

# **PUBLIC HEARINGS ON IPAP SECTORS: METALS FABRICATION**

**PRESENTATION TO THE PORTFOLIO  
COMMITTEE OF TRADE AND INDUSTRY**

**11 AUGUST 2015**



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# PRESENTATION OVERVIEW

- Classification of the Metal Fabrication sector
- Global dynamics and key drivers of growth
- Performance of the sector: 1994 to 2014
- Opportunities to further develop the sector and key binding constraints
- Key pillars of the sector strategy and interventions made to-date
- Conclusion: further policy issues to unlock the growth and development of the sector

# SECTOR CLASSIFICATION

- Ferrous Metals:
  - Upstream: primary iron and steel (flat-rolled products: coil; sheets, plate, long products: reinforcement bars; wire rod) and scrap metals
  - Downstream: fabricated metal products (e.g. pipes; structural steel; extrusions; wire products; castings; etc.)
- Non-ferrous Metals
  - Primary: slabs, billets and ingots of aluminium, copper, brass, lead, tin, zinc
  - Midstream and downstream: flat and long products, extrusions, castings, foil
  - Precious metals fabrications and related downstream industries e.g. Jewellery



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# SECTOR CLASSIFICATION

- Capital Equipment:
  - Capital equipment and machinery (e.g. valves; transformers; material handling equipment; etc)
  - Engineering and allied services
- Rail transport equipment:
  - Rail Rolling Stock (locomotives, electric multiple units, wagons, and coaches)
  - Rail Infrastructure (signalling, perway, and overhead electric transmission)

➔ These sectors are vital components of modern economies with practically every other economic sector dependent on it for the ‘tools, castings, components and systems’ to operate. Put simply, this sector produces the parts and machines which other sectors use to produce their goods and services.

# RECENT KEY GLOBAL DYNAMICS AND DRIVERS OF GROWTH

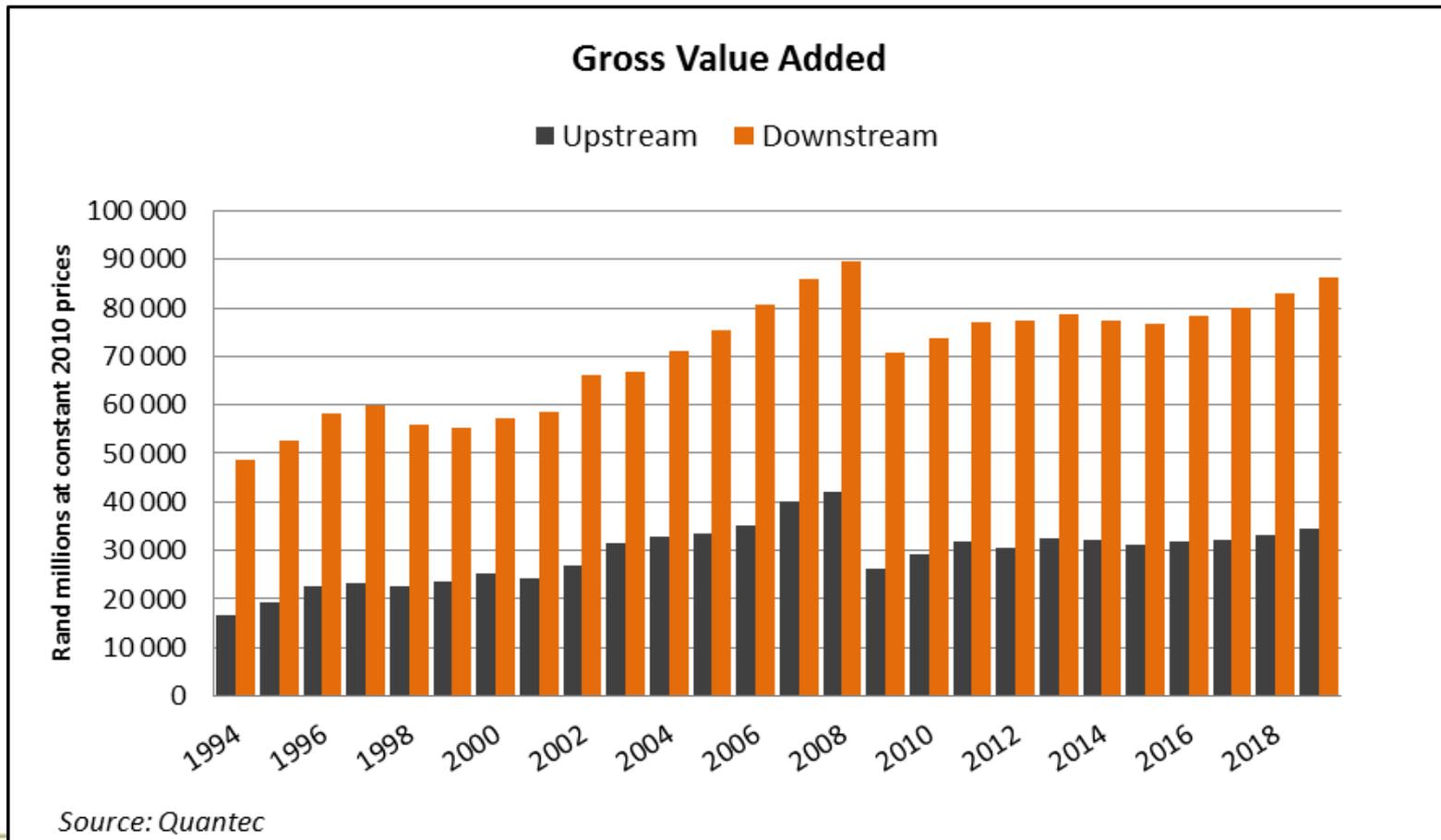
- Declining global output, exacerbated by decline Chinese growth and consumption
- Declining commodity prices (e.g. iron ore, PGMs, Gold) resulting in decline in mining activities → decline in demand for metal products
- Increased Chinese exports of primary steel and mid-stream non-ferrous and ferrous finished goods
- Higher tariffs and non-tariff barriers in potential export markets
- Increased use of light metals (Aluminium) in vehicles



