



# Congressional Budget Office

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## **The Uncertainty of Long-Term Budget Projections**

National Tax Association  
108th Annual Conference on Taxation  
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# CBO's Long-Term Projections

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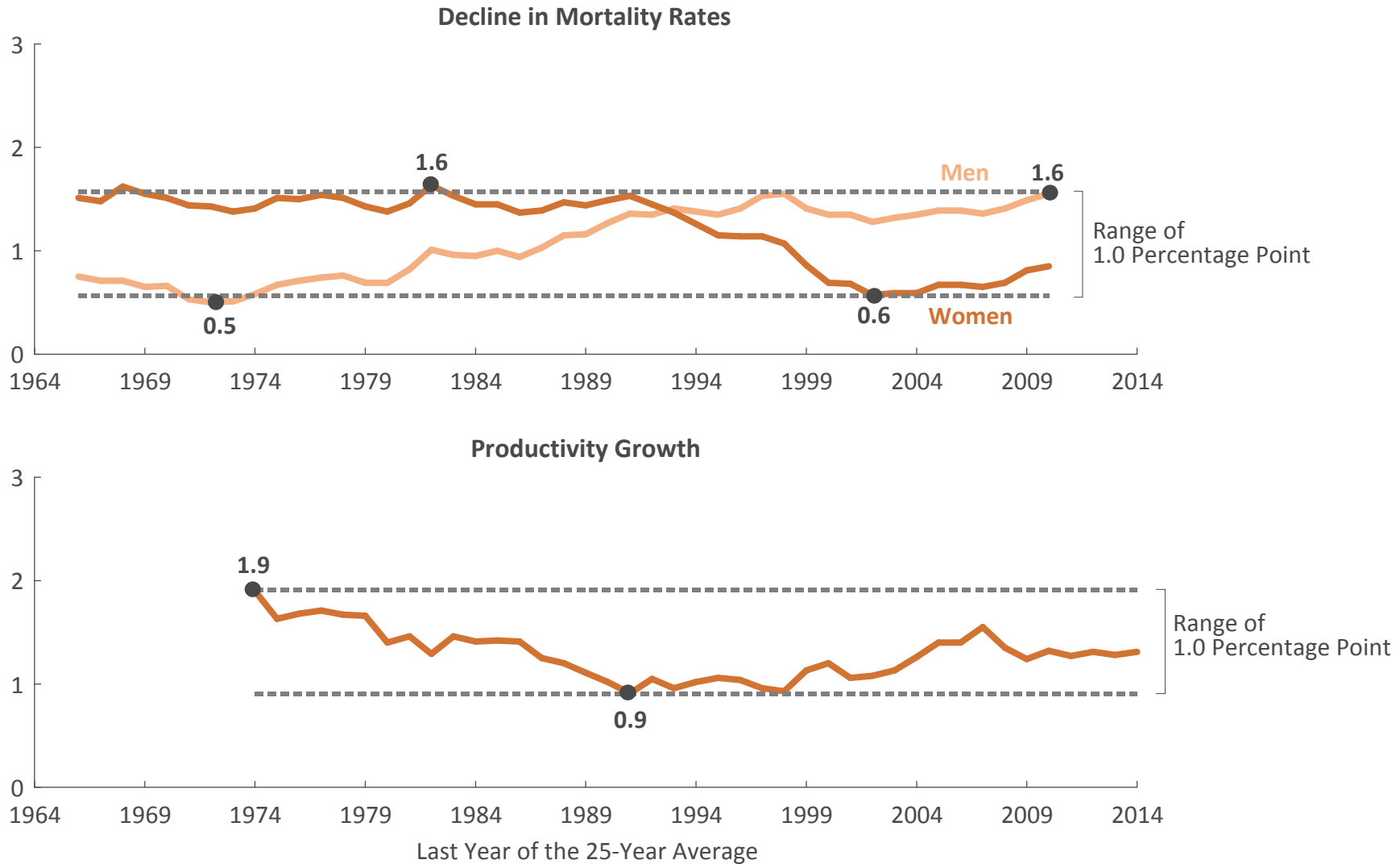
- CBO produces long-term (25-year) budget projections annually.
- CBO's extended baseline projections depend on estimates of the future paths of mortality rates, productivity, interest rates, and health care costs, among many other variables.
- CBO shows how its long-term projections would change if those paths varied from CBO's central estimates.

