



SOLAR and WIND POWER: LOCALISATION AND INDUSTRY DEVELOPMENT STRATEGY

Sunpower – 15 September 2011

Green Industries, Department of Trade and Industry



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Content

- Manufacturing Outlook in South Africa
- Carbon and energy security context
- Localisation targets
- Customised Sector Programme for Solar and Wind





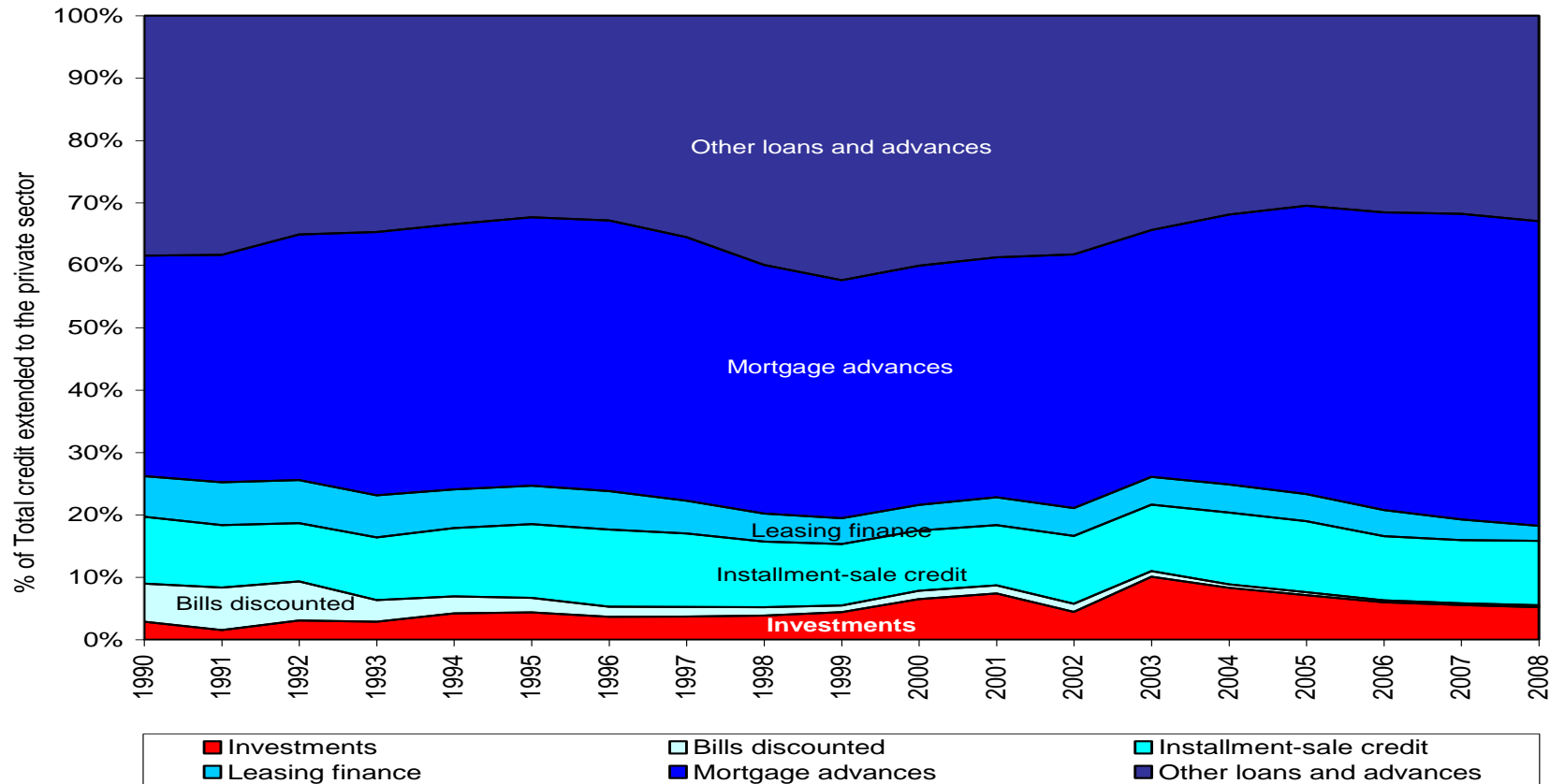
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Credit Extension versus Investment

Despite massive private credit extension only a small proportion is being channelled towards fixed investment ...

