The Outlook for Emerging Economies

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Presentation at the Session, “Are Emerging Economies Facing Growth Stagnation?”
January 4, 2016
THE SOURCES OF ECONOMIC GROWTH

Comparisons among Regions and Countries

Sources of Growth in Capital Input

Information Technology and Non-Information Technology

Labor Input and Labor Quality

Total Factor Productivity
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MODEL OF PRODUCTION: Production Possibility Frontier.

\[ w_{I,t} \Delta \ln I_t + w_{C,t} \Delta \ln C_t = v_{K,t} \Delta \ln K_t + v_{L,t} \Delta \ln L_t + \Delta \ln A_t \]

where:

I - Investment

C – Consumption

\( w_{I}, w_{C} \) – Shares of Investment, Consumption

K – Capital

L – Labor

\( v_{K}, v_{L} \) – Shares of Capital, Labor

A - Total Factor Productivity (TFP)
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Sources of World Economic Growth
Average annual growth rates, weighted by the income share.
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Sources of World Economic Growth

Annual percentage growth rates
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Sources of G7 Economic Growth

Annual percentage growth rates

[Bar chart showing sources of economic growth for G7 countries from 1985-2005]
Sources of Growth for Emerging Economies

Annual percentage growth rates

- Brazil
- China
- India
- Indonesia
- Mexico
- Russian Federation
- South Korea

Legend:
- Hours
- Quality
- Non-IT Capital
- IT Capital
- TFP
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Projecting Growth of the U.S. and the World Economy

Hours Worked from Labor Force Projections;
Labor Quality from Projections of Educational Attainment

Productivity Growth from Production Possibility Frontier:
IT and Non-IT Productivity Growth, Capital Quality, and the Gap between Growth of Output and Capital

GDP Growth Is the Sum of Growth in Hours Worked and Productivity Growth
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SOURCES OF AVERAGE LABOR PRODUCTIVITY GROWTH

\[ \Delta \ln y_t = v_{K,t} \Delta \ln k_t + v_{L,t} (\Delta \ln L_t - \Delta \ln H_t) + \Delta \ln A_t \]

where:

- \( y = \frac{Y}{H} \) - Output per Hour Worked (ALP).
- \( k = \frac{K}{H} \) - Capital Input per Hour Worked.

- **CAPITAL DEEPENING**: growth of capital input per hour worked, weighted by the share of capital.

- **LABOR QUALITY GROWTH**: growth of labor input per hour worked, weighted by the share of labor.

- **TOTAL FACTOR PRODUCTIVITY**.
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Range of World Output Projections

Annual percentage growth rates

<table>
<thead>
<tr>
<th>Period</th>
<th>Hours</th>
<th>Labor Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-2014</td>
<td>0.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Pessimistic Case</td>
<td>0.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Base Case</td>
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Range of World Output Projections
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Range of G7 Output Projections
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Range of Output Projections for Emerging Economies
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OUTLOOK FOR THE EMERGING ECONOMIES: SUMMARY

Medium-Term Outlook for the World Economy by the IMF.

The Transition to Sustainability.

Potential Growth of the World Economy.

Curb Your Enthusiasm.
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GDP Share Projection
World's GDP in 2014 = 100
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GDP Share Projection
World's GDP in 2014 = 100

- China
- United States
- India
- Japan
- Indonesia
- Germany
- Brazil
- Russia