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INFRASTRUCTURE EXPOSURE

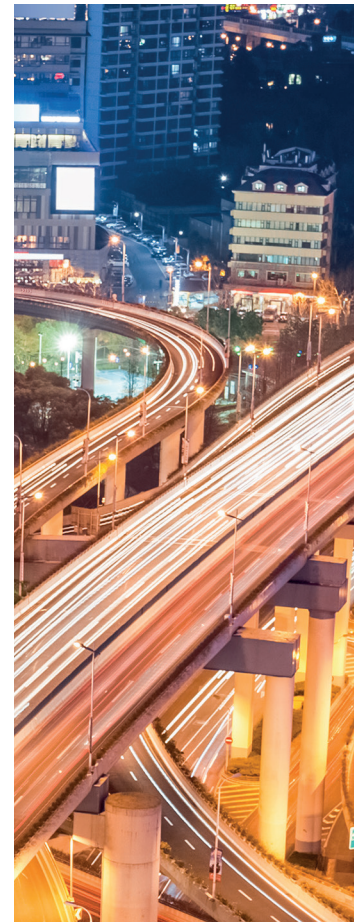
through multiple asset classes

LONG-TERM INVESTING

and infrastructure

PRESCRIBED ASSETS

in South Africa



AN INTRODUCTION TO INFRASTRUCTURE INVESTMENTS

VOL.7

ALSO IN THIS ISSUE: EXAMPLES OF INFRASTRUCTURE INVESTMENT | UNDERSTANDING THE DIFFERENT TYPES OF INFRASTRUCTURE INVESTMENTS | INFRASTRUCTURE RESOURCES FOR RETIREMENT FUNDS

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AN INTRODUCTION TO INFRASTRUCTURE INVESTMENTS

overview

Infrastructure investments are gaining increasing attention as necessary investments for retirement funds in South Africa. Investing in infrastructure projects presents funds with the opportunity to achieve long-term suitable returns for members, while at the same time contributing towards much-needed economic and socioeconomic outcomes.

What is infrastructure investing?

Investment in infrastructure – often referred to as an alternative asset class – is receiving increased attention and is gaining importance. According to the Chartered Financial Analyst (CFA) Society, “infrastructure is generally defined as the long-lived, large-scale public systems, structures, and facilities that provide essential services to society and the economy.” The Principles for Responsible Investment (PRI) states that: “Infrastructure forms the backbone of every economy, enabling economic and social development.”

Opportunities in infrastructure can be diverse and can enable investment in projects that ensure the provision of essential goods and services, thereby adding to the quality of communities’ lives.

From a portfolio-construction perspective, infrastructure investments offer portfolio diversification due to their low correlation with more traditional asset classes – such as listed

equity – and can enhance yields, while also providing inflation protection. Furthermore, these assets can also be defensive during economic downturns.

Given infrastructure’s long-term nature, investing in these assets can be appealing to retirement funds, particularly in times of rising interest rates and inflation. But the merit of infrastructure investment also extends beyond financial gain; not only does it provide an opportunity to invest in something that has a different risk-return profile to more traditional asset classes, but it also affords the opportunity to invest in and stimulate the country’s socioeconomic growth and development.

Can retirement funds invest in infrastructure?

Although there is no specific allocation to infrastructure investments as per Regulation 28 of the Pension Funds Act,

retirement funds may have exposure to these types of investments through different asset classes, such as unlisted or listed debt or private equity. Currently, Regulation 28 allows retirement funds to allocate 10% of their investment portfolio to private equity investments, for example.

On 26 February National Treasury announced draft amendments to Regulation 28 of the Pension Funds Act to encourage investment in infrastructure. The review of Regulation 28 is in response to “a number of calls for increased investment in infrastructure given the current low economic growth climate”.

The amendments seek to make it easier for retirement funds to invest in infrastructure. Infrastructure is not currently listed as a separate asset class under Regulation 28. The review of the regulation will allow for infrastructure investments to be more clearly defined under existing asset classes, such as equities, debt instruments and property. The amendments further propose that overall investment in infrastructure across all asset categories may not exceed 45% in respect of domestic exposure, with an additional limit of 10% in respect of Africa, and an aggregate limit for infrastructure investment.*

Comparative to other international emerging market peers, infrastructure spending in South Africa is too low relative to what is considered adequate for a developing economy. The level of gross fixed capital formation (GFCF) as a percentage of gross domestic product (GDP) reflects the extent of infrastructure spending in an economy. The most recent statistics show that GFCF as a percentage of GDP in South Africa was 18% in 2019. This is considered too low for a developing economy, where the norm should be approximately 30% to 35% of GDP, according to several studies. This emphasises the importance of South Africa investing in more infrastructure projects locally.

Types of infrastructure investments

Globally, there are different ways to access infrastructure investments, examples being through direct investment, publicly listed funds, private infrastructure funds or private infrastructure fund of funds. The means of investment will be dependent on the investor’s objectives and liquidity requirements.

There can be a broad range of infrastructure investment opportunities across different sectors available to investors. Each opportunity should be assessed on its own merits, relative to the suitability for the investor, such as risk profile, investment time horizon and investment return objectives. Examples of infrastructure projects can include social projects, such as the construction of schools and hospitals; transportation projects, such as the building, construction or development of roads, railways and airports; communication projects, such as investing in wireless communication towers; or energy focused projects, such as renewable energy investments.

**Treasury has invited public comment on the amendments to Regulation 28 until 29 March 2021. You can access the Government Gazette where the draft amendments were published via this link: <https://bit.ly/3uHeyZ7>*

“Increasing attention is being paid to the ability of investing in infrastructure projects to help with South Africa’s post-COVID setting.”

