

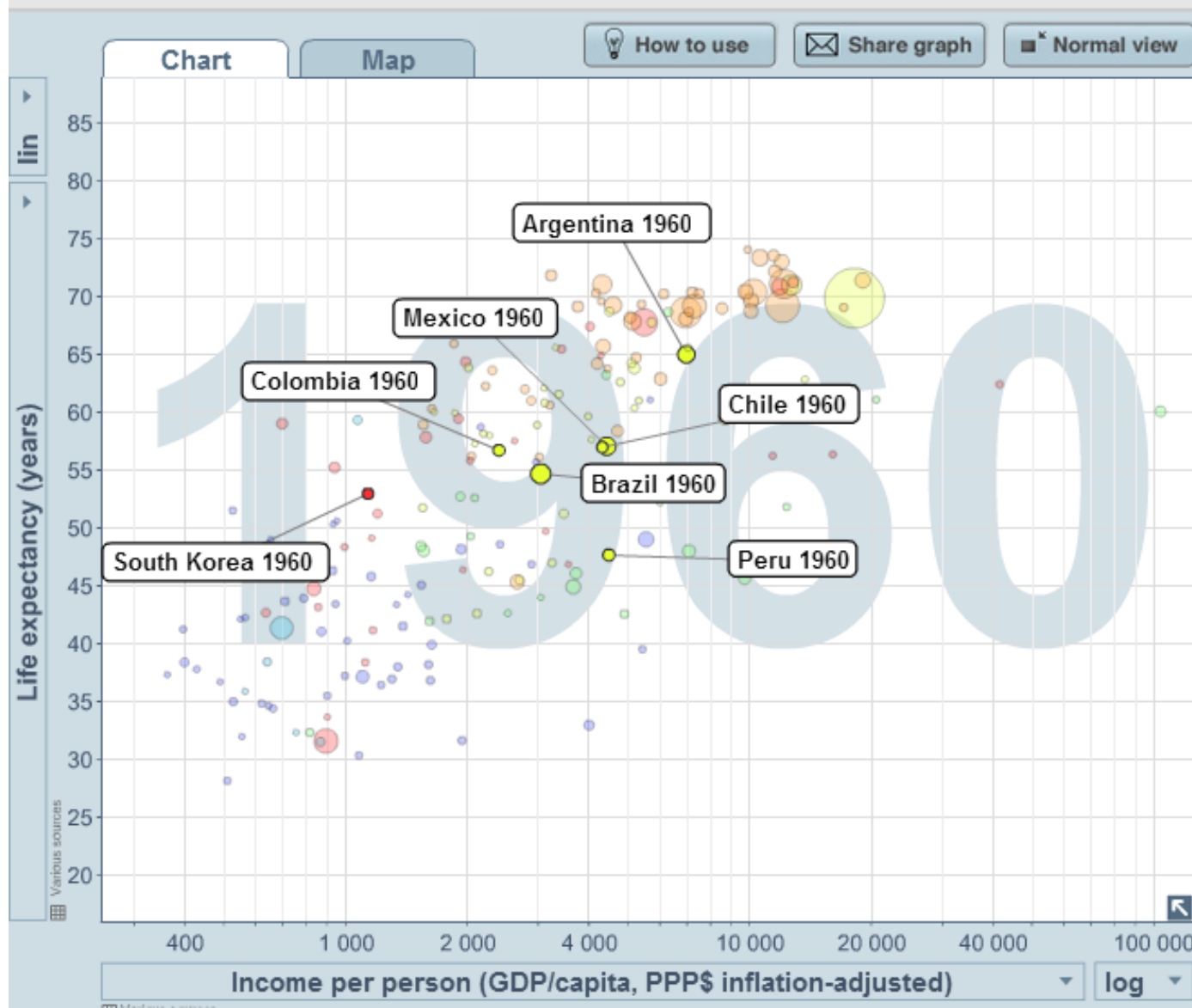
# Korean Productive Transformation: From Technological Catch-up to Innovation Leader- What is Transferable to Latin America?

