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Monetary aspects of Zimbabwe's new economic crisis

Thulisile Radebe and David Fowkes

Abstract

Zimbabwe is experiencing a renewed economic crisis, confounding hopes that a new 'open for business' government would achieve a rapid economic recovery. Three monetary mistakes explain how Zimbabwe reached this juncture. (1) Dollarization, which commenced in 2009, generated substantial real exchange rate appreciation relative to major trading partners. This contributed to large current account deficits which were financed, in part, by exports of Zimbabwe's hard-currency money supply. The resulting liquidity shortages were addressed with new fiat money instruments, but (2) these were co-opted to fund large increases in fiscal spending. In these circumstances, (3) maintaining the bond note/dollar peg at parity activated Gresham's law, intensifying liquidity shortages. Unilaterally adopting the rand is probably Zimbabwe's least-bad choice at this stage.

Introduction[1]

Zimbabwe has fallen back into economic crisis. The latest symptom of this has been widespread protests, following the government's decision to raise fuel prices by around 150%.[2] Accelerating inflation and shortages of goods have, however, been felt since at least mid-2018. In this note, we set out a few simple economic concepts which explain why the crisis is happening, and particularly why it is happening now.

Zimbabwe's dollarization, in the wake of hyperinflation, led to a large appreciation of the real effective exchange rate relative to Zimbabwe's neighbours, including South Africa. This contributed to enormous current account deficits (in the five years following dollarization, the CAD averaged 15% of GDP). Hard currency outflows to finance this deficit contributed to liquidity shortages – instead of dollars circulating as means of payment, they were exported to pay for imports. In principle, the resulting liquidity crisis could have been addressed with a new means of payment, like the 'bond notes' introduced in May 2016. However, this step could not remedy Zimbabwe's balance of payments constraint, which would sooner or later have necessitated bond note devaluation. In the event, the peg was more deeply undermined by monetary financing of fiscal deficits, leading to excessive (electronic) bond note creation. Trying to maintain a currency peg in these circumstances has activated Gresham's Law, which holds that bad money drives out good. Zimbabweans have rationally hoarded real dollars while spending bond notes. This process has exacerbated the liquidity crisis the bond notes were originally intended to solve.

[1] Many thanks to Rob Davies, Theo Janse van Rensburg, and seminar attendees for their useful comments. The views expressed here are strictly those of the authors.

[2] Petrol prices went from $1.24 a litre to $3.31, and diesel prices rose from $1.36 to $3.11.

Zimbabwe could restore basic economic functionality by devaluing bond notes. To avoid persistent inflation and restore trust, it could abolish domestic currency; as in 2009, this would rapidly end shortages and eliminate inflation. However, it would also recreate the overvaluation problem, if the US dollar once again became the unit of account. A better strategy would be to adopt the rand, which would allow the Zimbabwean price level to follow that of its biggest neighbour and trading partner. So long as Zimbabwe fails to complete a credible political transition, it will be unable to attract significant foreign financing and will therefore have to choose between either a functioning monetary system or large fiscal deficits.

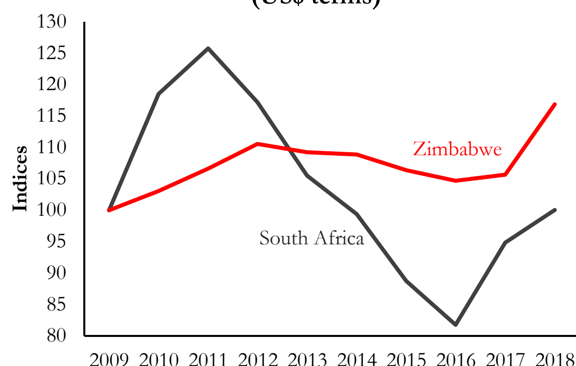
Approaches to understanding the current crisis

There are two obstacles to achieving a satisfying understanding of Zimbabwe's current crisis. The first is data shortages. Zimbabwean economic data are incomplete, unreliable or simply unavailable; even the websites of the Reserve Bank of Zimbabwe and ZimStat were down for much of the period during which this note was written. In these circumstances, theory is especially helpful in connecting the dots, which is why we lean so heavily on the concepts of REER overvaluation, monetary financing and Gresham's law.

