

PwC Tax Colloquium

Tax Policy Implications of the Deficit

July 2010

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2. Other Fiscal Gaps, in the States and Abroad
3. Implications for Tax Policy

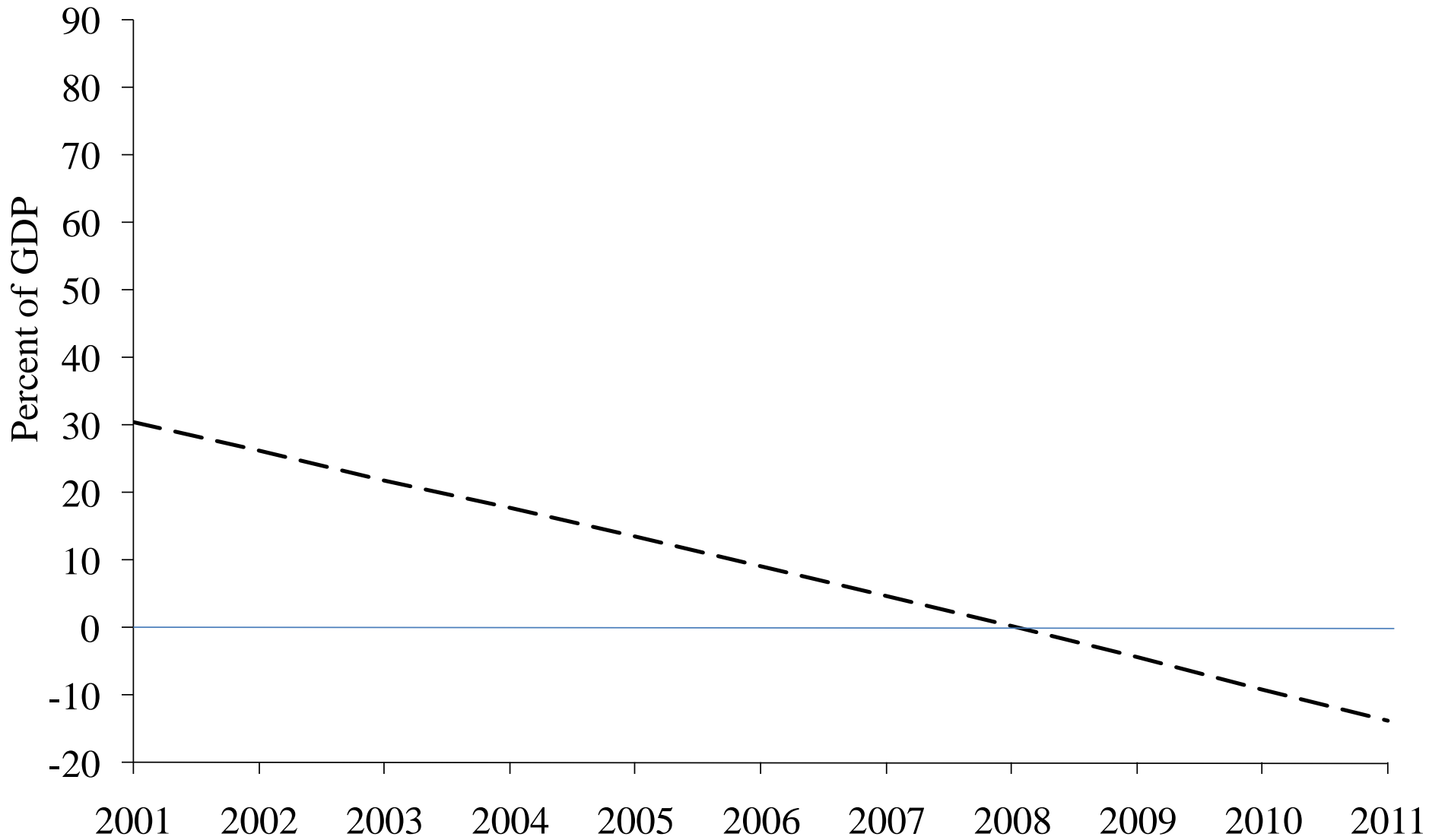
# 1. The U.S. Federal Fiscal Gap

- a. How did the Problem Arise?
- b. The Fiscal Gap in the Medium and Long Terms
- c. The Impact of Health Care Reform
- d. The Deficit Commission
- e. The Scope for Spending Reductions

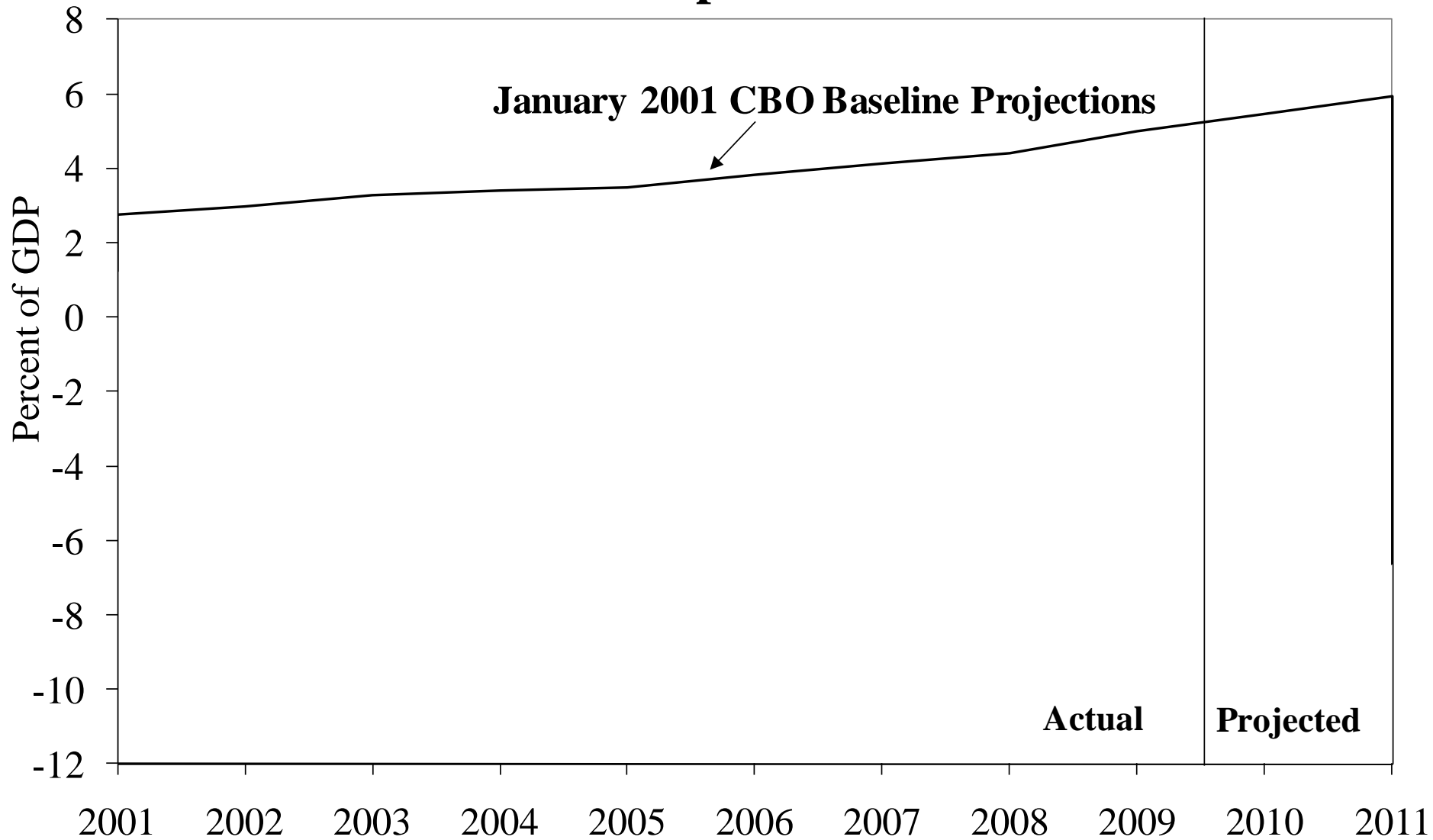
# 1. The U.S. Federal Fiscal Gap

## a. How Did the Problem Arise?

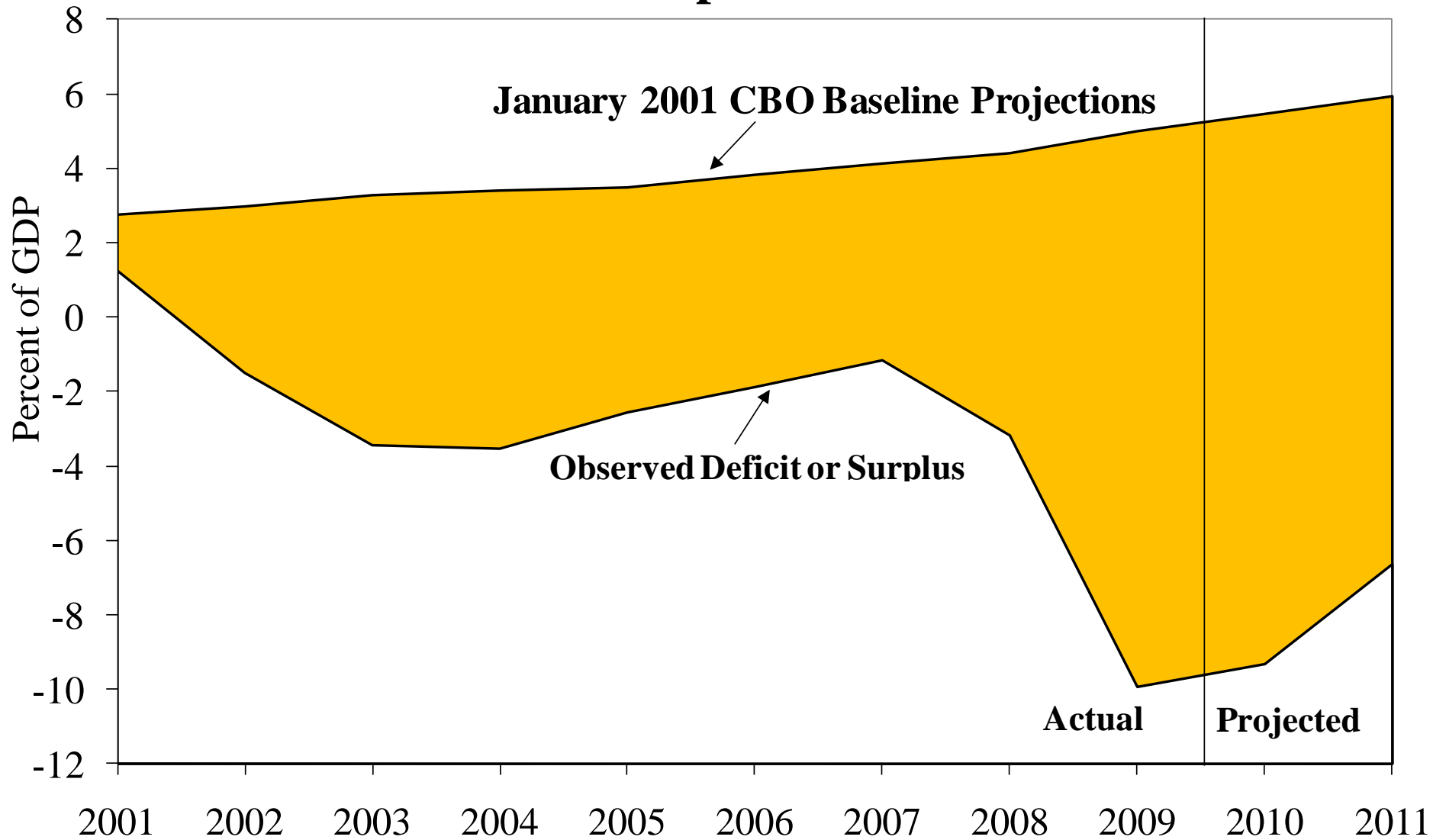
# Net Federal Debt, 2001 CBO Projections



