

National Advisory Council on Innovation (NACI) Presentation

Dr Ntsane Moleleki

Contribution of Research Capacities to
National Objectives: NACI Perspective

AfricaLics '15

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NATIONAL ADVISORY COUNCIL ON INNOVATION

Background

NACI's Statutory Mandate

“...advise the Minister for Science and Technology and through the Minister, the Minister's Committee and Cabinet on the role and contribution of science, mathematics, innovation and technology, including indigenous technologies, in promoting and achieving national objectives”

The National System of Innovation

NACI Views the NSI as an inclusive entity with multiple players

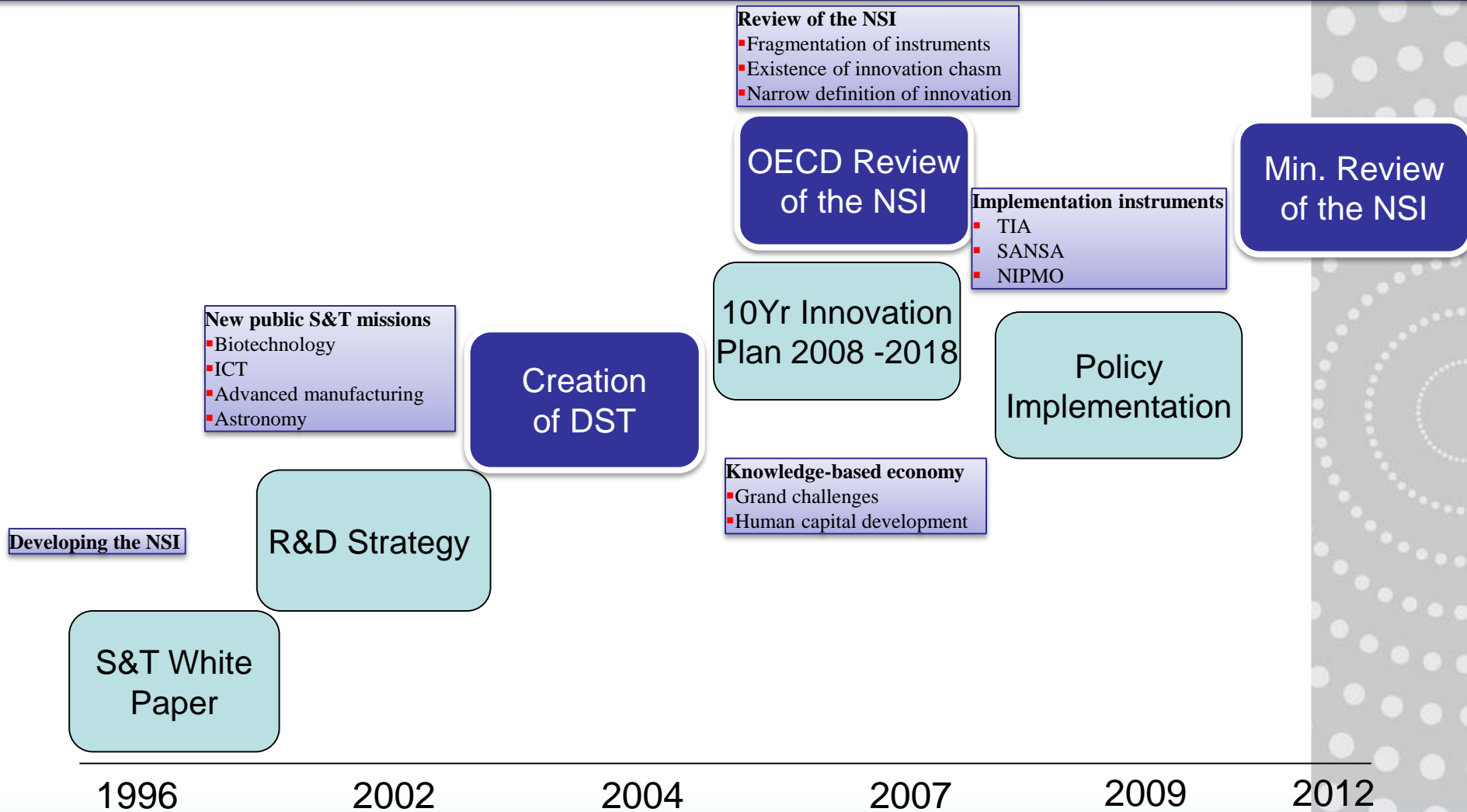
- Government departments
- Business sector
- Universities and Science Councils
- Research organisations

Innovation results when these entities operate as a single system and according to their MANDATES

