



Schumacher meets Schumpeter

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Development Policy and Practice,

The Open University

“Induce”

“to lead in”,

“to begin in”,

“to introduce”





Induced Innovation

- Those factors “leading in” or “bringing in” – in other words, **inducing** - new products, new processes, new ways of doing things

The Theory of Induced Innovation



- The nature of demand
- Factor and infrastructure availability and price
- Firm trajectories and path dependency
 - institutional economics



Key characteristics of 20th Century globalisation

1. Market segmentation and volatility

The 2nd Industrial Divide – from Fordism to post-Fordism



- **Critical success factor in mass production**
 - Price
 - Volume
 - Price
- **Critical success factor in mass customisation**
 - Quality
 - Differentiation
 - Price

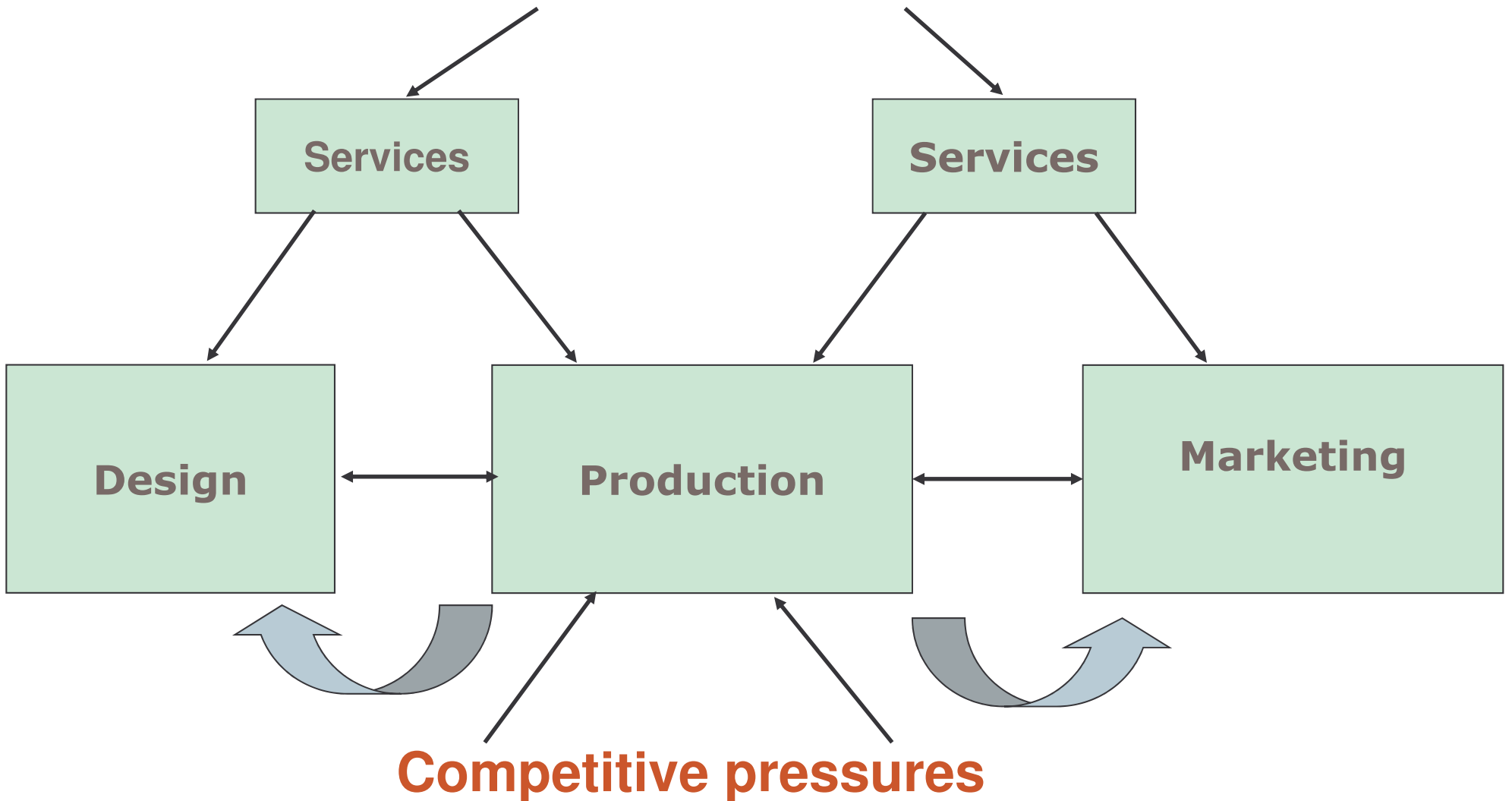


Key characteristics of 20th Century globalisation

1. Market segmentation and volatility
2. Persistent absolute poverty outside of China
3. Growing inequality
4. Global value chains lead to globally decentralised production

