Sustaining Productivity Growth: The Key in Meeting Global Challenges

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Theme: Challenging the Frontier, Empowering People
Running uphill: Malaysia is headed into a period of slowing global productivity

- Both Europe and the US see slowing productivity growth and persistently low investment.
- Why? One idea is that “We are running out of innovations. Growth slowed in the early 1970s and has been slow ever since, except for the short information technology bubble 1994-2005. Investment responds to opportunities. Lack of innovation will be compounded by weak capital accumulation…”

The labor productivity problem

- The MPB is well timed. It is more difficult today than 20 years ago to make dramatic leaps in productivity. There is no recipe – countries differ by factor shares, unemployment, labour supply, and demographics.

- This presentation briefly examines three issues

  1. How will higher productivity affect the well-being of the majority of the population. Is it good or bad for Malaysians?
  2. What policy mix?
  3. What regulatory reform strategy would be most effective in supporting the MPB?

MALAYSIA PRODUCTIVITY BLUEPRINT

Driving Productivity of the Nation
TFP is hard to sustain – need the right mix of policies and appetite for risk

Source: Chad Jones, Long-Term Growth in Advanced Economies, ECB Sintra Forum, June 28, 2017
So, does productivity improvement increase or reduce jobs?

- The answer is “increase”, but....
Employment rates rise with productivity

David Autor and Anna Salomons, “Does Productivity Growth Threaten Employment? \Robocalypse Now?” European Central Bank Annual Conference, Sintra, Portugal
27 June 2017
Productivity effects on employment: positive but slowing in the 2000s

Productivity improvements create disruption and risk

<table>
<thead>
<tr>
<th>The least safe jobs</th>
<th>The safest jobs</th>
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<tbody>
<tr>
<td>Telemarketer</td>
<td>Mental health and substance abuse social worker</td>
</tr>
<tr>
<td>Chance of automation</td>
<td>Chance of automation</td>
</tr>
<tr>
<td>99%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Loan officer</td>
<td>Occupational therapist</td>
</tr>
<tr>
<td>Chance of automation</td>
<td>Chance of automation</td>
</tr>
<tr>
<td>98%</td>
<td>0.35%</td>
</tr>
<tr>
<td>Cashier</td>
<td>Dietitian and nutritionist</td>
</tr>
<tr>
<td>Chance of automation</td>
<td>Chance of automation</td>
</tr>
<tr>
<td>97%</td>
<td>0.39%</td>
</tr>
<tr>
<td>Paralegal and legal assistant</td>
<td>Physician and surgeon</td>
</tr>
<tr>
<td>Chance of automation</td>
<td>Chance of automation</td>
</tr>
<tr>
<td>94%</td>
<td>0.42%</td>
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<tr>
<td>Taxi driver</td>
<td>Clergy</td>
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<tr>
<td>Chance of automation</td>
<td>Chance of automation</td>
</tr>
<tr>
<td>89%</td>
<td>0.81%</td>
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<tr>
<td>Fast food cook</td>
<td></td>
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<tr>
<td>Chance of automation</td>
<td></td>
</tr>
<tr>
<td>81%</td>
<td></td>
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Source: The Future of Employment
In fact, Europe explicitly bases its productivity policy on disruption

- EU doctrine: boosting productivity through creative destruction
  - EU level decides on internal competition + free trade agreements
  - The Member states are in charge of compensating the losers

- But this is producing tensions:
  - Rising inequalities + perceptions of unfairness
  - Rejection of further integration (Brexit)

Unbalanced growth: Employment in `advancing' sectors shrinks, according to Autor and Salomons

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Cumulative Productivity Growth

- Mining, utilities, construction
- Manufacturing
- Education, health
- Low-tech services
- High-tech services

Cumulative Change in Employment

- Mining, utilities, construction
- Manufacturing
- Education, health
- Low-tech services
- High-tech services

Unweighted average across all 19 countries. Productivity is gross output based.

Shares normalized to 0 in 1970. Unweighted average across all 19 countries.

But spillover effects of productivity growth create more jobs than are lost. Productivity growth in services produces largest positive spillovers.
Productivity growth has been strongly skill-biased 1970-2007 due to induced sectoral shifts.

Based on model 5 from Table 7; prediction averaged across all 19 countries. Productivity is gross output based.

But not in Malaysia!