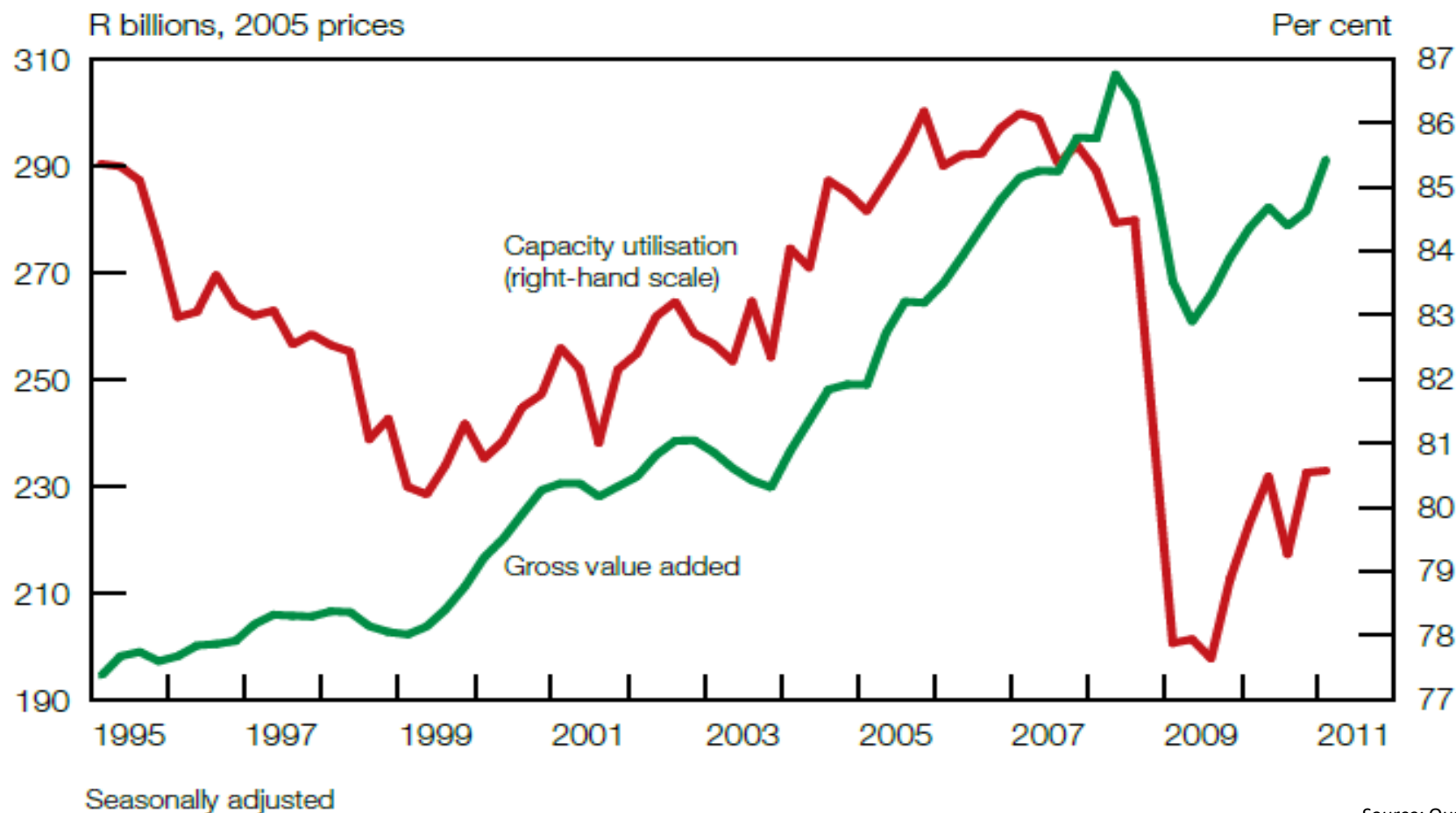
Private sector credit extension by all monetary institutions, 1990 – 2008 (%)



