

Moving South Africa's Mining Sector Towards Beneficiation

Presentation for:

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By

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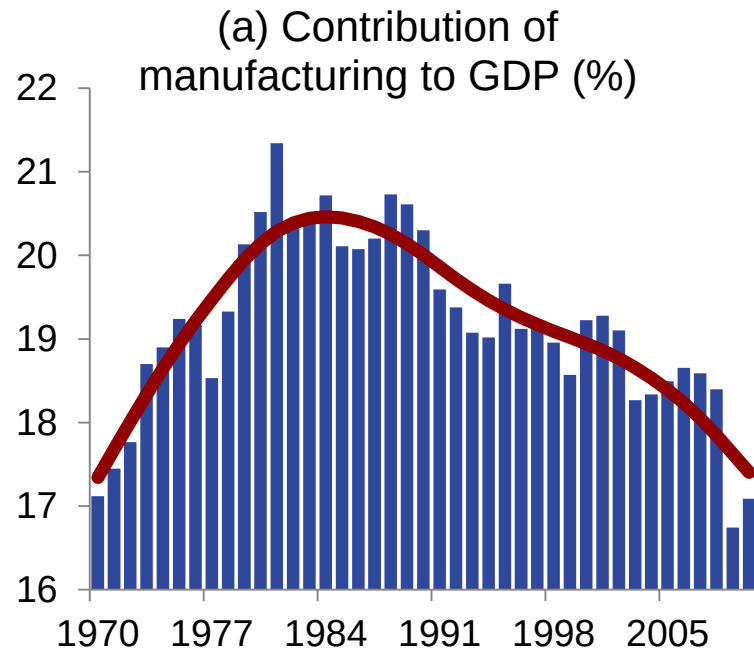
Pan-African Investment & Research Services (Pty) Ltd.

Outline

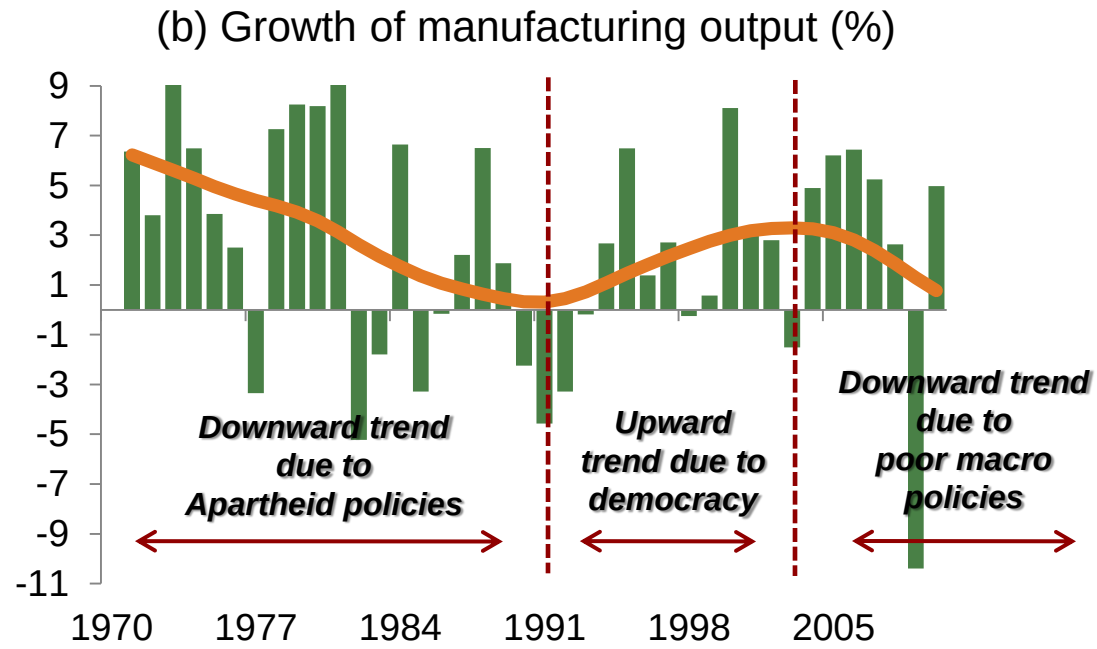
1. Trends in the SA Mineral Beneficiation & manufacturing sector
2. Manufacturing Sectoral multiplier effects
3. Impact of a Sustained Boost in Manufacturing
4. Concluding remarks: Policy Implications

