

Human Capital: Skills for Today or Skills for the Future?

Philip McCann
University of Groningen

Human Capital: Skills for Today or Skills for the Future?

- Human capital, skills and growth
- Growth theory – exogenous ‘technology’ or endogenous processes
- Aspatial models → Spatial (regional) models
- Factor mobility
- Mobility of knowledge, ideas and systems

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- Endogenous processes
 - knowledge 'spillovers' (Romer)
 - human capital (Lucas)
 - innovation (Aghion and Howitt)
 - competition (Porter)
 - entrepreneurship (Acs and Audretsch)

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- Knowledge interactions and embodied knowledge (human capital)
- knowledge spillovers – a la agglomeration – sharing, matching, sorting
- Knowledge exchanges – enforceable contracts
- Firm (organisational) boundaries: markets versus hierarchies

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- Human capital characteristics
- Higher skills → higher mobility
- Higher initial mobility → higher subsequent mobility
- Higher skills → Mobility is more directional
- Human capital → greater mobility and spatial specificity

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- Learning effects – Mincer – are dominated by age 25-40 university graduates
- ‘Complex problem solvers’ – Australian estimates – 80% of value-added
- These are in ‘knowledge centres’
- Knowledge is spatially bounded
- Innovation indicators are spatially bounded

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- Cities have higher productivity
- Cities generate more knowledge outcomes (patents, innovations, copyrights, licenses)
- Cities have higher human capital – both stocks and inflows
- Cities and ‘creativity’
- Cities and entrepreneurship

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- But what is new here? Cities and urbanisation have always been a crucial part of industrialisation since globalisation started in 1602
- In the second decade of 20th century the world's fifteen largest cities were in the eight largest and richest economies
- Simple and direct relationship since 1602 to the eve of World War I

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- For much of the rich world the simple industrialisation-urbanisation scale relationship broke down in the mid 20th century
 - WW1
 - Depression
 - WWII
 - Bretton-Woods

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- Internal national production and replication
- Modern globalisation 1989: new features
 - degree of human capital mobility
 - multinationals: private sector global institutions as technology conduits
 - global regionalism
 - global cities

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- O'Brien (1992) – the 'end of geography'
- Cairncross (1997) – the 'death of distance'
- Thomas Friedman (2005) – the 'World is Flat'
- The world is becoming a global 'village'
- Role of *perceptions* of distance and space

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- *Globalization* and *Localization* are both increasing in tandem
- Slow *international convergence* (except Africa)
- Increasing intra-national *inter-regional divergence*

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- *Technological Changes* – transportation improvements (RO-RO), JIT, satellite systems, ICTs, internet
- *Institutional Changes* – EU, NAFTA, CER, ASEAN, MERCOSUR, APEC, BITs, DTTs
- *Organizational Changes* – out-sourcing, off-shoring, global expansion of multinationals

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- The transition economies bring 260 million new workers into the global economy – eastwards drift of EU
- China brings 760 million workers into the global economy
- India brings 440 million workers into the global economy
- Rise of the BRIICS economies

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- Changing architecture of global trade
- Leamer (2007) – the world is not shrinking but economic activity is dispersing
- Key role of China
- Growth in Super-Regions: EU, NAFTA, East-Asia

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- Importance of agglomeration appears to have increased globally since early 1990s
- More than half the world now live in cities
- In advanced economies cities are increasingly associated with knowledge activities
- Premium for face-to-face contact

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Spatial transactions costs for routine, standardized and non-knowledge intensive activities have *fallen*

Spatial transactions costs for non-routine, non-standardized and knowledge-intensive activities have *risen*