The increasing globalisation of VCs

Competitive pressures





Global distribution of manufacturing value added

	Share of the World			Share of developing countries		
	1985	1995	2005	1985	1995	2005
By Income						
S. and E. Asia	4.1	12.9	19.7	29.2	59.5	69.4
China	1.4	5.1	9.8	10.2	23.6	34.7
Latin America	6.7	6.9	6.4	46.9	31.5	22.6
Sub-Saharan Africa	1.0	0.3	0.3	7.1	1.3	1.0

Source: Data provided by Statistics Office, UNIDO, June 2008.



Key characteristics of 20th Century globalisation

1. Persistent absolute poverty outside of China
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4. Dispersion of productive capabilities
5. Dispersion of innovative capabilities



Developing countries in Global R&D

	c1970	1990	2000
Share of global R&D (\$PPP) (%)	2.0	10.2	21.0
R&D as % GDP	NA	0.7	0.9
Coverage	Excluding centrally planned	Including centrally planned and NIC economies	

Source: 1970 - Sussex Manifesto, 1970; 1990 and 2000 - UIS Bulletin on Science and Technology Statistics, Issue No 1, 2004, cited in M. Bell, 2007



Key characteristics of 20th Century globalisation

1. Persistent absolute poverty outside of China
2. Growing inequality
3. Global value chains lead to globally decentralised production
4. Dispersion of productive capabilities and the growth of aggressive entrepreneurship
5. Dispersion of innovative capabilities
6. Growing role of users in innovation



Economic Crisis

- **Between the onset of the crisis in August 2008 and the first quarter of 2009**
 - global output fell by 2.4%
 - OECD output fell by 4%
 - aggregate employment in the OECD fell by 2.2m
- **Between June 2008 and June 2009 exports fell by:**
 - 34 % in Germany
 - 24% in Japan
 - 13% in China

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“Is this a V recovery or a W?
I think it’s the latter...”

(CEO HSBC Bank, Financial Times, 5th Oct 09)

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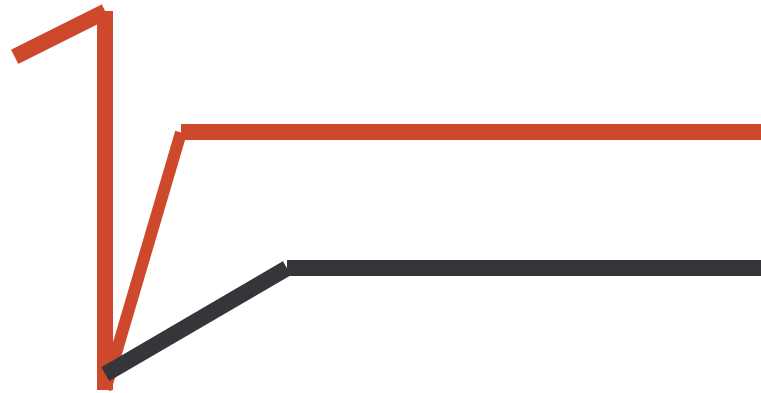