IDB Korea Week  
Washington DC  
May 13-15, 2014

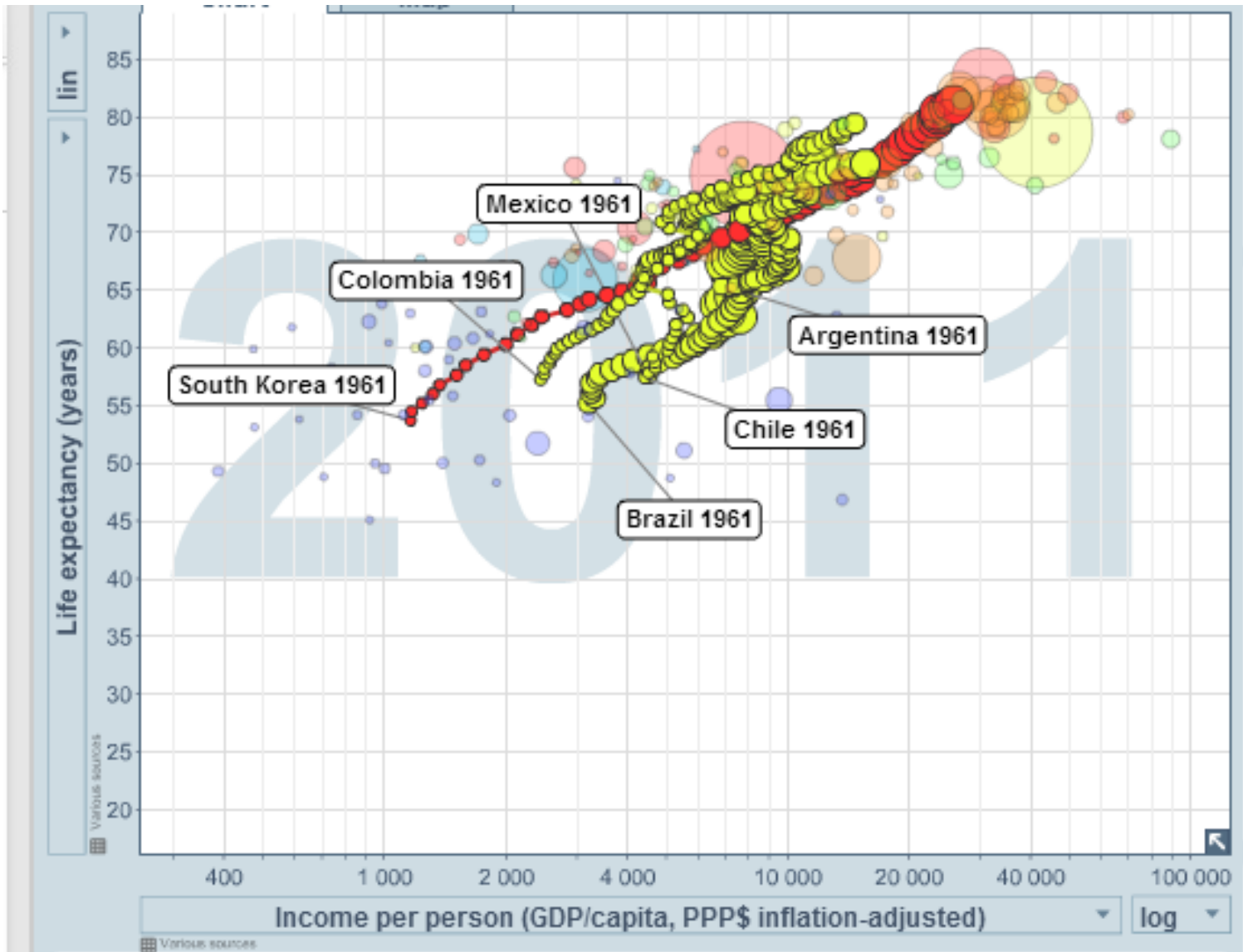
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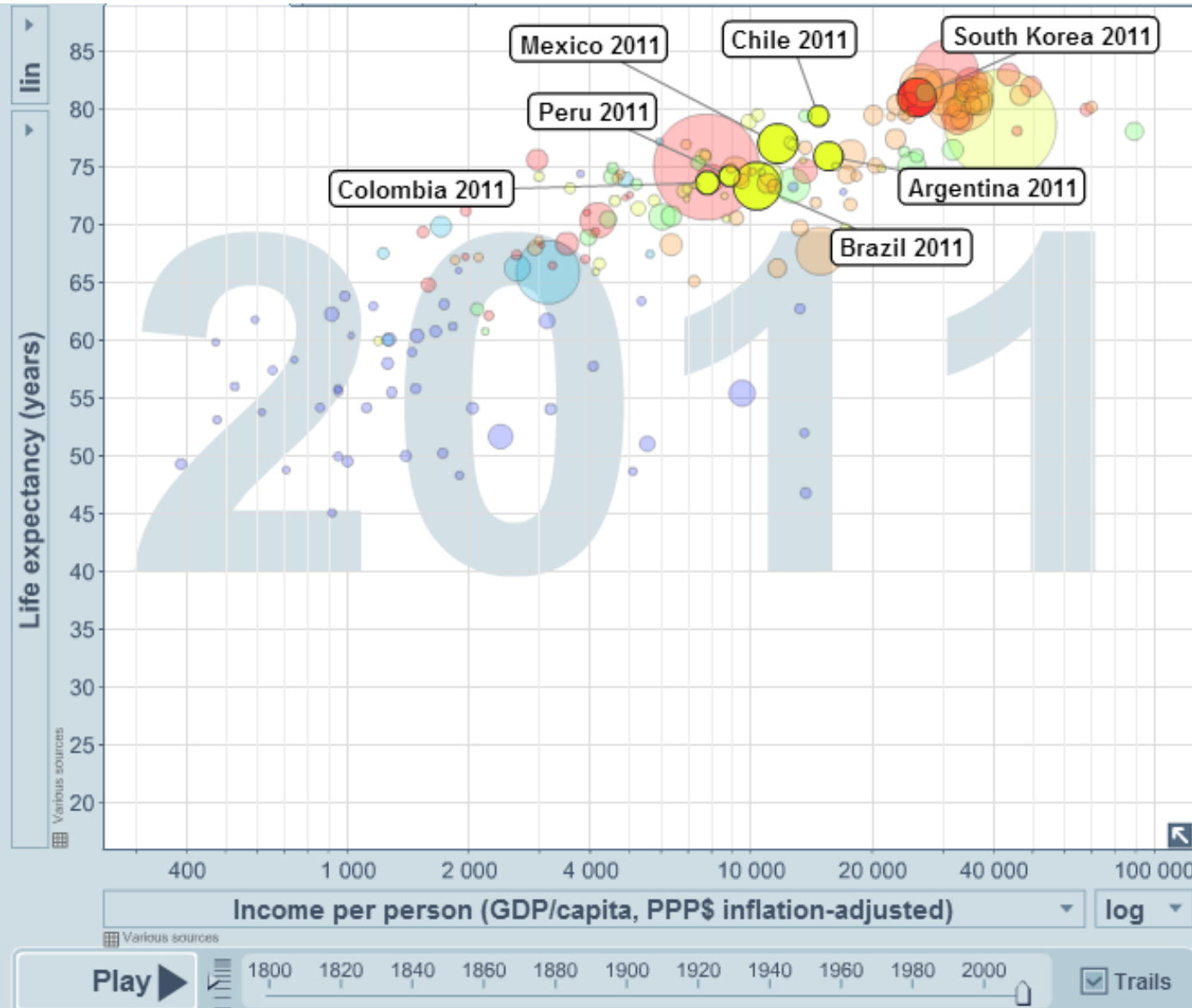
# Per Capita GDP Life Expectancy, and Economic Size 1960



