, and matches, or take a credit note for future purchases. It is widely believed that the sweets, biscuits, and matches used as change are overpriced so they more easily match the sums usually called upon as change. For example, lollypops, which have an average price in Zimbabwe of US\$0.10, are sold in some shops for as much as US\$0.25. In a country where the average wage hovers around US\$200 a month, the accumulative monthly impact of needless purchases takes on new dimensions.

The banking sector attempted to import South African rand coins and exchange them for notes with retailers, even at a rate of 1:1—for example, a R10 note for R10 in coins, as offered by the country's largest bank, the Commercial Bank of Zimbabwe. Accusations, as is usual in these circumstances, are thrown from one court to another: bankers claim retailers are cashing in on the coin crisis in Zimbabwe by refusing to exchange their notes for coins, whereas the Retailers Association of Zimbabwe accuses bankers of exploiting "arbitrage opportunities" by manipulating the exchange rate between the rand and the U.S. dollar (New Ziana 2010). Needless to say, there are no estimates as to the total amount of coins held by the banks.

In the capital city, Harare, where South African coins are scarce, taxi drivers have resorted to using Zimbabwe dollar bearer checks and giving them a nominal value of R5, with the rate between rands and U.S. dollars set at 10:1. So, if one pays for a taxi ride that costs R5 with a U.S. dollar, one will be given a fat wad of bearer checks as

⁷South Africa accounts for over 60 percent of Zimbabwe's imports (CIA 2010), and prices in Zimbabwe tend to follow those of South Africa—sometimes matching them but often higher, the margins differing from product to product.

change, and on taking another taxi ride one can pay for it with the bearer checks. Those checks, however, are unusable outside of the Harare taxi system.

A solution to this problem may be for the government to begin issuing coins, a solution that would not endanger the credibility of full dollarization because they are a subsidiary component of the money supply (Schuler 1999). As such, the shipping costs of importing coins would be avoided. In light of the government's tight budget, however, a better idea may be to allow banks to issue coins under a limited free-banking system.⁸

Rand/U.S. dollar exchange rates differ from city to city and even from shop to shop within a city. For instance, in one city, a U.S. dollar might be valued at R8, whereas in Harare it may be R10. Today, a U.S. dollar is worth R7.5 in most cities in Zimbabwe, having started at R10 in February 2009 and fallen to R8 between December 2009 and January 2010. Harare generally values the U.S. dollar at between R8 and R10, even though the real, current international exchange rate is closer to R7.5 than R10. This may be because Harare is further from South Africa than other major cities to the south of Harare.

Currency circulation was fairly heterogeneous in the early days of dollarization. Towns closer to South Africa tended to prefer the rand; towns closer to Mozambique used the U.S. dollar with the metical in subsidiary circulation perhaps given the preference of many Mozambicans for the U.S. dollar; towns closer to Botswana preferred the pula (and the U.S. dollar); and towns closer to Zambia preferred the kwacha and the U.S. dollar, with a greater emphasis on the dollar because of the strength of the dollar compared to the kwacha. The rand enjoyed a wide circulation until the past year.⁹

Despite the travails of the U.S. dollar, it has become ubiquitous, all but supplanting every other currency.¹⁰ It is natural for people to settle on one currency, for reasons of economies of scale, but for

⁸For a detailed analysis of free banking, see Selgin (1988).

⁹There are no estimates of the relative circulation of the currencies in Zimbabwe. The RBZ argues that as it does not issue the money in circulation, it cannot possibly know how much there is, especially considering that many people still do not bank at a bank but keep cash in their pockets and pillows. Neither the metical nor the kwacha enjoyed widespread use and even in those provinces or towns bordering Mozambique or Zambia; the U.S. dollar had by far the greater prevalence.

¹⁰This is particularly striking if one considers that the U.S. dollar was worth R11.588 at the end of 2005, R7.958 at the end of 2008, and recently hit R7. The dollar performed similarly against many of the currencies used in Zimbabwe.

them to settle on the dollar instead of the rand is a puzzle. The cause for this is disputed. One theory, proposed by Eric Bloch, a Zimbabwean economist, is that the absence of a statutory instrument to oblige usage of international exchange rates rather than artificial rates decided by the convenience of sellers forces people to substitute other currencies for the U.S. dollar.