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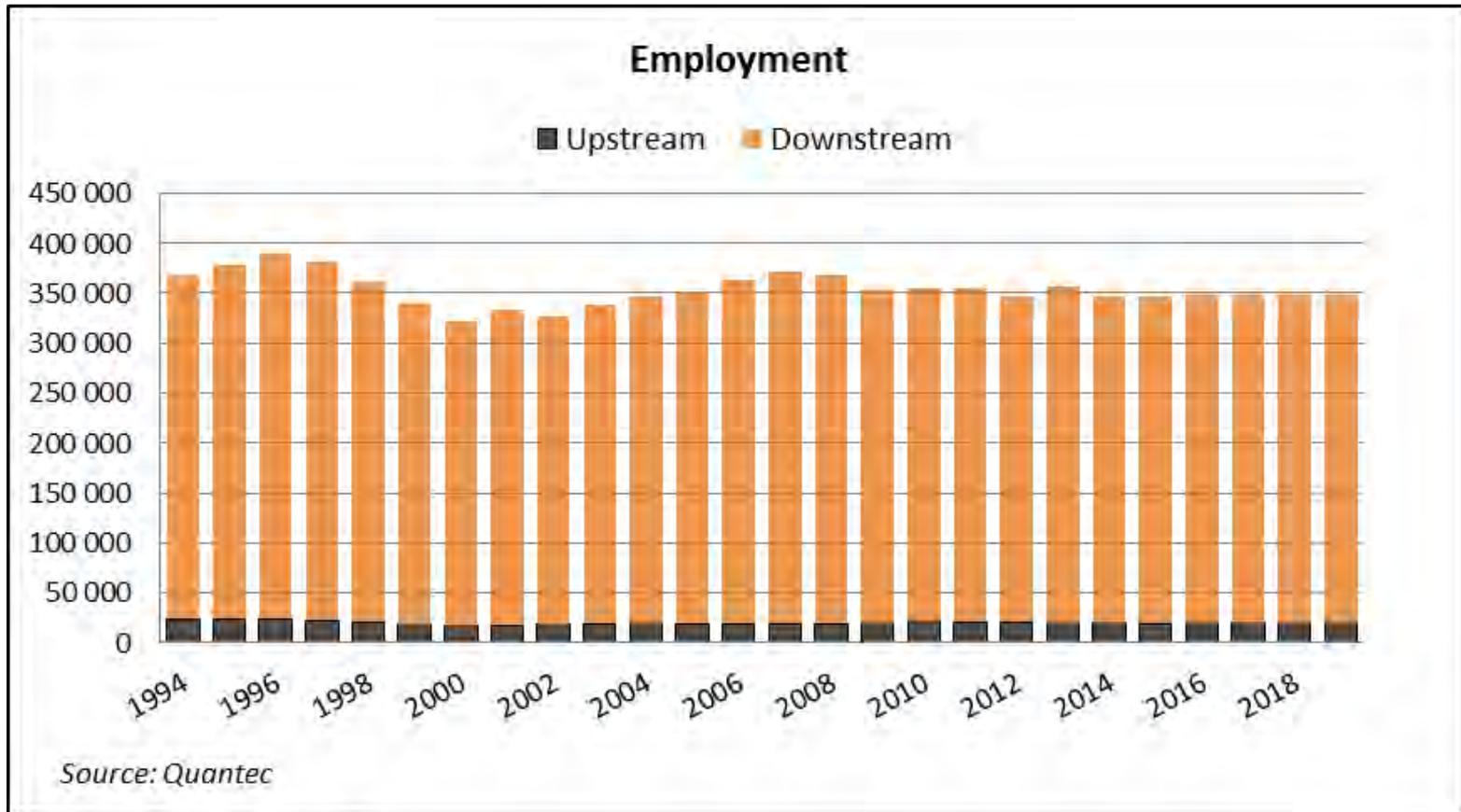
# PERFORMANCE OF THE SECTOR: VALUE ADDED



