



**Congressional Budget Office**

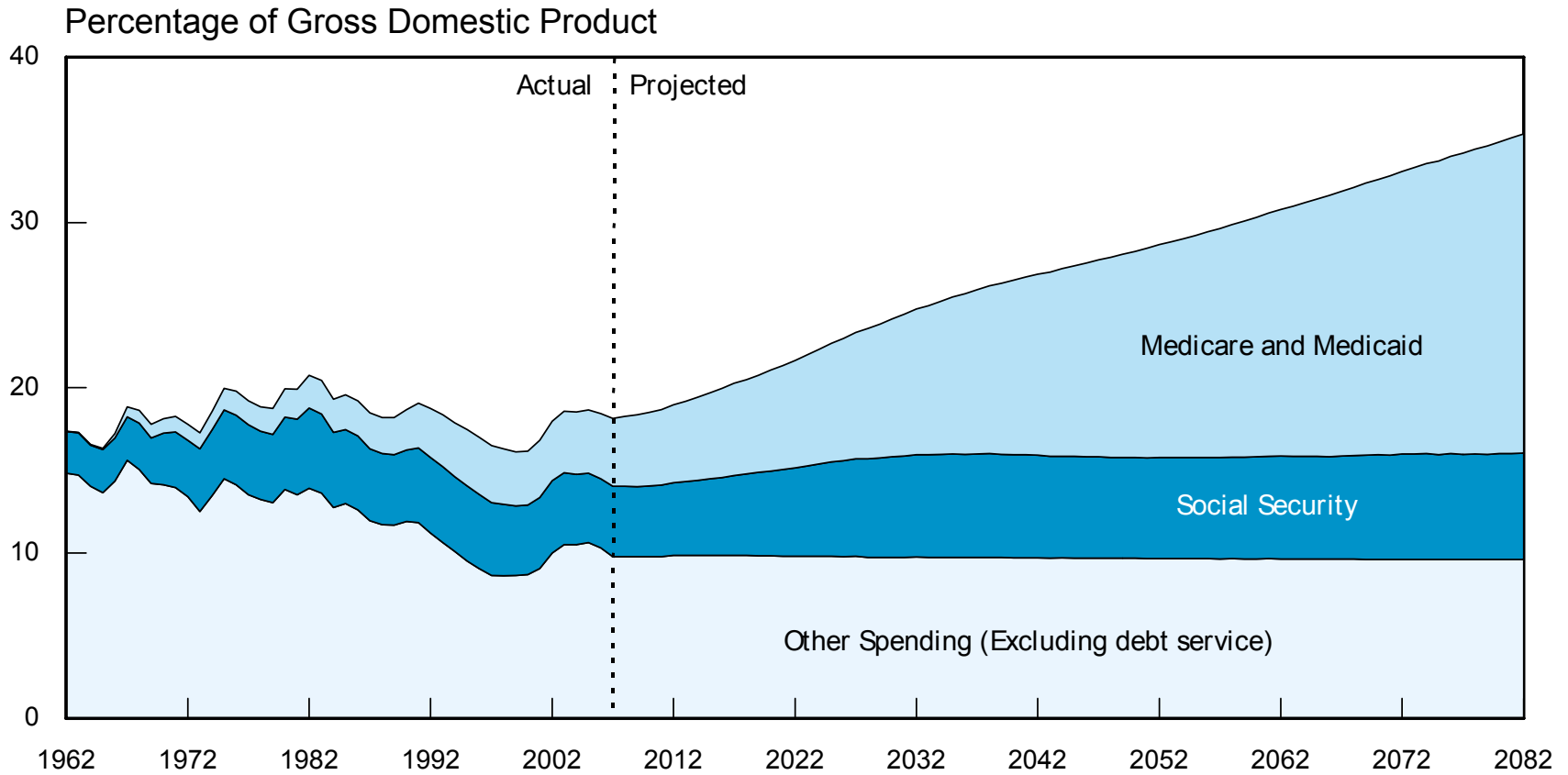
**AAAS Forum on Science and Technology Policy**

# **The Nation's Fiscal Challenges**

**May 9, 2008**



# Federal Spending Under CBO's Alternative Fiscal Scenario





# Excess Cost Growth in Medicare, Medicaid, and All Other Spending on Health Care

Percentage Points

	<b>Medicare</b>	<b>Medicaid</b>	<b>All Other</b>	<b>Total</b>
1975 to 1990	2.9	2.9	2.4	2.6
1990 to 2005	1.8	1.3	1.4	1.5
1975 to 2005	2.4	2.2	2.0	2.1



## Estimated Contributions of Selected Factors to Long-Term Growth in Real Health Care Spending per Capita, 1940 to 1990

	Smith, Heffler, and Freeland (2000)	Cutler (1995)	Newhouse (1992)
<b>Aging of the Population</b>	2	2	2
<b>Changes in Third-Party Payment</b>	10	13	10
<b>Personal Income Growth</b>	11-18	5	<23
<b>Prices in the Health Care Sector</b>	11-22	19	Not Estimated
<b>Administrative Costs</b>	3-10	13	Not Estimated
<b>Defensive Medicine and Supplier-Induced Demand</b>	0	Not Estimated	0
<b>Technology-Related Changes in Medical Practice</b>	38-62	49	>65

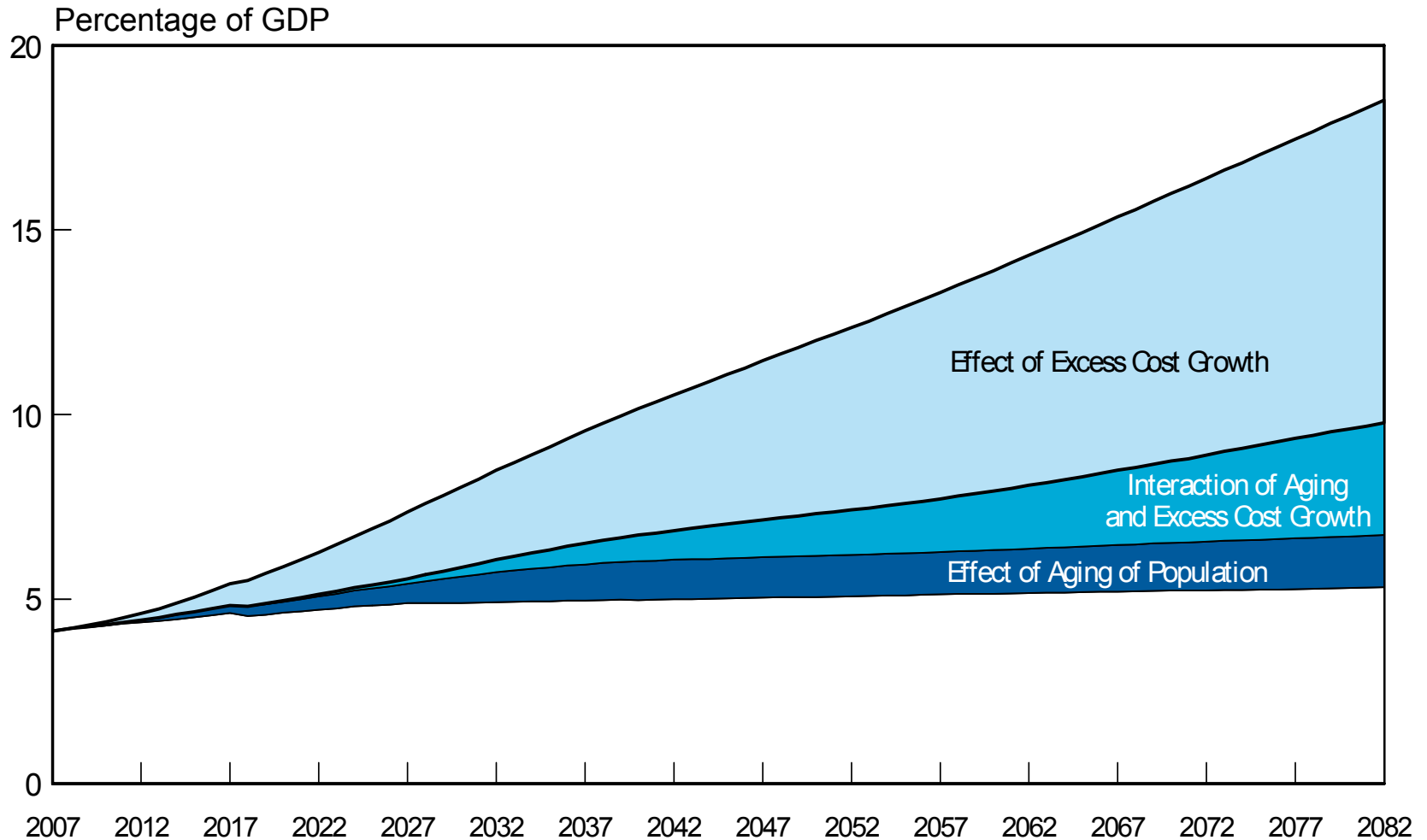


## Misdiagnosing the Problem

- Most discussions in media: aging and demographics
- Most of the fiscal problem: rising cost per beneficiary, not the number or type of beneficiaries