# Per Capita GDP Life Expectancy, and Economic Size 196-2011



# Per Capita GDP Life Expectancy, and Economic Size 2011



# Key Elements of the Korean Experience

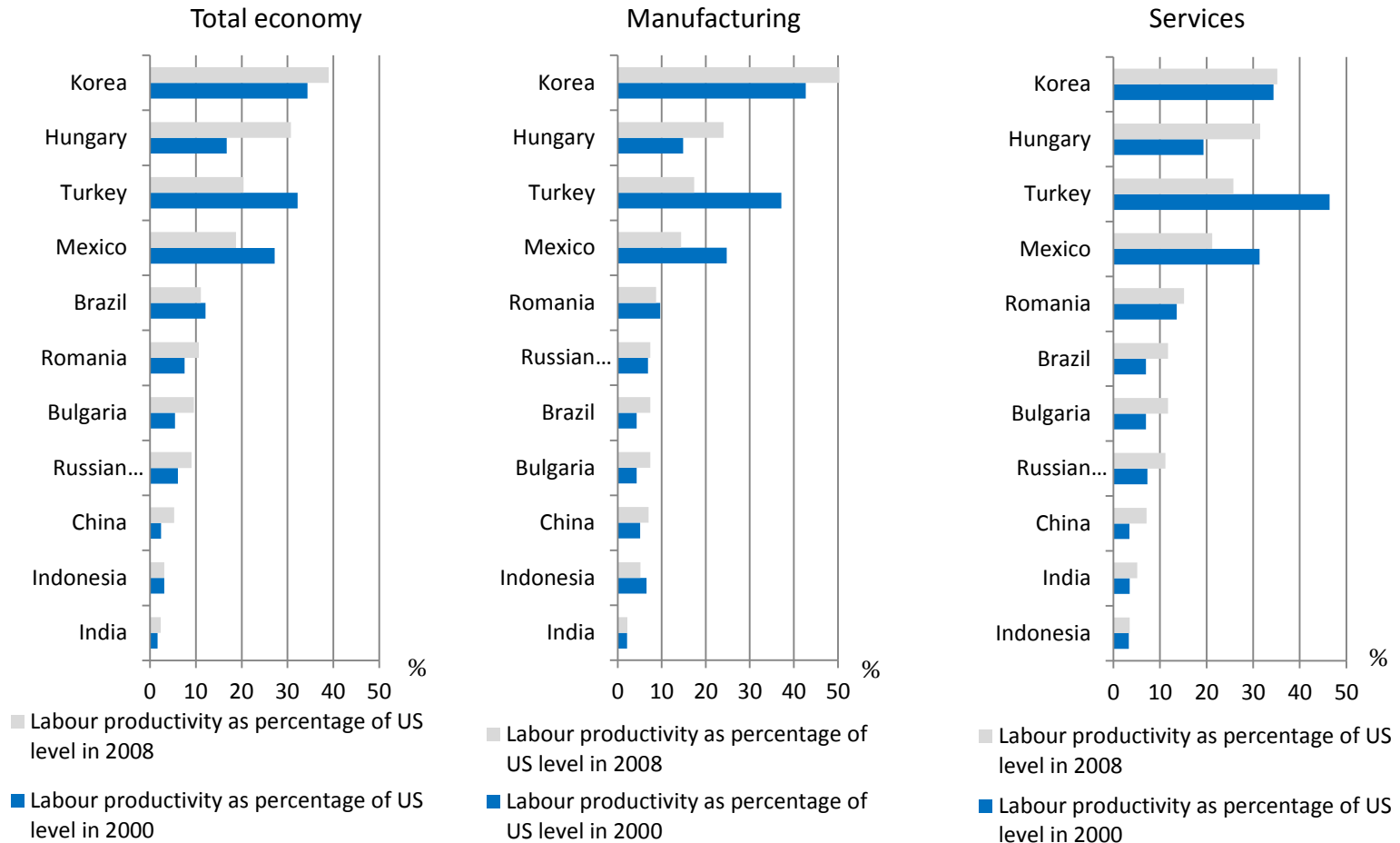


- Long history and culture
- Natural resource poor
- Devastated by Korean War-mass mobilization society
- More homogenous population; lower inequality
- Strong and capable government
- Strategy of strong outward orientation led by manufacturing
- Rapid ramp up of education and R&D investment
- Large dynamic Chaebols that invest in R&D
- Rapid learning and movement from imitation to innovation