Manufacturing since 2008 crisis

Manufacturing value-added and capacity utilisation remain below pre-2008 crisis levels

Manufacturing: Real gross value added and capacity utilisation





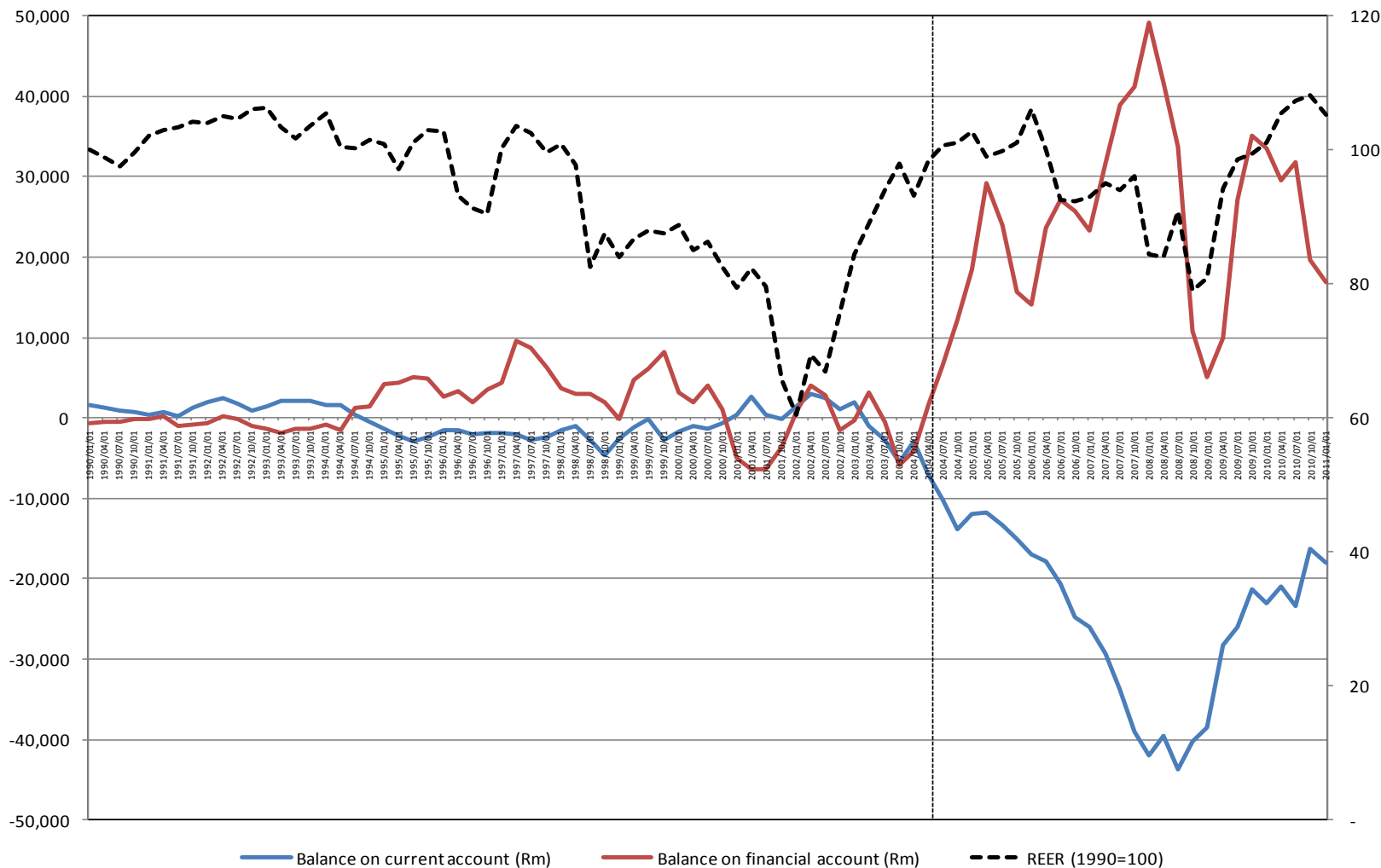
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Currency