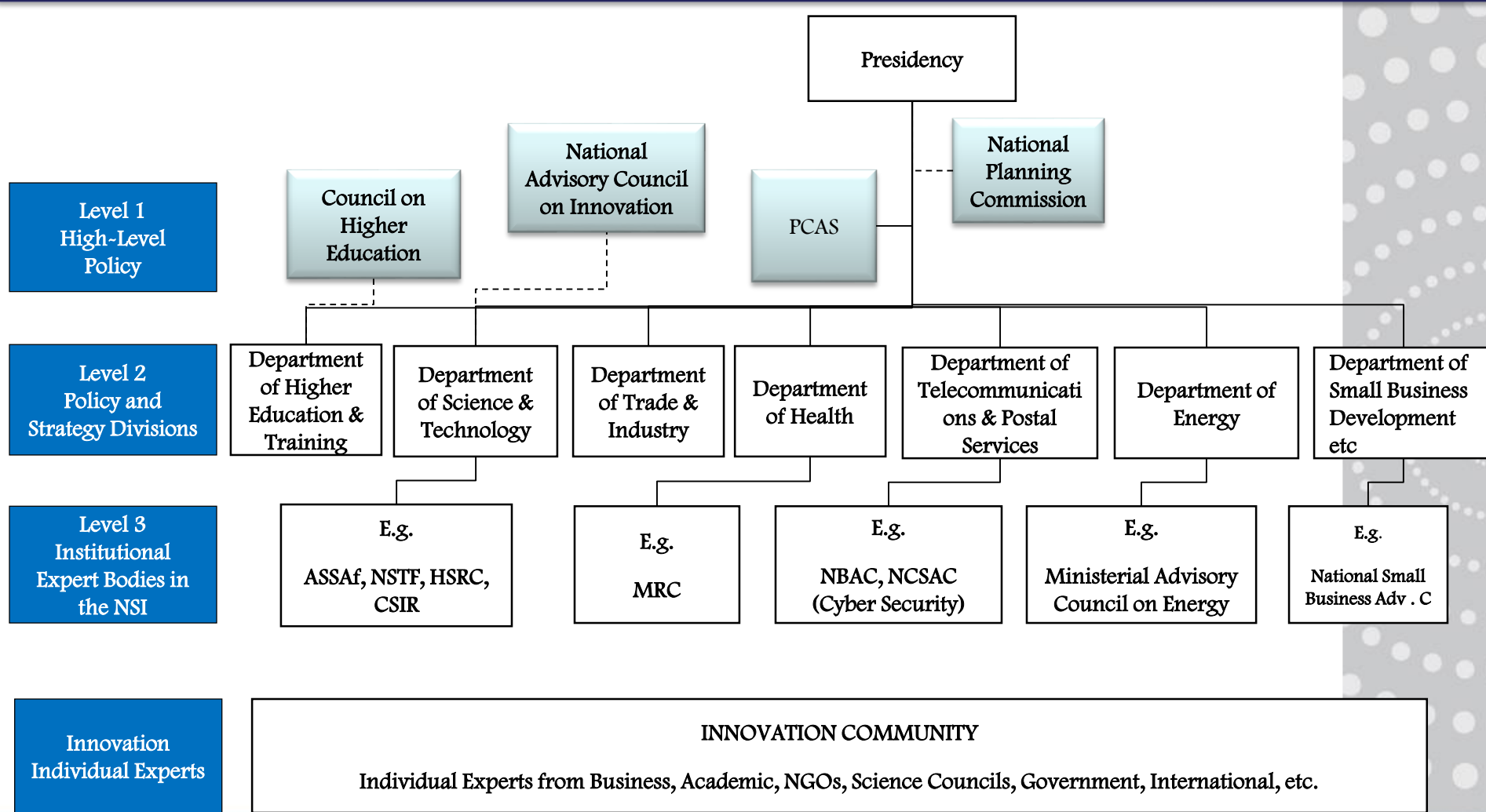
The NSI is a useful analytical and planning framework that helps NACI to:

- Understand the funding and performance of the science and innovation system
- Understand the uptake, development and diffusion of new technologies
- Understand the productivity of South Africa as a result of innovation
- Understand the NSI contribution to economic growth (contribution to GDP)