# How CBO Estimates Ranges of Uncertainty for Key Inputs Into Long-Term Projections

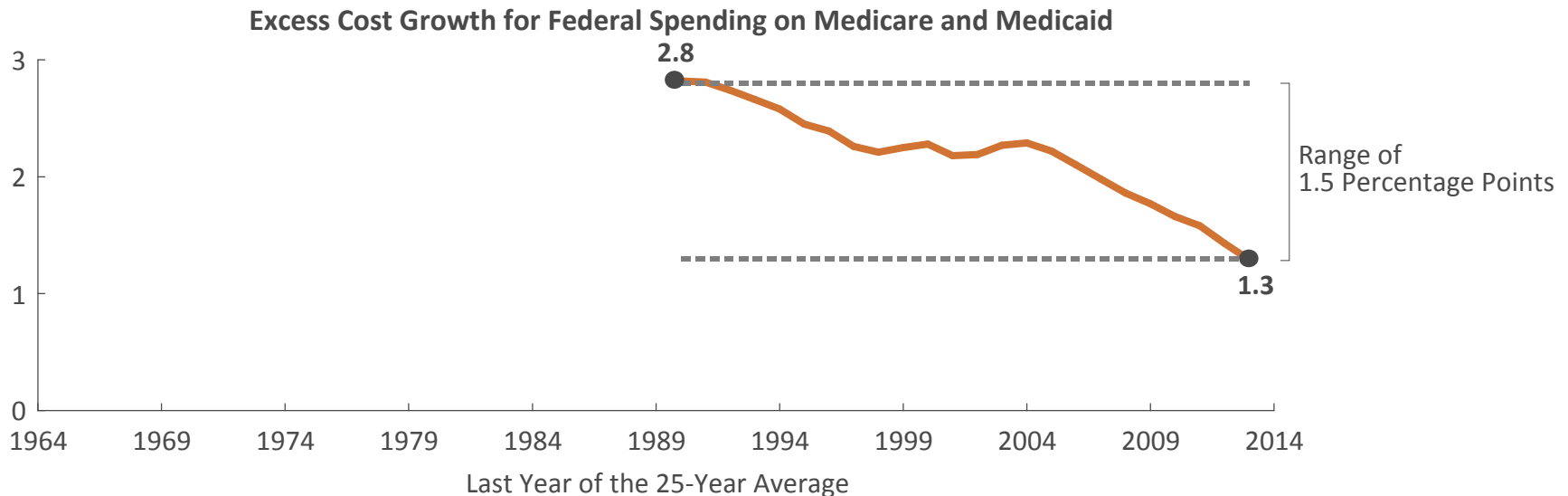
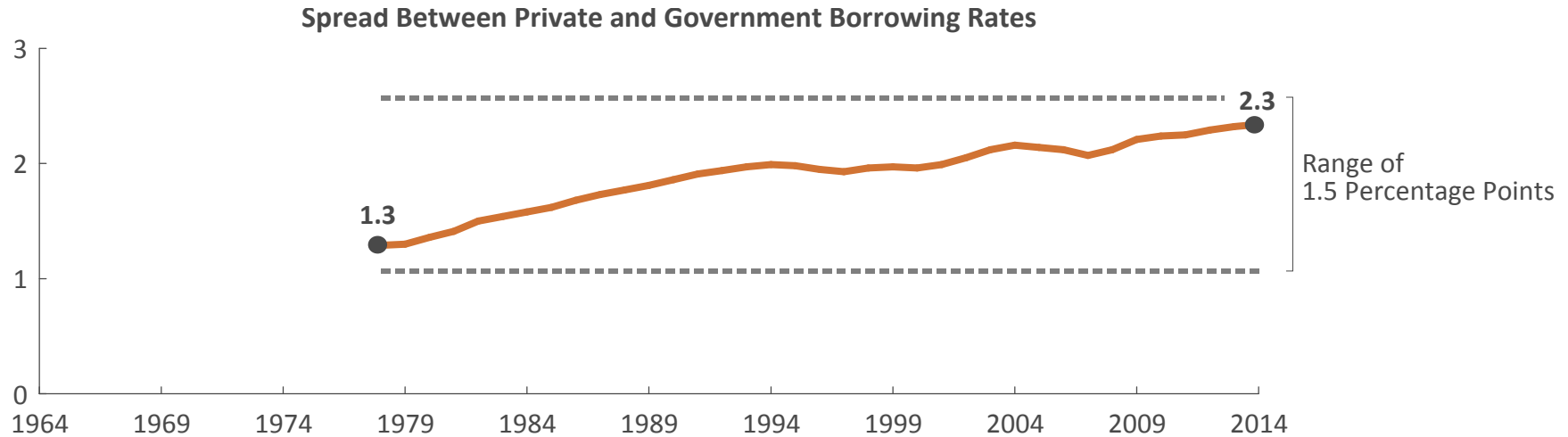
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- Ranges are based largely on the variation in 25-year averages over history.
- Ranges are also adjusted based on consideration of possible future developments.