CHARACTERISTICS OF INFRASTRUCTURE INVESTMENTS

- **Investment horizon:** Infrastructure investments are typically long term in nature.
- **Less liquidity:** A large portion of these assets are unlisted which, among other factors, can make them less liquid.
- **Search for yield:** The current search for an enhanced yield in a low interest rate environment has fuelled the demand for investments of this nature. Added to this, the lower interest rate environment can be positive for investments of this nature, as it results in lower funding costs.
- **Stable returns:** Infrastructure investments are less tied to economic cycles, therefore providing more stable returns.
- **Portfolio diversification:** The performance of the underlying assets in infrastructure investments is uncorrelated to more traditional asset classes, such as listed equities.

REFERENCES

ASISA | CFA Society | Futuregrowth

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LONG-TERM INVESTING AND INFRASTRUCTURE

overview

Infrastructure assets fall into various categories and have different lifecycles. Investors should have an understanding of this, as it can impact the risk-return profile of an investment, including its ability to match inflation.

An economic and social good

Infrastructure plays a crucial role in any economy. The availability of transport, communication, electricity, safe water and sanitation, and other basic facilities, has a tremendous impact on improving the quality of life and wellbeing for any country. Infrastructure facilities and services are essential for efficient production of goods and services, transport and trade – all of which spur economic growth – which in turn helps in reducing poverty.

In recognising the essential role that long-term financing for infrastructure plays in supporting strong, sustainable, balanced and inclusive growth, it is understandable that long-term investment vehicles, such as retirement funds, are approached to provide this type of financing for infrastructure projects.

Historically, governments have borne the main responsibility for infrastructure development, as infrastructure is typically considered a 'public good'. However, in most countries, governments are struggling to keep up with the level of development required. This is proving especially true in a post-COVID economic environment, where most countries are experiencing unusually low growth.

African countries, similar to their international emerging market counterparts, have a significant infrastructure deficit, especially when compared to developed market peers. To

combat the continent's infrastructure deficit, alternative sources of funding are needed. Infrastructure investments are traditionally seen as inflation linked, and institutional investors are increasingly seen as suitable funding partners for infrastructure investments, given their long-term liabilities, which make inflation-linked assets attractive.

Greenfield and brownfield infrastructure projects

There are two main stages of infrastructure investment – greenfield and brownfield. Each type of investment carries its own inherent risks and abilities to match or beat inflation.

Greenfield infrastructure is an investment into new infrastructure – new development and construction projects.

For an investor, some inherent risks of these projects include construction risk, performance risk and off-taker risk. The creation of the asset primarily involves funding the project, with risk of the project not reaching commercial status.

Greenfield infrastructure assets do not traditionally provide inflation-hedging features.

Brownfield infrastructure is an investment into existing and ready-to-operate – or already operating – infrastructure assets.

For an investor, these brownfield assets can generate revenues. Given that the infrastructure already exists and is in use, the risks of investing into this project are substantially less than in a greenfield project, where the future cash generation is uncertain.

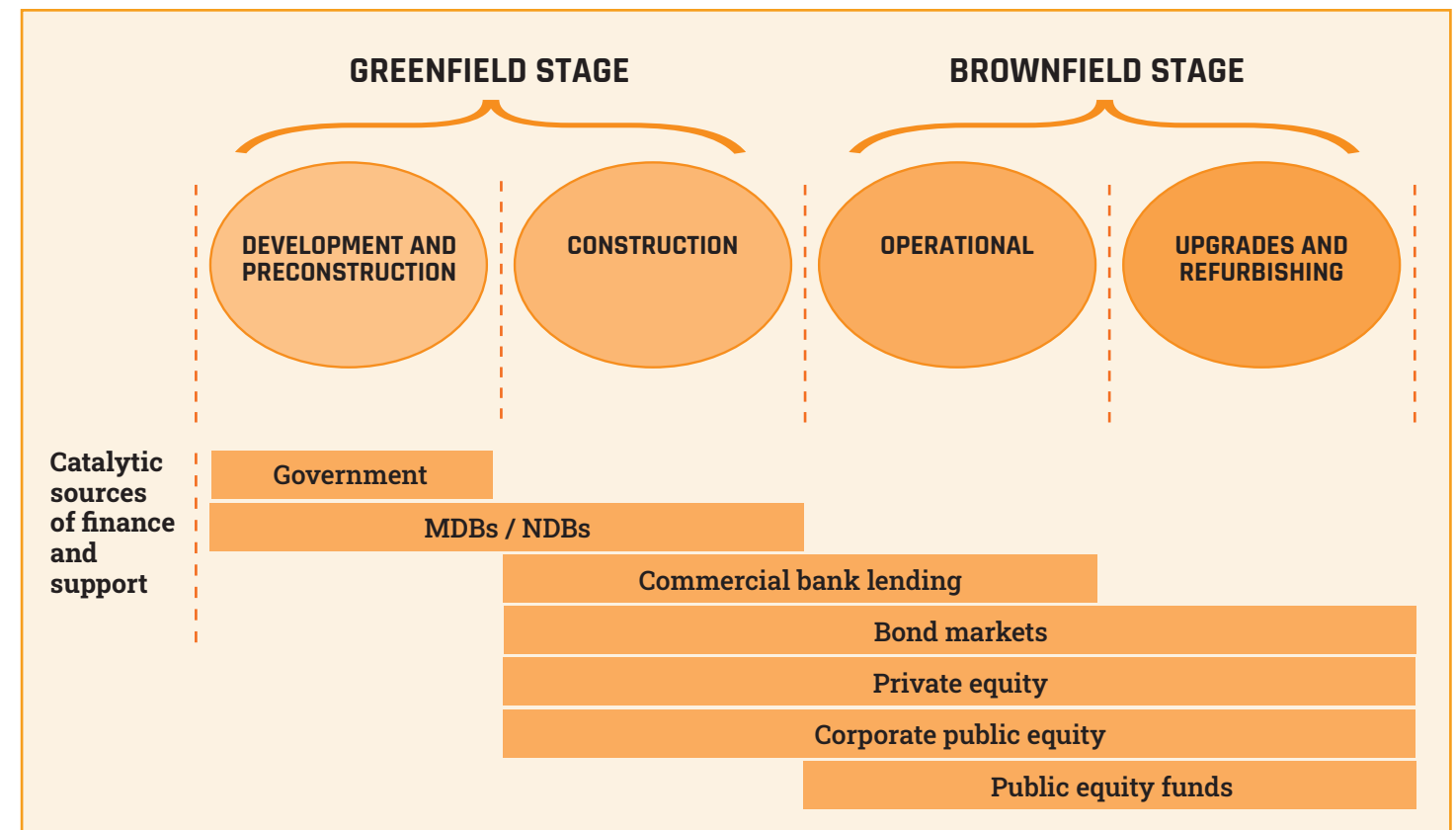
Understanding the nature of an infrastructure project

