
The cost of complexity in manufacturing



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Nampak CEO

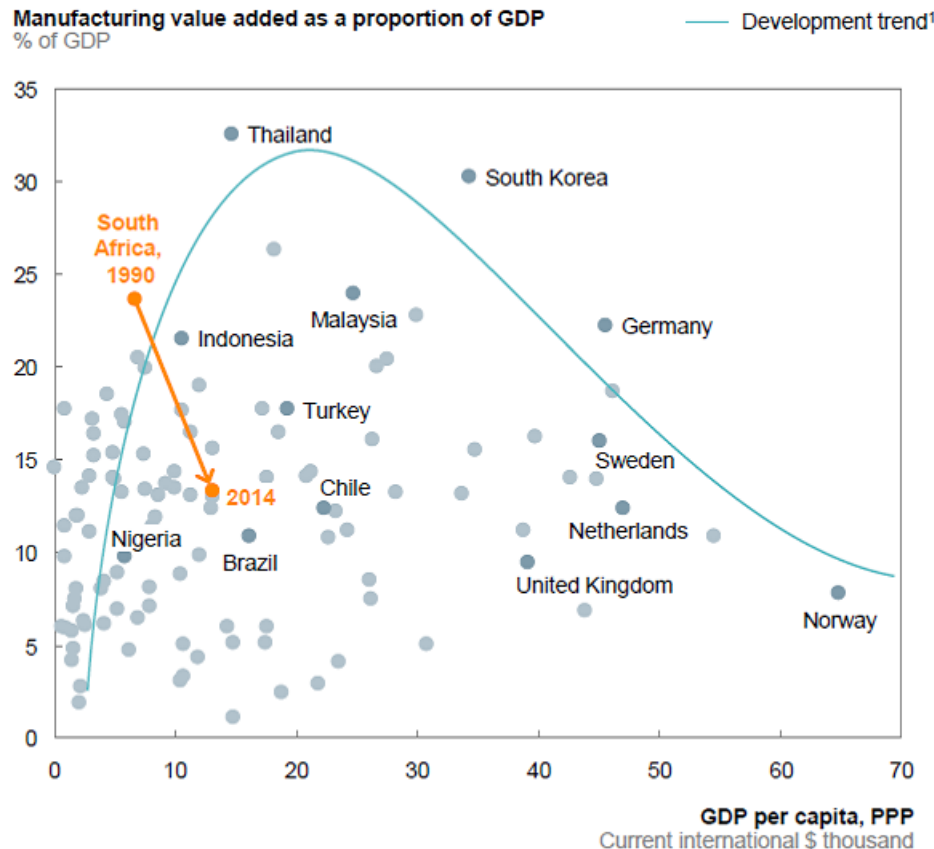
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“Any intelligent fool can make things bigger, more complex, and more violent. It takes a touch of genius - and a lot of courage - to move in the opposite direction.”