# The 25-Year Averages and Ranges CBO Used for Four Factors Affecting Budgetary Outcomes



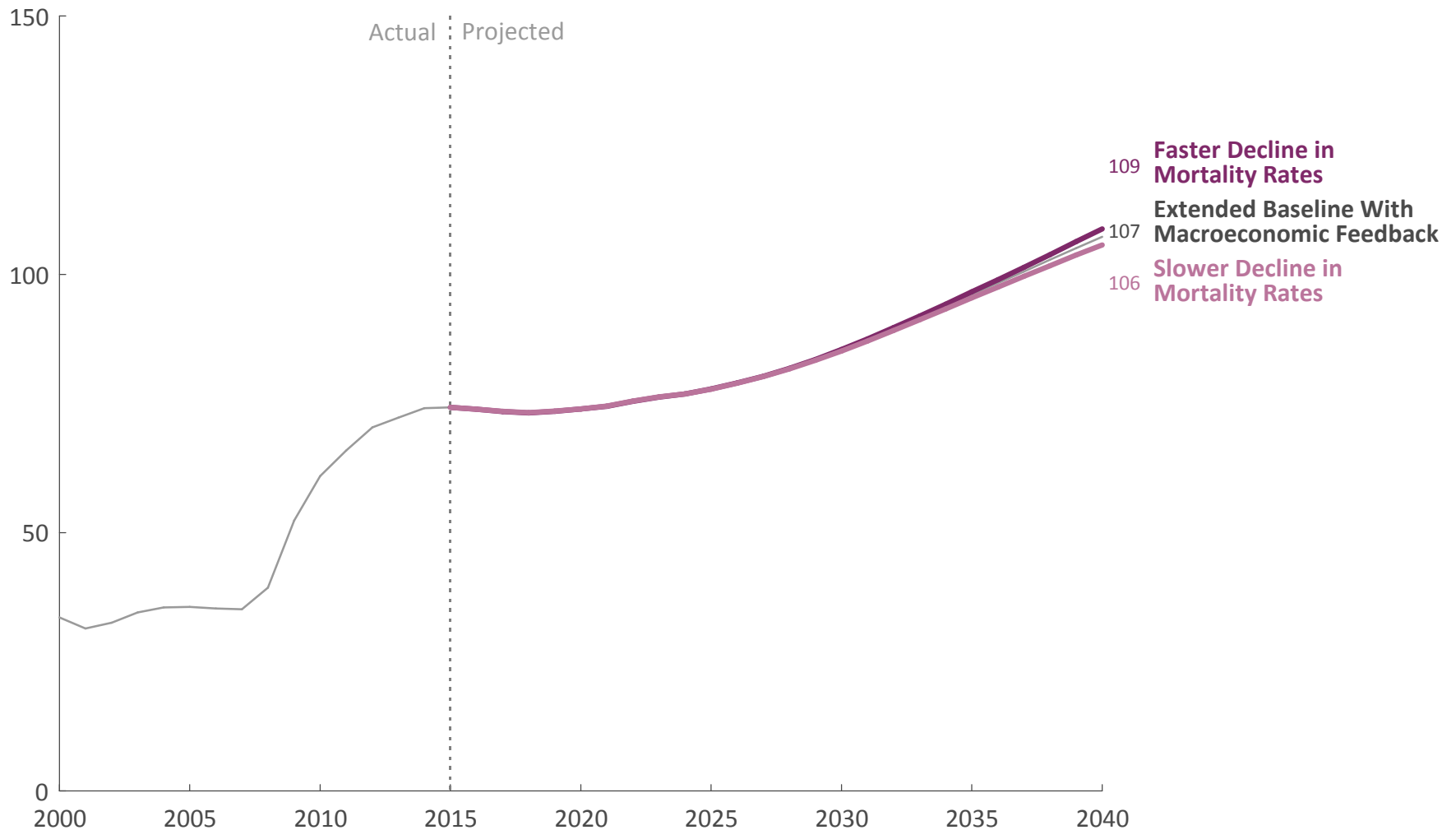
# The 25-Year Averages and Ranges CBO Used for Four Factors Affecting Budgetary Outcomes (Continued)