# Federal Deficit or Surplus, 2001 Projections and Actual and Prospective Outcomes



# Federal Deficit or Surplus, 2001 Projections and Actual and Prospective Outcomes

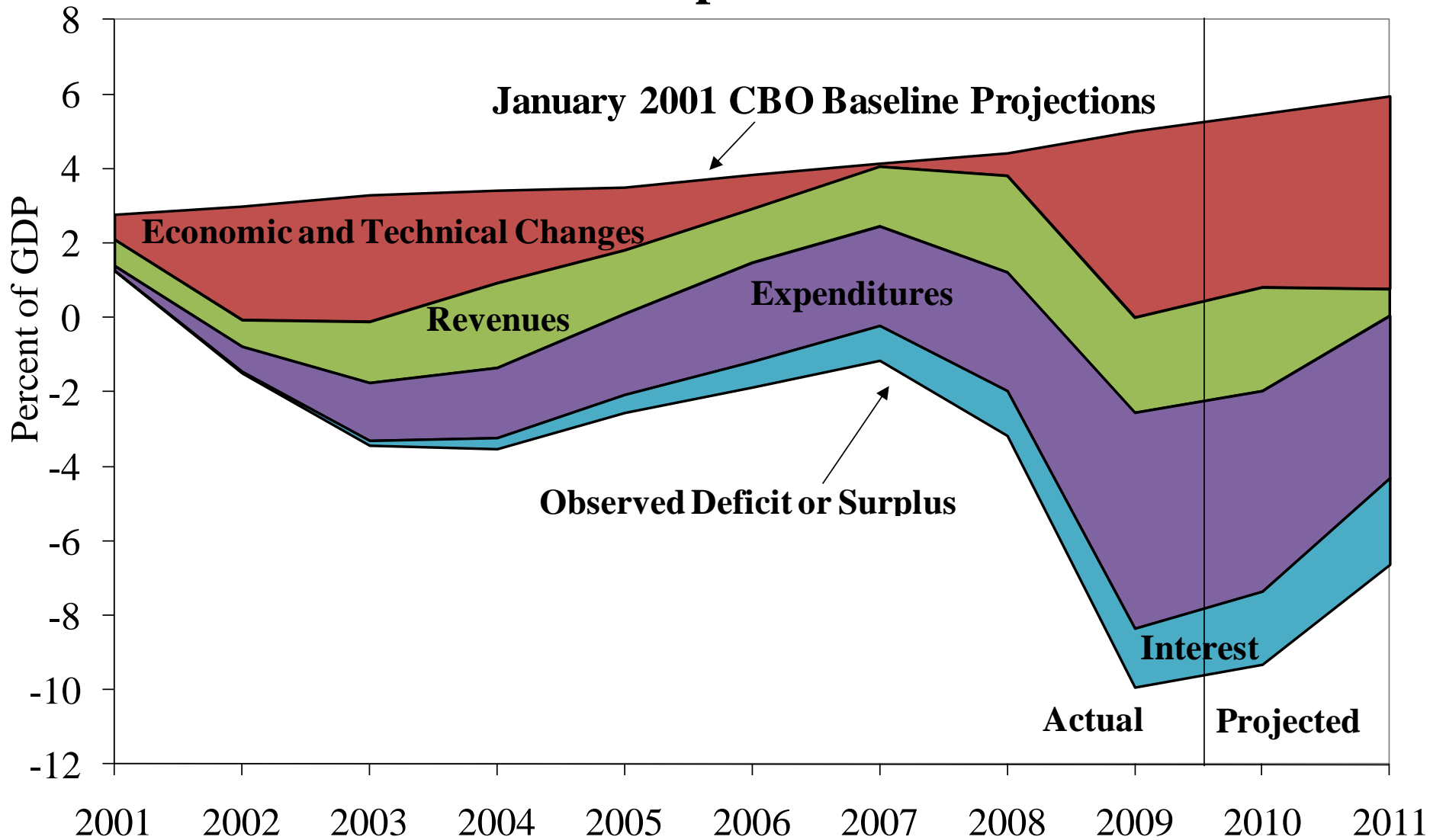


# What Happened?

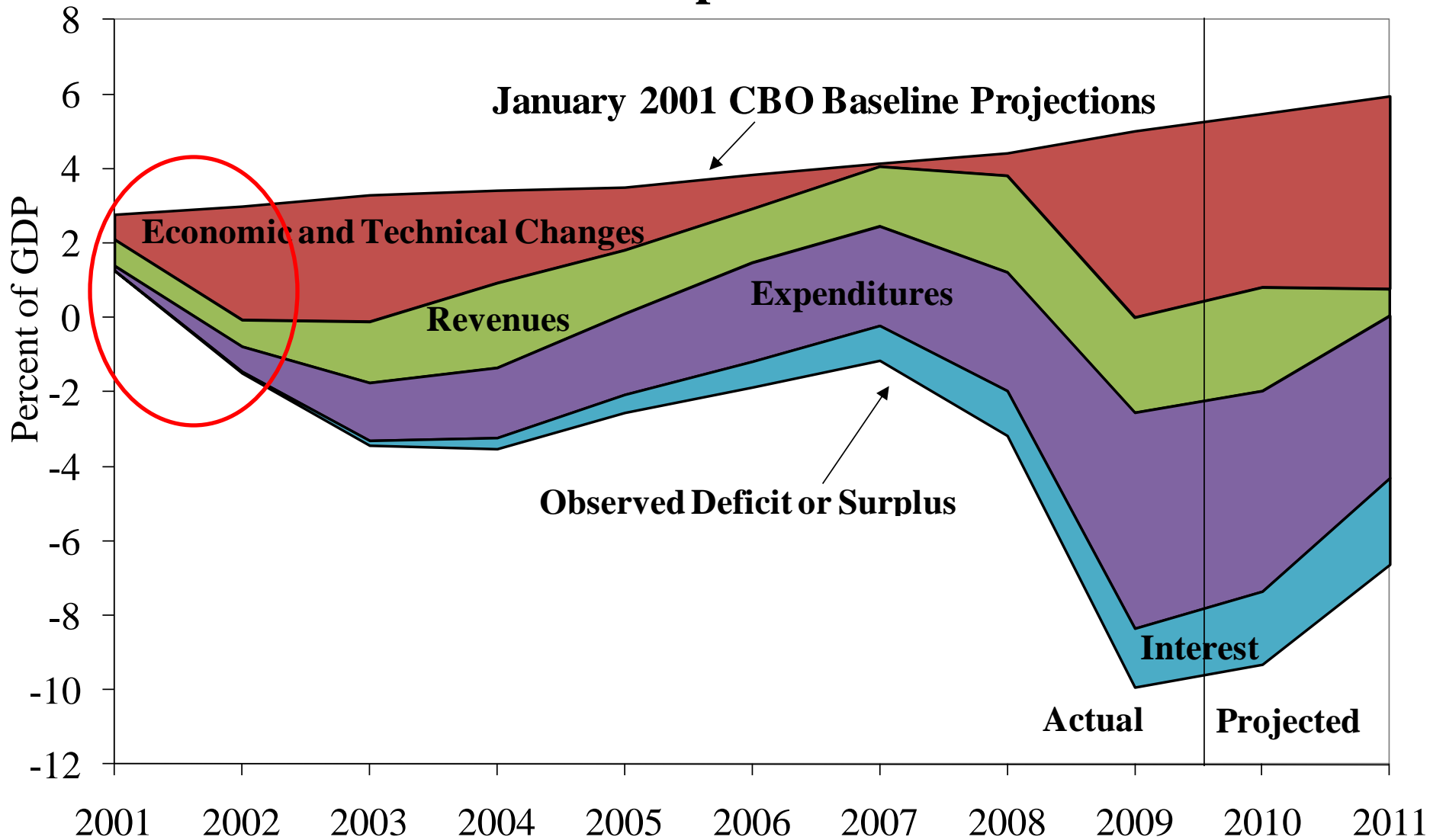
## Three Phases:

1. The Economy
2. Policy
3. The Great Recession

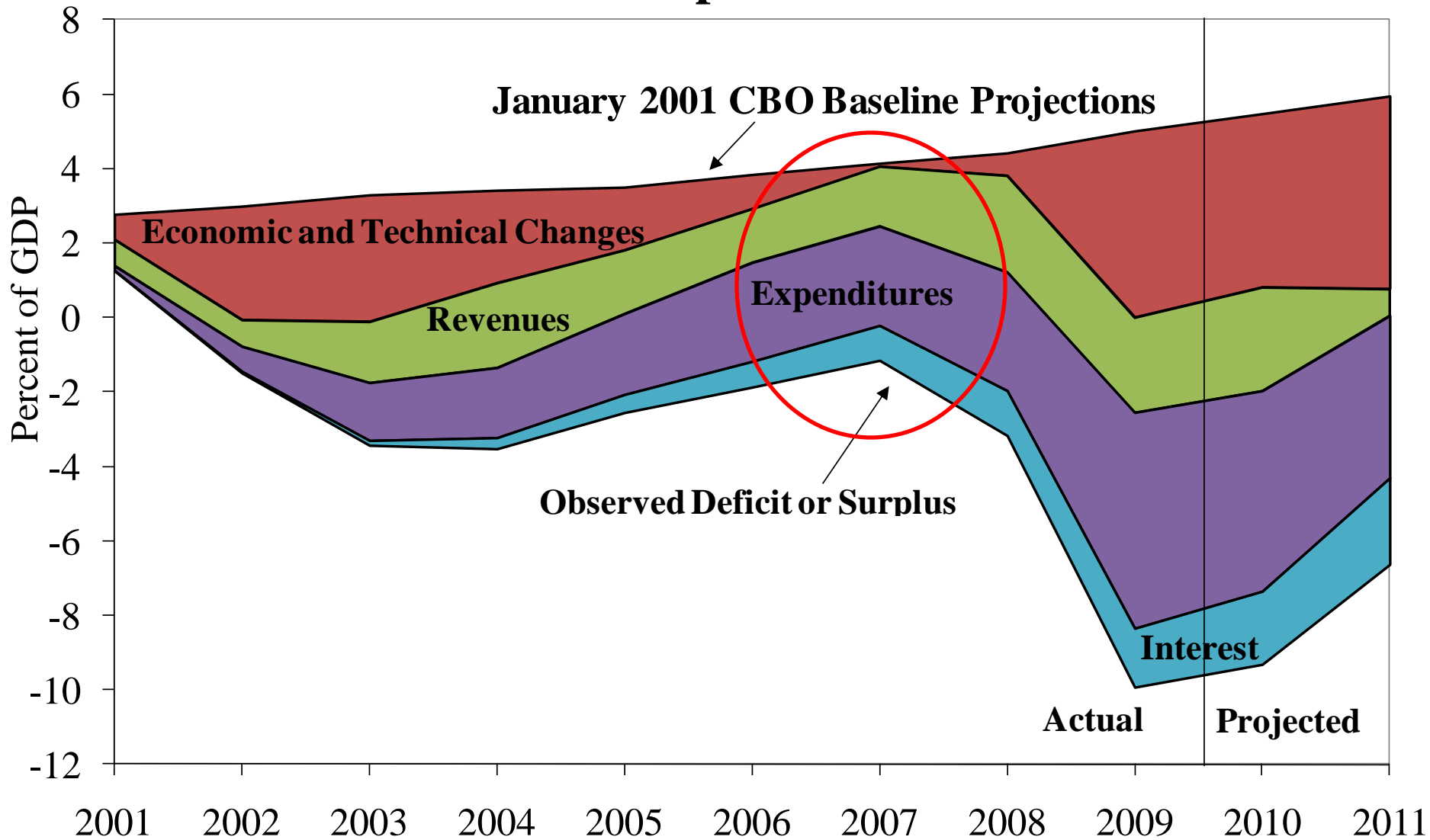
# Federal Deficit or Surplus, 2001 Projections and Actual and Prospective Outcomes



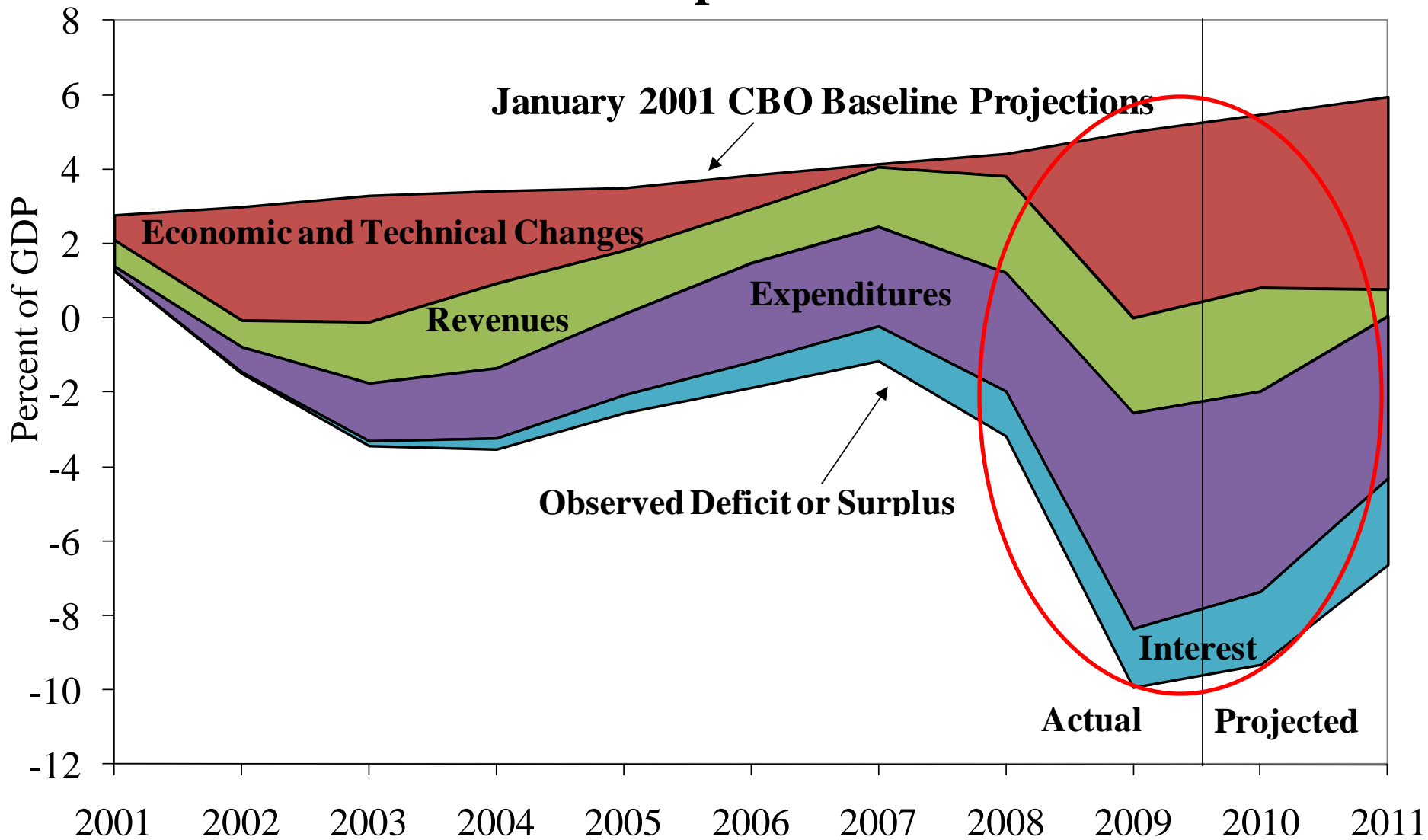
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# What Happened?

