

The Government Budget: Prospects and Implications

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National Saving and Wealth

- Income Statement Concepts
 - Output: $Y = C + I + G + NX$
 - National Saving: $S = Y - C - G = I + NX$
- Balance Sheet Concept
 - National Wealth = domestic capital stock + net foreign assets

Link Between Balance Sheet and Income Statement

- National Saving = Growth of National Wealth
 - $S = I + NX$
 - I = growth of domestic capital stock
 - NX = growth of net foreign assets

U.S. National Saving, 1998-III

| 1998-III | \$billions | % of GDP | \$/person |
|---|---------------|-------------|-------------|
| Gross Private Saving | 1078.7 | 12.6 | 3991 |
| Personal | 12.6 | 0.1 | 47 |
| Business | 1066.1 | 12.5 | 3944 |
| | | | |
| Gross Government Saving | 395.7 | 4.6 | 1464 |
| Federal saving | 161.6 | 1.9 | 598 |
| State and local saving | 234.1 | 2.7 | 866 |
| | | | |
| Total National Saving | 1474.5 | 17.3 | 5455 |
| | | | |
| Investment | 1604.2 | 18.8 | 5935 |
| Private | 1364.4 | 16.0 | 5048 |
| Federal | 60.8 | 0.7 | 225 |
| State and local | 179.0 | 2.1 | 662 |
| Current Account Balance | -231.6 | -2.7 | -857 |
| Investment + Current Account Balance | 1372.6 | 16.1 | 5078 |
| | | | |
| Statistical Discrepancy | -102.0 | -1.2 | -377 |

The Government Budget: Prospects and Implications, Professor Andrew Abel

Gross Government Saving

1998-III

| 1998-III | \$billions |
|--------------------------------|--------------|
| Gross Government Saving | 395.7 |
| Federal saving | 161.6 |
| Receipts | 1858.8 |
| Current expenditures | 1766.7 |
| Current surplus | 92.0 |
| Consumption of fixed capital | 69.6 |
| State and local saving | 234.1 |
| Receipts | 1152.3 |
| Current expenditures | 1003.6 |
| Current surplus | 148.7 |
| Consumption of fixed capital | 85.4 |

Budget Outlook under Current Policies

| | Actual 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| In Billions of Dollars | | | | | | | | | | | | |
| Baseline Total Surplus ^a | 70 | 107 | 131 | 151 | 209 | 209 | 234 | 256 | 306 | 333 | 355 | 381 |
| On-Budget Deficit (-) or Surplus (Excluding Social Security and the Postal Service) ^a | -29 | -19 | -7 | 6 | 55 | 48 | 63 | 72 | 113 | 130 | 143 | 164 |
| Memorandum: | | | | | | | | | | | | |
| Off-Budget Surplus | | | | | | | | | | | | |
| Social Security | 99 | 126 | 137 | 144 | 153 | 161 | 171 | 183 | 193 | 204 | 212 | 217 |
| Postal Service | <u>b</u> | <u>b</u> | <u>b</u> | <u>b</u> | <u>1</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| Total | 99 | 127 | 138 | 145 | 153 | 161 | 171 | 183 | 193 | 204 | 212 | 217 |
| Total Surplus If Discretionary Spending Was Frozen at the 2002 Level from 2003 to 2009 | 70 | 107 | 131 | 151 | 209 | 225 | 265 | 305 | 374 | 421 | 465 | 514 |
| As a Percentage of GDP | | | | | | | | | | | | |
| Baseline Total Surplus ^a | 0.8 | 1.2 | 1.4 | 1.6 | 2.1 | 2.0 | 2.2 | 2.3 | 2.6 | 2.7 | 2.7 | 2.8 |
| On-Budget Deficit (-) or Surplus (Excluding Social Security and the Postal Service) ^a | -0.3 | -0.2 | -0.1 | 0.1 | 0.6 | 0.5 | 0.6 | 0.6 | 1.0 | 1.0 | 1.1 | 1.2 |

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Table 2-1, p.

Deficits and Debt in Europe

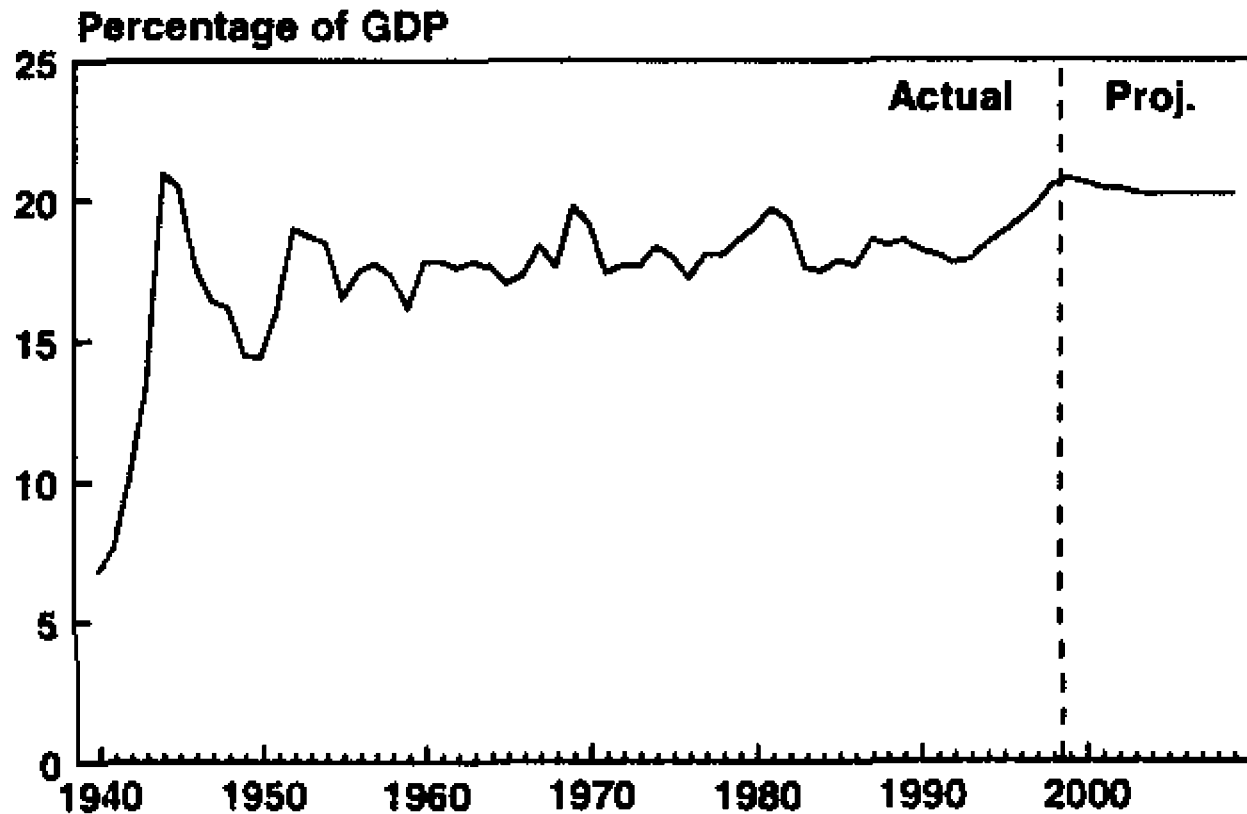
(percent of GDP)