# **How Do Those Ranges of Uncertainty Affect CBO's Long-Term Projection for Federal Debt?**

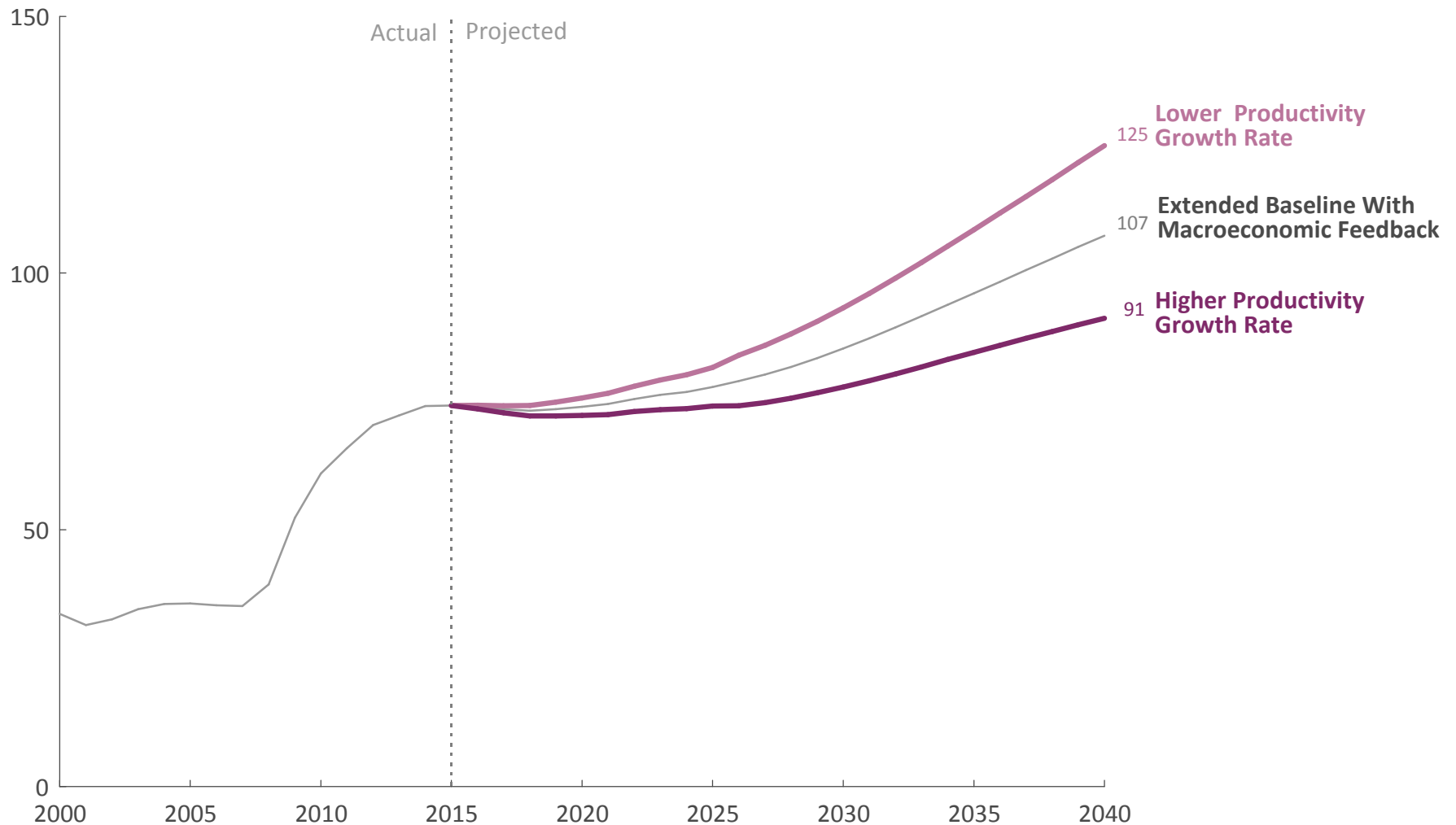
# Federal Debt Given Different Rates of Mortality Decline