## Three Phases:

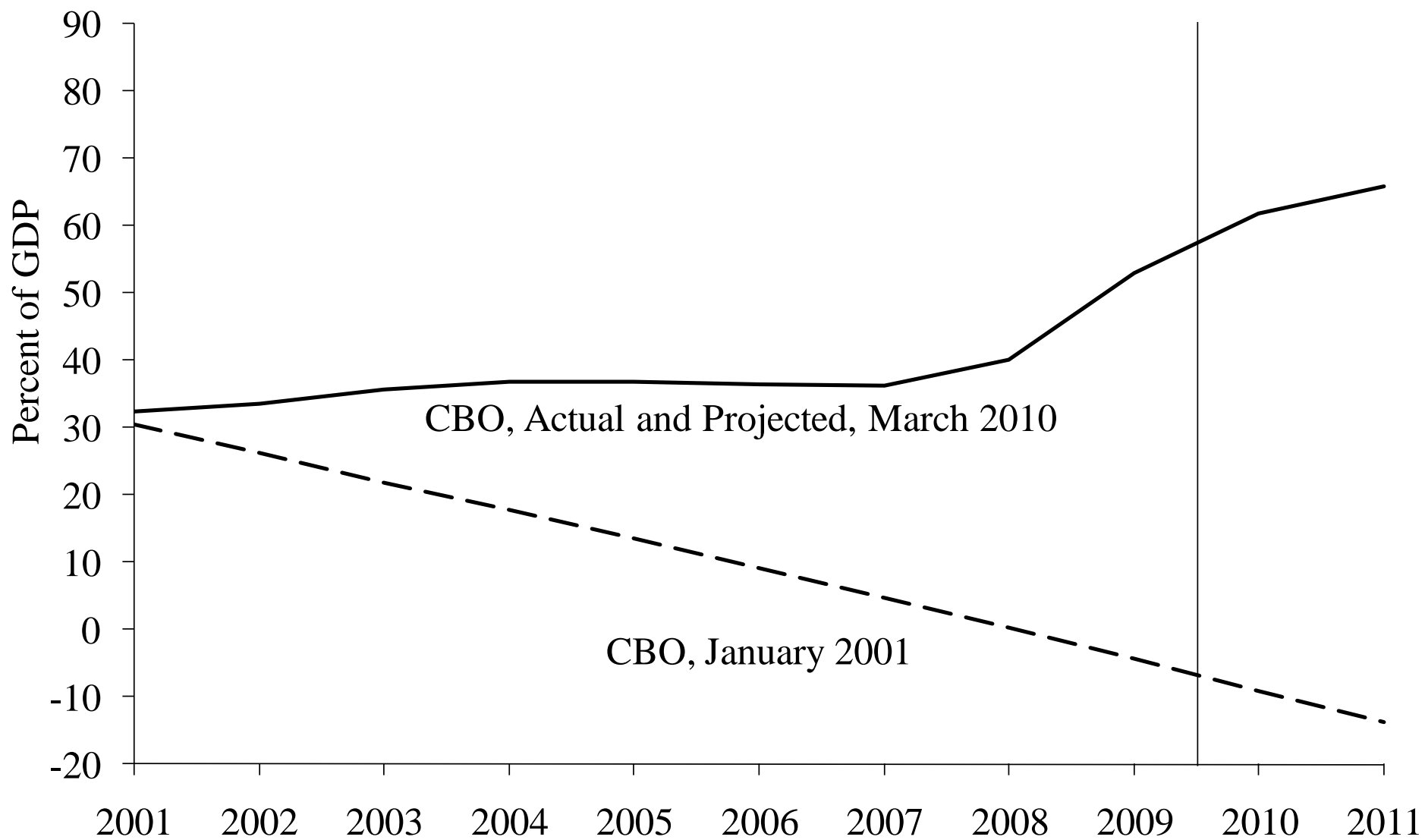
1. The Economy
2. Policy
3. The Great Recession
  - Increased deficits in 2009-10 due to weak economy plus ARRA, TARP, etc.
  - The economy itself the more important factor in increasing the deficit:
    - Economy, 2007-2009: 4.61% of Potential GDP
    - Policy, 2007-2009: 4.13% of Potential GDP

# What Happened?

## Three Phases:

1. The Economy
2. Policy
3. The Great Recession
  - Increased deficits in 2009-10 due to weak economy plus ARRA, TARP, etc.
  - The economy itself the more important factor in increasing the deficit:
  - A large cumulative impact on the national debt

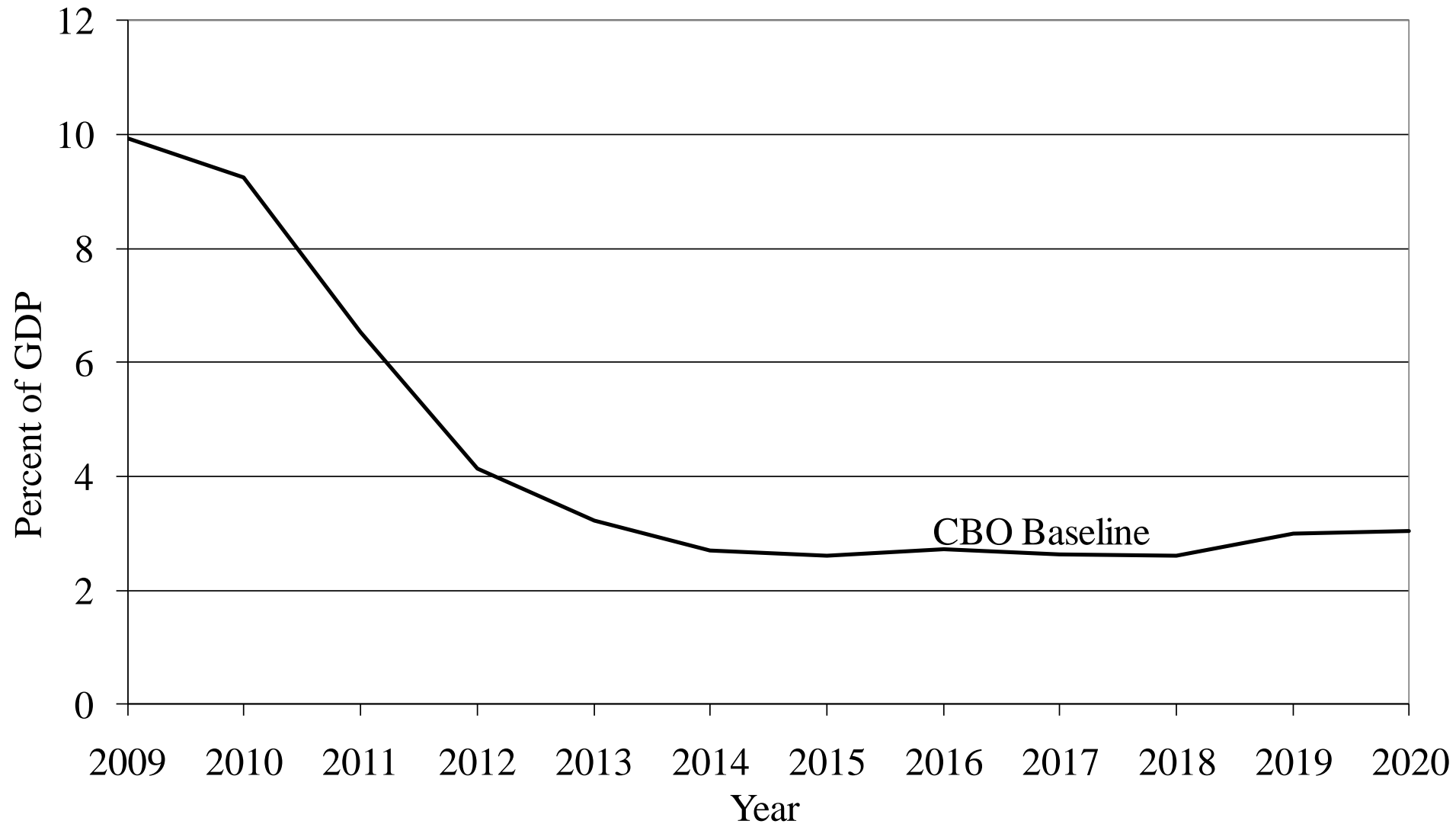
# Net Federal Debt, 2001 and 2010 Projections