For example, the state-owned daily, the *Chronicle*, can be bought for US\$1 or R10, even if the true exchange rate may be closer to US\$1: R7.27. So, if one purchased the *Chronicle* using rands, one would make a loss, albeit not a significant one—that is, one could still make the purchase, but, over time, the accumulation of purchases with the rand would create a significant loss, and this realization, or the sum of such purchases would incline one to abandon the rand or any other similarly undervalued currency. One could be more positive and say that, by using the U.S. dollar instead of the rand, one would be making a profit. Substitution could occur much faster if the value of transactions were large. There would not be a generalized abandonment of the rand, but one limited to those transactions in which the rand was undervalued. So, to take up our example, one would substitute rands for dollars in purchasing the *Chronicle*, but use the rand where the rate followed or approximated the international exchange rate.

Our example offers only a partial explanation for the demise of non-U.S. dollar currencies in Zimbabwe.¹¹ This trend may be further exacerbated by the effects of the importance of the state in the economy, which creates a bias toward the dollar. The government is the largest employer, either directly or through its shareholdings in parastatals. Civil servants and teachers are paid in dollars, and the government's transactions are conducted in dollars. This arrangement means there is a persistent injection of U.S. dollars into the economy, pushing out undervalued currencies like the rand. Where rands circulate in greater volume than U.S. dollars is in the form of coins because Zimbabwe has no dollar coins.

It has been suggested that Zimbabwe switch to using the rand as the main currency for the simple reason that Zimbabwe conducts most of its trade with South Africa and receives funds from more

¹¹The virtual absence of the euro or the pound in Zimbabwe is probably a reflection of the limited convertibility of the pound and the restricted trade and labor mobility between Zimbabwe and the European Union.

than three million expatriate Zimbabweans residing in South Africa. Though the rand does not have as good a long-term record as the U.S. dollar, the dollar does not have the best long-term *prospects*. In recent history, the South African Reserve Bank's (SARB) inflation targeting policy¹² and the strength of the South African economy, alongside the increased demand for gold, which is built into the rand because of the importance of gold mining to the South African economy, have resulted in a marked improvement of the rand's stability and made it the foremost currency among those of emerging countries. South Africa, like Zimbabwe, has a history of exchange controls, but has been progressively loosening them. Therefore, adopting the rand would prove not only natural but strategic, and Zimbabwe could negotiate entry into the Common Monetary Area with greater tranquility than it adopted the U.S. dollar.

Gaining public support for the adoption of the rand as the primary currency could prove popular, though many Zimbabweans seem to be of the opinion that South Africa's economy rests on shaky ground. A poorly crafted proposal might therefore meet with opposition. Nevertheless, Zimbabweans are aware of the declining value of the U.S. dollar and recognize the shortage of rands, which they prefer.¹³ Thus, on balance, a correct approach to putting this issue before Zimbabweans could win support.

Promulgating a statutory instrument to oblige cross-rates that match international rates, even with the caveat that they can approximate international rates on commonplace transactions and equal them on larger transactions, may not only create confusion but impose costs of continuously changing prices. It is important to note that volatility is inherent in currency markets and that the rigidity of Zimbabwe's cross-rates is in response to the potential chaos of flexible rates in a country as technologically backward as Zimbabwe.

In choosing a currency to dollarize under, the established optimum currency area criteria have been country characteristics such as small size, open markets, dominance of internal disturbances, symmetry of shocks, and labor mobility (Goldfajn and Olivares 2000). Zimbabwe chose to adopt the dollar as the primary currency of its dollarization plan—despite having policies that restricted foreign

¹²Inflation is targeted at a wide range of between 3 and 6 percent (SARB 2007).