Infrastructure assets often exhibit 'monopolistic' features, in that they have exclusive possession or control of the supply or trade of a particular commodity or service. For example, a toll road or airport that travellers must use to access a specific city, town or region. In such cases, predictability of future cash flows to repay investors is more certain.

Brownfield infrastructure investments are also often scalable; by enhancing the facilities, greater output can be produced (for example, expanding a port or toll road) and therefore greater cashflows can be generated. These features allow for the cashflows emanating from brownfield infrastructure investments to be modelled to escalate or be linked to inflation. Given the long-term operating capacity of most infrastructure assets, they align well with the goals of long-term investors – such as retirement funds – who are seeking liability-matching assets.

However, it must be noted that not all infrastructure assets offer the virtues of inflation hedging and it is important for investors to understand the different categories of infrastructure assets, as well as the different life-stages of their development, as these result in different cashflow profiles. Prudential limits, such as Regulation 28, enable retirement funds to have exposure to infrastructure investments by means of different asset classes.

Stages of infrastructure projects and predominant sources of finance per stage



The figure above illustrates the project lifecycle of an infrastructure project and the potential sources of finance for initiating a project, or refinancing an existing asset. Early in the project lifecycle, government and development finance institutions (DFIs) play an important and catalytic role in attracting subsequent financing for a project, partnering with project sponsors and developing appropriate funding models. In later stages, as projects mature, different sources of finance come into play. Retirement funds are likely to have exposure to these assets at construction phase for greenfield projects and at operational phase for brownfield projects.

REFERENCES

OECD | RISCURA | PICC

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INFRASTRUCTURE EXPOSURE THROUGH MULTIPLE ASSET CLASSES



overview

Retirement funds seeking exposure to infrastructure assets have a number of investment instruments or asset classes available to them for investing in infrastructure.

Infrastructure across multiple instruments

Added to an understanding of the fundamental aspects of infrastructure assets, it is important to appreciate how institutional investors would traditionally approach investing in infrastructure assets. The prudential investment requirements in Regulation 28 of the Pension Fund's Act support retirement funds investing in a diversified portfolio of assets across multiple asset classes. This can, for example, be achieved by investing in a portfolio of infrastructure assets, where the fund is able to achieve a diversified exposure to the infrastructure theme across multiple asset classes.

While infrastructure investments are generally classified as unlisted investments, there are a number of other investment instruments available to investors, such as retirement funds,

seeking exposure to infrastructure assets. Table 1 ranks instruments based on several dimensions. The left-hand margin describes modes of investment, recognising that there are broad asset categories (fixed income, mixed, equity), followed by principal instruments. Besides the fact that investors can be creditors or equity holders, some investments – particularly public-private partnership (PPP) contracts and concessions – may have debt-like characteristics due to contracted cashflows. As indicated in Table 1, The Organisation for Economic Co-operation and Development (OECD) has defined asset categories by their nature, with the distinction drawn between whether an investor receives priority claims in corporate or project cashflows (creditor), mixed (creditor with equity participation rights), or residual claims to cashflows (equity).

Investment instruments and vehicles for investing in infrastructure assets

Modes		Infrastructure finance instruments		Market channels
Asset category	Instrument	Infrastructure project	Corporate balance sheet / Broader entities	Capital pool
Fixed income	Bonds	Project bonds	Corporate bonds, green bonds	Bond indices, bond funds, exchange-traded funds (ETFs)
		Municipal, sub-sovereign bonds		
		Green bonds, Sukuk	Subordinate bonds	
Fixed income	Loans	Direct/co-investment lending to infrastructure project, syndicated project loans	Direct/co-investment lending to infrastructure corporate	Debt funds, general partners (GPs)
			Syndicated loans, securitised loans (ABS), CLOs	Loan indices, loan funds
Mixed	Hybrid	Subordinated loans/bonds, mezzanine finances	Subordinated bonds, convertible bonds, preferred stock	Mezzanine debt funds (GPs), hybrid debt funds
Equity	Listed	YieldCos, closed-end funds	Listed infrastructure & utilities stocks, closed-end funds, Real Estate Investment Trusts (REITs), Infrastructure Investment Trusts (IITs), Master Limited Partnerships (MLPs)	Listed infrastructure equity funds, indices, trusts, ETFs
	Unlisted	Direct/co-investment in infrastructure project equity, PPP	Direct/co-investment in infrastructure corporate equity	Unlisted infrastructure funds (GPs)

Source: The Organisation for Economic Co-operation and Development (OECD)

From an investor's perspective, the asset class chosen for the investment into the infrastructure project or fund will depend on the nature of the asset (debt, equity, listed or unlisted), regulatory and tax considerations, and on how investors have defined and allocated infrastructure in their portfolios based on their own portfolio of assets measured against liabilities. Smaller investors with limited resources and small amounts of capital allocated to infrastructure are limited to collective or pooled and corporate investments, while large funds may be able to commit capital directly to infrastructure projects.

Loans and bonds form the largest categories of infrastructure finance. Debt instruments can be structured to have long-term maturities that extend over the life of long-term assets, such as infrastructure assets. Debt financing can be provided through multiple instruments; debt instruments can take the form of direct loans held on the balance sheets of financial institutions or may be structured for resale to investors via private markets (private-placement debt), or public markets through registered corporate and government bonds.