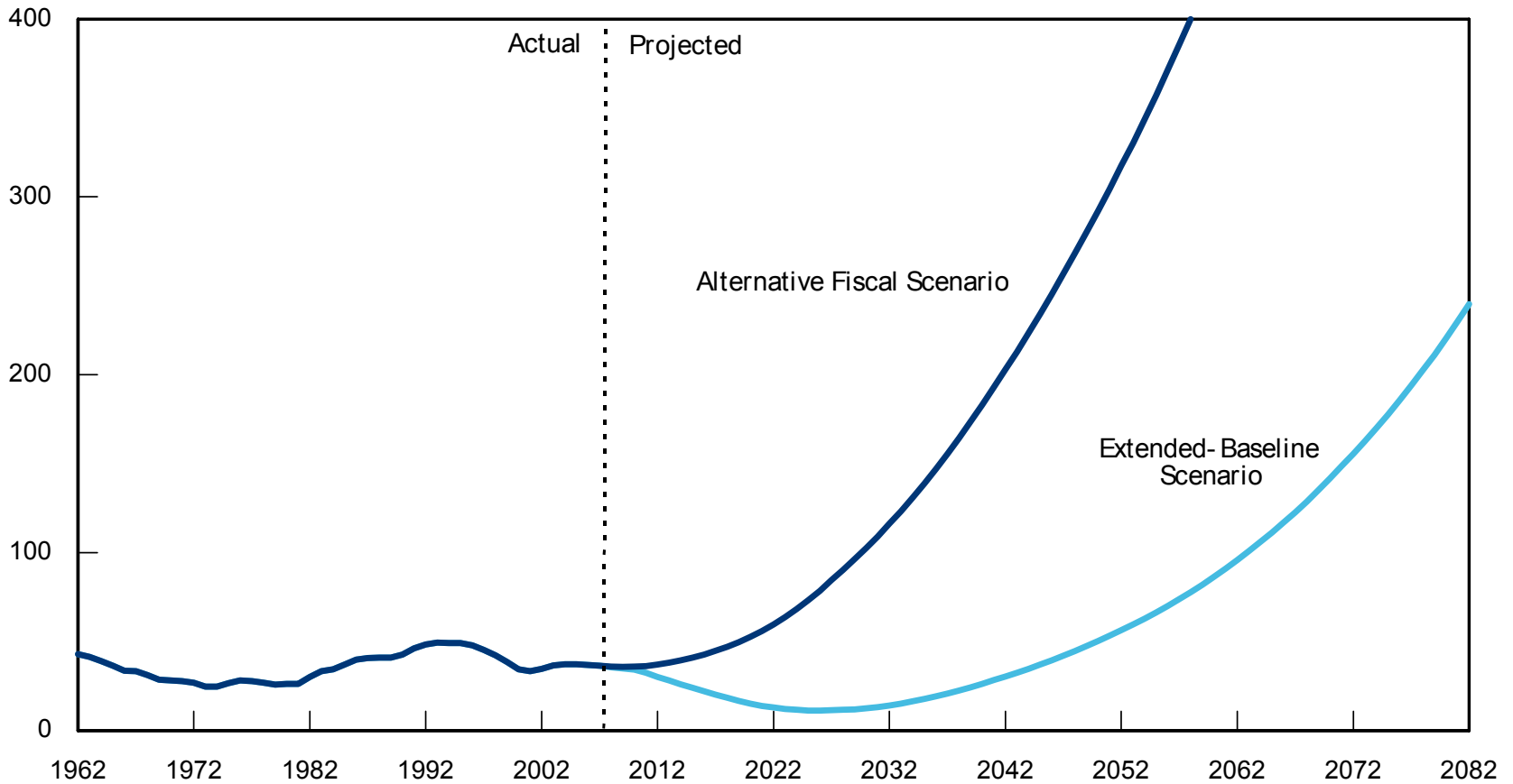


# Sources of Growth in Projected Federal Spending on Medicare and Medicaid



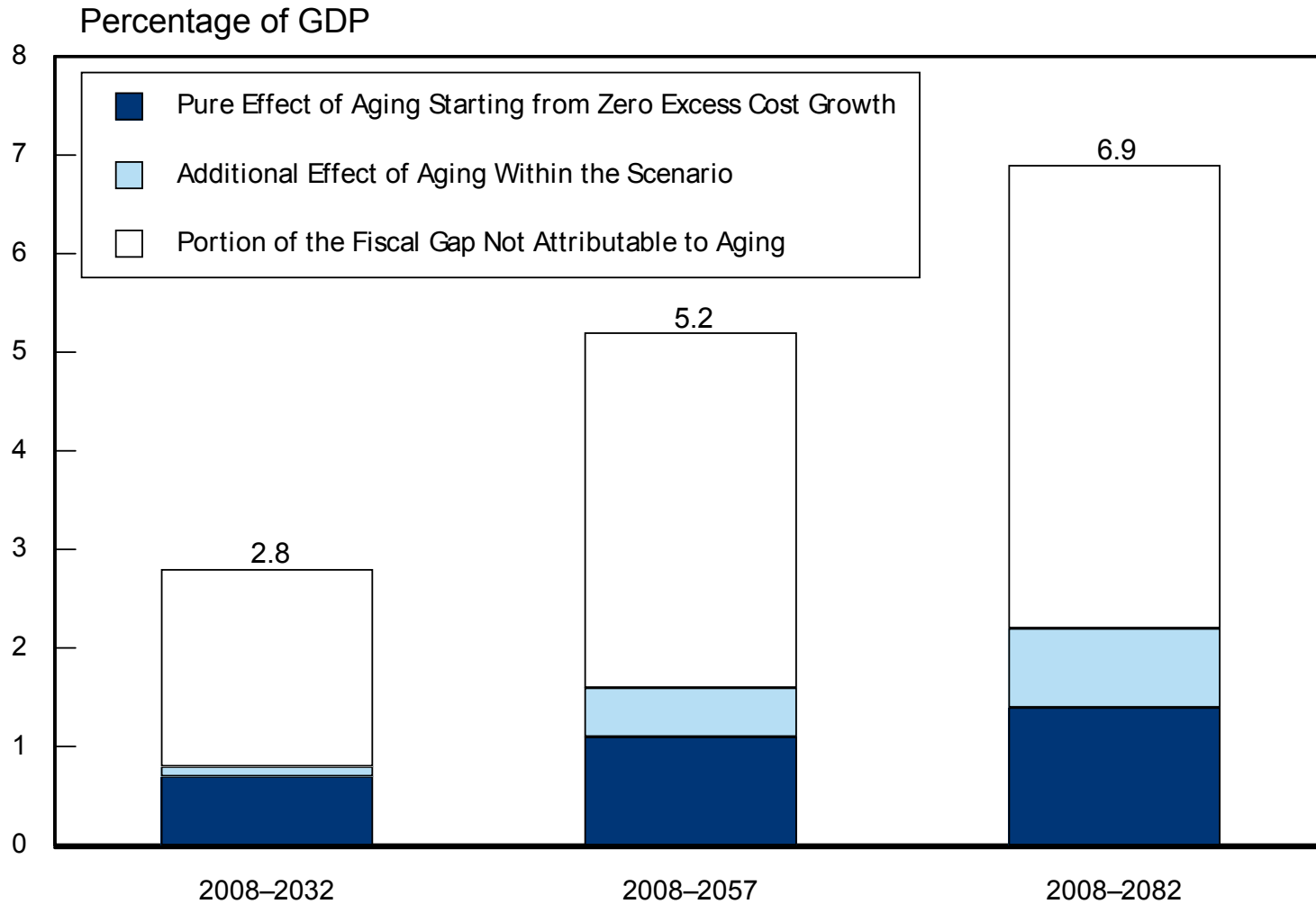


# Federal Debt Held by the Public as a Percentage of Gross Domestic Product Under CBO's Long-Term Budget Scenarios





# Contribution of Aging to the Fiscal Gap Under CBO's Alternative Fiscal Scenario





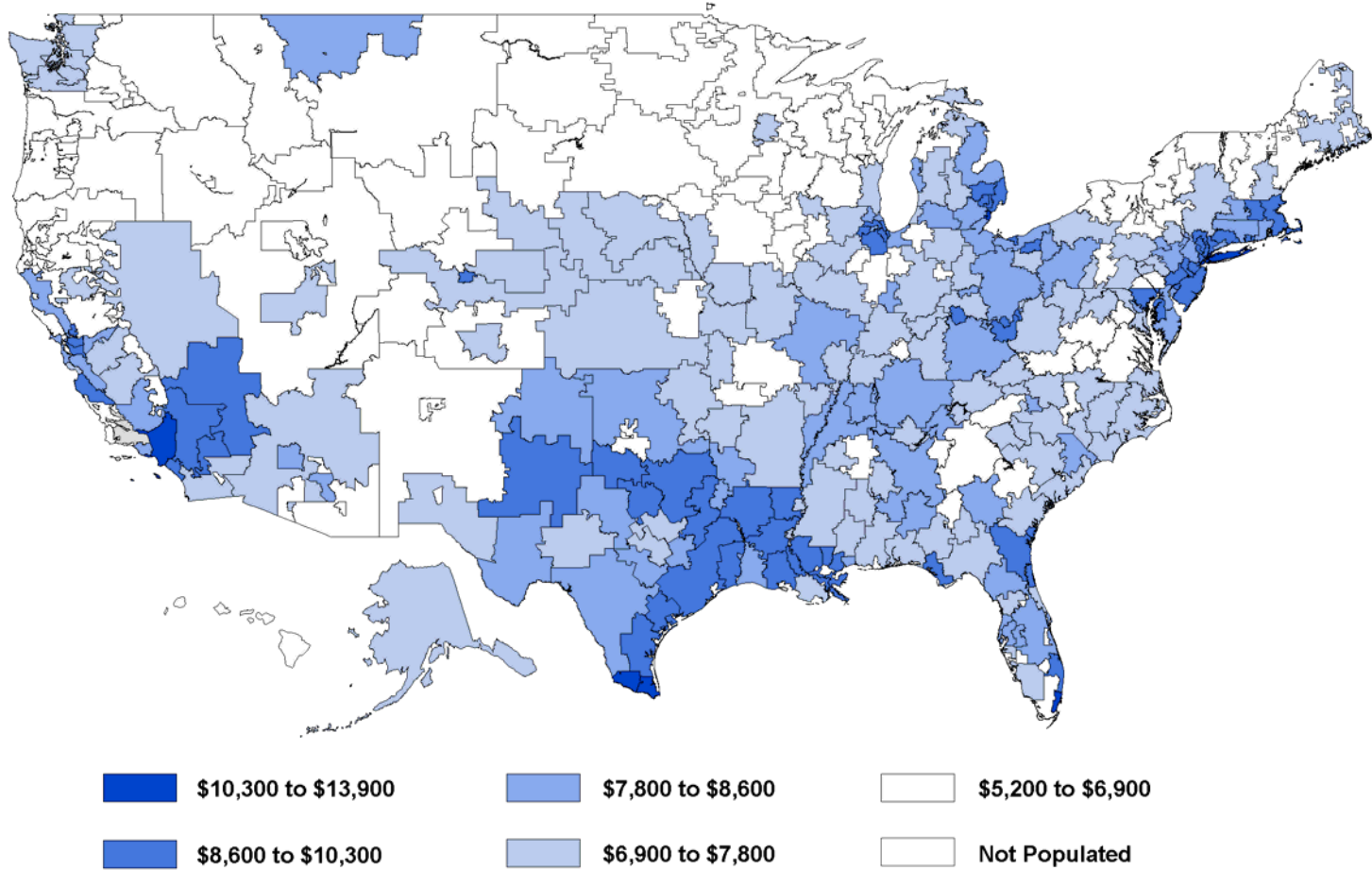
