

The New Economy Redux?

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The New Economy Redux?

- The New Economy Redux?
 - Characteristics of the “New Economy” of the later-half of the 1990s
 - Chairman Greenspan
 - Role of IT in the U.S. Cycle
 - Post-Recovery Sustainability of IT-led Resurgence in Growth

The New Economy: Redux?

Final Sales of Computers, Software, and Communications

	Contributions to Real GDP Growth								
	1995	1996	1997	1998	1999	2000	Growth 1994- 2000	2001	Growth 1995- 2001
Percent Change at Annual Rate:	2.7	3.6	4.4	4.3	4.1	3.8	3.8	0.3	3.4
Gross Domestic Product, total									
Computers and Software	0.62	0.74	0.90	0.87	0.77	0.56	0.74	0.10	0.65
Telecommunications Services	0.10	0.14	0.11	0.12	0.17	0.16	0.13	0.11	0.13
Communication Equipment	0.19	0.15	0.17	0.13	0.21	0.26	0.18	-0.11	0.13
Total	0.91	1.03	1.18	1.12	1.15	0.98	1.06	0.10	0.92

The New Economy: Redux?

Final Sales of Computers, Software, and Communications

	Contributions to Gross Domestic Purchases Prices Growth								
	1995	1996	1997	1998	1999	2000	Growth 1994- 2000	2001	Growth 1995- 2001
Percent Change at Annual Rate:	2.2	1.8	1.6	0.8	1.5	2.5	1.7	1.9	1.7
Gross Domestic Purchases Prices									
Computers and Software	-0.24	-0.44	-0.45	-0.53	-0.42	-0.23	-0.38	-0.28	-0.39
Telecommunications Services	0.00	0.02	0.03	0.01	-0.02	-0.03	0.00	-0.02	0.00
Communication Equipment	-0.05	-0.05	-0.03	-0.07	-0.09	-0.09	-0.06	-0.09	-0.07
Total	-0.29	-0.47	-0.45	-0.59	-0.53	-0.35	-0.44	-0.39	-0.46

The New Economy Redux?

- The New Economy in the 1990s
 - High Growth and Low Inflation
 - Contribution of IT
 - U.S. versus Europe

The New Economy Redux?

- Impact of Measurement in the United States
 - Hedonics
 - Software
 - Chain Indexes
 - Services
 - Births, Structural and Technical Change, and the Underestimation of Growth

The New Economy Redux?