- MPB: “the proportion of highly skilled workers has remained constant at 25% over the years.”
- The key constraint to investments in high capital sectors seems to be labor skills (not exploitation of cheap foreign labor) and extreme labor “stickiness”
- Sensibly, Malaysia wants to “build a strong pipeline of skilled workers” – and they should move more quickly across sectors
- Korea: “the winning strategy of Korea was to move swiftly from the exploitation of cheap labour to the creation of a skilled labour force and of “competitive capabilities”…. 
- …but note need to keep profits high to encourage re-investment!
Absolute Contributions of Intersectoral Shifts in Labour to TFP and GDP Growth in Asia, 1980-2000, % points per year

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<td>Indonesia</td>
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<td>-0.18</td>
<td>1.21</td>
<td>1.51</td>
<td>1.76*</td>
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<td>South Korea</td>
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<td>-1.80</td>
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<td>0.33</td>
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<td>Philippines</td>
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<td>0.00</td>
<td>0.07</td>
<td>0.63</td>
<td>0.37**</td>
</tr>
<tr>
<td>Singapore</td>
<td>-0.29</td>
<td>1.25</td>
<td>2.33</td>
<td>-0.41</td>
<td>0.78**</td>
</tr>
<tr>
<td>Taiwan</td>
<td>0.05</td>
<td>0.11</td>
<td>0.13</td>
<td>0.09</td>
<td>0.10**</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.26</td>
<td>0.52</td>
<td>1.43</td>
<td>1.05</td>
<td>0.81**</td>
</tr>
</tbody>
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* The year 1986 is not included.
** The year 2000 is not included.

## Absolute Contributions of Labour Quality Growth to TFP and GDP Growth in Asia, 1980-2000 (% points per year)

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<tbody>
<tr>
<td>India</td>
<td>0.00</td>
<td>-0.09</td>
<td>-0.20</td>
<td>-0.36</td>
<td>-0.17</td>
</tr>
<tr>
<td>Indonesia</td>
<td>N.A.</td>
<td>N.A.</td>
<td>1.10</td>
<td>1.21</td>
<td>1.43**</td>
</tr>
<tr>
<td>Japan</td>
<td>0.62</td>
<td>0.31</td>
<td>0.29</td>
<td>0.04</td>
<td>0.96</td>
</tr>
<tr>
<td>South Korea</td>
<td>1.93</td>
<td>2.43</td>
<td>1.57</td>
<td>0.76</td>
<td>1.67</td>
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<tr>
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<tr>
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<td>0.62</td>
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<tr>
<td>Singapore</td>
<td>1.32</td>
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<td>0.84</td>
<td>0.92</td>
<td>0.85*</td>
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<tr>
<td>Taiwan</td>
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<td>0.20</td>
<td>0.19</td>
<td>0.31</td>
<td>0.24*</td>
</tr>
<tr>
<td>Vietnam</td>
<td>N.A.</td>
<td>2.29***</td>
<td>0.17</td>
<td>1.10</td>
<td>0.48**</td>
</tr>
</tbody>
</table>

* The year 2000 is not included.
** The average is for 1986 to 2000.
*** The average is for 1986 to 1989.

Gap of Labour Productivity per Hour: South Korea vs. USA and Japan
South Korea: Productivity improvements rewarded capital more than labour

Graph 5: Capital/labour ratio (K/L), Capital/Value added ratio (K/Y) and Labour/Value added ratio (L/Y)
(logarithms) 1970-2000

Source OECD-STAN

Giulio Guarini, Vasco Molini, and Roberta Rabellotti (July 2003) Is Korea catching up?
An analysis of the labour productivity growth in South Korea at
How does productivity affect labor income?

- If productivity reduces income for many people, that is a real problem.
- Labor is earning less as a proportion of output in most developed countries. More is flowing to capital investors and IP owners.
- Stagnant wages are a major problem.
US experience is that when productivity growth is rapid, wages grow rapidly

Labor productivity growth is essential to increase real wages

- Over long spans of time, productivity growth is the most important component of overall earnings growth.
- Movements in the labour share of income align with movements in labour productivity growth (OECD)

BUT....

- Overall productivity gains do not directly influence the wage distribution, but technical change has displaced unskilled workers and driven down their relative wages.
What policies can boost productivity?

- The MPB enlists several strategies, some more operational and some more aspirational (goals).