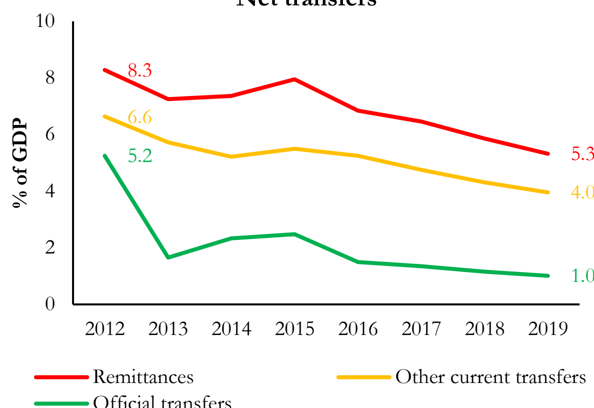
The second obstacle is the temptation to over-explain the problem. No doubt Zimbabwe's economy would benefit from a restoration of public trust or a successful industrial policy that resurrected manufacturing industries, two courses that have been urged by some commentators.[3] But the lack of these things does not explain why Zimbabwe's situation has got markedly worse in recent months. An adequate explanation should respect Occam's Razor, and not draw in more than the fewest, simplest reasons necessary to explain the current puzzle. Accordingly, this note does not set out a grand design for Zimbabwe's economic recovery. We maintain a narrow focus on the present crisis.

[3] On trust, see Robert Rotberg (2019, January 17) "Bold steps Mnangagwa should be taking instead of fiddling with the petrol price" Available at: https://nehandaradio.com/2019/01/15/robert-rotberg-mnangagwas-petrol-price-hike-is-madness-this-is-what-he-should-be-doing/. On industrial policy, see for instance Tapiwa Mashakada (2016, June 2017) "Alternative solutions to the liquidity, cash crisis' Available at: https://www.theindependent.co.zw/2016/06/17/alternative-solutions-liquidity-cash-crisis/

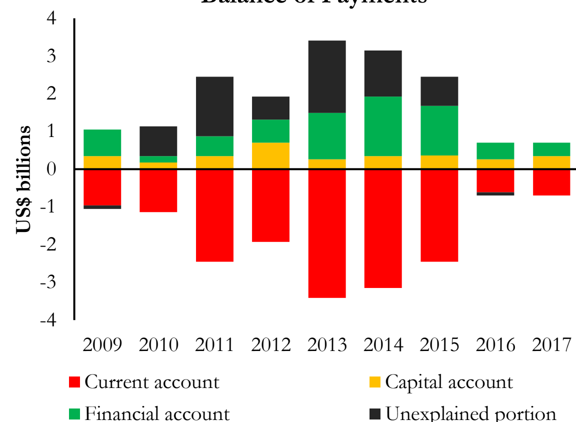
The overvaluation problem



Abandoning the Zimbabwe dollar solved Zimbabwe's inflation problem. However, the *de facto* – and later *de jure* – multicurrency system evolved into a dollar system, in the sense that prices were denominated in US dollars.[4] The RBZ estimated that as of 2016, 95% of transactions were taking place in US currency, up from 49% in 2009.[5] This development undermined Zimbabwe's new monetary system by creating a large, implicit import subsidy.



From late-2010 onwards, the South African rand and other neighbouring currencies depreciated against the US dollar. Zimbabwean prices, being fixed in dollar terms, stayed relatively stable. There was some mild deflation in 2014, 2015 and 2016, but not enough to achieve an internal devaluation large enough to maintain competitiveness. Between 2009 and 2016, the Zimbabwean price level rose by close to 5%; over that same period, the South African price level *in US dollar terms* fell by about 18%. This left South African goods and services attractively priced relative to those in Zimbabwe. Accordingly, South African exports to Zimbabwe nearly doubled between 2007 and 2017, in volume terms (according to dti data). Rand weakness also reduced the value of remittances from Zimbabweans working in South Africa. Similar overvaluation effects also applied relative to Zimbabwe's other regional trading partners.