# The labour productivity gap with the U.S. is significant

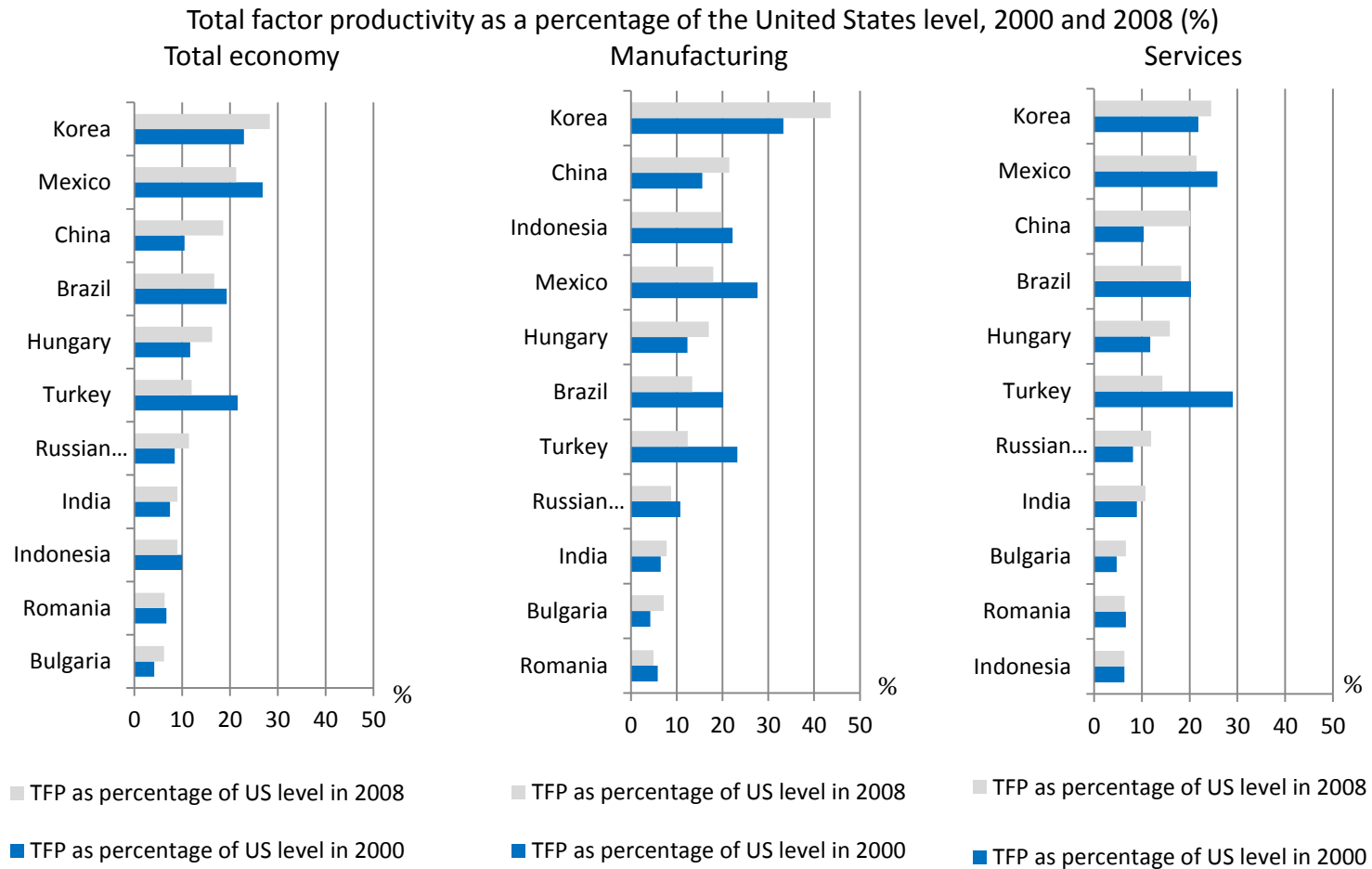


Labour productivity (value added per employee in constant 2002 USD) as percentage of the United States level, 2000 and 2008 (%)



Source: Authors' estimations using Timmer, M.P. (ed) (2012), "The World Input-Output Database (WIOD): Contents, Sources and Methods", WIOD Working Paper Number 10

# ... so is the total factor productivity gap



Source: Authors' estimations using Timmer, M.P. (ed) (2012), "The World Input-Output Database (WIOD): Contents, Sources and Methods", WIOD Working Paper Number 10