Persistent currency overvaluation, which worsened since 2008 crisis

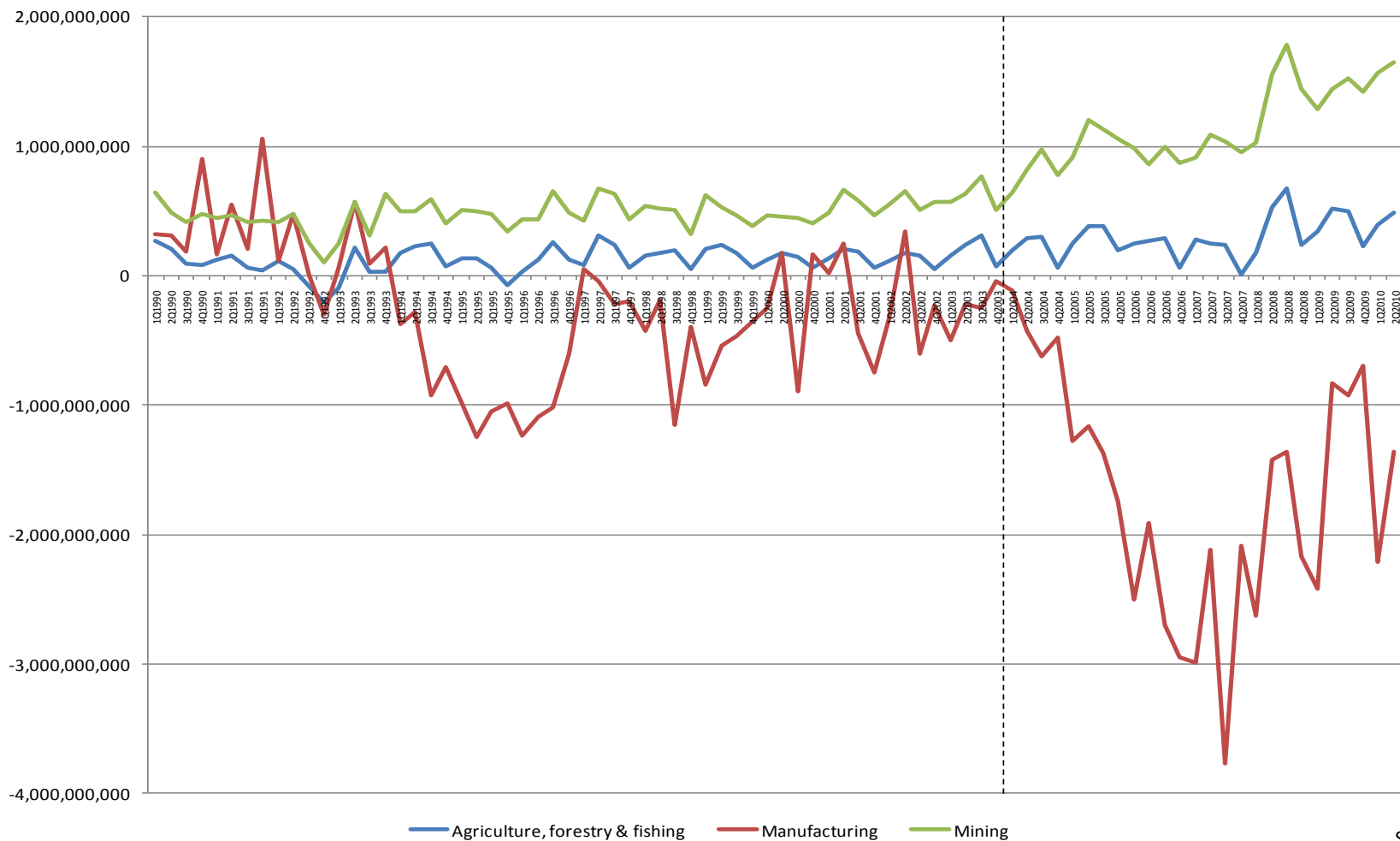
Current and financial account balances and REER, Q11990 – Q12011