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# PERFORMANCE OF THE SECTOR: EMPLOYMENT IN THE SECTOR

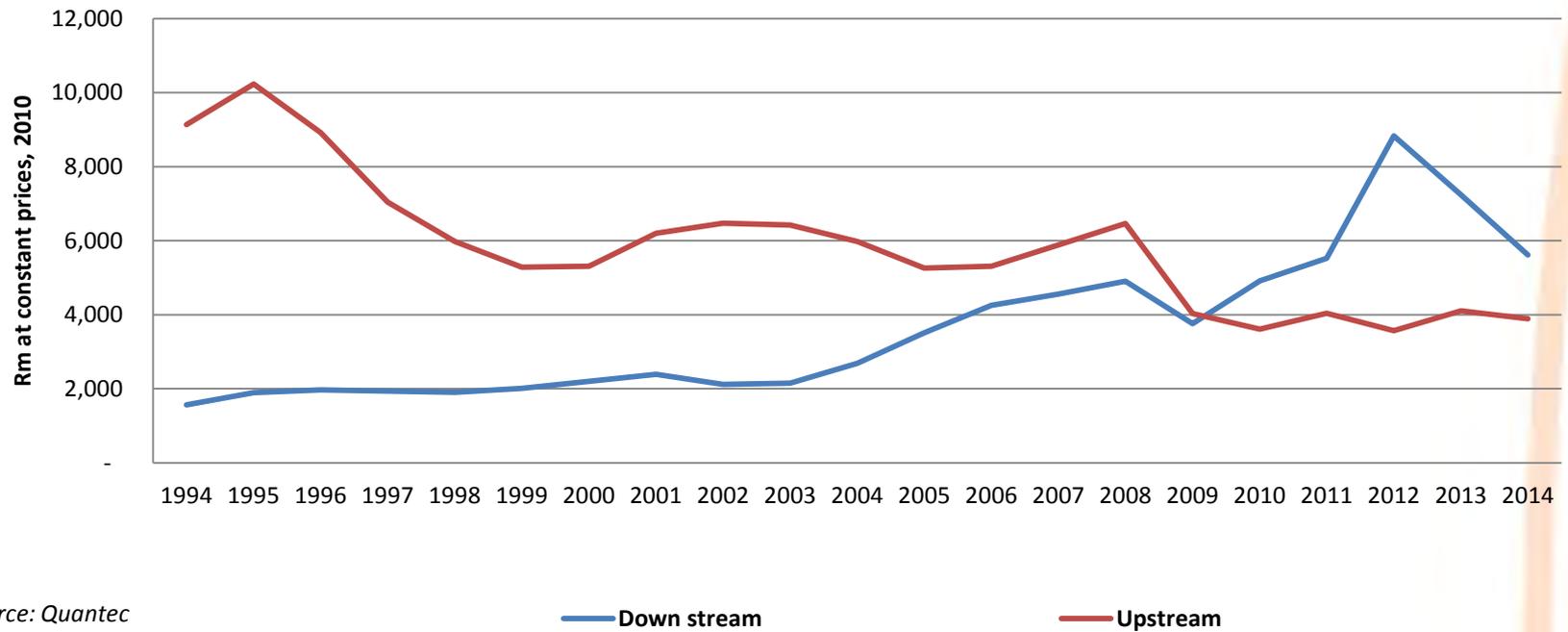


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