# What is Different in Latin America?



- Generally natural resource rich economies
- High income inequality
- Countries have not had strong export oriented industrialization drive-instead have been more inward oriented with focus on import substitution
- Low investments in technical education
- Low investments in R&D
- More focus on Washington consensus than on building technological capability and enhancing production structure
- Lower government capability



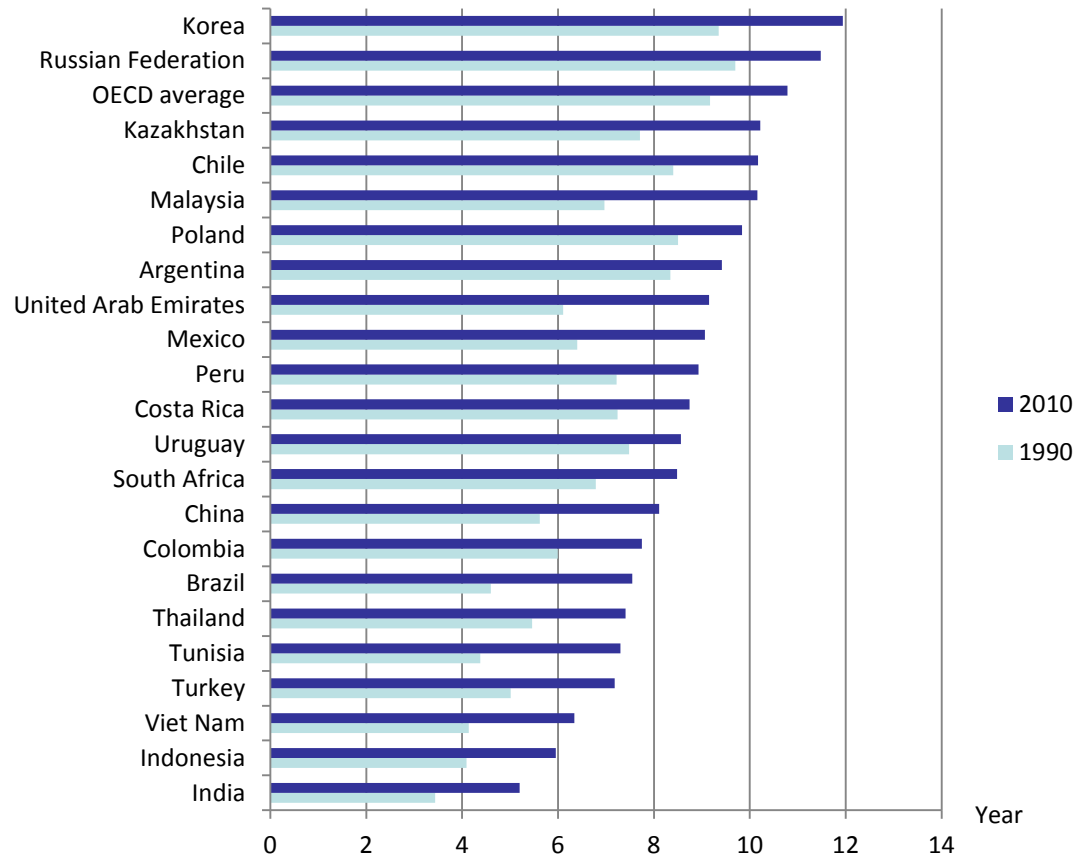
# What is Different in the International Context?



