THE INTERMEDIATE-TERM OUTLOOK FOR U.S. ECONOMIC GROWTH

Lessons from Postwar History

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PROJECTING U.S. ECONOMIC GROWTH

THE SOURCES OF ECONOMIC GROWTH
Innovation Versus Replication

CHANGES IN DEMOGRAPHIC TRENDS
Hours Worked and Growth of Labor Quality

INNOVATION AND PRODUCTIVITY
IT-Producing, IT-Using, and Non-IT Industries
THE ROLE OF INNOVATION

TOTAL FACTOR PRODUCTIVITY
IT-Producing, IT-Using and Non-IT Industries

REALLOCATION OF FACTOR INPUTS
Capital Input and Labor Input

AGGREGATE PRODUCTIVITY GROWTH
Industry Productivity and Factor Reallocations
Contribution of Industry Groups to Productivity Growth, 1947-2012
Contribution of Industry Groups to Productivity Growth, 1995-2012
Figure 1.1 Growth in processor performance since the mid-1980s. This chart plots performance relative to the VAX 11/780 as measured by the SPECint benchmarks (see Section 1.8). Prior to the mid-1980s, processor performance growth was largely technology driven and averaged about 25% per year. The increase in growth to about 52% since then is attributable to more advanced architectural and organizational ideas. By 2002, this growth led to a difference in performance of about a factor of seven. Performance for floating-point-oriented calculations has increased even faster. Since 2002, the limits of power, available instruction-level parallelism, and long memory latency have slowed uniprocessor performance recently, to about 20% per year. Since SPEC has changed over the years, performance of newer machines is estimated by a scaling factor that relates the performance for two different versions of SPEC (e.g., SPEC92, SPEC95, and SPEC2000).
PROJECTING PRODUCTIVITY AND ECONOMIC GROWTH

Contribution of Industry Groups to Productivity Growth

Range of Labor Productivity Growth Projections

Range of Potential Output Projections
Contribution of Industry Groups to Productivity Growth, 2012-2022

The diagram illustrates the contribution of industry groups to productivity growth from 1990-2010 and three different case scenarios: Pessimistic Case, Base Case, and Optimistic Case. The productivity growth is segmented into Non-IT, IT-Producing, and IT-Using categories. The Optimistic Case shows the highest productivity growth.
Range of U.S. Labor Productivity Projections, 2012-2022

Annual percentage growth rates

- 1990-2012
- Pessimistic Case
- Base Case
- Optimistic Case

- Labor Quality
- Capital Deepening
- TFP
Annual percentage growth rates
OUTLOOK FOR U.S. ECONOMIC GROWTH

PROJECTING PRODUCTIVITY AND ECONOMIC GROWTH:
Demography and Technology

CHANGES IN DEMOGRAPHY
Slowdown in Hours and Labor Quality Growth

CHANGES IN TECHNOLOGY
Revival of Productivity Growth