

Techno-Economic Paradigm Shifts and Economic Growth in the Enlarged Europe

Activity-Specific Economic Growth
and Context-Specific Policies

Erik S. Reinert. Tallinn University of
Technology, Estonia & The Other Canon
Foundation, Norway

What went wrong in 2005?

Technological and Economic Aspects

- **The abandonment of successful principles of the past.** With the 2004 enlargement three important principles of integration – used since the very inception of European integration – were abandoned. These principles were based on the principles of German 19th Century economist Friedrich List
- **Little attention to the different ways innovation – especially ICT – spread in the economy.** Windows of opportunity for innovation open and close. Product innovations and process innovations may have very different effects on income. Focus on *counting innovations* (Frascati and Oslo Manuals) rather than on their systemic effects.

German economist Friedrich List (1789-1846) is no hero in today's economics textbooks. But his economic principles not only industrialized Continental Europe in the 19th century, but also built European integration from the early 1950s until and including the successful integration of Spain and Portugal into the EU in 1986.

For a long time the division of labour in Europe was this:

- Friedrich List ruled the field of practical integration policy
- neo-classical economics ruled in the economics textbooks.

Not until the 2004 integration were List's principles abandoned in favour of the same textbook economics that dominates the Washington Consensus.

First Listian Principle Abandoned:

- *Listian principle*: A nation first industrialises and is then gradually integrated economically into nations at the same level of development. Symmetrical integration: win/win situations.
- *Neoclassical principle*: Free trade is a goal per se, even before the required stage of industrialisation is achieved. Risk of lose/lose situation & factor-price *polarization*.

The 2004 EU enlargement directly against Listian principles. First the former communist countries in Eastern Europe (with the exception of Hungary) suffered dramatic deindustrialisation, unemployment and underemployment. Then these countries were then abruptly integrated into the EU, creating economic and social tensions.

Second Listian Principle abandoned:

- *Listian principle*: The preconditions for wealth, democracy and political freedom are all the same: a diversified manufacturing sector subject to increasing returns.
- *Neoclassical principle*: all economic activities are qualitatively alike, economic structure does not matter

Post 1990-ideology based on ‘comparative advantage’ without an understanding that it is actually possible for a nation to specialise in being poor and ignorant, in economic activities that require little knowledge, operate under perfect competition and diminishing returns, and/or bereft of any scale economies and technological change.

Third Listian Principle abandoned:

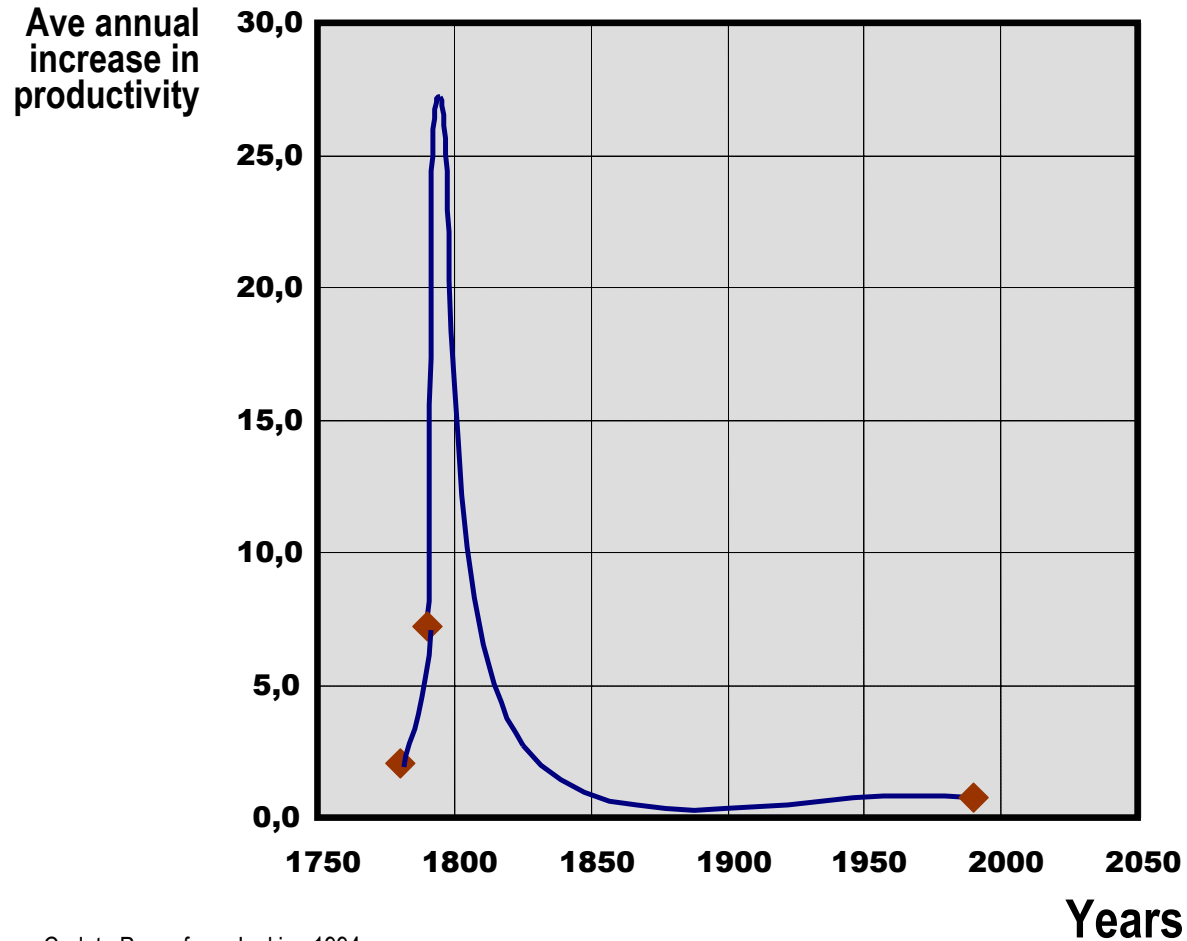
- ***Listian principle***: Economic welfare a result of synergy. 13th century Florentine Chancellor Brunetto Latini (1210-1294) explains the wealth of cities as a *common weal* ('un ben comune').
- ***Neoclassical principle***: 'There is no such thing as society', Margaret Thatcher (1987).

**Assymetrical integration creates the
Vanek-Reinert effect:**

When two nations at widely different technological levels integrate, the first casualty is *the most advanced* economic activity in *the least advanced* nation. This in turn contributes to factor price polarization and migration of skilled labour (Reinert 1980).