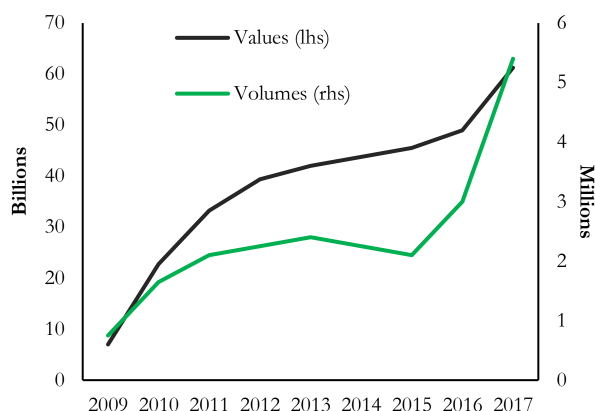


In these circumstances, it is unsurprising that Zimbabwe ran very large current account deficits following dollarisation, averaging 12.8% of GDP

[4] Zimbabwe's difficulty in running a dollar system in same neighbourhood as a big country with a volatile currency parallels Argentina's failed dollarization plan (a scheme which collapsed in 2001). In Argentina's case, it was Brazil's 1998 abandonment of its currency peg which left Argentina's real effective exchange rate severely overvalued. Of course, Argentina had its own currency, the peso, which was fixed to the dollar through a currency board arrangement, with guaranteed convertibility. It took almost three years for the peg to break. A remarkable aspect of the Zimbabwean case is that the authorities decided to introduce a pegged currency in the twilight period of dollarization, precisely when the viability of any such peg was failing.

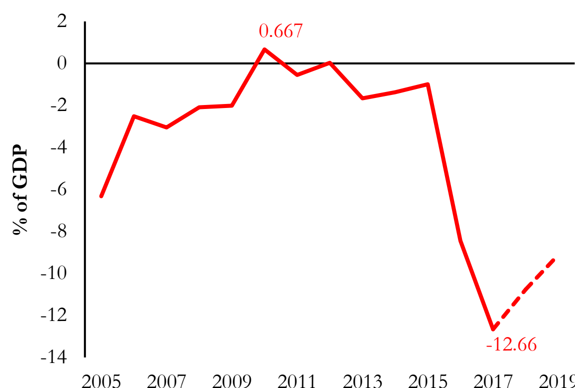
[5] According to the RBZ, the rand and the dollar were used in equal proportions between 2009 and 2013; the rand share then rapidly declined, to just 5% of transactions by 2016. This decline in rand usage is somewhat puzzling. It is unlikely that rand notes and coins would have been harder to come by than US dollars, so as an instrument of payment the rand should have had an advantage. Although Zimbabweans probably preferred dollars to rands, given that dollars hold their value much more effectively and tend to be less volatile, Gresham's Law should then have caused rands to circulate and dollars to be saved. The best explanation we have found is that the Zimbabwean government decided to denominate its accounts in US dollars. Given that it is more efficient to have a single unit of account than competing units, this decision – by the largest economic actor in Zimbabwe – probably caused others to converge on a dollar norm. See Roger Southall (2018, 8 January), "Bond notes, borrowing, and heading for bust: Zimbabwe's persistent crisis", *Canadian Journal of African Studies*, 51:3, especially pp. 390 and 392. Available at: https://www.tandfonline.com/doi/pdf/10.1080/00083968.2017.1411285

annually between 2009 and 2016. (By contrast, the current account had recorded a surplus in 2007.[6])