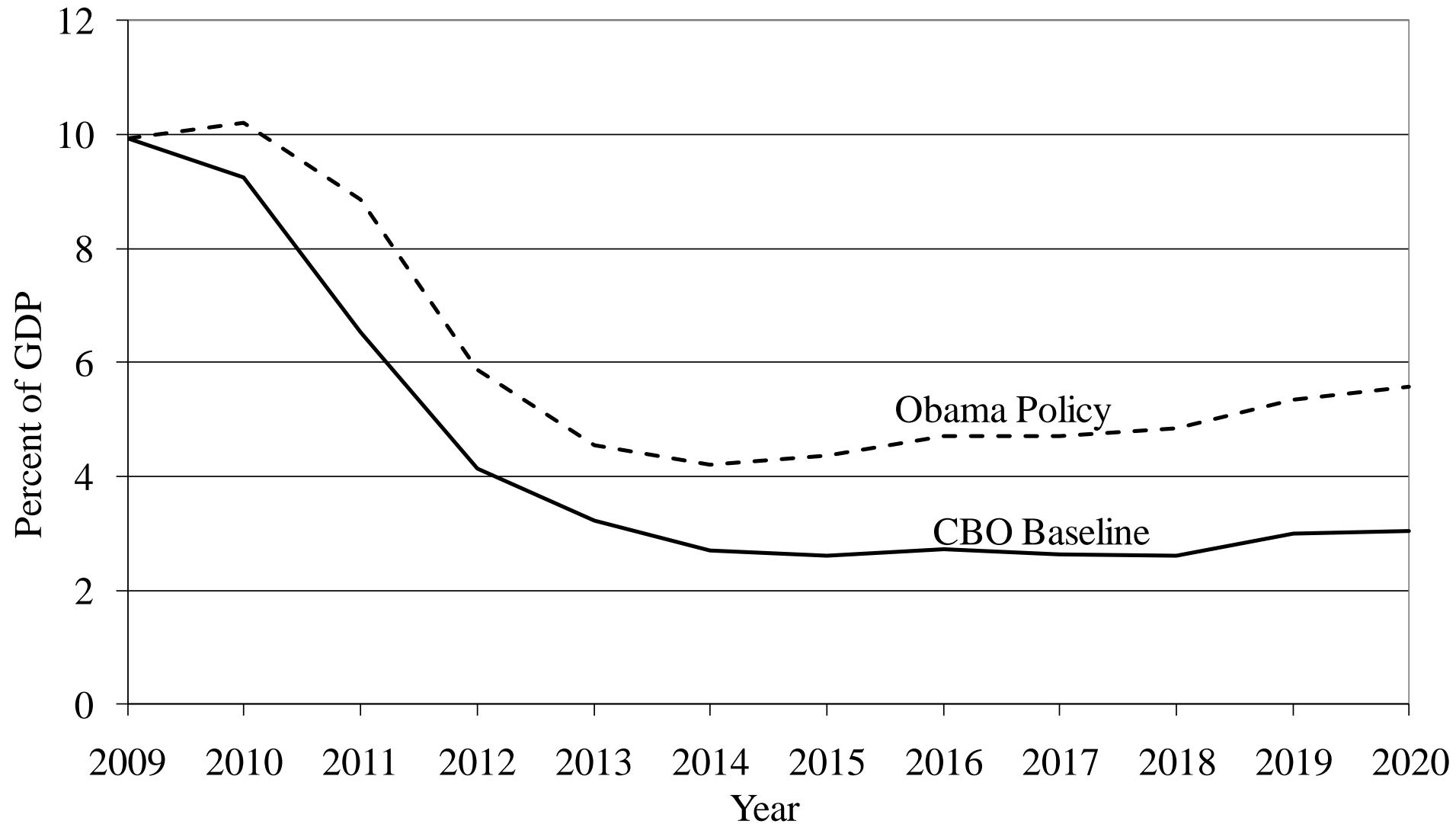
# 1. The U.S. Federal Fiscal Gap

## b. The Fiscal Gap in the Medium and Long Terms

# Alternative Deficit Projections, 2010-2020



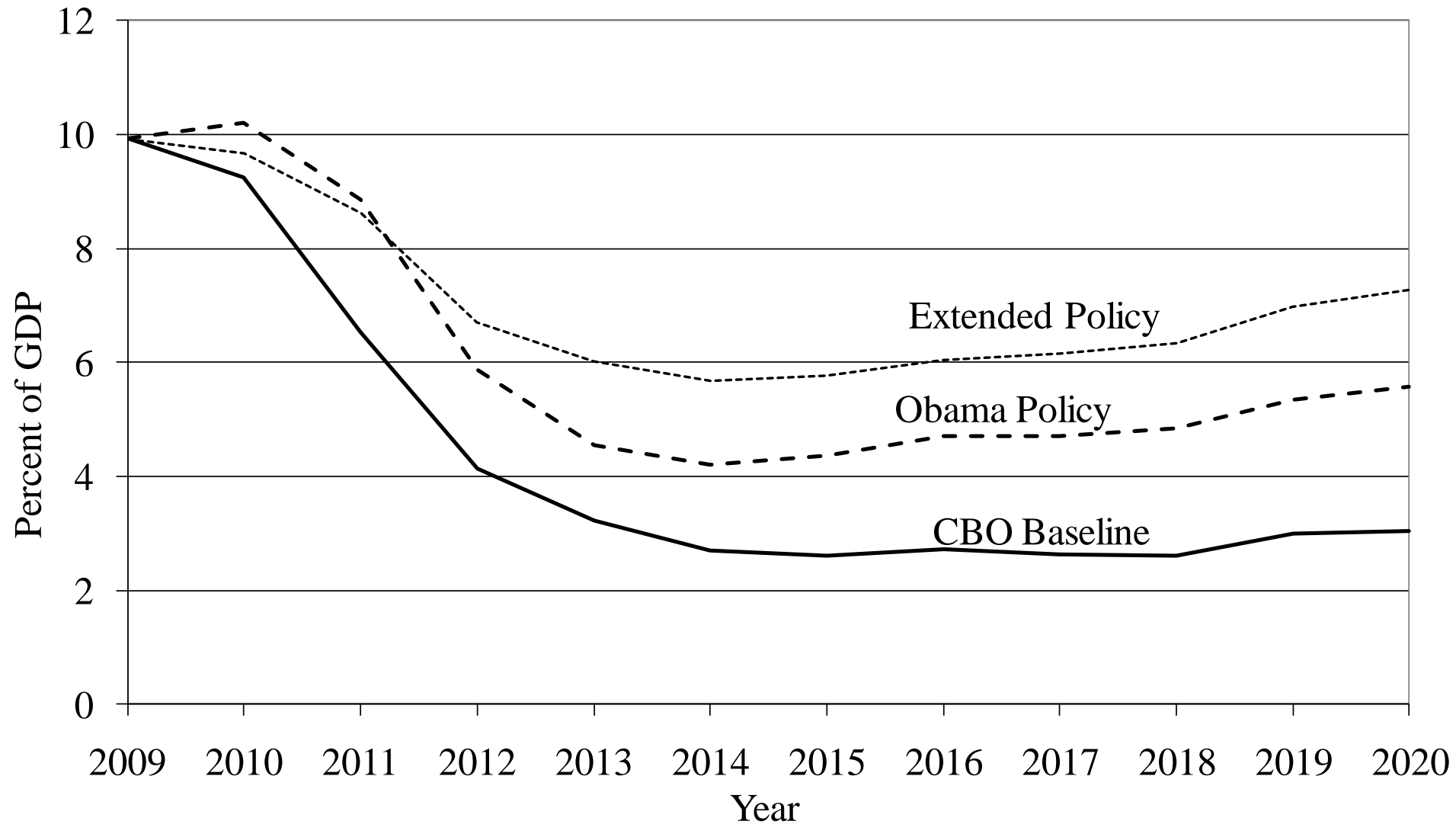
# Alternative Deficit Projections, 2010-2020



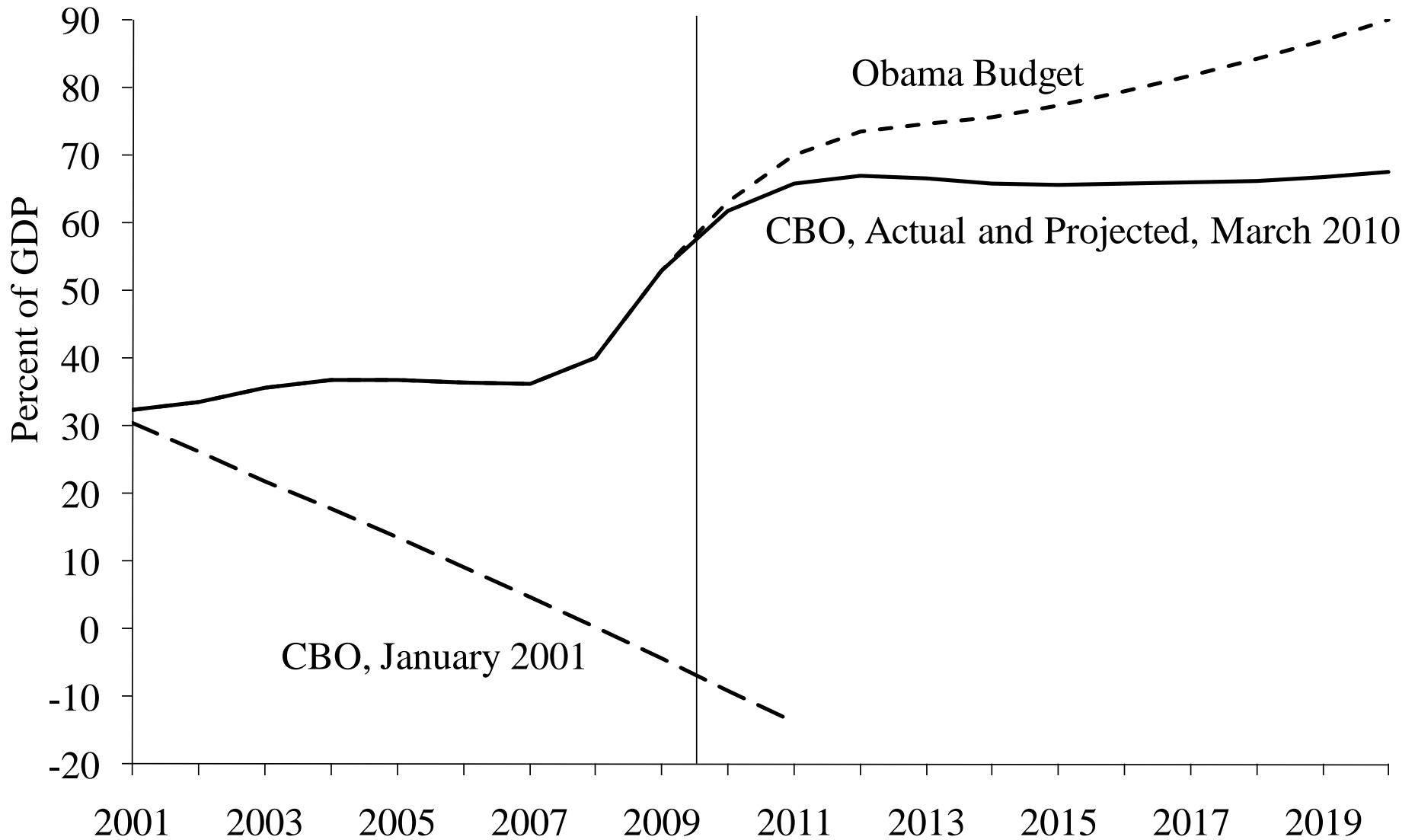
# Extended Policy

- Assumes current and future Congresses will act like previous Congresses.
- Start with CBO baseline + health care reform.
- Extend all non-stimulus expiring tax provisions.
- Allow non-stimulus, non-defense discretionary spending to grow with inflation & population.
- Replace projected defense spending with Obama defense plan.
- Assume physician payments under Medicare will be frozen, rather than cut.

# Alternative Deficit Projections, 2010-2020



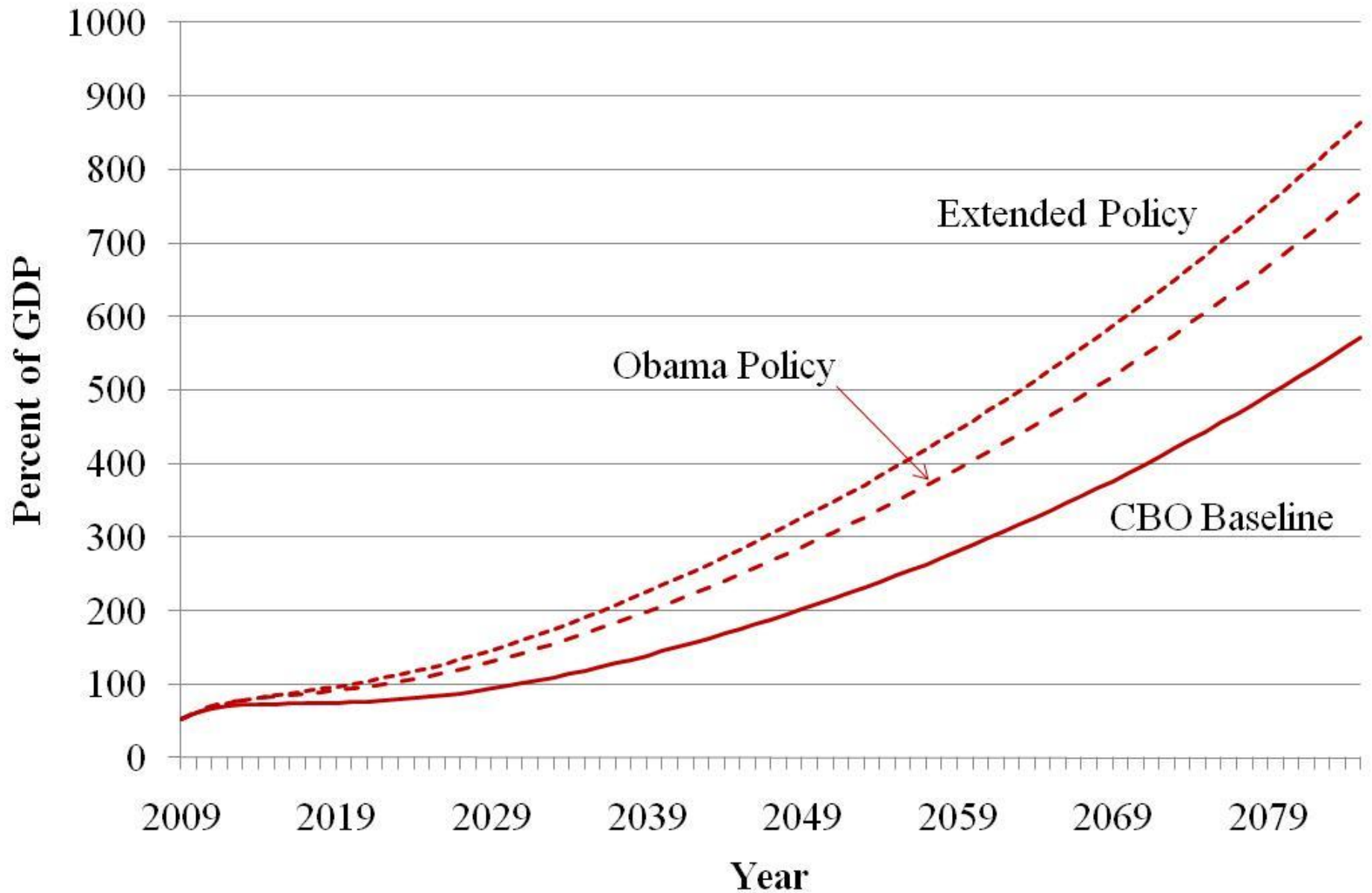
# Net Federal Debt, 2001 and 2010 Projections



# Obama Policy in 2020

- The (full employment) deficit = 5.5% of GDP
  - Highest FE deficit since WWII except for current episode
- Public debt = 90% of GDP (and rising)
  - Highest level since 1947 (when it was falling)
- Spending will exceed 25% of GDP
  - Highest level since WWII except for 2011
  - Net interest will be 4.0% of GDP, highest level ever (and larger than Defense or NDDS in 2020)
- Revenues will equal 19.5% of GDP

# National Debt as a Percent of GDP



# The Fiscal Gap

- In dollar terms, the gap is the present value of the difference between all expected future revenues and expected future non-interest spending.
- Easier to understand as a share of GDP – the gap equals the size of the immediate and permanent tax increase or spending cut (or combination) that would keep the debt/GDP ratio at the same level in the long term as now.