Evolution of the NSI



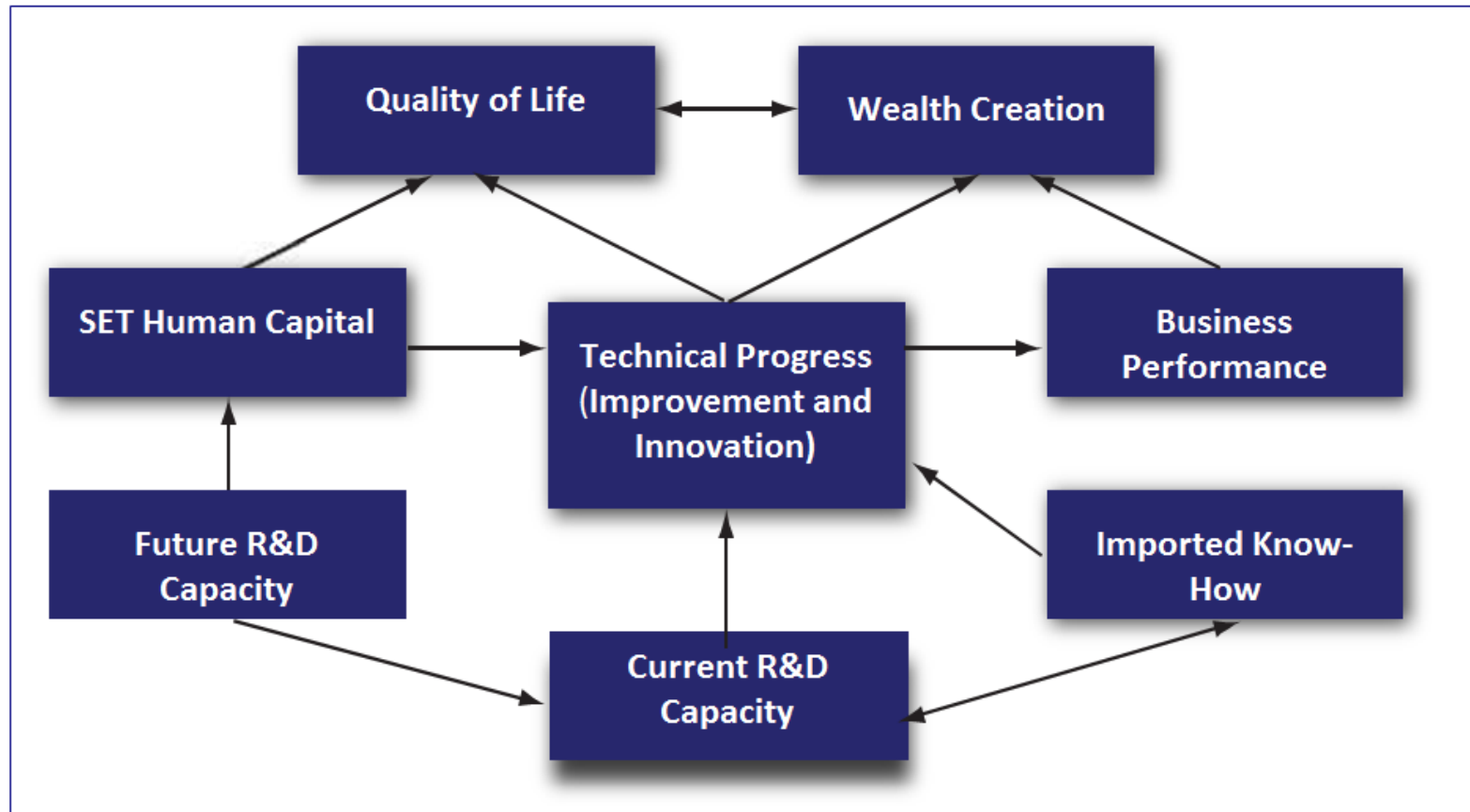
Advisory Policy Landscape in the NSI



A Snapshot of Selected Indicators

Selected NACI Indicators of Progress Within the NSI

National Research and Development Strategy (2002)

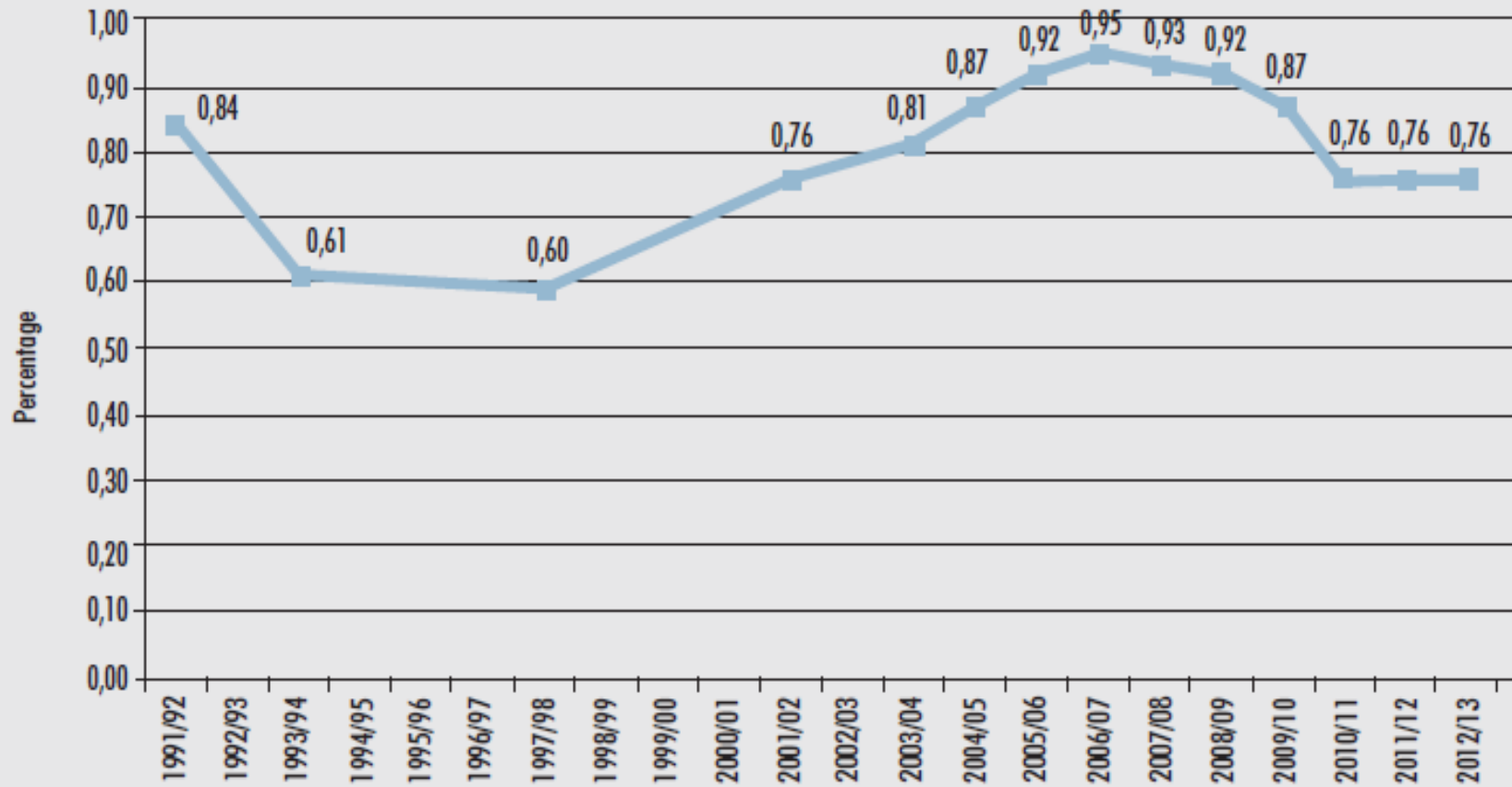


Source: Department of Science and Technology "National Research and Development Strategy, 2002"

