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Harnessing International Production Networks to Foster Inclusive Growth and Local Capacities

Paper submitted by

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Irmgard Nübler

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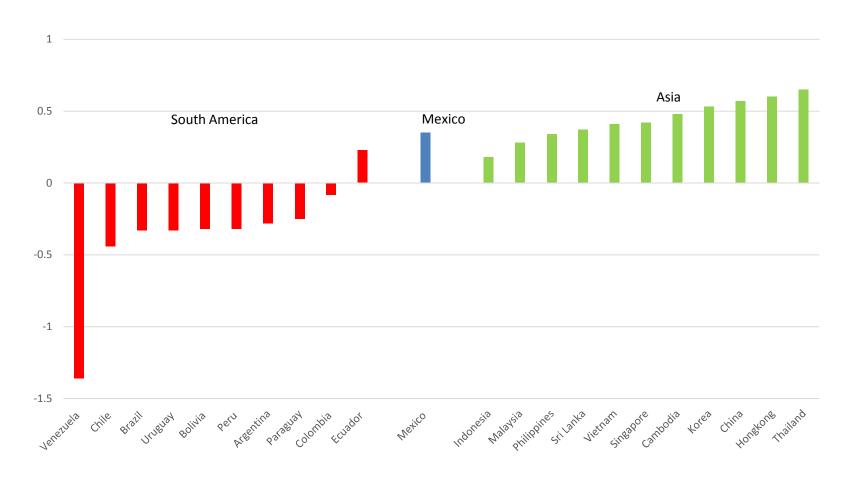
New technologies and innovations create windows of opportunities for developing countries

- The challenge for developing countries: generate a rapid, sustained and inclusive productive transformation process
 - Diversify production structure -product innovation
 - Increase sophistication and complexity of products for productivity and learning
 - Enter industries with high demand elasticities for domestic and foreign demand
- New technologies create opportunities for developing countries to leapfrog
- Countries take advantage by creating capabilities to innovate
- Such capabilities are built up in individual and societal learning processes
- Learning processes cannot be created by markets, requires long-term learning strategies and deliberate policies

Comparing Latin America and Asia

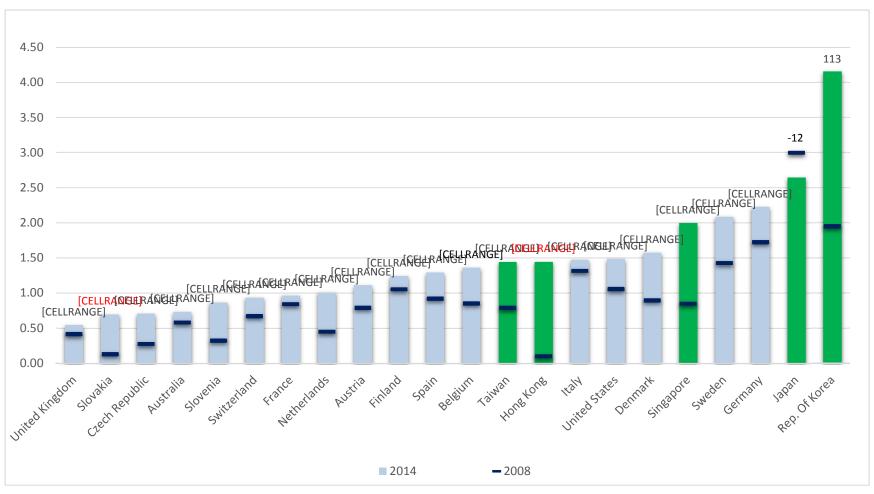
- The narrative: 1990-2014
 - South East Asian countries:
 - entered emerging GVCs with manufacturing intermediates (diversification)
 - increased economic complexity
 - accumulated capabilities to innovate
 - Diversified into two robot-intensive industries and learned to compete – transport and electronic
 - Creating productive jobs
 - South American countries:
 - supplied largely natural resources to GVCs
 - decreased economic complexity and de-industrialised.
 - Limited opportunities to develop capabilities to innovate and catch up in manufacturing
 - Developed only one robot-intensive industry- transport
 - Loosing productive jobs

Change in economic complexity in Latin American and Asian countries, 1998-2008.