¹³Some companies who paid their workers in rands have now begun paying workers in U.S. dollars, due to the ubiquity of the dollar.

direct investment and sanctions imposed by the Bush administration and carried on by the Obama administration, despite the asymmetrical nature its shocks vis-à-vis the United States, and despite the limited mobility of labor between the United States and Zimbabwe. Given traditional optimum currency theory, South Africa's rand should have been adopted as the lead currency in Zimbabwe if one accepts that Zimbabwe could not maintain an independent currency. Time constraints, though, may have encumbered the case for the rand as the chief currency, the adoption of which, by way of membership into South Africa's Common Monetary Area, would have involved torturous negotiations.

The choice of the U.S. dollar may also have a negative effect on the growth of the economy. To gain dollars, one must sell goods for dollars, or sell goods for one currency and exchange that currency for dollars. In the first instance, a country has a fairly straightforward way of obtaining gold. In the second, transaction costs may diminish export earnings, and if the currency being exchanged for the dollar is stronger than the dollar and continuing to gain strength, a country also builds up a burgeoning opportunity cost in using the dollar, and furthermore, this process wastes precious time. Zimbabwe, because of its limited trade partnership with the United States, is facing the second scenario.

The Costs of Dollarization

The costs of moving from the Zimbabwe dollar to the U.S. dollar were marginal. Toward the end, the Zimbabwe dollar existed largely in the form of non-cash transactions, because of the inability of the government's printing presses to keep up with hyperinflation and because of the high costs entailed in printing the bearer checks issued by the government, which had to be printed in Germany. Zimbabwe did not enter into any formal agreement to dollarize officially, and the foreign currency in the hands of the government was obtained from taxes subsequent to full dollarization.

In the late era of the Zimbabwe dollar, three exchange rates existed: the official, the parallel, and the "burning rate" (named because one "burnt" or conjured up money prolifically). The burning rate, based on the Real Time Gross Settlement (RTGS) system, was used by individuals and businesses in transactions involving normal interbank transfers. A rate was agreed upon beforehand, for some

sum of foreign currency to be paid in cash to a broker, who would have access to large quantities of Zimbabwe dollars that would then be used to effect a Zimbabwe dollar payment via an RTGS into one's account. The rate took into account the time it took to process inter-bank transfers and inflationary expectations. For example, someone having to pay Z\$2,000,000 might be able to obtain that amount for US\$100 on the parallel market, but at the burning rate he might only need US\$10. He would give a broker US\$10 and ask that broker to deposit Zimbabwe dollars into a specified account. The broker made a profit by exploiting economies of scale, and the payee benefited from reduced foreign currency costs. This system arose to deal with the dearth of cash in the market. The payments made through this third-tier, non-cash rate were not accompanied by any increase in the supply of Zimbabwe dollars, so that many checks were written for sums greater than the total supply of money. The RTGS system was eventually suspended on October 3, 2008, by the Reserve Bank, killing this third-tier parallel market and electronic transfers. The system was brought back to life on November 13, 2008, but that did not bring back "burning."

When Zimbabwe dollar accounts were converted to U.S. dollars, they seem to have been converted according to this third-tier, non-cash rate, implying a low "stock cost." In terms of "flow cost," one must note that the Reserve Bank had negligible foreign holdings and that it pursued a policy of inflation. Unquestionably, this entails a high flow cost for the Reserve Bank, but this cost is easily borne if one considers the philosophical and macroeconomic importance of protecting the wealth of the citizens and if one remembers the excesses of the Reserve Bank. There is a philosophic argument to be had against conventional economic theory, which holds that the systematic debauching of a currency is a necessary tool of monetary policy. If we accept the position at face value, we may find fault with the government for not engaging in talks with either the United States (which would have been politically delicate) or South Africa (which would have been complicated enough to slow the dollarization process down) over sharing seigniorage revenue.

One number should put to bed any arguments against dollarization in Zimbabwe: on March 1, 2008, the *Sunday Times* published a report based on documents obtained from several sources, that Giesecke & Devrient GmbH were being paid more than €500,000 a week to deliver bearer checks to Zimbabwe (Lamb 2008).

