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URBANIZATION, INFRASTRUCTURE AND THE ROLE OF PENSION FUNDS TOWARDS DEVELOPMENT: A SOUTH AFRICAN PERSPECTIVE

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OUTLINE

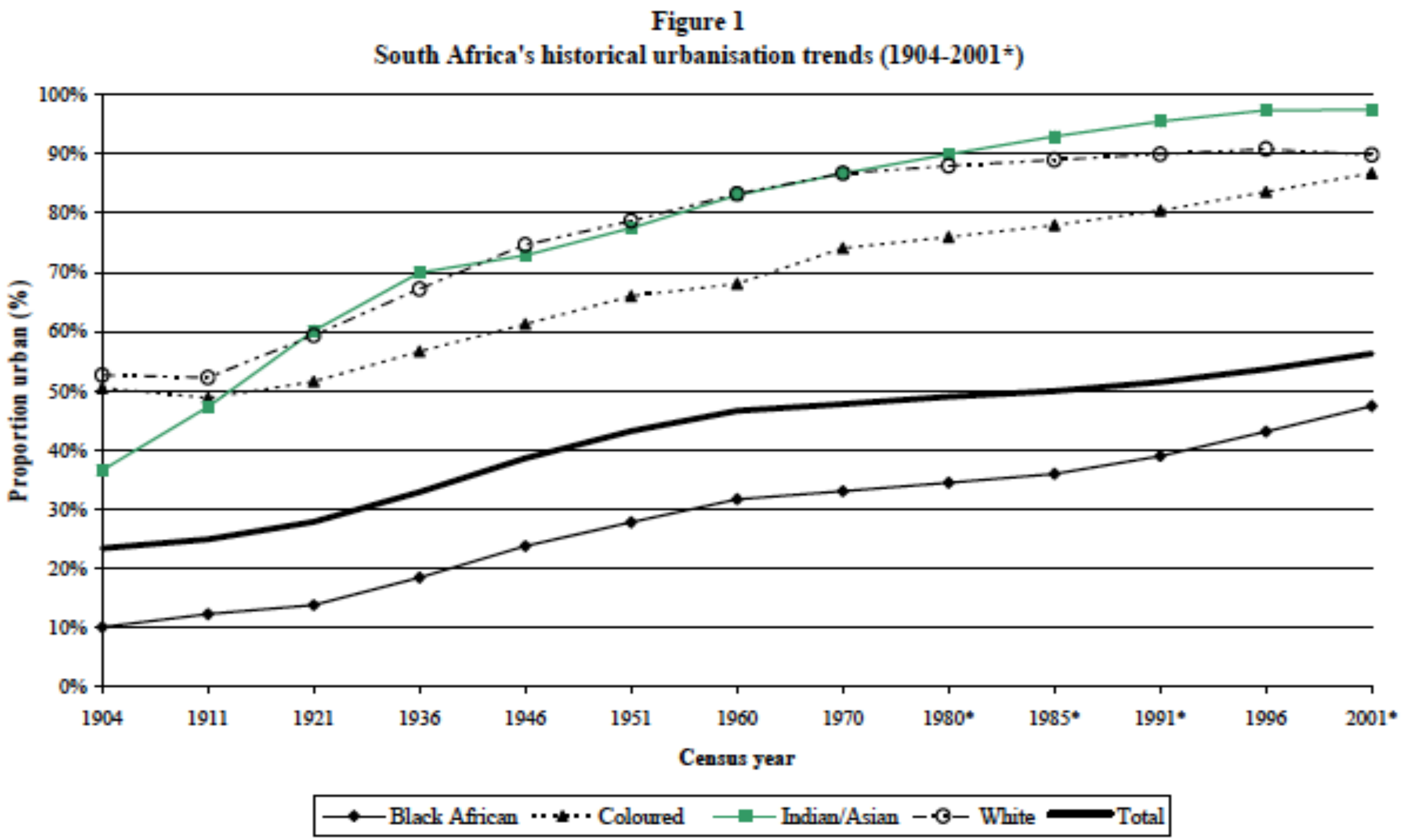
- Urbanization trends
- Infrastructure
- Pension assets and capital markets
- South African Overview
  - Financial structure
  - Stages
  - Trends
- Public Investment Corporation
- Conclusion