Trends in the South African Mineral Beneficiation and Manufacturing Sector

Increasing manufacturing output but declining manufacturing contribution to GDP



■ Contribution to GDP — Trend

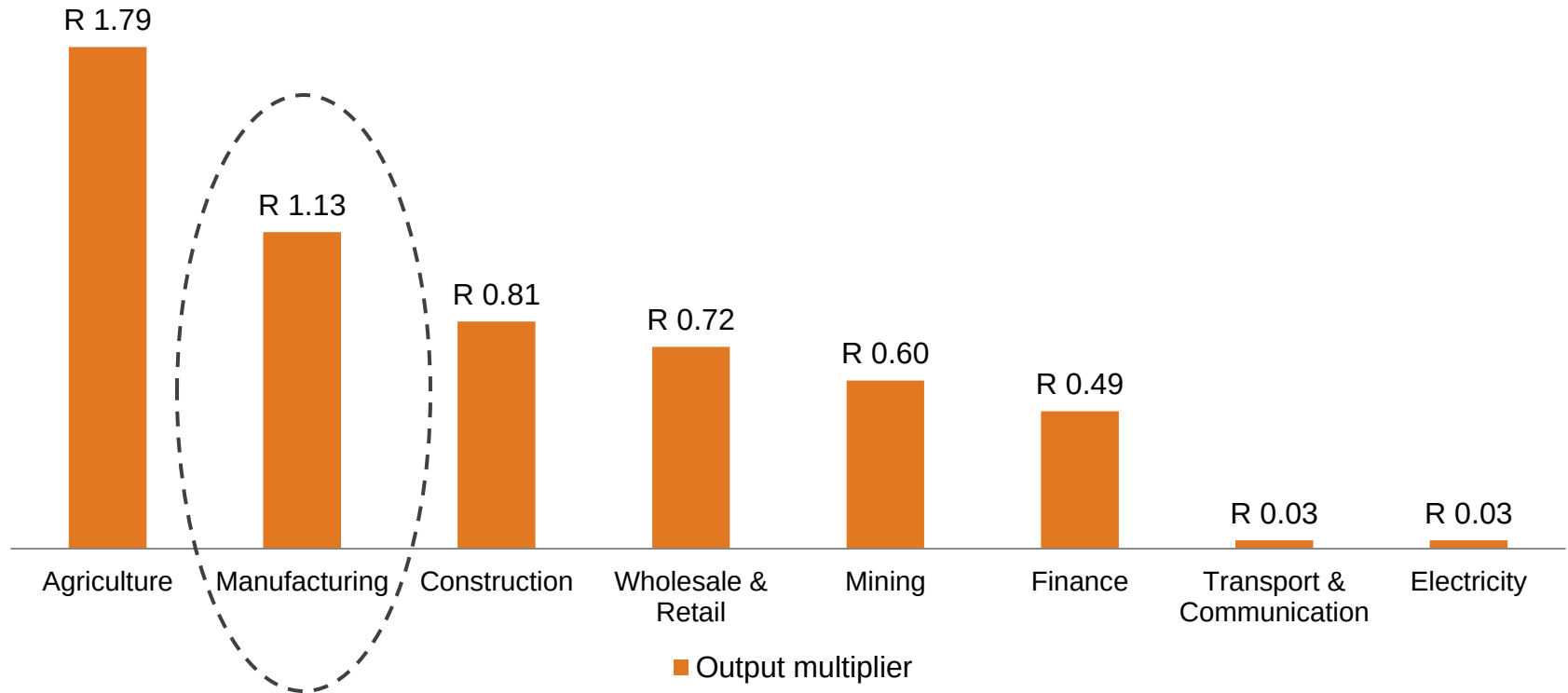


■ Growth of manufacturing output — Trend

Sectoral multiplier effects:

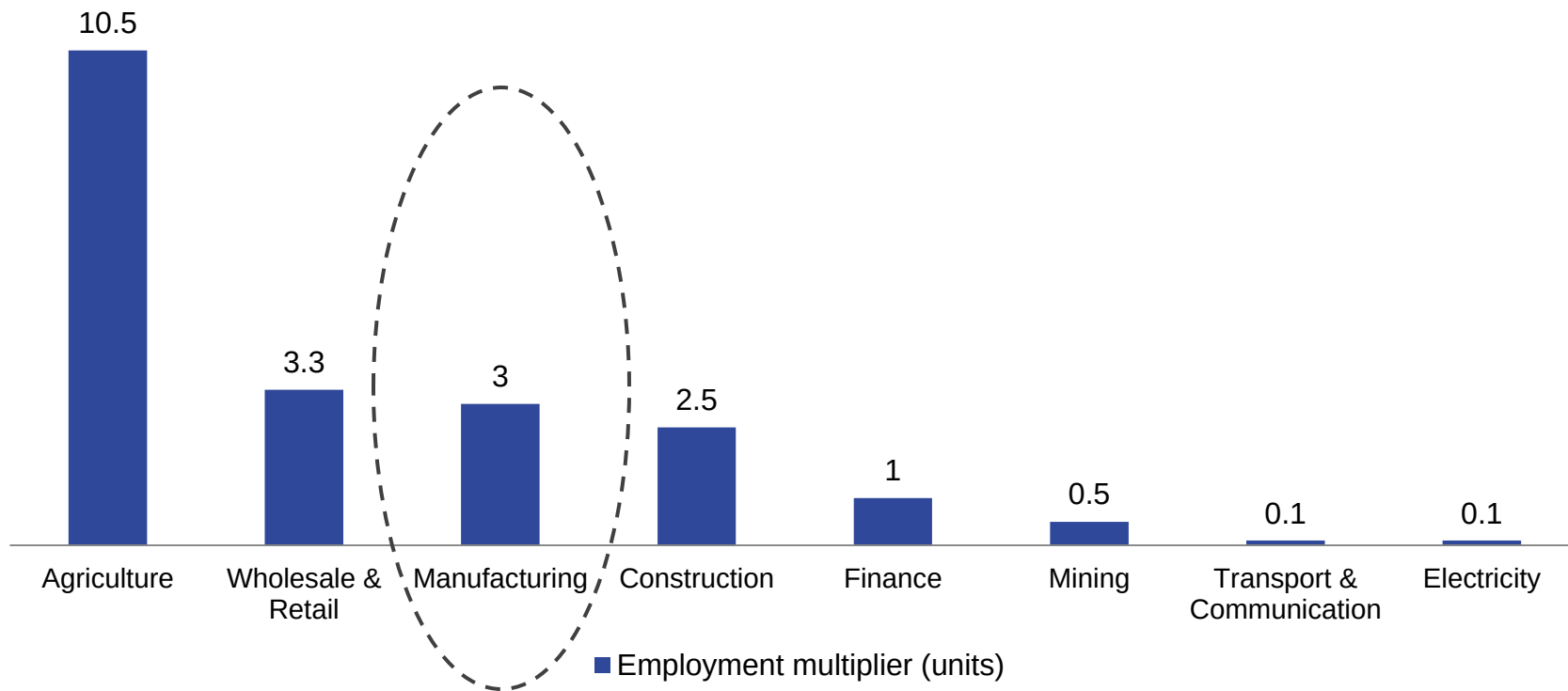
**Manufacturing remains a critical sector in
the South African economy**

