Creative destruction and public policies – what kind of policies in a frontier economy?

- Case Finland

Pekka Ylä-Anttila

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This talk

• Background: Finland’s great leap in productivity
• Sources of productivity
  – Within industries
  – Productivity enhancing structural change – creative destruction
  – Creative destruction in a frontier economy
    • Experimentation
    • Reallocation
    • Selection
• What kind of policies at the frontier?
  – Long term: education policies
  – Short/medium term: competition & innovation policies
Aggregate productivity development – the great leap
Labor productivity levels in manufacturing, Finland 1995=100

Sources: Groningen University, EU KLEMS, Maliranta (2009)
Labor productivity, non-financial firms, USA 2008 = 100

Macro-level sources of productivity growth

  – Contributions from:
    • TFP 2.5 % points
    • ICT capital 0.7 % points
    • Non-ICT capital 0.2 % points
• High TFP contribution indication of catching-up and technical change
• Growth accounting does not, however, reveal
  – Causal relations
  – Role of creative destruction
Creative destruction - Digging beneath the aggregate productivity numbers

- Productivity enhancing restructuring – micro-level changes in productivity distributions
- Components
  - Entries (experimentation)
  - Exits (selection)
  - Reallocation of resources between continuing plants/firms
"Creative destruction" in transition

Industry productivity

Productivity vs. Time


Trend of firm/plant productivity (measured by "matching approach")

experimentation

reallocation

selection

LÄHDE: Hyytinen-Maliranta 2010
The role of creative destruction in international comparisons of aggregate labor productivity (manufacturing)

Sources: Groningen University, EU KLEMS, Maliranta (2009).
Components of creative destruction within manufacturing industries (%)
Summary and conclusions – what kind of policies in a frontier economy?
Summary – vital role of creative destruction

• In addition to macro-level sources of productivity growth, creative destruction has a vital role.
• Creative destruction explains one third of the overall productivity growth in Finnish manufacturing and virtually all of the acceleration since mid 1980s.

• In a frontier economy creative destruction is about
  – experimentation, reallocation,
  – selection among individuals (particularly managers) and businesses.
Policies

• Competition enhances innovation
• Opening up the economy and increasing competition associated with innovation and productivity growth in Finland
  – Reducing product market regulation (faster than OECD average) coincides with high productivity growth
  – Further evidence from sectoral studies: manufacturing vs. services (retail trade)
    • Creative destruction effects later in services
Sources:


**Maliranta – Rouvinen – Ylä-Anttila** (2010), Finland’s path to greater well-being through creative destruction, forthcoming