- Ernst Schumacher

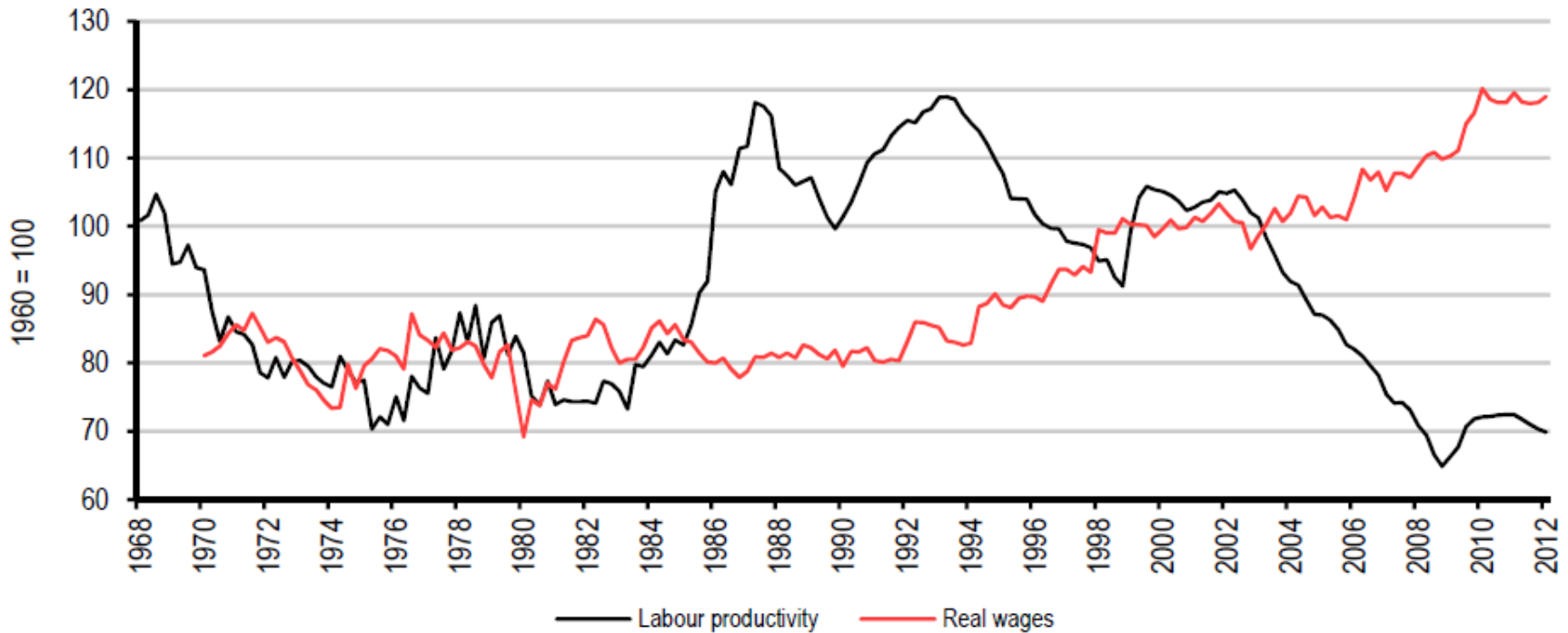
Manufacturing's contribution to GDP fallen from 24% early 1980's to 13% in 2015



- › For SA's stage of development, manufacturing should contribute double to GDP
- › South Africa's manufacturing growth lagging other emerging markets
- › Reasons are many:
 - » Increased competition from imports
 - » Increased labour costs
 - » High energy costs
 - » Infrastructure
 - » Policy and regulatory uncertainty