Percentage of Gross Domestic Product



# Federal Debt Given Different Rates of Productivity Growth

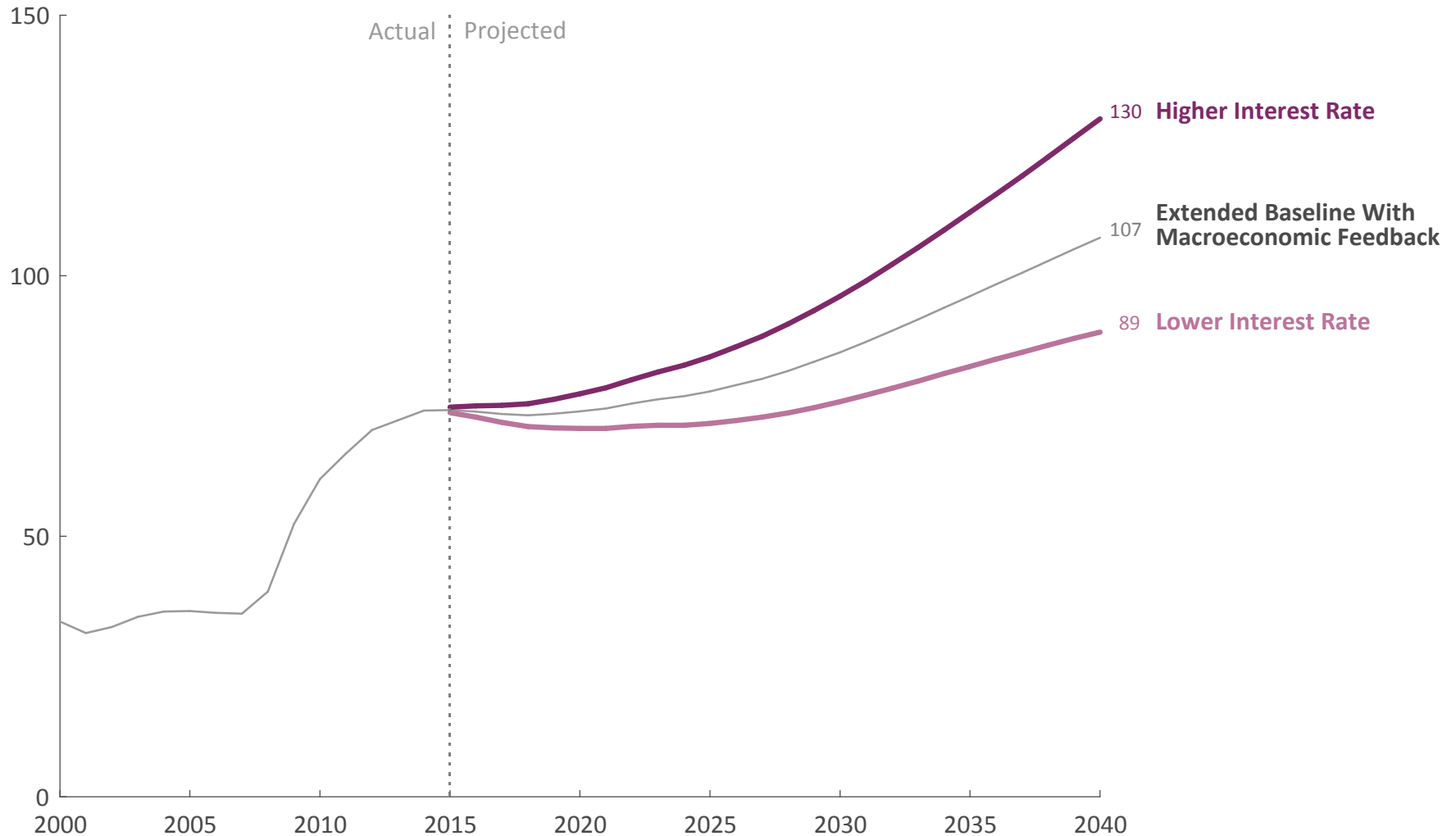
