

Economics 210c/236a
Fall 2011

Christina Romer
David Romer

LECTURE 5

The Effects of Fiscal Changes: Taxes and Fiscal Consolidations



September 28, 2011

I. ROMER AND ROMER, “THE MACROECONOMIC EFFECTS OF TAX CHANGES: ESTIMATES BASED ON A NEW MEASURE OF FISCAL SHOCKS”

Background: Blanchard and Perotti

- A VAR with Y , G , cyclically-adjusted T .
- G and cyclically-adjusted T assumed not to respond to Y within the quarter.
- More precisely: Shocks to G and cyclically-adjusted T assumed uncorrelated with present and future shocks to Y .

Framework

$$(1) \quad \Delta Y_t = \alpha + \beta \Delta T_t + \varepsilon_t,$$

where Y is real GDP and ΔT is a measure of legislated tax changes.

$$(2) \quad \varepsilon_t = \sum_{i=1}^K \varepsilon_t^i.$$

$$(3) \quad \Delta T_t = \sum_{i=1}^K b_t^i \varepsilon_t^i + \sum_{j=1}^L \omega_t^j,$$

where the ω 's are additional influences on tax policy.

Framework (cont.)

These imply

$$(4) \quad \Delta Y_t = \alpha + \beta \left[\sum_{i=1}^K b_t^i \varepsilon_t^i + \sum_{j=1}^L \omega_t^j \right] + \varepsilon_t.$$

We can rewrite this as:

$$(5) \quad \Delta Y_t = \alpha + \beta \sum_{j=1}^L \omega_t^j + v_t,$$

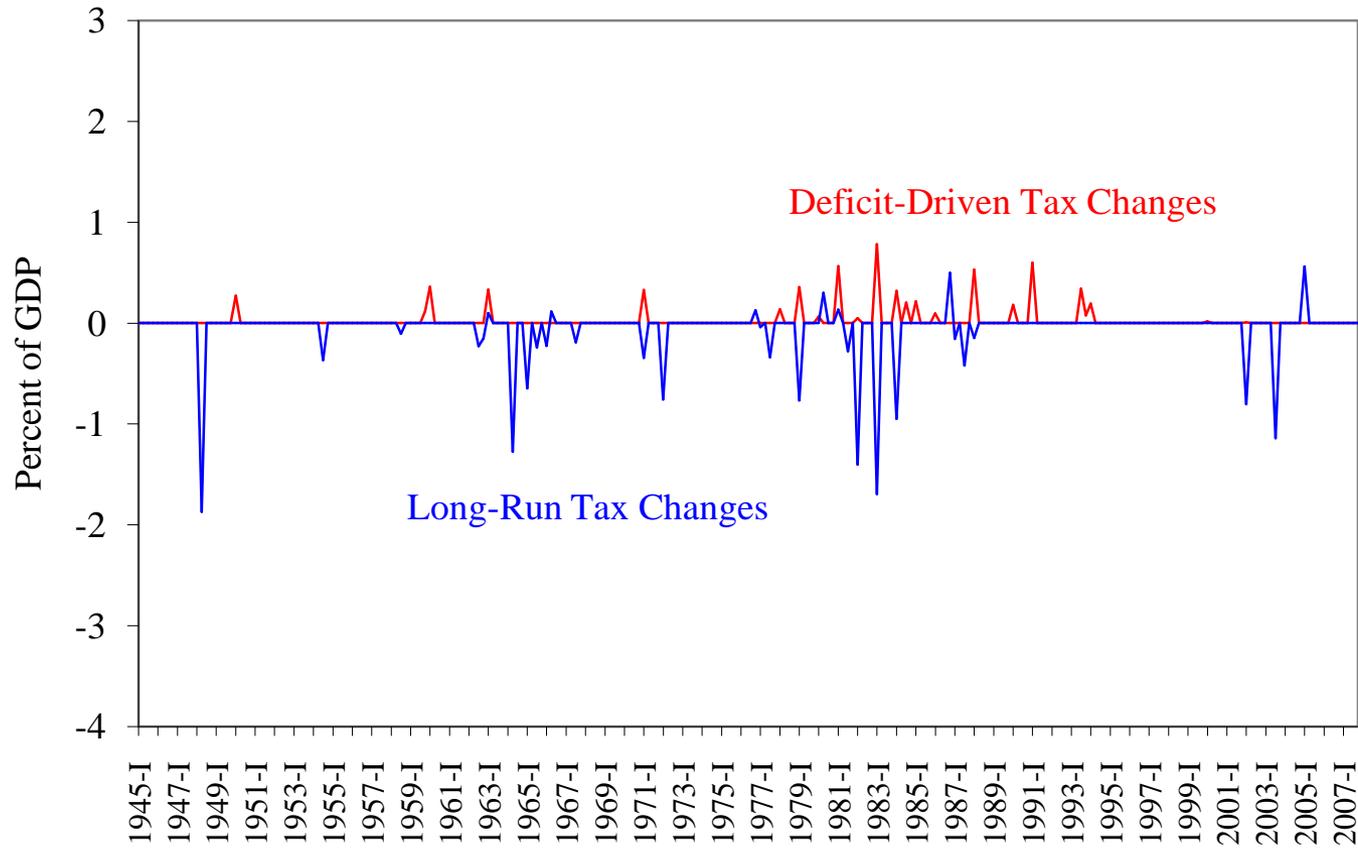
where $v_t = \sum_{i=1}^K (1 + \beta b_t^i) \varepsilon_t^i$.

Classifying Motivation

- Endogenous
 - Countercyclical
 - Spending-driven
- Exogenous
 - Deficit-driven
 - For long-run growth