- Much more restrictive rules of the game\_  
WTO, TRIPS,
- Greater globalizations and competitiveness
- Greater speed of everything
- Emergence of China with complex double role:
  - Tremendous competitive pressure on manufactured exporters
  - Great appetite (demand) for natural resources

# Education attainments in emerging economies are nearing OECD levels (Korea is above)

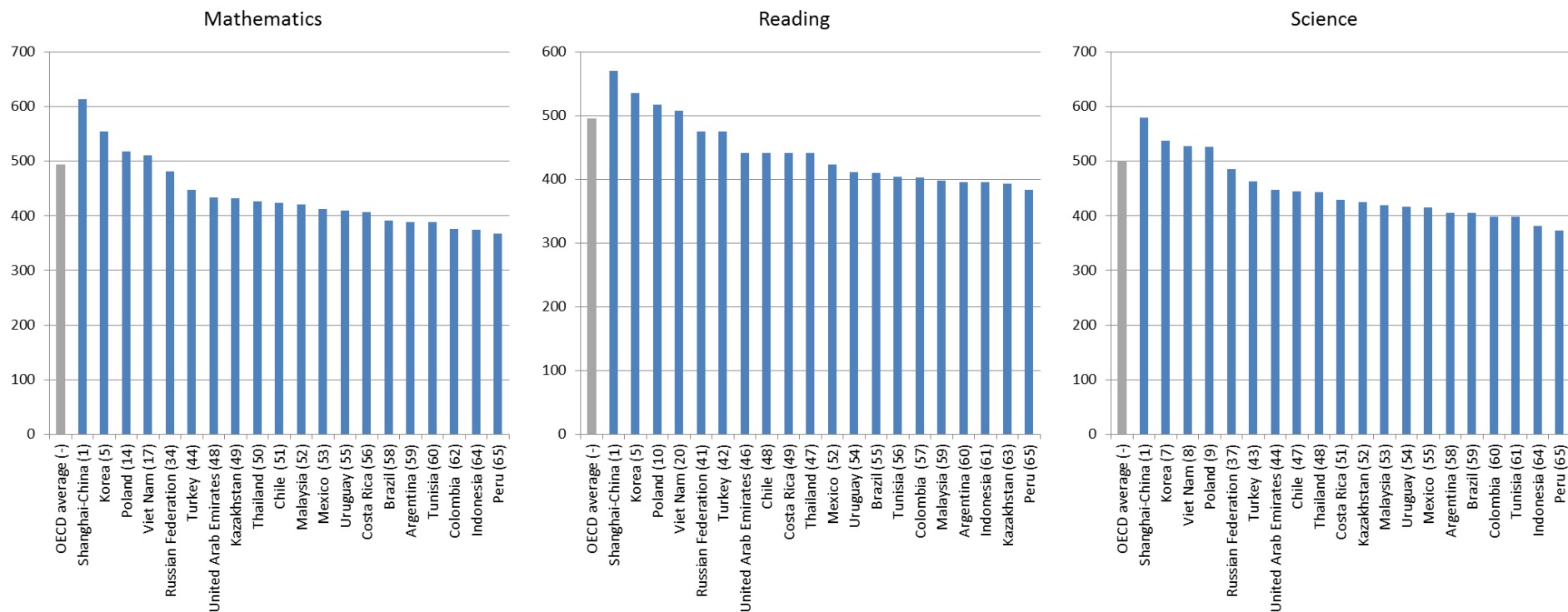
Average years of total schooling, age 15+, total, 1990 and 2010



Source: World Bank (2013), World Development Indicators 2013, World Bank, Washington, D.C..

