Financing Infrastructure for New Economies in the Context of Dislocated Markets

By Zeph Nhleko | Peer Review

Introduction

One could be forgiven for thinking that given the close to 20 deadly pandemics (LePan, 2020) and over 70 economic crises humanity has seen since the first century, we should by now know how mutation works and what economic outcomes to expect. This view is influenced by the established understanding that irrespective of the type of crisis – natural, financial, economic or otherwise – all crises have some similarities (Reinhart and Rogoff, 2011). For example, we can anticipate varying impacts from crises on risk appetite in markets, liquidity, productivity, trade, economic activity, standard of living – sometimes even lives and fiscal debt.

The uncertainty in crises mutation begs the question whether certain tools can be set up during normal times to help smooth impacts. Specifically, this question should seek to deal with smoothing impacts on infrastructure finance by development finance institutions (DFIs). Some have criticised DFIs in South Africa for lacking the foresight to deal with and respond to crises in general. This note seeks to add to the DFI arsenal in thinking through possible options.

The proposals in this note are inspired by the New Cities New Economies project in which Ratshitanga (2019) triumphs in relating why the South African economy finds itself where it is. The project analysis confirms that the economic problems confronting South Africa have not changed since 1994. The assessment further makes a recommendation for a controlled and deliberate economic discrimination to development by introducing the ex nihilo strategy. This strategy discriminates because irrespective of the size and number of developments, specific spatial localities must be chosen to create new economies out of nothing. This is a good thing. The special economic zones concept uses this approach. The critique that this strategy might locate people in the middle of nowhere misses the point that this is precisely how new economies should be forged.

Some of the missing links (Ratshitanga, 2019) to achieving quick progress with the New Cities New Economies project have been the weak collaboration among stakeholders, the lack of widespread programmatic approach to infrastructure development, the dearth of visionary leadership, clinging to the notion of democratic centralisation at the expense of new innovative ways, the inability to identify and successfully nurture local economy initiatives, as well as a lack of innovative funding solutions. The rest of the report assesses the concepts of new economies and dislocated markets to frame the discussion before highlighting the lingering challenges of municipal infrastructure. The last section covers the proposed tools that should be considered by DFIs for infrastructure funding, especially during times of dysfunctional markets.

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The concept of new economies

The term ‘new economy’ can assume different definitions, depending on the context of usage. It could be used to refer to a high-tech driven economy and society (DeLong and Summers, 2001) that emphasises information, ideas and relationships. It can also mean the introduction of new measures of economic progress that encourage new frameworks of economic analysis and policies (OECD, 2019). In this context, the term is used in the spirit of the New Cities New Economies project to mean the development of new spatial settlements that are accompanied by economic activity. Naturally, these are sustainable environments that lean towards being urban in nature. The emphasis is on financing the creation of new infrastructure for these spatial localities, which should be situated within municipality boundaries in South Africa. For new economies to make sense, settlements and economic activity must be supported by sound economic and social infrastructure. For example, many of China’s cities that started off being labelled as ghost towns eventually found their vibrancy (Shepard, 2015), thus driving the point that if planned properly and supported with the relevant infrastructure, new economies can be developed.

In the case of South Africa, the creation of new economies ex nihilo does not detract from the reality that existing township and rural economies must be improved. The neo-apartheid state of South Africa has ensured that black people who live in these areas, especially in townships, remain crowded with inadequate infrastructure (Evans, 2009).

Dislocated capital markets

Capital market dislocation refers to widespread asset mispricing in the market (Pasquariello, 2012) brought about by a shock internal or external to the market. As a result of the difficulty in measuring market dislocations, it has often been proposed that a market-specific index can be created to assess them. The impact of market dislocations on the ability of DFIs to access funding can be devastating. First, investors pull out of the market, thus rendering DFIs unable to issue new debt instruments. Secondly, the cost of borrowing rises sharply as a risk-off sentiment sets in. Thirdly, those lenders who remain in the market reprice their facilities upwards to compensate for the perceived extra risk. The outcome is that a DFI struggles to service its commitments, let alone extend new credit or create new business. If the market dislocation persists, this means the DFI is unable to invest more to counter the economic downturn.

Municip al infrastructure challenges

Ten years ago, the municipal infrastructure growth rates were robust across all infrastructure types. By 2018, the only growth rate posting a positive return was for transport equipment. This demonstrates both the reversal in infrastructure development and perhaps the inability to maintain infrastructure at the municipal level.

Furthermore, it has been reported recently that it would take an increase in infrastructure investment of 28% per year for the next three years for South Africa to get back to the original growth trends observed half a decade ago (Watermeyer and Phillips, 2020). New economies must be created at the municipal level of the economy and therefore investing in municipalities is critical. One of the investment vehicles is in municipal bonds.

information management systems and sound accounting management, among others.