# Fiscal Gaps

<b>Fiscal Gaps</b>							
<b>Baseline:</b>	<b>CBO Baseline</b>		<b>Extended Policy</b>		<b>Obama Policy</b>		
	<b>Through</b>	<b>Permanent</b>	<b>Through</b>	<b>Permanent</b>	<b>Through</b>	<b>Permanent</b>	
	<b>2085</b>		<b>2085</b>		<b>2085</b>		
Percent of GDP	4.60	6.40	7.21	9.07	6.36	8.18	
\$ Trillions (PV)	35.0	92.7	54.8	131.2	48.3	118.3	

# 1. The U.S. Federal Fiscal Gap

## c. The Impact of Health Care Reform

# The Impact of Health Care Reform

## CBO:

- Recent health care reform better than revenue neutral over ten years; added revenues and spending cuts projected to exceed added spending
- Over following ten years, bigger deficit reduction because revenue increases and spending cuts grow faster than spending increases

# The Impact of Health Care Reform

- How much might this help?
- Ten-year gains already in Obama policy projections just presented
- Projected average gains of 0.25% to 0.5% of GDP over following ten years
  - If hold these gains, cut fiscal gap by almost same percent of GDP – maybe 1/20 of the overall gap
  - Would need to have gains continue to grow for several decades to have a big effect

# The Impact of Health Care Reform

- Will these deficit reductions occur?
- Legislation does include a variety of measures intended to slow cost growth; but
  - These have to be sustained by future legislators
  - Spending cuts will be harder to sustain if underlying costs continue to grow
- Even if predictions hold, the remaining task is harder, because potential sources of revenue increases and spending cuts have been used

# The Impact of Health Care Reform

- Examples:
  - 0.9% increase in Medicare payroll tax on those over 250k
  - 3.8% Medicare tax on capital income on those over 250k
  - Cuts in Medicare reimbursements
- That is, the deficit commission now has less scope to raise marginal tax rates or cut Medicare payments to reduce the deficit

# 1. The U.S. Federal Fiscal Gap

## d. The Deficit Commission

# The Deficit Commission

- Final report due in December 2010
- 18 appointees: 6 Obama, 6 Democratic Congressional, 6 Republican Congressional
- The charge: eliminate primary deficit by 2015
  - Or, an overall deficit of about 3% of GDP
  - Would require a reduction in spending and/or increase in taxes of 2.2% of GDP relative to the extended policy scenario and 1.4% of GDP relative to the Obama policy scenario

# The Deficit Commission

- Given projected economic growth and interest rates, a permanent annual deficit of 3% of GDP would stabilize the debt-GDP ratio at around 67%
- But not clear what policies will accomplish this in 2015, and especially over time

# 1. The U.S. Federal Fiscal Gap

## e. The Scope for Spending Reductions

# The Scope for Spending Reductions

- In a typical year, more than 70% of federal spending is on five programs:
  - Defense
  - Social Security
  - Medicare
  - Medicaid
  - Net interest
- 65% in 2009 (because of TARP and stimulus)
- 74% in 2014 rising to 78% in 2020 under Obama policy

# The Scope for Spending Reductions

- Will be difficult to cut any of the big 5 spending items significantly in this decade.
- Under Obama policy, other federal spending will account for 6.0% of GDP in 2014 and 5.5% of GDP in 2020.
  - Even enormous cuts in such spending will not reduce the deficit much.

# 2. Other Fiscal Gaps

# Other Fiscal Gaps

- As events in Europe, especially, illustrate, US is not alone:
  - Greece and the other PIIGS
  - United Kingdom's recently announced policy changes
- IMF (March 2010):
  - To stabilize debt-GDP ratios at 60% by 2030, developed countries need to cut spending or raise taxes by 8.2% of GDP (G-20: 8.8%)

# Other Fiscal Gaps

- At the state and local levels, big problems as well
- Current large budget gaps in most states, with little recourse except to raise taxes and cut spending immediately
- Over the longer term, huge underfunded public pension liabilities that require enormous additional funding in the next couple of decades, even if pension reform occurs

### 3. Implications for Tax Policy

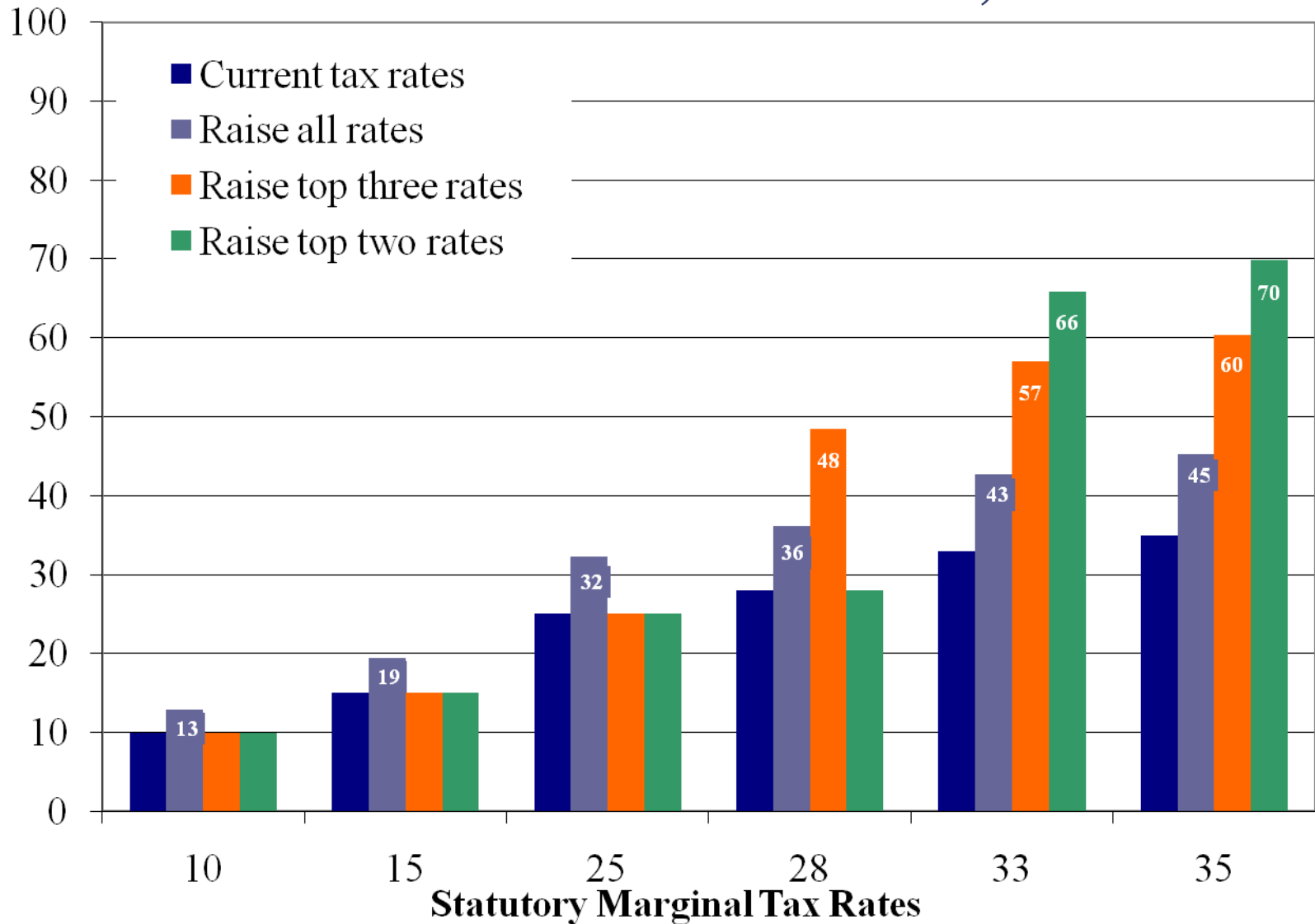
Basically three choices:

1. Raise rates of existing taxes
2. Broaden existing tax bases
3. Introduce new taxes

# 1. Raise Rates of Existing Taxes

- Most obvious policy measure: eliminate all the 2001-03 tax cuts, not just for those over 250k
  - This is already assumed in the CBO projections
  - Relative to the Obama policy projections, this would generate about 1% more of GDP in tax revenue
- Or, simply raise rates more for those at the top
  - More progressive, but at some point would become counterproductive; Tax Policy Center estimates suggest not realistic:

# 3% Deficit Target: Alternative Baseline A, 2019



## 2. Broaden Existing Tax Bases

Important examples:

- Mortgage interest deduction
  - Simpler than dealing with imputed rent
- Employer-provided health insurance exclusion
  - A small cutback in health care bill
- Total elimination of either would raise almost 1% of GDP

### 3. Introduce New Taxes

- Carbon Tax
- Value-Added Tax

# Carbon Tax

## Rationale

Three ways to reduce greenhouse gas (GhG) emissions without subsidies:

### 1. Controls

- Facility-specific emissions limitations or control technology standards.
- In May 2010, EPA promulgated rules under the Clean Air Act affecting large stationary sources accounting for 70% of GhG emissions from stationary sources.

### 2. Cap and trade

- Government sets fixed number of emission allowances, distributes them by allocation and/or auction, and allows trading (e.g., Waxman-Markey and Kerry Lieberman bills, SOx and NOx trading, Regional GhG Initiative).

### 3. Tax

- Excise tax on emissions (or fuels that generate emissions) set at a rate high enough to achieve desired reduction.

Alternatively, government can use **subsidies** to promote research, development, and deployment of energy efficiency, carbon capture, and alternative fuels technologies.

# Carbon Tax

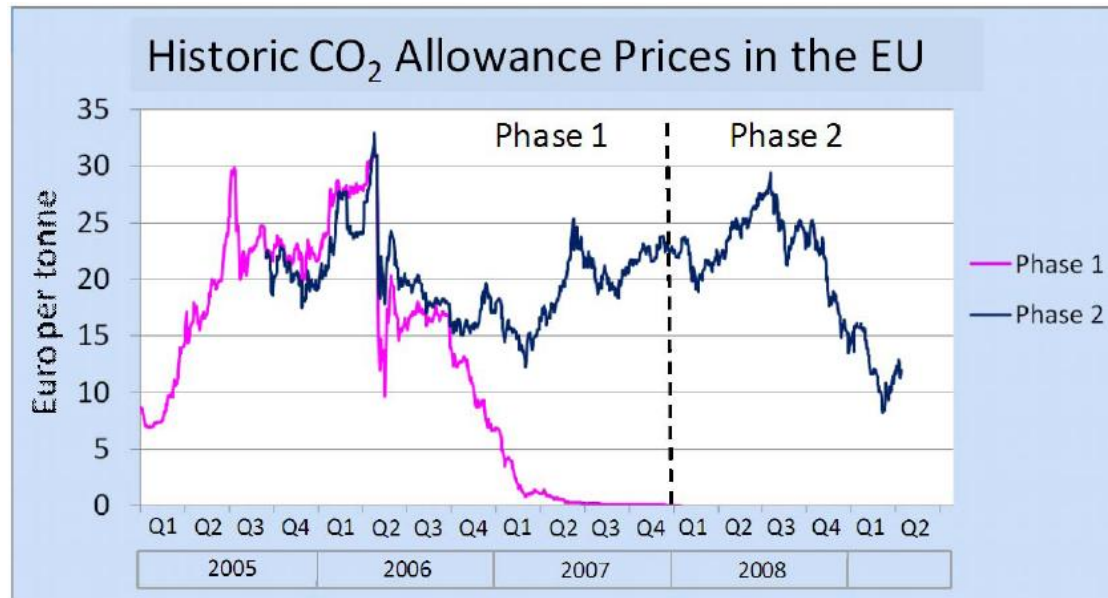
## Rationale

- Both cap and trade and emissions tax systems put a “price” on GhG emissions and thus are cost effective:
  - Under a trading system, all emitters will undertake emissions control measures until the marginal cost of control equals market price of emissions.
  - Under a tax system, all emitters will undertake emissions control measures until the marginal cost of control equals tax rate.
  - Under either cap and trade or tax system, GhG reductions are achieved at lowest possible cost.
- By contrast, inflexible controls are likely to be inefficient, with higher overall control costs for a given emissions reduction target.

# Comparison of Trading and Tax Systems *(continued)*

- Volatility of Carbon Price

- Annual fluctuations in GhG emissions around trend have no adverse environmental effect, while fluctuations in the price of fossil fuels, which account for 85% of US energy, impose high macroeconomic costs.
- Price volatility under cap and trade could be mitigated through banking and borrowing as well as caps and floors on carbon allowance price.



Source: Point Carbon

# Comparison of Trading and Tax Systems

- Free allocation of allowances
  - Foreign and U.S. federal and state experience shows that all, or almost all of the allowances under cap and trade systems are freely allocated resulting in windfall gains to recipients and a new form of currency that legislators can use to, in effect, earmark appropriations.
  - Free allocation limits revenues that can be used to address regressivity, tax reform, or the deficit.
  - Where allowances are allocated based on historic emissions, new entrants and early actors are competitively disadvantaged.
- Trading system costs and start-up time
  - U.S. already taxes coal (Black Lung Trust Fund tax) and petroleum (Oil Spill Trust Fund tax), so implementation of a carbon tax could be achieved relatively quickly and simply as compared to establishing a new trading system for billions of emissions allowances.