URBANISATION

URBANISATION

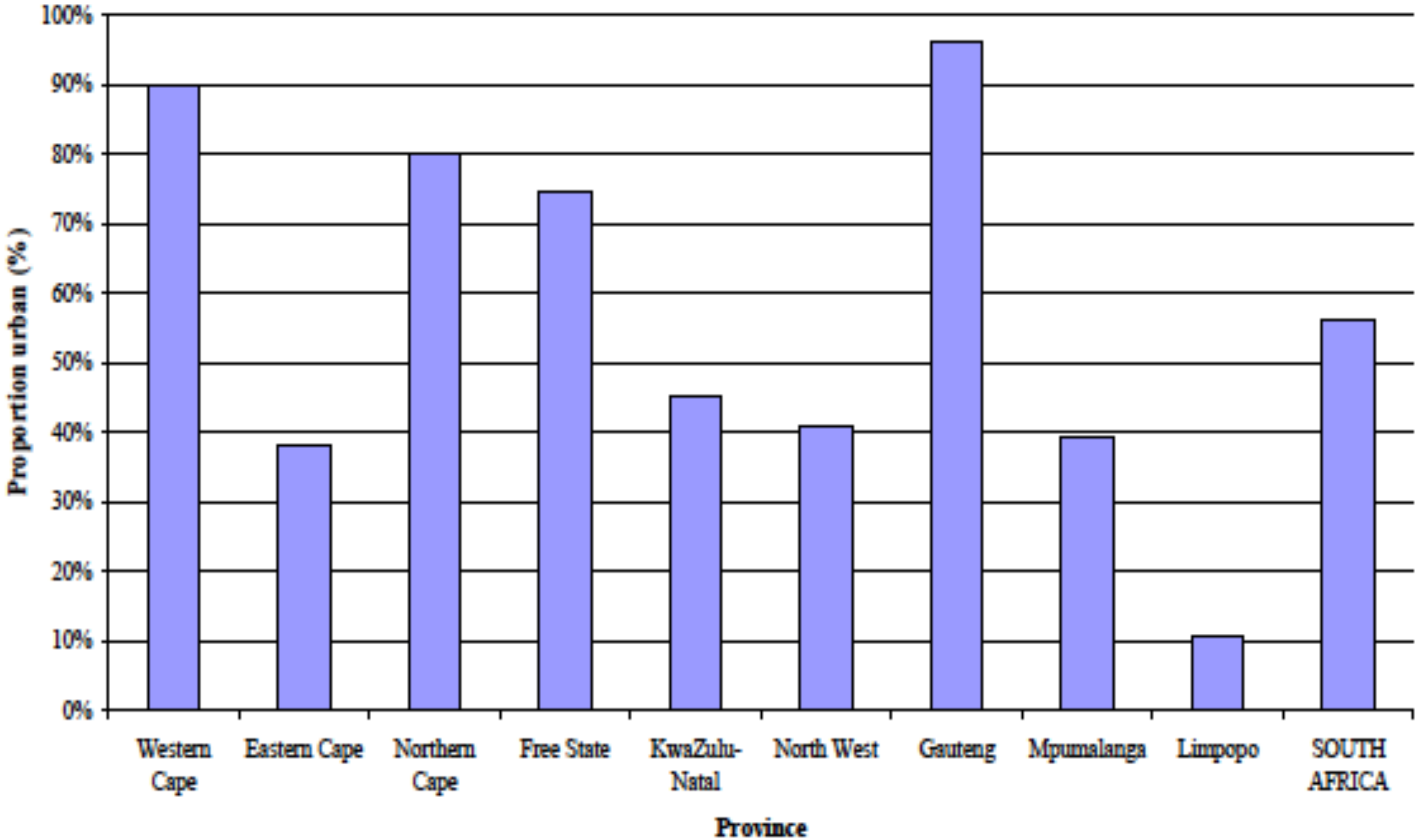
- Two thirds (33 million) people in urban areas (Stats SA, 2006)
- Migration rate above 60%, highest in Africa
- Type of migration not linked to agglomeration
- 17 million in 23 under resourced municipalities (PICC, 2013)
- Economic infrastructure and Social infrastructure
- Rural urban migration displaces unemployed – not the cause
- Projected to increase to three quarters of population in cities by 2030
- Urbanisation accompanied by industrialization and economic development (pull effect), but not in Africa – no change in economic structure and levels of capital investment
- African cities is not as a consequence of increased manufacturing output or industrial services (Gollin et al, 2013. Coliier, 2006; Freire et al, 2014)
- Cities hold potential to increase productivity from agglomeration (Duranton and Puga, 2004; Freire et al, 2014)
- Large communities matched with economic infrastructure generate efficiency that enhance productivity
- Cities host to services for business, industry, education, healthcare

South Africa's urbanisation trends(1904-2001*)



(Source: Stats SA, 2006)

South Africa's urbanisation levels (1904-2001*)



(Source: Stats SA, 2006)

URBANISATION

Production or consumption cities ?