**Before we all get too depressed...**

Embedded in the nation's central long-term fiscal challenge appears to be a substantial opportunity:

Can we reduce health care costs without impairing health outcomes?



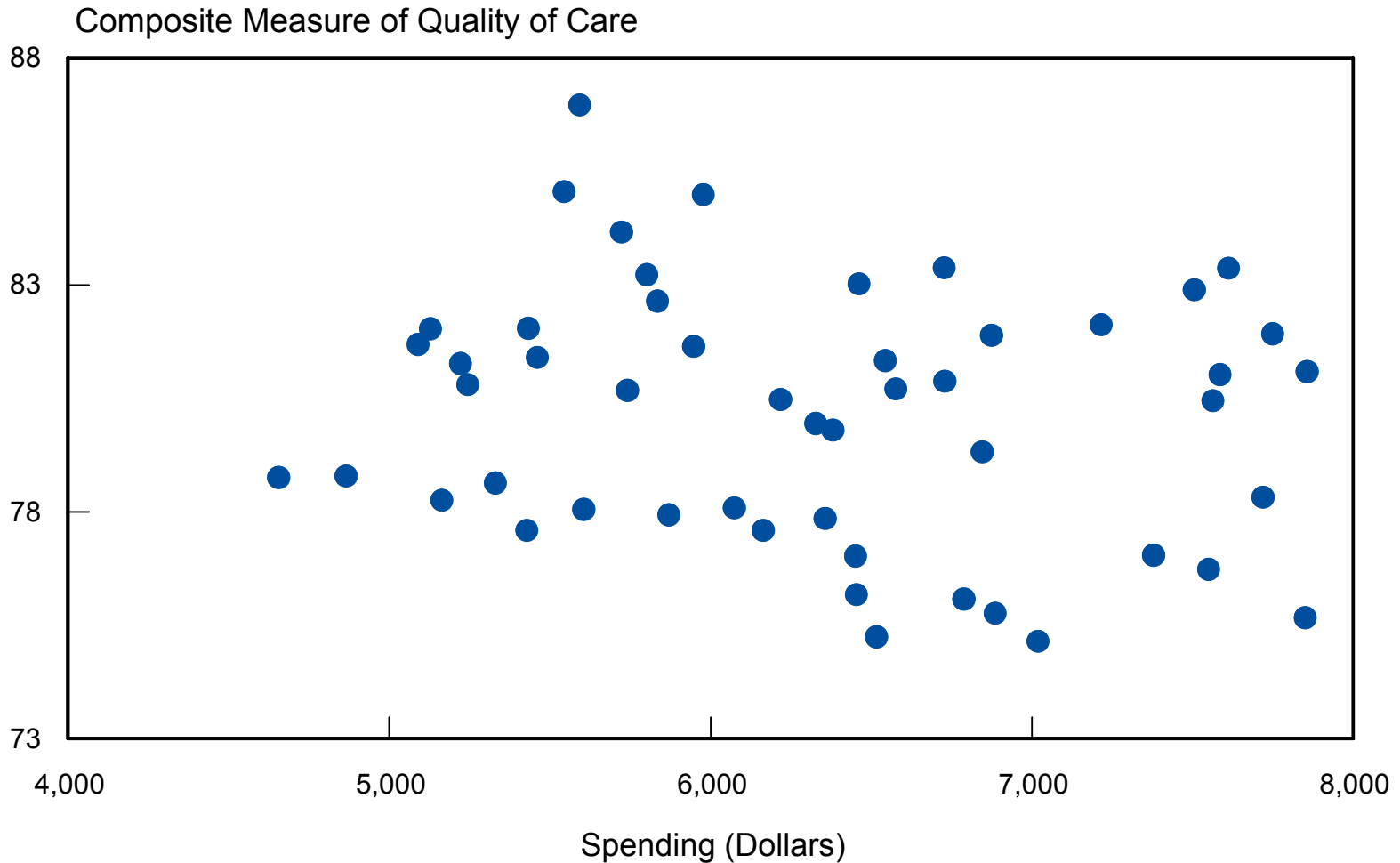
# Medicare Spending per Beneficiary in the United States, by Hospital Referral Region, 2005