Figure 1
New Measure of Fiscal Shocks

b. Long-Run and Deficit-Driven Tax Changes

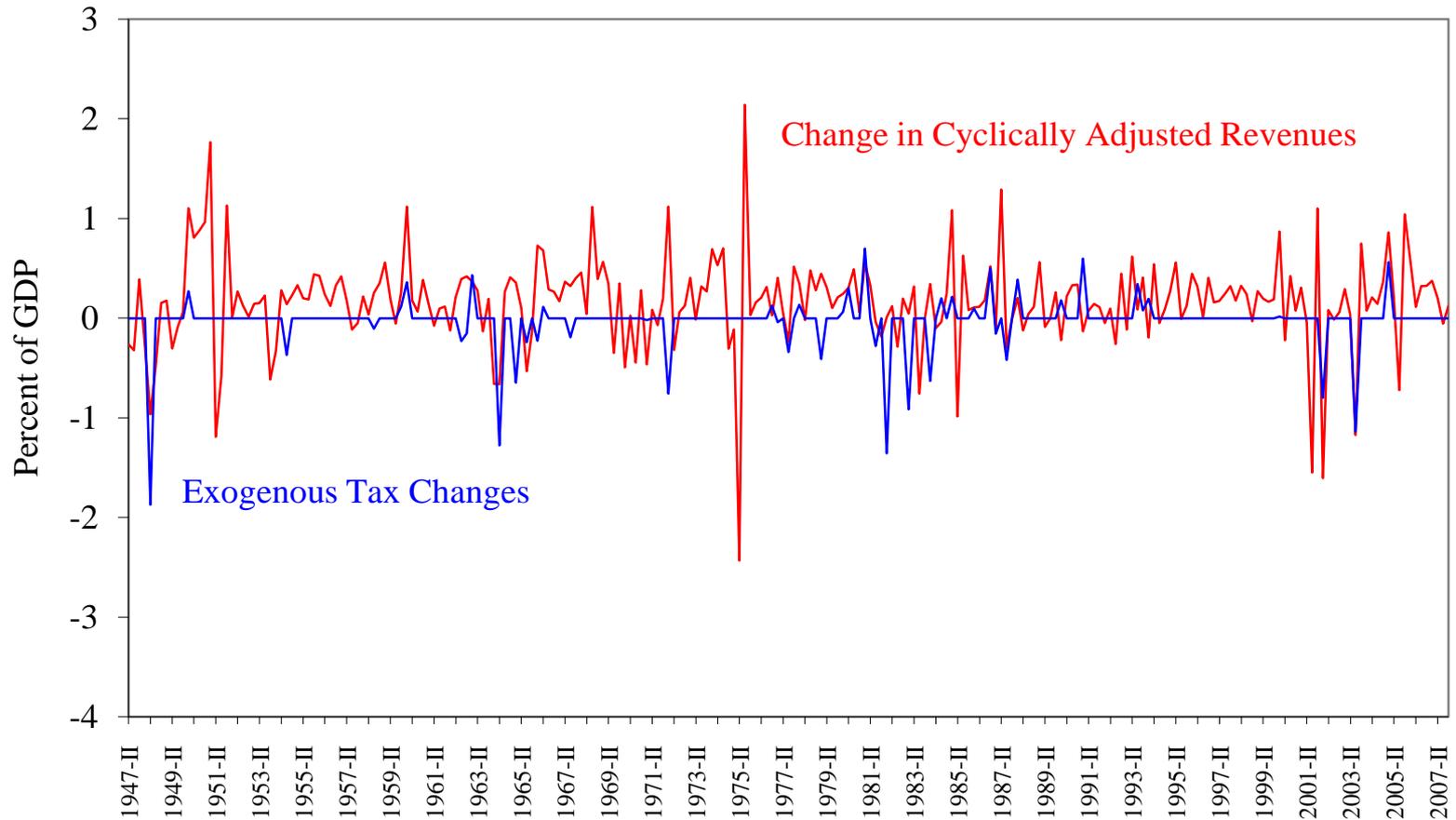


From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 3

Comparing New Measure of Tax Changes and Cyclically Adjusted Revenues

a. Exogenous Tax Changes and the Change in Cyclically Adjusted Revenues

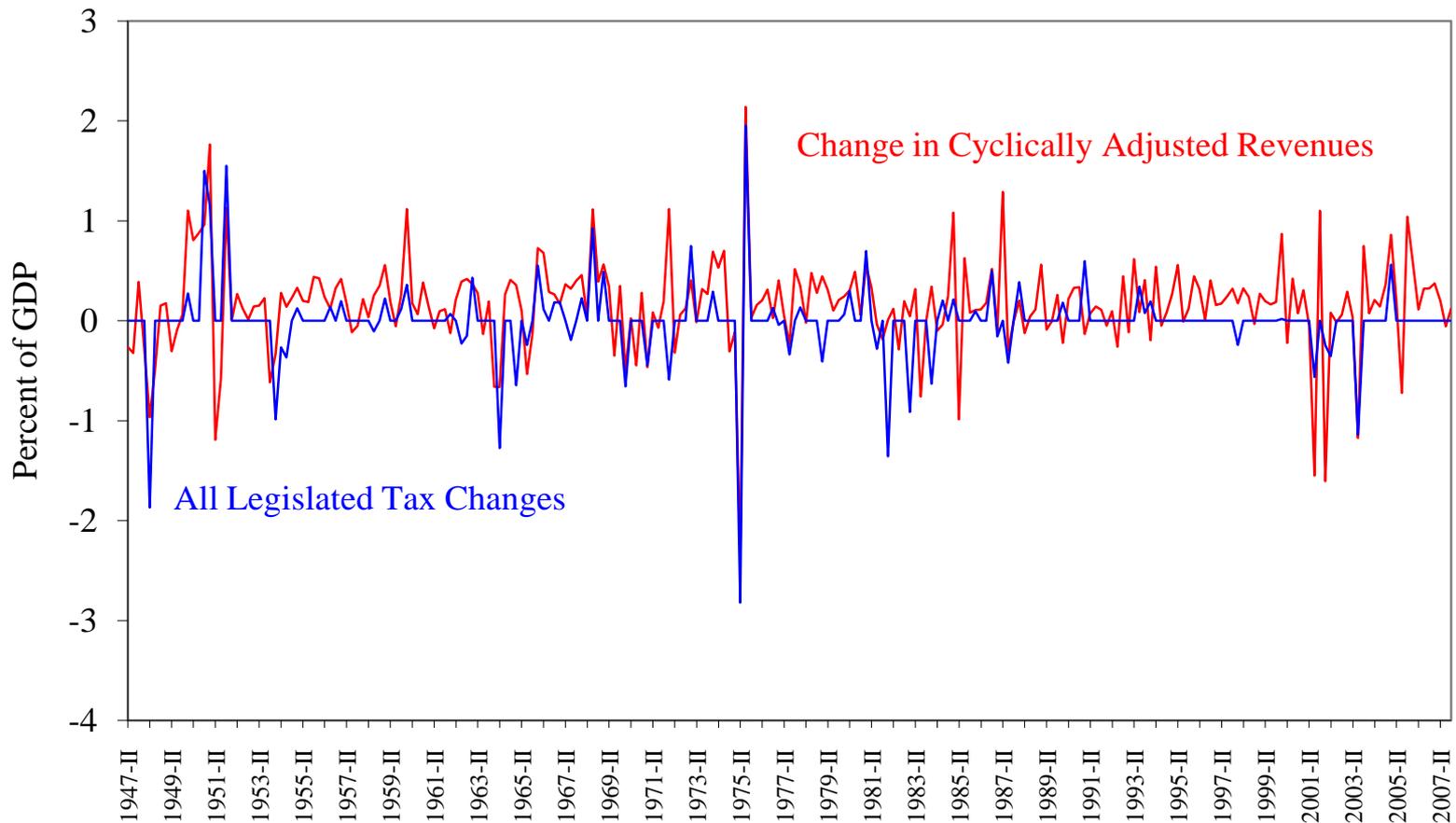


From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 3

Comparing New Measure of Tax Changes and Cyclically Adjusted Revenues

b. All Legislated Tax Changes and the Change in Cyclically Adjusted Revenues



From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Specifications

