Industrialisation and Industrial Policy

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The importance of manufacturing

- Physical transformation of raw materials into value-added products
- Knowledge and learning
- Linkages
  - Backward linkages
    - Inputs from upstream sectors like agriculture and mining
  - Forward linkages
    - New industries / diversification
    - Demand for associated services
- Direct and indirect employment creation effect
- Export earnings and balance of payments
Case Study: the Steel Value Chain

Iron Ore
$180 per ton
0.2 Jobs per 1000 tons per year

Hot Rolled Coil
$585 per ton
0.8 Jobs per 1000 tons per year

Structural Steel
$3000 per ton
30 Jobs per 1000 tons per year

Capital Equipment / “Yellow Metals”
$13700 per ton
150 Jobs per 1000 tons per year
The importance of manufacturing

Growth rates by sector: countries post WWII experiencing high and sustained growth

Source: Growth Commission
The importance of manufacturing

- Virtually no countries have attained rapid and sustained growth and high income levels without industrialisation
- Growth Commission
  - Brazil, China, Indonesia, Japan, the Republic of Korea, Malaysia, Singapore, Taiwan, China and Thailand
- Other success stories
  - India, Argentina, Chile, Mexico, Turkey
- No country has successfully industrialised without industrial policy
The need for industrial policy

- Developing countries do not automatically converge with advanced countries
- Path dependence
  - More of the same
  - Locked into low value activities
  - Highest profit versus high value-adding activities
- Structural change
  - Coordination
  - Price and non-price mechanisms
  - Financing / supporting industrial learning
Key elements of industrial policy

- Tariffs
- Subsidies
- Concessional Finance
- Procurement
- ...

- Policy
- Infrastructure
- Skills
- ...

- Minimum requirements
- Targets

- Domestic rivalry
- Export markets

SUPPORT
COORDINATION
ADAPTATION
CONDITIONALITIES
COMPETITION
Case Study: Ethiopia

• **Industrial Development Strategy (IDS) 2003**
  • Agriculture demand-led industrialisation (ADSI)
  • Support growth of agricultural sector ("industrial policy for agriculture")
  • Value-addition
  • Export-led
  • Labour-intensive
  • Public-private

Source: Gebreeyesus, 2013
Case Study: Ethiopia

Textiles and Leather
• Ambitious target of US$500million exports each by 2010

• **Textiles**
  • Required $US1.6bn investment
  • Self-sufficiency in fabrics
  • Direct state investment and joint ventures in textiles

• **Leather**
  • Upgrade tanneries and finished products
  • Discourage hide and skin exports: 150% export tax

• Support for training and world-class manufacturing

Source: Gebreeyesus, 2013
Case Study: Ethiopia

Textiles and Leather

• **Performance**
  • By 2010 textile exports were only 8% and leather products 3.7% of target…
  • … but textile exports were four times their 2003 base

• **Lessons / constraints to be addressed**
  • Poor logistics $\rightarrow$ investment in infrastructure
  • Weak fabric production base $\rightarrow$ invest in fabrics
  • Quality of leather $\rightarrow$ modernize tanneries

Source: Gebreeyesus, 2013
Cut Flowers

- Government recognises potential, adds cut flowers to industrial policy
- Target 1,000ha flower production in five years
- Provision of:
  - Land
  - Long-term credit
  - Air transport

- Performance
  - By 2008: 81 farms, 1,200 ha under cultivation
  - 50,000 jobs
  - Fourth largest export sector
  - 5th largest exporter to the EU
Case Study: Ethiopia

Fig. 4: Ethiopia; exports of selected products 1997-2011

Source: Gebreeyesus, 2013
South African Industrial Policy context

Industrial Policy

Industrial Finance

Trade Policy

Investment / Export Promotion

Procurement

Black Industrialists Intellectual Property
Policy integration

• **Macro policy**
  • Interest rate
  • Exchange rate
  • Savings and investment
  • Finance
    • Short vs long term,
    • Consumption vs investment
    • Financial instruments vs “bricks and mortar”

• **Infrastructure**
  • Electricity
  • Rail
  • Ports
  • Enablers of new industries
Policy integration

• Competition policy
  • Intermediate inputs
  • Purchases by poor / working class households

• Education and skills
  • Vocational training
  • SET skills

• Innovation / Technology
  • Support for primary and industrial research
  • Commercialisation
  • Process and product improvements
Industrial policy instruments

• Industrial finance
  • “On-budget” e.g. DTI investment incentives
  • Development Finance Institutions (DFI’s) e.g. IDC
  • Export credit and insurance

• Procurement
  • Designation of sectors / products for public procurement
  • Minimum levels of local content
Industrial policy instruments

• **Trade policy**
  • Tariffs
  • Anti-dumping and countervailing duties
  • Technical infrastructure / standards

• **Regional integration**
  • Regional trade agreements
  • Regional infrastructure
  • Regional value chains
Industrial policy instruments

• **Investment / Export Promotion**
  - Foreign direct investment promotion
  - Export promotion

• **BEE / Black Industrialists**
  - Finance
  - Skills

• **Intellectual Property**
  - Commercialisation of SA intellectual property
  - Production opportunities e.g. pharmaceuticals