- Production cities:
  - Attract labour due to increased productivity (manufacturing)
  - Higher wages drives rural to urban
  - Rise In rural agricultural productivity opportunities arise in tradables sector
- Consumption cities
  - Resource led development
  - Increased surplus that drive consumption from disposable income

- Development strategy of cities must change
  - Drive output efficiency
  - Innovation
  - Enterprise developoment

- Current status – adhoc national projects whose chief aim is to alleviate poverty no synergies, more emphasis on supporting economic strengths and building competitive advantages

INFRASTRUCTURE

INFRASTRUCTURE

- Infrastructure is significantly correlated to growth (Duranton & Puga; Turok, 2012; Turok & Parnell, 2009)
- Improvement in marginal productivity of capital in SA (Fedderke and Bogetic, 2009; Fedderke et all, 2006)
- PICC >>> NIP >>> 23 under resourced municipalities
- National Infrastructure plan identifies 18 strategic projects but a combined total of 645 projects valued which has seen a commitment of R827 billion
- Standard & Poors, McKinsey and the Boston Consulting Group have estimated that global public investment available for infrastructure falls short by $500 billion per annum (B20, 2014).
- AfDB Africa infrastructure gap suffers a shortfall of $93 billion per annum between 2009-2010 (Anyanwu et al, 2010).

INFRASTRUCTURE

- South Africa financing requirements will be 10% of GDP per annum for the next 5 years (Anyanwu et al, 2010)
- Public investment deficit require private sector funding for support
- Weak state capacity, Planning and management of institutions
- Capital markets listed or unlisted debt or equity
- Infrastructure projects such as toll roads, power distribution and transmission facilities, mobile networks, bridges are able to receive long term **operating cash flows** when properly <u>structured</u>
- Financial market development in Africa remains a hindrance to securing foreign investment into domestic infrastructure

Current and Potential Allocation EMDE to Infrastructure Investment

Institutional Investors	Assets Under Management ($US)	Current Investment in EMDE Infrastructure	Potential Investment in EMDE Infrastructure
South Africa Institutional Investors	$236 billion	0-5%	5% value is $11.8 billion 10% value is $23.6 billion
EM Institutional Investors	4.5 trillion	Limited an e.g. Chile 1.5% regulation	1% assets is $50 billion
EM Pension Reserve and Social Security Funds	1 trillion	Not confirmed – up to 10%	10% value is $100 billion
OECD Institutional Investors	79 trillion	Less than 1%	1% assets value of $750 billion
OECD Institutional Investors Long term capital	6.5 trillion	1% but can invest up to 10% in domestic markets	1% of assets is $50 billion
Sovereign Wealth Funds	4 trillion	0-5%	5% assets value of capital = $250 billion

Source: Inderst, 2014

THEN WHAT?

- Enabling pension fund regulation and reduce fragmentation in different levels of govt
- Contract law and methods for recourse coupled with a strong regulatory capacity in the infrastructure related sector
- Governance concerns over agencies that collect payments for infrastructure services and quality of governance
- Insufficient technical capacity for project planning, development and packaging
- "Short termism" – interests of pension funds
- Perceptions of high risk

THEN WHAT?

- Opportunity exists for pension funds to make asset allocation and commit to infrastructure related bonds and long term debt investment mechanisms

- Australian and American pension funds have invested up to 5% of total assets in infrastructure, Canadians up to **15%** of total public pension assets (Beeferman, 2008; Currier, 2007; Inderst, 2009)

- Infrastructure investments hold benefits different from other asset classes - protected from market volatility and interest rate risks (Inderst, 2009)

- Strategic infrastructure finance investment using non-traditional financing mechanisms has shown significant returns in other countries (Anyanwu et al, 2010)