# ...but the quality of education is still lower in many emerging economies, including in Latin America

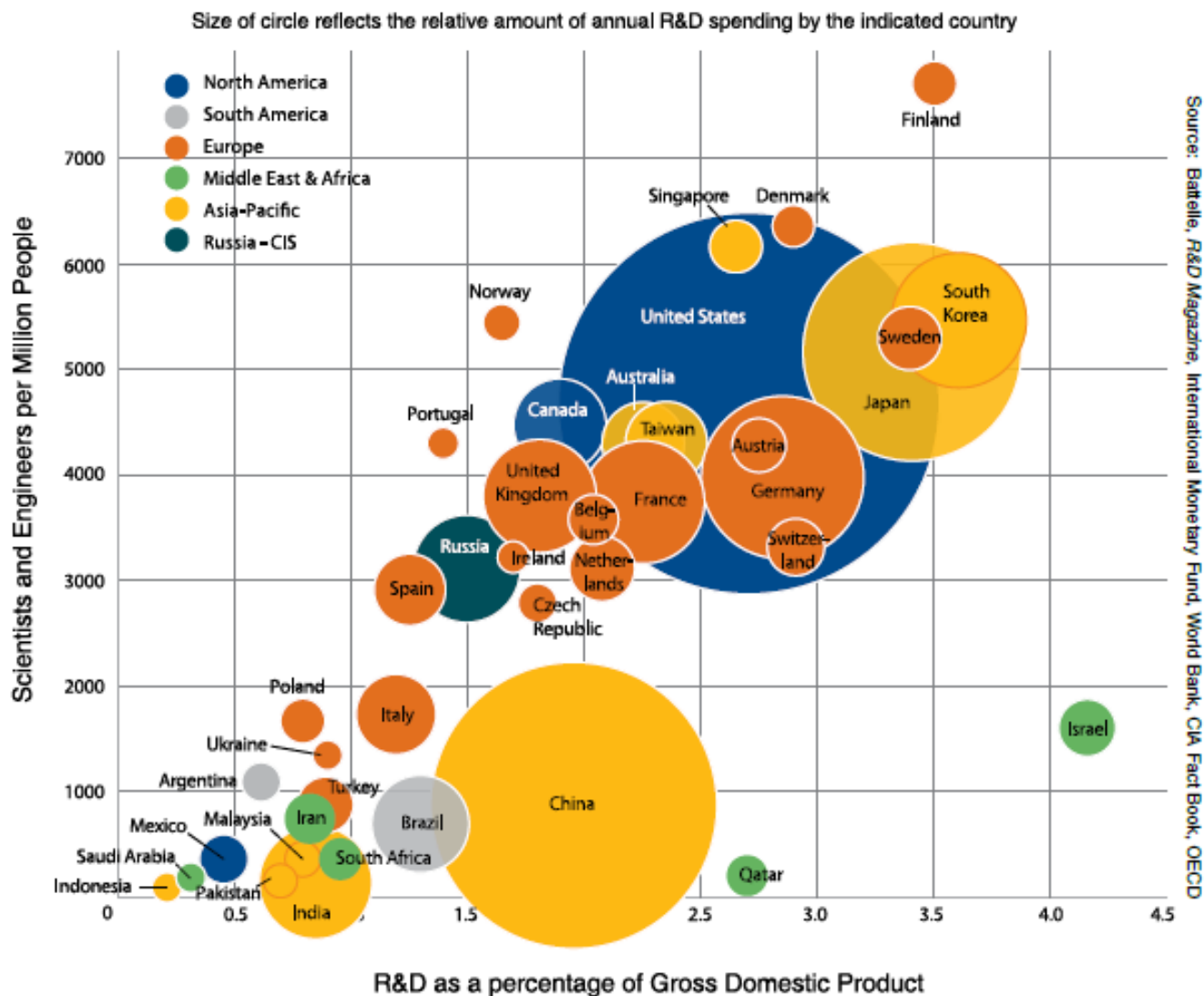
PISA scores by categories for selected countries and OECD average



Note: Ranking out of 65 entities in parentheses.