Source: Data from CMS



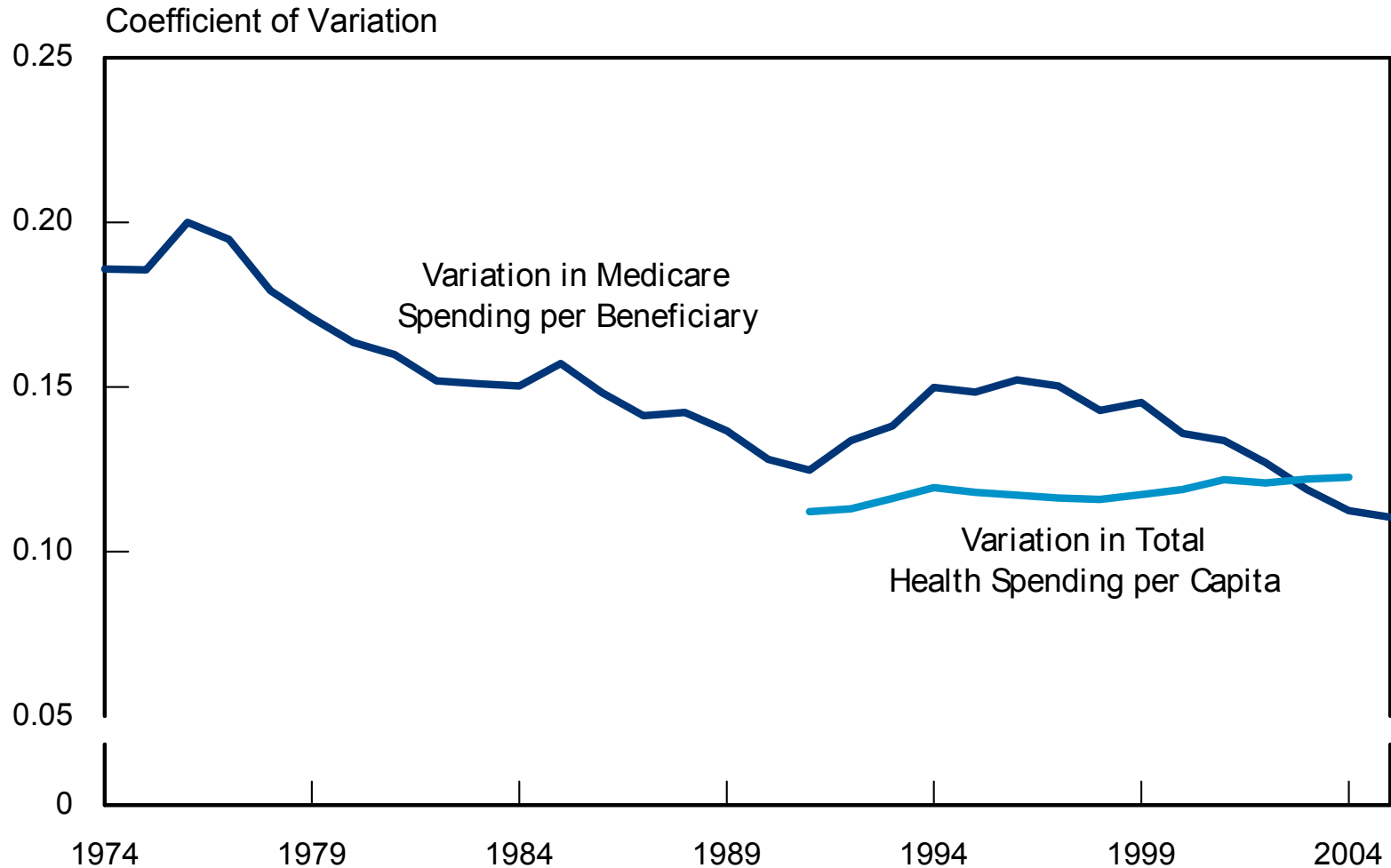
# The Relationship Between Quality and Medicare Spending, by State, 2004



Source: Data from AHRQ and CMS.



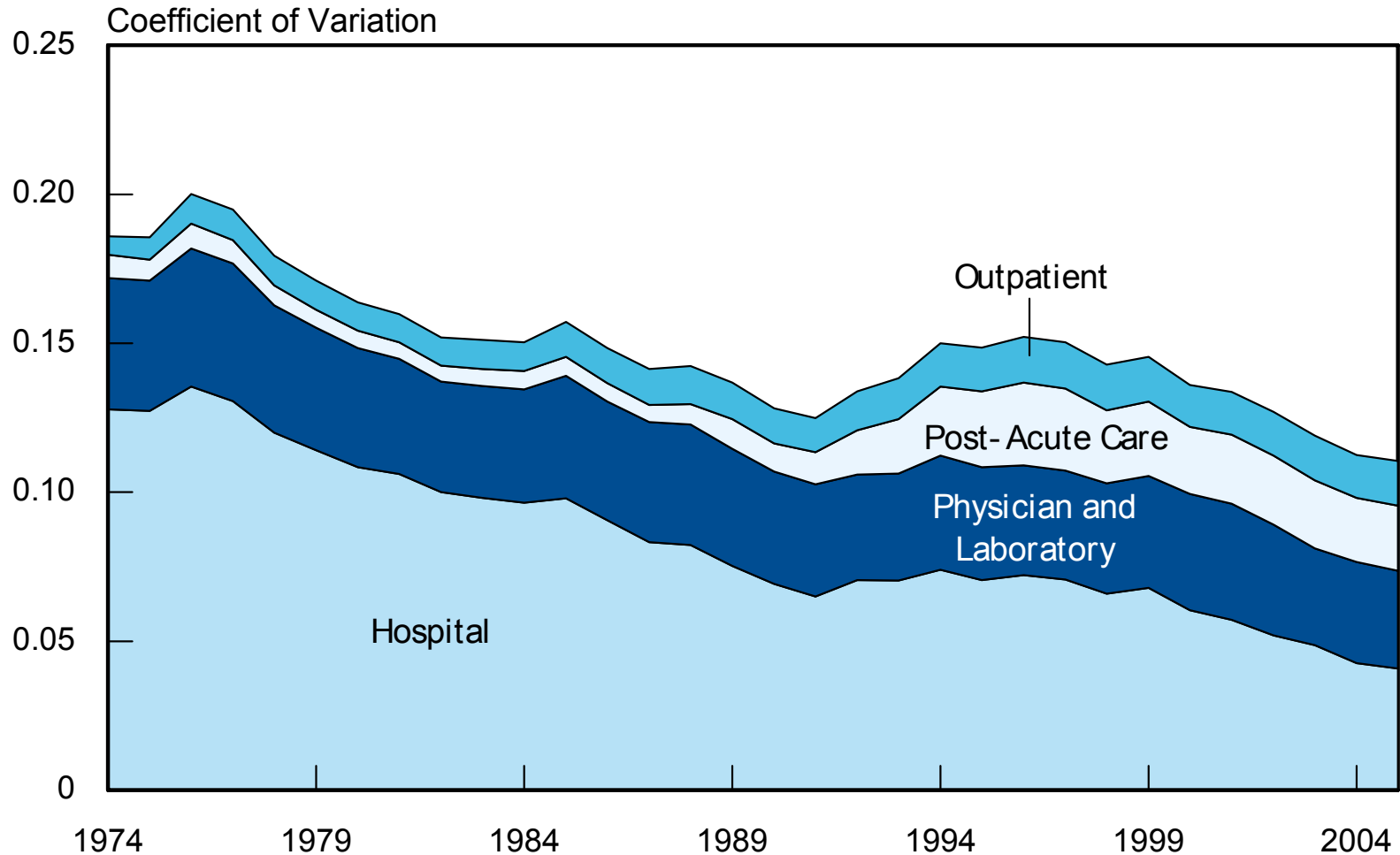
# Variation in State-Level Medicare and Overall Health Care Spending per Capita



Source: Data from CMS.