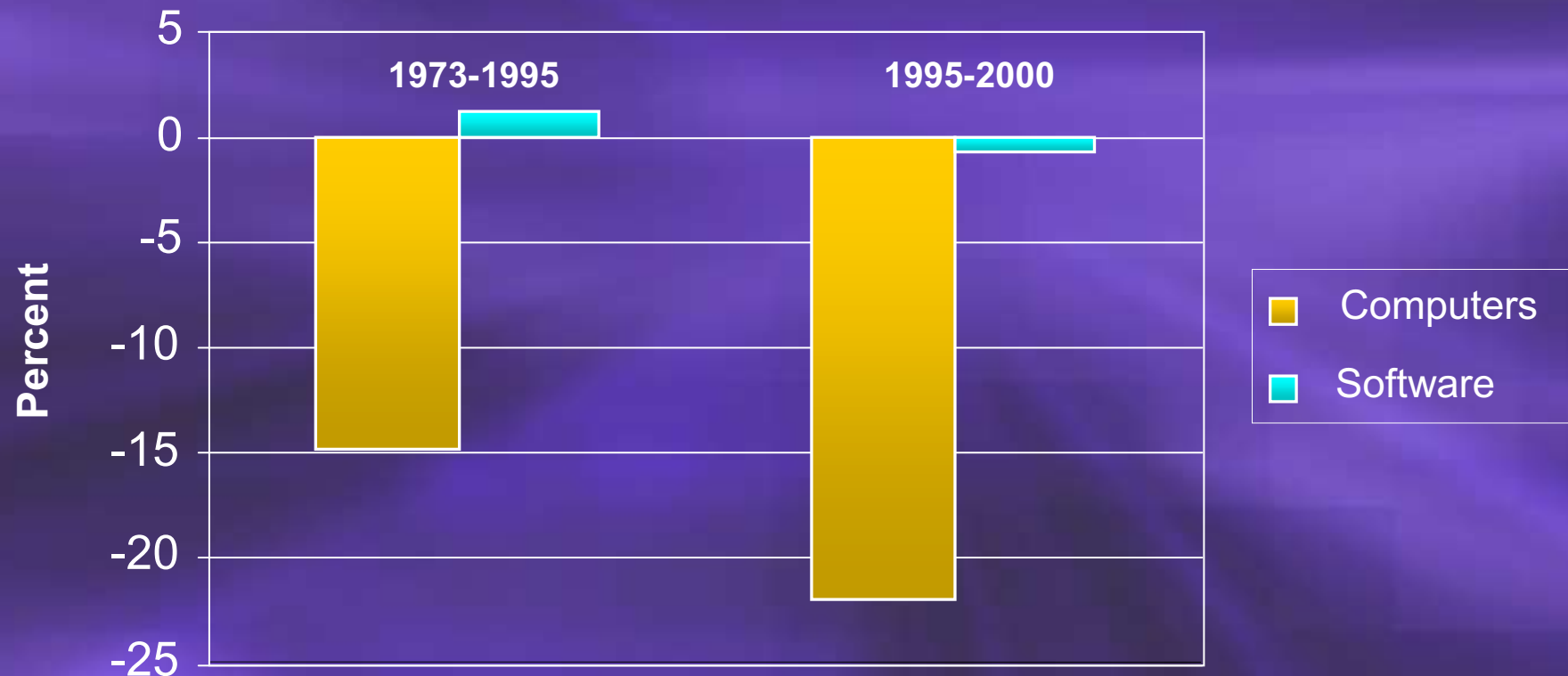
Contributions of Private Fixed Investment in Computers and Software to Percent Changes in Real GDP

[Average annual rates]

	Real GDP (percent change)	Contributions (percentage points)		
		Computers	Software	Sum
1973-1995	2.78	0.16	0.08	0.24
1995-2000	3.81	0.37	0.29	0.66
Difference	1.03	0.21	0.21	0.42
1995-2001	3.31	0.33	0.25	0.58
Difference	0.53	0.17	0.17	0.34

The New Economy: Redux?

Chain Type Price Indexes for Private Fixed Investment in Computers and Peripherals and in Computer Software, Average Annual Rates of Change