In the end, it can be argued that the decision to fully dollarize represented the conviction that the benefits of dollarization outweighed the revenue gained from issuance of the Zimbabwe dollar. Antinolfi and Keister (2001) posit that the increased revenue resulting from increased economic activity offsets the loss of seigniorage, though this is hard to calculate and takes time to develop.

Cost of Losing Reserve Bank as Lender of Last Resort

Zimbabwe suffers from a lack of financial integration with the global economy, which would help solve the problem of credit shortages by allowing foreign banks to loan to Zimbabwean companies, without the necessity of balancing their loans and deposits. Interest rates would no doubt fall as foreign banks would perform the function of lender of last resort and increase the pool of available liquidity also, due to the competition that would develop as a result.

The “Indigenization and Economic Empowerment Act of 2007,” which requires that black Zimbabweans own 51 percent of companies, further inhibits the financial integration of the financial system with that of any foreign country. The Act compounds the unfriendly banking laws of Zimbabwe by placing an even more severe limitation on foreign direct investment. Without foreign competition in Zimbabwe, people cannot move their funds in and out of Zimbabwe, access foreign credit, or choose from a broader range of currencies. Lobbying for the abolishment of the Act has proved futile, but many express the hope that the law will be watered down and that a solution will be found that is suitably imposing to allow the government to save face, yet not so frightful as to be the death knell to foreign direct investment. Such a solution may lie between 15 and 25 percent indigenization, but that may prove unworkable. The government has sent out many mixed messages, along party lines, which has confused investors. The government has already made various cosmetic changes and established 14 sector boards, with each overseeing a particular economic sector and entertaining the pleas of an assortment of companies for a waiver on indigenization.

Even before the indigenization bill was enacted, Zimbabwe’s law prevented foreign financial institutions from entering the market without an unlikely constellation of exemptions. The Zimbabwe Stock Exchange sets a limit of 10 percent on the stake which a foreign investor may own in a listed financial institution, though, structuring of shareholding may raise this to 35 percent. Furthermore,

the Reserve Bank of Zimbabwe oversees the process of changing directorship or appointing senior managers of listed companies. Other regulatory obligations involving the Banking Act, and the Zimbabwe Stock Exchange's statutory requirements, complicate the process even further, making it impossible to complete a takeover or acquisition of a significant interest within a 90-day period (Chinake 2009). Finally, any investor must deal with the absence of general banking licenses in a country in which discount houses are on the decline. In 2009, the last finance house, Trustfin, became a commercial bank, TN Bank, and merchant houses are increasingly looking to convert their licenses to those of commercial banks. This concatenation of inhospitable banking, indigenization laws, and mixed signals over the direction of reform in the country has made direct foreign investment in Zimbabwe a rather foreboding proposition. Since the inclusive government took over, there has not been one financial institution taken over by a major international bank.

Of the 14 commercial banks, five merchant banks, four building societies, and four discount houses operating in Zimbabwe, few have roots in the global capital market. Of these, three are the successors of "imperial banks" of the colonial era: Barclays Bank, Standard Chartered Bank, and Stanbic Bank (owned by Standard Bank of South Africa). The Russian financial services group, Renaissance Capital, (through Africa Investments), owns 15 percent of the Commercial Bank of Zimbabwe (CBZ), the country's largest bank. These four banks comprise the largest banks in the country, holding 60 percent of all deposits (a decline from 75 percent in 2009). Of the financial institutions in Zimbabwe, the following have appreciable foreign interests: Merchant Bank of Central Africa (MBCA), recently welcomed into the South African group, Nedbank; BancABC, owned by the African Banking Corporation, with a primary listing in Botswana and a secondary one in Zimbabwe; Central African Building Society (CABS), the country's largest building society and a subsidiary of Old Mutual Zimbabwe, in turn a subsidiary of Old Mutual plc of the United Kingdom (Old Mutual Zimbabwe also has a 18.3 percent stake in MBCA); Premier Bank,¹⁴ a little known bank with a murky