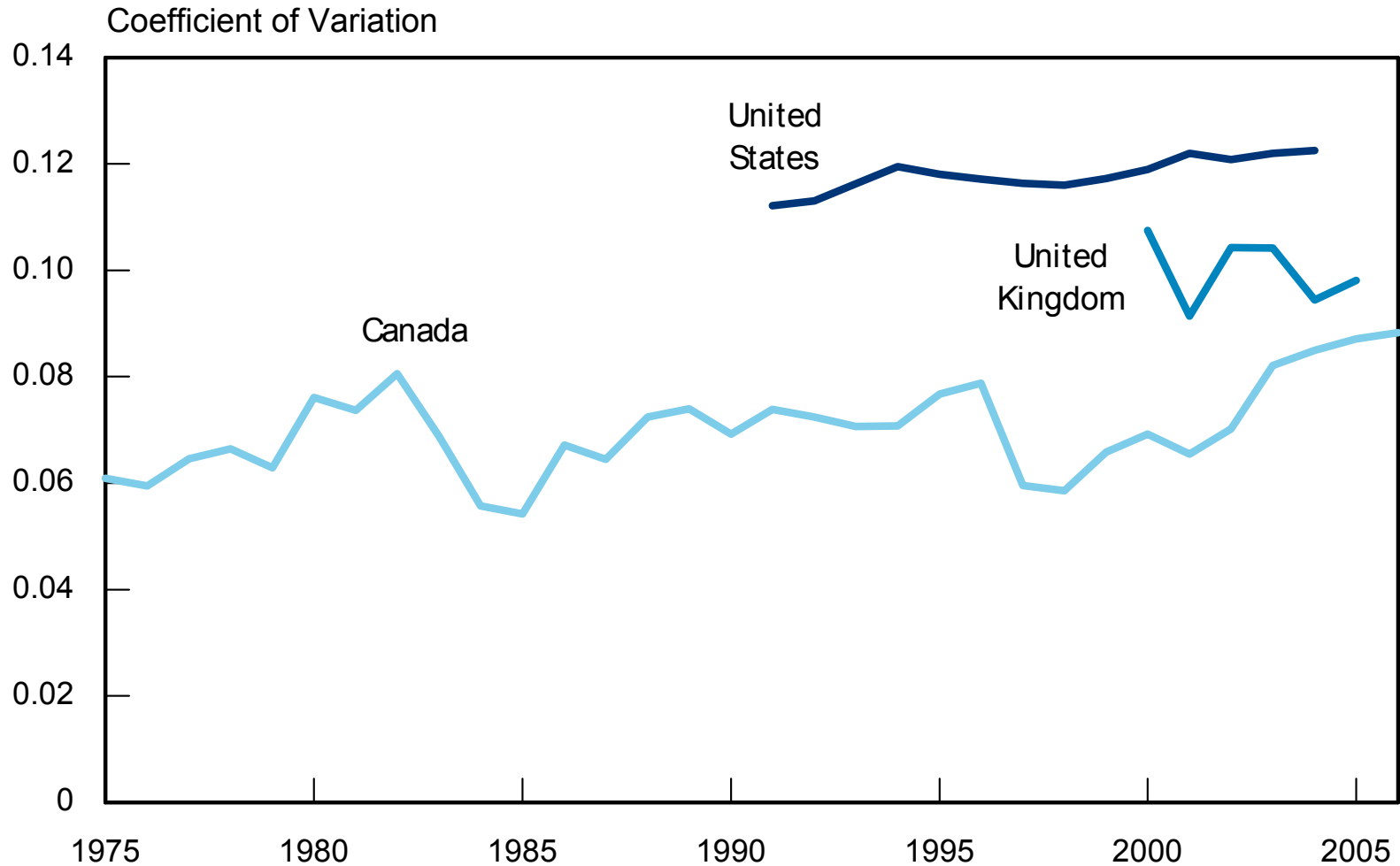
# Contributions of Major Service Categories to State-Level Variation in Medicare Spending per Beneficiary



Source: Data from CMS.



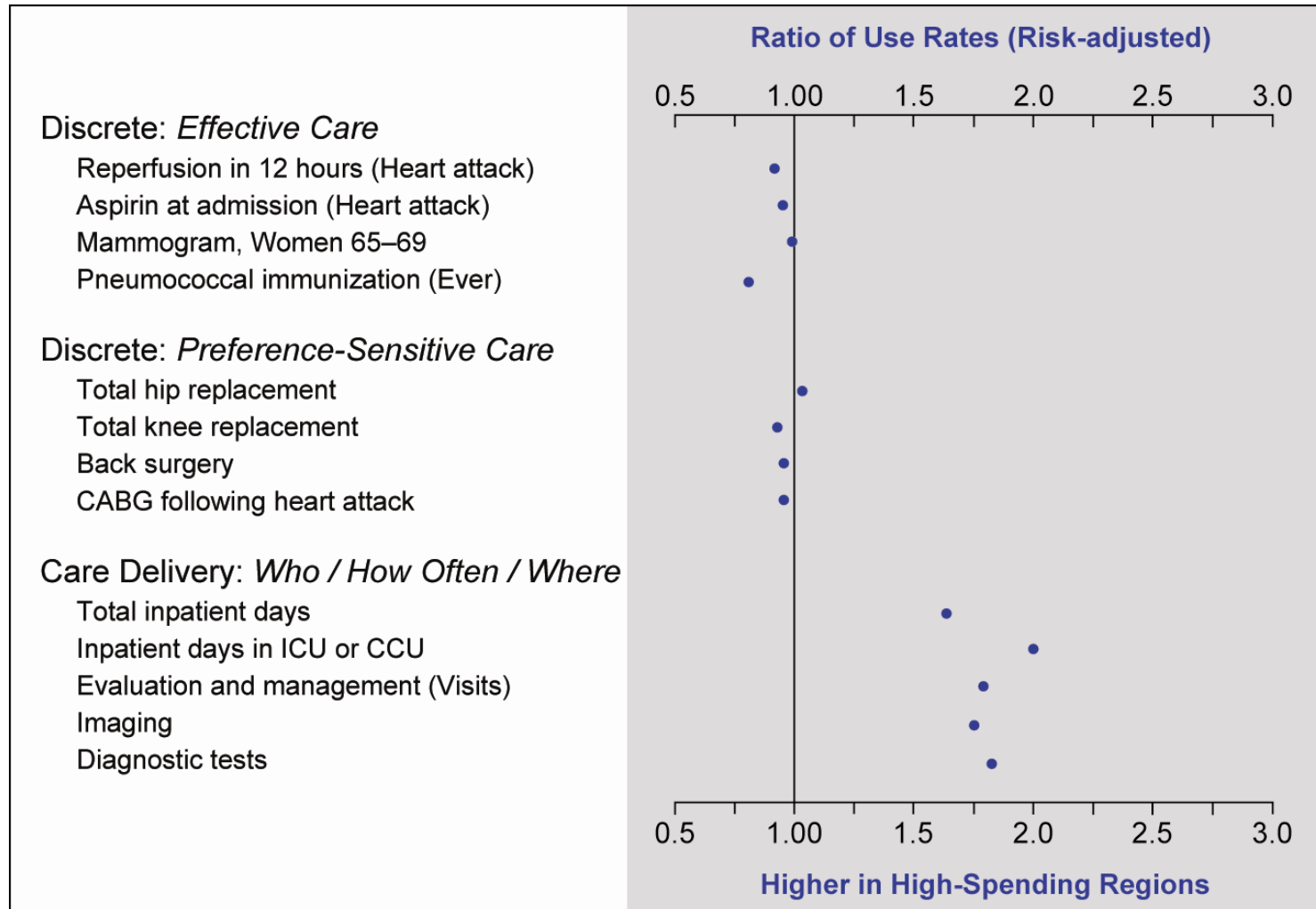
# Geographic Variation in Health Care Spending per Capita in Selected Countries



Source: Data from CMS, HM Treasury (U.K.), and the Canadian Institute for Health Information.



