# Catching up processes and forms of internationalisation : compatibilities and oppositions

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## I Catching up : back to basic

- Countries with various levels of developments
- Exchanges (trade or other): potentials for catching up by transfering knowledge and know how to lower wage countries
- Price competitiveness of the less developed countries
- Two ways to proceed (as stressed in Fagerberg 2005):
- à la Veblen whereby mobility of people (scientists, engineers, technicians,) and equipments are bringing their knowledge and know how from abroad.
- à la Gershenkron (black box) whereby transfers are taking place under different forms (of which imported equipment goods) and then especially diffused/supported by local institutions.

## From initializing transfers(phase 1) to full diffusion dynamics (phase 2)

- Still how these transfers (phase 1) diffuse to the whole economy: - through a series of similar transfers
- setting up mechanisms spreading new internal dynamics, be it in financing, in support the diffusion of modernization across industries...
- developing education and training, even public and private R&D
- All these co-evolutions may lead to the development of institutional fabrics (with complementarities and hierarchies of institutions in the regulation theory perspective), more or less country specific, fueling a semi-autonomous dynamics of development
- when these are effective, they can be considered as NIS National innovation systems (à la Lundvall and Nelson)

## National innovation systems

- These catching up dynamics do not always lead to steady internal development based on « proper » national innovation systems.
- Historically, catching up processes have mainly been observed within clubs
- The specificities of NIS are mostly linked to path dependencies phenomenons
- Though no regular patterns in such clubs of convergence (as the flying geese hypothesis), the EU Lisbon agenda (which failed) was too much inspired by such naive view
- All NIS are open to crises and evolve through time if only with the changes in the patterns of internationalisation

## A strong sectoral dimension

- Catching up processes differ according to the relative importance of sectoral dynamics with their own specificities(see Malerba):
- -manufacturing is the reference most used where the notion of price competitiveness clearly localised the advantage (from Vernon trade cycle to Rodrick full convergence)
- -raw materials is a more conspicuous case as prices are for long been set at an international level and are therefore open to speculative runs and thus may vary strongly (with the pleas of rentier economy)
- agricultural products which are highly variable depending on weather variations, and now open to speculative bubbles in a financialised world
- -services which have for long been considered as non tradeable and which are deeply transformed with ICTs development

## Forms of internationalisation 1

 The forms of internationalisation and of the organization of international markets are key factors determining the parts that these various sectors could play in the catching up processes....reduction in tranports costs, internationalization of fixed capital and diffusion of ICTs (information and communication technologies) have been crucial in these changes in transaction costs

## Forms of internationalisation 2

- Dynamics of catching up clearly depend on the forms of internationalisation, eg on the rules governing exchanges, be it trade or other kinds of exchanges (from finance to information and knowledge or people mobility)
- These rules of exchanges vary along time and across space
- five components are especially important in the post world war II era: rules of trade/ of finance/ of human migrations/ of knowledge and information... .. and the structure of international aid.
- In the modern period of post world war II, one can distinguish two
  periods: the one organised in the aftermath of WWII (with the
  Bretton woods institutions and the new UN institutions, much
  centered around the western world; the second following the
  diffusion of the neo liberal economic ideology at the turn of the
  1980s with a much more global scope, a real break centered
  around market led mechanisms

# Forms of internationalization and globalization processes 1

- Much of our views on catching up stem from the context of the first post war period.
- The second period with its globalization trends has complexified the catching up processes
- NIS have been eroded/challenged/transformed according to their ability to be congruent with the economic liberal turn of the 80s, eg « market led » NIS à l'anglo-saxon are faring more easily than German or French NIS
- Some global processes have provoked major breaks in some of the NIS fabrics.

# Forms of internationalization and globalization processes 2

- 1) The rise of a globalized finance
- (more open to global financial crisis, channeling a logic of share holder value ...rather opposed or orthogonal to a logic of economic growth, fueling the development of global value chains and speculative runs
- 2) the straigthjacket of WTO: liberalisation of manufacturing trade, but persistent blocages on services and agriculture, and overall an inability to adjust to financialization (speculative bubbles on exchange rates, prices of raw materials) which renders irrelevant considerations on fair price competitiveness

# Forms of internationalization and globalization processes 3

- 3 on exchange of knowledge and information: strict ruling of IPR (diktat) at a global level, when the development of ICTs would urge for open practices
- 4 human mobility: liberalization strictly restricted to highly qualified workers, resisting rising pressures of economic and political migrations
- 5 international aid: MDG successes and failures, difficulties to avoid rising inequalities within countries

