Outline

1. Why Industry?
2. Mainstream Argument
3. ‘Late-late’ comers and ISI
4. Critiques from Right
5. Return of ‘Industry Policy’?
1. Why Industry?

Secondary sector = construction + manufacturing + mining

Manufacturing: artisanal or industrial

- Industrial involves specialization, division of labour, factory system, machines & technology, standardisation, ‘increasing returns’
- Industrialisation of agriculture similar except that agriculture faces declining returns to scale
- Manufacturing has more potential for value-added, technological development, etc.
Industrialisation

= production becoming more based on industrial processes

- Within one sector or in new sectors

Industrial Policy: government efforts to induce these changes, whether through public or private actors

- Infant industry protection, import tariffs, subsidies, government procurement, R&D, etc.
A meaningful understanding of modern (capitalist) economic development...

An increasing amount of value-added produced per person *(within system)*, achieved through increasing labour productivity (output per unit of labour time) rather than through working longer hours or through appropriating the surpluses of others, and grounded on capital accumulation.

Capital accumulation: the accumulation of produced means of production – including infrastructure – rather than simply an increase in factor inputs (e.g. labour, land and money).
Increasing labour productivity usually results from a synergy of:

- Specialization (Smith)
- Scale (allows for specialisation)
- ‘Capital’ or technology (incl. organisational: technology as social & institutional)

Increasing labour productivity in physical production leads labour transition to tertiary (service) activities

- We probably need to think of this in terms of global processes, not simply in national terms
Can we avoid it?

- Celso Furtado on ‘industrial civilization’
- Early Dev. Economics consensus:
  - Primary commodity exports could no longer serve as ‘engines of growth’
  - Industrialisation necessary
  - Trade could not guide industrialisation
  - State must help guide (industrial policy)
- Countries that industrialised have become richer; those that did not have not
- Is there a post-industrial possibility?
Constraints to new comers

- Technological and productivity divides ever greater
- Increasing barriers to entry in higher value-added industries (and increasing competition in older industries)
- Increasing concentration of ownership/control at the upper end of value-chains
- Hence, increasing dependence on technology (Prebisch and Furtado)
Question: how should a country industrialise in this context?

‘Neoliberal vs Structuralist’ (Sanjaya Lall)

- oversimplified, but the basic point is free market versus state-led industrial policy, or non-interventionist vs. interventionist
- Import Substitution Industrialisation (ISI) is a type of industrial policy
- ‘Structuralist’ and ISI became the targets of neoliberalism in the 1970s
- Some background…
2. Comparative Advantage

Ricardian Trade Theory:

- even if one country has absolute (competitive) advantage in all products, both countries are better off if they specialise in the products that they are comparatively *most best or least worst* at producing

- About the allocation of fully-used scarce factors; total output raised by rearranging inputs

- Efficiency leads to growth; industrialisation is guided by efficient free-market allocation
### Ricardo’s example

<table>
<thead>
<tr>
<th>Cost per hours of labour input</th>
<th>cloth</th>
<th>wine</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Portugal</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Ratio England/Portugal</td>
<td>1.5</td>
<td>2.0</td>
</tr>
</tbody>
</table>
A modern reformulation...

<table>
<thead>
<tr>
<th></th>
<th>Boeings (one, equal quality)</th>
<th>Soya (bushel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>$50,000,000</td>
<td>$6.98 (2001; export price was $4.93 = US dumping)</td>
</tr>
<tr>
<td>Brazil</td>
<td>$100,000,000</td>
<td>$7.66 (2002-2003)</td>
</tr>
<tr>
<td>Ratio USA/Brazil</td>
<td>0.5</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Modern reformulations

- Re-expressed through abstract general equilibrium models (e.g. Heckscher-Ohlin)
  - Same result: labour-intensive good produced in labour-abundant country, etc.
- Factor-Price Equalisation Th. (Samuelson)
  - Comparative advantage leads to equalisation of wages and profits within and between countries
  - Basis for claim that free trade is equalising and pro-poor, e.g. China and US, *Economist*
- Many problems with the theory. The biggest:
  - The ‘now-industrialised countries’ did not develop by following CA and free markets (Chang)
Historical Background

- Industrial policy has been used extensively since mercantilist period, first by the UK, then by the rest.
- Free Trade only advocated by the leader once the leader has a clear competitive advantage (i.e. Kicking Away the Ladder).
- E.g. the transformation of UK trade with India in first half of 19th century, followed by ‘free trade imperialism’

3. Late-industrialisation and ISI
Neo-colonial trade today?
Second industrial revolution

Starts in later half of 19th century with science-based innovations:

- electricity, steel, chemicals, engines, railroads, communication technologies
- machines (‘capital’) produced separately

Implications:

- technologies require greater scale; more costly to set up industries; hence barriers to entry higher, and effort to catch up greater
‘Late comers’ entered in this context

- Germany, France, US, USSR and Japan
- Industrial policy becomes crucial:
  - the later the lag, the greater the technological gap, the greater the effort required to catch-up
- Combined with other policy principles, e.g. use of banks, social welfare, education, etc.
  - the argument that social welfare comes only after countries have developed ignores historical reality (see Gershenkron 1962)
- Despite difficulties, technologies in late-comers were still home-grown; capitalisms were ‘nationally’-bound (including colonies)
Post-war ‘Late-late industrialisers’