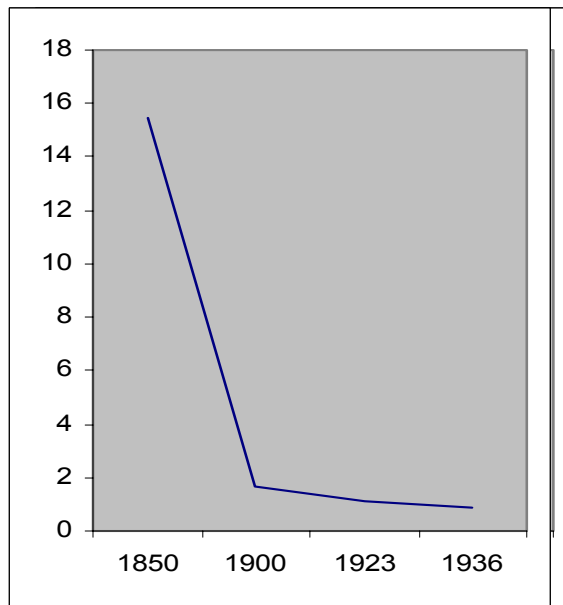
A quantum jump in productivity

The mechanization of cotton spinning in the first paradigm



Source: Carlota Perez from Jenkins 1994

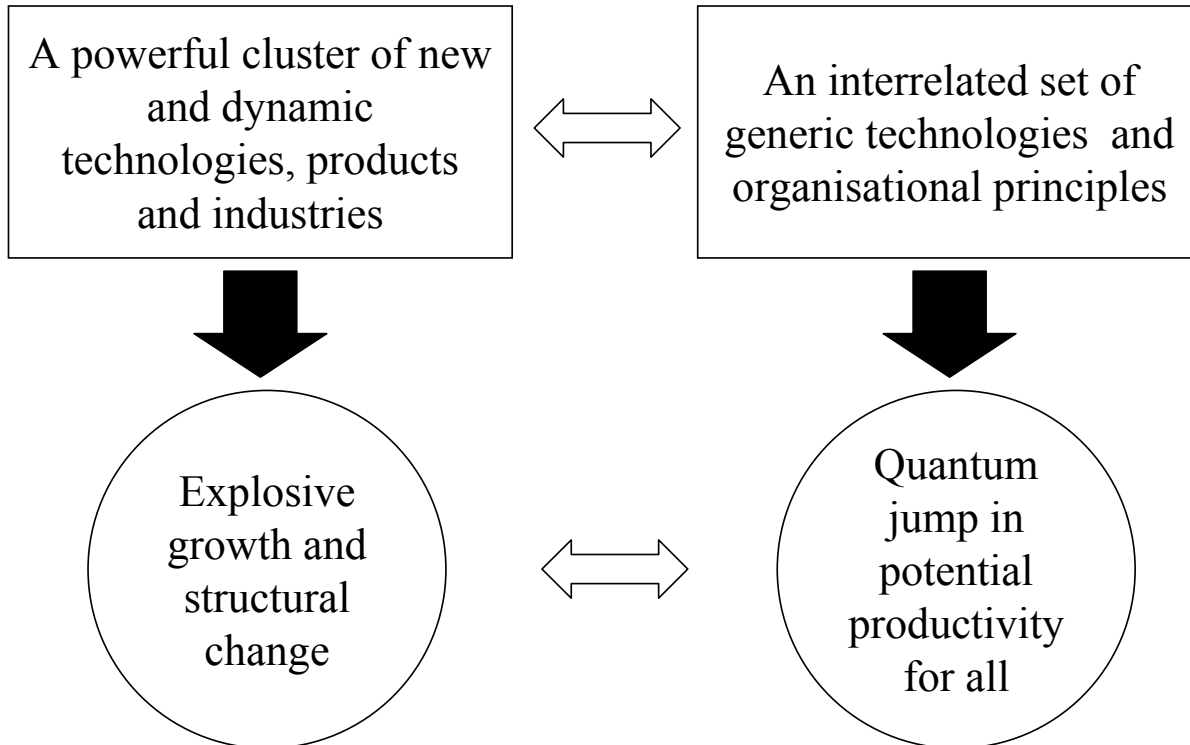
USA: Learning Curve of Best-Practice Productivity in Medium Grade Men's Shoes'.



Man-Hours Required by Best-Practice Methods of Producing A Pair of Medium-grade Men's Shoes at Selected Dates in the U.S.

Year	Man-Hours Per Pair
1850	15.5
1900	1.7
1923	1.1
1936	0.9

What is a technological revolution?



Change in techno-economic paradigm
(New best practice “common sense”)

How innovations spread:

- *Classically*: as lowered prices to the consumers. Typically in agriculture and *process innovations* (perfect competition)
Using ICT
- ‘Collusively’: as higher profits, higher wages and higher tax base for the producing country. Typically in *product innovations*, Ford & Microsoft. (dynamic, Schumpeterian imperfect competition, ‘market failure’ (?)) New products based on ICT.

How the use of ICT *reduces* value added

- Tourism: internet bookings reduce margins for hotels in Venice and Costa del Sol, Spain.
- Used books: instead of finding books through catalogues, customers now find them on the web. Result a precipitous fall in prices for used books. Book descriptions on the web reduce need for high-skilled cataloguers.

Two definitions of competitiveness:

OECD: The ability to compete in international markets while **increasing** the real wages.

Poor periphery: “we have to **reduce** the real wages in order to stay competitive”, President Museveni, Uganda, May 2004.

Wrong economic strategies and world context (abandoning List’s principles & China) force Europe to adopt Uganda’s definition of competitiveness.