A R1 investment in manufacturing results in a R1.13 increase in GDP



Source: PAIRS

A R1 million investment in manufacturing translates into 3 decent and sustainable additional jobs



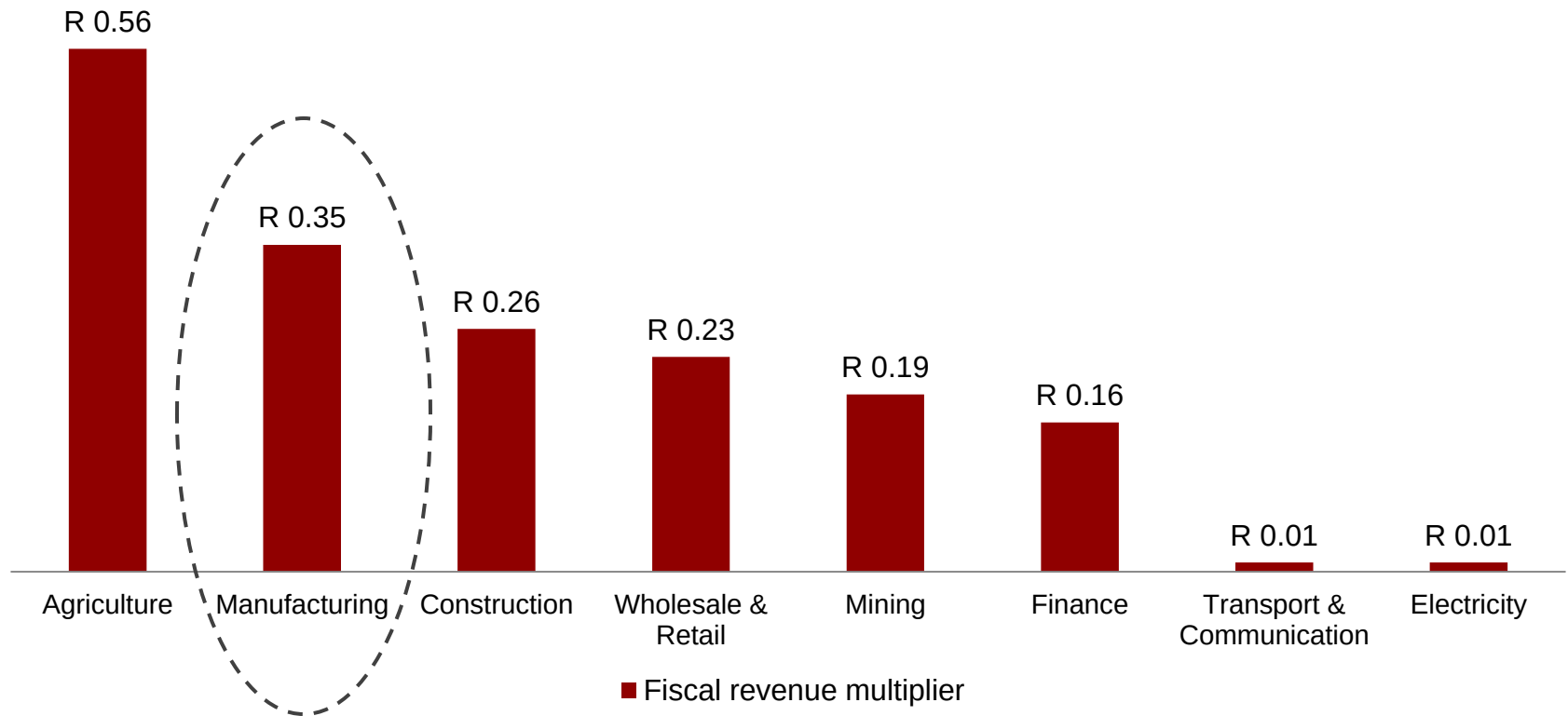
Source: PAIRS

A R1 investment in manufacturing results in a R0.13 increase in exports receipts



Source: PAIRS

A R1 investment in manufacturing results in a R0.35 increase in fiscal revenue



Source: PAIRS

Impact of a sustained boost in manufacturing

An extended boost in manufacturing will significantly impact on sustainable employment and other macroeconomic variables

Pan-African Study: Simulation scenarios



1. **First scenario:**

Manufacturing output grows at 3.4% per annum (average forecast growth rate of manufacturing output between 2010 and 2020)

2. **Second scenario:**

Manufacturing output grows at 10% per annum (average estimate of the minimum sustainable pro-poor GDP growth that will restore the momentum of the sector, given that the highest growth recorded between 1970-2010 was 9.3% in 1981)

10-year cumulative effects of the economy-wide impact of an increase in manufacturing output

	3.4% growth over 10 years (baseline scenario)	10% growth over 10 years (sustainable scenario)	Change from baseline to sustainable scenario
Output	R184 billion	R537 billion	191.85%
Employment	158,000	454,000	187.34%