Financial instrument classification

The ASISA Infrastructure Investment Definition, Classification and Statistics Standard (August 2020) classified financial instrument definitions as follows:

- An **equity investment** is a claim on the investee's residual cashflow after operations and financing, the opportunity to participate in the corporate decision-making process,

and a claim on the company's net assets in the case of liquidation.

- Debt** is defined as an instrument that gives rise, on specified dates, to cashflows that are solely payments of principal and interest on the principal amount outstanding.
- Senior debt** is debt that has priority of payment over a tranche of junior or mezzanine debt. There may be different levels of priority within the senior debt category, but as long as there is a material level of debt that ranks below the instrument, it is classified as senior debt. (Senior debt is often secured against assets; however, in the context of project finance in the infrastructure space, this is less relevant and thus not seen as an essential characteristic of senior debt.)
- Junior or mezzanine debt** is debt that ranks the lowest in priority of payment and is normally unsecured or has a reversionary right to security.

REFERENCES

ASISA | OECD

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PRESCRIBED ASSETS

Overview

Should legislation or regulation relating to the introduction of prescribed assets be formally tabled by the South African government, such assets need to be structured as attractive investment opportunities in order to encourage domestic and international investment into the full spectrum of infrastructure assets in South Africa.

What are prescribed assets?

The term “prescribed assets” refers to a government policy that requires investors, like retirement funds, to hold a certain amount of investments in government-specified assets, such as government or state-owned entities’ (SOEs) bonds. These assets could be issued by SOEs, through standalone projects, such as a highway, power plant or other specific public infrastructure initiative, or by the government directly for “general purposes”, such as funding transport or water infrastructure.

The discussion around prescribed assets arose in the ANC’s 2019 election manifesto, which proposed to “investigate the introduction of prescribed assets on financial institution funds within a regulatory framework for socially productive investments (including housing, infrastructure for social and economic development and township and village economy) and job creation while considering the risk profiles of the affected entities”. However, it has not yet been officially tabled as part of any draft legislation or regulation, hence there is very little detail around what form it would take.

Prescription is not new

Under the apartheid government, pension funds, life insurance companies and the Public Investment Corporation (PIC, the

manager of the Government Employees Pension Fund) were required to invest from 33% to 75% of their assets in government, government-guaranteed and specified government-approved bonds, resulting in large distortions in the local bond market. These prescriptions originally served as prudential guidelines (equivalent to today’s Regulation 28). However, the Jacobs Committee of 1988, established to investigate these inefficiencies, found that prescribed investments eventually came to be regarded as an “assured source of public funding” for government projects.

As a consequence of this assured public funding, South Africa saw the development of a dual market; a lack of trading in bonds, as investors wanted to hold them to maturity; a lack of transparent pricing; under-pricing of risk; and, most importantly for investors, the underperformance of investment returns from these prescribed assets. Simply put, investors did not receive adequate returns for the investment risk they had to assume as a result of prescription.

The Jacobs Committee furthermore found that because investors were forced to invest in prescribed assets rather than better-performing equities – and by holding more bonds than would likely have been appropriate for their risk profiles – investors received a real return of 8.6% less than they should have in the 1970s, and 2.9% less than they should have in the

1980s. This was a significant opportunity cost to investors, which ultimately led to individual retirement fund members receiving reduced pensions. In the face of these negative impacts, the Jacobs Committee recommended the abolition of prescribed assets, which was implemented in the 1989 National Budget.

Criticisms of prescription

The primary concern regarding prescription is that it leads to South Africa’s savings (insurance and retirement fund assets collectively representing R6.2tr per ASISA figures) becoming an instrument of state policy, and so avoids the investment discipline of financial markets and the fiduciary responsibility of trustees and their appointed asset managers, in turn resulting in lower-than-market returns for investors. The criticisms of prescription are outlined below:

- Prescription will likely result in investors being forced to invest in SOEs, such as Eskom, Transnet, SAA, the Land Bank etc., where poor governance, mismanagement and lack of delivery have been rife, further compounded by state capture in recent years.
- Retirement fund members are the ultimate owners of investment capital managed by fund managers. Retirement fund trustees entrust the responsible management of their investments to professional fund managers, who need to make investment decisions in the best interest of their clients. Prescription is at odds with the fiduciary duty of those entrusted with the responsible management of other people’s savings.
- Dictating how investors should invest interferes with the capital allocation function of capital markets, which should always be objective and driven by performance. By forcing the market, through prescription, to invest in assets producing lower-than-traditional market returns and/or forced investment in high-risk assets removes the competition for funding and the performance incentive, as well as depriving more deserving projects from much-needed finance.
- Forcing investors to invest into specific assets pushes up the price, or pulls down the yield, resulting in artificially low interest rates. This, in turn, pushes them down to below inflation rates, resulting in negative real returns for investors. This results in ‘cheap money’, which distorts the asset allocation process and further causes higher rates of inflation.
- Freedom of choice is a basic tenet that all South African citizens enjoy, whether it be as citizens, customers or investors. This includes the ability for investors to freely change their investments to adapt to changing market conditions and investment goals.
- Prescription will also have a negative impact on the country’s credit rating, which would see foreign investors – many of whom are pension funds – being forced to withdraw their investments from South Africa.

Investing in South Africa’s future

In order to attract domestic and international investors into the full spectrum of infrastructure assets in South Africa, such assets need to be structured as attractive investment opportunities, providing revenue streams and risk-return profiles that match investors’ return expectations and liability structures. Government has the responsibility to introduce mechanisms to support private capital funding of public assets, changing the risk allocation between the private sector, taxpayer and consumer.