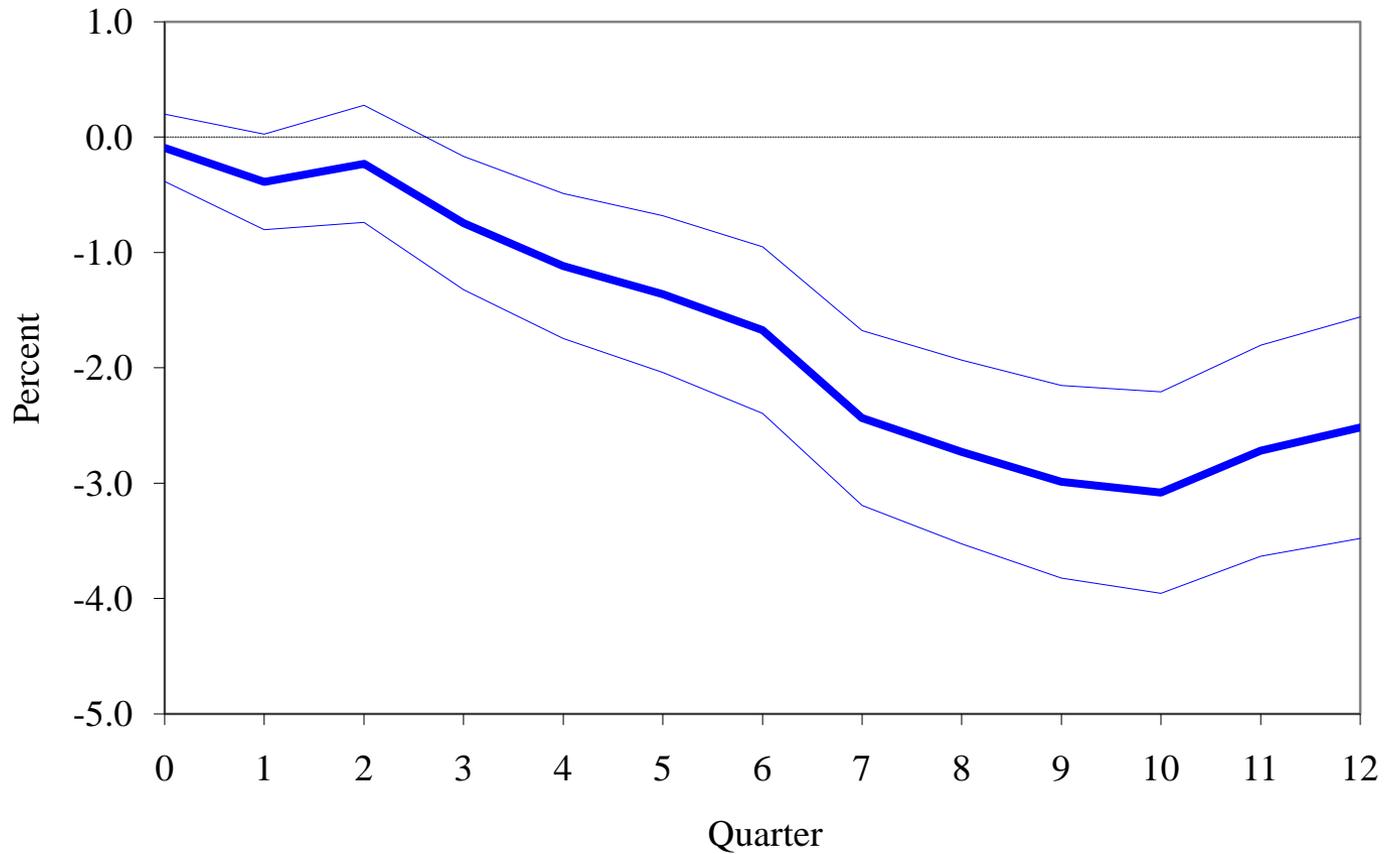
1.
$$\Delta Y_t = a + \sum_{i=0}^M b_i \Delta T_{t-i} + e_t.$$

2.
$$\Delta Y_t = a + \sum_{i=0}^M b_i \Delta T_{t-i} + \sum_{j=1}^N c_j \Delta Y_{t-j} + e_t.$$

3. A two-variable VAR with tax changes and GDP, 12 lags, tax variable ordered first.

Figure 4

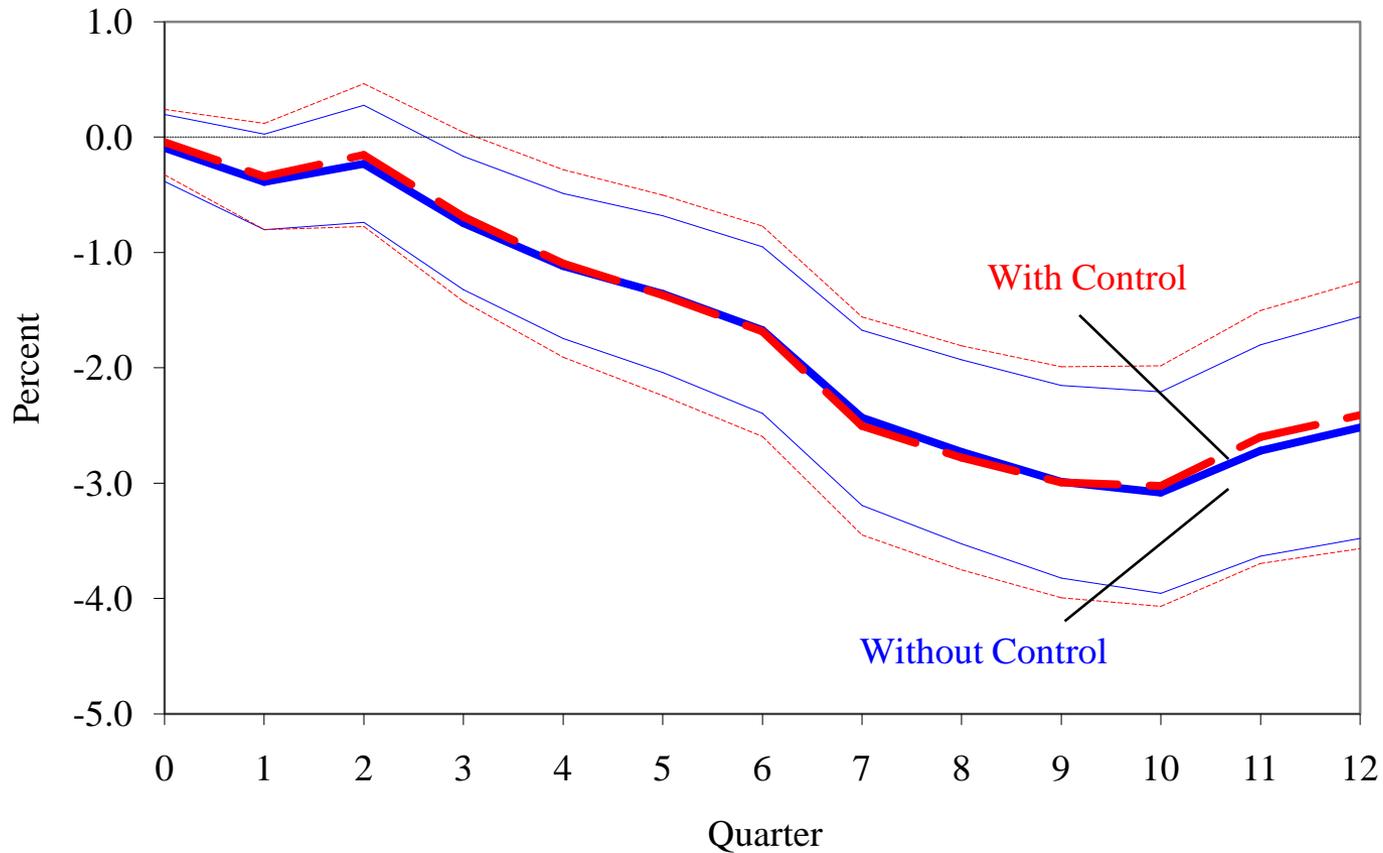
Estimated Impact of an Exogenous Tax Increase of 1% of GDP on GDP
(Single Equation, No Controls)



From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 5

Estimated Impact of a Tax Increase of 1% of GDP on GDP
(Single Equation, Controlling for Lagged GDP Growth)

