Globelics: a Southern perspective

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Two early papers by Chris Freeman on NSI:

- ✓ Technological infrastructure and international competitiveness, draft paper submitted to the OECD ad hoc group on science, technology and competitiveness, August 1982
 - BAL first written contribution that uses the concept national system of innovation
- Long waves and economic development, paper presented at the Conference on New Technologies and Development, University of Campinas, Brazil, September, 1982.

Long waves and economic development, paper presented at the Conference on New Technologies and Development, University of Campinas, Brazil, 1982.

- Innovation at centre stage
- Diffusion of IT paradigm.
- Macro X micro: long waves.
- Development perceived as endogeinising technical change



National Systems of innovation and development

In underdeveloped conditions:

- Macro instability deeply affects microeconomic behaviour.
- Higher degree of heterogeneity (intra and inter industry) than advanced economies.
- Greater disparities (in income distribution, patterns of consumption, and so on) than what is found in advanced economies.



National Systems of innovation and development

In underdeveloped conditions:

- More diversity in institutions and technologies in developing countries than what should be expected in advanced economies that are characterised by relatively more homogeneous and stable patterns
- Strong institutional differences
- Significant role of MNC investment
- In developing countries, diversity is shown at a more decentralised level than the national one.

Proposition: Analysis of NSIs in developing countries should emphasize:

- macro-micro dichotomy,
- role of MNC's subsidiaries,
- institutional development,
- human resources,
- demand pattern
- local systems of innovation.

Institutional Change and NSI

- The structural adaptation of the economy will be a slow and painful process if left to itself in a period of radical change
- Many of the economic and technical advantages that the new technoeconomic paradigm make possible depend on extensive structural change and institutional and social innovations
- There is usually more resistance to institutional change than to technical change and that this may lead to a postponement of important institutional and organisational innovations
- Freeman and Perez 1988; Lundvall, 1992

What institutional change?

- Colonialism served to eviscerate existing institutions in the affected countries, which is almost all of the developing world . It tried to graft on the existing cultures foreign institutions and ideas, but in a process of imposition. In which control and authority lay outside and not within, it is not surprising that the graft did not hold. What was left in its place was a void the old was destroyed, but not really viable had been created in its stead. Worse still, in all too many countries, they were left without the human capital required to create an alternative, let alone to adapt to the rapid changes that marked the latter half of the twentieth century...
- The colonial mentality has evolved. While no one today speaks, like Kipling, of the 'white mans burden,' I have too often sensed a paternalism that is but a close cousin ...no one would claim that the playing field in international trade negotiations, debt restructuring or any of the multitude of other arenas in which the developed and developing countries interact is a level one. Economic power relations play out with potentially no less disastrous consequences for developing countries
- Stiglitz (2000)

Institutional Development: Best Practice or Local Development?

A 'best practice' might work well in some countries but fail miserably when recommended in other contexts. In questions of institutional development, it is very difficult to know a priori just how general is a 'best practice'. Robert Cole studied the diffusion in industry of quality circles and Japanese-style quality methods. The process of local adaptation was so extensive and creative that it amounted to a local reinvention of 'global best practice' ... The significance of this point of view is that contrary to the simplistic use of the term by many economists, there is, in principle, no such thing as diffusion of best practices, practices that evolve in the course of their diffusion. Contrary to popular wisdom, there are times when it pays to reinvent the wheel

Stiglitz (2000)