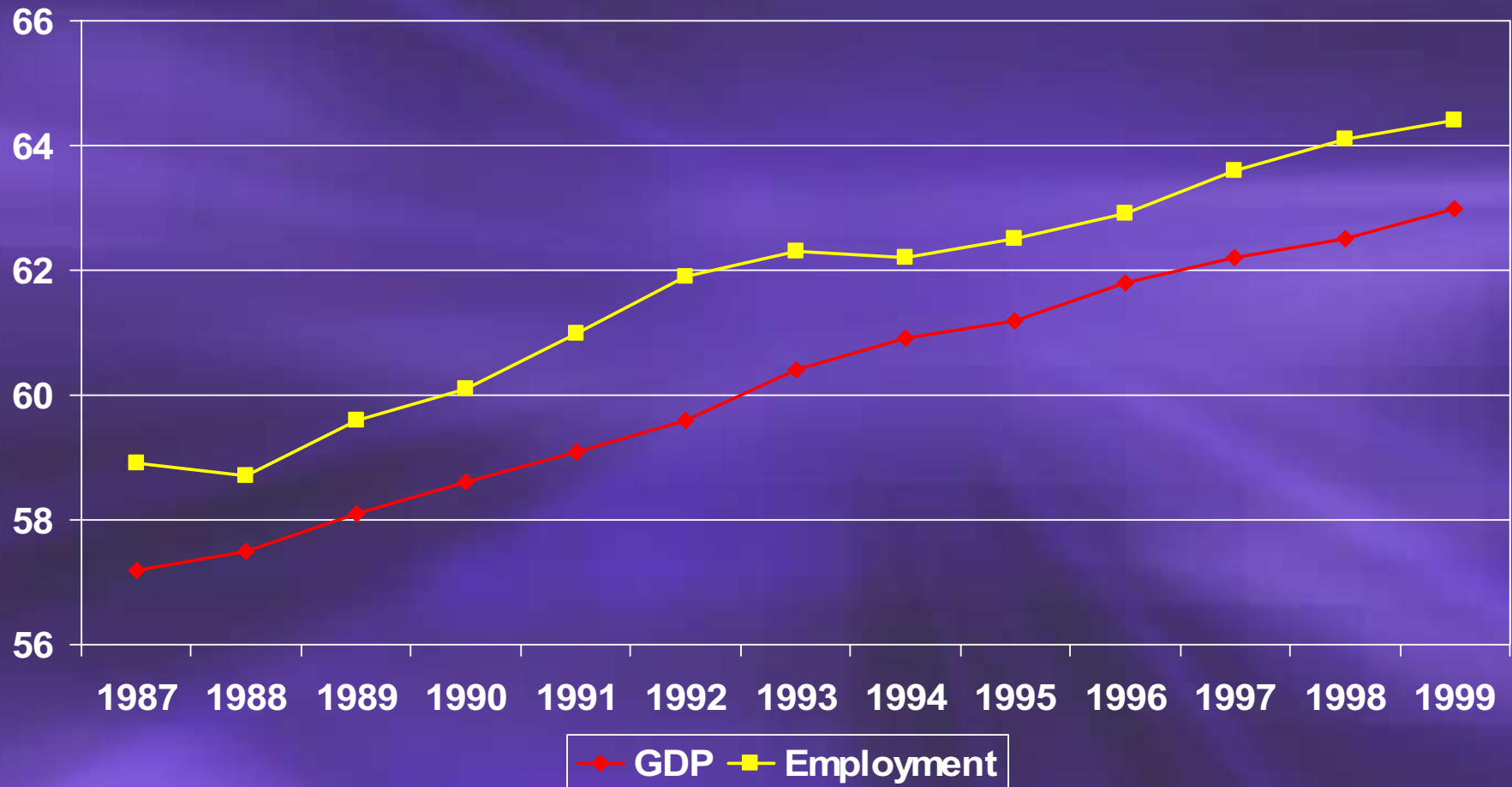


The New Economy Redux?

- Measuring Services Prices and Output:
 - Increasing Share of Output
 - Impact on Estimates of Inflation, Sustainable Growth, and Productivity
 - Focus of New Economy and Other Economic Paradoxes