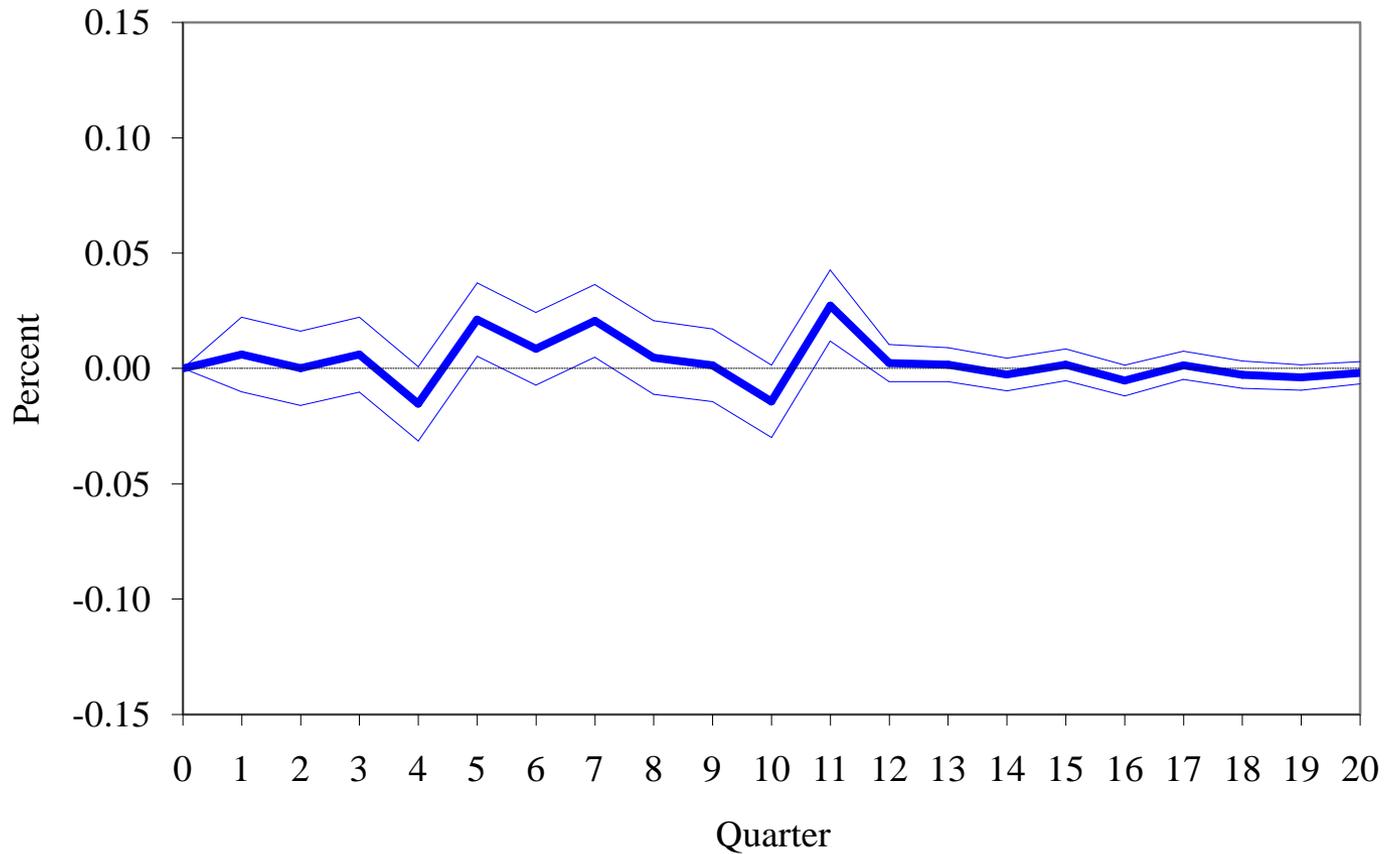


From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 6

Results of a Two-Variable VAR for Exogenous Tax Changes and Real GDP

b. Response of Tax to GDP

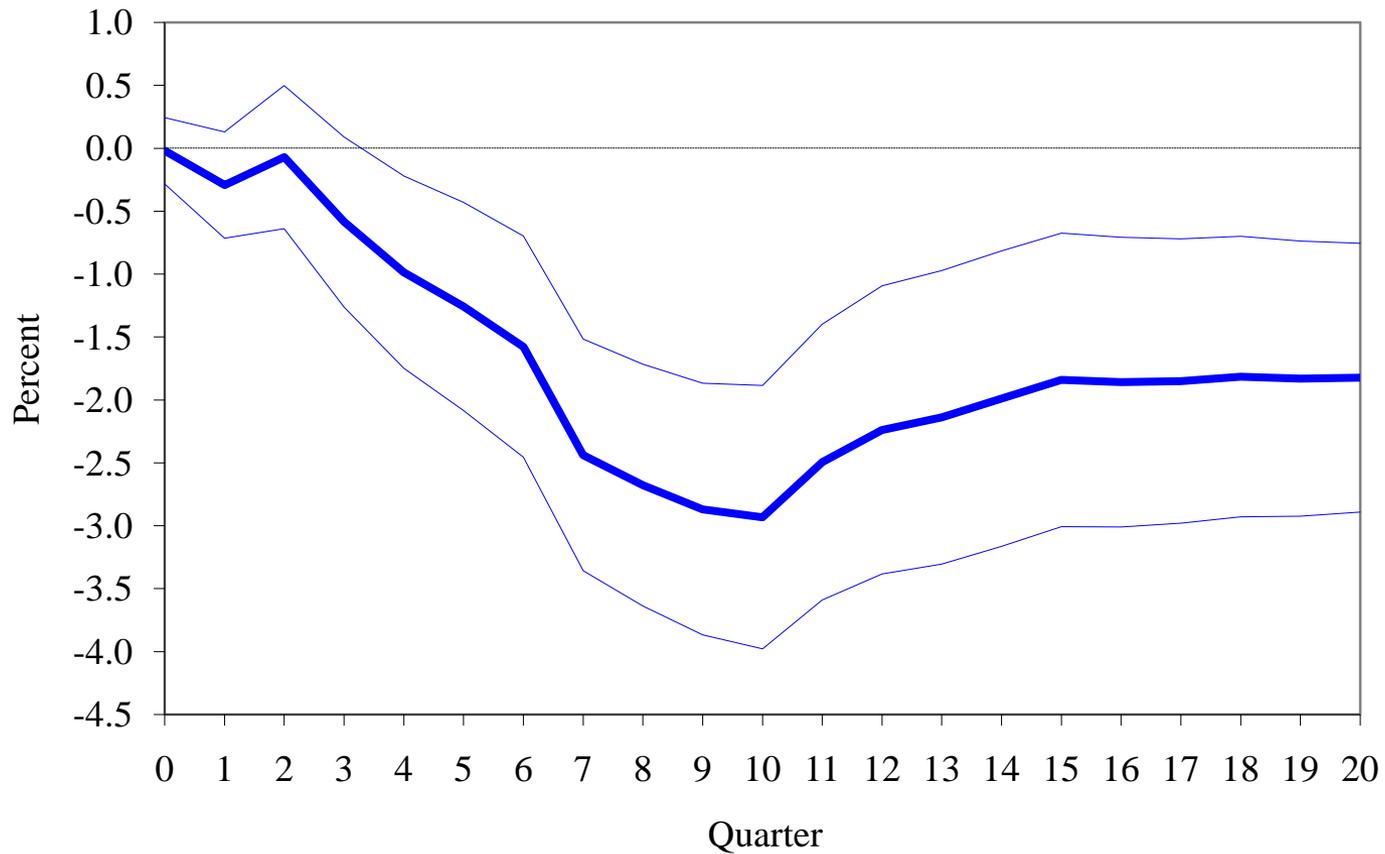


From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 6

Results of a Two-Variable VAR for Exogenous Tax Changes and Real GDP

c. Response of GDP to Tax