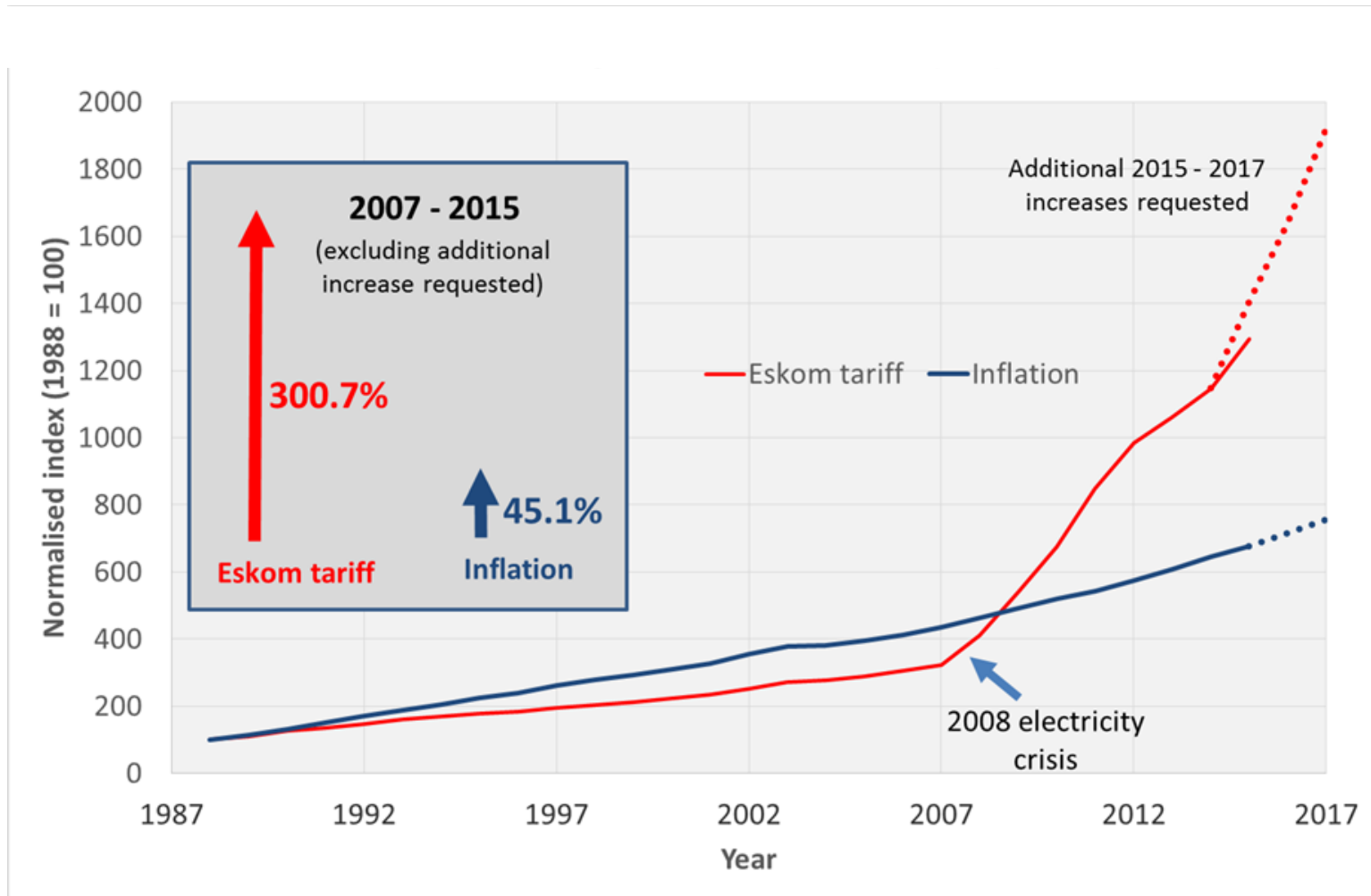
¹ Not a mathematical fit, but an observed trend that manufacturing peaks at 30–40% of GDP before gradually declining as a country's wealth grows.