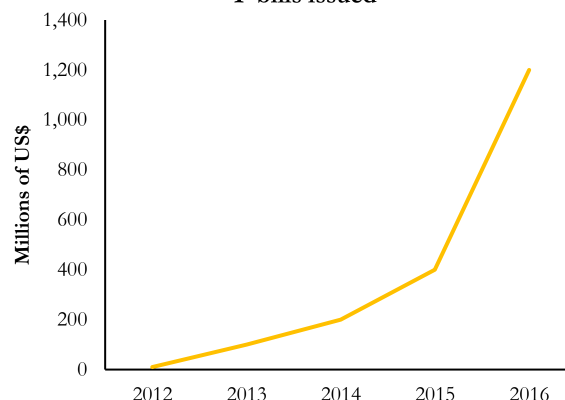


Usually, current account deficits are funded by financial inflows, either through the sale of assets to foreigners (bonds, stocks, real estate) or foreign aid. In Zimbabwe's case, given adverse local investment conditions and sanctions, such inflows were scarce. There was, however, an option to export the means of payment itself, given that the monetary base was all foreign currency. As a result, persistent current account deficits created a steady decline in local cash – a logic that, pursued to its end, would ultimately have drained all liquidity from the economy. Indeed, by 2016 Zimbabwe was so short of foreign currency that it could no longer import, and the current account closed abruptly.[7]

A liquidity solution and a fiscal problem



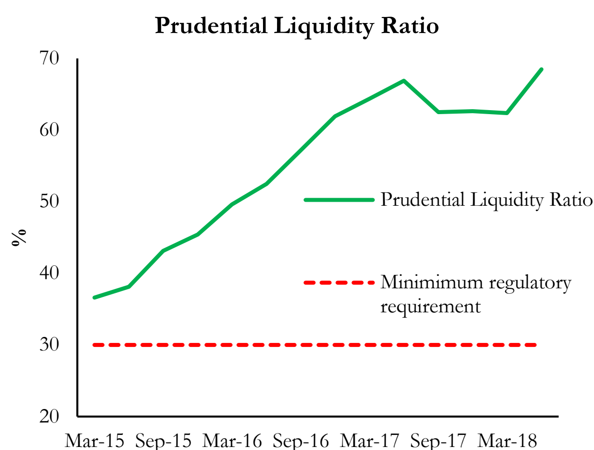
Zimbabwe adopted two strategies to handle its liquidity shortages. The first, simply enough, was to issue bond coins (in December 2014) and low-denomination bond notes ($2 notes in November 2016 and $5 in January 2017). These provided a means of payment and, helpfully, a means of making change – a longstanding problem given that low-denomination instruments were scarce in Zimbabwe, forcing people to accept change in goods such as sweets or eggs. Second, and more innovatively, Zimbabweans expanded use of its Real Time Gross Settlements scheme for electronic payments – thereby developing the kind of cashless payments system more commonly seen in much richer societies, like Sweden. Both the new physical and electronic monies were pegged at parity to the dollar. To enhance their credibility, both were also backed by loans from the Afreximbank, a multilateral trade-financing bank based in Cairo.



These new money instruments, however, created an irresistible temptation for the fiscal authorities. Between 2009 and 2015, the Zimbabwean government ran small fiscal deficits, or even (in 2010 and 2012) surpluses; the average fiscal balance for the period was -0.6% of GDP. This was an inescapable consequences of cash budgeting: the government had almost no means to

[6] The IMF estimate for the current account is +4.4% of GDP. However, figures for the pre-2009 period are especially unreliable due to hyperinflation.
[7] World Bank (2017, June) Zimbabwe economic update: the state in the economy. Available at: http://documents.worldbank.org/curated/en/333081497536246610/pdf/116309-WP-PUBLIC-on-6-21-6-am-dc-time-15-6-2017-15-24-30-ZimbabweEconomicUpdate.pdf

borrow. When it recovered the power to issue money, however, impossible spending demands were no longer literally impossible. Accordingly, in calendar year 2016 government employees received (unbudgeted) 13th cheques, raising the total wage bill to more than 90% of total revenues. Moreover, the effects of El Niño saw more than 4% of GDP being directed to agricultural support. The fiscal deficit promptly exploded to 8.4% of GDP – and it has grown further since.