¹⁴ADC obtained a waiver to purchase a 54 percent stake in Premier Bank at a cost of US\$6 million. At the time, the Reserve Bank governor owned 25 percent of the bank. EcoBank will acquire ADC's 54 percent stake in Premier Bank, barely a year after ADC purchased it.

ownership history, owned by a German investment house known as ADC, but on the verge of falling into the arms of the Nigerian group, EcoBank; and ReNaissance Merchant Bank (RMB), a subsidiary of the Zimbabwean wing of Renaissance Capital, ReNaissance Financial Holdings Ltd. Many of these banks have struggled to compete in Zimbabwe and, in the case of CABS, suffered considerably during the hyperinflation. Several other locally owned banks, some formed in the heyday of hyperinflation and others with a deeper history in Zimbabwe, form the rest of the family of financial institutions of Zimbabwe.

Deposits are concentrated in a few banks that are free from the threat of competition, capable of using their economies of scale to charge lower interest rates than the majority of banks, who are forced to scramble for the remaining deposits. Smaller banks have had to devise more liberal and aggressive means of attracting depositors, such as making the conditions for holding a bank account cheaper.

Of the four top banks, only CBZ was formed after independence, having been founded as the Bank of Credit and Commerce Zimbabwe (BCCZ) in 1881. In 1991, it was completely taken over by the government, which had previously owned 49 percent of the bank, after its parent company collapsed. But, in 1998, a year after privatization in which the government retained a 20 percent stake in CBZ, the Amalgamated Bank of South Africa (ABSA) became the single largest shareholder, procuring 26 percent of CBZ. To date, the government retains a 20 percent stake in CBZ. However, ABSA, one of South Africa's largest banks, sold its shareholding in CBZ in 2007. Stanbic and Standard Chartered had their genesis in 1892. Barclays has operated in Zimbabwe since 1912. After the establishment of the imperial banks, Zimbabwe failed to attract a single leading international bank.

It is also important to note that foreign banks may not extend credit lines to countries such as Zimbabwe at the very moment when they are needed, due to their desire to protect their shareholder's value by limiting exposure to countries with high risk levels (Berg and Borensztein 2000).

Though the system has proved incapable of extending adequate liquidity to individual banks in need (because of the inability of domestic banks to access foreign credit lines), building up a reserve

fund from tax revenues would have inadequate value in a country with low wages and struggling businesses and might even cripple the economy further.¹⁵

It is too early to tell whether full dollarization will result in fewer bank failures than those of the Zimbabwe dollar era, but empirical evidence from other dollarized countries suggest that this will be so (Bogetic 2000, Berg and Borensztein 2000), though the limited financial integration of Zimbabwe makes the possibility of bank runs more likely than it should be under a dollarized environment.

Cost of Losing Flexibility in Monetary and Exchange Rate Policy

A dollarized monetary system cannot devalue the currency or finance deficits through inflation because, by definition, it does not issue the currency under use. This is a significant cost incurred by the government, but this cost is largely hypothetical given the extreme nature of events that would demand that the government have devaluation as a tool of its monetary policy (Bogetic 2000). In the normal course of events, this “cost” earns a profit: empirical evidence indicates that dollarized systems promote exceptional monetary and price stability (Bogetic 2000 and Chang 2000). The mobility of capital in the global economy already constrains independent monetary policy¹⁶ and exchanges limited monetary independence for the long-run benefits of low inflation, convertibility, and a stable currency. Prior to dollarization, Zimbabwe retained (limited) independent monetary policy, but this independence came with instability, a central bank whose declarations lacked credibility, and a currency whose value halved every 24.7 hours (Hanke and Kwok 2009).

¹⁵Some estimates have the government’s reserves of foreign exchange and gold as low as US\$111million in the era of partial dollarization, in December 2009 (CIA 2010). This is an obvious and short cap on the government’s ability to provide adequate liquidity to banks in need.

