An overview of Australia’s productivity performance

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Productivity Commission

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• Australia’s productivity performance of market sector
  – Recent development
• Productivity at industry level
  – Recent development; and
  – Trend over a longer period
• Contribution of changes in the composition of human capital to
  – Labour productivity
  – Economic growth
• Key messages
Multifactor productivity

Market Sector (12) Multifactor Productivity (ABS)

Index 2003-04 = 100

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Multifactor productivity

Index 2003-04 = 100

Market Sector (12) Multifactor Productivity (ABS)

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### Industry MFP growth rates

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>4.0</td>
<td>3.6</td>
<td>-1.5</td>
<td>7.4</td>
</tr>
<tr>
<td>Mining</td>
<td>0.6</td>
<td>0.0</td>
<td>-4.0</td>
<td>-7.6</td>
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<tr>
<td>Manufacturing</td>
<td>0.6</td>
<td>1.3</td>
<td>-1.4</td>
<td>-0.8</td>
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<tr>
<td>Electricity, gas, water and waste services</td>
<td>1.9</td>
<td>-2.2</td>
<td>-4.8</td>
<td>-4.2</td>
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<tr>
<td>Construction</td>
<td>2.5</td>
<td>0.9</td>
<td>0.6</td>
<td>0.6</td>
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<tr>
<td>Wholesale trade</td>
<td>5.3</td>
<td>1.3</td>
<td>0.0</td>
<td>-1.0</td>
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<tr>
<td>Retail trade</td>
<td>2.1</td>
<td>1.4</td>
<td>0.3</td>
<td>1.1</td>
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<tr>
<td>Accommodation and food services</td>
<td>1.7</td>
<td>0.8</td>
<td>0.4</td>
<td>-3.0</td>
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<tr>
<td>Transport, postal and warehousing</td>
<td>2.0</td>
<td>1.7</td>
<td>0.7</td>
<td>-1.2</td>
</tr>
<tr>
<td>Information, media and telecommunications</td>
<td>2.8</td>
<td>-1.0</td>
<td>0.1</td>
<td>-0.1</td>
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<tr>
<td>Financial and insurance services</td>
<td>2.9</td>
<td>2.3</td>
<td>4.4</td>
<td>-0.2</td>
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<tr>
<td>Arts and recreation services</td>
<td>-1.8</td>
<td>1.0</td>
<td>-1.8</td>
<td>1.1</td>
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<tr>
<td>Market sector</td>
<td>2.5</td>
<td>1.2</td>
<td>0.0</td>
<td>-1.0</td>
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</table>

Source: Productivity Commission
Causes for the slowdown in Mining and Utility

- Lumpy investment
  - *Both mining and utility industries*
- Depletion of natural resources
  - *Mining industry*
- Technology change
  - *Electricity supply*
- Imperfect (output) measurement
  - *Water supply*
MFP growth between 1985-86 to 2010-11

- Agriculture, Forestry and Fishing: Above the MS MFP average
- Financial and Insurance Services: Above the MS MFP average
- Information, Media and Telecommunications: Above the MS MFP average
- Transport, Postal and Warehousing: Around the MS MFP average
- Retail Trade: Around the MS MFP average
- Wholesale Trade: Below the MS MFP average
- Manufacturing: Below the MS MFP average
- Construction: Below the MS MFP average
- Electricity, Gas, Water and Waste Services: Below the MS MFP average
- Accommodation and Food Services: Below the MS MFP average
- Mining: Below the MS MFP average
- Arts and Recreation Services: Below the MS MFP average

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Indexes of labour input for the 12 industry market sector

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Labour Productivity Indexes for the 12 industry market sector

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Decomposition of Real Gross Domestic Income (GDI)

<table>
<thead>
<tr>
<th>Year Period</th>
<th>Productivity Commission</th>
<th>ToT Growth</th>
<th>Hours Growth</th>
<th>Human Capital Contribution</th>
<th>LP Growth (net of human capital effect)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-81 to 1990-91</td>
<td>1.06%</td>
<td>0.04%</td>
<td>1.65%</td>
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<tr>
<td>1990-91 to 2000-01</td>
<td>1.73%</td>
<td>0.01%</td>
<td>1.43%</td>
<td>0.37%</td>
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<tr>
<td>2000-01 to 2010-11</td>
<td>1.91%</td>
<td>0.23%</td>
<td>1.29%</td>
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<tr>
<td>1980-81 to 2010-11</td>
<td>1.24%</td>
<td>0.30%</td>
<td>1.66%</td>
<td>0.45%</td>
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</table>
Key messages

• In the recent decade, MFP growth slowed down
  – For the market sector as a whole and across many industries
  – Mining and utility industries

• Long term productivity performance was diverse across industries

• The effect of human capital made a significant contribution to the growth of Australia’s real income