This borrowing was funded mostly with two instruments. First, government drew on an overdraft facility with the Reserve Bank of Zimbabwe. Despite legislation restricting borrowing from the RBZ to 20% of the previous year's government revenues, the fiscal authorities drew cash from the RBZ freely, pushing the overdraft facility to $2.3 billion, well above the statutory limit of $762.8 million. Second, government began issuing large quantities of Treasury bills – usually with 91 day maturities – chiefly to local banks. The explosion in T-bill issuance is somewhat puzzling, not least because when the government first held T-bill auctions, in 2012, they mostly failed, with banks requiring higher interest rates on T-bills than the government was willing to pay.[8] What appears to have changed is that the government began offering larger discounts on T-bills (i.e. higher interest rates). This created what appeared to be profitable opportunities for banks, with interest rates starting at around 5% (given deflation in 2016, this amounted to a real rate above 6%).[9] Banks were also able to exchange their non-performing loans for Treasury bills under the ZAMCO scheme, which offered banks an opportunity to get bad loans off their books. The catch is that banks have now come to hold large quantities of RTGS balances and T-bills on the asset sides of their balance sheets, which will pose a threat to their solvency in the event of a large bond note devaluation. (IMF estimates suggest that for each 10% reduction in the value of T-bills, banks would lose around 15% of their capital, with broadly similar effects for equivalent cuts to the value of RTGS balances.[10])

Gresham's Law, inflation and shortages

The expansion of the bond note supply has effectively broken the US dollar peg. Black market exchange rates have climbed to roughly $4 per US$1.[11] Because the authorities have not officially devalued bond notes, however, they have inadvertently exacerbated shortages of liquidity. The reason for this is Gresham's law. This principle, attributed (incorrectly) to the 16th century British financier Sir Thomas Gresham, holds that bad money drives out good; if people have a choice between two kinds of money, they will keep the more valuable. Accordingly, Zimbabweans are inclined to hoard dollars and circulate bond notes.

Given declining supplies of foreign currency, and the difficulty of setting prices in one currency when two are actually circulating, it is unsurprising that Zimbabwe has also suffered shortages of imports. The fact of economic collapse is not enough to explain why shops are empty; in 2009, letting the price system work –

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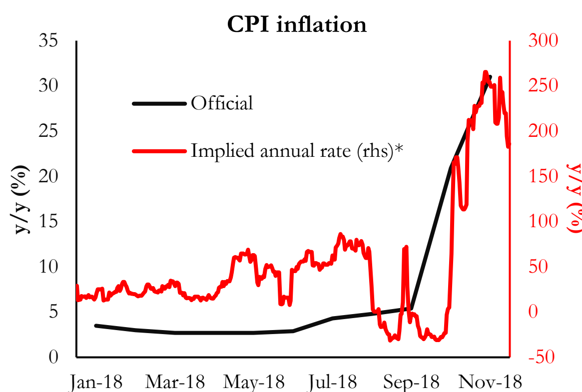
[8] ZEPARU (2013) "Issuing Treasury Bills in a Dollarised Zimbabwean Economy" Available at: http://www.zeparu.co.zw/sites/default/files/2018-03/Policy%20Brief%20Issuing%20Treasury%20Bills%20in%20a%20Dollarised%20Zimbabwean%20%20Economy.pdf
[9] Banks are required to hold at least 30% of their assets in liquid forms, including cash, RTGS balances and T-bills. We wondered if this legislation had been used to compel bond note purchases. However, IMF data shows that RTGS and T-bill holdings exceed 30% of capital for every Zimbabwean bank, which suggests there were other reasons to hold these assets. See IMF Article IV consultation, 2017, p. 43
[10] IMF (2017). "Zimbabwe Article IV" Available at: https://www.imf.org/~/media/Files/Publications/CR/2017/cr17196.ashx
[11] See Macdonald Dzirutwe (2019, January 24) "Zollars, The Crocodile and the cash crunch behind Zimbabwe's protests" Available at: https://city-press.news24.com/News/zollars-the-crocodile-and-the-cash-crunch-behind-zims-protests-20190124

by abandoning price controls and the Zimbabwean dollar – quickly refilled the shelves. In the current context, the price system is once again struggling to function. Bond note inflation is just part of the market's attempt to get prices right, a task made more difficult by the fact that while bond note prices need to be higher, dollar prices should be lower (given dollar scarcity).[12]