Investment	R116 billion	R339 billion	192.24%
Household consumption	R136 billion	R398 billion	192.65%
Real wages	R61 billion	R177 billion	190.16%
Fiscal revenue	R62 billion	R182 billion	193.55%
Exports	R52 billion	R151 billion	190.38%
Imports	R102 billion	R297 billion	191.18%
Exchange rate (R/\$)	-1.43%	-4.08%	185.31%
Consumer inflation	-0.58%	-1.66%	186.21%

Source: PAIRS

Impact on sectoral output (R billion)

	3.4% growth over 10 years (baseline scenario)	10% growth over 10 years (sustainable scenario)	Change from baseline to sustainable scenario
Manufacturing	94.5 (Shock amount)	277.8 (Shock amount)	193.97%
Mining	8.5	25.0	194.12%
Agriculture	2.7	8.0	196.30%
Wholesale & retail trade	14.4	42.0	191.67%
Finance	11.0	31.3	184.55%
Construction	1.3	3.7	184.62%
Transport & Communication	14	41.0	192.86%
Electricity	5.5	16.2	194.55%

Source: PAIRS

Employment effects (no. of jobs)

	3.4% growth over 10 years (baseline scenario)	10% growth over 10 years (sustainable scenario)	Change from baseline to sustainable scenario
Manufacturing	61,000	173,000	183.61%
Mining	8,700	25,300	190.80%
Agriculture	2,500	7,100	184.00%
Wholesale & retail trade	39,800	112,400	182.41%
Finance	16,600	47,500	186.14%
Construction	4,300	12,500	190.70%
Transport & Communication	2,800	8,200	192.86%
Electricity	7,400	21,800	194.59%

Source: PAIRS

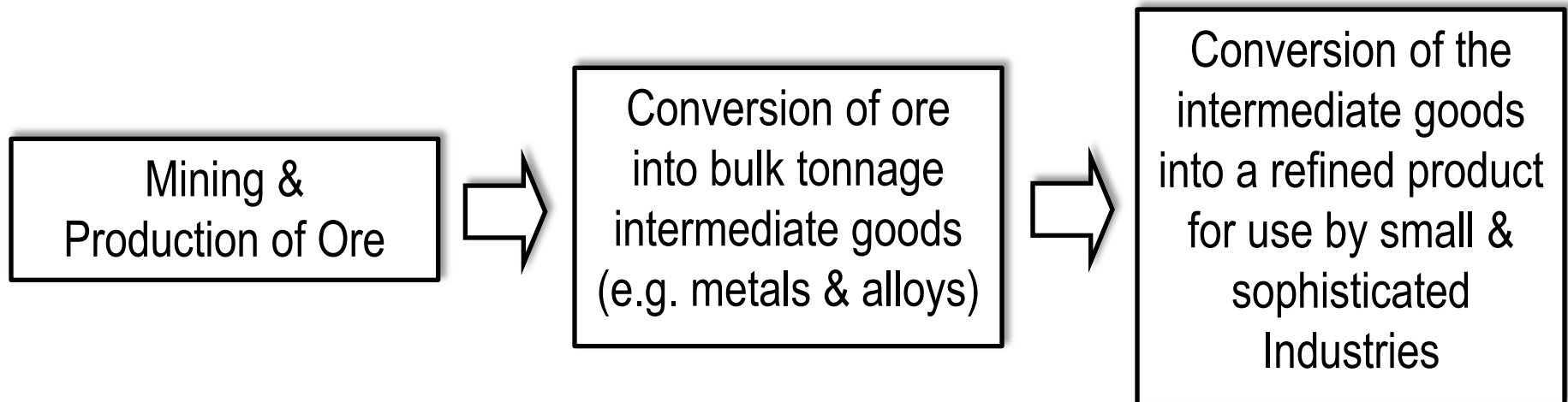
Real wages effects (R billion)