Bonds, for example, are an inevitable asset class for retirement funds, especially if the funds practise asset and risk diversification and require stable income. Retirement funds are already significant investors in government or SOE-issued bonds. Prescription therefore does not seem to be of absolute necessity, and even if it were to be necessary, it seems to result in unintended consequences that will do more harm than good. Over the past 20 years, retirement funds have, on average, held about 20% of their total assets in government and SOE bonds. For the right product and price, there should always be a buyer or investor, and current South African government bonds yield good returns compared with other foreign sovereign bonds. Financial institutions have also indirectly participated in funding public sector spending through their purchases of South African government and SOE bonds, valued at some R1.3tr.

Example: SA’s Renewable Energy Independent Power Procurement Programme

Due to the right incentives and policy environment being in place, one example of investor support for investing in infrastructure assets in South Africa over the last ten years – without the necessity of prescription – is the financing and construction of South Africa’s Renewable Energy Independent Power Procurement Programme (REIPPP). The REIPPP was able to achieve both economic and social impact – over and above the provision of additional power capacity through renewable energy projects, such as solar and wind energy projects.

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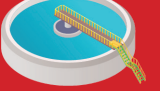




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Infrastructure Types







Economic infrastructure examples:

Infrastructure type	Investment options	Investment instruments
Electricity generation, transmission infrastructure & related services 	Independent power producers	Bonds, equity, project finance etc.
	Eskom bonds, private equity	Bonds, equity, project finance etc.
Commuter transport infrastructure & related services 	PRASA, Gautrain, ACSA, BRT systems in SA cities etc.	PPPs, debt and project finance for transport infrastructure
	Municipal bonds	Bonds for municipal transport development etc.
	Bus and taxi companies and financiers, private commuter bus and taxi companies	SA Taxi finance, bus companies, airline companies etc. via listed, unlisted debt and equity
ICT and broadband infrastructure & related services 	Listed Telco's, unlisted Telco's, e.g., Telkom, MTN, Vodacom, Dark Fibre Africa, Seacom etc. via listed, unlisted debt	Bonds, listed and unlisted equity
Water infrastructure & related services 	Finance for water agencies and SOEs	SOE bonds for TCTA, Rand Water, Umgeni Water etc. via listed, unlisted debt
	Municipal bonds	Municipal bonds for water and sanitation infrastructure via listed, unlisted debt
Liquid fuels infrastructure & related services 	Project finance for new / expanded oil refineries	e.g., PetroSA via listed, unlisted debt
	Project finance, listed and unlisted debt and equity for new / redeveloped coal-to-liquid refineries	e.g., Sasol via listed, unlisted debt and equity
	Project finance for gas	e.g., PetroSA via listed, unlisted debt
Rail & ports infrastructure & related services 	Transnet bonds	e.g., Transnet via listed, unlisted debt
Road infrastructure & related services 	SANRAL bonds, toll road PPPs	e.g., SANRAL via listed, unlisted debt
Airport infrastructure & related services 	ACSA bonds	e.g., ACSA via listed, unlisted debt
	Private airports	e.g., Lanseria via listed, unlisted debt and equity

Social infrastructure examples:

Infrastructure type	Investment options	Investment instruments
Affordable housing infrastructure & related services 	Finance for low-income and affordable housing developer companies	Project finance, listed and unlisted debt and equity
	Low-income housing funds	Project finance, listed and unlisted debt and equity
	Low-income housing developments	Project finance, listed and unlisted debt and equity
	Funding to housing finance wholesale and retail institutions	Listed and unlisted debt and equity
	Investment in companies providing urban rental accommodation	Listed and unlisted debt and equity
Healthcare infrastructure & related services 	Hospitals and clinics infrastructure	PPPs, listed and unlisted debt and equity and Special Purpose Acquisition Companies (SPACs)
	Healthcare companies	Listed and unlisted debt and equity
	End-user mortgage finance	Listed and unlisted debt and equity
Education infrastructure & related services 	Universities and technical colleges	PPPs, listed and unlisted debt and equity
	ECD, Primary, secondary schools and campuses	PPPs, listed and unlisted debt and equity
	Education financing and student loans	Listed and unlisted debt and equity
B-BBEE, SMEs, enterprise development and job creation 	B-BBEE ownership transactions and black industrialist programme	Listed and unlisted debt and equity, project finance
	SME investments (businesses actively seeking a high social and/or environmental impact)	Mainly unlisted debt and equity
	Investment in supporters and facilitators of SMEs, including incubators and micro-financiers	Mainly unlisted debt and equity
	Exceptional employment creating sectors, such as agriculture and agro-processing, tourism, construction, business process outsourcing etc.	Listed and unlisted debt and equity

Environmental or green infrastructure examples:

Infrastructure type	Investment options	Investment instruments
Energy 	Energy efficiency in public infrastructure and buildings & in private sector and households	PPPs, project finance, listed and unlisted debt and equity
	Small-scale embedded generation & renewable energy based on non-sovereign-backed Power Purchase Agreements	Private equity funds, fund of funds focusing on renewable energy investments
Waste 	Waste to energy (biogas / incineration) Waste diversion / recycling	PPPs, project finance, listed and unlisted debt and equity
Water 	Water resource development (renewable energy desalination plants)	PPPs, project finance, listed and unlisted debt and equity
	Water infrastructure operations, maintenance and rehabilitation	PPPs, project finance, listed and unlisted debt and equity
	Commercial / industrial water harvesting	PPPs, project finance, listed and unlisted debt and equity
Agriculture, food systems and food security 	Wastewater treatment and wastewater to energy	PPPs, project finance, listed and unlisted debt and equity
	Climate-smart agriculture	PPPs, project finance, listed and unlisted debt and equity
	Controlled environment agriculture / precision agriculture (Greentech / ICT solutions)	PPPs, project finance, listed and unlisted debt and equity
Low-carbon, climate-resilient built environment and human settlements 	Energy efficiency, renewables	PPPs, project finance, listed and unlisted debt and equity
	Agri-parks and Special Economic Zones (SEZ) for Greentech.	PPPs, project finance, listed and unlisted debt and equity
	Green buildings for social, low-income housing (recycling, energy efficiency, water and waste management, sustainable building materials)	PPPs, project finance, listed and unlisted debt and equity
Bonds 	Green & sustainability bonds	Listed and unlisted debt, public and private sector issuers

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GEFP | PICC | Genesis | RENMERE

UNDERSTANDING THE DIFFERENT TYPES OF INFRASTRUCTURE INVESTMENTS



overview

At present, Regulation 28 of the Pension Funds Act doesn't define infrastructure as a specific category, but is spread across a number of asset classes, such as equity, bonds, loans and private equity. However, in February 2021, National Treasury tabled draft amendments to Regulation 28 that would provide a more precise definition of infrastructure under these various asset classes currently available. Public comment on these draft amendments can be made until 29 March 2021.