# What Additional Services Are Provided in High-Spending Regions?





## Variations Among Academic Medical Centers

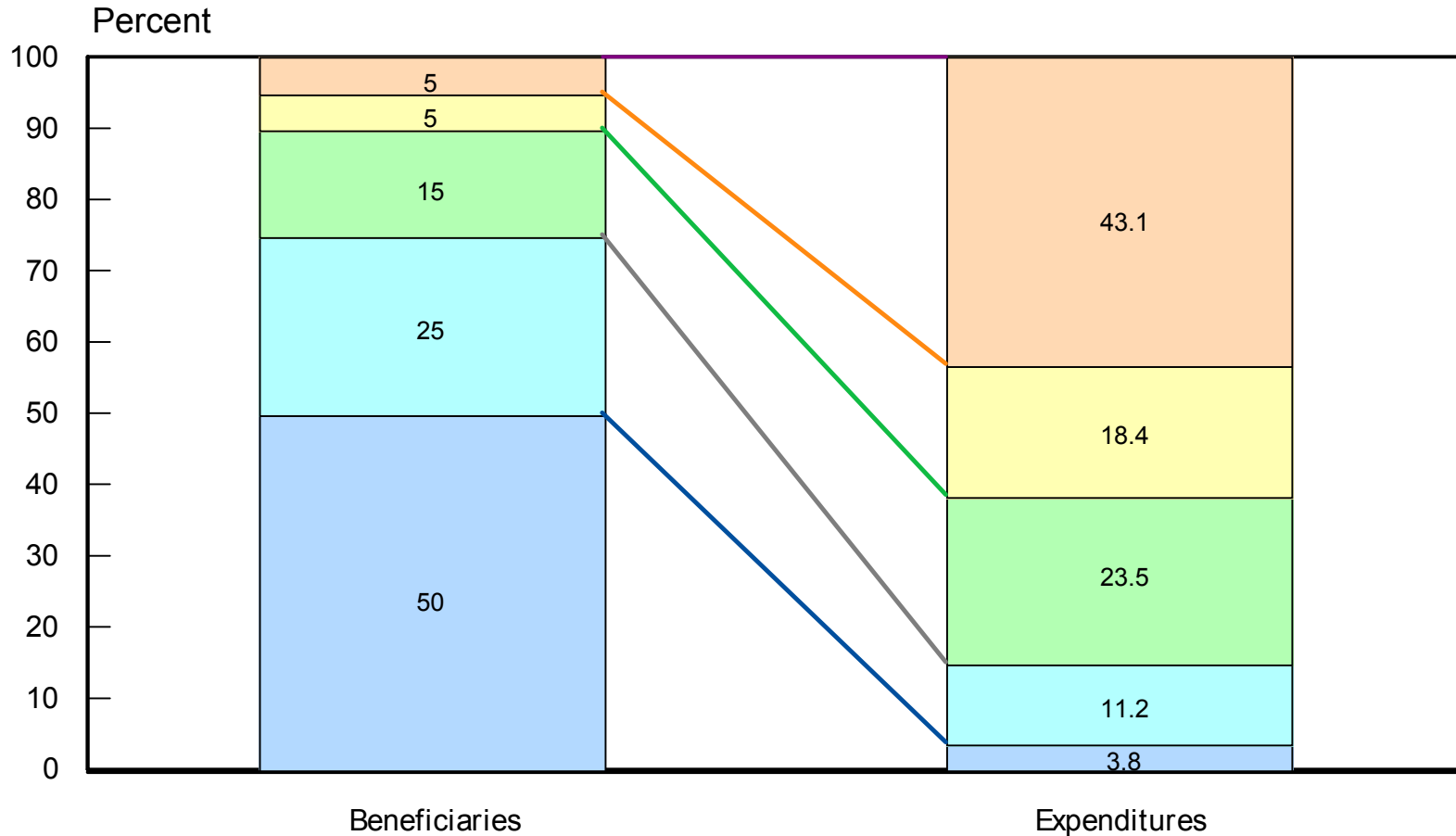
*Use of Biologically Targeted Interventions and Care-Delivery Methods Among Three of U.S. News and World Report's "Honor Roll" AMCs*

	<b>UCLA Medical Center</b>	<b>Massachusetts General Hospital</b>	<b>Mayo Clinic (St. Mary's Hospital)</b>
<b>Biologically Targeted Interventions: Acute Inpatient Care</b>			
CMS composite quality score	81.5	85.9	90.4
<b>Care Delivery—and Spending—Among Medicare Patients in Last Six Months of Life</b>			
Total Medicare spending	50,522	40,181	26,330
Hospital days	19.2	17.7	12.9
Physician visits	52.1	42.2	23.9
Ratio, medical specialist / primary care	2.9	1.0	1.1

Source: Elliot Fisher, Dartmouth Medical School.



# Concentration of Total Annual Medicare Expenditures Among Beneficiaries, 2001



Source: Data from CMS.



# Paths Toward Capturing the Opportunity

- Information
  - Comparative effectiveness research
  - Randomized control trials
  - Health Information Technology
  - Costs salience
- Incentives
  - Better care, not more care
  - Coverage vs. differentiated payments
- Delivery Systems
- Health Behavior
  - Making it easy and simple to lead healthy lives
  - Managing chronic disease
  - Emphasizing prevention
  - Changing behavior and social norms among medical professionals