| Country | General Government Deficit | | Gross Government Debt | | Country | General Government Deficit | | Gross Government Debt | |
|-------------|----------------------------|------|-----------------------|-------|---------------------|----------------------------|------|-----------------------|-------|
| | 1996 | 1997 | 1996 | 1997 | | 1996 | 1997 | 1996 | 1997 |
| Germany | 3.8 | 3.3 | 60.3 | 61.5 | Austria | 3.9 | 2.5 | 69.8 | 68.1 |
| France | 4.1 | 3.3 | 56.3 | 57.8 | Denmark | 1.6 | 0.1 | 69.9 | 67.3 |
| Italy | 6.8 | 3.3 | 123.0 | 121.5 | Finland | 2.6 | 1.9 | 58.0 | 58.7 |
| UK | 4.4 | 3.1 | 49.3 | 49.4 | Greece | 7.6 | 5.1 | 110.7 | 107.7 |
| Spain | 4.4 | 3.2 | 69.5 | 69.0 | Portugal | 4.0 | 2.9 | 70.8 | 69.2 |
| Netherlands | 2.3 | 2.2 | 78.8 | 76.1 | Ireland | 1.0 | 1.6 | 76.4 | 72.3 |
| Belgium | 3.4 | 2.9 | 130.0 | 127.1 | Luxembourg | 0.1 | 0.1 | 5.9 | 5.7 |
| Sweden | 2.5 | 0.8 | 78.6 | 76.6 | Maastricht criteria | 3.0 | | 60.0 | |

Source: World Economic Outlook, International Monetary Fund, May 1997, Table 5, p. 27.

Revenues as a Share of GDP

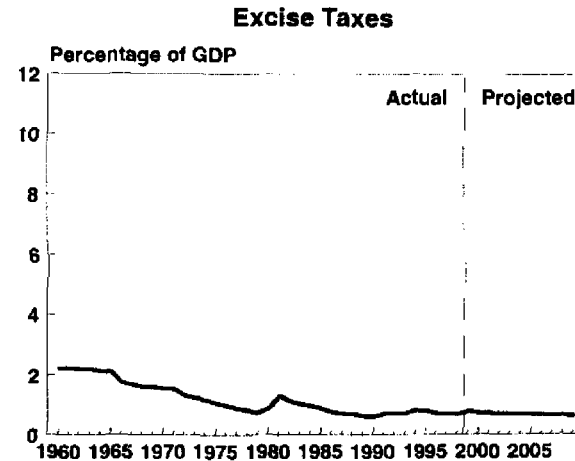
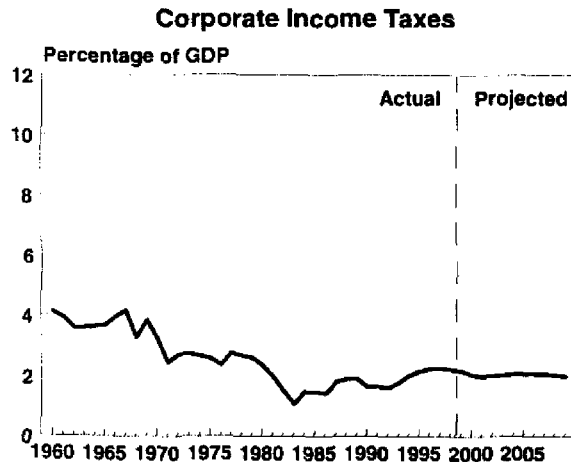
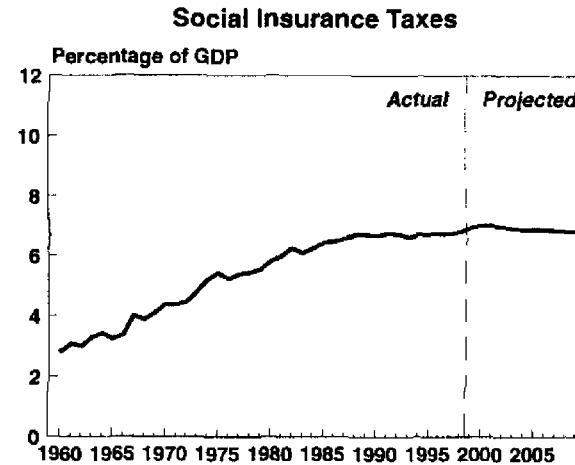
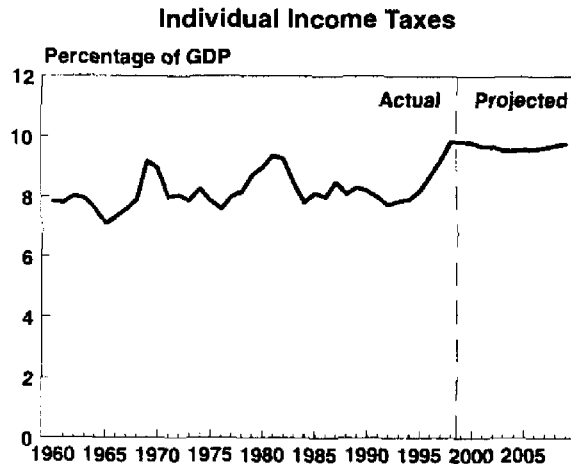
(fiscal year)



Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Figure 3-2, p. 45.

Revenues by Source

(fiscal year)



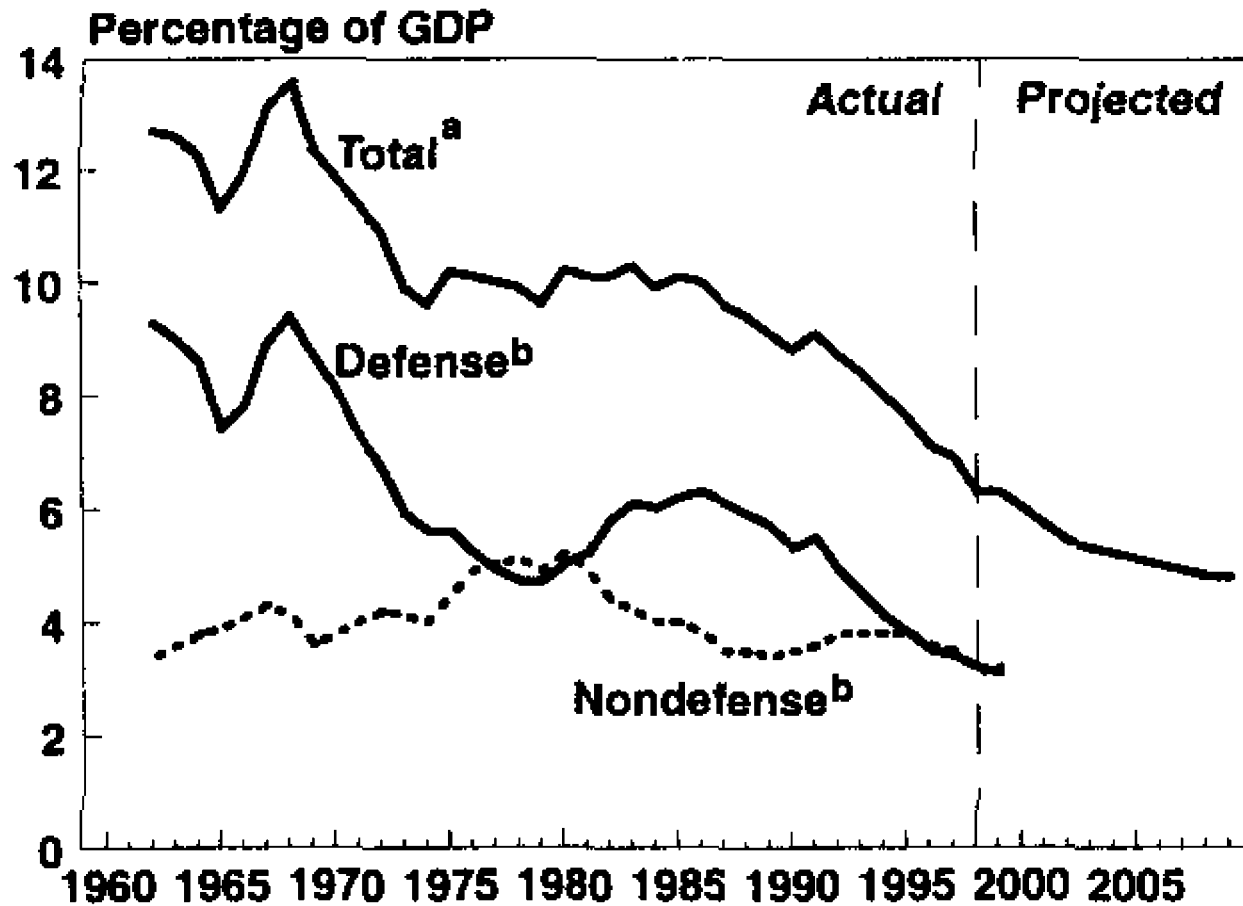
Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Figure 3-3, p. 47

