Malaysia Economic Monitor
The Quest for Productivity Growth
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Sluggish global economic growth...

Annual growth rate, %

- Previous estimate (Jan. 2016)

Source: World Bank staff calculations
... commodity prices bottoming up...

...and the commodity balance stabilizes

Balances, % of GDP (last four quarters)

Source: CEIC, DOSM, World Bank staff calculations
The current account balance has increased.

Balances, % of GDP (last four quarters)

Source: World Bank staff calculations
Fiscal consolidation continues despite lower oil-related revenues

Balances of the Federal Government, percent of GDP

Source: MOF, World Bank staff calculations
GDP Growth remains resilient supported by private consumption

**Contribution to GDP, Y/Y**

- Private consumption
- Fixed investment
- Change in inventories
- Net exports
- Real GDP

Source: CEIC, DOSM, World Bank staff calculations
Households’ credit growth remained on a downward trend

Loans outstanding (banking system); y/y change of 12-mth moving averages, %

Source: BNM, World Bank staff calculations
Portfolio outflows were registered in Q3

Source: CEIC, DOSM, World Bank staff calculations
Among broad depreciation of currencies

US$/ currency, Rebase Jan 2016= 100

Source: CEIC, BNM, World Bank staff calculations
Note: December data as at 16 December 2016
Weak but growing:

• Global economic growth

• Commodity prices

• Global trade

But higher uncertainty:

• Expect volatility
GDP growth expected to slowly recover in 2016

Change from last year, percent

Source: CEIC, DOSM, World Bank staff projections
The Quest for Productivity Growth
Global TFP growth has been slowing down post the global financial crisis...

Sources of world economic growth, annual growth rate, %

- 1990-1995: 0.0%
- 1996-2000: 1.1%
- 2001-2005: 0.8%
- 2006-2010: -0.3%
- 2011-2014: 0.5%

Source: World Development Indicators (WDI), World Bank staff calculations
and the deceleration has been broad-based across all levels of incomes

Sources of world economic growth, annual growth rate, %

Source: WDI, World Bank staff calculations
Malaysian factor accumulation key for growth

Contribution to annual growth rate, %

<table>
<thead>
<tr>
<th>Period</th>
<th>Capital Stock</th>
<th>Labour</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-1995</td>
<td>3.8</td>
<td>2.2</td>
<td>1.5</td>
</tr>
<tr>
<td>1996-2000</td>
<td>1.7</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td>2001-2005</td>
<td>-0.3</td>
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<td>1.1</td>
<td>1.5</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: WDI, World staff calculations
Malaysia’s TFP growth below high income regional economies

Contribution to annual growth rate, % (1990-2014)

Source: WDI, World Bank staff calculations
Labour productivity in Malaysia is lower than many regional countries...

Value added growth per worker, annual growth rate, % (1990-2014)

Source: WDI, World staff calculations
...but above other peer countries

Value added growth per worker, annual growth rate, % (1990-2014)

<table>
<thead>
<tr>
<th>Country</th>
<th>Value Added Growth per Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>2.58</td>
</tr>
<tr>
<td>Chile</td>
<td>2.07</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.11</td>
</tr>
<tr>
<td>Peru</td>
<td>0.67</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Source: WDI, World staff calculations
Prior to the 1998 AFC, sectors with higher labour productivity created more employment.

Value added growth per worker by sector, % (1990-1998)

*Other activities - Finance, business services, real estate and government services

Source: WDI, World Bank staff calculations
After 1998, labour productivity reduced and destroyed employment in manufacturing

Value added growth per worker by sector, % (1999-2014)

*Other activities - Finance, business services, real estate and government services

Source: WDI, World Bank staff calculations
Higher productivity, key for raising income markedly in the long-run

GDP per capita, Malaysia/ Average high-income economies, %

- **Baseline**: TFP growth = 1.8%
- **Scenario 1 (S1)**: TFP growth = 2.3%
- **Scenario 2 (S2)**: S1 + Δ labour force
- **Scenario 3 (S3)**: S2 + human capital + investment

Source: WDI, World staff calculations
Raising productivity should be complemented by improvement in other areas...

Female labour force participation, %

Investment as share of GDP, %

Source: DOSM, WDI, World Bank staff calculations
Sustained employment, in difficult sales environment

Real employment growth; Real annual sales growth; Labour productivity growth, %, 2012-2014

Source: World Bank Enterprise Surveys
Large firms lead recent productivity decline...

Annual labour productivity growth, %, 2012-2014

- Small (<20): 1.0%
- Medium (20-99): -3.2%
- Large (>100): -11.6%

Source: World Bank Enterprise Surveys
...mainly among exporting firms particularly in Malaysia

Annual labour productivity growth, %, 2012-2014

Source: World Bank Enterprise Surveys
Services performed better than manufacturing

Annual labour productivity growth, %, (2012-2014)

Source: World Bank Enterprise Surveys
Manufacturing firms in Malaysia have higher variability of TFP...