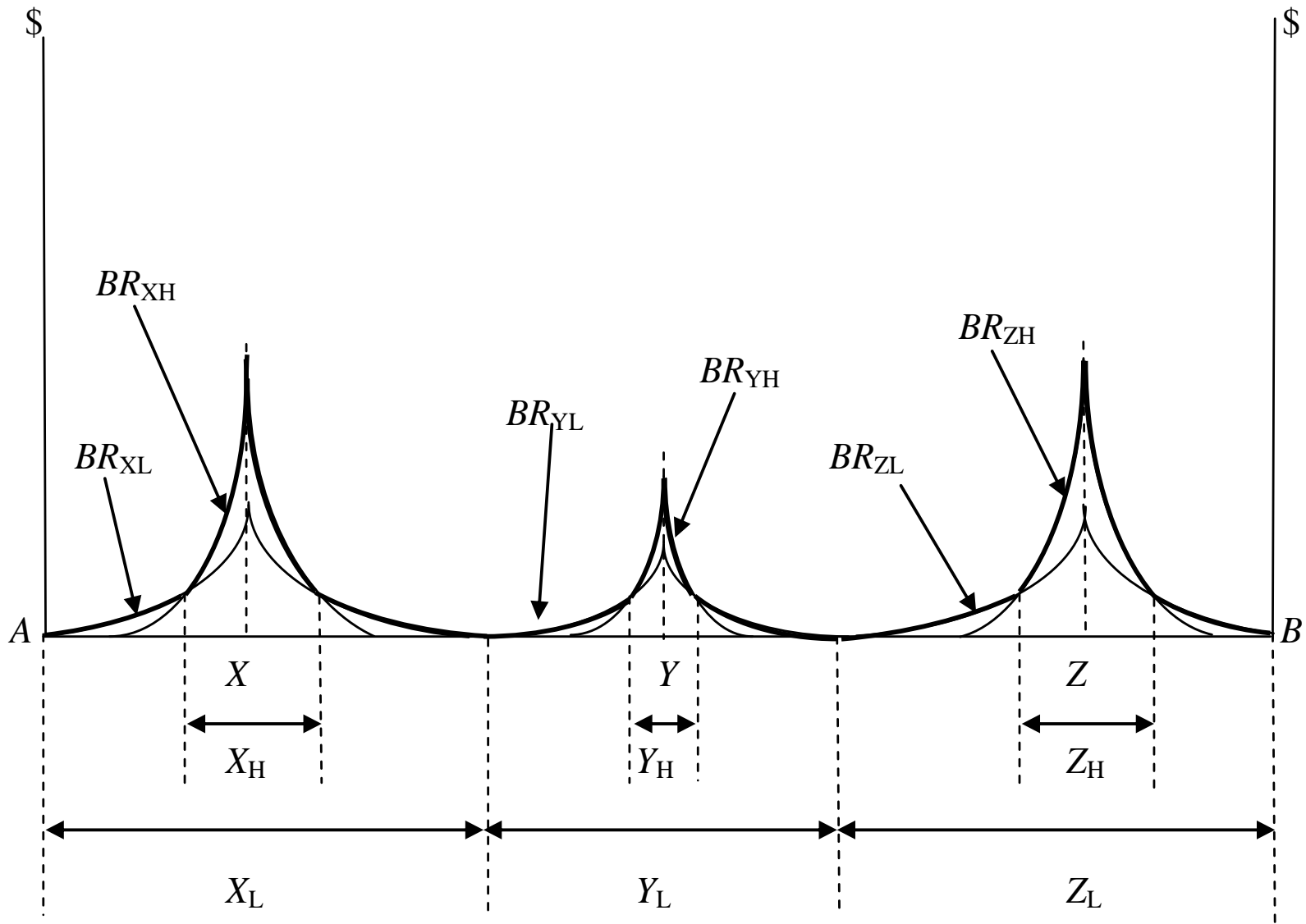


Fig. 1 A Three City One-Dimensional Economic Geography

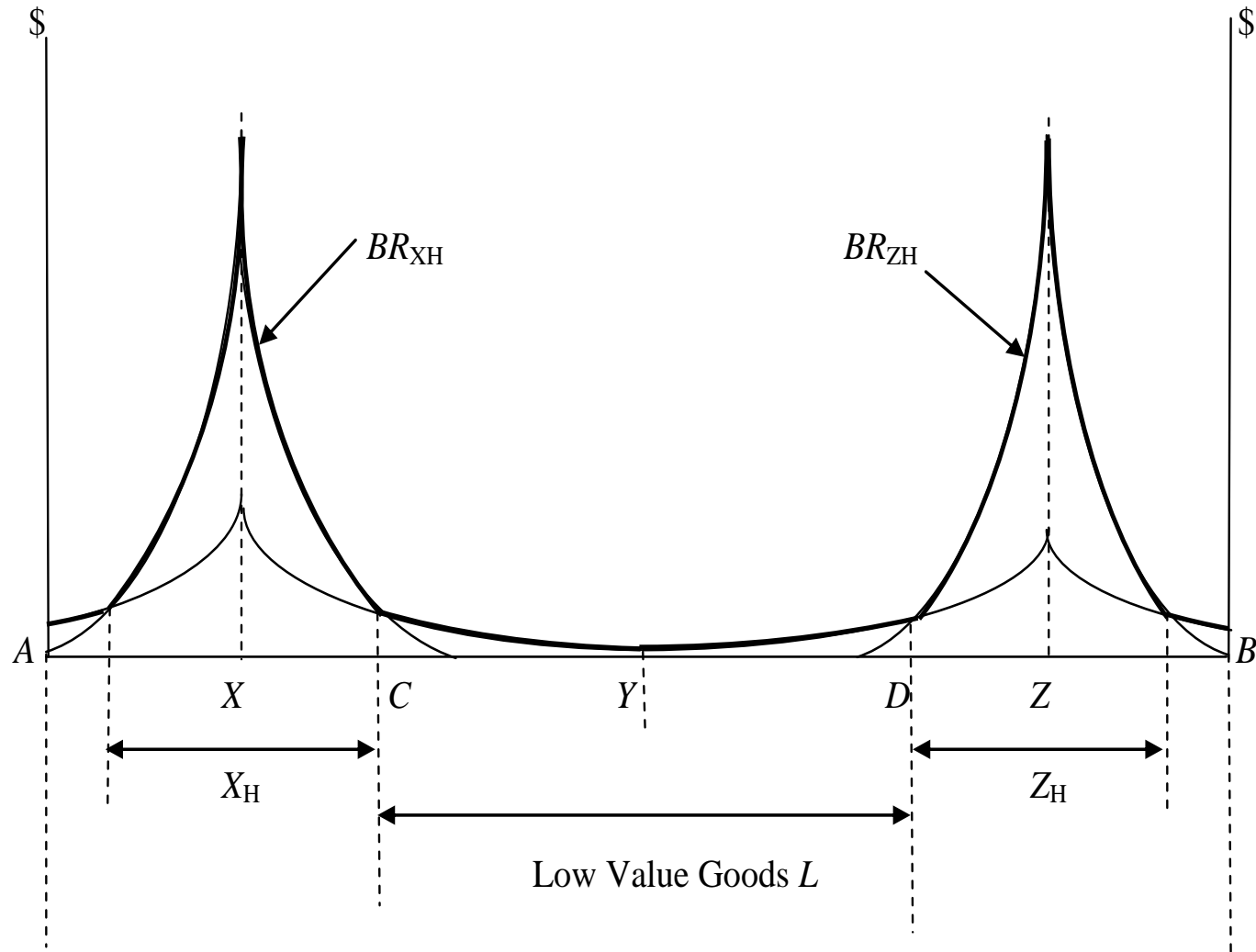


Fig. 2 Globalization, Localization and Economic Geography

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- Knowledge (spikes and peaks) activities - in which types of regions and cities?
- Global flows of knowledge and ideas
- Face to face contact and human capital mobility
- Critical role of multinational enterprises, and universities as knowledge conduits for local SMEs

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- The links between globalization, knowledge and regions can be considered on two levels
- Global *city-regions* at both the sub-national and trans-national levels
- Changing role of *sub-national* regions
- Changing role of '*super-regions*'

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- Role of cities and regions
- Specialisation versus diversity: Marshall versus Jacobs
- No empirical consensus (meta-analysis)
- Urban effects – scale and density – doubling gives ~ 5 – 7 % productivity increases
- Are scale and density the answer?