Wages are increasing, and productivity is falling



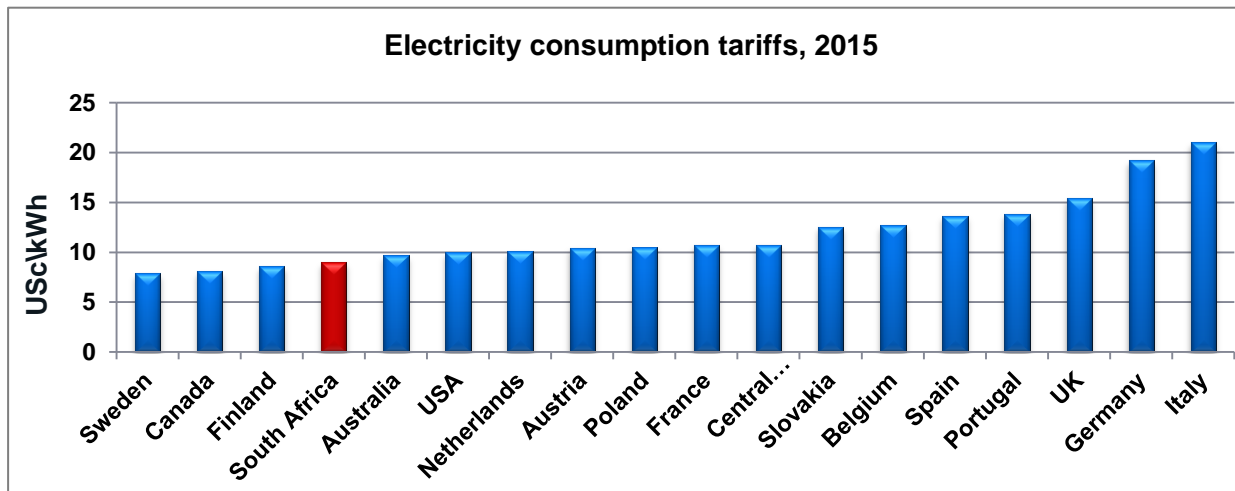
Source: Adcorp

Electricity costs are increasing above inflation

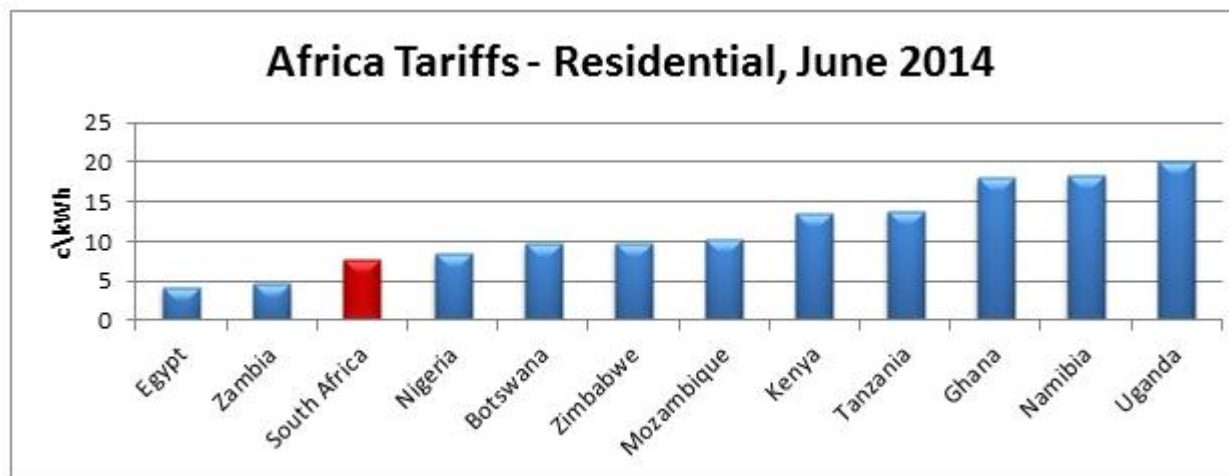


Source: PowerOptimal

But Eskom is still relatively cheap...