Percentage of Gross Domestic Product





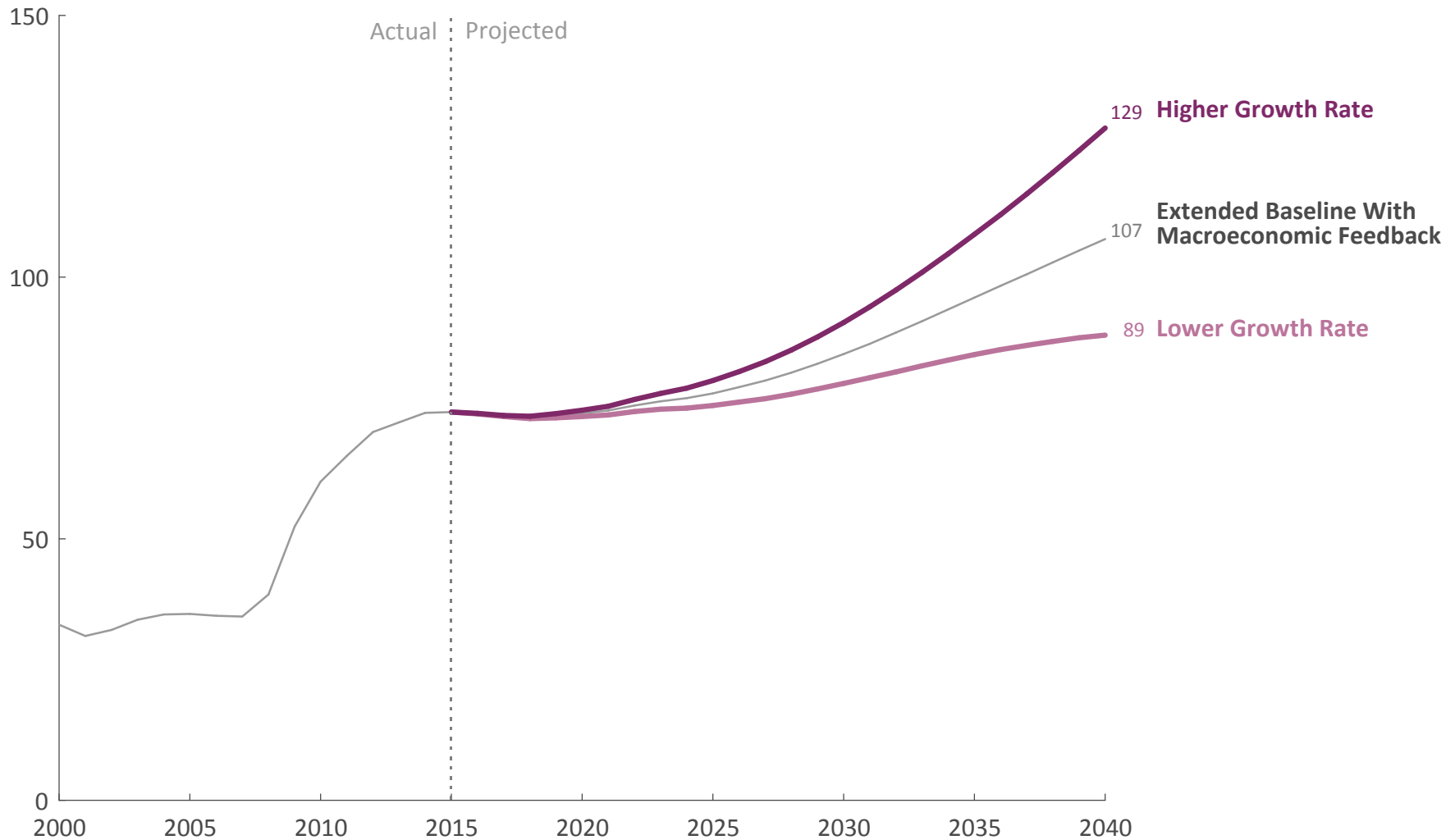
# Federal Debt Given Different Interest Rates