Trade Balance

Manufacturing: double-whammy of currency overvaluation and crisis

Manufacturing, Mining and Agriculture Trade Balance Q11990 – Q12011, US\$m





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Manufacturing since 2008 crisis

Manufacturing employment remains well below 2008 levels

Manufacturing employment





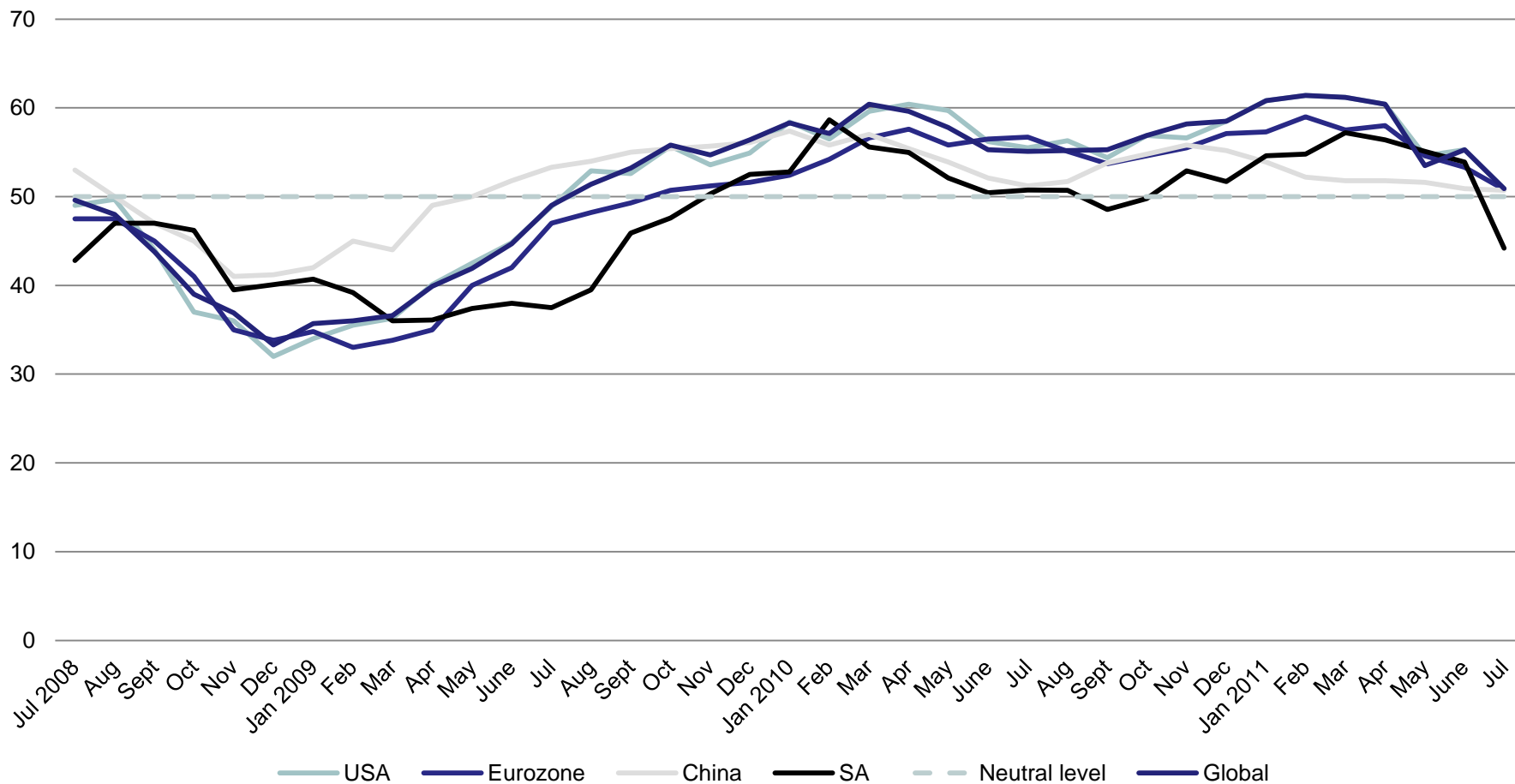
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Manufacturing outlook

