The Power of Productivity

WEALTH, POVERTY, AND THE THREAT TO GLOBAL STABILITY

William W. Lewis
The University of Chicago Press, 2004

National Bank of Poland
Warsaw
June 2, 2004
THE McKINSEY GLOBAL INSTITUTE

- McKinsey’s independent economic research institute
- Founded in 1990 in Washington D.C.
- In-depth economic diagnostic of 13 countries and 25 economic sectors
- Participation by leading economists (e.g., Robert Solow)
MGI WORK OVER TIME

The building blocks (1990-95)
• Service sector productivity
• Manufacturing sector productivity
• The global capital market
• Employment performance
• Capital productivity
• Healthcare productivity

Country studies (1996-2001)
• U.S.
• Japan
• Germany
• France
• Sweden
• Australia
• The Netherlands
• UK
• Korea
• Brazil
• Poland
• Russia
• India

Focused on U.S., Germany, and Japan
### SECTORS STUDIED BY MGI

<table>
<thead>
<tr>
<th>Sector</th>
<th>Wheat farming</th>
<th>Dairy farming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Steel</td>
<td>Confectionery</td>
</tr>
<tr>
<td></td>
<td>Automotive</td>
<td>Chicken processing</td>
</tr>
<tr>
<td></td>
<td>Computer manufacturing</td>
<td>Cement</td>
</tr>
<tr>
<td></td>
<td>Semiconductors</td>
<td>Oil</td>
</tr>
<tr>
<td></td>
<td>Apparel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wheat milling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dairy processing</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>Telecom</td>
<td>Hotels</td>
</tr>
<tr>
<td></td>
<td>Power generation</td>
<td>Health care</td>
</tr>
<tr>
<td></td>
<td>Power distribution</td>
<td>Securities</td>
</tr>
<tr>
<td>Services</td>
<td>Retail</td>
<td>Software</td>
</tr>
<tr>
<td></td>
<td>Housing construction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wholesale</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Airlines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retail banking</td>
<td></td>
</tr>
</tbody>
</table>
## Participating Economists

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Europe</th>
<th>Other Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Robert Solow – MIT</td>
<td>• Olivier Blanchard – MIT</td>
<td>• Montek Singh Ahluwalia – IMF</td>
</tr>
<tr>
<td>• Martin Baily – IIE</td>
<td>• Stephen Nickell – LSE</td>
<td>• Masahiko Aoki – Stanford</td>
</tr>
<tr>
<td>• Dick Cooper – Harvard</td>
<td>• Edmond Malinvaud – INSEE</td>
<td>• Jose Scheinkman – Chicago</td>
</tr>
<tr>
<td>• Orley Ashenfelter – Princeton</td>
<td>• Hans Gersbach – Heidelberg</td>
<td>• Andrei Illarionov – Russian Government</td>
</tr>
<tr>
<td>• Paul Romer – Stanford</td>
<td></td>
<td>• Leszek Balcerowicz – Polish Central Bank</td>
</tr>
<tr>
<td>• Alan Garber – Stanford</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ken Arrow – Stanford</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ECONOMIC DEVELOPMENT PATHS

Percent U.S. 1995 level

GDP per capita
Percent

Total labor and capital inputs per capita

W. Germany (1970 - 95)
France (1970 - 95)
U.S. (1890 - 1995)
U.K. (1970 - 95)
Japan (1950 - 95)
Korea (1970 - 95)
Brazil (1960 - 95)
Russia (1997)
Poland (1997)
India (1970 - 99)
\[ \text{GDP per capita} = \frac{\text{Employment Capita}}{\text{Labor productivity}} \times \]

- Skill level of personnel
- Organization of functions and tasks, marketing and other operational factors

- Capital and technology
- Scale and capacity utilization
PRODUCTIVITY AND GDP PER CAPITA ACROSS COUNTRIES

Index U.S. = 100 in 1996

GDP/capita

Labor productivity

Japan (2000)
Korea (1997)
Poland (1999)
Brazil (1997)
Russia (1999)
India (2000)
U.S. (1990-99)
Germany (1996)
France (1996)
CONCLUSIONS

• Sector level analysis is necessary to find causal factors of economic performance

• Education is not as immediately important as most people think

• If poor countries take care of their productivity problems, they will get the needed capital

• Foreign direct investment has the potential to cause poor countries to grow faster than anybody thinks

• Distortions in competition in product markets are more important than labor or capital market problems

• The Washington Consensus about good economic policy for developing countries profoundly underestimated the importance of a level playing field for market competition

• Distorting markets to achieve social equity objectives is usually a bad idea

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DUAL ECONOMY IN JAPAN

11 Industries

Relative productivity levels
Index U.S. = 100

Employment
100% = 12.473 million employees
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## BLUE COLLAR TRAINABILITY – CONSTRUCTION OF SUBSIDIZED HOUSING