The different types of infrastructure are probably best broken down according to whether their key focus is economic, social or environmental.

Investment in economic infrastructure: This is return-seeking capital investment in the construction, improvement, or replacement of the economic infrastructural framework of South Africa. In other words: the backbone of the country's economy that allows it to run, grow, and become more competitive. This may include investments in energy infrastructure, the logistics network, water infrastructure, commuter transport infrastructure, the provision of liquid fuels, and broadband infrastructure. These systems tend to be capital-intensive and

high-cost investments, and are vital to a country's economic development and prosperity.

Also known as hard infrastructure, these make up the physical systems that make it necessary to run a modern, industrialised nation. Examples include roads, highways, bridges, as well as the capital and assets needed to make them operational (transit buses, vehicles, oil rigs/refineries).

Investment in social infrastructure: This is return-seeking capital investment in the construction, improvement, or replacement of the social infrastructural framework. That is to say the physical infrastructure that helps to improve the lives and prospects of South African citizens. It includes investment

“Infrastructure investing could help South Africa break out of its low-growth trap, and private sector investment could assist with this. However, it is essential that the policy environment and potential risk-returns measure up.”

ASSESSING POTENTIAL INVESTMENT IN INFRASTRUCTURE

South Africa's levels of infrastructure investment are too low, with government funding for these projects becoming increasingly difficult in a post-COVID economic environment. Infrastructure investing could help South Africa break out of its low-growth trap, and private sector investment could assist with this. However, it is essential that the policy environment and potential risk-returns measure up, according to Futuregrowth.

“While businesses that are in the infrastructure development space can be exposed to some quite specific risks, the key for us is that the fundamentals should still hold and the returns generated for our clients' funds must be commensurate with the risk taken on.”

Factors assessed when investing into an infrastructure fund, specifically include:

- historical financial performance;
- a forward-looking view of the infrastructure asset's operations and its sustainability;
- the extent to which there is alignment of interests between all stakeholders of the infrastructure asset;
- management's experience and track record;
- the composition of the board of directors, including their skills and experience;
- An assessment of the environmental, social and governance factors that could affect the risk profile of the infrastructure asset; and
- understanding the competitive environment and industry in which the infrastructure asset operates.

SOURCE: Futuregrowth

in affordable housing, healthcare and education, as well as supporting enterprise development, broad-based black economic empowerment, (B-BBEE) and SMEs (small-, medium- and micro- enterprises) in the economy (including agriculture and agro-processing, construction and housing, tourism, business process outsourcing, and the green economy), and in B-BBEE transactions.

Also known as soft infrastructure, these types of infrastructure make up institutions that help maintain the economy. These usually require human capital and help deliver certain services to the population. Examples include the healthcare system, financial institutions, governmental systems, law enforcement, and education systems.

Environmental or green investments: This is return-seeking investment in firms, funds and projects that seek to improve environmental sustainability outcomes, to mitigate climate change, and to foster renewable energy, green buildings, energy efficiency, recycling, and clean technologies. Projects related to infrastructure development and improvements may be funded publicly, privately, or through public-private partnerships (PPPs).

Infrastructure as a public good

In economic terms, infrastructure often involves the production of public goods or production processes that support natural monopolies. Because infrastructure very often involves the production of either public goods or goods that lend themselves to production by natural monopolies, it is very typical to see public financing, control, supervision, or regulation of infrastructure. This usually takes the form of direct government production or production by a closely regulated, legally sanctioned, and often subsidised monopoly. An example of this monopoly would be Eskom, for power generation and distribution; and SANRAL, for South Africa's national road network, including toll roads.

Infrastructure and the level of public access:

- Tolloed infrastructure is defined as infrastructure for which a fee must be paid to access the infrastructure. For example: e-tolls and the Gautrain in Gauteng.
- Untolloed infrastructure is defined as infrastructure for which either no fee is charged for access, or a subsidised fee is charged for access, such as South Africa's national road network.
- Untolloed, special access infrastructure will be defined as any infrastructure for which either no fee is charged for access, or a subsidised fee is charged for access and the infrastructure is only accessible to special disadvantaged or vulnerable groups. An example of this would be public hospitals in South Africa.