## Beyond the triomphalism of neo lib economists, a deep crisis of the capitalist project

- This turn towards a neo liberal market driven trend of internationalisation is though a victory à la Pilate of orthodox economics
- A model open to decisive crises (of which 1997, 2001 and 2008), which develops inequality, erodes solidarity and public space, fuels speculative runs and individualism, lacks morality,....
- Led to finance bashing, ...and far ranging despise of enterprise (...even to reach Porter see last book on « shared value » ...to depart from Milton friedman : the social role of entreprise is to make profit

## A deep crisis of the capitalist project

- The orthodox economists are still strong believers of free market driven economies but they are a bit alone and mainly caught up in this irrealistic dead end perspective by the fact that they have attached to it their so called professionalism/expertise (tool box)
- In the real world around them the firms and especially the financial ones are object of severe criticisms

- It follows that deep reconstruction processes may well be at work, not exposed as full mounty programs (the communist experience has killed such big schemes) but through struggling on processes (STRUGGLES) that one has to take into account
- The big issue is whether or not they may help to reconstruct global governance and exchange rules, differentiating them in order to meet agreed global objectives in ways taking into account the capabilities of each member states 13

## Struggles 1

- 1 *on finance*: calls for reregulation, taming global finance, limiting risks of global financial crisis, restricting capital mobility (see Greece) and speculative runs
- 2 on WTO ruling: adjusting to finance ruling (to take into account over/under valuation), to development needs (protecting developing industries), fair trade in agriculture and services, safety issues

## Struggles 2

- 3 on exchange of knowledge and information: battling on open source and generics (see India, Brazil, battles on AIDS treatments), dealing with uncertainty of some scientific developments
- 4 human mobility: battles around free mobility zones à la Schengen, pressures of economic and political migrations, rising fears of widespreading terrorism, institutionalization of exchanges between hosts and home countries,
- 5 international aid: New development goals, towards less inequalities, reducing poverty traps, questioning on well being; rising issues of war and peace, terrorism

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## New fronts 1

- These struggling lines are also telling of the various choices of catching up paths that countries could follow
- Not to say either that globalization processes are destroying a fabric of NIS that would have insured a steady process of growth and catching up at a world level
- Globally some catching up did effectively emerge ....and the rise of « emerging economies » (BRICS and others) is telling in that respect . ..and overall poverty has reduced but inequalities within countries tend to increase

## New fronts 2

- Basically globalization trends have favored phase 1 (« localized » transfers....) but reduced the scope of phase 2 (retreat of the states, limits put to public activities)
- ...leading to lasting unequal development (segmentation observed in emerging countries..not to speak of other developing countries)
- Retreats of the states have been accompanied by an increasing role of multinational enterprises and ...NGOs
- .....favoring as a response coalitions of nations (of which regional alliances)
- But this new context has also to meet new global challenges ....where International institutions will see their role increased

lacktriangle

# New challenges orienting the development paths 1

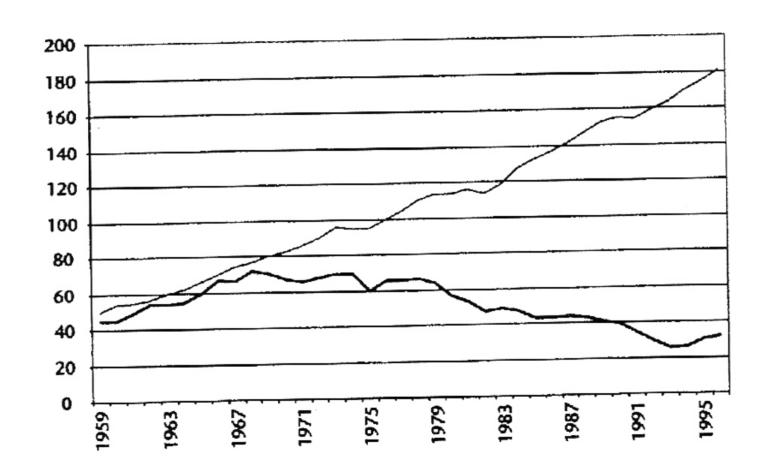
- 1 the well being issue
- The evolutions of well being indicators have departed from those of GDP at the turn of the 80s (see graphs ....and J.Gadrey and F. Jany-Catrice contributions )
- Policies have to target well being development and the governance of internationalisation forms has to adjust accordingly (clear for free access to medecine...such as AIDS treatments)
- Bound to impact (phase 2) and international aid policies