<table>
<thead>
<tr>
<th>Labor productivity</th>
<th>Construction cost</th>
<th>Construction description</th>
<th>Organization of labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>M²/thousand hours</td>
<td>U.S.$/M²</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U.S.</strong></td>
<td><strong>Brazil</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>210</td>
<td>• 75 M²/unit</td>
<td>Blue collar background</td>
</tr>
<tr>
<td>35</td>
<td>250</td>
<td>• 209 units</td>
<td>Mexican agriculture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1 floor</td>
<td>Brazilian northeast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Content</td>
<td>agriculture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– 1 bedroom</td>
<td>• Less specialized</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– 1 bathroom</td>
<td>Similar educational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– AC</td>
<td>background</td>
</tr>
</tbody>
</table>

### Labour Productivity

- **U.S. (Houston)**: 130 M²/thousand hours
- **Brazil (São Paulo)**: 35 M²/thousand hours

### Construction Cost

- **U.S.**: 210 U.S.$/M²
- **Brazil**: 250 U.S.$/M²

### Construction Description

- **U.S.**:
  - 75 M²/unit
  - 209 units
  - 1 floor
  - Content:
    - 1 bedroom
    - 1 bathroom
    - AC

- **Brazil**:
  - 40 M²/unit
  - 20 units
  - 5 floors
  - Content:
    - 1 - 2 bedroom
    - 1 bathroom
    - No internal doors

### Organization of Labor

- **Subcontractors**
  - **U.S.**: 40
  - **Brazil**: 10
  - Brazilian gap: • Less specialized

- **Blue collar background**
  - **U.S.**: Mexican agriculture
  - **Brazil**: Brazilian northeast agriculture
  - Brazilian gap: • Similar educational background
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COMPOSITION OF PRIVATE INVESTMENT IN POLAND, 1995-98

Percent of current GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>Foreign</th>
<th>Domestic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1996</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>1997</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>1998</td>
<td>13</td>
<td>7</td>
<td>20</td>
</tr>
</tbody>
</table>
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INDIAN AUTOMOTIVE INDUSTRY

Index: India = 100 in 1992-93

**Barriers removed**
- Licensing abolished
- FDI allowed

- **Labour productivity**
  - 1992-93: 100
  - Increase: 256%

- **Output**
  - 1992-93: 100
  - 1999-2000: 380
  - Increase: 280%

- **Employment**
  - 1992-93: 100
  - 1999-2000: 111
  - Increase: 11%
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AUTOMOTIVE LABOR PRODUCTIVITY GROWTH

Vehicles produced per employee

Labor productivity
Vehicles per employee

<table>
<thead>
<tr>
<th>Year</th>
<th>Toyota 1974</th>
<th>Nissan 1974</th>
<th>Hyundai 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>44.7</td>
<td>35.5</td>
<td>27.9</td>
</tr>
</tbody>
</table>

20-year labor productivity growth rate
Percent

<table>
<thead>
<tr>
<th>Year</th>
<th>Toyota 1954-74</th>
<th>Nissan 1954-74</th>
<th>Hyundai 1976-96</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954-74</td>
<td>13.8</td>
<td>12.9</td>
<td>8.6</td>
</tr>
</tbody>
</table>
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SUPERMARKETS AND INFORMAL MARKETS IN RUSSIA

Index price in gastronoms = 100

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>With equal laws and enforcement</th>
<th>Supermarkets 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of goods</td>
<td>63</td>
<td>76</td>
<td>69</td>
</tr>
<tr>
<td>Taxes</td>
<td>0.2</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>12</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Net margin</td>
<td>8</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Price</td>
<td>83</td>
<td>101</td>
<td>96</td>
</tr>
</tbody>
</table>

Retail/wholesale markets
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IMPORTANCE OF LOW SKILLED LABOR IN THE U.S. – 1995

Number of jobs in the U.S.

<table>
<thead>
<tr>
<th>WAGE COSTS</th>
<th>U.S. minimum wage costs (U.S. $ 5.1)</th>
<th>French minimum wage costs (U.S. $ 9.3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26%</td>
<td></td>
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</tbody>
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INFORMALITY IN BRAZIL
Percent urban employment

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“Super planning has to be staged by underdeveloped countries”

Gunnar Myrdal – 1956
Nobel Laureate
GOVERNMENT PROGRAMS
Total government expenditures as % of GDP

- United States 1913: 2.9%
- Japan 1970: 3.4%
- Brazil 2001: 11.3%
- India 2000-2001: 31.6%
- United States 1999-2000: 36.6%

Programs:
- Economic affairs
- Housing and community affairs
- Social security and welfare
- Health
- Education
- Defense and public order
- General public services and other
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U.S. CONSUMER ADVOCACY

• 1906, Senator Robert La Follette
  “The welfare of all the people as consumers should be the supreme consideration of the government.”

• 1914, Walter Lippman
  “We hear a great deal about the class-consciousness of labor. My own observation is that in America today consumers’ consciousness is growing very much faster.”

• 1932, President Franklin Roosevelt
  “I believe that we are at the threshold of a fundamental change in our popular economic thought; in the future, we’re going to think less about the producer and more about the consumer.”

• 1960, John F. Kennedy
  “The consumer is the only man in our economy without a high-powered lobbyist. I intend to be that lobbyist.”