REFERENCES

ASISA | GEPP | PICC | Genesis | Futuregrowth

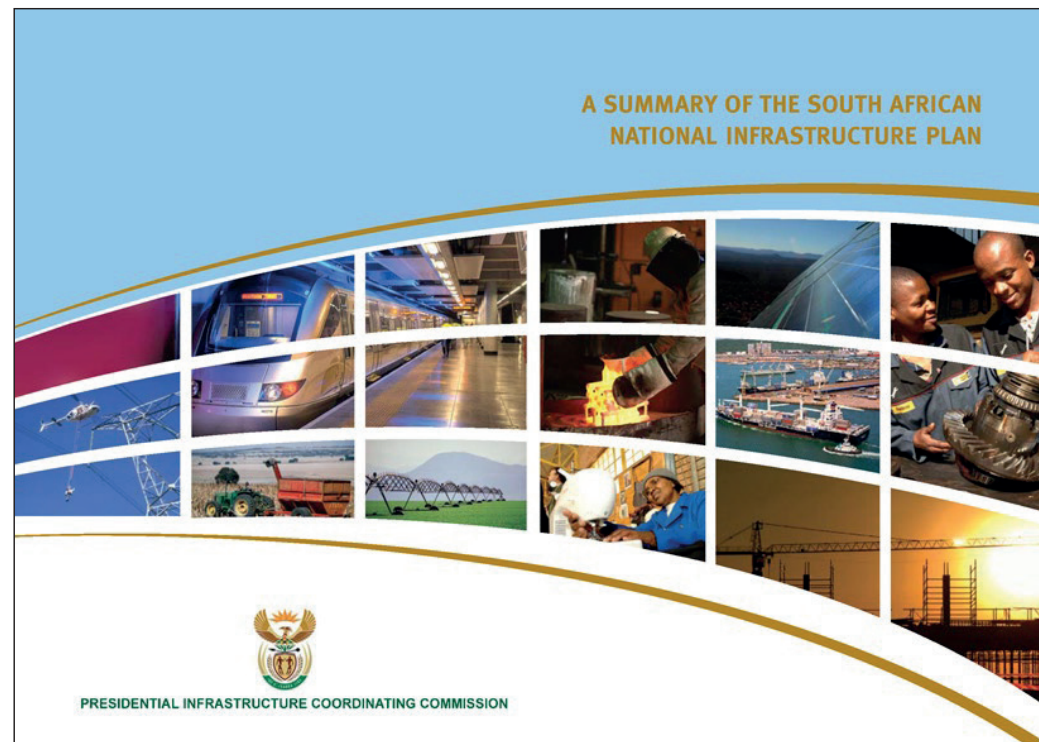
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INFRASTRUCTURE RESOURCES FOR RETIREMENT FUNDS

overview

Infrastructure investment is an important tool to create jobs, propel economic recovery, and position our economies for sustainable growth. A number of local and international initiatives and resources are available to investors. This article highlights three resources that may be of interest to retirement funds.



Presidential Infrastructure Coordinating Commission (PICC) – Summary of SA National Infrastructure Plan

“Infrastructure investment is key to our efforts to grow the economy, create jobs, empower small businesses and provide services to our people. We have invested heavily in new roads, power stations, schools and other infrastructure. As some of our projects are taking time to get off the ground and to enhance our efforts, I will assemble a team to speed up implementation of new projects, particularly water projects, health facilities and road maintenance. We have learnt some valuable lessons from our experience in building all the new infrastructure, which will inform our way ahead. We will focus on improvements in our budget and monitoring systems, improve the integration of projects and build a broad compact on infrastructure with business and organised labour.”

– President Cyril Ramaphosa, State of the Nation Address 2018

The South African government adopted a National Infrastructure Plan in 2012 that intends to transform

our economic landscape, while simultaneously creating significant numbers of new jobs, and to strengthen the delivery of basic services. The plan also supports the integration of African economies.

This document is a high-level summary of the National Infrastructure Plan. It sets out the challenges South Africa needs to respond to in planning and developing enabling infrastructure that fosters economic growth.

More recently, government has announced the establishment of Infrastructure South Africa. Infrastructure South Africa will play a coordinating role and serve as the conduit to develop all government infrastructure projects that require funding from the fiscus.

Source:

<http://www.economic.gov.za/downloads/presidential-infrastructure-coordinating-commission/#piccbook>

Further PICC resources: <http://www.economic.gov.za/picc>



Primer on responsible investment in infrastructure

This article series by the Principles for Responsible Investment (PRI) clarifies key concepts of responsible investment in private infrastructure equity and debt, and how the six Principles for Responsible Investment apply to infrastructure.

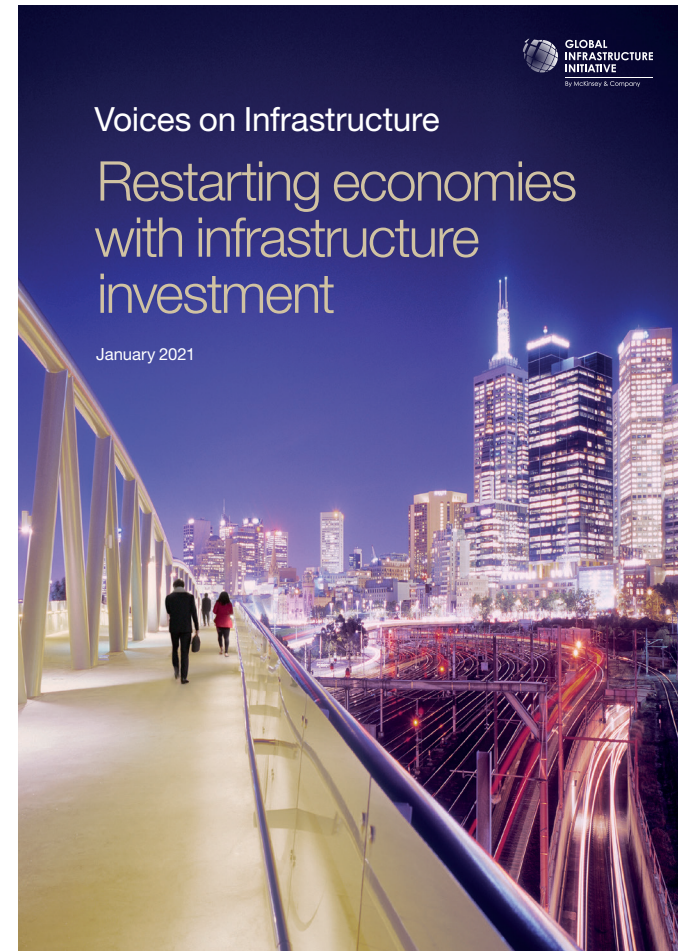
The PRI defines responsible investment as “an approach to investing that aims to incorporate environmental, social and governance (ESG) factors into investment decisions, to better manage risk and generate sustainable, long-term returns”.