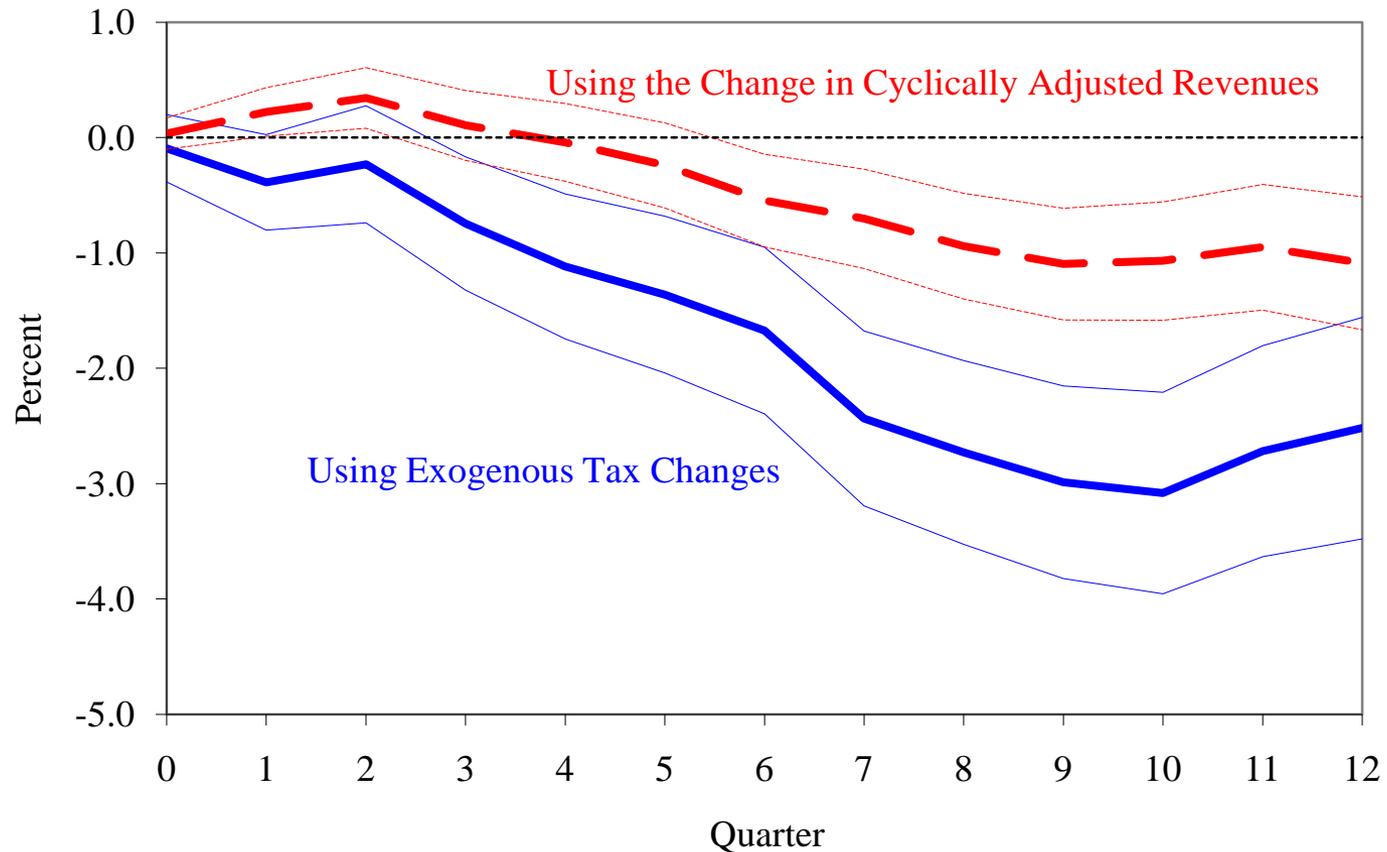


From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 7

Estimated Impact of a Tax Increase of 1% of GDP on GDP
(Single Equation, No Controls)

a. Using the Change in Cyclically Adjusted Revenues

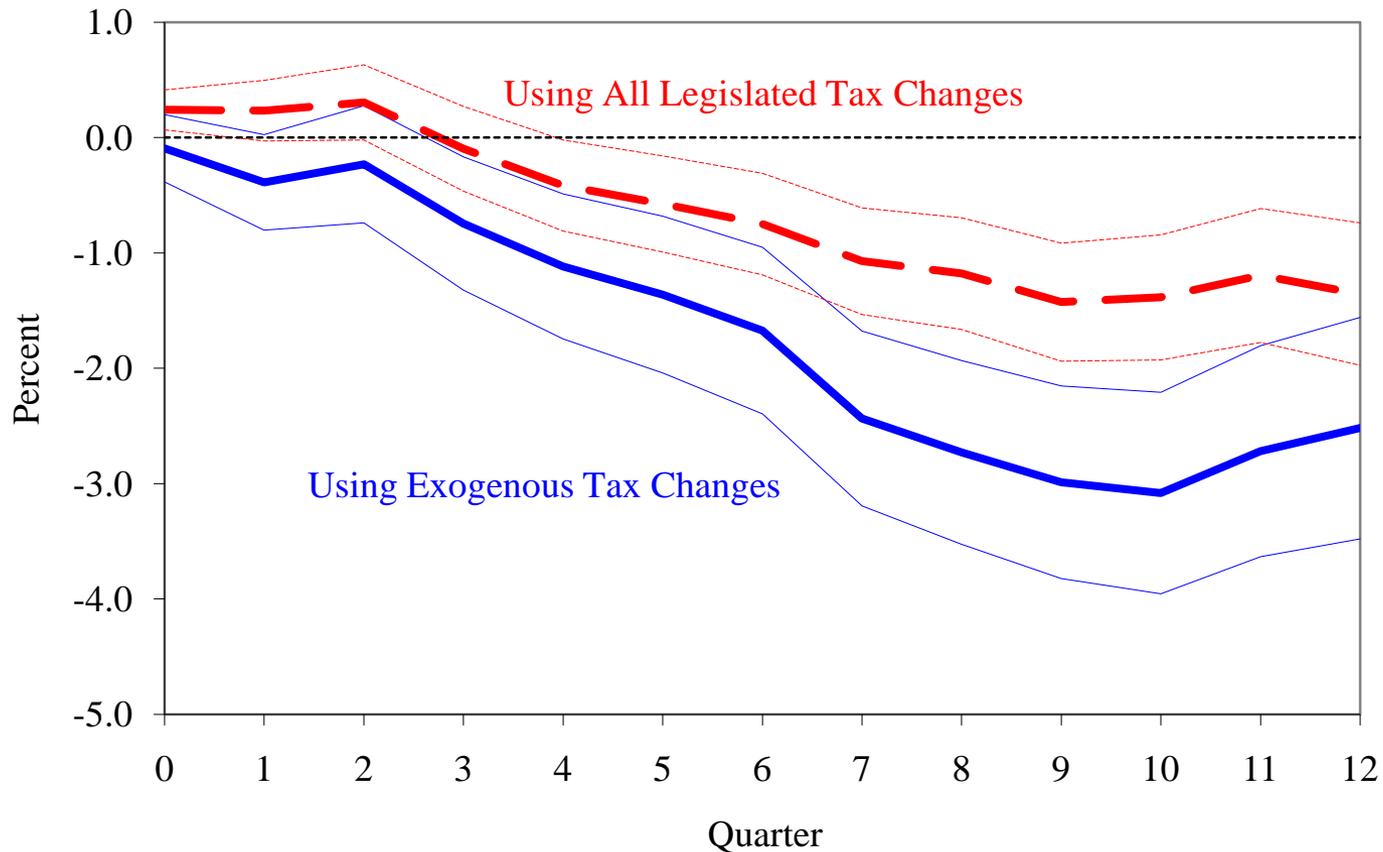


From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 7

Estimated Impact of a Tax Increase of 1% of GDP on GDP
(Single Equation, No Controls)

