Beyond Industrial Policy: Emerging Issues and New Trends

Ken Warwick

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• The revival of industrial policy
• What do we mean by Industrial Policy?
• The evolving rationale
• The instruments of industrial policy
• Typology by policy orientation
• New industrial policy in practice
• Industrial strategy in the UK
• Conclusions
Renewed interest in industrial policy worldwide
Examples of industrial policy initiatives

- Brazil – *Plano Brasil Major*
- China - *Plan for National Strategic Emerging Industries*
- India – *National Manufacturing Policy*
- Japan – *Industrial Structure Vision*
- Netherlands – *Top Sectors*
- UK – *Plan for Growth and Industrial Strategy*
- US – *American Recovery and Reinvestment Act*
Why the resurgence of interest?

- Search for measures to stimulate growth and employment in response to the crisis
- Concerns over structural imbalances
- Prevalence of market failure
- Political economy of bail-out finance
- Challenge of emerging market economies
Share of global manufacturing value added

Source: OECD estimates, based on UNSD
Location of value added in the value chain

Source: Gary Gereffi, presentation at OECD workshop, September 2010.
Definition of Industrial Policy

“Industrial Policy is any type of intervention or government policy that attempts to improve the business environment or to alter the structure of economic activity toward sectors, technologies or tasks that are expected to offer better prospects for economic growth or societal welfare than would occur in the absence of such intervention.”
The evolving rationale for industrial policies

- Laissez faire
- Traditional, state-aids, ownership-based
- Neoclassical, market-failure correcting
- New growth, technological capabilities
- Institutionalist, neo-Schumpeterian, evolutionist, systems-based
**Policy domain:** Product or factor markets – labour, capital, land and technology. Role for policies to develop entrepreneurship or facilitate coordination or the creation of new networks.

Product markets

Factor markets (Labour, Capital, Land, Technology)

Systems and institutions
## Typology of instruments by policy domain

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<th>Domain</th>
<th>Horizontal Policies</th>
<th>Selective Policies</th>
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<td><strong>Product markets</strong></td>
<td>Competition and anti-trust</td>
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<td>Nationalisation/privatisation</td>
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<td>Product market regulation</td>
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<td>Income and employment tax</td>
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<td>Financial market regulation</td>
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<td>Clusters policy</td>
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**Orientation**: Is policy horizontal/functional or vertical/selective? Is targeting strategic or in response to market pressures? Is intervention time-limited or longer-term? Conditional or unconditional? Does policy work with existing comparative advantage or explore new areas?
Typology by policy orientation

Industrial Policy

Horizontal

Selective

Framework conditions

Strategic

Defensive/Reactive

“Tasks”

Sectors

Technology
Two-way classification of strategic industrial policy

- Infant industry
- Building on strengths in development
- Seeking strategic advantage in new areas
- Consolidating on frontier strengths

Comparative advantage-developing

Catch-up

Frontier

Comparative advantage-following
Stages of industry lifecycle

Source: Livesey (2012)
Comparative industry maturity grid

Source: Livesey (2012)
Industrial policy orientation based on comparative maturity

Source: Livesey (2012)
New industrial policy in practice

- Cluster policies
- Investment promotion
- Public procurement
- Fostering green growth
What have we learned?

Embeddedness  Carrots & sticks  Accountability

(Rodrik, 2008)

“The emerging consensus is that the risks associated with selective-strategic industrial policy can be minimised through a ‘soft’ form of industrial policy, based on a more facilitative, coordinating role for government, consistent with the systems approach......

“The goal of ‘soft’ industrial policy is to develop ways for government and industry to work together to set strategic priorities, deal with coordination problems, allow for experimentation, avoid capture by vested interests and improve productivity.”
“...my chief political project last year was to establish a firm case for an industrial strategy – words previously banished from Whitehall. That case has been won – and I think is now broadly accepted on Right and Left. Work is now well underway with industry to develop long-range strategies for ten important sectors by this summer.”
Developing strategic partnerships with industry

The government is developing long-term strategic partnerships with industry sectors where we can have the most impact on growth.

**Advanced manufacturing**
- Aerospace
- Automotive
- Life sciences
- Agri-tech

**Enabling sectors**
- Energy: nuclear
- Energy: oil and gas
- Energy: offshore wind
- Construction

**Knowledge services**
- Education
- Information economy
- Professional business services

**Partnership strategies will:**
- be long term
- be created with industry, committing business and government to specific actions
- involve the whole of government
- identify actions to benefit all businesses
‘Eight great technologies’

• **Big data**: transforming scientific enquiry and many industries - the opportunity to lead in this and in the energy-efficient computing revolution.
• **Satellites**: building satellites and analysing and using the data from satellites.
• **Robots and other autonomous systems**: applications range from assisted living for disabled people to nuclear decommissioning.
• **Synthetic biology**: engineering genes to help heal, feed and fuel the nation.
• **Regenerative medicine**: new medical techniques for repairing and replacing damaged human tissue.
• **Agricultural technologies**: the opportunity to be at the forefront of the next green revolution.
• **Advanced materials**: with targeted properties enabling technological advances in sectors like aerospace and construction.
• **Energy storage**: technologies for storing energy when it is produced so that it can be used when it is needed.
“One size doesn’t fit all”. Approach varies with stage of development of country and/or ‘sector’.

Some moving to more horizontal policy; while others moving to more selective.

“Choosing races and placing bets”. Both flexibility and tenacity needed.

Convergence in thinking on “fourth generation” industrial policy with emphasis on systems, networks, institutions and capabilities.

Risks of ‘government failure’, capture, protectionism.

Challenges for evaluation, especially of strategy and policy programmes.
Thank you

감사합니다

Ken Warwick
T: +44 1932 355390
M: +44 7823 535316
warwickeconomics@btinternet.com
• **Aim**: Industrialisation, productivity, sector growth, employment, social welfare, distribution.

• **Target group**: Sector (or technology, input, or stage of the value chain), firms or clusters?

• **Rationale**: Underlying philosophy that justifies active industrial policy (market failures, capacity building etc).

• **Orientation**: Is policy horizontal/functional or vertical/selective? Is targeting strategic or in response to market pressures? Is intervention time-limited or longer-term? Conditional or unconditional? Does policy work with existing comparative advantage or explore new areas?

• **Policy domain**: Product or factor markets – labour, capital, land and technology. Role for policies to develop entrepreneurship or facilitate coordination or the creation of new networks?
Typology by orientation – reactive/defensive policy

Reactive

Crisis response

Bail-out Finance

Incentivising reform

Defensive

Managed adjustment

Protecting losers
Conclusions

- Definition and new typology by orientation proposed.
- Approach varies with maturity of country and ‘sector’.
- Typology by policy domain based on growth accounting.
- Echoes evolving rationale.
- Theoretical rationale versus risk of Government failure.
- Role for ‘soft’ industrial policy.
- Need for better monitoring and evaluation.
- Focus on selective policy, and industrial strategy.