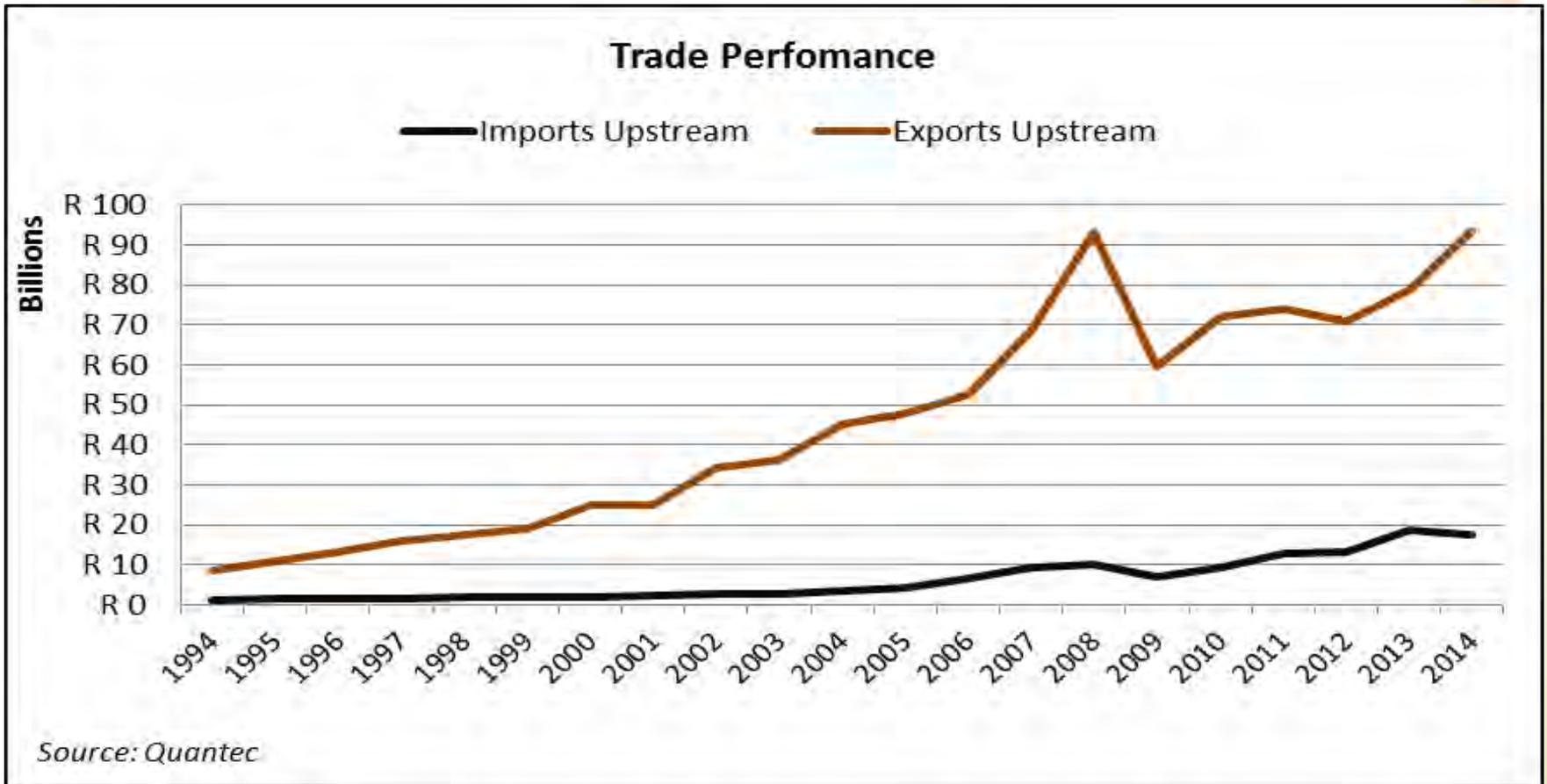
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# PERFORMANCE OF THE SECTOR: GROSS FIXED CAPITAL FORMATION