¹⁶The difference between a monetary policy with an exchange rate that floats and one that has a wide band is negligible in practice. In the “1997–1998 emerging markets crisis, interest rates were least variable in countries with more rigid exchange rate systems. At the same time, exchange rates moved very little in countries with flexible exchange rate systems” (Chang 2000: 7).

Cost of Linking Business Cycles

As has been noted, very little trade is conducted between the United States and Zimbabwe, and Zimbabwe's largest trade partner uses the rand (South Africa). This arrangement results in Zimbabwe's economy being more closely tied to that of South Africa than that of the United States, despite the primacy of the dollar in Zimbabwe, so that interest rates will tend to rise or fall with those of South Africa, rather than with those of the United States. More empirical evidence is needed to substantiate this feature of dollarization. Zimbabwe did not adopt a multicurrency regime to act countercyclically to everyone else. In a decade in which her neighbors and the world at large grew, Zimbabwe's economy contracted significantly. Linking Zimbabwe's business cycle, even in the period of global recession, is a reality far rosier than the ignoble isolation of the Zimbabwe dollar era. Full dollarization is the most direct, irreversible, and credible way of bringing about tighter trade and financial integration (Bogetic 2000).

Cost of Converting Prices, Computer Programs, and Cash Registers

Because of Zimbabwe's hyperinflationary past, Zimbabwe was already incurring a nearly daily cost converting prices, computer programs, and cash registers, so the stability of adopting a multicurrency regime was a net benefit rather than a cost.

Conclusion

While it is important to note that the aforementioned observations describe the performance of dollarization in the short term, it is also important to note the immediacy of dollarization's impact on inflation in the country. As a tool for ensuring monetary stability and credibility, and thereby protecting the wealth of Zimbabweans and businesses, dollarization has increased certainty for investors and been an instant hit.

In his mid-term fiscal review, Biti (2009c) noted the major achievements of the inclusive government, among which five are particularly important in our discussion of dollarization in Zimbabwe:

1. Inflation reduction
2. Removal of price distortions in both foreign exchange and goods markets

3. Resuscitation of financial sector services
4. Overall business confidence building
5. Policy consistency and predictability on key policy fundamentals

It is manifest that dollarization, which is no less than legalizing the right to freedom of choice in currency, has brought about the end of hyperinflation, clarity in price discovery, the resurgence of financial institutions, business confidence, and stability in policy formulation. Tendai Biti would have done well to add that because of Zimbabwe's low inflation, private property is more secure,¹⁷ and savings are encouraged. Long-term lending, an obvious handmaid to low-inflation, has been strangely absent, though, as stated above, this is possibly due to the high costs borne by Zimbabweans, hampering the development of long-term savings.¹⁸

As to lending rates, if one considers the commercial bank prime lending rate of 578.96 percent in late 2007, the current rate of LIBOR + approximately 10 percent can be viewed as a significant benefit of full dollarization. The excesses of the Reserve Bank have been replaced with a starker budgetary discipline in which the government spends only what it earns rather than what it creates. Emigration has stabilized such that it is now, according to evidence gathered by Bloch, equal to immigration.

The god of money destruction has been toppled. The rights of individuals to protect their wealth have been placed ahead of the appetites of a rapacious kakistocracy. Choice in currency has been the savior of Zimbabwe's economy. The idea that money is a private good and that monopolization of the currency market can only lead to inefficiencies, distortions of information, stripping away of property rights, and systematic theft by the government is now widely accepted. Policies that favor the lusts of an organized minority over the rights of the manifold majority, cause monetary instability, and politicize monetary policy are no longer tolerated.

¹⁷“Money is the most widely held form of property. Inflation is a kind of tax on money, and the lower and less variable inflation is, the more secure are property rights in money” (Schuler 1999).

¹⁸Even as food prices fell, the cost of utilities remained stubbornly high, and today, with food prices again on the rise, inflationary pressures are stronger than they would be if they were a privatization of parastatals, or a liberalization of the utilities market. Most parastatals (90 percent) are insolvent and nearly all possess decrepit equipment, so they charge excessive fees for utilities in order to repay their debt and procure new equipment or fix the old.

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