PMI data points to disproportionate negative impact on SA manufacturing

PMI: Jul 2008 to Jul 2011



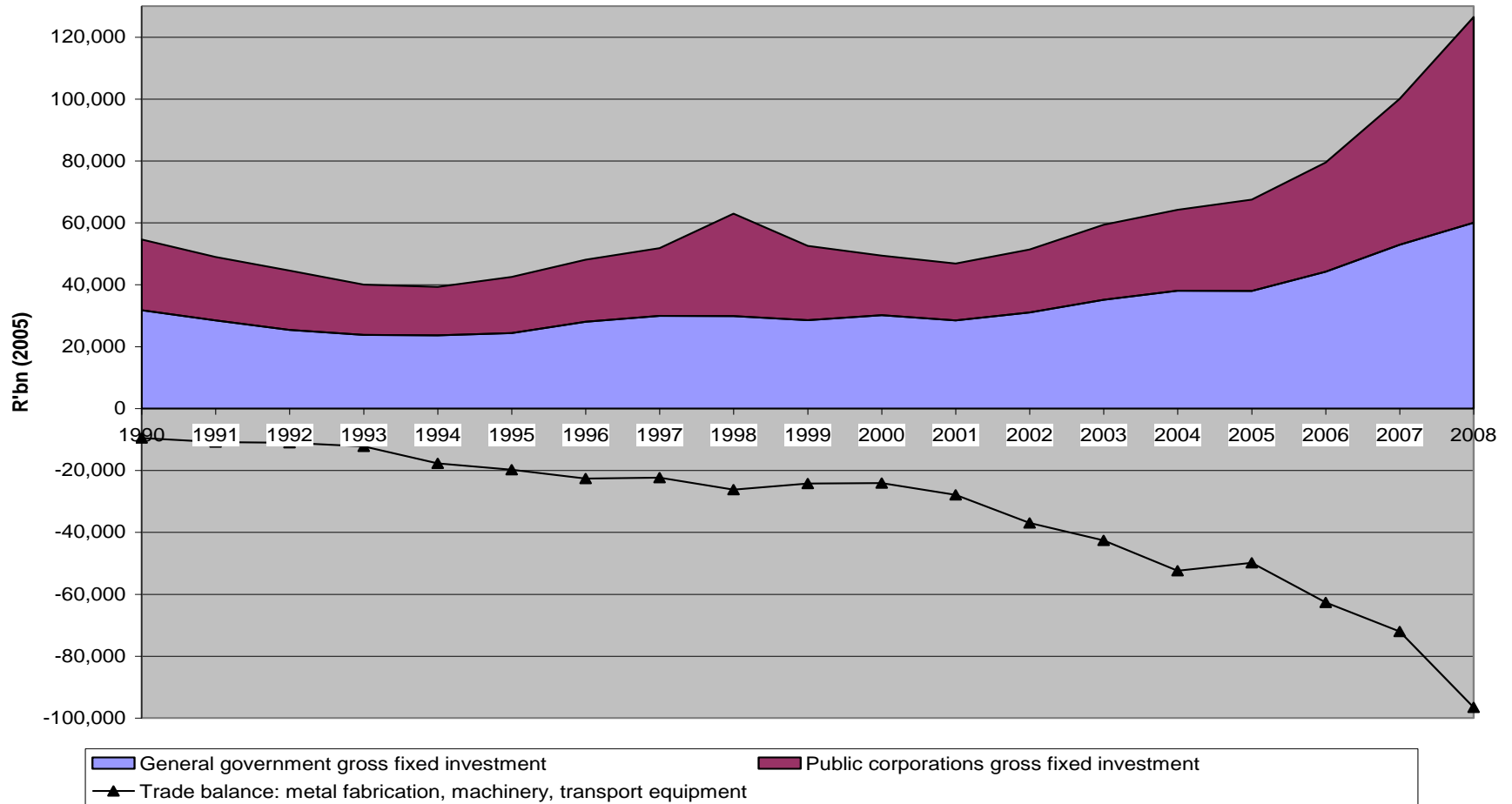


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Failure to leverage public capital expenditure

Public investment and trade balance in metal products and machinery, 1990 - 2008





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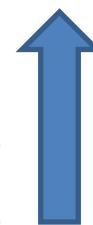
Carbon and Energy Security Context

- Urgent need for new electricity generation capacity
- Medium-term need for decoupling growth from carbon
- IRP targets building 17.8GW by 2030 consisting of
 - > Wind 8 400MW -
 - > PV 8 400MW
 - > CSP 1 000MW



Localisation under the IPP Procurement Programme

- RFP announced 31 July 2011
 - Wind: 1 850MW
 - PV: 1 450MW
 - CSP: 200MW
- Local content requirements (NERSA):
 - Solar without storage (CSP and PV) 35%
 - All other technologies 25%
 - Based on share of costs at commissioning (excl. finance and land costs) minus cost of imported components



What is required to grow a competitive solar and wind Industry ?

Customised Sector Programme (CSP)

A project-based methodology being employed by the Department to seek high impact and enduring key action programmes that will materially lift the current employment, equity and growth trajectory.

- Ensures a common understanding of key strategic challenges facing the sectors,
- Provides a strategic direction
- Sharpens our focus on where we can make the greatest difference moving forward,
- Provides clear priorities for the next five years and describes how we will deliver on these commitments and measure our success





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Customised Sector Programme for Solar and Wind

- Draft for Public Comment – October 2011
- Local Content Requirements
- Support Measures
 - Manufacturing Incentives
 - Renewable Energy Finance
 - Protective duties
 - Standards