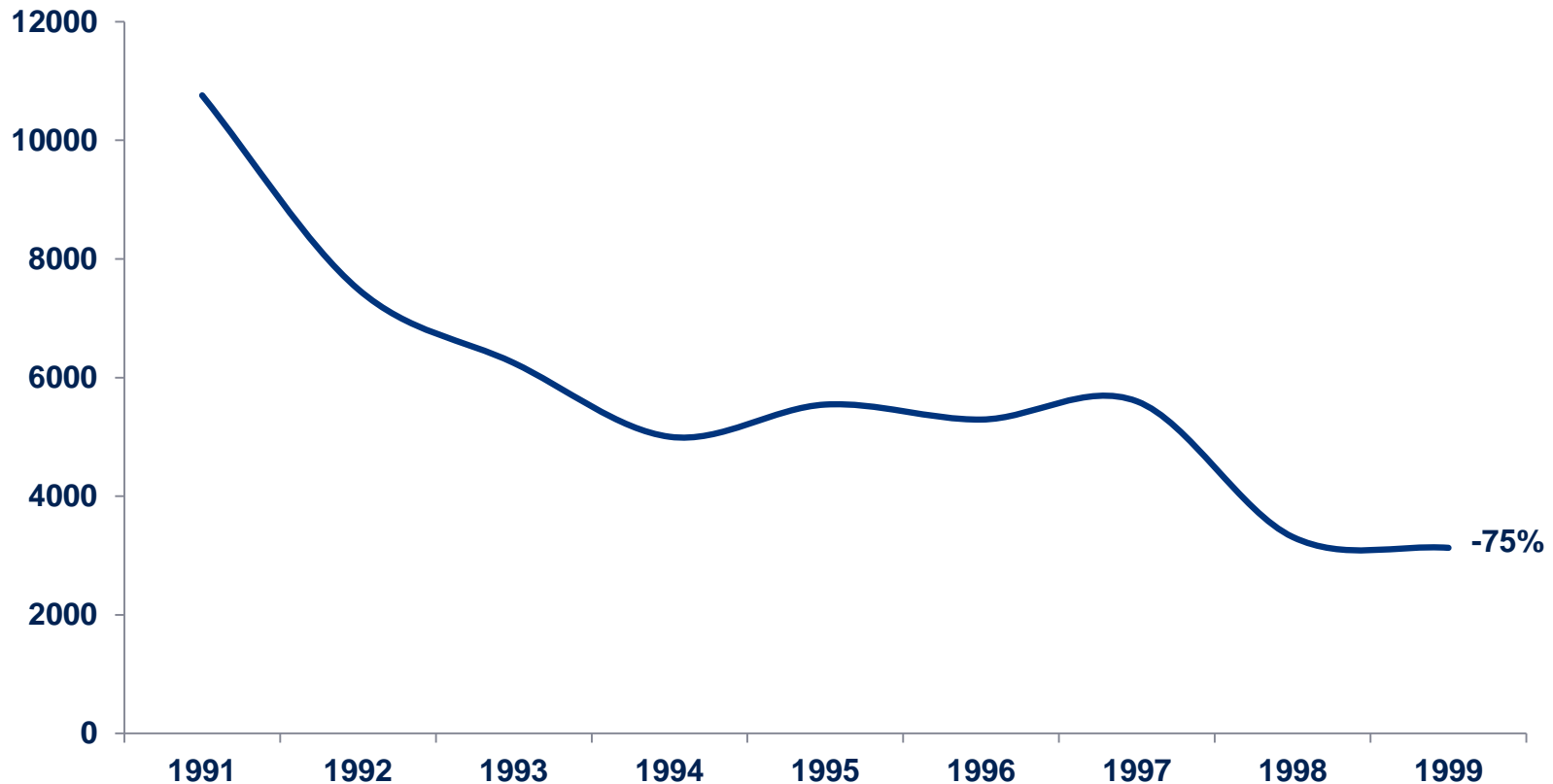
Source: statista



Source: Respective Utilities

Availability of skills a problem apprentices in decline

Number of apprentices

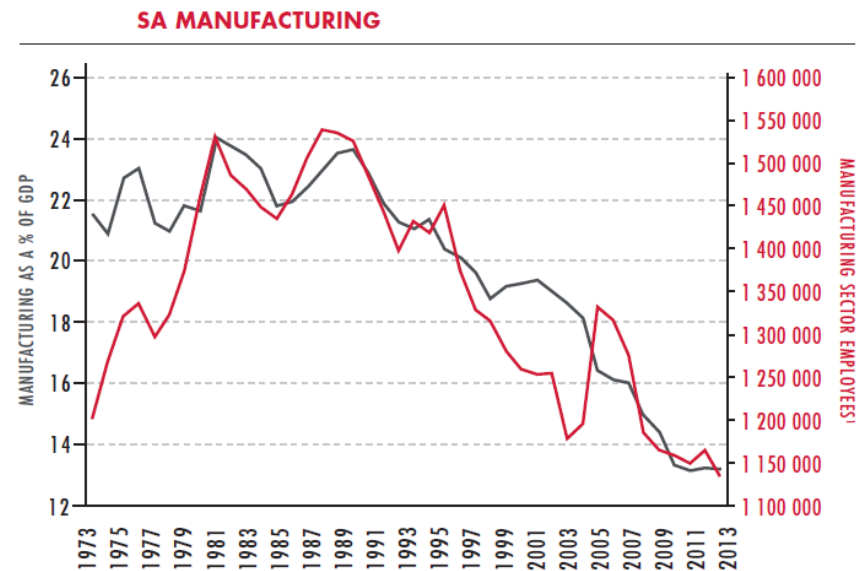


Source: Moleke, 2006

Neither SETAs nor industry has bridged the gap

Decline of manufacturing correlates closely with reduction in jobs

- › Since 1989, SA manufacturing has shed half a million jobs – as share of GDP has shrunk
- › If manufacturing were to have an appropriate share of GDP for SA's developmental stage (28 – 32%), a theoretical 800 000 to 1,1 million jobs could be created
- › We need to be competitive internationally
- › We need to identify our competitive and comparative advantages
- › We need to invest in new capacity