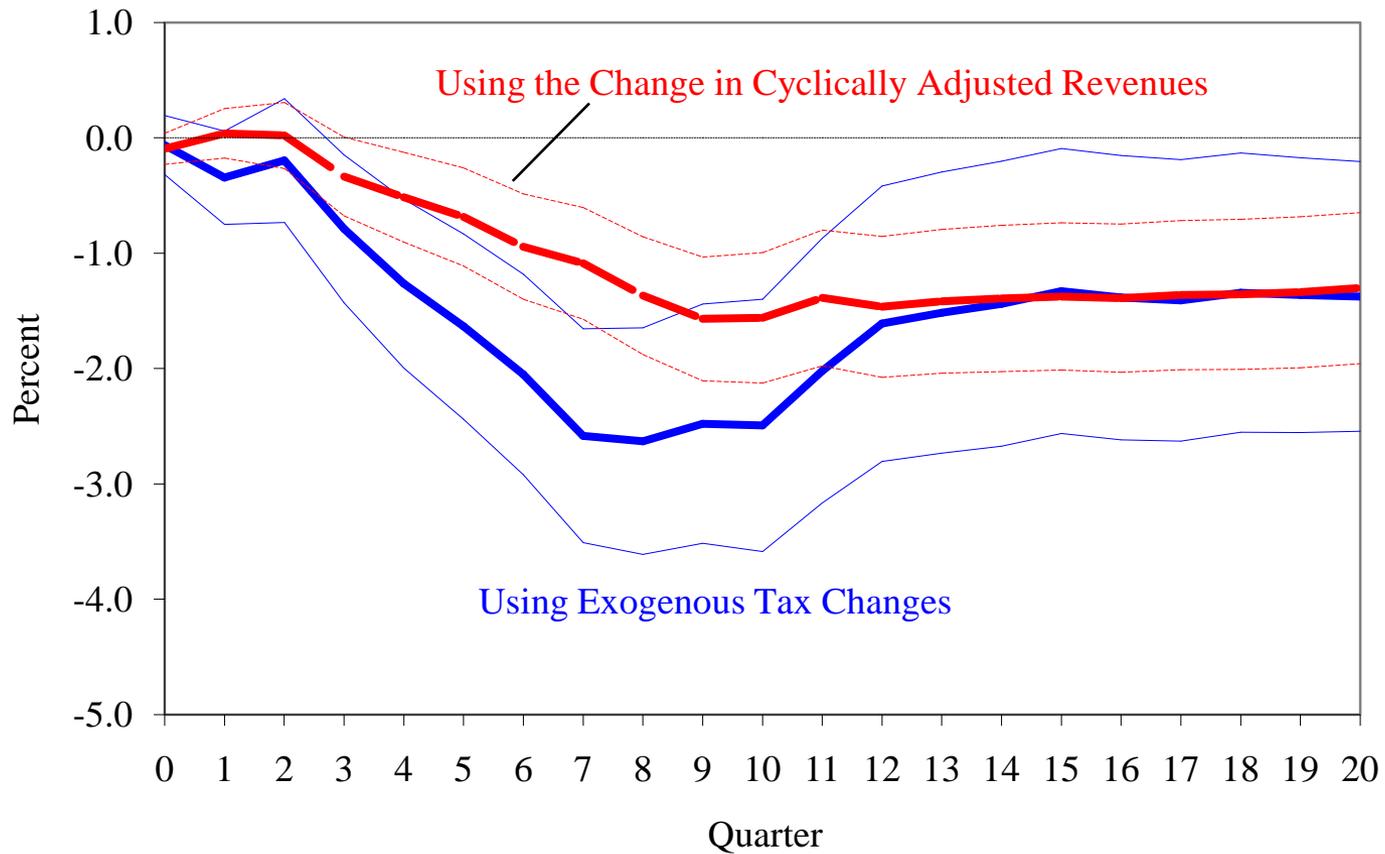
b. Using All Legislated Tax Changes



From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 10

Estimated Impact of a Tax Increase of 1% of GDP on GDP, Excluding Korea
(Two-Variable VAR)



From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

TABLE 1—EFFECT OF INCLUDING ADDITIONAL VARIABLES IN THE VAR

Third variable in VAR (sample period)	Maximum contractionary impact on GDP of a tax increase of 1% of GDP (standard error)	Maximum impact in VAR without third variable (standard error)	<i>p</i> -value for exclusion of third variable in tax equation
Government spending (1950:I–2007:IV)	–2.75% (1.07)	–2.93% (1.05)	1.000
Relative price of oil (1950:I–2007:IV)	–2.54 (1.07)	–2.93 (1.05)	0.896
Romer and Romer dummy (1950:I–2007:IV)	–2.32 (0.96)	–2.93 (1.05)	0.792
Federal funds rate (1953:I–2007:IV)	–2.18 (0.80)	–2.76 (1.52)	0.023
Romer and Romer shock (1972:I–1996:IV)	–3.61 (0.90)	–2.72 (1.42)	0.004
Republican president dummy (1950:I–2007:IV)	–3.07 (1.00)	–2.93 (1.05)	0.008

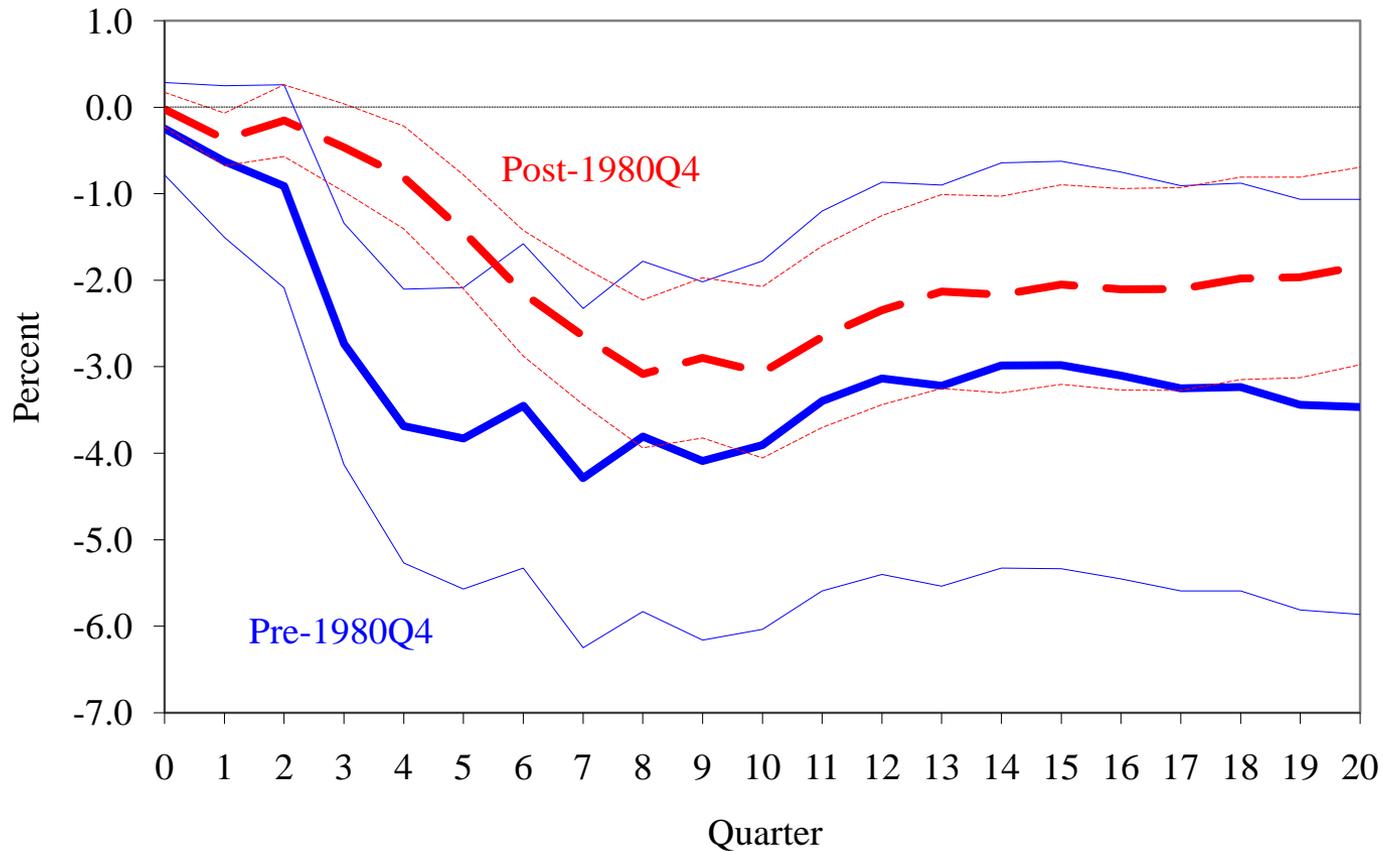
Notes: All VARs include the new measure of exogenous tax changes and log real GDP. See text for the description and data source for the various third variables. The VARs include 12 lags.