 - Technology support programmes
 - Investment support – Tisa
 - Tax allowances
 - Steel Procurement
 - Export credit assistance
 - Skills development
 - Solar Park
 - Etc





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Example - Wind Localisation Potential

Scenario	Assumptions	% value	Local spend/MW
1. Low-industrial Content	Grid connection, civil works, other capital costs, fully imported wind turbines	29	R4.64million
2. Medium-low industrial content	Grid connection, civil works, other capital costs, tower locally made, rest of turbine imported	47	R7.52million
3. Medium-high industrial content	Grid connection, civil work, other capital costs, tower, blades, generator and nacelle made locally, rest imported	66	R10.6million
4. High industrial Content	Grid connection, civil works, other capital costs, most of turbine made locally, except for specialised items such as gearbox, rotor bearings	87	R13,9million





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Concluding remarks

- ✓ Solar and wind power present a significant opportunity for hundreds of billions of rand of private sector investment aligned with the New Growth Path
- ✓ Co-benefits: energy security, job creation and industrial opportunity
- ✓ Domestic demand for solar and wind is driven by policy instruments (IRP and RE IPP Procurement Programme) and supported by finance (SARi) and technical and physical infrastructure (e.g. standards, Solar Parks).
- ✓ Development of local industry is driven by **local content requirements and manufacturing incentives**
- ✓ Many policies already in place. Additional policy development to focus on **small-scale applications**, including distributed generation; and achieving **technology objectives** with public research and demonstration to support local products





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Thank you

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