Winning Nations Foster and Support High Levels of Expenditure on R&D

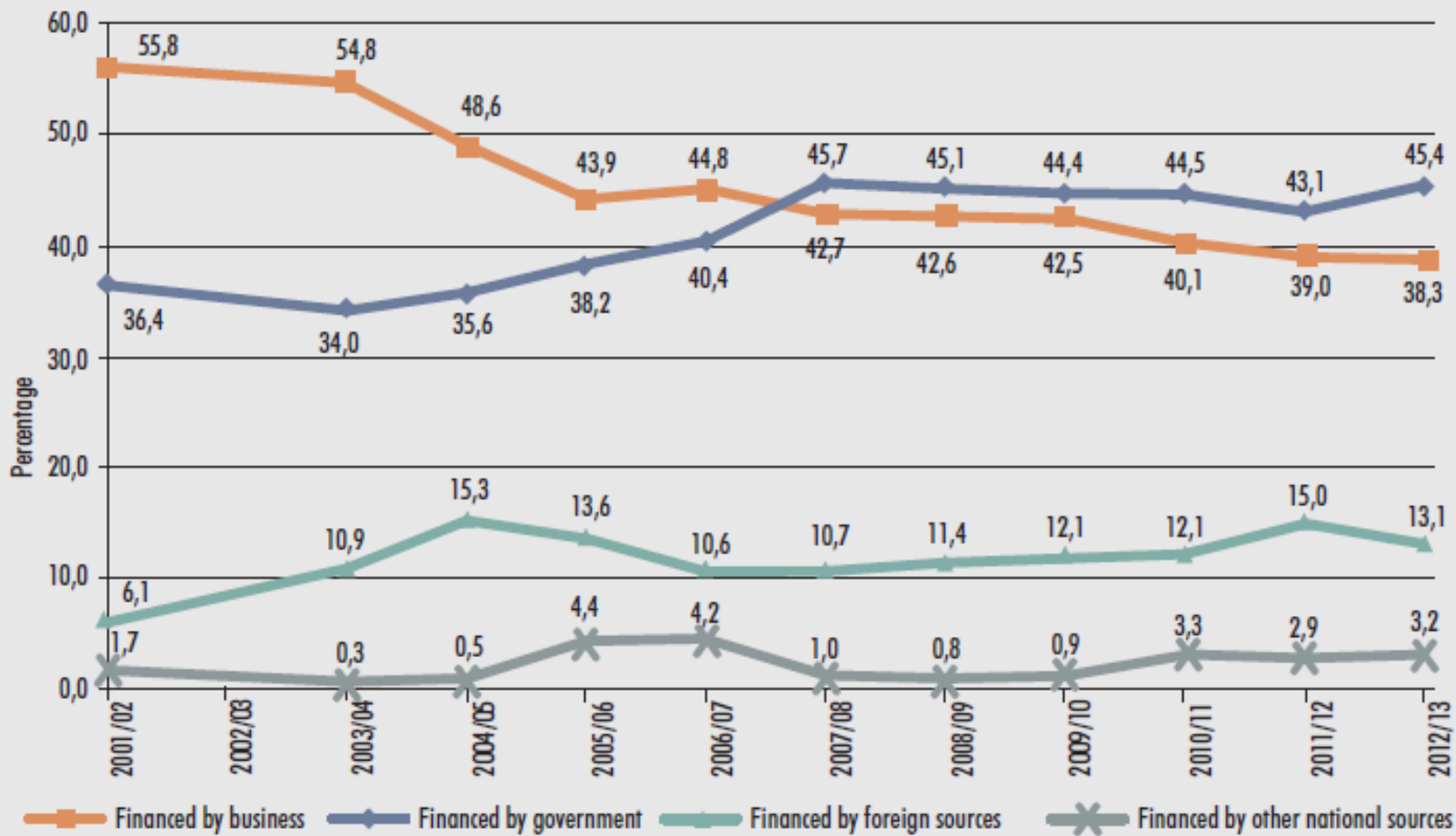
The Government of South Africa has set a Target of Achieving GERD at 1.5% of GDP by 2019

Gross Domestic Expenditure on R&D (GERD)



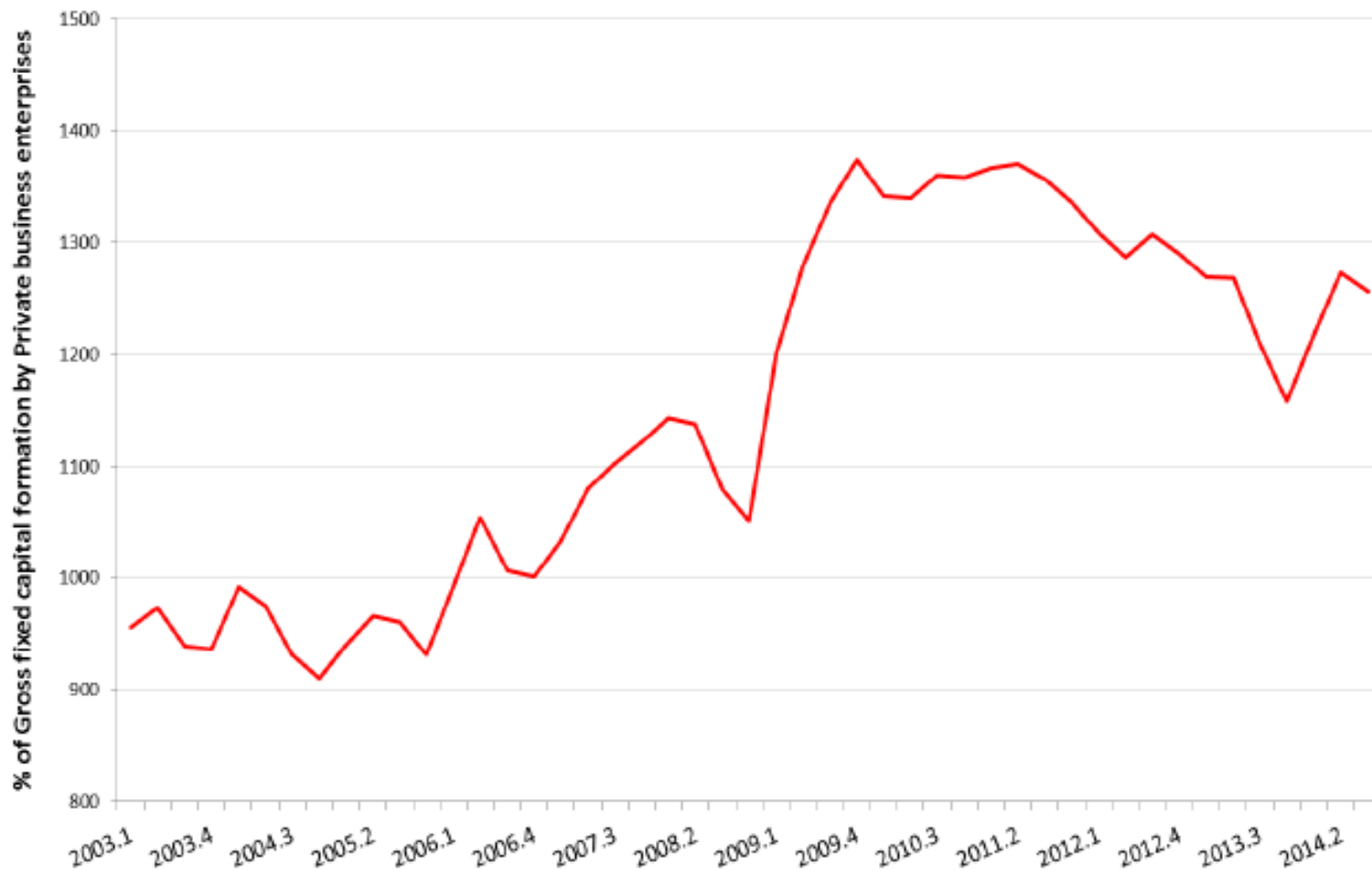
Source: Centre for Science, Technology and Innovation Indicators (CeSTII)