PENSION FUNDS

THEORETICALLY SPEAKING

- Levine (1997) outlined that countries with better developed banks and financial systems grow faster than those without
- A countries financial structure affects growth, and it complements financial development with similar growth effects on the economy. (Stulz, 2000; Rioja and Valev, 2012; Pinno and Serletis, 2007; Beck and Levine, 2004)
- Preconditions that must be met for pension assets to develop capital markets. (Meng and Pfau, 2010) An important precondition is the level of financial development, the higher the level of financial development the more significant the impact of pension funds.
- Pension funds has been recognized to play a contributory role in the development of capital markets. (Davis, 2006; Hu, 2005; Walker and Lefort, 2002; Davis and Hu, 2004; Irace, Rezk and Ricca, 2009)

THEORETICAL LITERATURE: PENSION AND GROWTH

- Growth channels: (i) savings (ii)capital market development, (iii) reduced labour market distortions and (iv) improved corporate governance (Impavido and Musalem, 2000; Walker and Lefort, 2002; Zandberg and Spierdijk, 2010)

- Pension assets contribute to capital markets by:
  - Positively impacting aggregate private **savings**. (Barr, 2000);
  - Long-term supply of funds to **capital markets** = findev(Meng and Pfau, 2010; Davis, 2005).
  - Hold greater **proportions of equities and bonds** than households
  - Encourage private bond finance in both the short and long run (Davis, 2006; Hu, 2005)
  - **Lowering transaction costs, diversifying risk**, they hold superior ability to process information (Davis and Steil, 2001; Raisa, 2012)
  - **New instruments, the modernization of infrastructure** and
  - Improved **regulations** occur as a consequence of the development of pension funds (Davis, 2006).

SOUTH AFRICAN OVERVIEW

PENSIONS IN SA OVERVIEW

- Despite the less than favourable economic conditions pension assets are ranked as the 10th biggest in the world at $236 billion US dollars in 2013, now 14th biggest (Towers Watson, 2014-15)

- Kaniki and Ntuli (2010) almost half of the formal labour force do not contribute towards any retirement savings arrangements. The remaining 55% who do contribute offer a low 11.3% of salaries

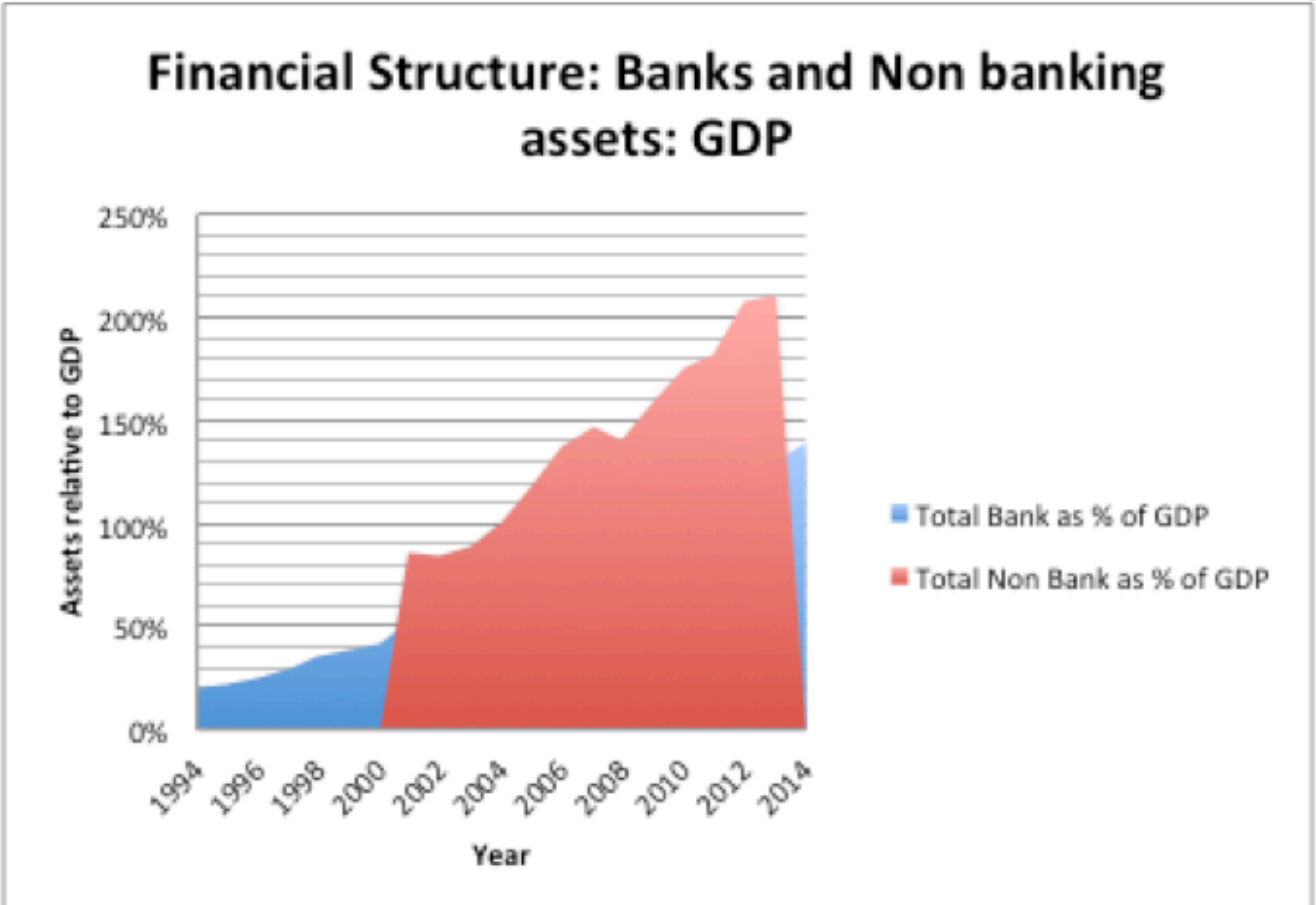
- 75% of the population reliant on state assistance for retirement (National Treasury, 2004).