Percentage of Gross Domestic Product



# Federal Debt Given Different Rates of Growth of Federal Health Care Spending

Percentage of Gross Domestic Product

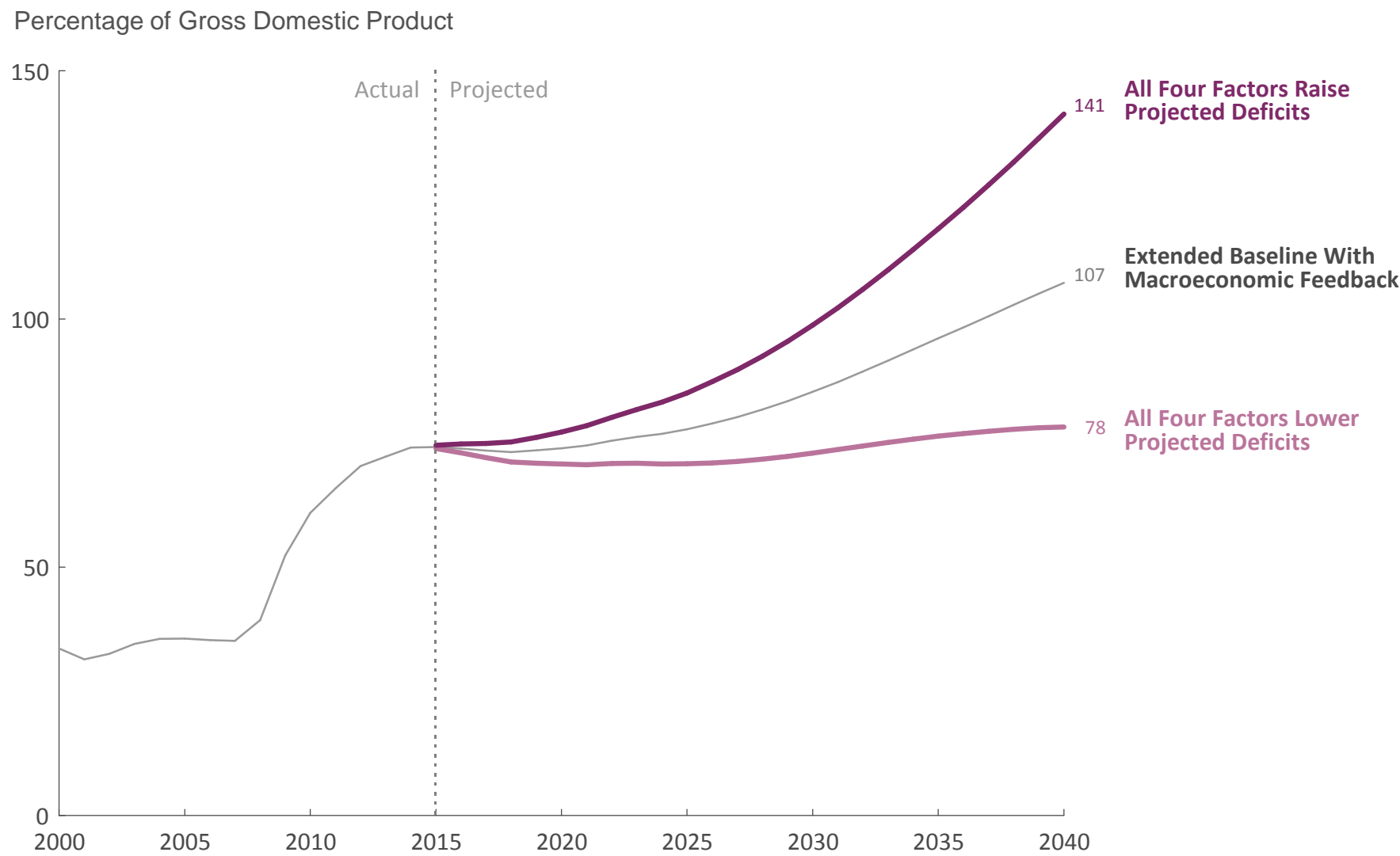


# Combined Effect of All Four Factors

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- Combining the full range of uncertainty for each factor would result in too large a range.
- Analysis of joint variation over history suggests that varying all factors simultaneously by 60 percent of their individual ranges yields outcomes for federal debt that are about as likely as the outcomes when an individual factor changes by the full range.

# Federal Debt Given Different Rates of Mortality Decline, Productivity Growth, Interest, and Growth of Federal Health Care Spending



# **Other Sources of Uncertainty**

# Other Sources of Uncertainty Related to Demographic and Other Trends

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- Changes in demographics and labor force growth.
- Decisions by states about Medicaid.

# Unexpected Developments That Would Affect the Budget

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- A severe economic downturn
- Changes in losses on federal insurance or credit programs
- Catastrophes
- The effects of climate change
- Changes in natural resources