Funding options that can be elevated during market dislocations episodes

Repurchase agreements (repos)

One of the key tools to deal with the DFI liquidity challenges through municipal bonds is to utilise them as repurchase agreements (repos). Repurchase agreements are a form of short-term market borrowing for traders. In the case of municipal bonds, term repurchase agreements with long tenor would be preferred. Although creditworthiness and interest rates are more likely to fluctuate in a long tenor repo, most DFIs' funding formula are more suited for these types of repos – with maturities of 6 months or longer.

R million

	Construction works		Plant, machinery and equipment		Transport equipment		Land and existing buildings		Other fixed assets		Leased assets and investment property		Total	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
	52 026	50 911	5 037	4 404	1 241	1 669	1 246	1 133	1 451	1 288	1 082	261	62 083	59 666
Y-o-Y growth		-2%		-13%		34%		-9%		-11%		-76%		-4%
10-yr growth	194%	63%	328%	173%	33%	56%	-17%	-66%	371%	168%	100%	433%	187%	58%
	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
	17 715	31 252	1 177	1 612	936	1 067	1 503	3 356	308	480	0	49	21 639	37 816
Y-o-Y growth		76%		37%		14%		123%		56%		100%		75%

(Source: Statistics South Africa)

In order to support the development of sound primary and secondary municipal bond markets, DFIs might have to increase their role of facilitating the municipal bond market. Balance sheet acquisitions may be utilised where available, or the prudent increase of debt-to-equity ratios might be explored. These municipal bonds can then later be used for repurchase agreements or collateralised instruments. To sustain this approach, a steady flow of municipal bond purchase must be maintained.

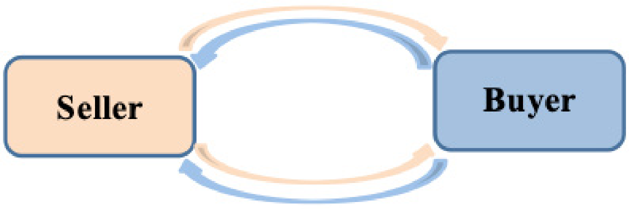
One key benefit that will flow from facilitating the municipal primary bond market is enhancing the governance standards at municipal level. This will be achieved as municipalities comply with market listing requirements such as financial information,

Setting longer tenor will probably be difficult initially, but once market players adjust, the process should stabilise. There is enough evidence in the case of South Africa that supports market appetite for this type of instrument. A standard tri-party repo would be preferred for this exercise.

Key risk mitigating processes, such as attending to over-collateralisation, margin calls or under-collateralisation can be utilised to deal with risks from various sources including the terms of the transaction, liquidity, high leveraging and counterparty risk, among others. A steady flow of these instruments must be maintained.

Simple structure of a repo

Earlier date: money flows to seller
and bond to buyer

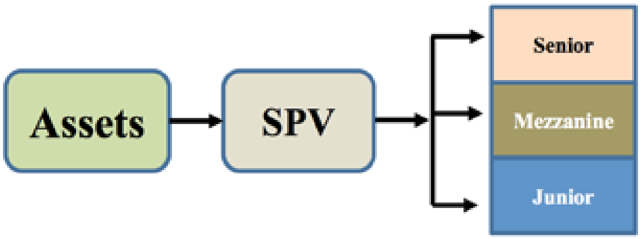


Later date: bond returns to seller
and money flows back to buyer

Collateralised Bond Obligations (CBO)

Municipal bonds of varying credit quality levels could be packaged into tradable Collateralised Bond Obligations (CBO) tranches to deal with liquidity issues. CBOs are structured debt instruments that have different bond grades with varying risk levels as underlying assets. This process facilitates the packaging of high-grade and low-grade municipal paper to be traded in the secondary market. This type of packaging allows high risk investors to participate in the low-grade, high yield segment of the CBO. Since South African municipalities have varying financial strengths and capabilities, the CBO approach would accommodate a wider range of municipalities – beyond just the metros.

Simple structure of a CBO



South African Reserve Bank infrastructure facility

There is a need for the central bank to be an active economic development agent, especially in dysfunctional markets. For some strange reason, the conversation about the involvement of the central bank in supporting economic development directly or indirectly is always taken to extremes. If it does not end up being a discussion about nationalisation, then it ends up being a conversation about printing money or about the threat to the central bank's independence. These are, quite frankly, inconsequential discussions and take a lot of our energy unnecessarily.