## Gross Fixed Capital Formation



# PERFORMANCE OF THE SECTOR: TRADE ANALYSIS

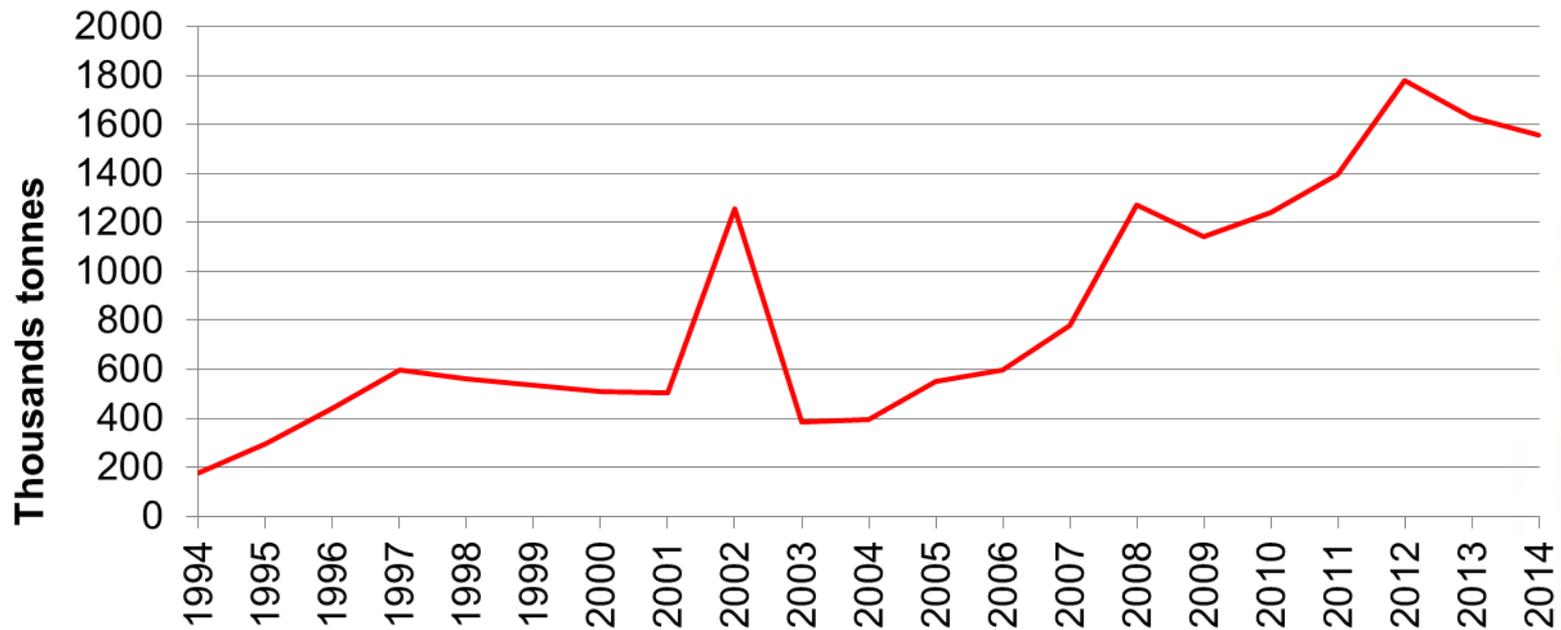


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# PERFORMANCE OF THE SECTOR: EXPORTS OF SCRAP METALS

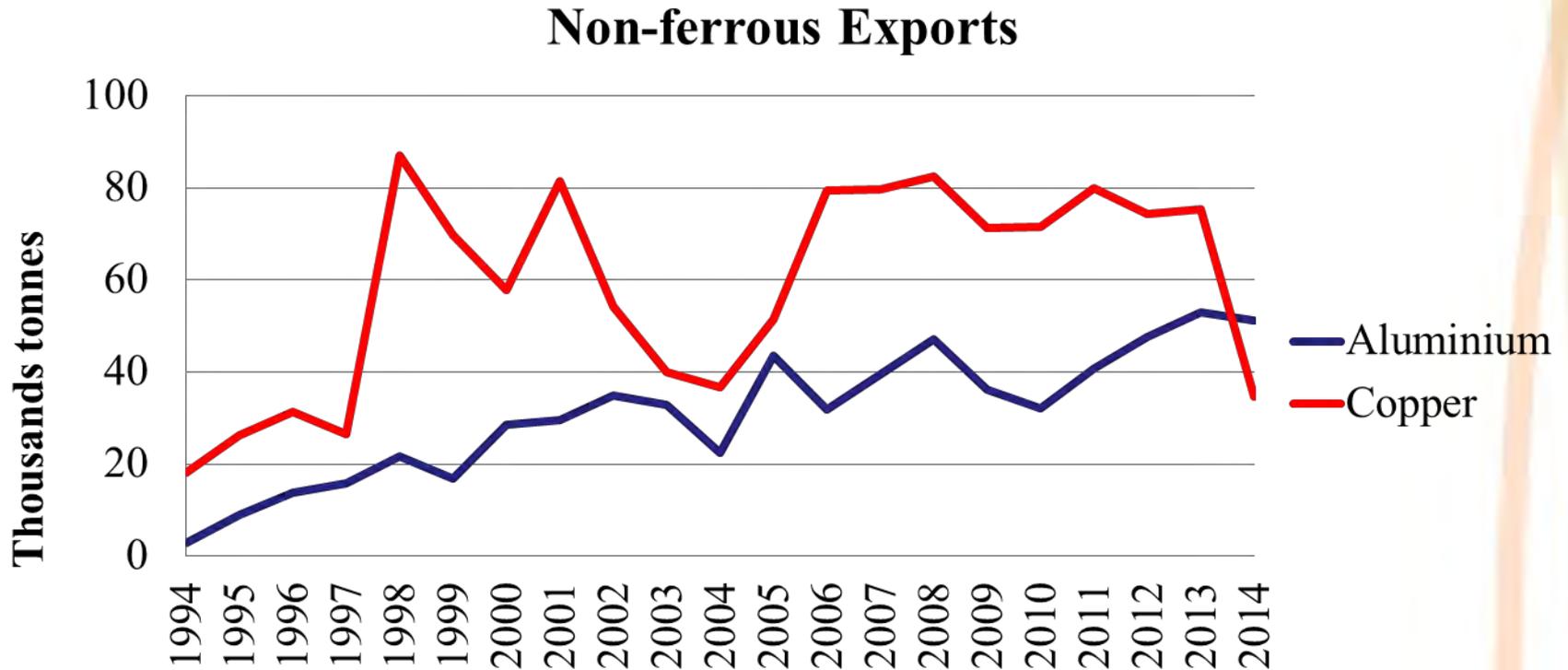