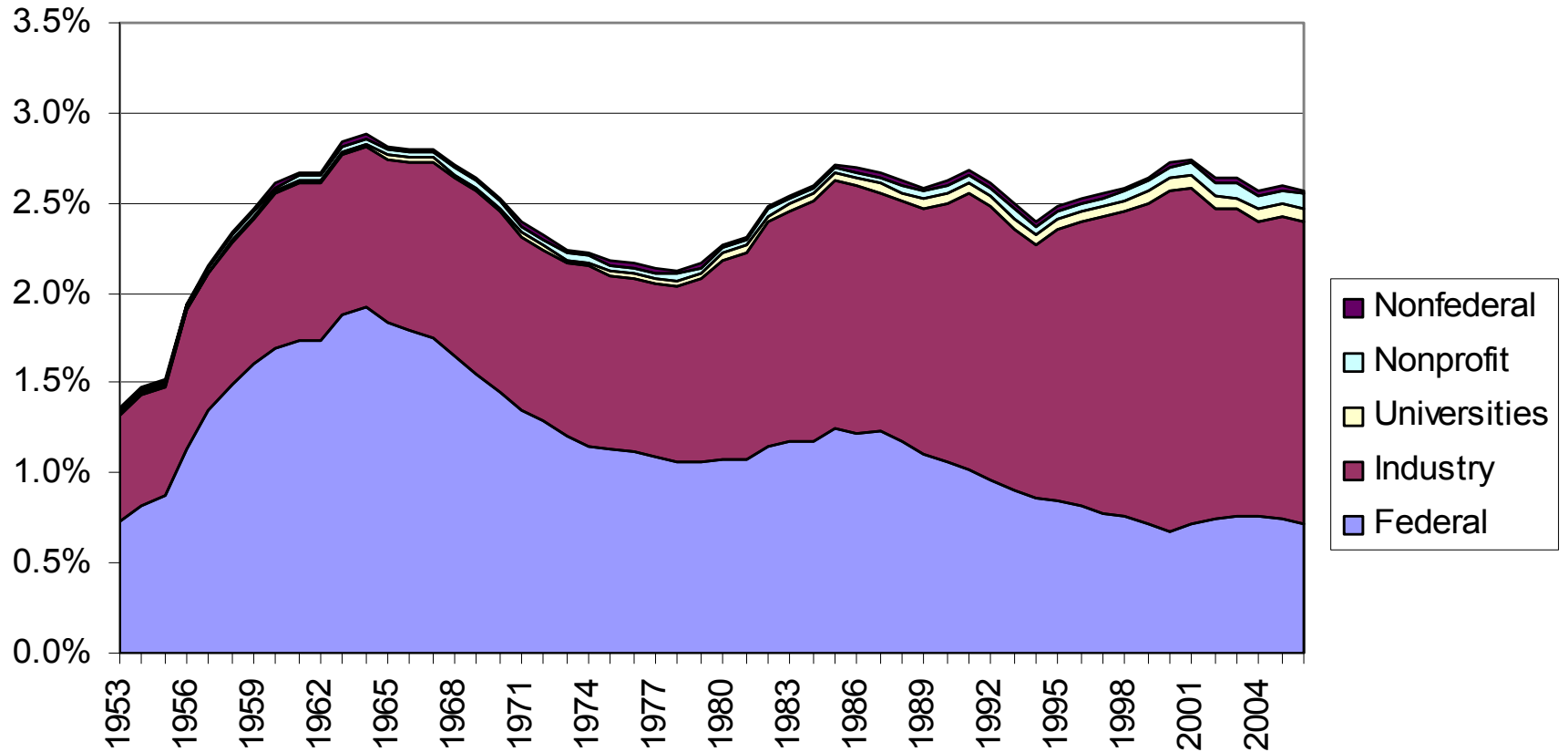


# Federal Spending That May Facilitate Economic Growth

- Education
- Infrastructure
- Research and Development



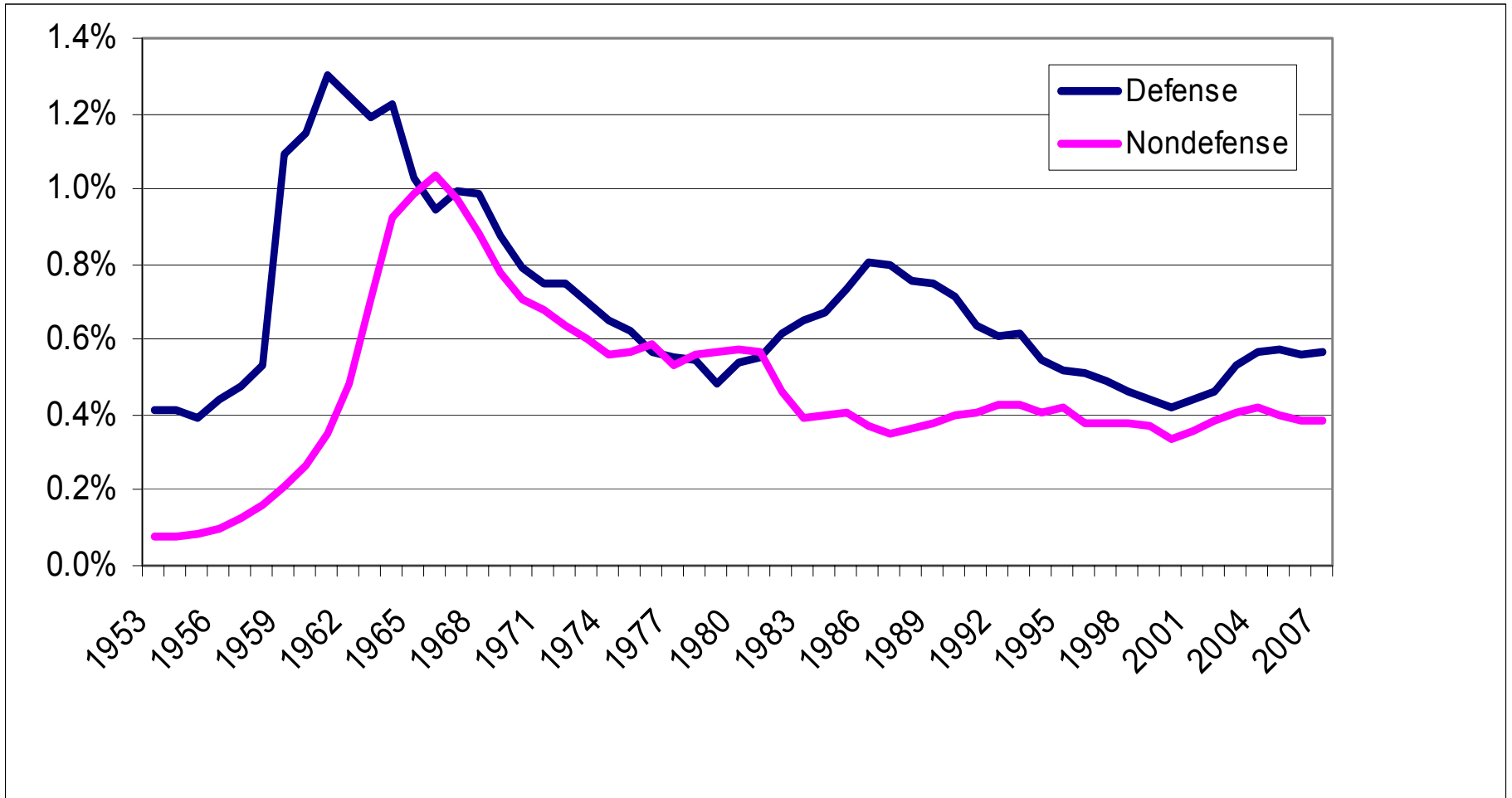
# Total U.S. R&D Spending as a Percentage of GDP