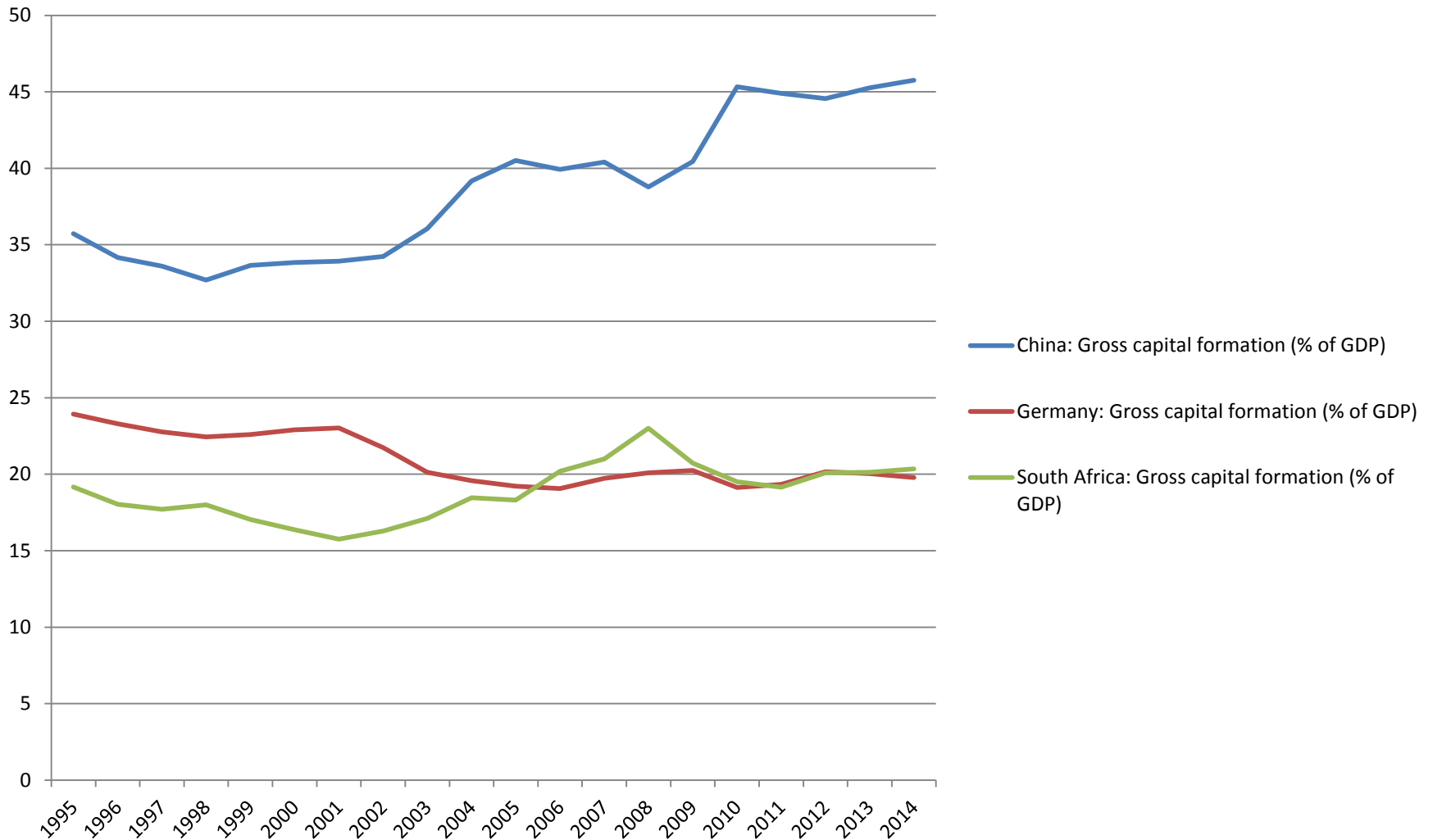


Source: StatsSA, South African Reserve Bank , Allan Gray, 2015

- › IPAP I and II
- › Section 12I of Income Tax Act
- › Manufacturing Competitiveness Enhancement Programme
- › Competition Commission investigations
- › Structural challenges remain