Perhaps its an

L



OR, MAYBE

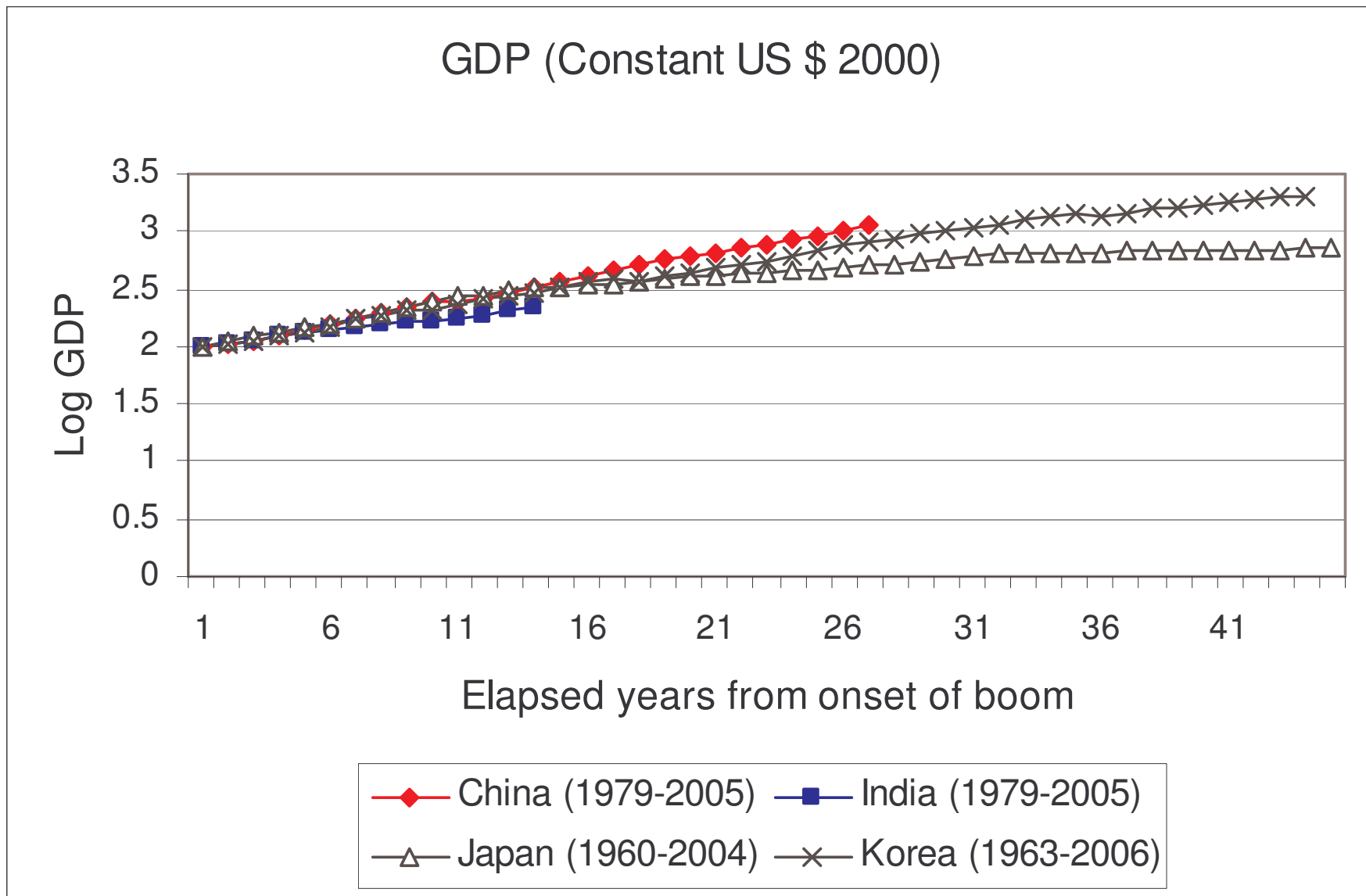




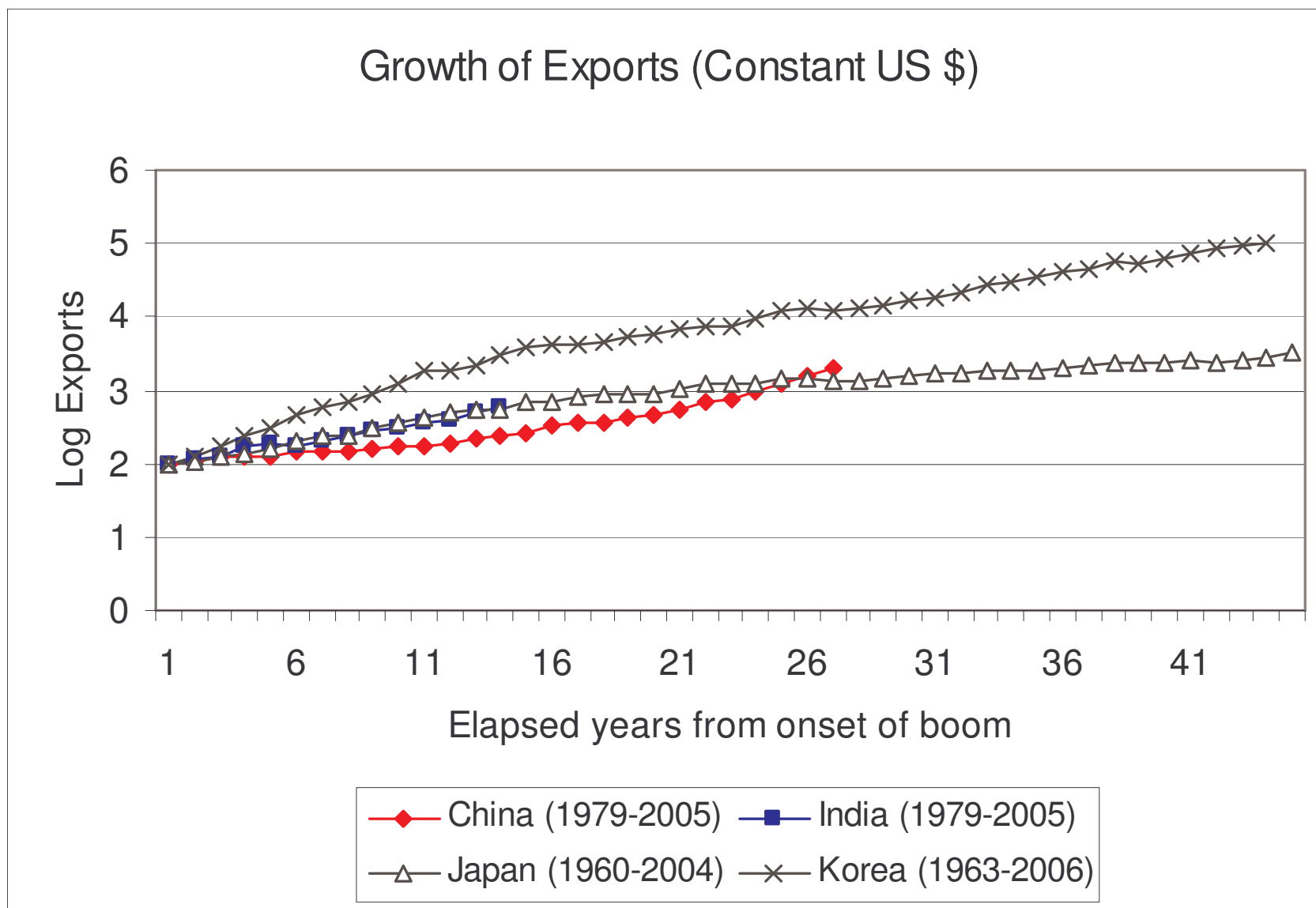