# Comparison of Trading and Tax Systems *(continued)*

- International Competitiveness
  - Absent border adjustments, companies have incentive to shift production to “pollution havens”
  - WTO precedents exist for border adjusting environmental taxes through value chain (i.e., Superfund chemical tax, ozone depleting chemical tax). Legal basis for Imposing emissions allowance requirements on imports and exempting exports is unclear.
- International Cooperation
  - Global efficiency requires international equalization of carbon price. An internationally agreed minimum carbon tax is one way to achieve coordination.
  - A global market for allowances would be inhibited by country-specific design features (e.g., price caps, penalties, banking and borrowing, and expiration dates). A global enforcement mechanism would be required to establish binding country caps and prevent issuance of excess allowances — in effect a global monetary authority for allowances.

# U.S. Emissions of Greenhouse Gases, 2007

- If emissions trading is limited to electric generators (like state programs) 33% of GhGs would be covered; adding industrial facilities (like European Trading System) covers 60%.
- A tax on fossil fuels would cover about 83% of GhGs.

<b>US Emissions of GhGs, 2007</b>						
[Million Metric Tons CO2 Equivalent ]						
<b>Gas</b>	<b>Residen- tial</b>	<b>Commer- cial</b>	<b>Indus- trial</b>	<b>Transpor- tation</b>	<b>Total</b>	<b>Percent of total</b>
CO2	1,261	1,098	1,760	1,903	6,022	83%
CH4	11	187	498	5	700	10%
N2O	5	10	314	56	384	5%
Other	5	61	39	73	177	2%
<b>Total</b>	<b>1,281</b>	<b>1,355</b>	<b>2,610</b>	<b>2,036</b>	<b>7,282</b>	<b>100%</b>
<b>Percent</b>	<b>18%</b>	<b>19%</b>	<b>36%</b>	<b>28%</b>	<b>100%</b>	
Electricity	12%	12%	9%	0%	33%	
Other	5%	7%	27%	28%	67%	

Source: Energy Information Administration, Emissions of Greenhouse Gases in the United States 2007, December 2008

# Existing Carbon Taxes

- British Columbia Carbon Tax
  - Starting 7/1/08, BC carbon tax applies to most fossil fuels, including gasoline, diesel, natural gas, coal, propane, and home heating oil.
  - Tax rate
    - Initially C\$10/ton of carbon content (9 cents per gallon of gasoline).
    - Rate to increase by C\$5/year, topping out at C\$30/ton by 2012, (27 cents per gallon of gasoline).
  - Generates C\$1.85 billion revenues over 3 years, all returned:
    - All BC residents—one-time credit of C\$100
    - Low-income BC families— annual credit of C\$100/adult (C\$30/child)
    - Revenue neutral reductions in corp. and individual income tax rates.
      - Salary of finance minister reduced if neutrality not achieved
  - Implemented in less than 6 months after enactment.
- Similar tax implemented in Quebec in Oct. 2007, with revenues used for “Green fund”
- EU countries have substantial gasoline taxes and some also have fossil fuel taxes characterized as carbon taxes (often with industrial exemptions)

# Revenue Effect of Upstream GhG Tax

Revenue Effect of Upstream Tax on Greenhouse Gas Emissions, 2012-19										
	2012	2013	2014	2015	2016	2017	2018	2019	2015-19	2012-19
Revenue* (\$ millions)	\$83.5	\$86.8	\$99.9						\$611.7	\$881.8
Tax rate (\$ per MTCO2e)	\$23.00	\$24.33	\$25.75	\$27.24	\$28.82	\$30.49	\$32.26	\$34.13		
*Net of income and payroll tax offsets										
Source: Congressional Budget Office, <i>Budget Options</i> , vol 2, August 2009, 254-255.										

- Same revenue could be raised by a 1.4% (2%) broad (narrow) based VAT.
- At 2008 levels, the value of fossil fuels consumed in the U.S. represents 10% (14%) of the base of a broad (narrow) VAT.\*

\*Petroleum valued at average refiners' acquisition price; natural gas valued at average city gate price, and coal valued at average open market price.

# Economic Effects of Carbon Tax

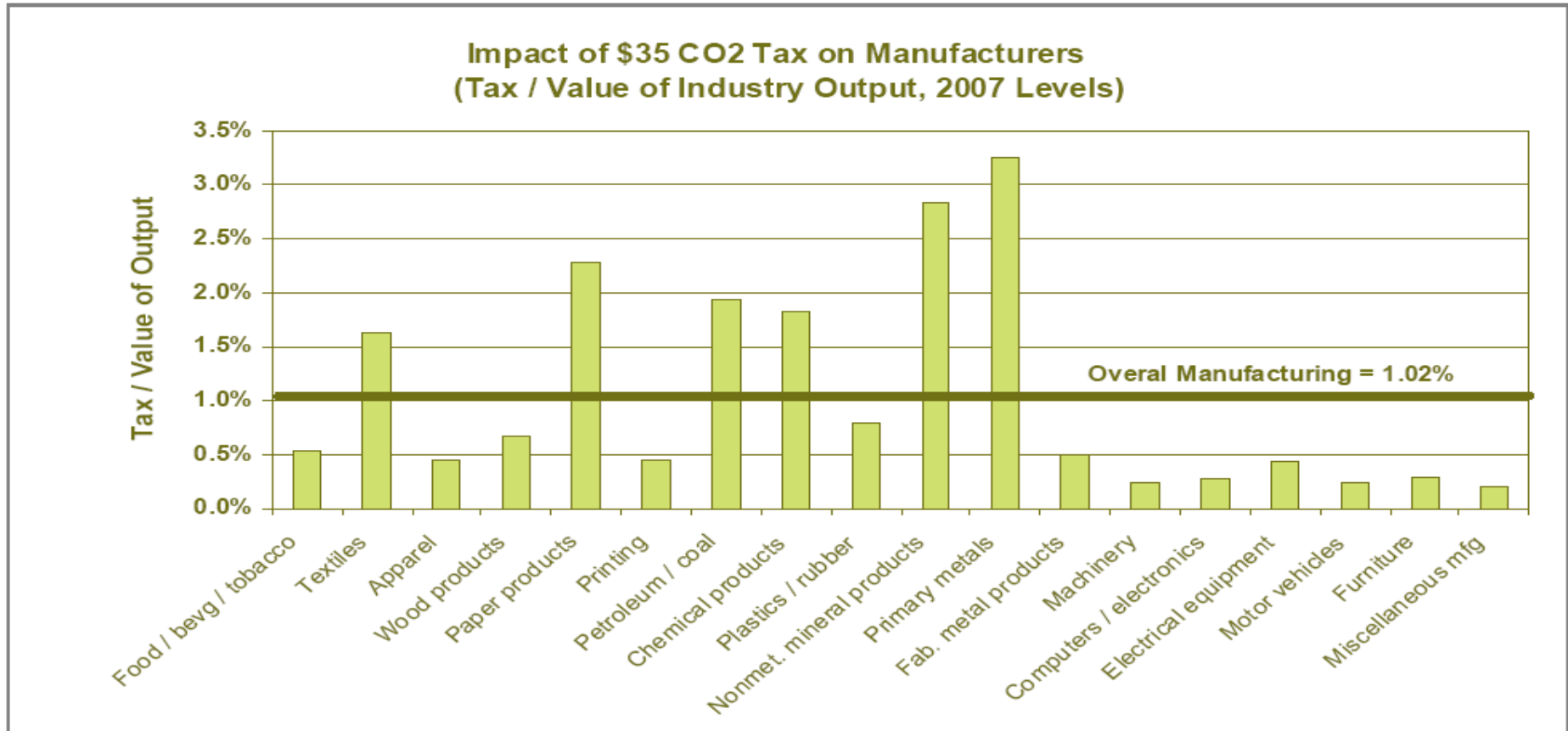
## Impact of \$35/ton tax on CO2 Emissions on Energy Costs

Fuel	Quantity	Pounds of CO <sub>2</sub> Emissions per unit	Average Price per unit, Feb 2009	Tax / Unit	Tax / Price	Tax / million Btu
<b>Petroleum</b>						
Gasoline	Gallon	19.6	\$1.98	\$0.31	16%	\$2.48
Diesel	Gallon	22.4	\$2.20	\$0.36	16%	\$2.56
Jet fuel	Gallon	21.1	\$1.44	\$0.33	23%	\$2.48
<b>Natural Gas</b>	Mcf	120.6	\$11.15	\$1.91	17%	\$1.86
<b>Coal*</b>	Short ton	4,236.7	\$42.16	\$67.13	159%	\$3.32

\*Average for all grades of coal.

Source: U.S. Department of Energy and PricewaterhouseCoopers calculations.

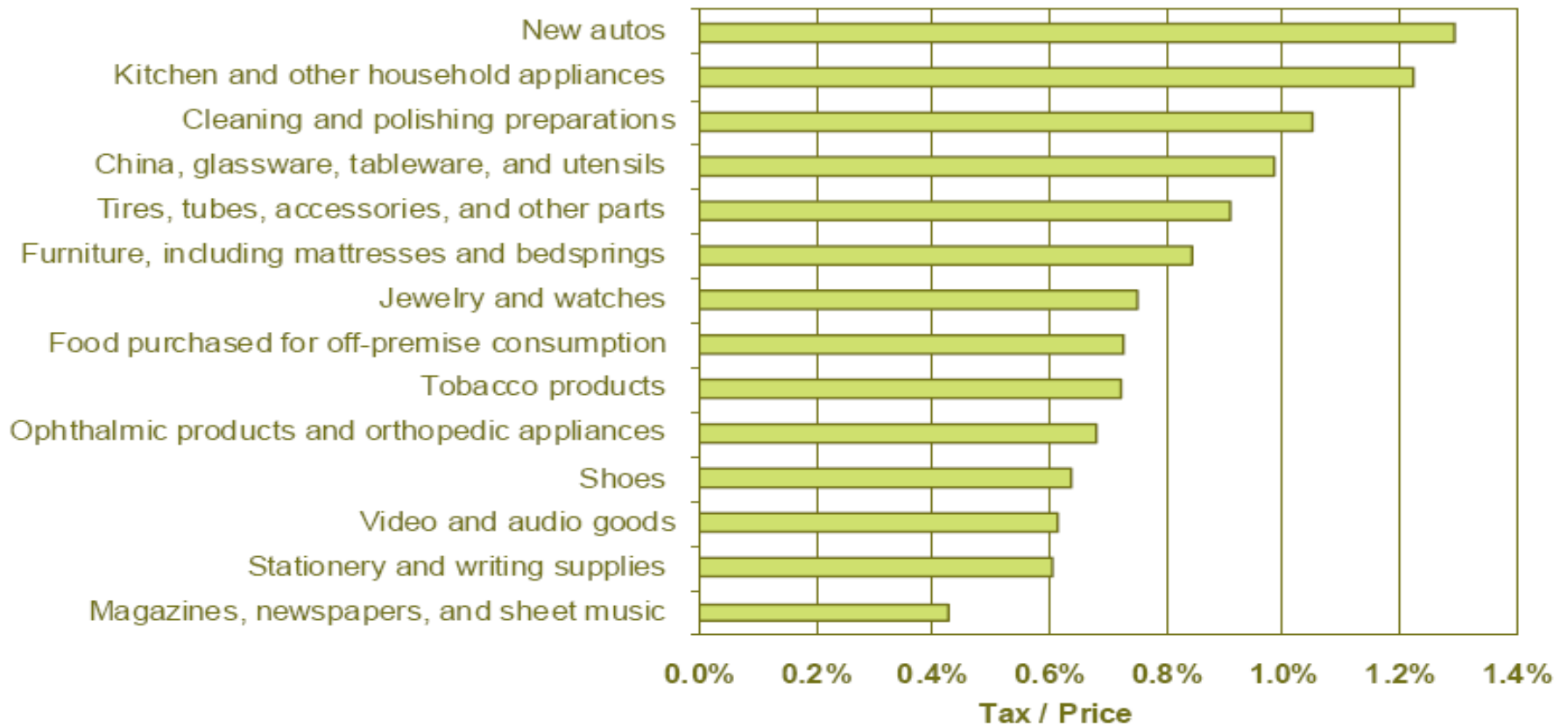
# Economic Effects of Carbon Tax (cont'd)



Source: Data from U.S. Department of Energy and U.S. Bureau of Economic Analysis, PricewaterhouseCoopers calculations.

# Economic Effects of Carbon Tax *(cont'd)*

## Impact of \$35 CO2 Tax on Selected Consumer Goods



# Politics of Carbon Tax

- Politics strongly favor cap and trade legislation over a carbon tax
  - The effect of emission caps on energy prices is less transparent than tax.
  - Free allocation of emissions allowances allows legislators to transfer billions of dollars of value in a non-transparent way.
  - U.S. Climate Action Partnership (USCAP), an alliance of businesses and environmental groups, advocates a cap and trade approach with free allocation of a substantial portion of allowances initially.
- Never the less, there currently is insufficient support to pass cap and trade legislation in the Senate and the odds of passage do not appear likely to improve in the next session of Congress.