GERD by Source of Funds



Source: Centre for Science, Technology and Innovation Indicators (CeSTII)

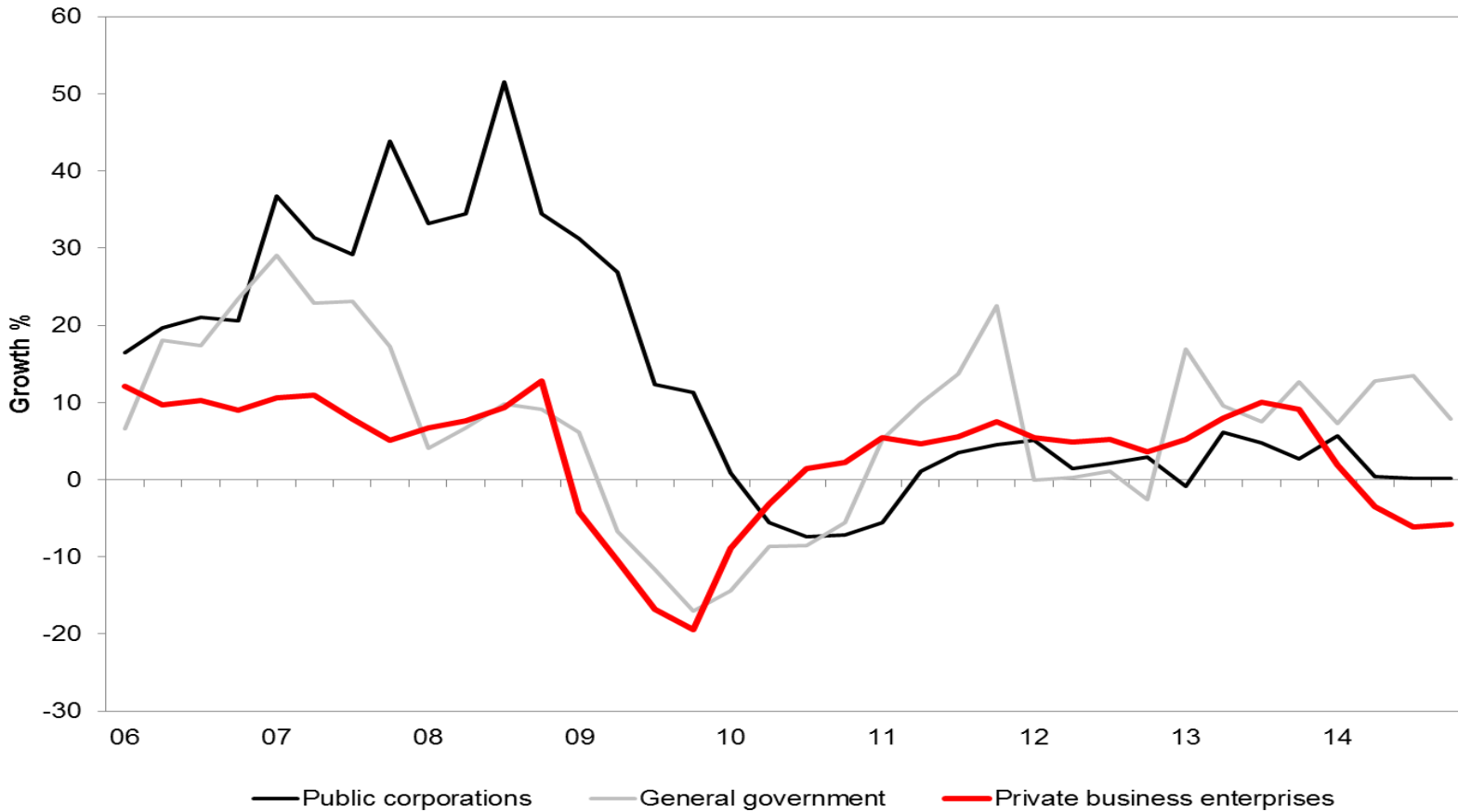
Deposits by Companies and Closed Corporations as a Percentage of Gross Fixed Capital Formation by Private Business Enterprises



Source: South African Reserve Bank (SARB)