Outlays

- Discretionary spending
 - Annual appropriation
 - Defense, education, transportation, ...
- Mandatory spending (Entitlements)
 - Eligibility rules and benefit formulas
- Offsetting receipts
 - e.g., drilling leases for Outer Continental Shelf
- Net interest

Outlays

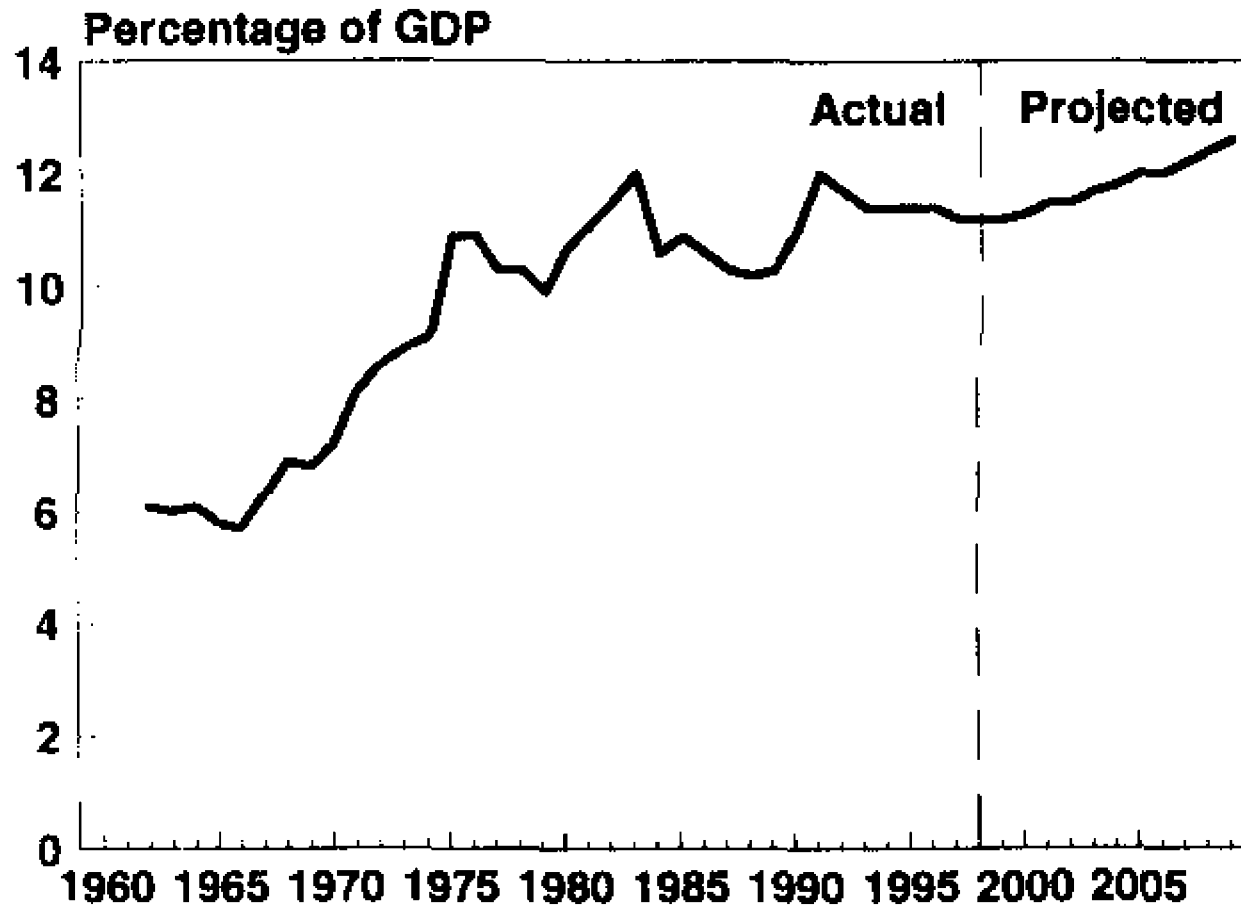
Discretionary Spending



Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Figure 4-1, p. 63.

Outlays

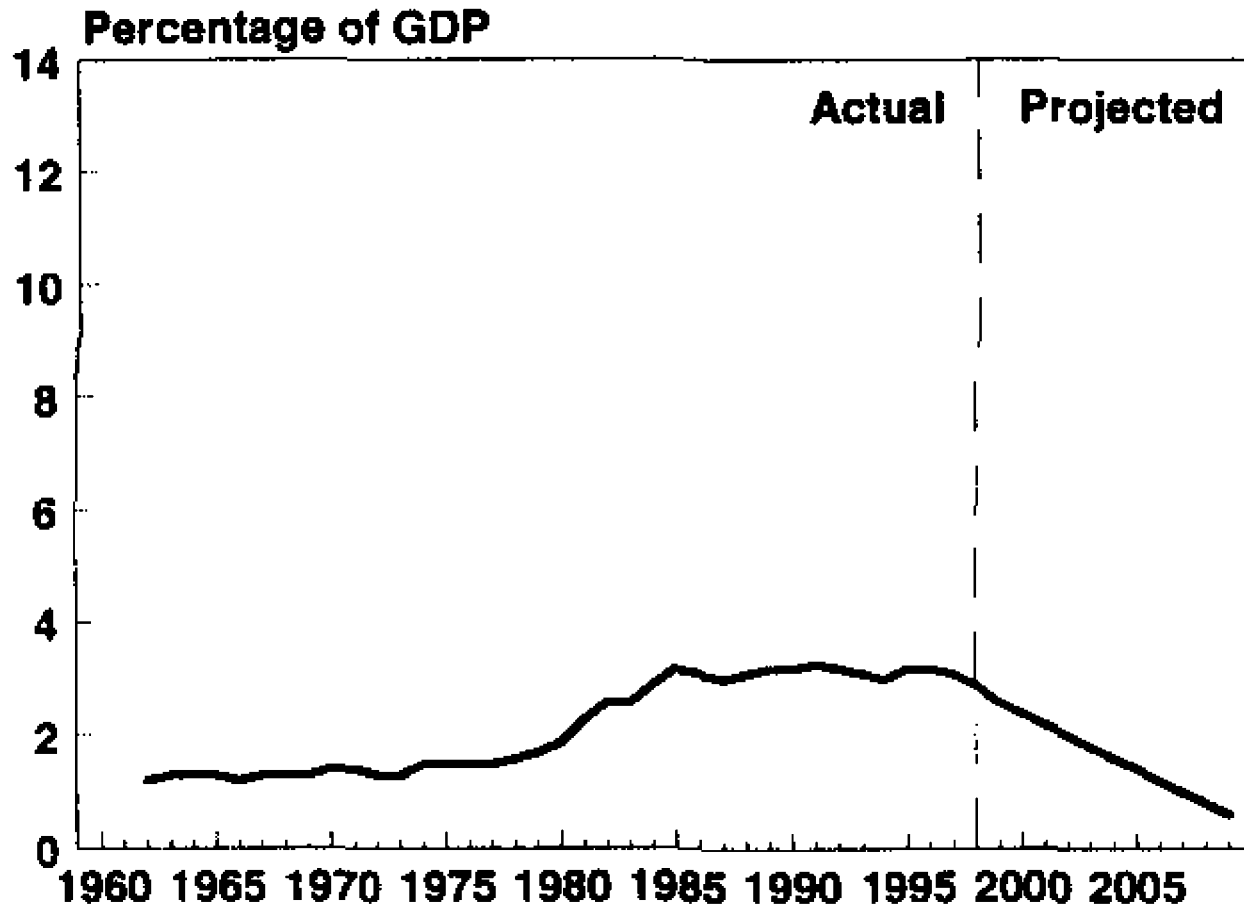
Entitlements and Other Mandatory Spending



Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Figure 4-1, p. 63.

Outlays

Net Interest



Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Figure 4-1, p. 63.

CBO Budget Projections

| | Actual 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-------------------------------------|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| In Billions of Dollars | | | | | | | | | | | | |
| Revenues | | | | | | | | | | | | |
| Individual income | 829 | 863 | 893 | 919 | 958 | 990 | 1,035 | 1,085 | 1,138 | 1,195 | 1,258 | 1,323 |
| Corporate income | 189 | 193 | 188 | 191 | 202 | 214 | 226 | 238 | 250 | 259 | 267 | 273 |
| Social insurance | 572 | 610 | 640 | 666 | 691 | 717 | 746 | 783 | 816 | 852 | 885 | 923 |
| Other | <u>132</u> | <u>148</u> | <u>148</u> | <u>154</u> | <u>164</u> | <u>170</u> | <u>177</u> | <u>182</u> | <u>188</u> | <u>194</u> | <u>200</u> | <u>208</u> |
| Total | 1,721 | 1,815 | 1,870 | 1,930 | 2,015 | 2,091 | 2,184 | 2,288 | 2,393 | 2,500 | 2,611 | 2,727 |
| On-budget | 1,306 | 1,368 | 1,402 | 1,443 | 1,508 | 1,563 | 1,634 | 1,711 | 1,791 | 1,871 | 1,956 | 2,046 |
| Off-budget | 416 | 446 | 468 | 488 | 506 | 527 | 550 | 577 | 602 | 628 | 654 | 681 |
| Outlays | | | | | | | | | | | | |
| Discretionary spending ^a | 554 | 575 | 574 | 573 | 568 | 583 | 598 | 614 | 630 | 646 | 663 | 680 |
| Mandatory spending | 939 | 982 | 1,028 | 1,086 | 1,141 | 1,210 | 1,280 | 1,365 | 1,425 | 1,511 | 1,609 | 1,708 |
| Offsetting receipts | -84 | -80 | -81 | -87 | -99 | -95 | -98 | -103 | -108 | -114 | -121 | -127 |
| Net interest | <u>243</u> | <u>231</u> | <u>218</u> | <u>207</u> | <u>195</u> | <u>183</u> | <u>170</u> | <u>156</u> | <u>140</u> | <u>123</u> | <u>104</u> | <u>85</u> |
| Total | 1,651 | 1,707 | 1,739 | 1,779 | 1,806 | 1,881 | 1,951 | 2,032 | 2,086 | 2,166 | 2,255 | 2,346 |
| On-budget | 1,335 | 1,388 | 1,409 | 1,437 | 1,453 | 1,515 | 1,572 | 1,639 | 1,678 | 1,741 | 1,813 | 1,882 |
| Off-budget | 317 | 320 | 330 | 343 | 353 | 366 | 379 | 393 | 409 | 425 | 442 | 464 |
| Deficit (-) or Surplus | 70 | 107 | 131 | 151 | 209 | 209 | 234 | 256 | 306 | 333 | 355 | 381 |
| On-budget deficit (-) or surplus | -29 | -19 | -7 | 6 | 55 | 48 | 63 | 72 | 113 | 130 | 143 | 164 |
| Off-budget surplus | 99 | 127 | 138 | 145 | 153 | 161 | 171 | 183 | 193 | 204 | 212 | 217 |
| Debt Held by the Public | 3,720 | 3,630 | 3,515 | 3,378 | 3,183 | 2,989 | 2,770 | 2,529 | 2,237 | 1,917 | 1,574 | 1,206 |

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Summary Table 3, p. xviii.

CBO Budget Projections

| | Actual 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-------------------------------------|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| As a Percentage of GDP | | | | | | | | | | | | |
| Revenues | | | | | | | | | | | | |
| Individual income | 9.9 | 9.9 | 9.8 | 9.7 | 9.7 | 9.6 | 9.6 | 9.6 | 9.6 | 9.6 | 9.7 | 9.8 |
| Corporate income | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 |
| Social insurance | 6.8 | 7.0 | 7.0 | 7.0 | 7.0 | 6.9 | 6.9 | 6.9 | 6.9 | 6.9 | 6.8 | 6.8 |
| Other | <u>1.6</u> | <u>1.7</u> | <u>1.6</u> | <u>1.6</u> | <u>1.7</u> | <u>1.6</u> | <u>1.6</u> | <u>1.6</u> | <u>1.6</u> | <u>1.6</u> | <u>1.5</u> | <u>1.5</u> |
| Total | 20.5 | 20.7 | 20.6 | 20.4 | 20.3 | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 |
| On-budget | 15.5 | 15.6 | 15.4 | 15.2 | 15.2 | 15.1 | 15.1 | 15.1 | 15.1 | 15.1 | 15.1 | 15.1 |
| Off-budget | 4.9 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.0 |
| Outlays | | | | | | | | | | | | |
| Discretionary spending ^a | 6.6 | 6.6 | 6.3 | 6.0 | 5.7 | 5.6 | 5.5 | 5.4 | 5.3 | 5.2 | 5.1 | 5.0 |
| Mandatory spending | 11.2 | 11.2 | 11.3 | 11.5 | 11.5 | 11.7 | 11.8 | 12.0 | 12.0 | 12.2 | 12.4 | 12.6 |
| Offsetting receipts | -1.0 | -0.9 | -0.9 | -0.9 | -1.0 | -0.9 | -0.9 | -0.9 | -0.9 | -0.9 | -0.9 | -0.9 |
| Net interest | <u>2.9</u> | <u>2.6</u> | <u>2.4</u> | <u>2.2</u> | <u>2.0</u> | <u>1.8</u> | <u>1.6</u> | <u>1.4</u> | <u>1.2</u> | <u>1.0</u> | <u>0.8</u> | <u>0.6</u> |
| Total | 19.6 | 19.5 | 19.1 | 18.8 | 18.2 | 18.2 | 18.0 | 17.9 | 17.6 | 17.5 | 17.4 | 17.3 |
| On-budget | 15.9 | 15.8 | 15.5 | 15.2 | 14.7 | 14.6 | 14.5 | 14.5 | 14.2 | 14.1 | 14.0 | 13.9 |
| Off-budget | 3.8 | 3.6 | 3.6 | 3.6 | 3.6 | 3.5 | 3.5 | 3.5 | 3.4 | 3.4 | 3.4 | 3.4 |

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Summary Table 3, p. xviii.