- Even greater hurdles because lag and technological gaps so great +
- Rise of Transnational Corporations (TNCs) controlling production and technologies
  - TNC origins in mercantile trading companies (EIC), but modern TNCs were an innovation of US capitalism (maybe?)
- Therefore, post-war late industrialization has been much more technologically-dependent
  - i.e. technologies and machines imported rather than home-made
Dependence on capital imports
The historical integration of peripheries (LatAm) into the international economy and the propagation of technical progress (from centre to periphery) established the outward-directed, externally-propelled development of peripheries and the four characteristics of peripheral capitalist economies:

- declining terms of trade
- marginalisation of disadvantaged populations
- imitative metropolitan consumption patterns of periphery elites
- macroeconomic instability

Centre-Periphery Approach
(Prebisch/CEPAL 1950)
Furtado on ‘industrial civilization’ and the nature of dependence

- LA countries accessed ‘industrial civilization’ through imports; consume before produce
- Fundamental difference with earlier industrialisers and basis of dependence
- Thus, industrialisation requires import substitution (cf. Hirschman 1968)
- ISI simply systematises this reality; usually practiced through tariffs, quotas and exch. rates
- Problem: ISI did not solve the underlying problem (Furtado recognised this in the 1950s)
Structural Weakness (hence ‘structuralism’)

- Import dependence leads to chronic shortages of foreign exchange, even if exporting well (e.g. South Korea in 1970s)
- Foreign exchange becomes a specific constraint, distinct from savings
- This constraint is structural, i.e. it is based on the technological and input characteristics of production
  - Hence, it cannot be overcome through ‘right’ prices or demand management
- The constraint is NOT because people in South behave differently (as per modernisation theory)
  - However, social polarisation tends to worsen the problem
The ‘Asian Tigers’

- East Asia (Rep of Korea and Taiwan) are the few to have broken through and become ‘central,’ in this sense of endogenising technological development.
- Many argue that they were exceptional cases (geopolitics; aid; etc).
- Even so, we need to ask how they did it – interpretation is central to the debate (e.g. World Bank Asian Miracle report in 1993).
- (same with China today)
Late-comer principles followed in East Asia with even more intensity

Amsden on South Korea (1989: 8-10):

1. (Effective) interventionist state; ‘getting the prices wrong’; industrial policy, etc.
2. Large diversified business groups as agents of expansion
3. Abundant supply of competent salaried managers
4. Abundant supply of low cost, well-educated workers

NB: land reform; universal health and education; aid; national ownership in industries; state-owned banks; authoritarianism (?)
Other stories…

Latin America (ISI since 1930s):

- classic case of polarised growth & dominance of TNCs in strategic ISI industries
- downfall was arguably due to inequality and TNCs, not ISI (East Asians also practiced ISI)

Sub-Saharan Africa

- very little industry outside South Africa at time of decolonisation
- started everything in 1960s and 1970s with massive lag and unfavourable world economy
4. ‘Counter-revolution’ in late 1970s

- E.g. Hayek, Chicago Boys, Deepak Lal, etc.
- Anne Krueger (1974) coins ‘rent-seeking’; portrays dichotomy between ISI and EOI
- First neoliberal experiments were in Chile and Argentina under authoritarian regimes; ironically ended in crisis in the late 1970s
- ‘Changing of the Guard’: Krueger replaced Chenery as Chief Econ in WB (1982-86); Stanley Fischer (1988-90); both became First Dep. MD of IMF in 1990s and 2000s.
‘Neoliberal’ policies end ISI in most of the South (besides India & China)

- Origins of neoliberal policies need to be understood as attack on Keynesianism in North and national developmentalism (and ISI) in South
- Return to trade primacy, anti-planning, state retrenchment
- Industrial policy severely constrained
- Long depression for the most-integrated countries of South
The Rise of Global Production (and Distribution) Networks (GPNs)

- ‘Post-Fordist’ production fragmented and assembly work off-shored (high-tech and head offices kept ‘on-shore’)
- Driving force behind rise of trade and manufacturing in Global South (especially East Asia), e.g. laptop
- GPNs dominated and led by TNCs
Majority of LDC exports are now manufactures

- But these exports are concentrated in lower value-added parts of GPNs
- Southern manufacturing accrues relatively less value-added than it did in European past
Four patterns in South since 1970s

- East and South East Asia – rapid integration into TNC-dominated GPNs, esp. after 1997
- LA (and MENA?) – stagnates for two decades after reaching middle position in 1970s with large TNC presence; growth now largely based on resources
- South Asia – sluggish domestic ISI industrial base slowly opens and starts to transform (polarisation?)
- Africa – very little industry outside South and North Africa, but increasing entry of TNCs in infrastructure, mining, even retail
Conclusion: key challenges today

- How to enhance national ownership and control in GPNs dominated by TNCs?
  - Neoliberal agendas need to be understood as related to change in the engagement of TNCs with South, and facilitation of TNC (financialised) control over GPNs, targeting national forms of ownership and accumulation (e.g. Iraq and Libya)

- Fundamental issue in economic development is not just about increasing productivity, but also about how to retain wealth within domestic sphere + prioritize domestic accumulation by whatever means (state, market or other)
Key points regarding financing development:

- Role of technological dependence in structuring foreign financial dependence
- The role of TNCs in global and domestic financial flows
- The changing nature of international trade/current account and financial account flows and balances and of their role in financing development, especially in terms of structural foreign exchange needs