State of the NSI: Business Confidence

Gross Domestic Fixed Investment by Type of Organisation



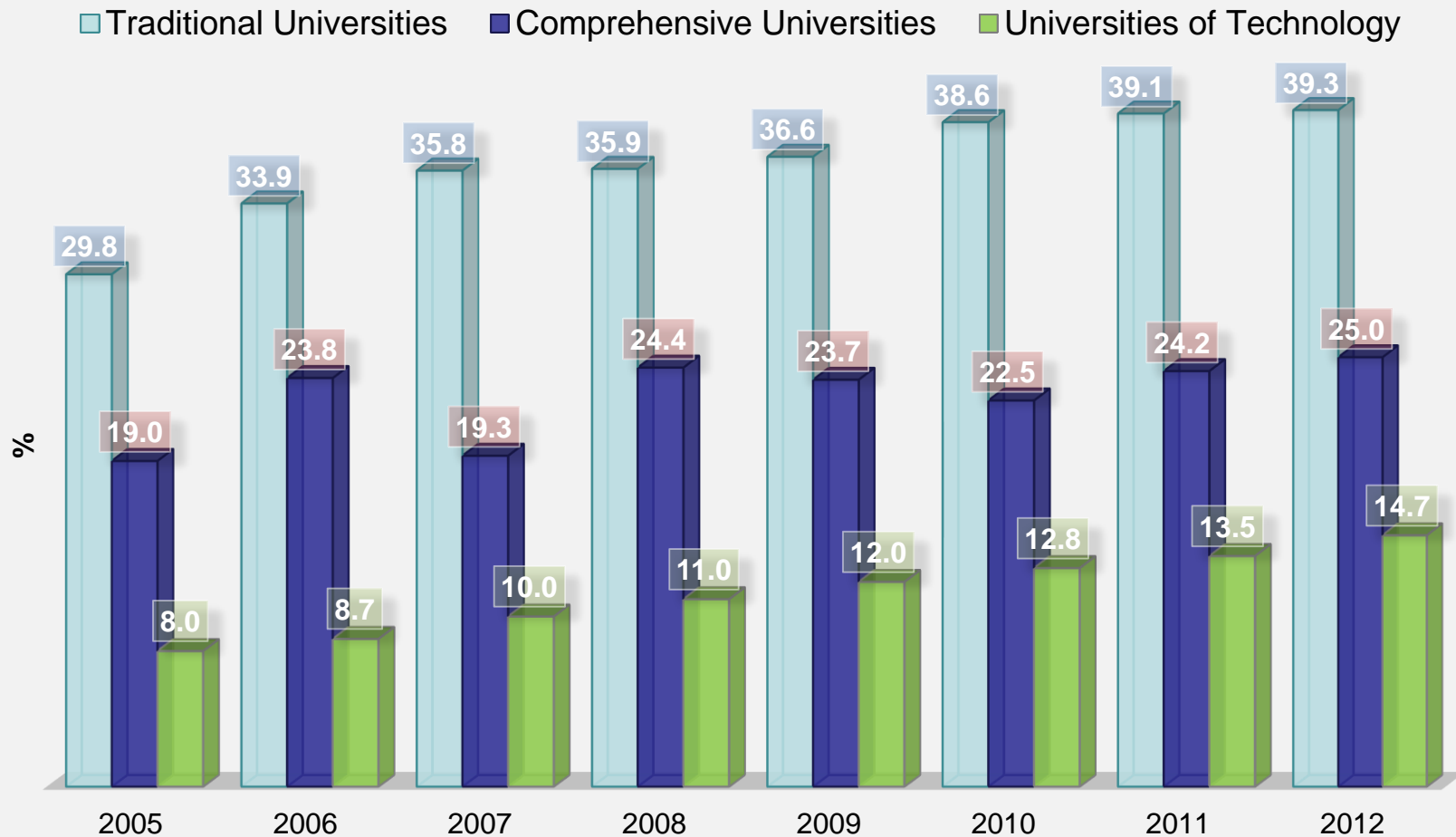
Source: SARB

State of the NSI: SA Collaborative Scientific Papers

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Top 10 World Collaboration	55,4	57,0	57,5	59,6	61,0	62,1	66,8	70,2	82,8	84,1
BRICS Collaboration	4,0	4,6	4,3	4,7	6,2	5,3	7,1	9,1	12,1	13,2
Top 10 Africa Collaboration	3,9	4,7	4,7	5,2	6,3	6,6	8,0	8,7	10,2	9,8