Measures of Fiscal Policy

| | Actual | | | | Projected | | | | | | | | | | |
|--|--------|------|------|------|-----------|------|------|------|------|------|------|------|------|------|------|
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| In Billions of Dollars | | | | | | | | | | | | | | | |
| Standardized-Employment Surplus or Deficit (-) ^a | -187 | -127 | -86 | -1 | 17 | 87 | 137 | 185 | 211 | 237 | 271 | 305 | 333 | 361 | 388 |
| Reconciliation with Budget Surplus or Deficit (-) | | | | | | | | | | | | | | | |
| Cyclical surplus or deficit (-) | -4 | 2 | 35 | 68 | 69 | 36 | 12 | 0 | -5 | -8 | -9 | -9 | -10 | -10 | -11 |
| Deposit insurance | 18 | 8 | 14 | 4 | 4 | 2 | 1 | 0 | 0 | -1 | 1 | 1 | 1 | 1 | 1 |
| Timing shifts ^b | -1 | 5 | -1 | -14 | 12 | 0 | -6 | 10 | -1 | 0 | -11 | 6 | 5 | 0 | 0 |
| Spectrum auctions | 8 | 0 | 11 | 3 | 1 | 2 | 4 | 9 | 2 | 1 | 1 | 1 | 1 | 0 | 0 |
| Asset sales | 2 | 4 | 5 | 10 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total Budget Surplus or Deficit (-) | -164 | -107 | -22 | 70 | 107 | 131 | 151 | 209 | 209 | 234 | 256 | 306 | 333 | 355 | 381 |

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Table 1-3, p. 16.

Measures of Fiscal Policy

| | Actual | | | | Projected | | | | | | | | | | |
|--|--------|-------|-------|-------|-----------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| As a Percentage of Potential GDP | | | | | | | | | | | | | | | |
| Standardized-Employment Surplus or Deficit (-) ^a | -2.6 | -1.7 | -1.1 | 0 | 0.2 | 1.0 | 1.5 | 1.9 | 2.0 | 2.2 | 2.4 | 2.6 | 2.7 | 2.8 | 2.9 |
| Reconciliation with Budget Surplus or Deficit (-) | | | | | | | | | | | | | | | |
| Cyclical surplus or deficit (-) | -0.1 | 0 | .4 | 0.8 | 0.8 | 0.4 | 0.1 | 0 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| Deposit insurance | 0.2 | 0.1 | 0.2 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Timing shifts ^b | 0 | 0.1 | 0 | -0.2 | 0.1 | 0 | -0.1 | 0.1 | 0 | 0 | -0.1 | 0 | 0 | 0 | 0 |
| Spectrum auctions | 0.1 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asset sales | 0 | 0 | 0.1 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Budget Surplus or Deficit (-) | -2.3 | -1.4 | -0.3 | 0.9 | 1.3 | 1.5 | 1.6 | 2.1 | 2.0 | 2.2 | 2.3 | 2.6 | 2.7 | 2.7 | 2.8 |
| Memorandum | | | | | | | | | | | | | | | |
| (Billions of dollars): | | | | | | | | | | | | | | | |
| Discretionary Spending | 546 | 534 | 548 | 554 | 575 | 574 | 573 | 568 | 583 | 598 | 614 | 630 | 646 | 663 | 680 |
| Net Interest Payments | 232 | 241 | 244 | 243 | 231 | 218 | 207 | 195 | 183 | 170 | 156 | 140 | 123 | 104 | 85 |
| Potential GDP | 7,222 | 7,548 | 7,897 | 8,218 | 8,575 | 9,001 | 9,444 | 9,903 | 10,372 | 10,858 | 11,361 | 11,880 | 12,417 | 12,974 | 13,550 |
| Primary Standardized Surplus ^a (As a percentage of potential GDP) | 0.6 | 1.5 | 2.0 | 3.0 | 2.9 | 3.4 | 3.6 | 3.8 | 3.8 | 3.8 | 3.8 | 3.7 | 3.7 | 3.6 | 3.5 |

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Table 1-3, p. 16.

Projections of Federal Debt

Actual
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

In Billions of Dollars

| | | | | | | | | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Debt Held by the Public at the Beginning of the Year | 3,771 | 3,720 | 3,630 | 3,515 | 3,378 | 3,183 | 2,989 | 2,770 | 2,529 | 2,237 | 1,917 | 1,574 |
| Changes | | | | | | | | | | | | |
| Surplus ^a | -70 | -107 | -131 | -151 | -209 | -209 | -234 | -256 | -306 | -333 | -355 | -381 |
| Credit financing accounts | 12 | 15 | 14 | 12 | 13 | 14 | 14 | 13 | 13 | 12 | 12 | 11 |
| Other | <u>7</u> | <u>3</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| Subtotal | -51 | -90 | -115 | -137 | -194 | -194 | -219 | -241 | -292 | -320 | -342 | -369 |
| Debt Held by the Public at the End of the Year | 3,720 | 3,630 | 3,515 | 3,378 | 3,183 | 2,989 | 2,770 | 2,529 | 2,237 | 1,917 | 1,574 | 1,206 |
| Debt Held by Government Accounts | | | | | | | | | | | | |
| Social Security | 730 | 857 | 994 | 1,139 | 1,291 | 1,453 | 1,624 | 1,807 | 2,000 | 2,204 | 2,416 | 2,633 |
| Other government accounts | <u>1,028</u> | <u>1,092</u> | <u>1,160</u> | <u>1,227</u> | <u>1,298</u> | <u>1,368</u> | <u>1,437</u> | <u>1,503</u> | <u>1,567</u> | <u>1,633</u> | <u>1,692</u> | <u>1,748</u> |
| Subtotal | 1,759 | 1,949 | 2,154 | 2,365 | 2,589 | 2,821 | 3,060 | 3,310 | 3,568 | 3,837 | 4,107 | 4,382 |
| Gross Federal Debt | 5,479 | 5,579 | 5,669 | 5,743 | 5,772 | 5,810 | 5,831 | 5,839 | 5,805 | 5,753 | 5,682 | 5,587 |
| Debt Subject to Limit ^b | 5,439 | 5,540 | 5,631 | 5,706 | 5,736 | 5,774 | 5,796 | 5,806 | 5,772 | 5,722 | 5,651 | 5,557 |

As a Percentage of GDP

| | | | | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|------|-----|
| Debt Held by the Public at the End of the Year | 44.3 | 41.4 | 38.6 | 35.6 | 32.1 | 28.9 | 25.6 | 22.3 | 18.9 | 15.5 | 12.2 | 8.9 |
|--|------|------|------|------|------|------|------|------|------|------|------|-----|

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Table 2-3, p. 38.