Anyone getting involved in the conversation about the central bank supporting economic development indirectly through DFIs should be aware that: (i) only privately-owned assets can be nationalised (Polity, 2011); (ii) as per the guidance of the monetary theory of inflation (Friedman, 1956), increasing the money supply faster than economic output is inflationary; and (iii) the independence of the central bank is guaranteed by the constitution (Department of Justice and Constitutional Development, 2020). Therefore, if it is agreed that historically the key elements of central banking are its independence, inflation targeting and direct/indirect support to economic sectors (Epstein, 2005), then the conversation should be about the central bank's role in assisting DFIs with infrastructure finance.

Surely in the same manner that the central bank targets sovereign paper in the primary or secondary market, it can target DFI paper or create an infrastructure-specific borrowing facility for DFIs. It has been argued that it should be normal for DFIs to have central bank reserve accounts and even participate in the discount window (Rezende, 2015), especially during times of dysfunctional financial markets. This argument is further justified by the fact that monetary policy liquidity interventions do not go all the way to support DFIs' borrowing requirements during tough times.

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The irrational presupposition that DFIs as non-clearing banks (i.e. as banks that do not participate in the exchange of payment instructions) cannot be supported by central banks deprives us of innovative thinking and imagination. It is logical that the framing and deployment of monetary policy should be informed in the main by prevailing domestic economic conditions. While the central bank independence and chosen monetary policy tool must remain mostly rigid, the investment/lending aspect of the policy must adapt and evolve with domestic economic progress. Central banks, by their very nature, are capable of adaptation – note, for example, how Montagu Norman, Benjamin Strong, Hjalmar Schacht and Émile Moreau manoeuvred the early part of the 1900s to reposition the Bank of England, the New York Federal Reserve, the Reichsbank and the Banque de France (Ahamed, 2009).

It is therefore sensible for the South African Reserve Bank to explore and consider getting indirectly involved with infrastructure development through DFIs. This is a long-term solution for a funding problem that repeats itself during every crisis. This liquidity challenge is undesirable if DFIs are expected to be countercyclical and to increase investments during bad economic patches. A standing R15–R20 billion infrastructure facility can ensure a good support platform for DFIs.

Concessional funding

There are a number of global concessional funds that have been established to support sustainable infrastructure development. Funding sustainable new economies using these funds, as part of a broader funding mix, offers an avenue to counter financial market dislocation challenges. Concessional funding, such as the Climate Investment Funds provided by the Sustainable Low Carbon Transport Partnership, gives the opportunity to accelerate the adoption of clean energy technologies, provides investment agility, and enables competitiveness on otherwise very expensive technologies (Climate Investment Funds, 2019; Binsted et al, 2013). Creating new economies will require sustainable approaches that are good for people and the planet. Many concessional funds share and promote the principles of the green economy.

The key sustainable funds available to be explored include:

- Global Environment Facility
- Clean Technology Fund
- Global Climate Change Alliance
- IDB's Sustainable Energy and Climate Change Initiative
- ADB Climate Change Fund
- Fast Start Financing
- German International Climate Initiative
- ADB Clean Energy Fund
- Carbon Market (Clean Development Mechanism and Voluntary Carbon Market)
- Green Climate Fund
- Sectoral Mechanism

It has been found that when financing the transition into new economies, governments require six additional actions (Godfrey and Zhao, 2016) as outlined below:

- Boost local resources and the ability to access capital for investment
- Coordinating public and private finance
- Leveraging international financing
- Strengthening institutional capacity for investment planning at national and local levels
- Reforming wider price distortions
- Strengthening investment in clean technology development and deployment

Urbanisation strategies, such as the Integrated Urban Development Framework and the City Support Programme, are critical to coordinate these actions. However, the focus should not only be on existing urban areas – which tend to entrench the apartheid spatial legacy – but on the creation of new economies as well.

In a study of medium-sized emerging cities in Latin America and the Caribbean (Bonilla-Roth, M. E. and Zapparoli, I., 2017), it was concluded that the process of structuring financing and crowding in private sector participation in financing new economies infrastructure is made easier if accompanied by technical support to strengthen the technical and administrative capacities of municipalities. In rethinking infrastructure finance and delivery, DFIs must therefore focus on smarter ways that favour sustainable deployment solutions. In this regard, two key aspects become important:

- Creation of platforms to implement infrastructure programmatically in a deliberate process of rowding in the private sector; and
- Focusing on the full infrastructure value chain and designing fit-for-purpose models/solutions through planning, preparation, finance, implementation, as well as operations and maintenance.

In addition, there must be an intentional inclusivity effort across the value chain to ensure that Broad-Based Black Economic Empowerment (BBBEE), gender and youth participation are at the centre of infrastructure creation.

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