The LUV Scenario

- L in Europe
- U in the US
- V in emerging Asia

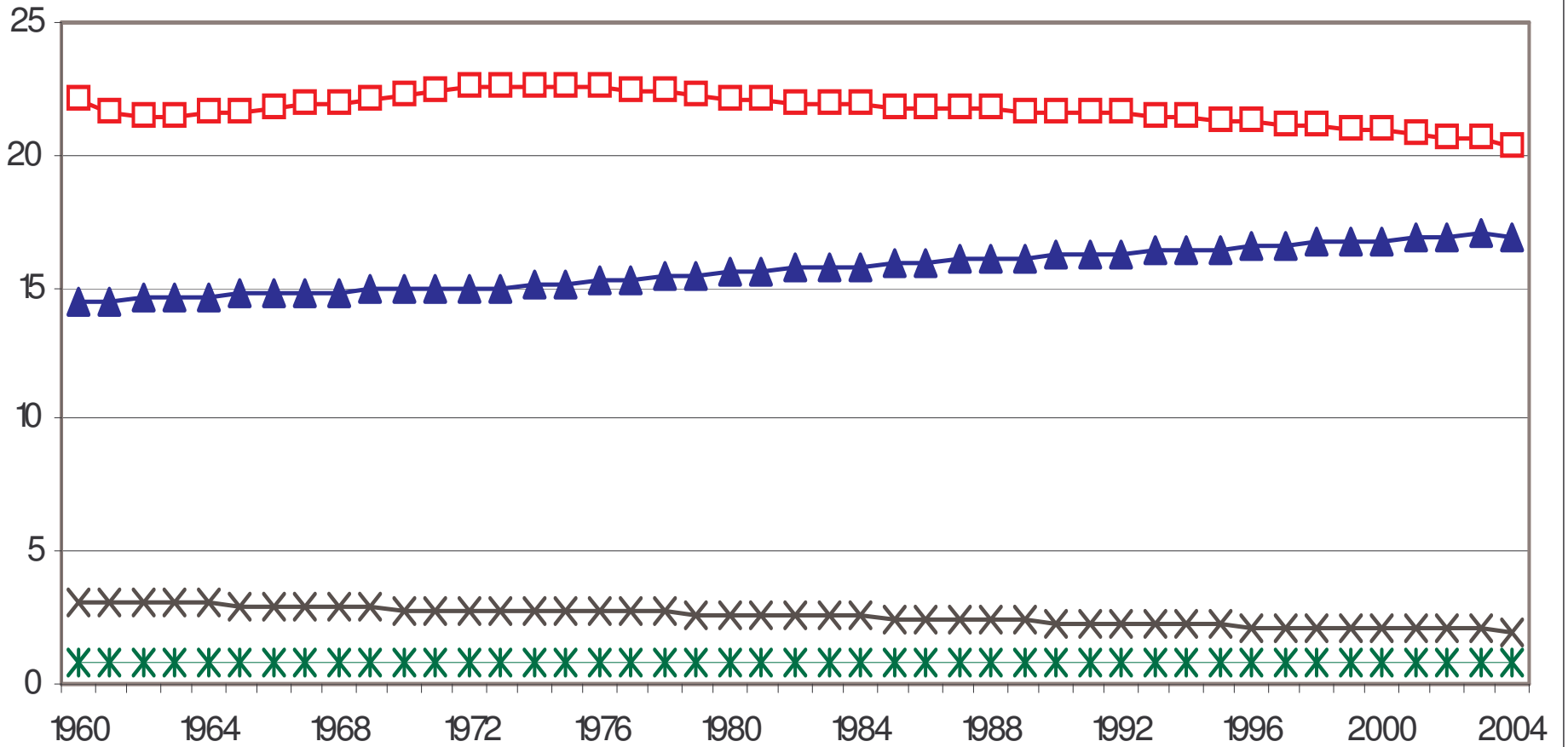
China's and India are not unique..



China's and India are not unique..



Share of Global Population



—□— China —▲— India —×— Japan —*— Korea, Rep.