Trust Fund Surpluses

(fiscal year, billions of dollars)

| | Actual 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|
| Social Security | 99 | 126 | 137 | 144 | 153 | 161 | 171 | 183 | 193 | 204 | 212 | 217 |
| Medicare | | | | | | | | | | | | |
| Hospital Insurance (Part A) | 2 | 8 | 9 | 8 | 14 | 12 | 10 | 5 | 8 | 1 | -3 | -9 |
| Supplementary Medical Insurance (Part B) | <u>-5</u> | <u>-2</u> | <u>-4</u> | <u>-5</u> | <u>-3</u> | <u>7</u> | <u>6</u> | <u>8</u> | <u>3</u> | <u>-10</u> | <u>8</u> | <u>9</u> |
| Subtotal | <u>-7</u> | <u>10</u> | <u>14</u> | <u>14</u> | <u>17</u> | <u>19</u> | <u>17</u> | <u>14</u> | <u>11</u> | <u>-11</u> | <u>5</u> | <u>a</u> |
| Military Retirement | 8 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 10 | 11 | 11 |
| Civilian Retirement ^b | 29 | 30 | 30 | 30 | 30 | 28 | 28 | 27 | 26 | 26 | 25 | 24 |
| Unemployment | 9 | 9 | 9 | 8 | 7 | 5 | 4 | 5 | 5 | 5 | 4 | 6 |
| Highway and Mass Transit | -4 | 7 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| Airport and Airway | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 6 | 7 | 8 |
| Other ^c | <u>-3</u> | <u>-3</u> | <u>-3</u> | <u>-3</u> | <u>-3</u> | <u>-4</u> | <u>-4</u> | <u>-4</u> | <u>-4</u> | <u>-4</u> | <u>-4</u> | <u>-4</u> |
| Total Trust Fund Surplus ^d | 153 | 195 | 203 | 209 | 222 | 231 | 238 | 249 | 257 | 268 | 270 | 273 |
| Federal Funds Deficit (-) or Surplus ^d | -83 | -88 | -73 | -59 | -13 | -21 | -4 | 7 | 49 | 66 | 86 | 108 |
| Total Surplus | 70 | 107 | 131 | 151 | 209 | 209 | 234 | 256 | 306 | 333 | 355 | 381 |
| Memorandum: | | | | | | | | | | | | |
| Net Transfers from General Fund to Trust Funds | 265 | 275 | 292 | 311 | 327 | 355 | 378 | 410 | 422 | 462 | 491 | 523 |

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Table 2-4, p. 41.

Burden of the Debt

| | billions | dollars per |
|-------------------------|------------|-------------|
| | of dollars | capita |
| Gross Federal Debt | 5479 | 20,271 |
| Debt Subject to Limit | 5439 | 20,123 |
| Debt Held by the Public | 3720 | 13,763 |

- Debt ceiling
 - raised to \$5500 billion in March 1996
 - raised to \$5950 billion in Balanced Budget Act of 1997

Two Views of Burden of Debt

- “We Owe it to Ourselves” \implies No Burden
 - \$1759 billion held by gov’t is no burden
 - \$3720 billion held by public is owed to public
 - but foreigners own some of this debt
- Burden, even if U.S. citizens owned all of debt
 - Crowds out capital stock
 - Reduces long-run wages and output per person

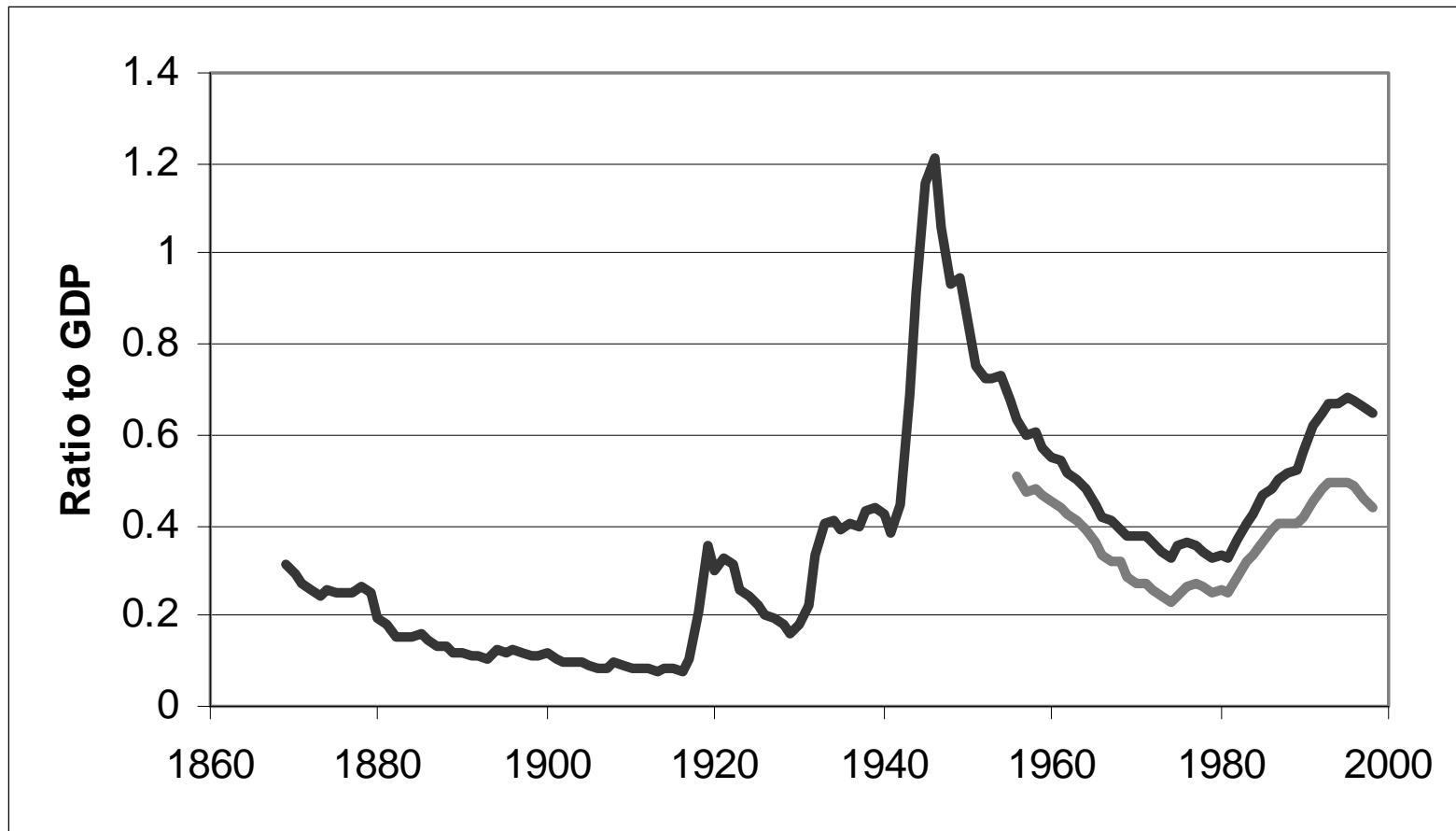
Federal Interest Outlays

(Fiscal year, billions)

| | Actual 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <i>Interest on Public Debt</i> (Gross interest) ^a | 364 | 357 | 350 | 347 | 345 | 342 | 340 | 337 | 334 | 330 | 324 | 318 |
| <i>Interest Received by Trust Funds</i> | | | | | | | | | | | | |
| Social Security | -47 | -52 | -58 | -64 | -71 | -79 | -87 | -96 | -105 | -115 | -126 | -137 |
| Other trust funds ^b | <u>-67</u> | <u>-67</u> | <u>-67</u> | <u>-69</u> | <u>-71</u> | <u>-73</u> | <u>-75</u> | <u>-77</u> | <u>-79</u> | <u>-82</u> | <u>-84</u> | <u>-86</u> |
| Subtotal | -114 | -119 | -125 | -133 | -142 | -152 | -162 | -173 | -185 | -197 | -210 | -223 |
| Other Interest ^c | <u>-7</u> | <u>-7</u> | <u>-6</u> | <u>-7</u> | <u>-7</u> | <u>-8</u> | <u>-8</u> | <u>-9</u> | <u>-9</u> | <u>-10</u> | <u>-10</u> | <u>-10</u> |
| Total (Net interest) | 243 | 231 | 218 | 207 | 195 | 183 | 170 | 156 | 140 | 123 | 104 | 85 |

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Table 4-8, p. 79.