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- Mega-scale and agglomeration (a la Marshall) – USA, Korea, Japan
- Much smaller scale: UK, France, Spain: Canada, Australia
- CEES: Poland, Czech Republic, Hungary
- Mexico, Turkey and BRIICS Countries
- Successful developing Countries

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- Rest of advanced OECD countries – role of scale is less clear-cut – 2 to 6 million
 - networks, connectivity, integration
- SME performance related to global performance
- In Europe: heterogeneity and connectivity
 - not scale (World Development Report 2009)

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- The rise of *global cities* in super-regions
- Global cities as *knowledge hubs* in global networks of transportation and communication
- Global city-regions dominate human capital
- Increasing spatial 'reach' of core cities

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- Key features of global-city regions: presence of multinational firms and global air-transport systems
- High concentrations of human capital (stocks and flows)
- ‘Escalator’ migration processes
- Access to global ideas, knowledge, and markets

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- Multinational affiliate sales are 2.25 global exports
- All multinational indicators outperform domestic indicators
- Multinational activity ~ 70% of all activity is in the same super-region as the parent
- DTTs and BITs are highly concentrated spatially

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- Rich city-regions are globally connected regions
- City and country size are not significant (Bel and Fageda)
- Transactions costs have increased for knowledge and time-related activities (Bouhol and de Serres)
- Access to people and ideas

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- EU 2000-2006 the population contribution of metro areas >250,000 population has remained almost constant at 59% - only increased by 0.5%
- EU GDP share of metro areas has grown only slowly but city GDP income per capita also depends on commuting patterns
- Legacy impacts of spatial institutions are very important

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- Absorptive capacity – may depend on distance from the technological frontier – but could be either positive or negative
- OECD data
- Lagging regions catching or falling behind
- Intermediate regions: heterogeneity of responses
- Spatial structure is critical: where activity takes place, not just what activity

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- Factors are more mobile (human capital) than ever but also more specific than ever
- Regional innovation systems approach: innovation is a social, institutional and geographical phenomenon, not just technological or sectoral
- Role of interdependencies
- Innovation not invention

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- Innovation systems approach
- Firms and private sector institutions (MNEs)
- Public sector institutions (universities etc)
- Quasi-public institutions: social capital
- Spatial factor responses: human capital mobility, (venture/equity) capital

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- Standard argument: better institutions → convergence (via absorption)
- Impacts of institutions and transactions costs depends on whether the underlying mechanisms are equilibrating (convergence) or cumulative (divergence)
- Human capital migration has both properties – disequilibrium and equilibrium processes

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- Micro-level innovation estimations
- Links between firms and institutions:
positive role of proximity in R&D
cooperation, zero or negative role for local
human capital or density
- Knowledge exchanges differ between
spillovers and embodied human capital
- Density and scale are 'catch all' effects

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- Role of amenities: natural and human produced (urban) amenities – in location preferences for human capital
- Quality of life
- Income elastic goods: consumption and variety
- Culture, creativity and human capital
- EU migration is pro-cyclical and pro

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- Contemporary policy context is more complex
- OECD local development approach 2009 *How Regions Grow* and 2009 EU Barca Report *An Agenda for a Reformed Cohesion Policy* emphasise the growth potential of all regions
- Counterpoint to 2009 World Development Report *Reshaping Economic Geography*

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- Scale of economic impacts is increasing
- Differentiation between localities is increasing
- Acting 'local' does not necessarily mean small is good – policy needs to be context-specific but also appropriate to the wider context
- Institutional issues – stakeholder involvement and multi-level governance

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- System-wide issues: network effects, agglomeration effects, polycentric system effects
- A *place-based* approach to regional policy – combines local specificities with wider system effects
- Provision of local public goods → bottlenecks and missing links