Indicateur de santé sociale

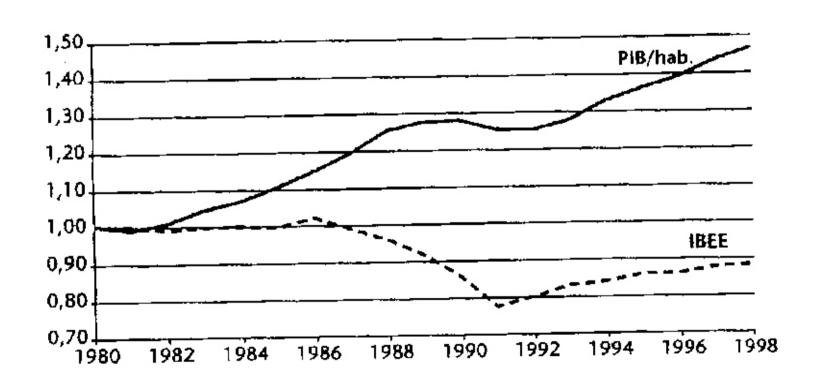
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- Miringoff and Miringoff, 1996
- 16 variables (quatre groupes d'âge avec différents critères : 3 pour l'enfance (mortalité, maladie, , pauvreté) , 4 pour les jeunes (suicide, drogues, abandons à l'université, les enfants de mères très jeunes), 3 pour les adultes (chômage, salaires hebdomadaires et mensuels , assurance maladie), 2 pour les personnes âgées (pauvreté après 65 et espérance de vie après 65), 4 pour tous les âges (crimes violents , accidents de la route liés à l'alcool, l'accès au logement à un prix raisonnable inégalités des revenus familiaux ) .
- Réduit à 9 variables quand cet indicateur de santé social est calculé sur longue période (remontant aux années 50).

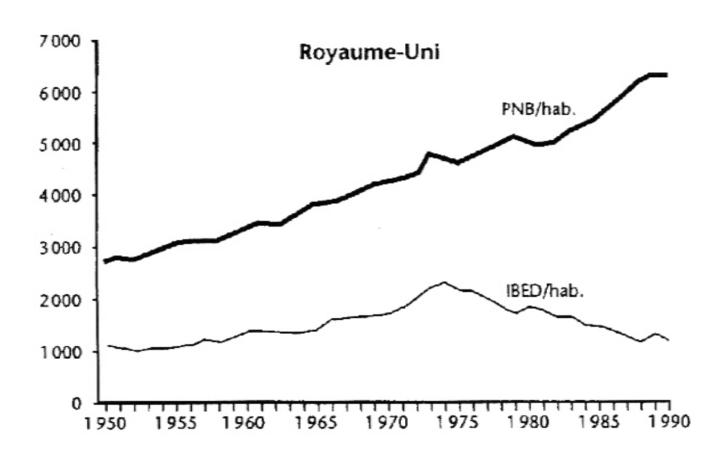
## Well being indicators and GDP: Canada IBEE see Osberg, Sharpe 1998



## GDP per head and well being indicators: USA IBED see Cobb and Cobb 1994



## GDP per head and well being indicators: UK IBED see Cobb and Cobb 1994



# New challenges orienting development paths 2

- 2 Figthing climate change
- Reducing green house gas emissions
- A global process of negotiations
- More environmentally friendly development paths
- Access to energy and to renewable energy
- Towards free diffusion of know how and cooperation on this issue?

# New challenges orienting development paths 3

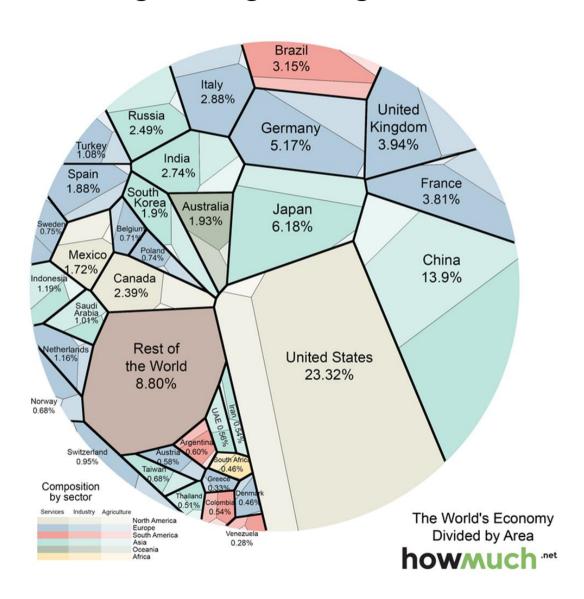
- 3 Coping with safety risks
- From nuclear industry risks to synthetic biology risks
- A global process of norms and controls
- Coping with the uncertainties of some scientific developments
- Bound to impact WTO rules (from labeling to imposition of new product standards)