- In general, these approaches are similar to those used in other countries, and many are supported by empirical research. Malaysia is moving in the direction of market shaping and creating rather than market fixing.*

- For example, research on systems of innovation have highlighted systemic failures such as the lack of linkages between science and industry.
  - MPB: “Stronger collaboration between industry and academia is essential for greater innovation and industry relevant R&D.” (p. 3-3)

*See Mariana Mazzucato* and Gregor Semieniuk, *Public financing of innovation: from market fixing to mission oriented market shaping,* Institute for Innovation and Public Purpose, University College London

- improvements in funding and organization of basic research
- global mechanisms to co-ordinate investment in basic research and related policies, such as R&D tax incentives, corporate taxation and IPR regimes
- support diffusion from global frontier firms via trade
- do not excessively favor applied over basic research and incumbent over start-up firms
- reduce barriers to firm entry and exit, support improved matching in labor markets
- allow for increased worker mobility and better labor market matches
Malaysia needs more disruption, but policies for transition are needed

- Productivity improvements depreciate some human and social capital.
- “Rapid productivity growth in primary and secondary industries (manufacturing in particular) has generated a substantial reallocation of workers into tertiary service activities, both in high skill-intensive services (e.g., health, education, finance) and in low skill-intensive services (e.g., food service, cleaning, hospitality).”
- “The expansion of services relative to other sectors has tended to favor high- and low-skill workers at the expense of middle-skill workers”.

David Autor and Anna Salomons, “Does Productivity Growth Threaten Employment?”, June 19, 2017
Help people cope with the pain of changes

- To provide political space for disruption, policies should “refocus attention on both the moral necessity and practical benefits of helping people cope with the economic disruptions that accompany growth.” (Bernanke, 2017)

- A comprehensive set of policies aimed at helping individuals and localities adjust to rapid economic change:
  - community redevelopment
  - infrastructure spending,
  - job training

- Such policies need to involve local input and cooperation across different levels of government, and cooperation of the public and private sectors.
The role of smart regulation in productivity strategies
How should the government regulate to encourage productivity growth?

- It is really hard to regulate well – regulations are contingent on balancing many factors.

- Look at the goal in the Malaysia Productivity Blueprint: “Existing laws and regulations will be strengthened to stimulate sustainable shared services by ensuring risks are mitigated while not curtailing growth and innovation, as well as ensuring the protection of consumers and workers.” (p. 4-20)

- Is it possible to regulate to achieve all 3 at the same time? What skills and tools do regulators need to achieve this high level of regulatory quality consistently?
The relevance of smart regulation for productivity

Vision and Leadership

Principles: Economics, Rule of Law, and Good Governance

Outcomes affecting economic growth

Making it happen on the Ground

Good Regulatory Practices

Microeconomic Principles:
- Market entry, consumer choice, higher ROI, lower cost of production, level playing field
  - More business entry and start-ups
  - More jobs at higher wages
  - More innovation
  - More stable long-term growth

Rule of Law:
- Legal security, transparency, consistency, and flexibility
  - Easy access to rules on commercial actions
  - Legal security and protected property rights
  - Predictability and guaranteed input into rules before they are adopted

New Public Management:
- Client-oriented government, efficiency, performance measurement, transparency
  - Simpler, cheaper, and faster government services
  - Accountability for results
  - Fewer barriers to business
  - Facilitation, not controls
  - Less corruption and uncertainty

“Good Regulatory Practices” that implement these principles

- Capacity to manage reforms across government
- Annual regulatory plan
- Regulatory review and elimination of unneeded rules
- Sustainability: RIA and new quality controls for regulations
- Consider trade and competition impacts in RIA
- Central web portal for stakeholder consultation
- Online Regulatory eRegistries

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How do GRPs increase economic activity? By changing the incentives of firms and consumers

Example 1: Cutting Regulatory Costs
- Reduce compliance cost for a procedure
- Reduce time and capital for businesses to comply
- Increase profitability and speed of action by businesses
- Higher ROI encourages more investment
- Firms expand and create new jobs, innovate and move into new markets faster

Economic outcomes:
- More businesses starting up
- Foreign investors increase assets in reform economy
- More innovation and faster response by firms.
- Jobs increase at higher real wages
- Consumers see higher household income, more choices in markets
- Growth rates increase, more stability in economic cycles

Example 2: Better consultation with stakeholders
- Government agency commits to 100% consultation – no regulatory “ambushes”
- Business planning based on more predictable, longer-term horizon
- Consultations produce more practical and less costly regulations
- Predictability and practicality encourage longer-term investments
- Firms invest in longer-term projects such as factories and infrastructure

Example 3: National regulatory inventory and online eRegistry
- Government creates online registry of all rules and procedures, with positive security
- Businesses find legal requirements at lower cost
- Foreign businesses find entry into markets easier and more predictable
- Legal security promotes longer time horizons and lower risks increase ROI
- Firms invest more, and invest in longer-term projects
How can regulators include disruption in the design of government policy?