 - » Labour inflexibility
 - » Collective bargaining
 - » Skills shortages exacerbated by visa challenges
 - » Infrastructure inefficiency

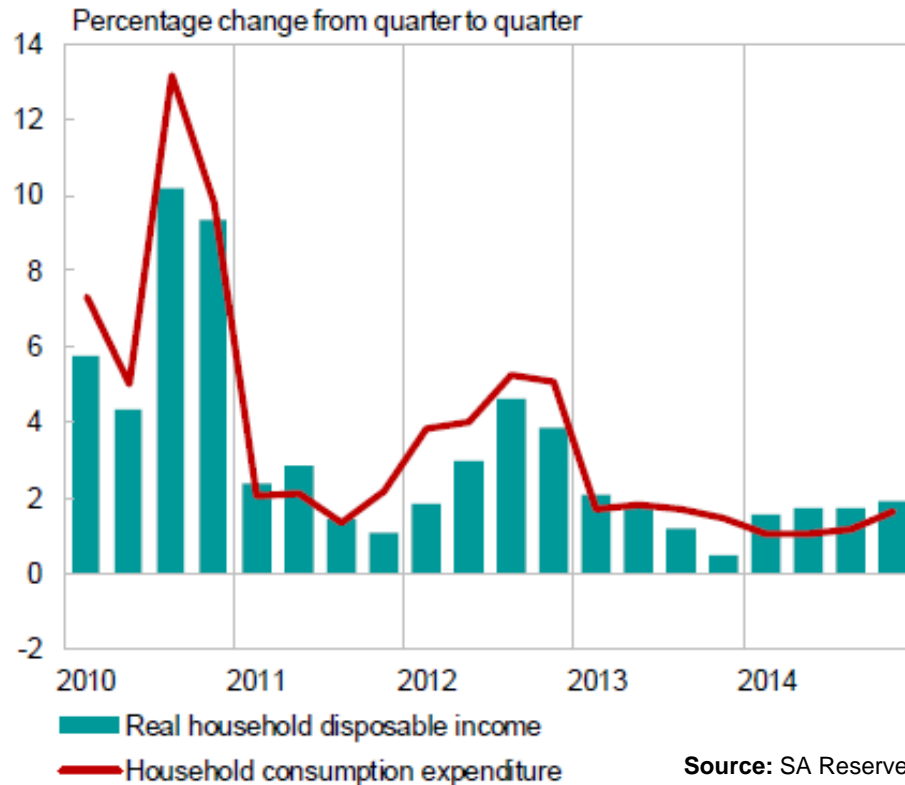
South Africa needs a macroeconomic environment that facilitates more capital investment locally.