Conclusions

Inasmuch as Zimbabwe's post-Mugabe government had a macroeconomic strategy, it hinged on the 2018 election unlocking foreign funding, which would have made the bond note/US dollar peg viable, at least for a few more years. Instead, observers were largely unpersuaded by the freeness and fairness of the polls and little money was forthcoming. In these circumstances, the government faced only bad choices. It could have devalued immediately, which would have permitted realistic pricing in markets, thereby limiting shortages, including of foreign currency. The government resisted this step, however, presumably hoping to avoid an unpopular spike in inflation, demands for large salary increases, and a large reduction in banks' assets, potentially rendering many of them insolvent.[13] The alternative, of course, was to maintain an increasingly unrealistic dollar peg, producing a more gradual acceleration in inflation, alongside shortages. This option has now run its course, with inflation over 40% (and perhaps as high as 200%).[14]



* Implied rate calculated by Steve Hanke, Johns Hopkins University

A comprehensive economic recovery strategy would involve political reforms that are beyond the scope of this note. Suffice to say that the recent, violent government crackdown on protestors has vitiated the new government's reformist credentials, which means official funding flows will probably not be forthcoming.[15] Zimbabwe will therefore struggle to rescue the bond note system, and will very likely have to find new monetary arrangements.

In the short run Zimbabwe could rapidly lower its inflation rate by switching back to a multi-currency system. In the longer run, however, this will not be sustainable if it once again becomes a *de facto* dollar system. To maintain competitiveness, Zimbabwe needs an exchange rate that will not become too appreciated relative to its neighbours', especially South Africa. The obvious answer is to adopt the rand unilaterally, with a view to joining the Common Monetary Area in the longer run (which would also allow Zimbabwe to receive seigniorage payments and issue its own currency, provided it were 100% backed by foreign reserves). Zimbabwe could attempt to issue a new currency of its own, but the RBZ probably lacks

[12] This also points to the trouble with claims that Zimbabwe has the world's highest petrol price. The stated price of US$3.31 per litre, or ZAR 45.88, would actually be around R11,50 per litre, at current market exchange rates. (By way of comparison, the South African January price is R14.01 per litre of 95 unleaded petrol.) At the previous petrol price, of $1.24 a litre, Zimbabwe was effectively selling petrol at a market price of ZAR 4.30, a very large discount which incentivised petrol re-exporting. In fact, the petrol price should probably be even higher than it is now. The recent increase only raised the excise tax, to ensure government revenues were not further compromised by inflation. So long as importers do not receive compensation in line with world prices, incentives to sell petrol in Zimbabwe will be too weak to ensure supply.
[13] In these situations, one usually also finds that some well-connected individuals are able to access foreign exchange at the official rate, a hugely lucrative privilege.
[14] Based on calculations by Steve Hanke. See https://www.cato.org/research/troubled-currencies. Hanke's calculations include black market price data.
[15] Prospects for sanction relief have also receded, although existing sanctions are generally narrowly targeted and are therefore probably not having significant macroeconomic effects.

the credibility or independence to achieve rapid disinflation with its own *fiat* currency, however, making this a less efficient option than rand-isation.[16]

Unfortunately, abandoning bond notes will severely compromise bank balance sheets. At this stage, recognising losses on these assets is inevitable (although there will be some offsetting reductions in liabilities). Probably the best course would be putting monetary reform first, to restore economic functionality, and worry about recapitalising banks later. Zimbabwe's recovery will in any event not be credit-led, given the difficulties of attracting deposits or making loans in a high inflation economy.

[16] This approach has been endorsed by the former coalition finance minister Tendai Biti. See Paul Richardson and Antony Sguazzin (2019, February 8), "Zimbabwe Should Adopt Rand after 'Miracle of Failure', Biti Says", *Bloomberg*. Available at: https://www.bloomberg.com/news/articles/2019-02-08/rand-offers-zimbabwe-economy-salvation-ex-finance-minister-says