## Ferrous Exports



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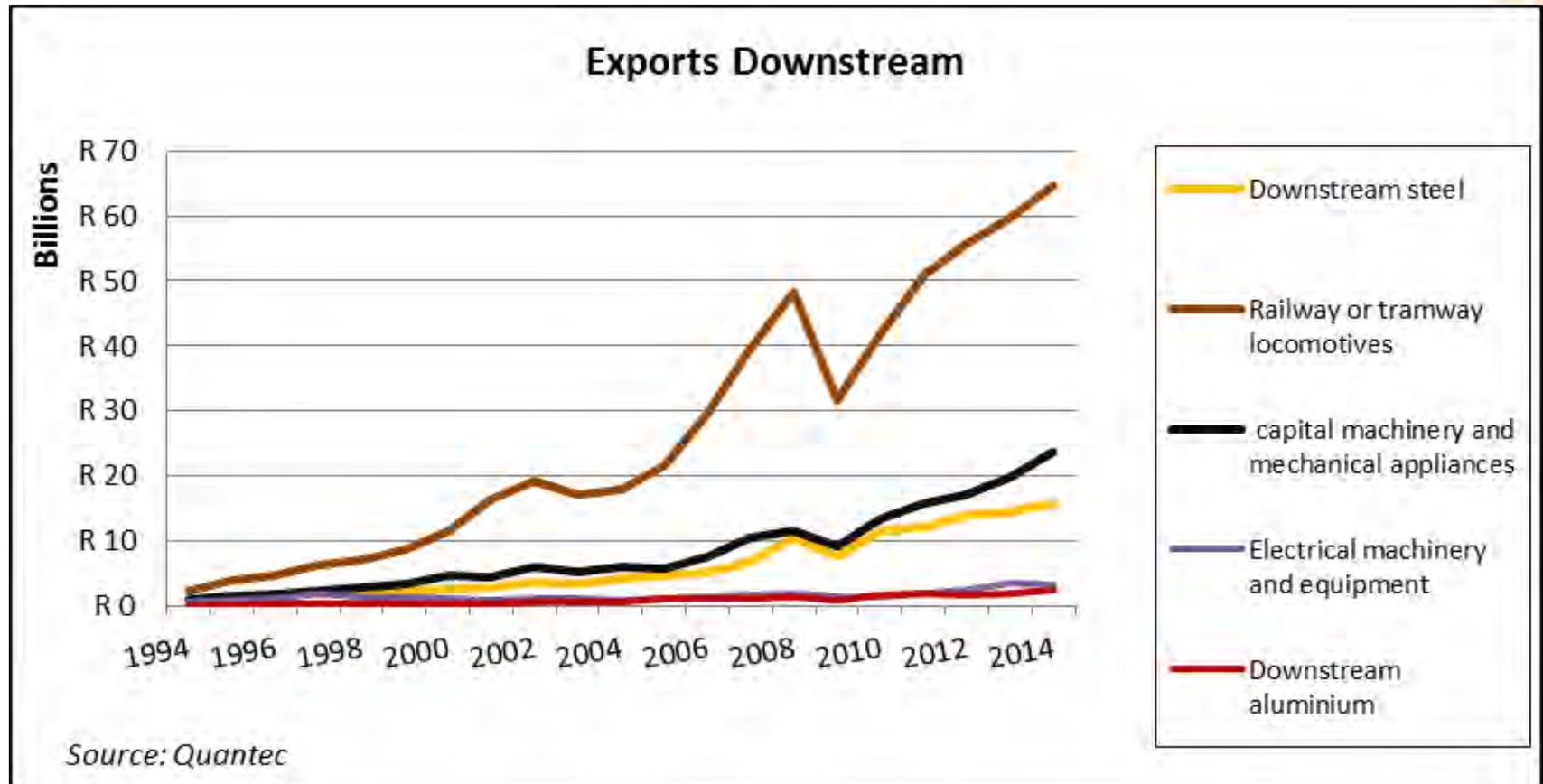
# PERFORMANCE OF THE SECTOR: EXPORTS OF SCRAP METALS



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# PERFORMANCE OF THE SECTOR: TRADE ANALYSIS