Source: Data from the National Science Foundation

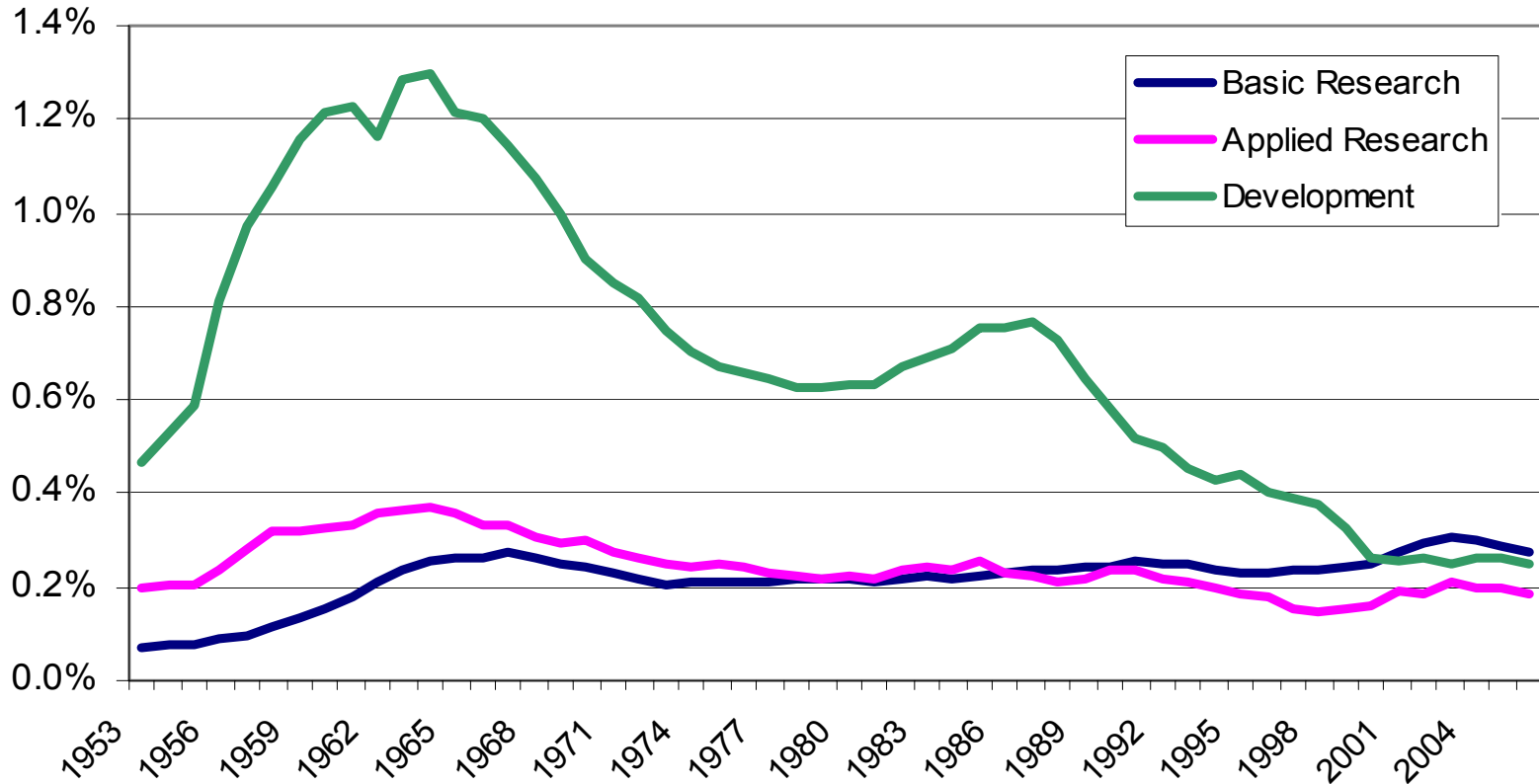


# Federal R&D Outlays by Spending Category as a Percentage of GDP





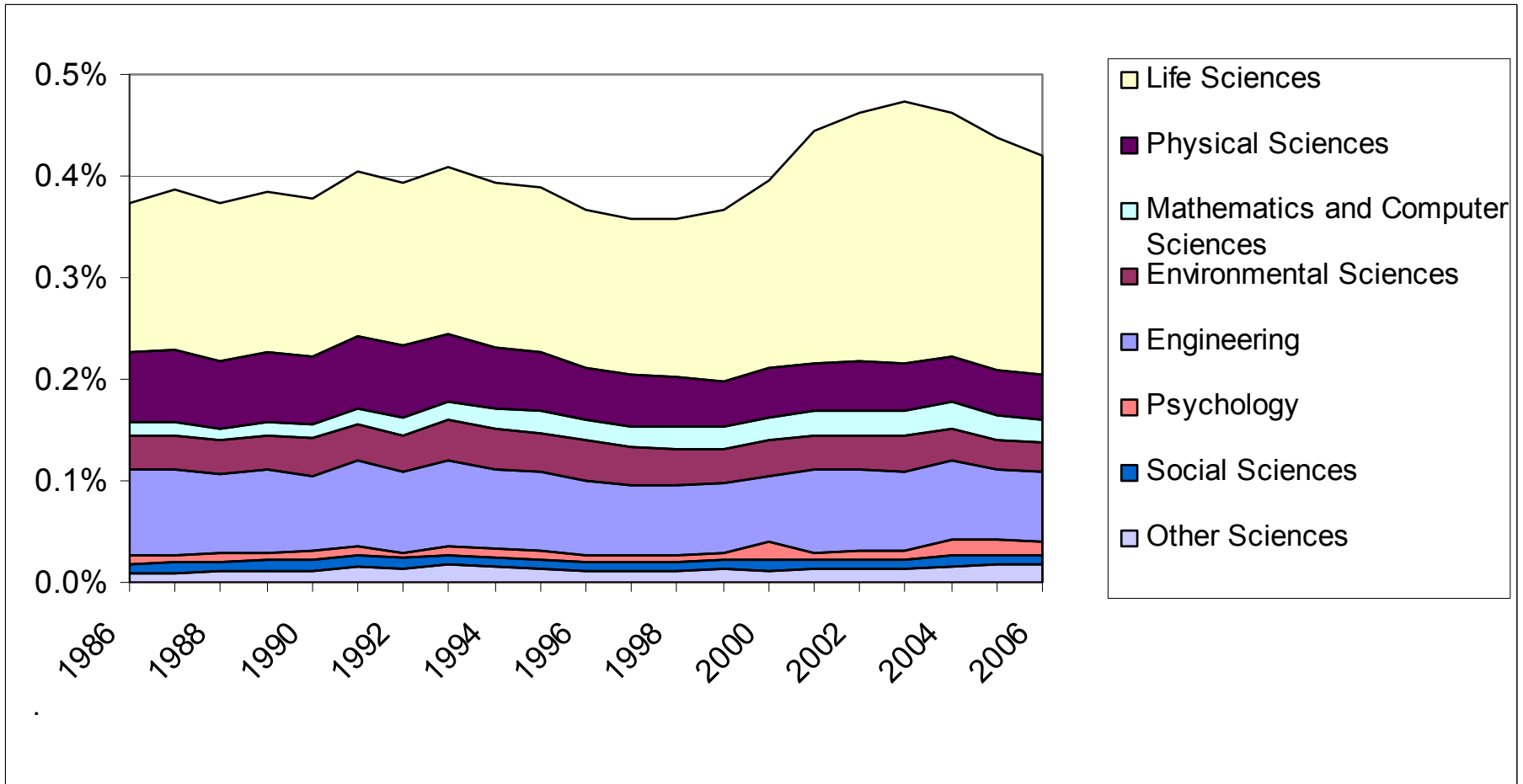
# Federal R&D Spending as a Percentage of GDP



Source: Data from the National Science Foundation



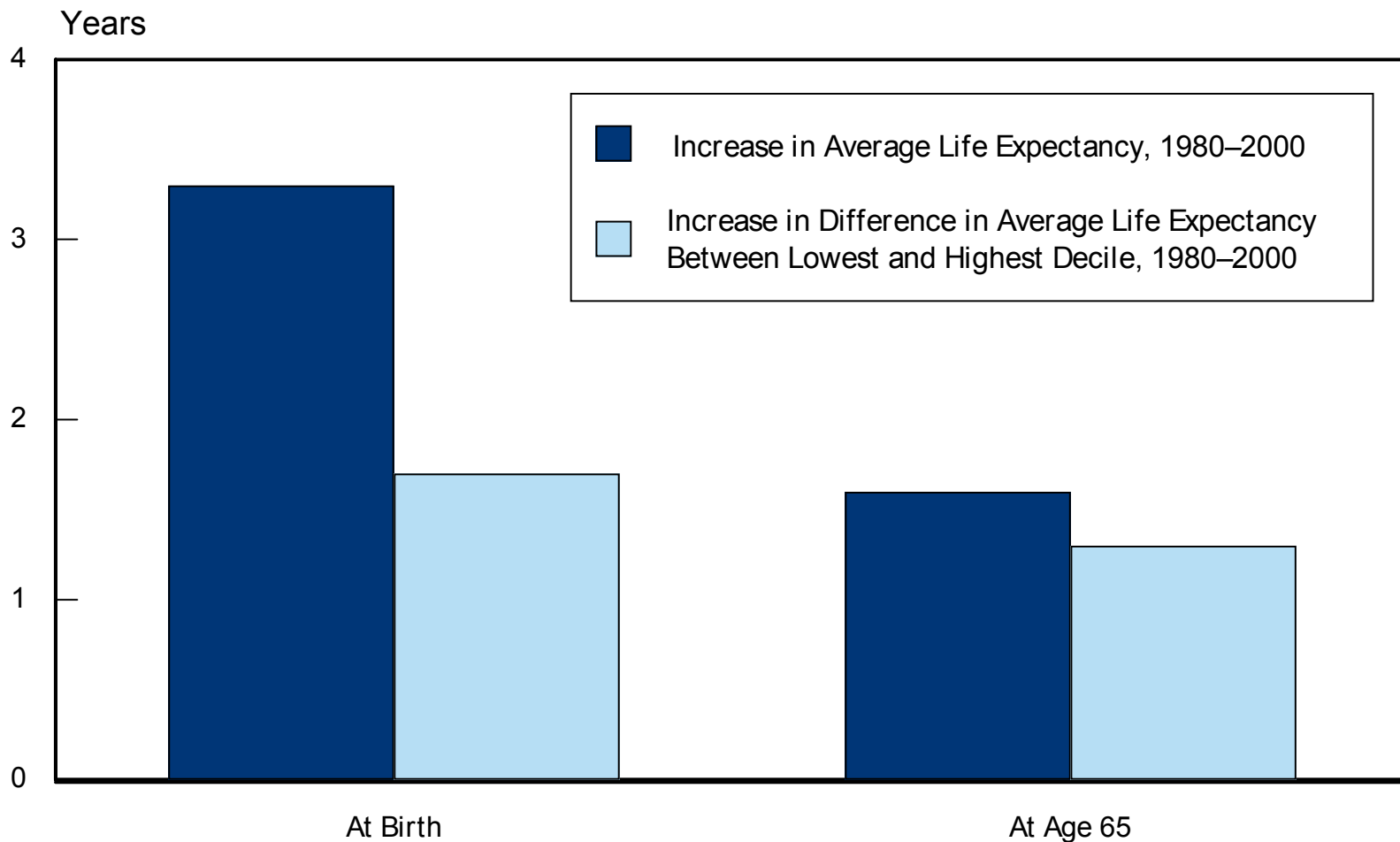
# Federal Research Obligations by Field, as a Percentage of GDP



Source: Data from the National Science Foundation



# Increase in Life Expectancy and Increase in Difference in Life Expectancy, by Economic Status



Source: Data from Singh and Siahpush (2006) and CDC.