- Infancy: At the beginning (1911-1958); Continued Separation (1959-1984); Separation (1985 - 1994); Corporatization and Amalgamation (1995 – 2015)

Banking and Non Banking Sector Financial Assets

Year	GDP [R millions]	Total Bank Assets [R millions]	Total Bank as % of GDP	Total Assets: Non Bank [R millions]	Total Non Bank as % of GDP	Assets Banks: Assets Non banking
2001	2 008 181	1 050 068	52%	1 715 002	85%	61%
2002	2 081 837	1 102 860	53%	1 739 310	84%	63%
2003	2 143 232	1 381 843	64%	1 919 677	90%	72%
2004	2 240 847	1 498 619	67%	2 272 156	101%	66%
2005	2 359 099	1 677 652	71%	2 768 288	117%	61%
2006	2 491 295	2 075 157	83%	3 415 389	137%	61%
2007	2 624 840	2 546 788	97%	3 867 503	147%	66%
2008	2 708 600	3 166 502	117%	3 797 520	140%	83%
2009	2 666 939	2 962 613	111%	4 254 613	160%	70%
2010	2 748 008	3 121 782	114%	4 815 447	175%	65%
2011	2 836 286	3 405 067	120%	5 142 252	181%	66%
2012	2 899 248	3 648 222	126%	6 011 956	207%	61%
2013	2 963 389	3 836 199	129%	6 921 203	234%	55%

SOUTH AFRICA'S EVOLUTION, REFORMS AND TRENDS



(Source: Authors own calculations and data from South African Reserve Bank, 1994 – 2014)