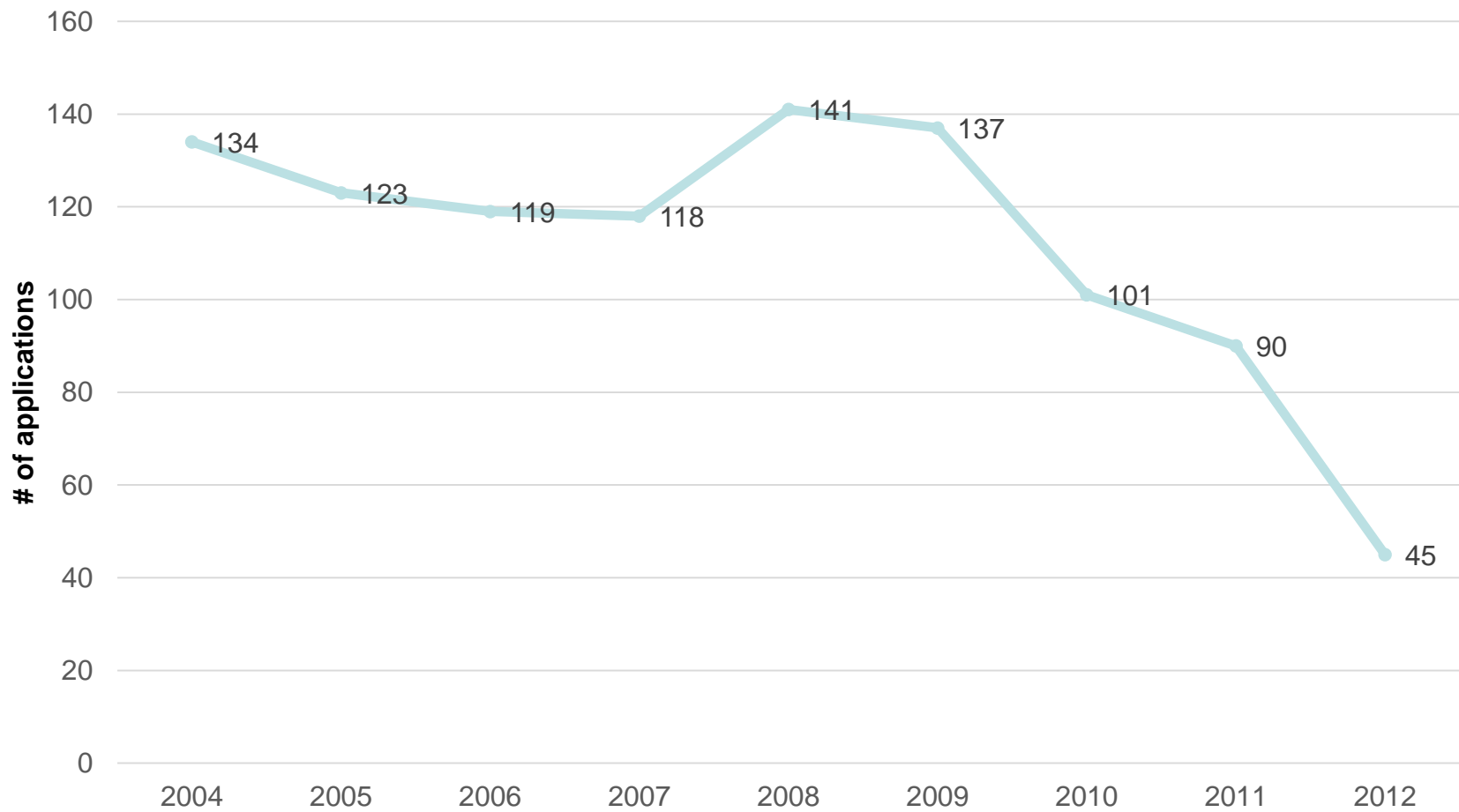
Source: Thomson Reuters "Incites"

State of the NSI: Academic Staff with PhDs



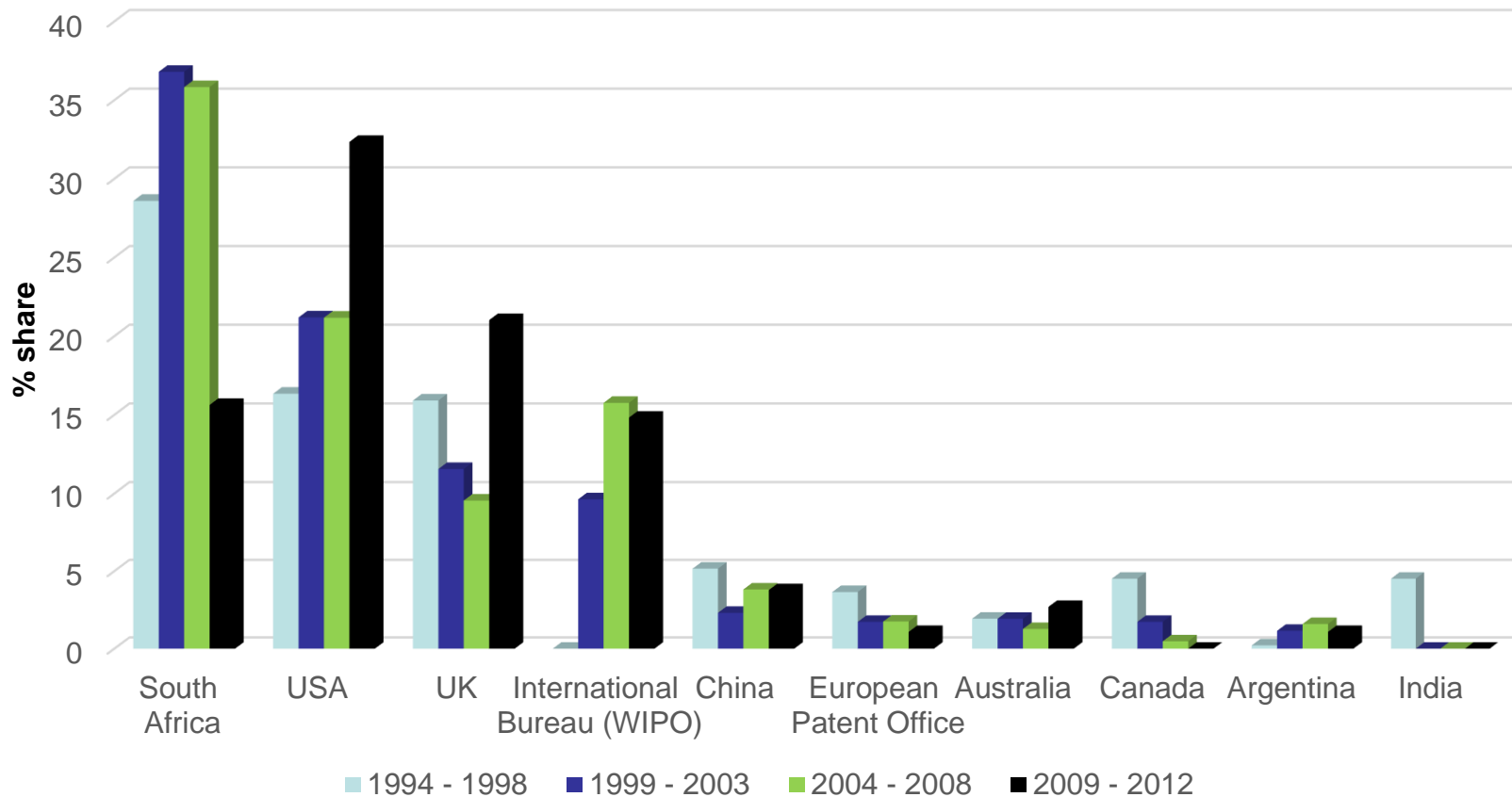
Source: DST "Research Information Management System (RIMS) database"