	3.4% growth over 10 years (baseline scenario)	10% growth over 10 years (sustainable scenario)	Change from baseline to sustainable scenario
Manufacturing	39.3	114.6	191.60%
Mining	1.2	3.5	191.67%
Agriculture	1.0	2.8	180.00%
Wholesale & retail trade	6.3	18.3	190.48%
Finance	5.2	15.0	188.46%
Construction	0.55	1.6	190.91%
Transport & Communication	2.9	8.6	196.55%
Electricity	1.3	3.8	192.31%

Source: PAIRS

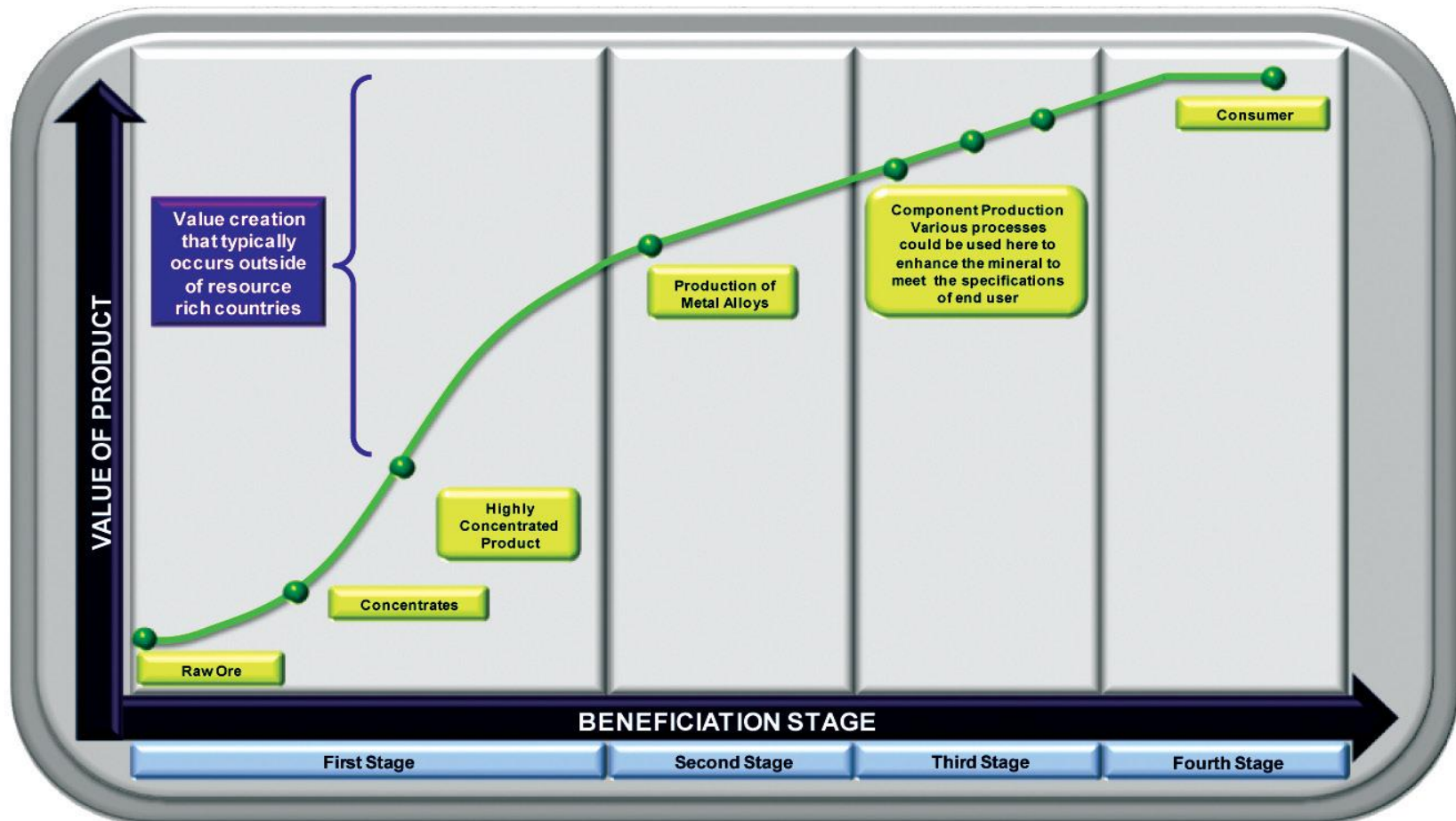
Manufacturing Expansion Needs Mineral Beneficiation