Debt-GDP Ratio in the U.S.



Changes in Debt-GDP Ratio

- Debt-GDP Ratio: $\frac{B}{GDP}$
- Growth of numerator: deficit
 - Primary deficit + net interest
- Growth of denominator: nominal GDP growth

Factors Causing Debt-GDP Ratio to Rise

- Large Primary Deficits (deficit minus interest)
 - Wars
 - Great Depression
 - 1980s and first half of 1990s
- High (Real) Interest Rates
- Low GDP growth
 - Great Depression

Effect on Deficit of 1 Percentage Point Reduction in Measured CPI

(fiscal years, billions of dollars)

| | 1998 | 2000 | 2007 |
|------------------------|------|-------|--------|
| Δ Revenues | 1.9 | 10.5 | 44.2 |
| Δ Outlays | | | |
| Social Security | -2.8 | -10.7 | -44.6 |
| Debt Service | -0.2 | -2.0 | -32.0 |
| Other | -0.9 | -4.5 | -19.3 |
| Δ Total Outlays | -3.9 | -17.2 | -95.9 |
| Δ Deficit | -5.8 | -27.7 | -140.1 |

Source: Congressional Budget Office, The Economic and Budget Outlook: Fiscal Years 1998-2007, January 1997, p. 41.

Long-Run Deficit Projections

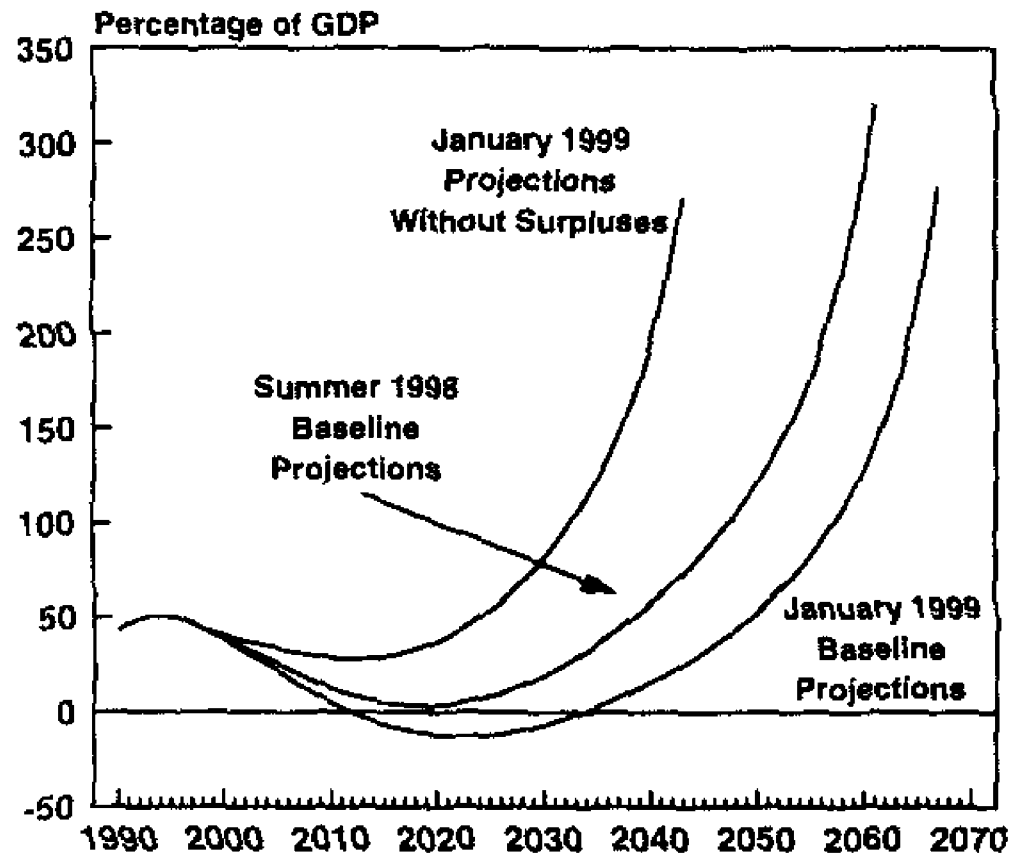
(Calendar year, percentage of GDP)

| | 1998 | 2010 | 2020 | 2030 | 2040 | 2050 | 2060 |
|---|-----------|----------|-----------|----------|----------|----------|------|
| NIPA Receipts | 22 | 21 | 21 | 21 | 21 | 21 | 21 |
| NIPA Expenditures | | | | | | | |
| Federal consumption expenditures | 5 | 4 | 4 | 4 | 4 | 4 | 4 |
| Federal transfers, grants, and subsidies | | | | | | | |
| Social Security | 4 | 5 | 6 | 6 | 6 | 7 | 7 |
| Medicare | 2 | 3 | 5 | 6 | 6 | 6 | 7 |
| Medicaid | 1 | 2 | 2 | 3 | 3 | 3 | 3 |
| Other | 5 | 4 | 4 | 4 | 4 | 4 | 4 |
| Net interest | <u>-3</u> | <u>a</u> | <u>-1</u> | <u>a</u> | <u>1</u> | <u>4</u> | 11 |
| Total | 21 | 18 | 20 | 22 | 24 | 27 | 35 |
| NIPA Deficit (-) or Surplus | 1 | 3 | 1 | -1 | -3 | -6 | -14 |
| Debt Held by the Public | 44 | 5 | -12 | -7 | 16 | 53 | 129 |
| Memorandum: | | | | | | | |
| Gross Domestic Product (Trillions of dollars) | 8.5 | 14.3 | 21.1 | 30.3 | 43.2 | 60.6 | 82.1 |

Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Table 2-5, p. 43.

Long-Run Debt Projections

(Debt held by public, calendar year, percentage of GDP)