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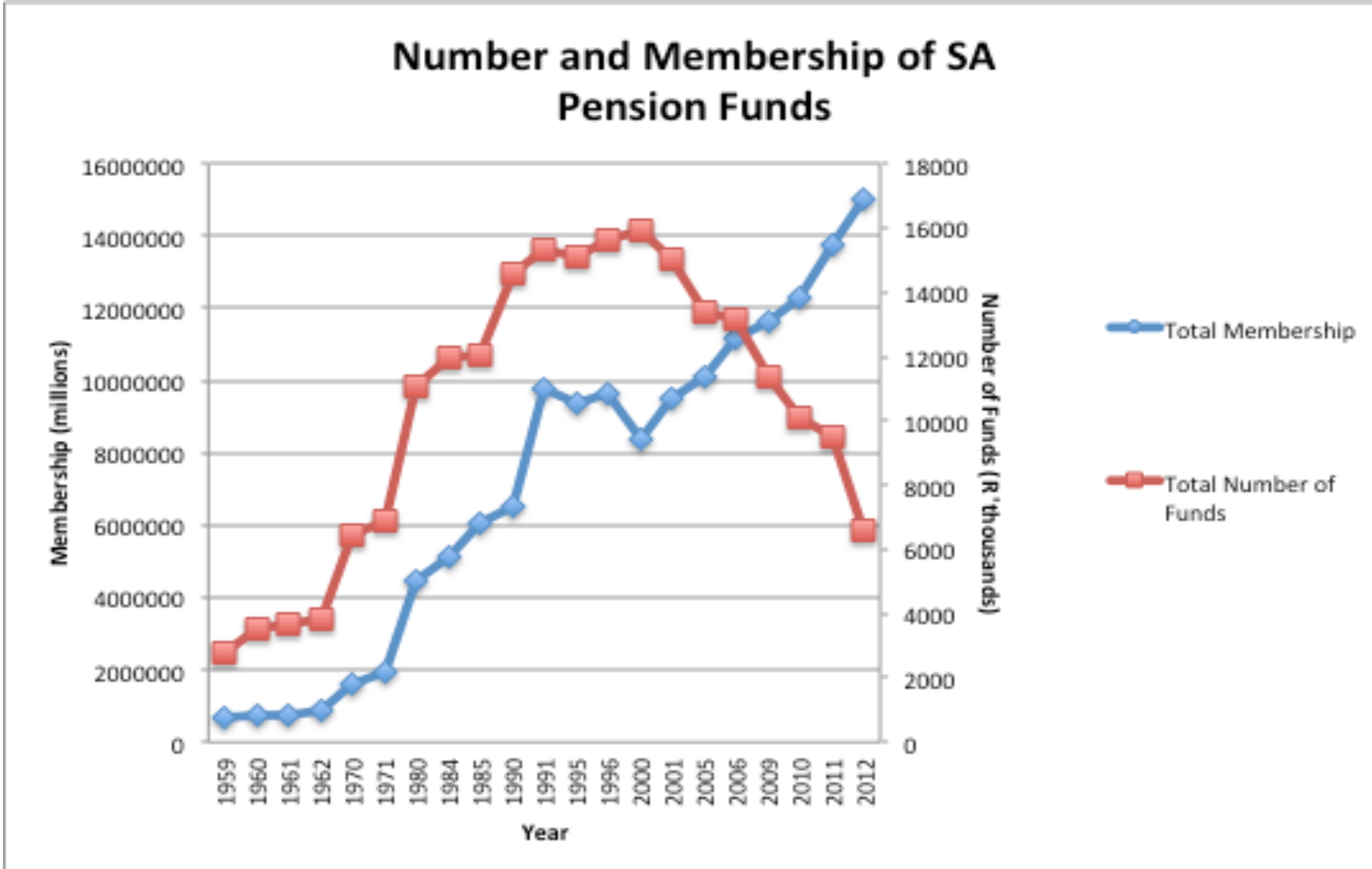


Source: Authors own compilation using data from the Financial Services Board, 1994 – 2014)

SHARE OF 13 BIGGEST PENSION MARKETS

Market	Yr end 2003 (%)	Yr end 2013 (%)	Growth (%CAGR)	PFA ($billion)
US	59.2	59	6.6	18,878
UK	7.5	10.2	10.8	3,263
Japan	17.3	10.1	0.9	3,236
Australia	2.5	4.9	12.0	1,565
Canada	3.8	4.5	6.5	1,451
Netherlands	3.7	4.2	7.3	1,359
Switzerland	2.1	2.5	4.7	786
Germany	1.4	1.6	7.3	509
Brazil	0.5	0.9	10.8	284
South Africa	**0.6**	**0.7**	**14.1**	**236**
France	0.8	0.5	1.1	169
Ireland	0.4	0.4	6.4	130
Hong Kong	0.2	0.4	12.0	114
Total (US$)	100	100	7.7	31, 980

SOUTH AFRICA'S EVOLUTION, REFORMS AND TRENDS

- R2.7 to R3.6 trillion to the South African economy (FSB, 2014)

- South Africa's total pension assets are recognized as being in the top ten globally with respect to size, a contribution of 0.7% to the total pension assets of the 13 biggest. (Watson, 2014)

- Increase of Banking R1 049 – R2 841 trill and Non Banking to R1 715 – R6 921 (2001 to 2014)

- 6581 Total funds and 15.9 million members (2014)