From: Romer and Romer, “The Macroeconomic Effects of Tax Changes”

Figure 13

Changes in the Impact of an Exogenous Tax Increase of 1% of GDP over Time

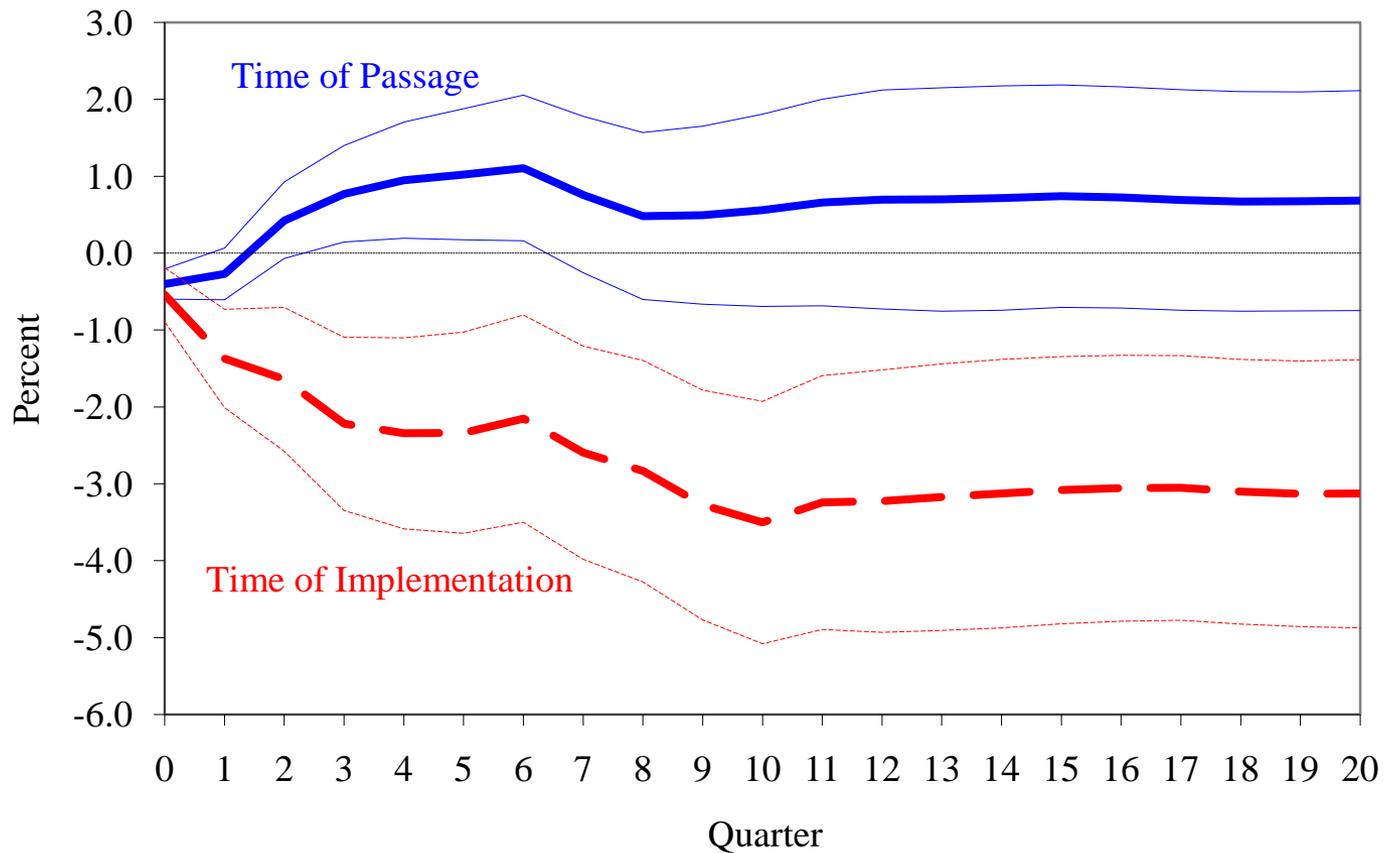
Panel A. Response of output (2-variable VAR)



From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

Figure 12

Estimated Impact of a Tax Increase of 1% of GDP on GDP
Including Tax Changes Dated Both at Time of Implementation and at Time of Passage
(Single Equation, Controlling for Lagged GDP Growth)