Measuring Services Prices and Output

Services Share of Output and Employment



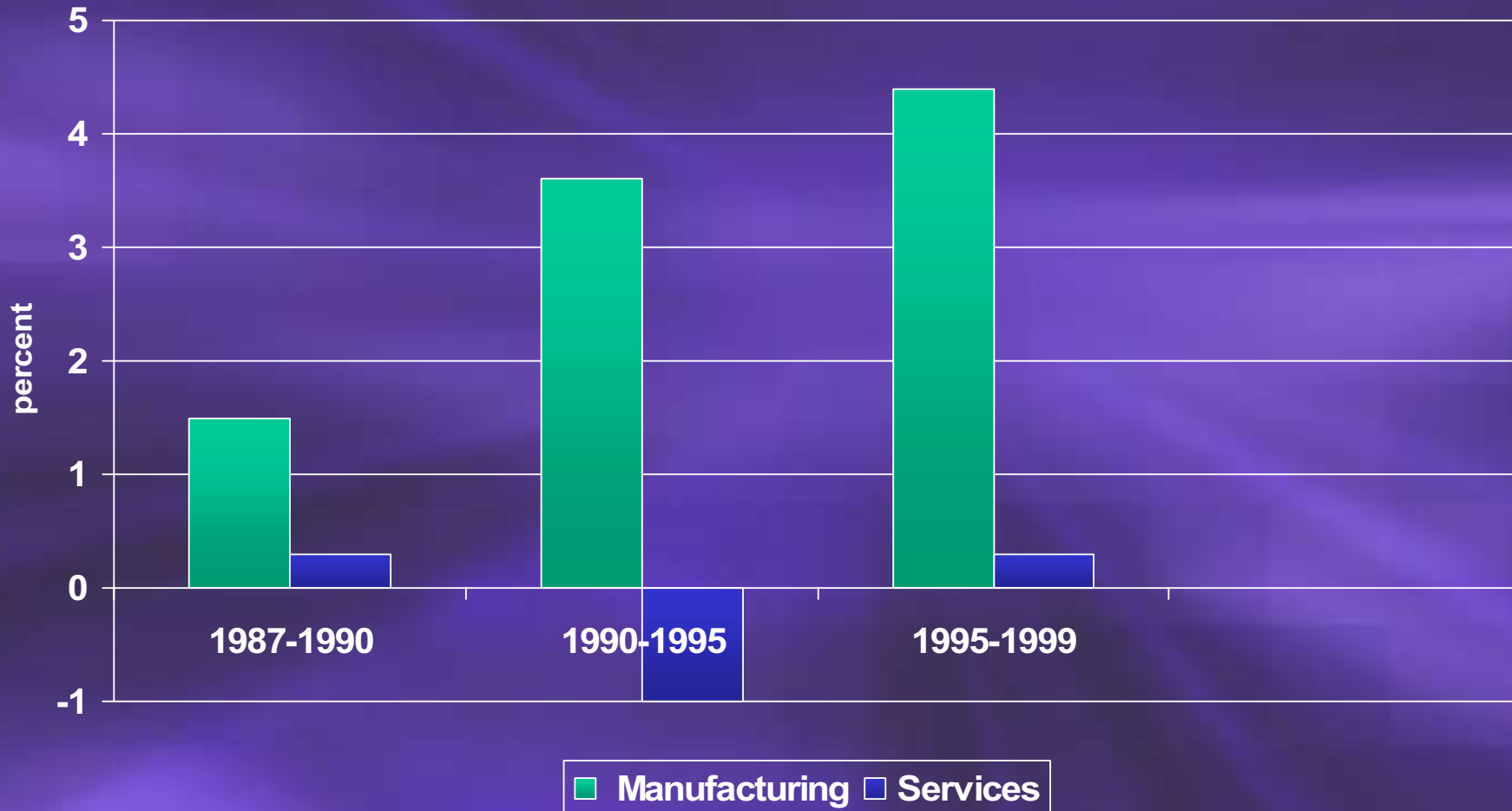
Measuring Services Prices and Output

Inflation (PCE) Goods vs. Services



Measuring Services Prices and Output

Real GDP per Person Engaged Average Annual Growth Rate



The New Economy Redux?

- Problems in Measurement of Services Prices and Output
 - New Products and Quality Change
 - Rapid Change in Product Characteristics and Prices
 - Fixed Weights

The New Economy Redux?

- Methods in Use Today for Measuring Services Output
 - Labor and Other Input Extrapolators
 - Cost-Based Deflators
 - All Items CPI Deflators
 - Physical-Output Extrapolators
 - Matched-Model Output Extrapolators
 - Hedonic-Based Models
 - Chain-Weighted Indexes

The New Economy Redux?

- Examples of the Impact of Alternative Methods for Measuring Services Output
 - Banking Output
 - Federal Reserve Board and BLS Estimates

The New Economy Redux?

- Next Steps in Measuring Services Prices
 - Expansion of PPI Services Price Coverage From 5% to 85% by 2004
 - Additional Quality Adjustment
 - Interim Use of Physical Output Extrapolators

The New Economy Redux?

- Likely Impact of Measurement in Europe and Other Countries
 - Hedonics and Software
 - Offsetting Impact of Computers Imports (but not telecommunications?)
 - Offsetting Impact of Chain Indexes
 - Services
 - Births, Structural and Technical Change, and the Underestimation of Growth

The New Economy Redux?

- Why Moving Toward International Comparability is Important?
 - Impact on Policy Discussions and Coordination
 - Importance for Analyses of Sources of Growth
 - Importance for Domestic Macro-Economic and Social Security Planning
 - The Challenge for Europe and Other Countries
 - The Challenge for the United States