# Value-Added Tax

- What is a VAT?
- Why VAT?
- Frequently asked questions about VAT
- Politics

# What is a VAT? Overview

Value-Added Tax (VAT) — also called Goods and Services Tax (GST) — is a system for collecting tax on the final sales price of goods and services in a staged process, with value added at each stage of the manufacturing and distribution process subject to tax. This is accomplished by:

1. Taxing domestic sales of goods and services by VAT-registered businesses, whether to final consumers or other business, and
  2. Allowing VAT-registrants to claim a credit or refund for VAT on business purchases.
- Net VAT remitted is equal to tax on sales (“output VAT”) less tax incurred on purchases of business inputs (“input VAT”).
  - Generally, absent exemptions, the total VAT remitted equals VAT on the final sale, as it would be under a retail sales tax.
  - VAT is destination-based: imports are taxed and exports are free of tax. Under WTO rules, such border adjustments are permitted for indirect taxes, such as VAT, but not for direct taxes, such as income and property taxes.

# What is VAT? Alternative forms of broad-based consumption tax

Type of Consumption Tax	Explanation
Retail sales tax	Imposed on sales by retailers. Services generally are not taxed. Sales to business generally are taxable unless purchased for resale, causing cascading.
VAT	Multi-stage tax on goods and services with credit on business purchases to avoid cascading.
Subtraction method VAT, also called Business Activities Tax (BAT)	Similar to VAT except structured as a direct tax on business sales less purchases from other businesses. No deduction for interest or wage expense.
Personal consumption tax	Tax on personal income with deduction for saving (and inclusion of dis-saving)
Flat tax	Like BAT except wages are deductible and taxed (at BAT rate) to wage earners.

# What is VAT? Example — no exemptions

## Three forms of Indirect Tax on Consumption

[Illustration with 10% rate]

	Farmer	Miller	Baker	Total
<b>Business transactions</b>				
Sales	\$300	\$700	\$1,000	
Purchases	\$0	\$300	\$700	
Value added	\$300	\$400	\$300	\$1,000
<b>1. RST calculation</b>				
Tax base	\$0	\$0	\$1,000	\$1,000
Tax	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>	<b>\$100</b>
<b>2. BAT calculation</b>				
Tax base (value added)	\$300	\$400	\$300	\$1,000
Tax	<b>\$30</b>	<b>\$40</b>	<b>\$30</b>	<b>\$100</b>
<b>3. VAT calculation</b>				
Tax on sales	\$30	\$70	\$100	
Credit for tax on inputs	\$0	-\$30	-\$70	
Net tax	<b>\$30</b>	<b>\$40</b>	<b>\$30</b>	<b>\$100</b>

- Without exemptions, an equal rate retail sales tax, subtraction VAT, and invoice-credit VAT all collect the same amount of revenue on sales of goods and services, but with a subtraction of invoice-credit VAT, much of the tax is withheld prior to the retail sale.

# What is VAT? Example —Exemption of intermediate sale

## Three forms of Consumption with Exemption of Intermediate Sale

[Illustration with exemption for miller; 10% rate]

	Farmer	Miller	Baker	Total
<b>Business transactions</b>				
Sales	\$300	\$700	\$1,000	
Purchases	\$0	\$300	\$700	
Value added	\$300	\$400	\$300	\$1,000
<b>1. RST calculation</b>				
Tax base	\$0	\$0	\$1,000	\$1,000
Tax	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>	<b>\$100</b>
<b>2. BAT calculation</b>				
Tax base (value added)	\$300	\$0	\$300	\$600
Tax	<b>\$30</b>	<b>\$0</b>	<b>\$30</b>	<b>\$60</b>
<b>3. VAT calculation</b>				
Tax on sales	\$30	\$0	\$100	
Credit for tax on inputs	\$0	\$0	\$0	
Net tax	<b>\$30</b>	<b>\$0</b>	<b>\$100</b>	<b>\$130</b>

- Under invoice-credit VAT, “exemption” means no VAT recovery for inputs allocable to exempt sales.
- With exemption of intermediate sale (by miller), there is no change in RST; however, BAT revenues are reduced by tax on miller’s value added while VAT revenues are increased by non-recoverable VAT on miller’s purchases.

# What is VAT? Example —Exemption of final sale

## Three forms of Consumption with Exemption of Final Sales

[Illustration with 10% rate]

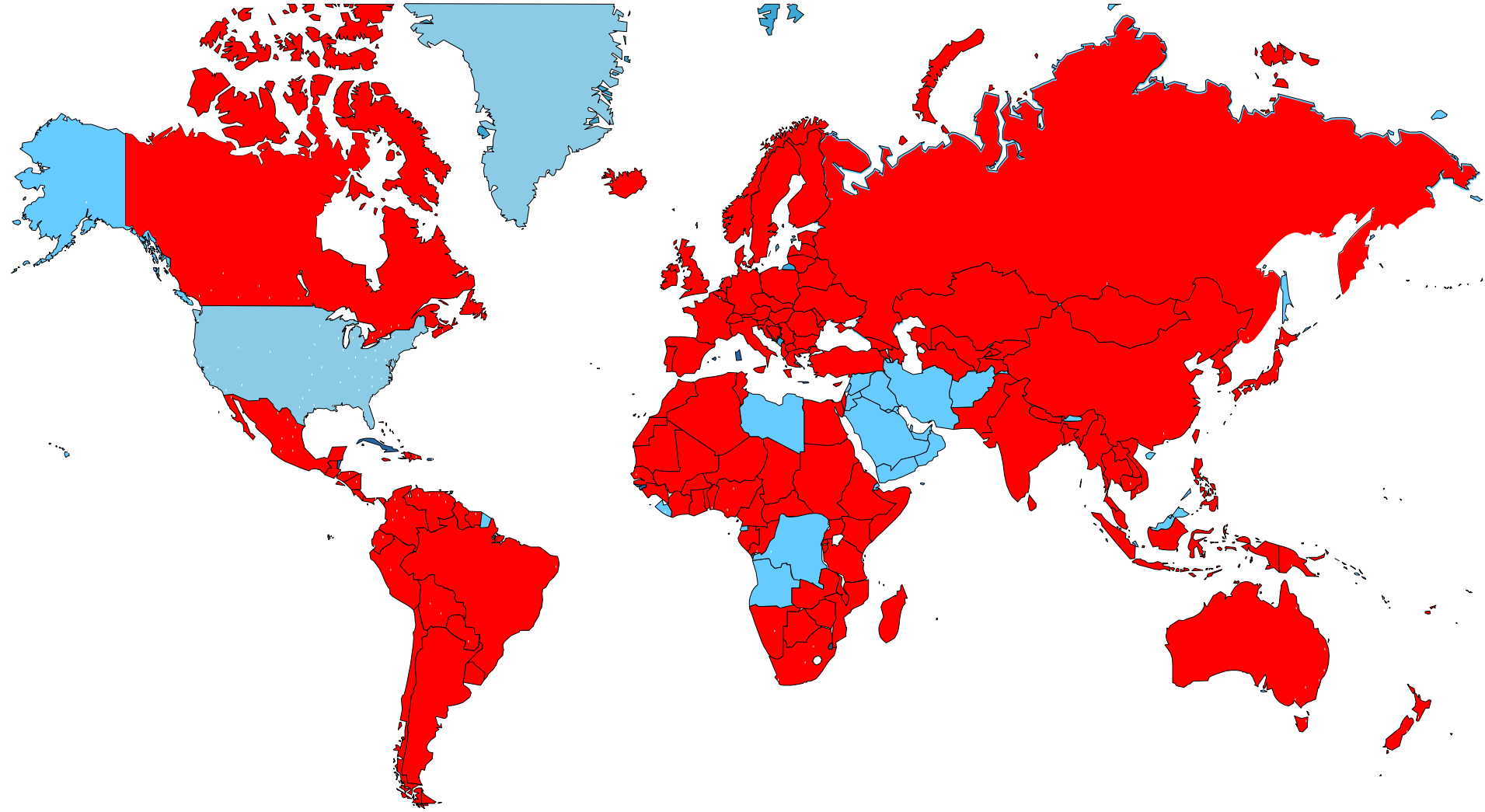
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<b>Business transactions</b>				
Sales	\$300	\$700	\$1,000	
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<b>1. RST calculation</b>				
Tax base	\$0	\$0	\$0	\$0
Tax	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>2. BAT calculation</b>				
Tax base (value added)	\$300	\$400	\$0	\$700
Tax	<b>\$30</b>	<b>\$40</b>	<b>\$0</b>	<b>\$70</b>
<b>3. VAT calculation</b>				
Tax on sales	\$30	\$70	\$0	
Credit for tax on inputs	\$0	-\$30	\$0	
Net tax	<b>\$30</b>	<b>\$40</b>	<b>\$0</b>	<b>\$70</b>

- With exemption of final sale (retail baker), all RST revenues are lost, whereas only tax on value added by baker is lost under BAT and VAT.

# Why VAT?

- Although a national RST would be simpler than a VAT, no country has sustained a RST at rates above 10%.
- Unlike VAT, State RSTs:
  - Do not apply to services.
  - Apply to many business purchases, causing multiple taxation (“tax cascading”). It has been estimated that as much as 40% of RST revenues are from sales to businesses rather than final consumers.
- The withholding feature of VAT improves tax compliance and limits the revenue cost of exemptions in the supply chain. This makes it possible to have a high VAT registration threshold.
- VAT has been adopted in about 140 countries.

# VAT/GST Jurisdictions, 2010



Without  
VAT/GST

With  
VAT/GST

# Why VAT? Spread of VAT

- The global spread of VAT is one of the most significant tax development in the latter half of the 20<sup>th</sup> century.
- In many cases, VAT has replaced other types of consumption taxes, particularly turnover (gross receipts) taxes, or sales taxes on manufacturers, wholesalers, or retailers.
- Success of VAT is due to a variety of factors
  - Broad base—includes all value added for goods and services
  - Can be border adjusted under WTO rules
  - Avoids cascading of tax through the value chain
  - Resistant to exemption of intermediate sales
  - Less vulnerable to evasion
  - Required for EU membership
  - Advocated by IMF as part of structural adjustment programs

# Why VAT? Revenue potential

VAT Base	Net revenue per point of VAT (\$ amounts in billions)		
	(% of GDP)	FY 2010	FY 2011-19
Broad base	0.45%	\$66	\$850
Narrow base	0.29%	\$42	\$540

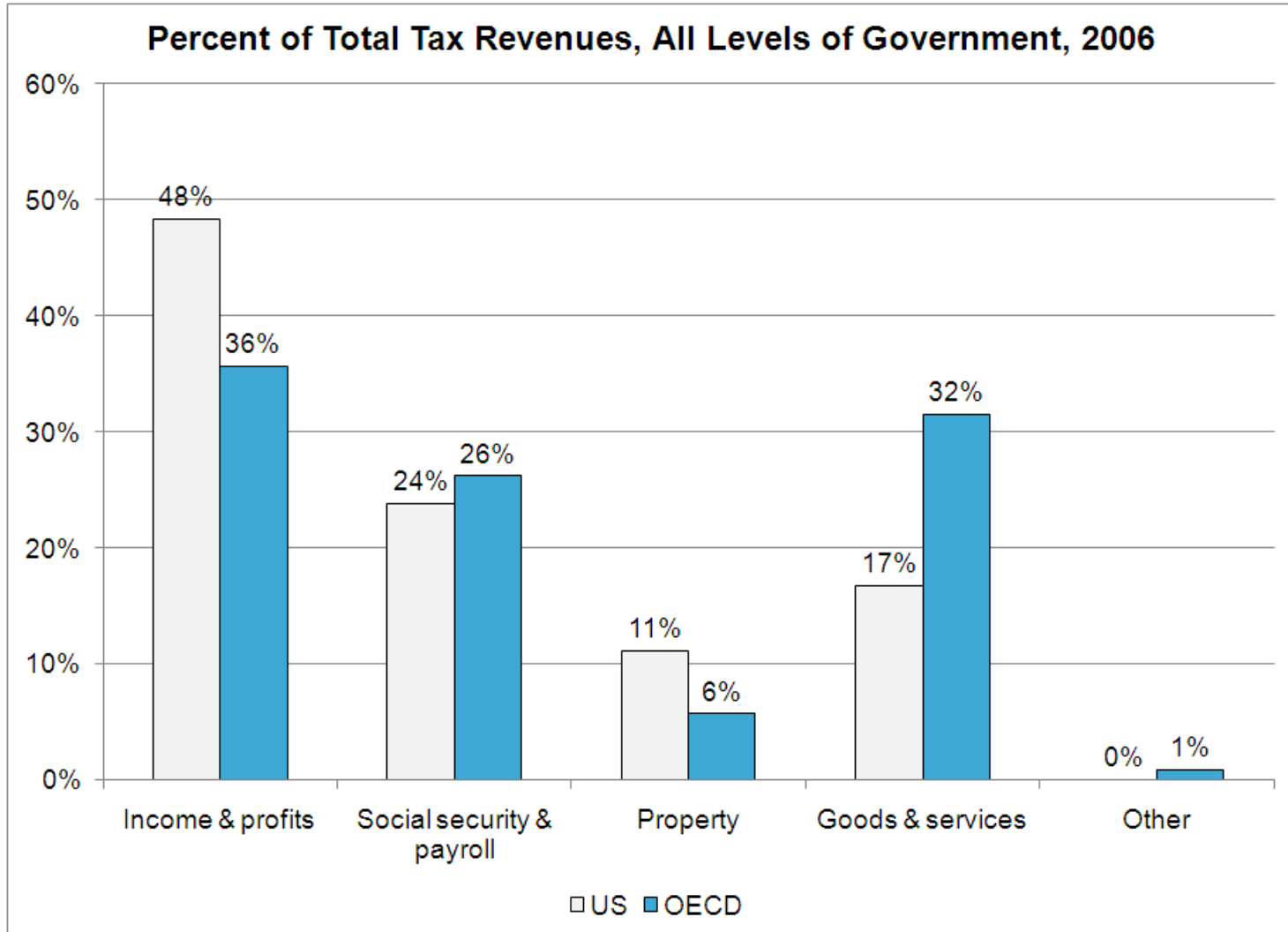
Note: Assumes 15% non-compliance rate. Net of 25% offset for reduction in income and payroll taxes conventionally assumed for indirect business taxes.