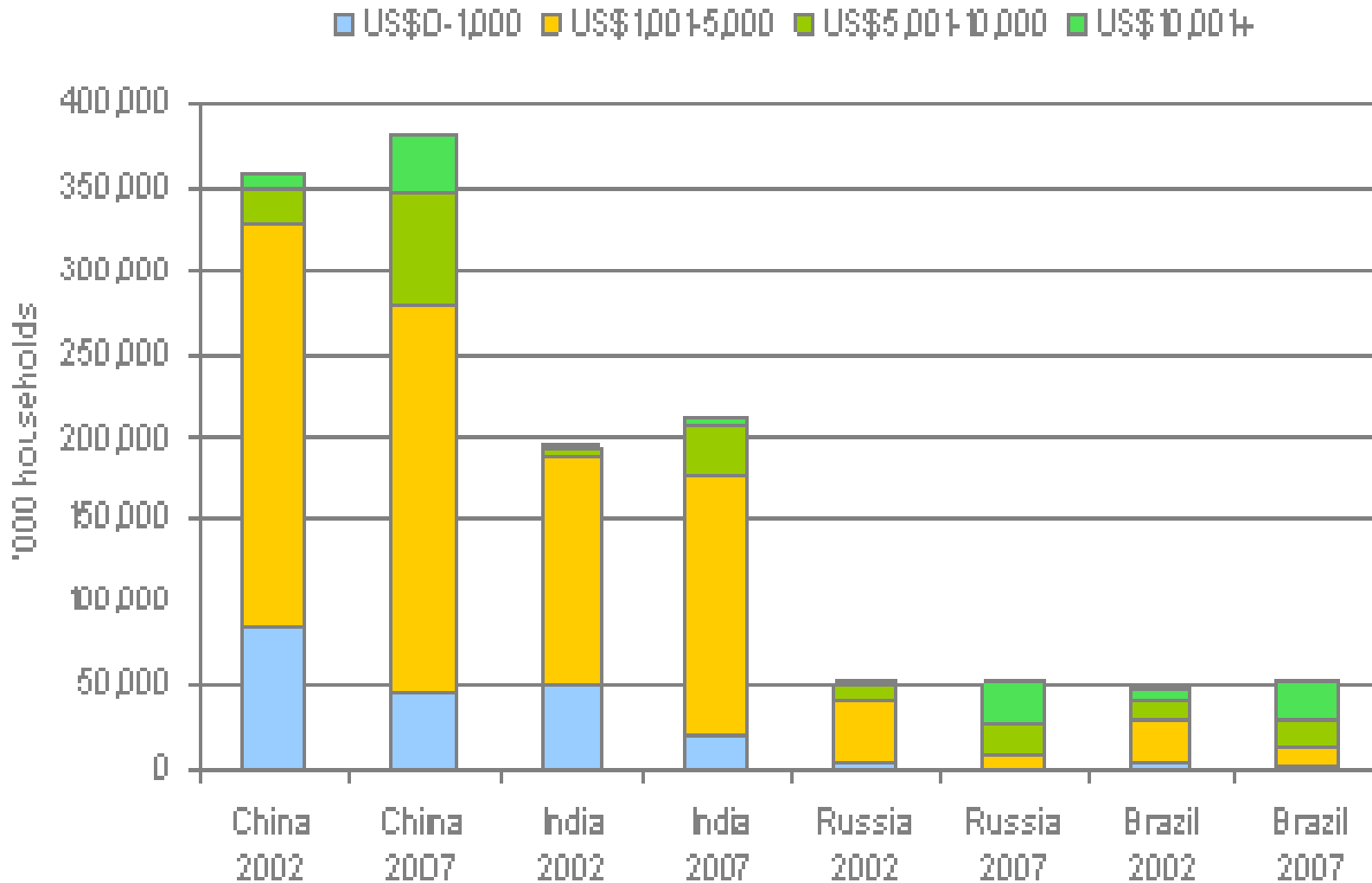
Distinctive Features of Low Income Markets



- **Consumers have low incomes**



Households according to disposable income bracket in BRIC countries: 2002/2007 '000 households



Distinctive Features of Low Income Markets



- **Consumers have low incomes**
- **Demand is commodity-intensive**
- **Price Price and affordability**
- **Standards not important**
- **Import of relatively unprocessed products**



So, how does this affect innovation for the poor, and involving the poor?

- Building on Gandhi, in the 1970s Schumacher proposed an intermediate technology
- But:
 - Innovative capabilities were concentrated in the north
 - Weak entrepreneurship in the south
 - Lack of effective demand by the poor
- So Appropriate technology (AT) driven by NGO and other not-for-profit activities



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Back to the theory of induced innovation

- The nature of demand and user driven – or rather, user focused - innovation
- Factor prices and infrastructure
- Firm trajectories and path dependency
 - Prahalad
 - GE
 - Philips
 - Nokia

A market opportunity for TNCs...



“[b]y stimulating commerce and development at the bottom of the economic pyramid, [northern-based] MNCs could radically improve the lives of billions of people... Achieving this goal does not require multinationals to spearhead global social development initiatives for charitable purposes. They need only act in their own self interest, for there are enormous business benefits to be gained by entering developing markets”

Or, perhaps disruption...?



the previously dominant industry leaders
“.....were as well-run as one could expect a firm managed by mortals to be – but that there is something about the way decisions get made in successful organisations what sows the seeds of eventual failure”.

(Christenson, 1997: xiii).



Or, perhaps disruption...?

They failed precisely because they listened to their customers so well – “the logical, competent decisions of management that are critical to the success of their companies are also why they lose their positions of leadership“

(Christenson, 1997: xiii).



And that takes us to Schumpeter..



Some questions

- Happened, happening or will happen?
- Will China and India run out of steam, and/or North revive?
- Does consumption of the poor really differ from that of the rich – average and marginal consumption
- Will impact be felt more in the capital goods than the consumer goods sectors?
- How will it affect poor producers exporting into the Asian Drivers?