# New challenges orienting development paths 4

- 4 adjusting to digitalisation of productive activities
- a third industrial revolution ....but one which may challenge the present ranking of competitiveness
- Production may be redistributed ...but at the same time demand may also be reorganized (by the actions of new prescribing intermediation booking.com, uber, amazon,..google or by new forms of organisation as in the share economy)

- Therefore:
- Phase 1 may become easier, more customized and localised (burgeoning creative territories, local resilience,..)
- Phase 2 will conversely be more difficult, requiring coalitions of states and agents (MNEs, ONGs,IIs), leading to new forms of « regional » and « global » governance

## On size and sectoral effects on regional/global governance



#### Composition of three competitiveness indicators

#### According to levels of development

	factor-driven economies (# moins 2000 \$)	efficiency-driven economies (#entre 3000 et 9000\$)	innovation-driven economies (# plus de 17000\$)
<ul> <li>Basic Requirements</li> <li>Institutions</li> <li>Infrastructure</li> <li>Macroeconomy</li> <li>Health and Primary</li> <li>Education</li> </ul>	50%	40%	30%
<ul> <li>Efficiency Enhancers</li> <li>Higher Education and Training</li> <li>Market Efficiency (goods, labor, financial)</li> <li>Technological Readiness</li> </ul>	40%	50%	40%
Innovation and Sophistication Factors  • Business Sophistication  • Innovation	10%	10%	30%

Source: World Economic Forum 2006-2007 report.

#### Schémas d'insertion internationale

	Modèles de rattrapage			
	Liés aux différentiels des coûts salariaux	Liés à une hiérarchie des compétences technologiques	Complémentarités technologiques avec des productions des matières premières	Fondés sur des secteurs développés localement
Coûts salariaux	++	+	++	++
Compétences	+	++	+	++
Matières premières			++	
Pays	Europe Centrale, Mexique ?	Asie du Sud-est	Brésil, Argentine	Cuba, Maroc, Tunisie
	Chine?	Chine?		Inde?
Secteurs	Economies d'échelle	Electronique	Agroalimentaire	Santé, éducation, tourisme
Déstabilisation	Elévation des salaires	Finances, coordination FMN	Finances, volatilité des prix	Finances
Accumulation	Forte	Faible	Faible	?
Salariés	Bénéficiés	Peu bénéficiés	Peu ou pas bénéficiés	Indéterminé

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Egidio Luis Miotti

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#### Schémas d'insertion internationale

	Modèles industriels et de services de rattrapage			
	Liés aux différentiels des coûts salariaux	Liés à une hiérarchie des compétences technologiques	Complémentarités technologiques avec des productions des matières premières	Fondés sur des secteurs développés localement
Coûts salariaux	44	+	+	++
Compétences	4	44	+	++
Matières premières			++	-
Ex. Pays	Europe Centrale, Mexique, Chine	Asie du Sud-est	Brésil, Argentine Venezuela, Chili	Cuba, Maroc, Tunisie Rép. Dominicaine
Secteurs	Economies d'échelle, intensifs en travail	Electronique	Agroalimentaire, énergie	Santé, tourisme
Fragilités	Montée de salaires	Finances, coordination FMN	Finances, volatilité de prix, <i>Dutch Disease</i> , corruption	?
Intensité de l'accumulation	Relativement forte	Relativement faible	Relativement faible	?
Salariés	Bénéficiés	Peu bénéficiés	Peu ou pas bénéficiés	Indéterminé

## Development paths 1

- Some foresight assessment:
- Old developed economies: risks of secular stagnation, adjustments via well being objectives, role of NGOs
- Importance of regional arrangements to impact trade regulations
- Conflicts between regions:
- The US- China accomodation/opposition issue (see TAFTA and pacific agreement)
- Strategic alliances to access non renewable ressources

## Development paths 2

	Actors of change: S, MNE, II, ONG	Major sectoral dimensions	Major challenges	cooperation
North America	S ++, MNE ++	services	Environment digitalisation	Inter Regional agreements
Europe	II ++ ONG ++	Mix Services manufatcuring	Environment Well being	Global cooperation
China And East Asia	S ++, MNE	manufacturing	environment	Inter regional
South America	S, MNE	Importance of raw materials		regional
Africa	North Africa	Raw materials	Environment	Regional
	Sub sahara		Well being Population	
	Specific critical issues			
India		Importance of services	environment	national
Russia	S, MNEs	Raw materials	environment	National
Other developing countries	IIs	Local organisation	Environment wellbeing	Isolated territories, IIs

- the COP21 negotiations (Paris december): no synthesis expected but an important stage of assessments of the commitments of the various actors
- Hopefully towards a « serious » MRV process (Measure Report and Verify)
- Crucial for mankind
- ....and not to be trapped in one of the dangerous gadget of the orthodox economists (like a single CO2 market)