Mineral Beneficiation – A Narrow/Mining Perspective

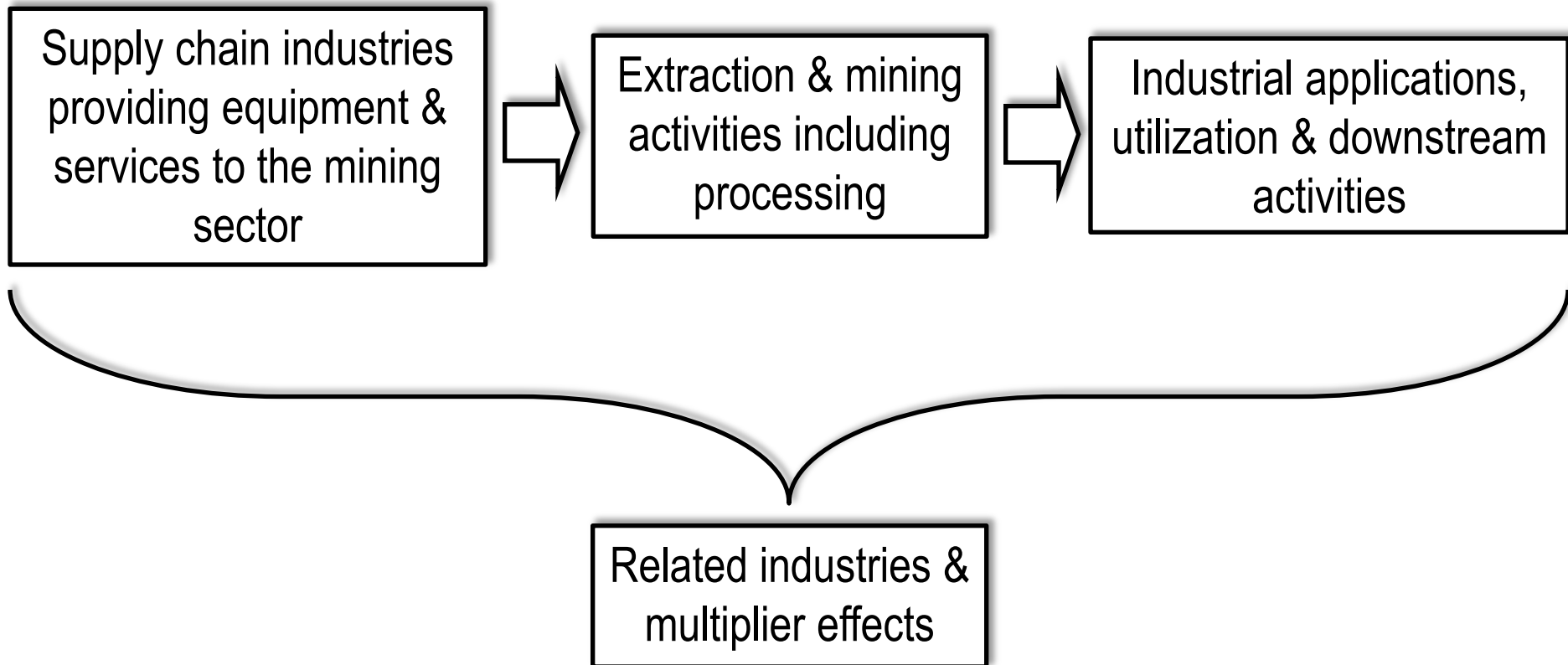


Source: PAIRS

Beneficiation Stages – A Narrow/Mining Perspective

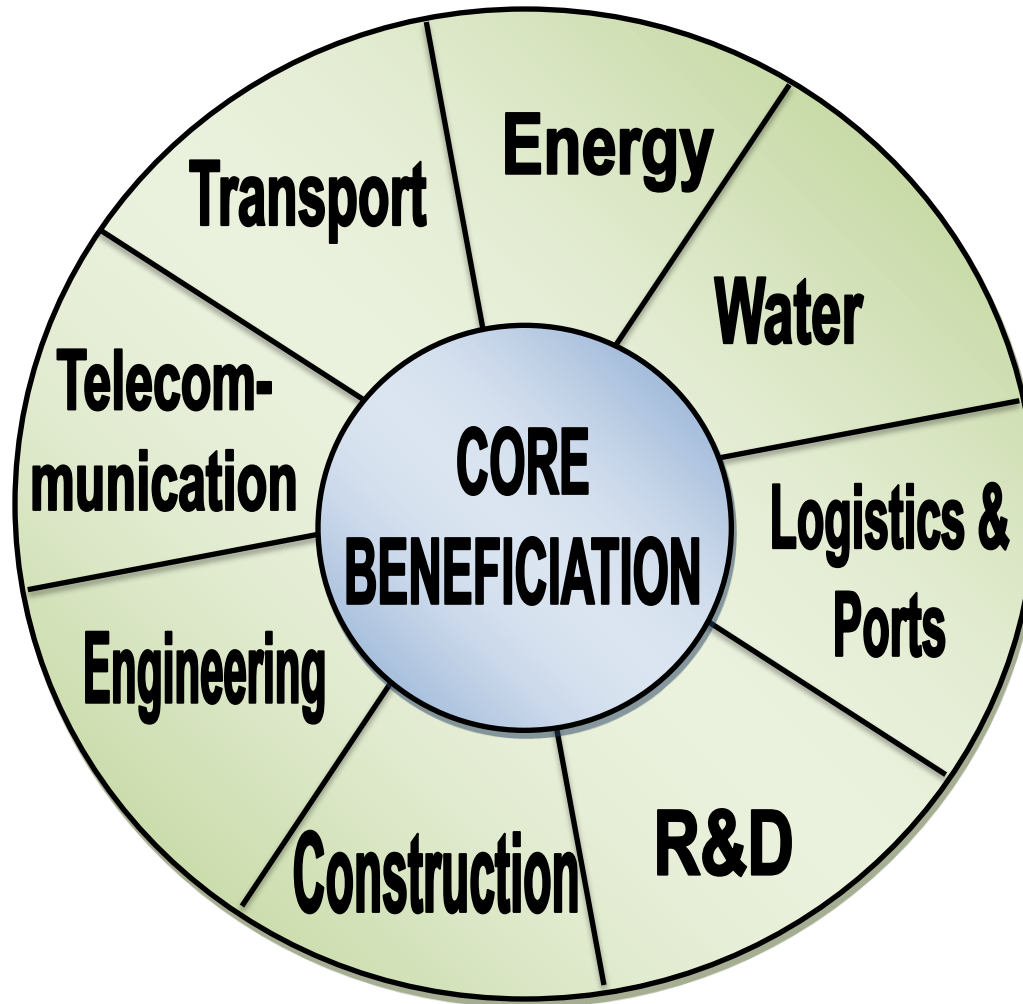


Beneficiation Value Chain – An Economic Integrated Perspective



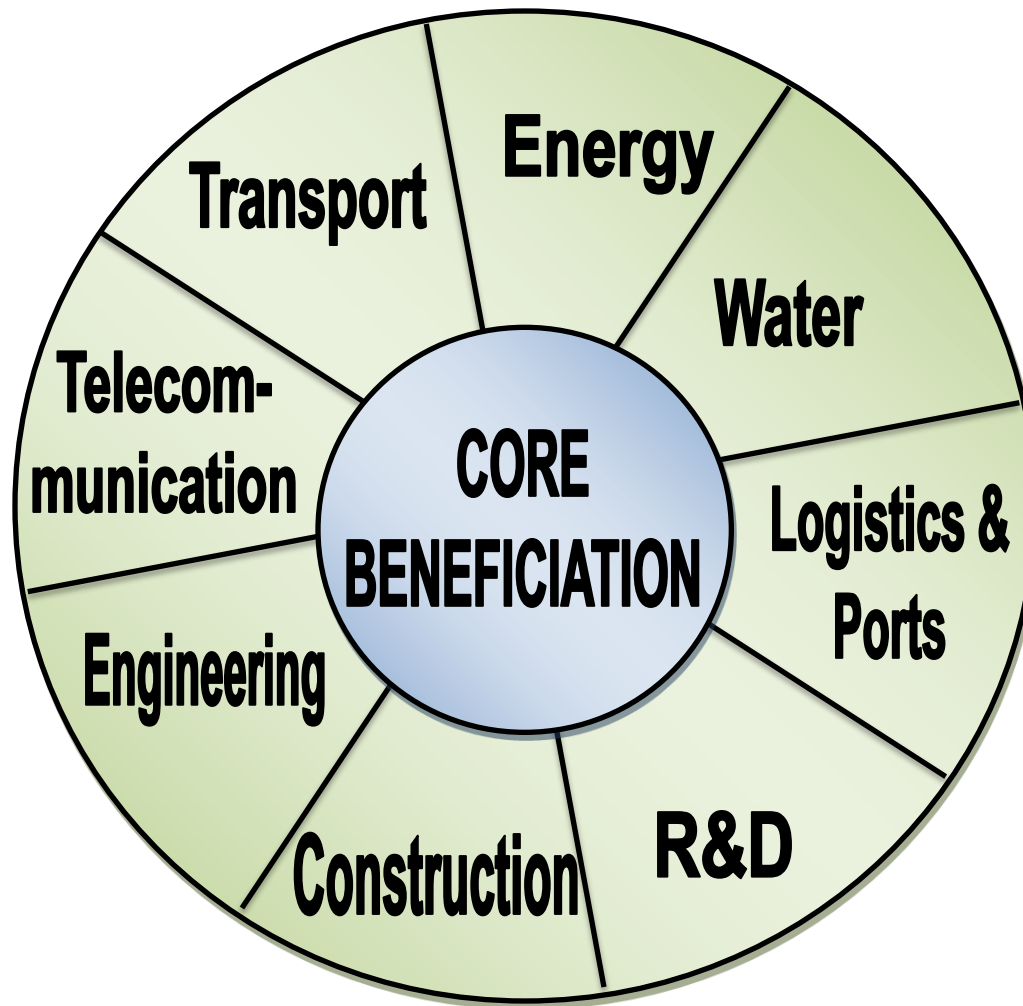
Source: PAIRS

Core vs. Integrated Mineral Beneficiation



Source: PAIRS

Core vs. Integrated Mineral Beneficiation



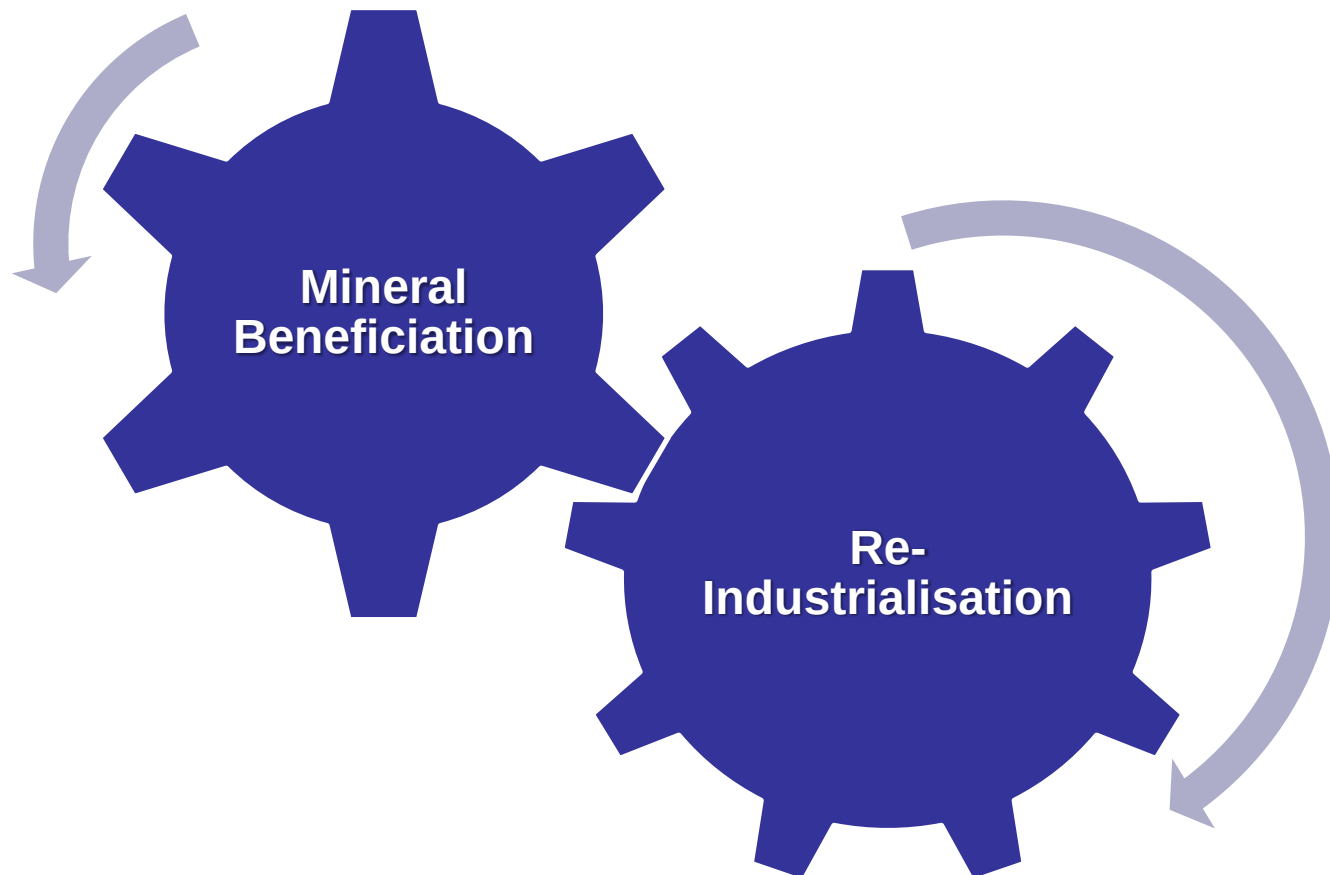
Note:

An integrated mineral beneficiation is the necessary platform for human resource and skills development.

Source: PAIRS

A Significant Business Reality:

Mineral Beneficiation & Re-industrialisation are Inseparable....



Policy Implications (I)

1. Mineral beneficiation and re-industrialization of SA economy are inseparable.
2. SA has the potential to re-industrialize at a scale larger than the 1950s and 1960s!
3. Successful re-industrialization and mineral beneficiation require inspired and sustained leadership of both business and government.
4. Left to the market forces, SA's mineral beneficiation and re-industrialization are unlikely to materialize.

Policy Implications (II)

4. SA is set to achieve sustainable growth of 10% in its mineral beneficiation and manufacturing output with significant impacts on employment, real wages and other macroeconomic variables. This requires:
 - a) An urgent removal of much procrastinated infrastructural bottlenecks in energy, water and other regulatory fields.
 - b) An appropriate framework for financing of the required infrastructure.
 - c) A “Multi-stakeholder Implementation Coordination Forum” to ensure binding roadmap for synchronized action plan.
5. The re-industrialization of SA requires a close integration of mineral beneficiation and manufacturing expansion.

Thank you for your attention



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