Responsible investment is particularly compatible with infrastructure investing because of the long-term nature of this asset class and its focus on essential services. Responsible investment is about systematically identifying, assessing, pricing, managing and monitoring material ESG risks. It means preserving and enhancing the value of an asset in the investment process – from origination to deal-making, asset management and exit. Addressing material ESG considerations and practising active asset management should contribute to an improvement in the long-term risk-adjusted returns for investors.

Source:

<https://www.unpri.org/infrastructure/primer-on-responsible-investment-in-infrastructure-/2700.article>

Further PRI resources: <https://www.unpri.org/investment-tools/alternative-investments/infrastructure>



Voices on Infrastructure, Restarting Economies with infrastructure investment

(January 2021) is a collection of insights on restarting economies with infrastructure investment published by the Global Infrastructure Initiative (GII). Infrastructure investment is an important tool to create jobs, propel economic recovery, and position our economies for sustainable growth. More than ever, many countries are faced with the need to invest in updated infrastructure to support growing populations; address inequities in the distribution of infrastructure services – from transportation to healthcare; and decarbonise their industries. COVID-19’s impact on the global economy has exacerbated the need for governments to identify investment programmes that will stimulate economic recovery and create sustainable jobs. The pandemic has also highlighted the weaknesses in our core social and physical infrastructure that have hampered our response to COVID-19 – which will make recovery that much more difficult.

Source: https://www.globalinfrastructureinitiative.com/sites/default/files/voices/edition/pdf/GII-January-2021-Voices_0.pdf

Further GII resources:

<https://www.globalinfrastructureinitiative.com/about>

REFERENCES

PICC | Global Infrastructure Initiative | PRI

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Retirement Fund Trustee Education Workshops

Workshop on Infrastructure Investing

The ASISA Academy, in partnership with the ASISA Foundation, offers a fully-funded, independently-delivered workshop for South African retirement fund principal officers and trustees in order to provide delegates with an in-depth understanding of infrastructure investing.

The workshop (delivered virtually or in-person) covers five key topics related to infrastructure investing. Each topic will be covered in detail in order to provide delegates with a comprehensive understanding of the fundamentals for investing in infrastructure assets.

The workshop's 5 main learning areas include:

1. The nature of infrastructure investments
2. The investment case for retirement funds investing in infrastructure
3. How infrastructure investments are funded
4. The risks and returns of infrastructure investments
5. How to include infrastructure investments in your fund's Investment Policy Statement (IPS)



"The workshop was an eye-opener for understanding financial markets. I will be able to make informed contributions, as well as informed decisions, in the trustee meetings going forward."

– Previous ASISA Academy workshop participant

For more information on this and other workshops, email the ASISA Academy LEARN@asisaacademy.org.za or visit <https://www.asisa.org.za/academy/>

To register your interest in attending one of these workshops, [please register here.](#)

**The ASISA Academy is an accredited CPD provider for the Batseta Council of Retirement Funds for South Africa*

You can also earn CPD points by participating in this independent, industry-approved workshop.

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Atleha.edu Consumer Financial Education initiatives are accredited for Continuous Professional Development (CPD) in partnership with the Batseta Council of Retirement Funds for South Africa.

To register your CPD credits for having read this Atleha-edu Consumer Education publication, please complete the following quiz and return this completed form via email to: cpd@atleha.edu.org or post it to: Atleha.edu, Postnet Suite 272, Private Bag, Somerset West, 7129

Please select the correct answer by marking the correct box below each question.

True or false? Infrastructure is generally seen as an alternative asset class.

- True
 False

1. Which is the most correct statement?

- A. Infrastructure investments sit within the listed equity asset class.
 B. Infrastructure investments are considered an alternative asset class that may be listed or unlisted debt or private equity.
 C. Infrastructure investments refer to unlisted projects that focus only on social outcomes.
 D. Retirement funds may not allocate capital to infrastructure projects due to their illiquid nature.

2. Choose the correct option.

As per Regulation 28 of the Pension Funds Act:

- A. retirement funds may allocate 20% to infrastructure investments.
 B. retirement funds may not allocate any portion of capital to infrastructure projects.
 C. there is no specific allocation to infrastructure projects, and these investments may fall under different asset classes.
 D. retirement funds may not exceed a 5% allocation to infrastructure investments.

3. True or false? All infrastructure investments are inflation-linked assets.

- A. True
 B. False

4. Choose the correct option.

'Greenfield infrastructure' investment is defined as:

- A. an investment into an existing infrastructure project.
 B. an investment into green projects, such as solar and wind farms.
 C. an investment into new infrastructure – new development and construction projects.
 D. an investment into agricultural projects.

5. True or false? All infrastructure investments are unlisted investments.

- A. True
 B. False

6. Choose the correct option.

An investor with limited resources and capital is least likely to invest in infrastructure by means of making:

- A. an indirect investment via an infrastructure funds of funds.
 B. a direct investment into an infrastructure project
 C. an indirect investment via an infrastructure bond.
 D. an indirect investment via an infrastructure fund.

7. True or false? Retirement funds in South Africa have previously had to accommodate prescribed assets as part of their investment allocation.

- A. True
 B. False

8. Choose the correct option.

South Africa's collective savings (both insurance and retirement fund assets) per ASISA statistics in rand terms is:

- A. R100 billion
 B. R5.3 trillion
 C. R6.2 trillion
 D. R4.8 trillion

9. True or false? Power generation and electricity supply would be best described as hard economic infrastructure.

- A. True
 B. False

10. Choose the correct option.

Which investment instrument(s) enable(s) retirement funds in South Africa to invest in infrastructure?

- A. Listed and unlisted debt
 B. Listed debt
 C. Listed and unlisted debt and equity, PPPs and project finance
 D. Infrastructure bonds