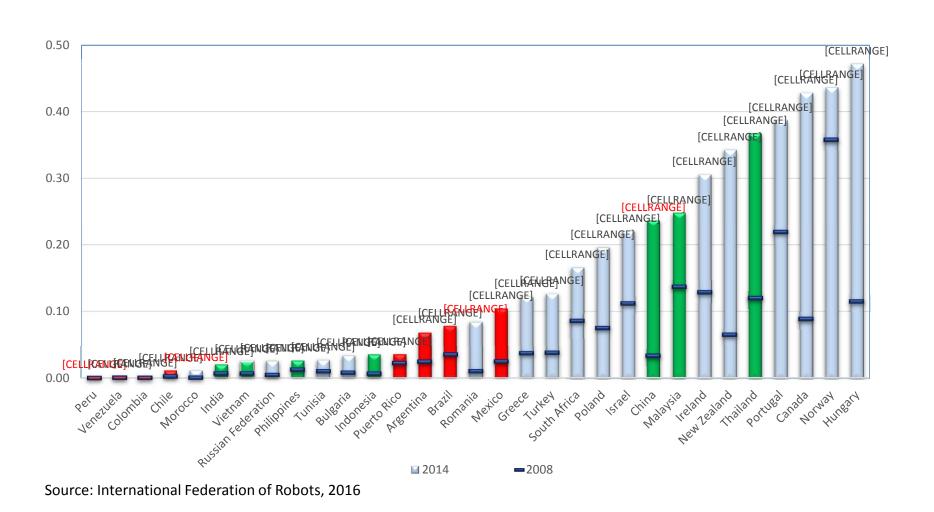
Source: The Economic Observatory (2017), MIT Harvard University

Robot Density across Countries in 2008 and 2014, High Density Countries (>0.5 in 2014)

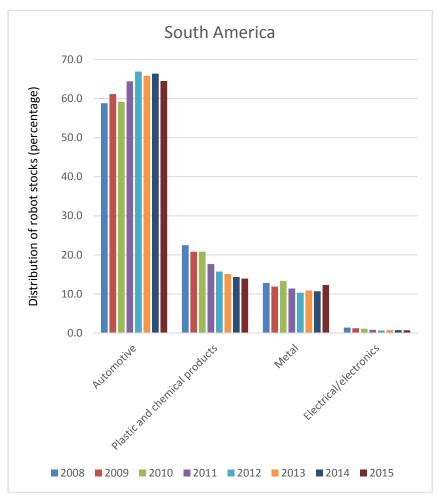


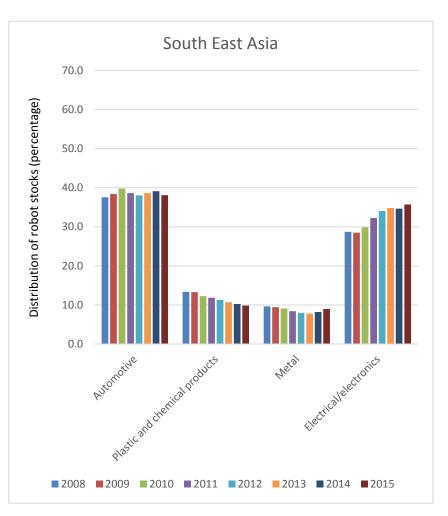
Source: International Federation of Robots, 2016

Robot Density across Countries in 2008 and 2014, Low Density Countries (<0.5 in 2014)



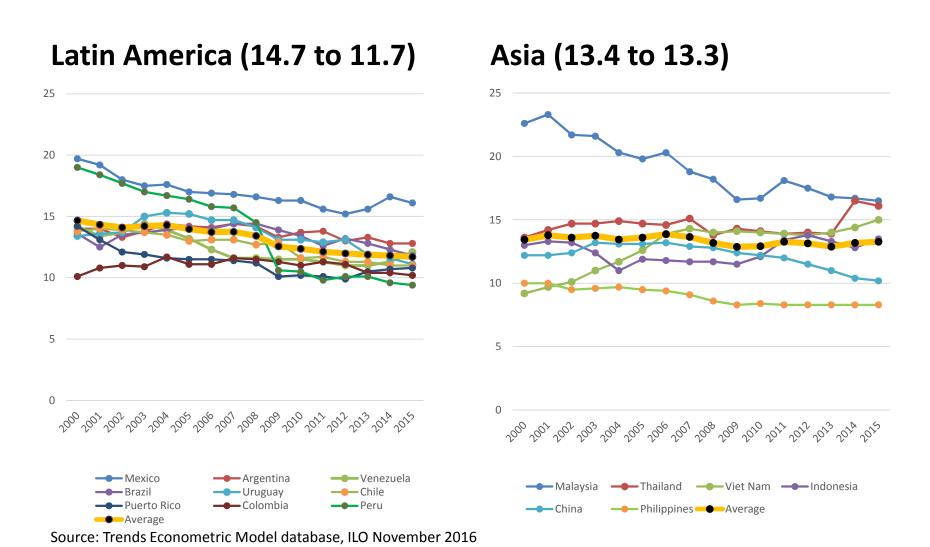
Distribution of robot stocks across the robot-intensive industries in South America and South East Asia, 2008-2015 (percentage)





Source: International Federation of Robotics, 2016

Change in manufacturing employment as a share of total employment, 2000-2015



III. A learning strategy for sustained and inclusive productive transformation

The challenge:

Creating capabilities to prepare for emerging windows of opportunities

Requires a long learning strategy and vision of productive development

Such learning strategies embrace

- Industrial and innovation: promote increasingly complex industries, occupations and learning
- Training policies: provide the skills needed in the economy
- Education policies: endow the labour force with competences, the ability to learn and attitudes that support innovations
- Wage and distribution policies: share the gains of higher productivity, increase domestic demand, and investment in education and training.

Thank you

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