AUSTRALIA AND THE GROWTH OF THE WORLD ECONOMY

By
Dale W. Jorgenson
Samuel W. Morris University Professor
Harvard University

Khuong Vu
National University of Singapore

http://scholar.harvard.edu/jorgenson/

24th Colin Clark Memorial Lecture
July 8, 2014
THREE MAJOR TRENDS IN THE WORLD ECONOMY

CHINA OVERTAKES THE U.S.: The U.S. Has Been the World’s Leading Economy for a Century

WORLD ECONOMIC GROWTH ACCELERATES: Mainly Due to China with a Contribution from India

THE NEW WORLD ORDER IN 2020: China, U.S., India, Japan, Germany, Russia, Brazil
GROWTH OF THE WORLD ECONOMY

THE SOURCES OF ECONOMIC GROWTH:
Capital Input, Labor Input, and Productivity

CAPITAL INPUT GROWTH:
Information and Non-Information Technology

LABOR INPUT GROWTH:
Hours Worked and Labor Quality

TOTAL FACTOR PRODUCTIVITY
Output per Unit of Input
Sources of Australia Economic Growth

Annual percentage growth rates

- 1990-1995
- 1995-2000
- 2000-2005
- 2005-2012

Legend:
- Hours
- Quality
- Non-IT Capital
- IT Capital
- TFP
Sources of World Economic Growth
Annual percentage growth rates

- Hours
- Quality
- Non-IT Capital
- IT Capital
- TFP
Sources of G7 Economic Growth
Annual percentage growth rates

- Hours
- Quality
- Non-IT Capital
- IT Capital
- TFP
Sources of BRICS Economic Growth
Annual percentage growth rates

Brazil

China

India

Indonesia

Mexico

Russian Federation

South Korea

Legend:
- Hours
- Quality
- Non-IT Capital
- IT Capital
- TFP
PROJECTING GROWTH OF THE WORLD ECONOMY

DEMOGRAPHICS:
Hours Worked from Labor Force Projections;
Labor Quality from Educational Attainment

LABOR PRODUCTIVITY:
Growth of TFP, Capital and Labor Quality, and the
Gap between Output and Capital

GDP GROWTH:
Sum of the Growth of Hours Worked and
Labor Productivity
Labor Productivity Projections for Australia, 2012-2022

Annual percentage growth rates

1990-2012

Annual Contribution (%)

-1.0

-0.5

0.0

0.5

1.0

1.5

2.0

2.5

Pessimistic Case

Labor Quality

Capital Deepening

Base Case

Optimistic Case

TFP

Labor Quality

Capital Deepening

2012-2022

Annual percentage growth rates

1990-2012

Annual Contribution (%)

-1.0

-0.5

0.0

0.5

1.0

1.5

2.0

2.5

Pessimistic Case

Labor Quality

Capital Deepening

Base Case

Optimistic Case

TFP

Labor Quality

Capital Deepening

2012-2022

Annual percentage growth rates

1990-2012

Annual Contribution (%)

-1.0

-0.5

0.0

0.5

1.0

1.5

2.0

2.5

Pessimistic Case

Labor Quality

Capital Deepening

Base Case

Optimistic Case

TFP

Labor Quality

Capital Deepening

2012-2022

Annual percentage growth rates

1990-2012

Annual Contribution (%)

-1.0

-0.5

0.0

0.5

1.0

1.5

2.0

2.5

Pessimistic Case

Labor Quality

Capital Deepening

Base Case

Optimistic Case

TFP

Labor Quality

Capital Deepening

2012-2022

Annual percentage growth rates
Growth Projections for Australia, 2012-2022

Annual percentage growth rates

1990-2012: 1.5% (Hours) + 1.6% (Labor Productivity) = 3.1%
Base Case: 1.0% (Hours) + 1.5% (Labor Productivity) = 2.5%
Optimistic Case: 1.0% (Hours) + 2.5% (Labor Productivity) = 3.5%
AUSTRALIA AND THE GROWTH OF THE WORLD ECONOMY

RESEARCH ON ECONOMIC GROWTH:
Growth of Input Greatly Exceeds TFP Growth;
Most Growth is Replication Not Innovation

THE ASIAN MODEL OF ECONOMIC GROWTH:
The Special Sauce Is Globalization and the
Accumulation of Human and Nonhuman Capital

OFFICIAL STATISTICS:
Growth Is Now Included in Our National Accounts; This
Involves a New Architecture for the Accounts