	1981	1987	1991	1995	1999	2002	2005	2008	2011
1. Immovable properties	5.8	5.9	4.8	4.3	3.6	1.1	0.6	1.1	0.7
2. Bills and Bonds	22.4	17.9	9.4	12.6	12.0	10.5	8.6	7.2	7.5
2. Bills and Bonds issued by govt or provincial administration	9.1	3.6	0.5						
3. Bills and Bonds issued by local authorities and administration boards	8.2	7.0	3.6						
4. Bills and Bonds issued by Rand Water board or Electricity Supply Commission	7.9	0.3	2.6						
5. Bills and Bonds issued by Land and Agricultural Bank and SARB	4.5	0.7	0.5						
6. Loans	6.3	1.4	0.5	0.3	0.6	0.8	0.1	0.1	-
7. Debentures	8.7	6.6	10.2	0.7	0.2	0.6	0.1	1.1	1.1
8. Deposits and savings accounts	15.6	19.5	24.4						
9. Equities/Shares in companies				47.7	34.3	29.3	23.3	20	18.8
Collective Investment Schemes/ Unit Trusts		24.4	33.3	1.5	5.8	6.2	5.5	6.6	7.9
10. Insurance Policies				24.6	28.2	35.0	47.6	46	45.9
11. Deposits and Krugerrands	-			7.5	7.0	6.7	4.3	6.3	5.1

Source: (Authors own compilation data from Financial Services Board, 1981-2016)

PUBLIC INVESTMENT CORPORATION (PIC)

PUBLIC INVESTMENT CORPORATION

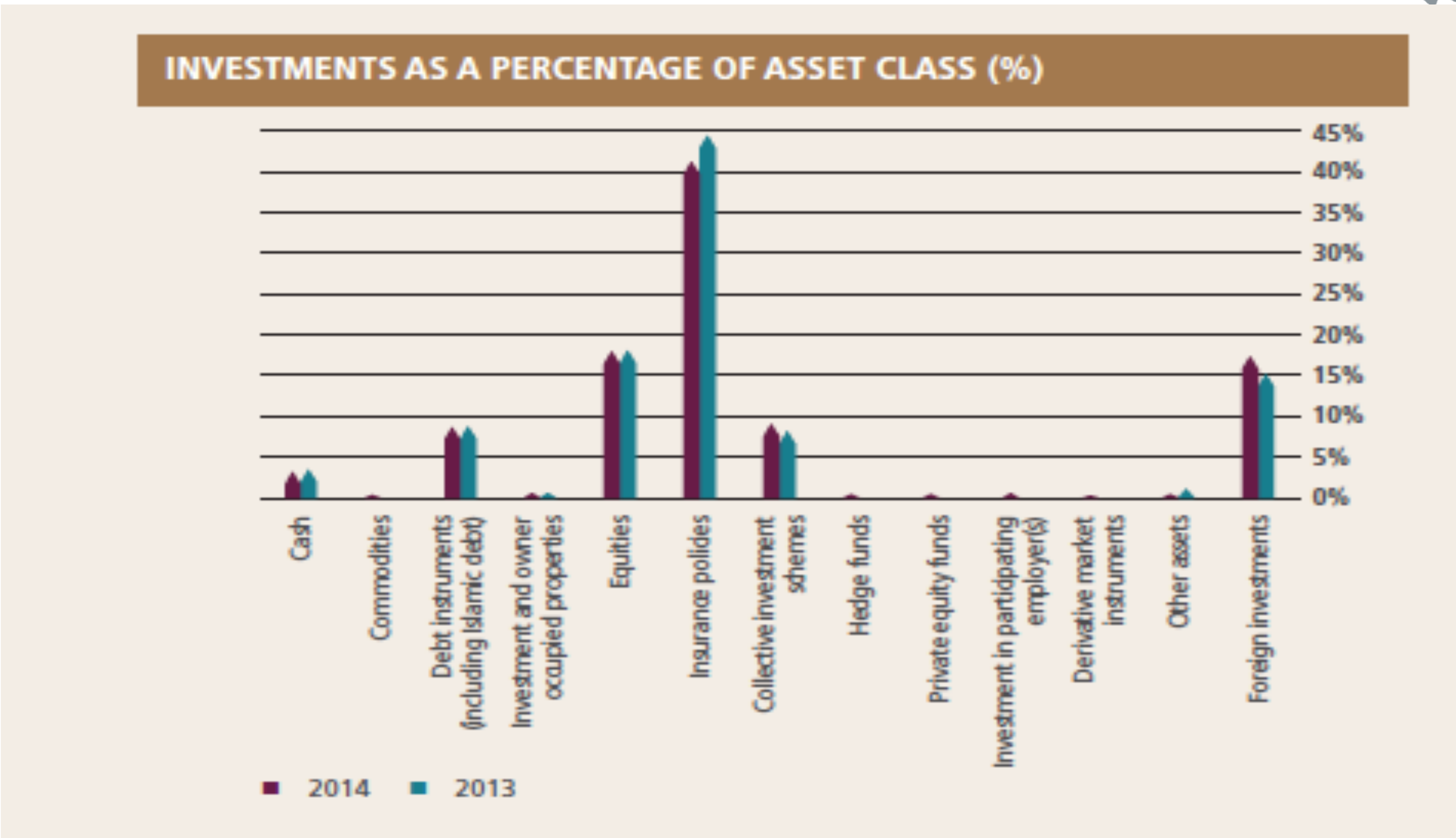
- Public Investment Corporation (PIC) is a wholly state owned investment management company