MPB:

“Initiative N7 aims to strengthen the development and utilisation of Good Regulatory Practices (GRP) across government agencies. This will help increase investments and foster inclusive growth, societal well-being and public trust. The initiative also proposes continuous review of prohibitive regulations to promote a business-friendly regulatory environment and accommodate technological and innovative disruptions.” (p. 3-19)
Malaysia’s February 2014 Action Plan on Regulation

Figure 2.1. High-level summary of Malaysia’s February 2014 action plan and key outputs by pillar:

- NPDIR/GRP strategy, aligned with RMK11
- KSN and NDPC leadership
- PEMUDAH and business demand
- EPU and AGC support
- KSUs and RC commitment
- NPDIR/GRP cost-benefits indicators
- NPDIR/GRP compliance cost indicators
- NPDIR/GRP implementation indicators
- Structured and ad hoc report templates
- RC RIA training programme and toolkit
- RC forward planning and reporting
- NDPC-EPU-MPC systems
- MPC SOPs and structure
- INTAN-MPC training programme
- NPDIR/GRP communication and outreach programme
- NPDIR/GRP communication toolkit
- NPDIR/GRP outreach activities

Political

Operational

Economic Impact and Monitoring

Comms
World Bank: Global Indicators of Regulatory Governance 2016

Examples from Dataset: Scores per region and income group

- High income: OECD (5.08 of 6)
- Europe & Central Asia (4.05 of 6)
- East Asia & Pacific (2.13 of 6)
- Latin America & Caribbean (1.88 of 6)
- South Asia (1.54 of 6)
- Sub-Saharan Africa (1.13 of 6)
- Middle East & North Africa (1.08 of 6)

- High income (3.88 of 6)
- Upper middle income (2.37 of 6)
- Lower middle income (1.87 of 6)
- Low income (0.95 of 6)

Publication of proposed text
- Conduct consultation
- Report on results of the consultation results
- Conduct impact assessment
- Specialized body for impact assessment
- Impact assessment made public

http://rulemaking.worldbank.org/
The OECD Agenda for Low-Cost, Low-Risk Regulation

I. Build a regulatory management system
   - Strategic medium-term regulatory reform policy (5 years)
   - Engines of reform at the center of government

II. Build the institutions to carry out good regulation
   - One stop shops
   - Inspections reforms
   - Due process

III. Improve the quality of new regulations (flow)
   - RIA
   - Stakeholder consultation
   - Central quality controls

IV. Upgrade quality of existing regulations (stock)
   - Targeted deregulation, simplification, codification (Doing Business, Standard Cost Model)
   - Broad-based reforms (Regulatory Guillotine™)
Quality in Flow Of New Regulations

Review the Stock of Regulations (Ministries/public/private)

RRI

Build capacities in Ministries Quality in Flow Of New Regulations (Ministries)

Central Unit For regulatory quality

Public Consultation

Stakeholder Advisory Council

Parliament Parallel Unit for Legal Quality

Administrative Procedure Law

Orderly Policy Process

Build Institutions For Better Regulations

President/ PM/ Council of Ministers

Legal controls

Regulatory guillotine™

“Doing Business” agenda

Sectoral reviews & re-engineering

WTO convergence strategy

Clear quality standards for new regulations (efficiency, economic standard, etc)

Central review & quality control

Regulatory Impact Analysis

Stakeholder consultation

Checks for WTO conformity

Electronic regulatory registry

Rationalize inspectorates

Silence is consent

One stop shops

Due process

Monitor Results, Adapt Rules

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The Jacobs, Cordova, & Associates map of a modern regulatory system
Impacts of cost-cutting: some examples

- Reducing start-up costs for new firms was found to result in higher take-up rates for education, higher rates of job creation for high-skilled labor and higher average productivity because new firms are often set up by high-skilled workers.

- Licensing reform led to an aggregate productivity improvement of around 22% for firms affected by the reform.

- In the Netherlands, a 2003 “base line” measurement of administrative burdens estimated their cumulative costs at €16 billion annually. Reducing this burden by 25 percent would, it was estimated, boost GDP by 2.8 percent to 3.7 percent.

- In South Korea, the OECD estimated that the value of gains of a one-year program to reduce the regulatory burden was equivalent to almost 1 percent of GDP, reflecting the opportunity cost of time.


