Industrialisation in emerging countries – from catching up to leapfrogging?

Christine Greenhalgh
Oxford Intellectual Property Research Centre
and Centre for Transformative Innovation
Swinburne University of Technology
Changes in International Trade Theory

• Original trade theory - comparative advantage driven by *static factor endowments* and *relative factor costs*

• Poor countries traded by using large endowments of cheap unskilled labour to make standard products

• To emerge they *gradually* engaged in moving up product quality ladder as wages rose and learned more advanced techniques

• Modern trade theory – comparative advantage is *self created and dynamic* based on investments in new technology and skills of workforce

• Countries compete to be *technology leaders* in a race to be first to market worldwide
Questions looking forward

Today new technology is being transmitted and adopted more rapidly internationally, so:

• Are emerging countries still confined to be continually in a slow catching-up situation?
• Or can they leapfrog and become technology leaders in some fields?
• Is new technology replacing unskilled jobs in traded goods everywhere?
• If so, is it now harder for poor countries to exploit comparative advantage based on cheap labour?
Recent features of trade and investment in emerging countries

• Examples of leapfrogging already exist
• Outsourcing of R&D by some multinational firms to tap into high quality foreign labour e.g. Indian software sector
• Rise in domestic investment in R&D by emerging countries e.g. China wind and solar
• East Africa moved from no phones to mobile phones and established an innovative system of money transfers via the M-Pesa system
Key role of vocational education and training in all countries

- Two strands of VET for youth - education and training for *school leavers* and professional education within *higher education*
- Continually updating these will be even more important in future due to speed of change in technology and jobs
- Third strand - *adult continuing education* and *retraining systems* will be a key to sustaining employability throughout working lives
- Need to ensure that lifelong learning is available as skill needs and occupations change
- Shared funding of VET between state, employers and individuals must be worked out carefully to match benefits to costs