## President's Deficit Reduction Commission Goal

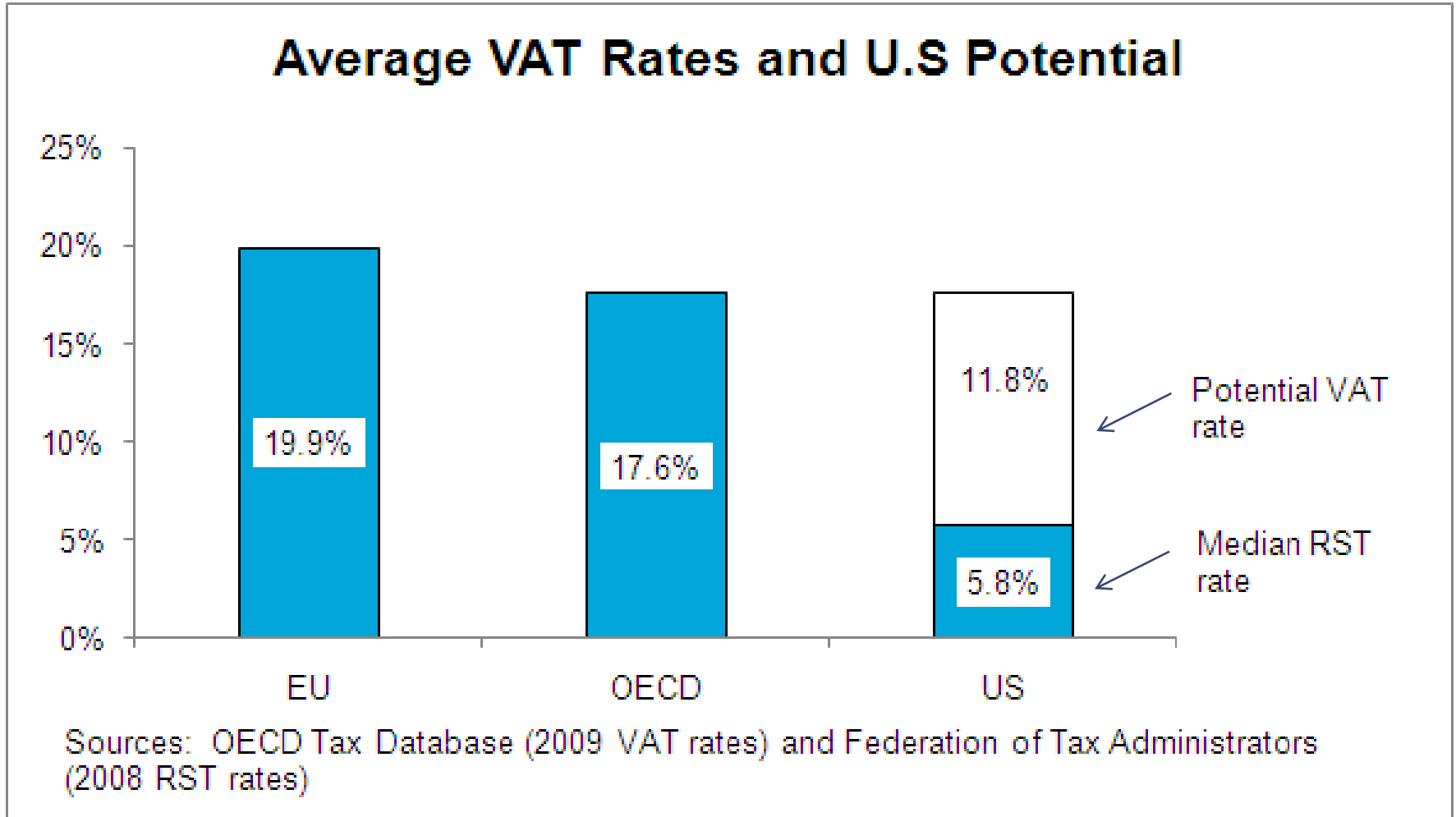
- Reduce deficit to approximately 3% of GDP by 2015

VAT Base	Using only VAT Rate to meet Deficit Commission Goal
	Relative to CBO Score of Admin. FY 2011 Budget
Broad	4.2%
Narrow	6.6%

# Why VAT? International norms



# Why VAT? International norms



# Why VAT? Tax structure and economic growth

- Unlike the income tax, VAT does not:
  - Discourage savings
  - Discourage domestic investment
  - Favor debt over equity finance
  - Fall more heavily on capital-intensive firms
  - Favor non-corporate over corporate business
- A recent OECD study of 21 countries over the 1971-2004 period finds that the corporate tax has the most negative effect on GDP per capita while taxes on immovable property and consumption are most growth friendly.<sup>1</sup>

<sup>1</sup>J. Arnold, “Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence From a Panel of OECD Countries,” OECD Economics Department Working Papers No. 643, Oct. 14, 2008

# Why VAT? Transfer pricing, Trade

## Transfer pricing

- Under **destination-based** taxes, such as VAT, transfer prices are irrelevant as the base equals final (B2C) sales to domestic consumers.
- Under **origin-based taxes**, such as the income tax, transfer prices on sales between domestic and foreign affiliates can shift the tax base across international boundaries with the potential for costly tax controversy.

## Trade

- Like a retail sales tax, VAT is trade neutral. Imports face the same tax as domestic production and exports are VAT-free.
- Corporate tax adversely affects trade in capital-intensive goods.

# FAQs

- Is VAT regressive?
  - Yes, if on a broad base without exemptions. Reducing VAT rates on necessities is an inefficient method of alleviating regressivity. Regressivity could be addressed outside the VAT by, for example, by reducing payroll taxes.
- Would VAT encourage government spending?
  - Countries with higher spending tend to have VATs; however, the economics literature disputes whether VAT causes increased spending.
- Would VAT be inflationary?
  - No. Adoption of VAT typically is accompanied by a one-time increase in the price level; however, this does not lead to ongoing inflation.

# FAQs

- Would VAT increase tax administration burdens?
  - Administration of VAT is less costly per dollar of revenue than income tax and can be reduced by (1) establishing a high registration threshold, (2) taxing all goods and services at the same rate, (3) combining VAT and income tax audits, and (4) relying on customs to collect VAT on imports.
- Would VAT reduce consumer spending?
  - Spending rises in anticipation of VAT introduction. Data from Japan show largest anticipatory effects for durables and storables, with pre- and post-effective date effects cancelling out. In theory, use of VAT to replace more distorting taxes, such as corporate income tax, would increase GDP and, over time, consumption.

# Politics of VAT

- Favorable commentary about VAT has come from both sides of the aisle

Alan Greenspan	Glen Hubbard	Greg Mankiw
David Brooks	Al Hunt	Bill Clinton
Erskine Bowles	Paul Volcker	Nancy Pelosi
Kent Conrad	John Podesta	Thea Lee (AFL-CIO)

- President Obama (April 21) “ [VAT is] something that would be novel for the United States. And before, you know, I start saying this makes sense or that makes sense, I want to get a better picture of what our options are.”
- A backlash against favorable comments about VAT has begun:
  - McCain amendment (to short-term extension of UI, COBRA, etc.) declaring it is the sense of the Senate that a VAT would “cripple families” and delay economic recovery passed 85-13 on April 15 with support from 44 Democrats including Sen. Baucus.
  - On May 20, 154 of 177 House Republicans write Bowles and Simpson in opposition to VAT.

# Politics of VAT

## Japanese Consumption Tax

- Prime Minister Masayoshi Ohira proposed a new VAT before elections in 1979. He lost his parliamentary majority and was forced to abandon the proposal.
- After implementation of a 3% consumption tax in 1989, Prime Minister Noboru Takeshita's approval rating declined from 50% to single digits, and he was forced to resign.
- In 1994, Prime Minister Morihiro Hosokawa proposed a rate increase to 7%; he was forced by his own party to retract the proposal the following day.
- Prime Minister Ryutaro Hashimoto was shortly out of office after the rate increased to 5% in 1997.
- After becoming Prime Minister on June 9, 2010, Naoto Kan announced his intention to increase the consumption tax as part of tax reform. On July 11, the DPJ lost its majority in the upper house of the Diet.

# Politics of VAT

## Canadian GST

- Prime Minister Brian Mulroney proposed replacing Canada's manufacturer's sales tax with a GST in 1989
- Even though GST was a replacement tax—not a tax increase—it was highly visible and polling indicated 80% opposition.
- Mulroney had to resort to the “deadlock” clause in the Constitution to obtain passage.
- In 1993, the Tories suffered the worst defeat of any Canadian governing party, losing 149 of their 151 seats in Parliament.

## United States?

“Liberals think it's regressive and conservatives think it's a money machine. If they reverse positions, the VAT may happen.”

—Larry Summers (*NY Times*, Dec. 19, 1988)

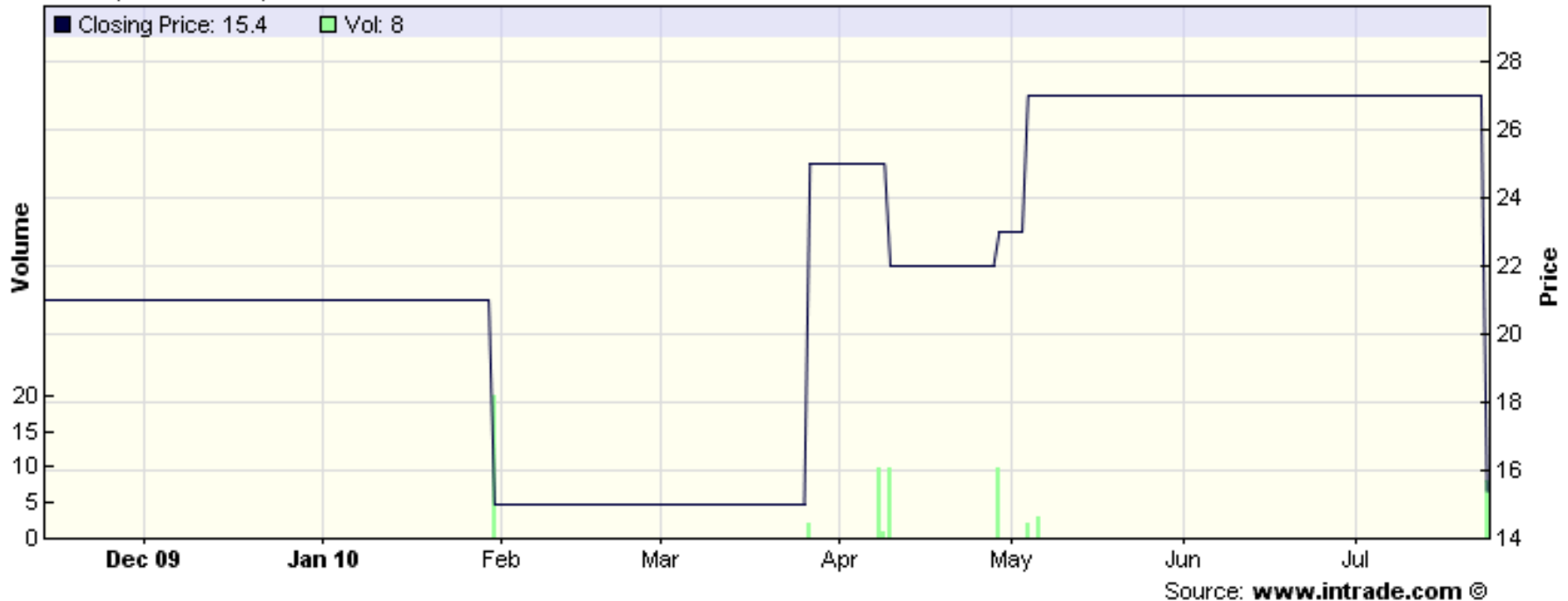
# Political Futures Market for VAT

## Intrade Futures Market (July 24, 2010)

Trading history for contract on:  
US to introduce federal Value Added, Goods and Service or Sales  
Tax before midnight ET 31 Dec 2011

USA.VAT/GST/SALES.DEC11

Nov 14, 2009 - Jul 24, 2010



Recent trading implies a 15% chance that a U.S. VAT will be adopted by 12/31/2011

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