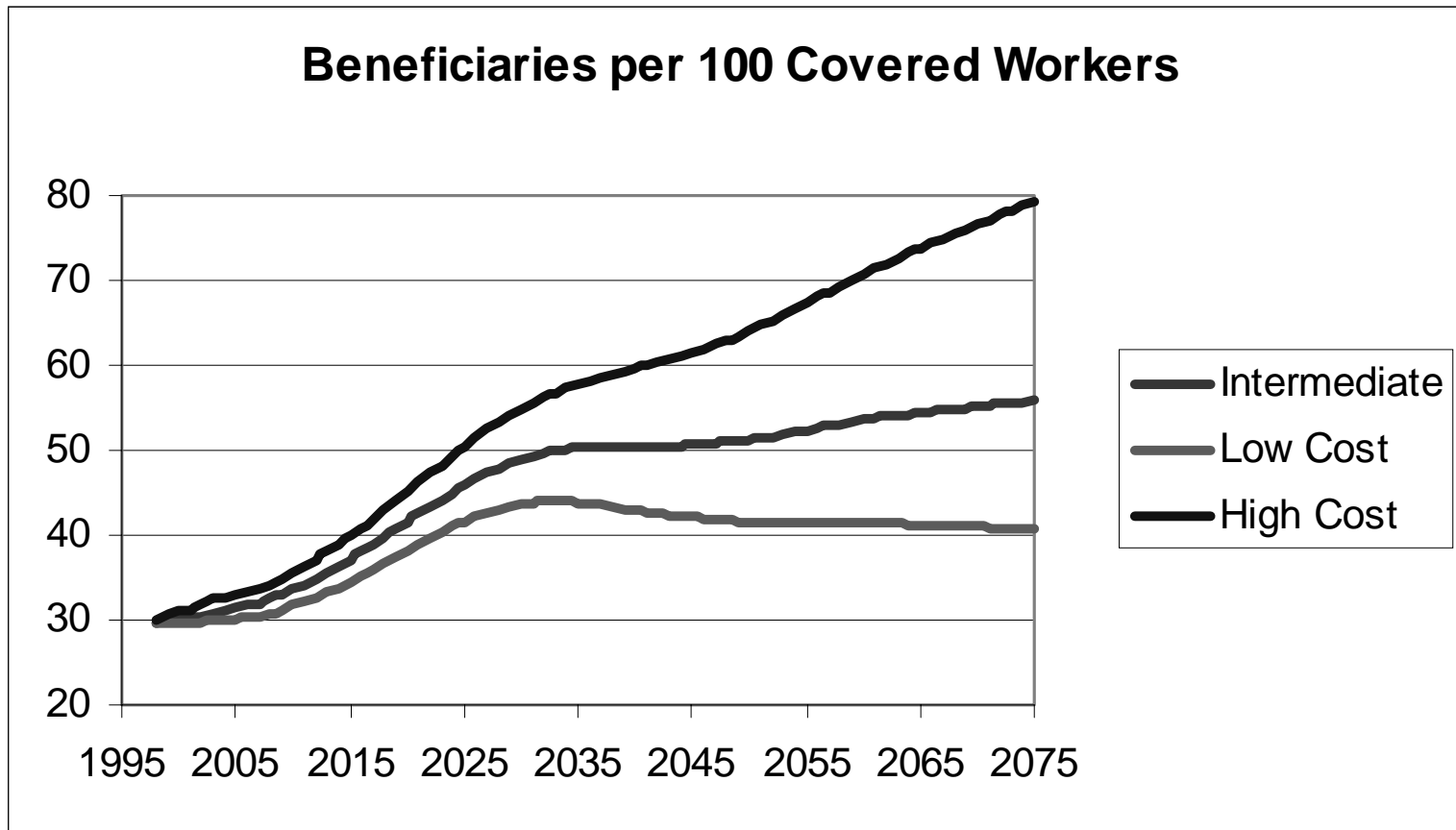
Source: CBO, The Economic and Budget Outlook: Fiscal Years 2000-2009, Figure 2-2, p. 44.

The Government Budget: Prospects and Implications, Professor Andrew Abel

Will Federal Debt Be Eliminated?

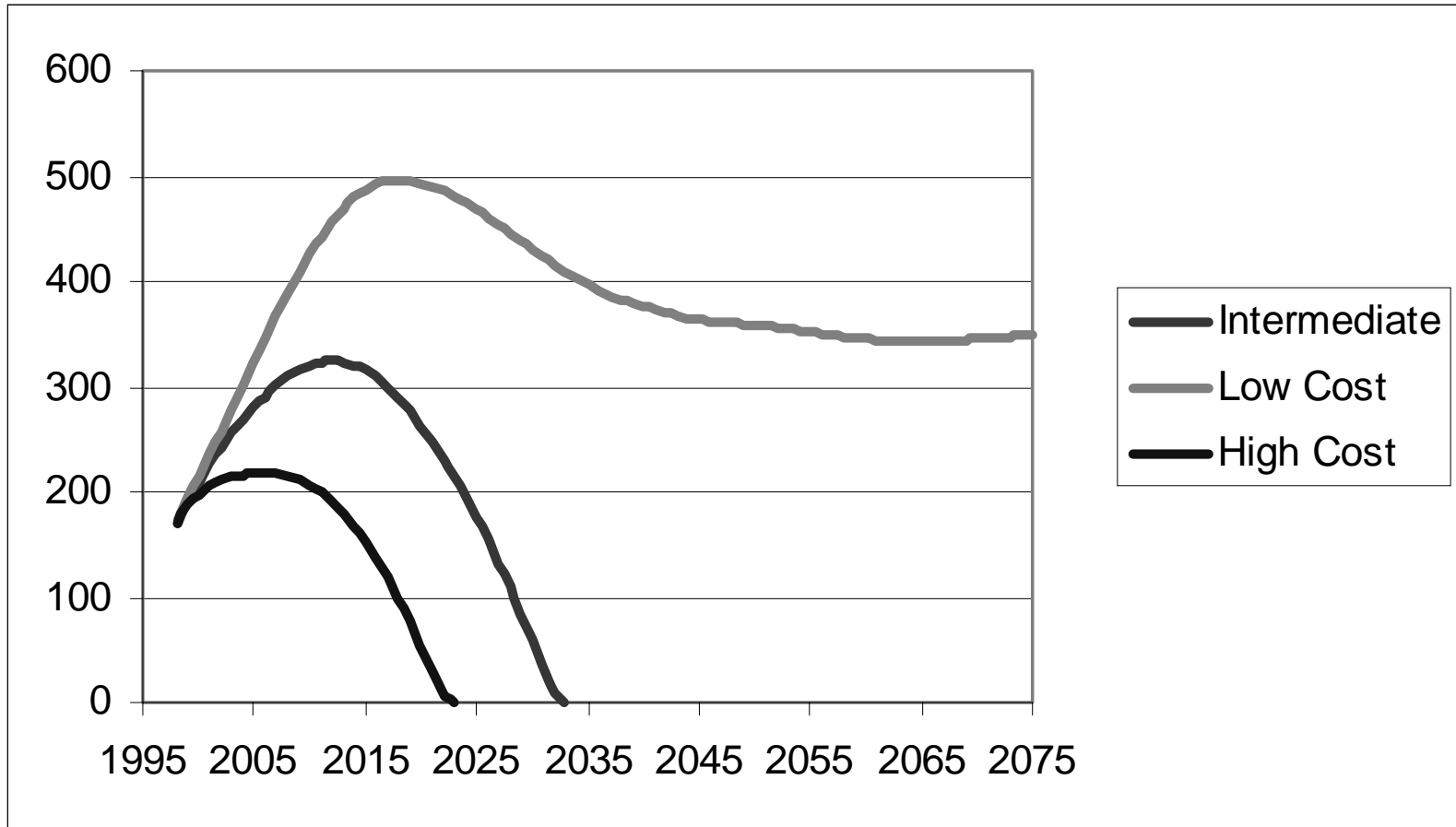
- Debt held by public
 - Projected to be zero in 2012
- Why might this projection prove incorrect?
 - Projected surpluses might not occur
 - Policies to cut taxes/increase spending
 - Recessions
 - Social Security Trust Fund may sell bonds to public in exchange for equity

Social Security: Demographic Time Bomb



Source: 1998 OASDI Trustees Report, Table II.F.19

OASDI Trust Fund Ratio



Source: 1998 OASDI Trustees Report, Table II.F.20

Possible Solutions

- Increase Contributions by Workers
 - Increase retirement age
- Reduce Benefits Paid to Retirees
 - Increase retirement age
 - Tax Social Security benefits
- Earn Higher Return on Assets in Trust Fund
 - Invest in equities
- Privatize Social Security
 - Individuals control allocation of assets
 - Transitional problems