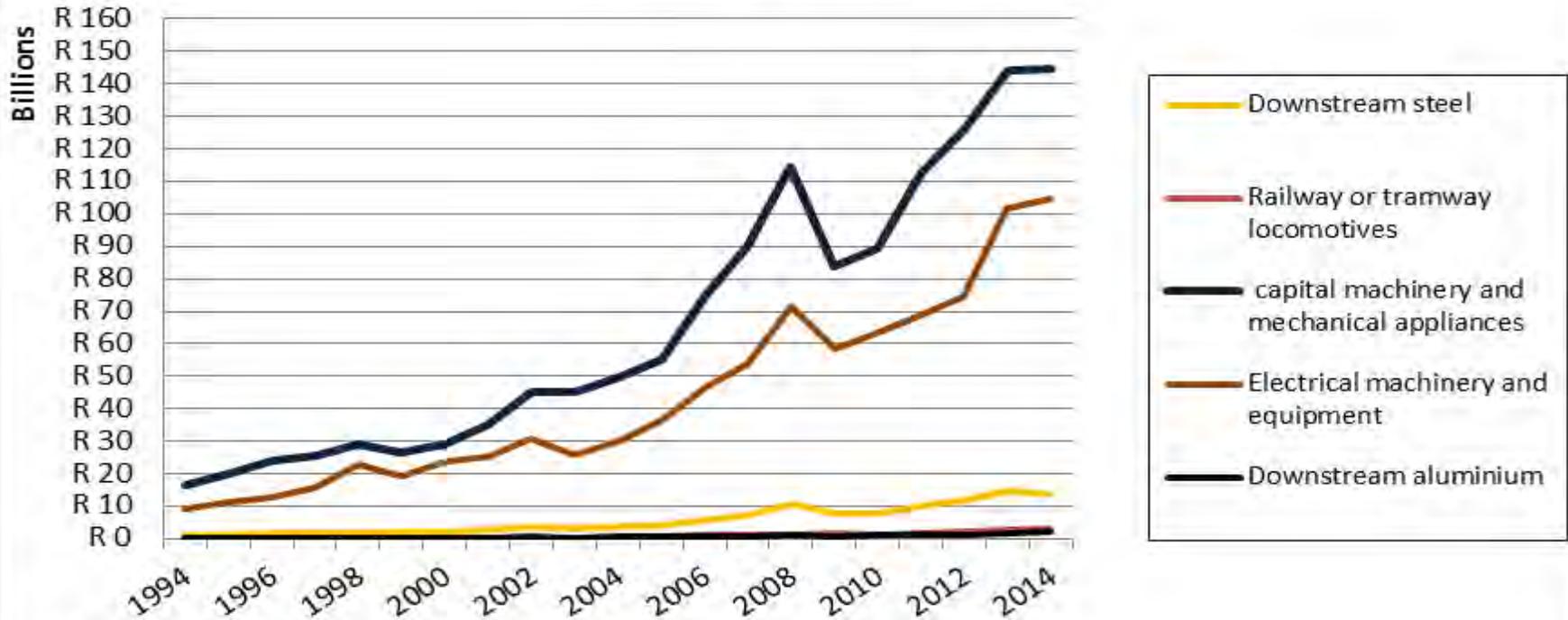


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# PERFORMANCE OF THE SECTOR: TRADE ANALYSIS

## Imports Downstream



Source: Quantec



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# KEY OPPORTUNITIES

- Public infrastructure-built programme, both in the local and the African economy, remains the single largest opportunity to stimulate the industry
- Mining turnkey projects in South Africa, the rest of Africa and South America
- Opportunities to extend value chains through further downstream manufacturing initiatives, turning the lack of maturity in existing South African beneficiation chains into strength
- Taking advantage of the Automotive Production Development Programme (APDP) to create additional opportunities for metal-component manufacturing

# KEY BINDING CONSTRAINTS

- Supply, availability and rising energy (electricity and gas) costs on the melting industries (e.g. steel mills and foundries)
- Availability and costs of key intermediate inputs (particularly steel; aluminium; and scrap metals)
- Availability and reliability of rail and associated high logistics costs
- Global overcapacity and declining global prices industry seriously threatening the viability of the local primary steel industry
- Downward tariff pressures on a number of value-added products which is resulting in a surge of imports, particularly in low-value and high-volume manufactured goods
- Lack of understanding and compliance to the localisation programmes

# KEY PILLARS OF THE SECTOR STRATEGY

- Response to government target of 75% local content across government procurement: Designation and localisation
- Competitiveness enhancement programmes deployed at company-level and dedicated training (under the NFTN and NTI programmes). Tooling and casting remain the critical blocks of manufacturing value add
- Dedicated sector support programme to address costs and access to relevant industrial financing
- Development of a comprehensive industry position papers to consolidate government's objectives and interventions

# INTERVENTIONS MADE TO-DATE: POLICY DEVELOPMENTS

- Localisation programme:
  - Sectors designated: Valves (70%); rolling stock (65%); and power pylons (100%)
  - Designation of spiral conveyance pipes; transformers and revisions of power pylons (to include line hardware; monopoles; etc.) approved by Minister and currently under consideration by National Treasury
- Through a policy directive by EDD, a new price preference system was introduced in Sep 2013 with the objective to first offer the scrap to local processing industries at a discount before export permits can be issued

# INTERVENTIONS MADE TO-DATE: DEDICATED INDUSTRY SUPPORT

- **National Foundry Technology Network: an intervention programme housed at the CSIR to assist the foundry industry to improve its competitiveness**
  - Through a partnership with South African Foundrymen (SAIF), 3 new trades (pattern-making; moulding and melting) have been developed and are in the process of approval by relevant authorities. To-date, more than 500 foundry workers have been trained and completed various modules under the newly Merseta approved foundry NQF 2-4 qualification
  - Firm-level interventions: foundries are being assisted in the following areas: facility lay-out; simulation; product development; pattern and tool design; sand testing; air quality management and scrap reduction programmes
  - More emphasis to be placed on facilitating energy audits/assessments and compliance with environmental regulations



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# INTERVENTIONS MADE TO-DATE: DEDICATED INDUSTRY SUPPORT

## National Tooling Initiative

- Due to the erosion of the apprenticeship programmes, in 2009 a partnership was formed the tooling industry to develop a new qualification and trade test
- In 2013/14, secured 3-year funding from National Skills Fund to assist in the pilot through enrolling additional students at various apprenticeship levels. To-date, 272 students have completed the coursework of the pilot apprenticeship programme, awaiting to be trade tested under the new qualification. These students are currently deployed in industry for ongoing workplace experience
- In 2013 the new apprenticeship qualification was approved by SAQA, and subsequently the trade test approved by NAMB and QCTO in 2015 → marks the importance of the integration of this new qualification into mainstream