- Manages the Government Employees Pension Fund (GEPF), Unemployment Insurance Fund, Compensation Commissioners, Political Office Bearers Fund and the Associated Institutions Pension Fund.

- GEPF Investment Policy that the sole mandate of the establishment of the PIC is to manage GEPF assets

- State owned entity that does little to drive the urgent developmental agenda of the country (Hendricks, 2008) .

ASSET ALLOCATION TOTAL PENSION FUNDS



Financial Services Board Annual Report, 2014

ASSET ALLOCATION TOTAL PIC PENSION FUNDS

Asset Class	2015 %	2013 R billion	2014 R billion	2015 R billion
Local Equity	48.68%	488	520	622
Local Bonds	34.31%	636	788.5	882.9
Cash and Money Market	4.46%	122	114.4	80.9
Properties	5.19%	62	70.4	94.1
Offshore Equity	3.91%	80	86.2	96.2
Offshore Bonds	1.40%	same	same	same
Africa Equity	0.65%	3	8	11.7
Isibaya	1.40%	13	17.6	25.4

PIC Annual Report, 2014

OPPORTUNITIES

- Long duration of infrastructure opens opportunities for the investment industry for long term liability matching
- Diversification
- Returns offered are indifferent to market movements
- Offering positive returns due to their mostly stable and predictable cash flows
- Strong privatized occupational system regime and private personal schemes (in both the public and private sector).
- Viviers et al (2009) measures the responsible investment funds which include targeted infrastructure investments at a mere 0.7% of the total investment capacity of South Africa's total capabilities.
- Potential investment within the current regulatory framework is measured at $11 billion
- The argument that targeted investments do not hold returns equivalent to non responsible investment funds must be discontinued. Viviers et al (2009) also argues that these are unjustified as they do not perform differently from non-targeted investments.
- The measured investment view average returns across the funds was 14.60%, 13.63%, 16.50% over 1 year, 3 years and 5 years respectively. (Alexander Forbes Annual Retirement Survey, 2013)

CONCLUSION

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- Inderst (2014) argues that unlisted investments are crucial to reducing the infrastructure gap
- Historically municipal bonds issues by South African metros form part of infrastructure fund instruments
- City wide infrastructure funds should be developed to deepen investment into urban spaces targeting both returns and social impact.
- Defining what strategic infrastructure investments are within South Africa
- Pipeline projects and improving the project development process
- Creation of a database of infrastructure projects to facilitate the monitoring of supply constraints and successes for mobilization of future funds
- $60 billion in the first quarter of 2016 through the National Democratic of China's Special Bond program of $60 billion in Q1 of 2016. Funding is for financing of local infrastructure projects (Bloomberg, 2016)
- Investment constraints, potential infrastructure assets and project pipeline, value and transparency of investments, political will and government capacity
- Investment in cities should focus on transforming cities into productive centres and economic nodes whilst addressing socio-economic needs

CONCLUSION

- Government regulation and interventions for pension funds successful in growth of the sector and discouraging bad practices. In the same light this sector in this new phase could manage & encourage drive to increase infrastructure development, reduce poverty and inequality, improve economic conditions of SA'ns
- Profitability and returns on performance need not necessarily be compromised, linkages between AuM and growth must be investigated
- Infrastructure can help institutional investors deal with the current low interest rate + provide them with a predictable (inflation adjusted) cash flow and a low correlation to existing investment returns.
- Few studies on the role pension funds can play in the context of emerging economies to drive national priorities.
- Historical imbalances and the dire needs to improve growth, reduce inequality and poverty, South African leadership need to look at other measures and government interventions to spur such radically Hendricks (2008)

ENKOSI

THANK YOU

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REA LEBOHA