Kox, Henk (2005) Intra-EU differences in regulation caused administrative burdens for Companies. CPB Memorandum Number: 136. Rev.1

The key on the regulatory side is stimulating competition in markets

OECD (2010):

- Anti-competitive regulation reduces productivity:
  - “Competitive product markets force companies to be more efficient and to increase labour or multi-factor productivity”

OECD (2010)

- Anti-competitive regulation destroys jobs:
  - “Easing anti-competitive product market regulation may have a positive effect on employment …Reducing barriers to entry would curb market power of incumbents and make entry of competitors possible, which again would raise the activity level and thus labour demand.”

World Bank (2011)

- “Reducing direct and indirect regulatory compliance costs across a broad front, while achieving or enhancing the benefits of regulation, can significantly boost performance at microeconomic and, depending on scale, macroeconomic levels.”
Competition and market entry: Product market regulation and total economy labour productivity

(OECD indicator, scale 0-6 from least to most restrictive)

Annual average percentage point change in labour productivity growth, 1996-2005 vs. 1985-1995

Correlation coefficient = -0.4
t-statistic = -1.91

Without Greece: Correlation coefficient = -0.74
t-statistic = -4.62

Source: OECD Productivity Database and OECD International regulation database.
Product Market Regulation and the Diffusion of Information and Communication Technology in OECD countries

(OECD indicator, scale 0-6 from least to most restrictive)

1 The indicator of regulation is the simple average of the OECD regulation indicators for seven non-manufacturing industries.

Source: OECD Productivity Database and OECD International Regulation Database.
Cross-country comparisons show broad correlation between regulatory style and economic performance

- Rich countries regulate less in all respects covered in the reports. Both labor productivity and employment are positively correlated with less regulation.
- A very strong relationship between economic freedom and GDP. Countries that improved their index of economic freedom over the 14 years of the index improved their economic growth.
- Economic freedom is highly correlated not just with per capita income and economic growth, but with other measures of well-being, including life expectancy, the income level of the poorest 10 percent, adult literacy, corruption-free governance, civil liberties, the United Nations’ Human Development Index, infant survival rates, the environment, and the absence of child labor.
- Regulatory reforms that increase market freedom have positive effects not only in product markets, where they tend to increase investment, innovation and productivity, but also for employment rates.

- Doing Business reports

- Heritage Foundation and the Wall Street Journal yearly index of economic freedom

- Fraser Institute of Vancouver, B.C. Economic Freedom of the World index

- OECD Database on Product Market Regulation
Summary: results of regulatory reforms

- Reforms that improve regulatory effects on market competition and openness, transparency, and efficiency:
  - make public policy more efficient by allocating national resources to higher value uses, by reducing the risk of policy failures, and by finding effective policy designs that respect market principles;
  - lower policy costs and barriers to market entry for firms, goods, and services, which in turn boosts foreign direct investment (FDI) and trade, increases the returns on participation in formal markets, speeds the uptake of new technologies and other innovations, and frees resources for other uses;
  - reduce policy risks for market actors by increasing transparency in the design and use of policy and by involvement of stakeholders in shaping policies important to them;
  - increase the social benefits of economic activity by safeguarding public interests such as efficient management of environmental, safety, and health risks; and
  - improve business security and market neutrality of policy by increasing accountability for policy implementation and results, and lowering corruption and vulnerability to capture of government functions.
What does this mean for Malaysia?

1. Productivity depends on a more competitive environment with more winners and more losers (Regulatory reform, state aid reform, competition and trade policies)

2. Markets for capital and labor should be flexible. Persistent rigidities in markets must be identified and removed (regulatory reform)
What does this mean for Malaysia? (1)

3. Regulation is often blamed. Regulatory reformers need the tools and skills to identify what regulations are really to blame, and to design policies better. Upgrading of the entire regulatory system based on disruption rather than risk minimization is needed.

- Better diagnostics
- More targeted analysis
- More careful regulatory design
- More rapid reviews and updating. MPB: “There is a need to review regulations governing key sectors that have yet to be aligned to liberalisation efforts, dampen productivity performance across economic sectors. Additionally, local companies are still protected from stronger competition, affecting their productivity performance. Thus, the Blueprint proposes periodical reviews of regulations to ensure they are aligned to liberalisation policies.” (p. 3-15)
What does this mean for Malaysia? (2)

4. Few startup companies and “gazelles”. Lack of financing or collateral for startups? Policy or regulatory risks too high? Need better diagnostics here.

5. Even if innovation is rapid, lack of worker skills limits the productivity benefits. Those with high skills can take advantage of the new technologies but less skilled/educated workers are confined to bad jobs, pulling down the average. New technologies demand a better educated and/or trained workforce but Malaysia (like many countries) is not keeping up.
Thank you!

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