# INTERVENTIONS MADE TO-DATE: DEDICATED INDUSTRY SUPPORT

- In Nov 2014, Minister launched the first Tooling Centre of Excellence at SA Nuclear Energy Corporation (Necsa). This is earmarked to run the first trade test
- Going forward, focus will be placed on enterprise development and competitiveness improvement programmes at firm -level



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# INTERVENTIONS MADE TO-DATE: INDUSTRIAL FINANCING

- **12i Tax Incentive Programme:** 13 investors supported with a tax allowance of R2billion, leveraging R8billion private investment and 2000 job creation
- **Manufacturing Competitiveness Enhancement Programme:** 249 firms assisted to the tune of R1.5billion
- **Enterprise Investment Programme:** since inception, R785 million grant support disbursed with 200 firms supported
- Minister Davies launched a R100 million **Gold Loan Scheme** to support the large jewellery manufacturers on 30 September 2014

# KEY HIGHLIGHTS IN THE SECTOR

- Rail Recapitalisation Programme
  - In 2013, PRASA signed a R51 billion contract with the Gibela Consortium for supply of 3600 coaches over 10 years. The contract embeds more than 65% local content to be achieved over the contract lifespan
  - In 2014, Transnet awarded a 1064 locomotive tender to 4 OEMs (General Electric; Bombardier; China South and North Rail) to a collective value of R51 billion. All 4 OEMs have to adhere to the requirements of designation
  - The outward mission to France, in September 2015, resulted in the conclusion of a contract between Transnet and Vincent Industries on the procurement of automated copper winding machines for AC and DC traction motor. This technology will be installed at Transnet Engineering Koedoespoort plant and will improve efficiencies in the rotating business



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# KEY HIGHLIGHTS IN THE SECTOR

- All OEMs signed with PRASA and Transnet are in discussions with the local industry. Some of the key contracts signed to-date include:

<ul style="list-style-type: none"><li>• Transnet Engineering is playing a major role in the assembly</li><li>• Scaw Metals for couplers and cast wheels</li><li>• Swasap for wheel axles</li><li>• DCD rolling stock for the fabrication of the car body</li><li>• Knorr Bremse for supply of braking system</li><li>• Timken for the bearings</li><li>• ABB for traction transformer</li><li>• Howden for motor bowlers</li><li>• Penbro Kelnick for supply of braking resistors</li></ul>	<ul style="list-style-type: none"><li>• Booyco for Heat Ventilation and Airconditioning (HVAC) system</li><li>• Profibre for seats</li><li>• Siyahamba Engineering for the windows and door systems</li><li>• Wabtec for supply of braking system</li><li>• Duys Engineering for fuel and water tank</li><li>• Microelectrica for braking resistors and electronic parts</li><li>• Supply of castings (Pefco, Guestro Foundry, Steloy, IPT, Dhuva Foundry)</li></ul>
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- Significant investments (in new factory space; machinery and equipment) are being implemented to enable the local industry to deliver on these commitments

# KEY HIGHLIGHTS IN THE SECTOR

- At the back of designation a number of local valve manufacturers have received significant orders from state procuring entities. Some of the key procurement orders to-date include:

- RGR Technologies to supply ball valves to Transnet pipelines
- Premier Valves to supply various valves to Rand Water and Eskom Kusile Power station
- Mitech supplied Umgeni Water with Butterfly valves
- Gunric Valves supplied Umgeni and Rand Water with Butterfly valves
- Ainsworth refurbished and supplied valves for Umgeni Water
- Dual Valves supplied valves on numerous occasion to Eskom Duvha Power station
- Ithuba Valves also supplied Umgeni water and Dept. Water Affairs

# KEY HIGHLIGHTS IN THE SECTOR

- US technology multinational General Electric (GE) announced a R700 million commitment designed to support innovation, enterprise- and skills-development in South Africa. R500-million will be invested in the creation of a customer innovation centre and R200-million in a supplier-development vehicle to provide technical, funding and business support to SMEs
- On the back of dti's support of R11 million Grindrod unveiled its cost-effective shunting and short haul locomotive in October 2014. The locomotive boasts 80% local content and is already being exported to a number of African countries with after sales service centres in these countries
- Sale of Hall Longmore – through a partnership with the new owners and the IDC, the transaction retained the only Electric Resistant Welding (ERW) pipe manufacturing capacity in the country and prevented the immediate loss of approximately 200 direct jobs and at least another 400 indirect jobs.

# CONCLUSION: KEY CONSIDERATIONS TO UNLOCK FURTHER GROWTH

- Localisation/Designations – non-compliance, across various tiers of government and Departments
- Significant opportunities exist to improve the local content and supplier development processes within procurement programmes
- Exports of Scrap Metals have not significantly reduced, the permit system is still being circumvented → urgent need an alternative and stringent interventions
- Global conditions calls for support to primary steel industry against conditionalities to ensure viability of both the up and downstream industry
- Escalating energy costs and trade-offs on the viability of the industry
- Port tariffs and rail and ports inefficiencies – re-balancing and improvements
- Industrial finance – further Economic Support Package funds need to be allocated to unlock private-sector investment and catalyse industrialisation