State of the NSI: SA Patent Family Applications



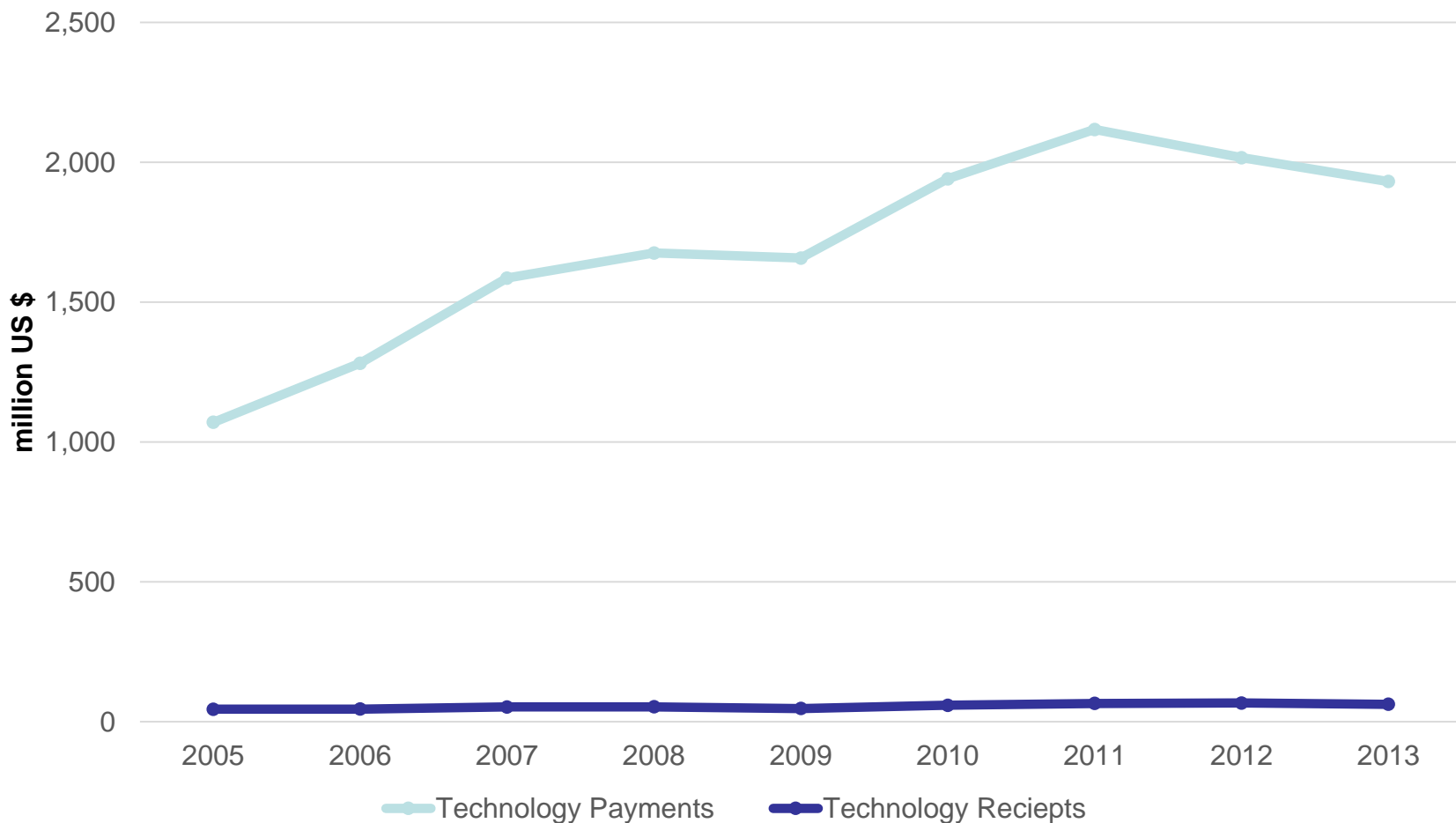
Source: WIPO "IP Statistics Data Center"

Proportion of South African Patent Family Applications at Various Patent Offices



Source: WIPO "IP Statistics Data Center"

State of the NSI: SA Technology Balance of Payment



Source: The World Bank "World Development Indicators"

State of the NSI: Employment Statistics

	2008	2009	2010	2011	2012	2013	2014
Labour Force Participation rate (as % of population aged 15+)	59,3	57,5	55,7	55,7	56,2	56,8	57,1
Employment in Agriculture (as % of total employment)	5,6	5,0	4,8	4,6	4,8	5,0	4,6
Employment in Industry (as % of total employment)	25,8	25,3	24,4	24,2	23,5	23,5	23,5
Employment in Services (as % of total employment)	68,6	69,7	70,7	71,2	71,7	71,5	71,9
Unemployment with Primary Education (% of unemployment)	15,5	13,8	12,9	11,7	11,5	10,2	10,7
Unemployment with Secondary Education (% of unemployment)	76,3	77,7	78,7	80,1	80,2	80,9	79,9
Unemployment with Tertiary Education (% of unemployment)	4,9	5,4	5,8	5,9	6,2	6,8	7,4

Source: The World Bank "World Development Indicators" & Econometrix

Thank You!!