Current rate of investment will not get us there



Source: World Bank statistics

Demand from local consumers will not create impetus for growth



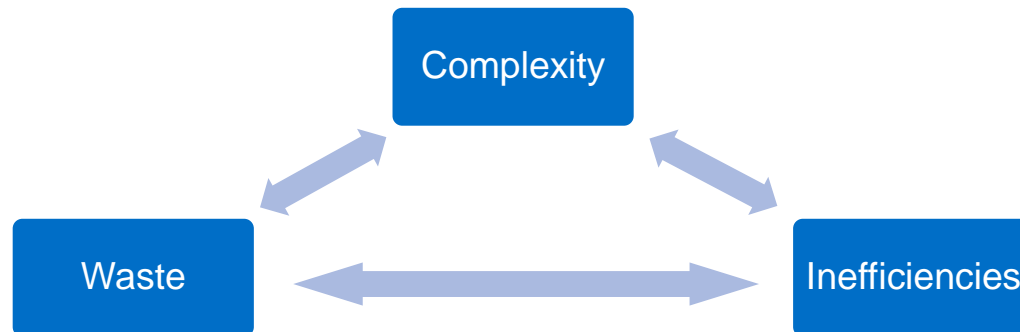
Seasonally adjusted annualised rates

Consumer demand unlikely to compensate for inefficiencies

Getting back to the basics of manufacturing

Reducing waste and increasing efficiencies

- › Pre-1994 the manufacturing sector organisations developed into bloated and inefficient organisations, shielded by protectionism
- › Consequences of generations of autarky; complexity, waste and inefficiencies were concealed by apparently good performance in the absence of competition and rising costs



- › The dawn of democracy came with trade liberalisation and subsequent rise in operating costs exposed inefficiencies related to complexity and waste
- › Getting back to the basics of manufacturing key to sustained improvement in performance

Inbound complexity.... leads to..... inbound waste

- Grades
- Gauges
- Suppliers
- Transport
- Payment
- Moulds



- Excess inventory
- Time and effort to manage suppliers and deliveries
- Greater risk of stock revaluation

Manufacturing complexity.... leads to... manufacturing waste

- Designs & SKUs (Stock Key Units)
- Equipment and OEMs
- Skill
- Frequent changeovers
- Poor production planning



- Excess “critical” spares
- Excess waiting time and WIP
- More headcount to cope with skill and job changes
- Job changes = spoilage = waste
- Poor utilisation = poor ROI

Nampak addressing complexity through operations excellence and investing to compete

- › Nampak DivFood reducing current lines and presses from 199 to around +/-100 with an investment of about R330 mn reducing complexity and improving efficiencies
 - » Food division: 47 current line and presses, equipment 20 – 30+ years old will be reduced to under 30
 - » Diversified: 149 current line and presses, equipment 20 – 40+ years old will be reduced to under 75
- › Nampak Glass's R1.2 bn investment in a new glass furnace increased our capacity by 56%
 - » Increased product offering and flexibility by improving our ability to optimise colour campaigns
 - » Energy efficiency enhanced by pre-heater and full electricity back-up
 - » Water consumption reduced by more than 90%
- › Bevcan has invested some R2.5 bn in new aluminium beverage can lines in SA
 - » Replacing old tinplate lines
 - » Increased capacity
 - » Improved energy efficiency

Investment necessary to ensure competitiveness

Nampak addressing complexity through marketing excellence

- › Divfood embarked on a project to rationalise customers and SKUs (Stock Key Units) in 2014
 - » Reduce active customer accounts by 180 (reduction since project inception at 100)
 - » Reduce SKU's by 1227 (reduction since project inception 771)

- › Glass has embarked on a similar initiative to rationalise product mix to better align to production footprint
 - » Reduced SKUs from 130 to 110 (target < 100) – initial phase complete

Moving from comfort zone to profit zone

- › South Africa manufacturing is increasingly facing headwinds from high energy costs, high labour costs and sluggish GDP growth rates
- › The long term viability of the sector under threat as a result of a policy of autarky that introduced complexity, waste and inefficiencies
- › Structural issues will remain challenging over the medium term
- › Significant opportunities to improve competitiveness by improving on the basics of manufacturing
- › Government's responsibility to create an enabling environment

Simplify, simplify, simplify!

- Henry David Thoreau

**Thank
you**