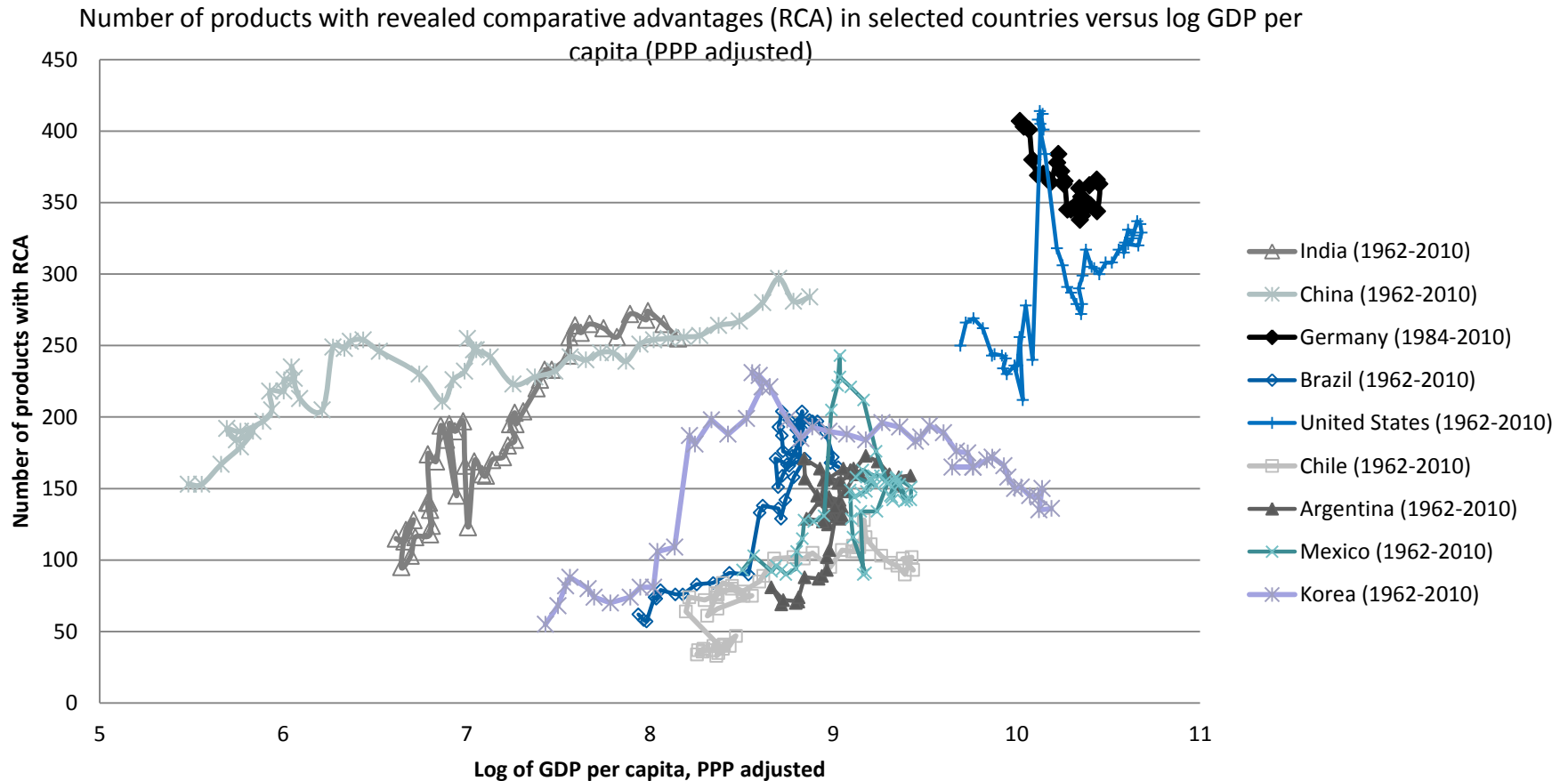
Source: OECD (2013), Education at a Glance: OECD Indicators, OECD Publishing, Paris.

# Global R&D Landscape 2013



Source: Batelle R&D Funding Forecast 2014

# Some resource-rich economies specialised rather than diversified



Source: Authors' calculations based on UN Comtrade (2013), United Nations Commodity Trade Statistics Database, and Penn World Tables (2013), Penn World Tables (database)

# What is Transferable?



- Critical importance of developing technological capability
- This requires investing in education and skills and in R&D
- Importance of role of government to address market failures and to coordinate activities of disparate actors.
- Importance of monitoring and evaluation and mid term corrections
- Constant process of challenge and response

# Implications?



- Much can be done in spite of differences in domestic and international context
- Need to convince multiple actors of what is at stake and why coordination is necessary.
- Requires longer term planning than in typically in Latin American countries
- This conference is an excellent opportunity to learn from the experience of a very successful country which can be an excellent partner



# THANK YOU!

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