Manufacturing firms TFP (2012-2014)

Source: World Bank Enterprise Surveys
...with much of the variability of TFP explained by large and small firms

Manufacturing firms TFP (2012-2014)

Source: World staff Enterprise Surveys
lower productivity mainly explained by non-exporters

Manufacturing firms TFP (2012-2014)

Source: World Bank Enterprise Surveys
Services productivity in Malaysia seem less productive than comparator countries

Ratio of median labour productivity (Services/ Manufacturing)

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<thead>
<tr>
<th>Country</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
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<tr>
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Source: World Bank Enterprise Surveys
Benchmarking Some Potential Drivers of Productivity

- Skills
- Infrastructure
- Innovation
- Efficiency
Malaysia manufacturing firms have a higher share of secondary educated workers...

Share of secondary educated workers, % of total workers

Manufacturing

Services

Source: World Bank Enterprise Surveys
Malaysian firms have lower vacancy rates but report more difficulties in finding skills

Source: World Bank Enterprise Surveys
Malaysian firms less likely to provide training and train fewer workers, mainly small firms

Source: World Bank Enterprise Surveys
Malaysian SMEs that provide training have higher labour productivity and TFP

Median sales per worker, USD

Median TFP, %

Source: World Bank Enterprise Surveys
Skills

Infrastructure

Innovation

Efficiency
Productivity is positively associated with innovation

Median sales per worker, USD

- No innovation
- Any innovation

Source: World Bank Enterprise Surveys
Malaysian firms mainly focus on non-technical innovation

Percentage of firms that innovate, %

Source: World Bank Enterprise Surveys
Skills

Infrastructure

Innovation

Efficiency
Malaysia’s infrastructure compares well although other MICs are catching up

Score (1-7), 2016-2017 and 2006-2007

Source: World Economic Forum Global Competitiveness Index
Malaysia’s logistics performance compares well with other MICs

Score (1-5), 2016 and 2007

**Source:** World Bank Logistics Performance Index
Malaysian firms more likely to have water shortages and less power outages

Manufacturing firms experiencing shortages/outages, %

- Malaysia: 10%
- High-income & OECD: 5%
- ASEAN: 15%
- China: 35%

At least 1 water shortage in a month

At least 1 power outage in a month

Source: World Bank Enterprise Surveys
Malaysian firms face less regulatory burden...

Days, number of visits, time dealing with regulations

Source: World Bank Enterprise Surveys
...although regulatory burden increases with firm size

Average senior management time spent dealing with regulations, %

Source: World Bank Enterprise Surveys
Malaysian firms mention regulatory burdens as main constraints in the business environment.

Ranking of business environment obstacles, percent of firms.

The proportion of Malaysian firms that are credit constrained is similar to comparators.

Source: World Bank Enterprise Surveys
Gap between most and less productive manufacturing firms declined slightly

Labour productivity growth, %, 2005-2014

- Productivity gap: 11.3 ppt
- Productivity gap: 8.9 ppt

Source: DOSM, World Bank staff calculations
Domestic-oriented manufacturing firms saw smaller decline in labour productivity growth

Labour productivity growth, %, 2005-2014

<table>
<thead>
<tr>
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<th>2005-2010</th>
<th>2010-2014</th>
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<tbody>
<tr>
<td>Domestic-oriented</td>
<td>5.4</td>
<td>-1.5</td>
</tr>
<tr>
<td>Export-oriented</td>
<td>3.8</td>
<td>-2.6</td>
</tr>
</tbody>
</table>

Source: DOSM, World Bank staff calculations
Distortions in output markets seem to undermine productivity growth

Productivity and factors distortions

Productivity and output market distortions

Source: DOSM, World Bank staff calculations
Removing distortions to the 1997 US level could increase productivity by 23 percent

Source: DOSM, World Bank staff calculations
Conclusions

- Productivity growth in Malaysia has declined since 2008, in part because slowdown in external demand.

- Malaysia shows relatively higher divergence in productivity of firms
  - In the same manufacturing industry, which can be explained by misallocation of resources across firms.
  - Between large and small firms, which can be explained by underperforming small firms => need to raise productivity of domestic laggard SMEs
  - Misallocation in output markets undermine productivity

- Productivity benchmarking
  - Good average education but skills hard to find => training
  - Innovation but in non-technical areas => technology absorption
  - Infrastructure compares well => keep the edge on logistics performance
  - Efficiency limited by misallocation and perceived regulations => competition

- Closing the gap with high income economies will require to accelerate productivity growth, while also keeping factor and human capital accumulation
Terima kasih!

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