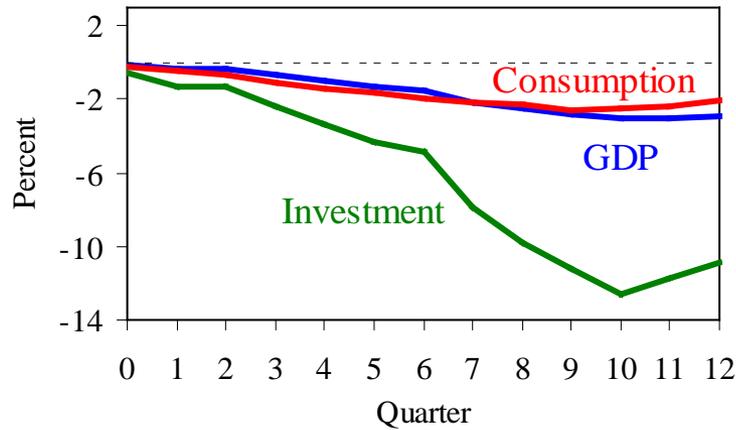


From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

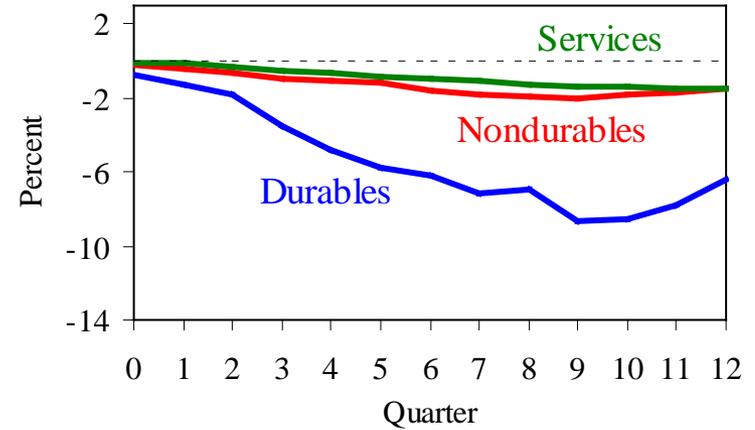
Figure 14

Estimated Impact of Exogenous Tax Increase of 1% of GDP on Components of GDP

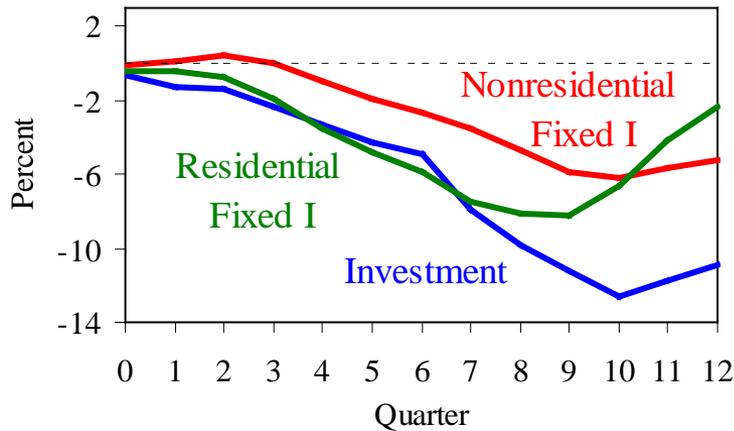
a. GDP, Consumption, and Investment



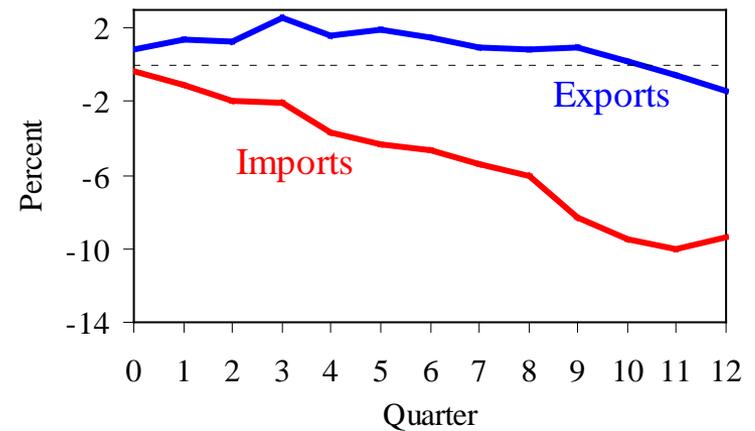
b. Consumption Expenditures on Durables, Nondurables, and Services



c. Investment, Nonresidential and Residential Fixed Investment



d. Exports and Imports



From: Romer and Romer, "The Macroeconomic Effects of Tax Changes"

II. BARRO AND REDLICK, “MACROECONOMIC EFFECTS FROM GOVERNMENT PURCHASES AND TAXES”

Framework

$$(1) \quad \begin{aligned} (y_t - y_{t-1}) / y_{t-1} = & \beta_0 + \beta_1 \cdot (g_t - g_{t-1}) / y_{t-1} \\ & + \beta_2 \cdot (g_t^* - g_{t-1}^*) / y_{t-1} \\ & + \beta_3 \cdot (\tau_t - \tau_{t-1}) + \text{other variables.} \end{aligned}$$

y is real GDP, g is real government purchases, g* measures expected future real government purchases, and τ is the average marginal income tax rate.

How Do Barro and Redlick Address the
Possibility of Omitted Variable Bias?

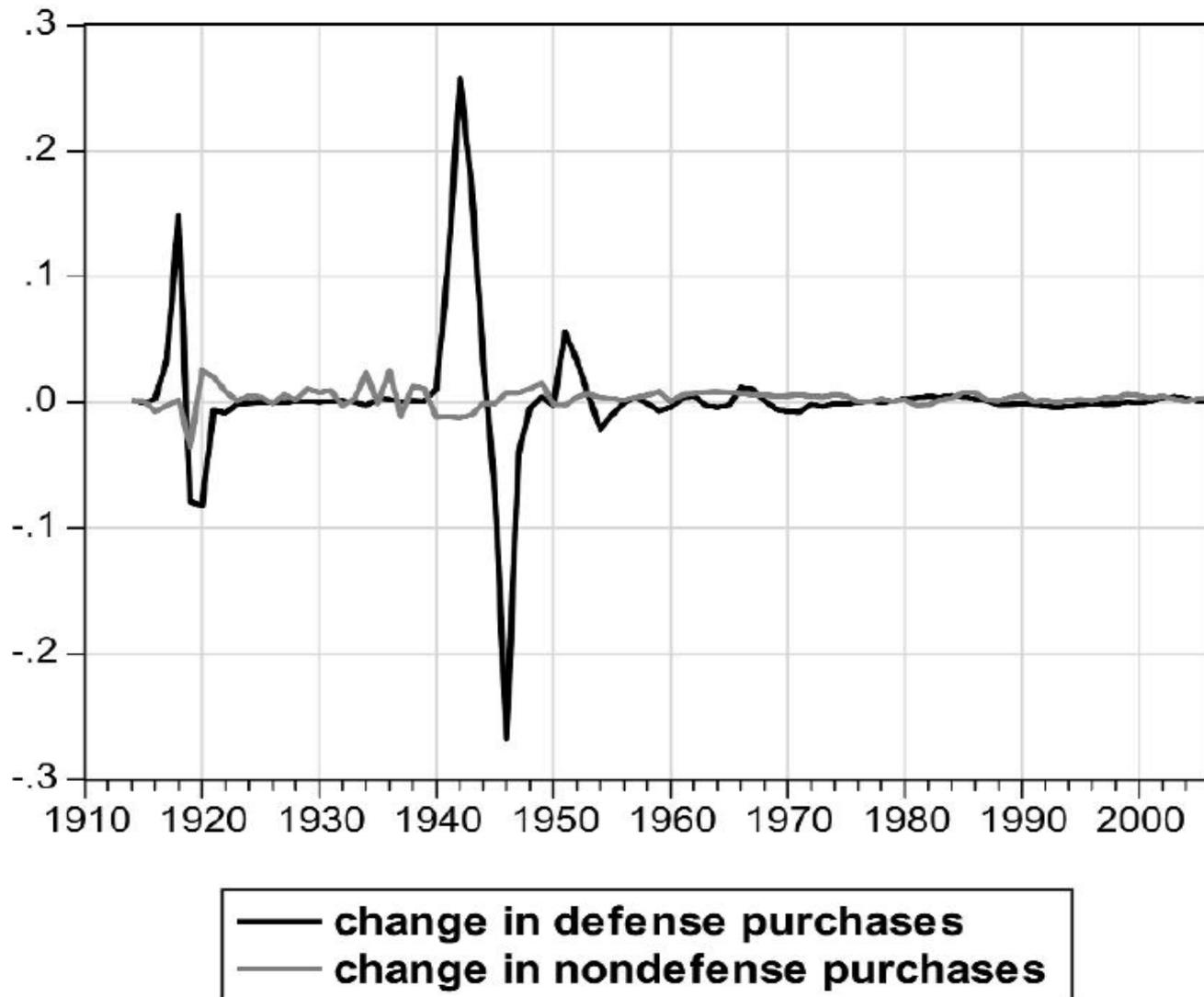


FIGURE I
 Changes in Defense and Nondefense Government Purchases, 1914–2006
 (expressed as ratios to the previous year's GDP)

From: Barro and Redlick, "Macroeconomic Effects from Government Purchases and Taxes"

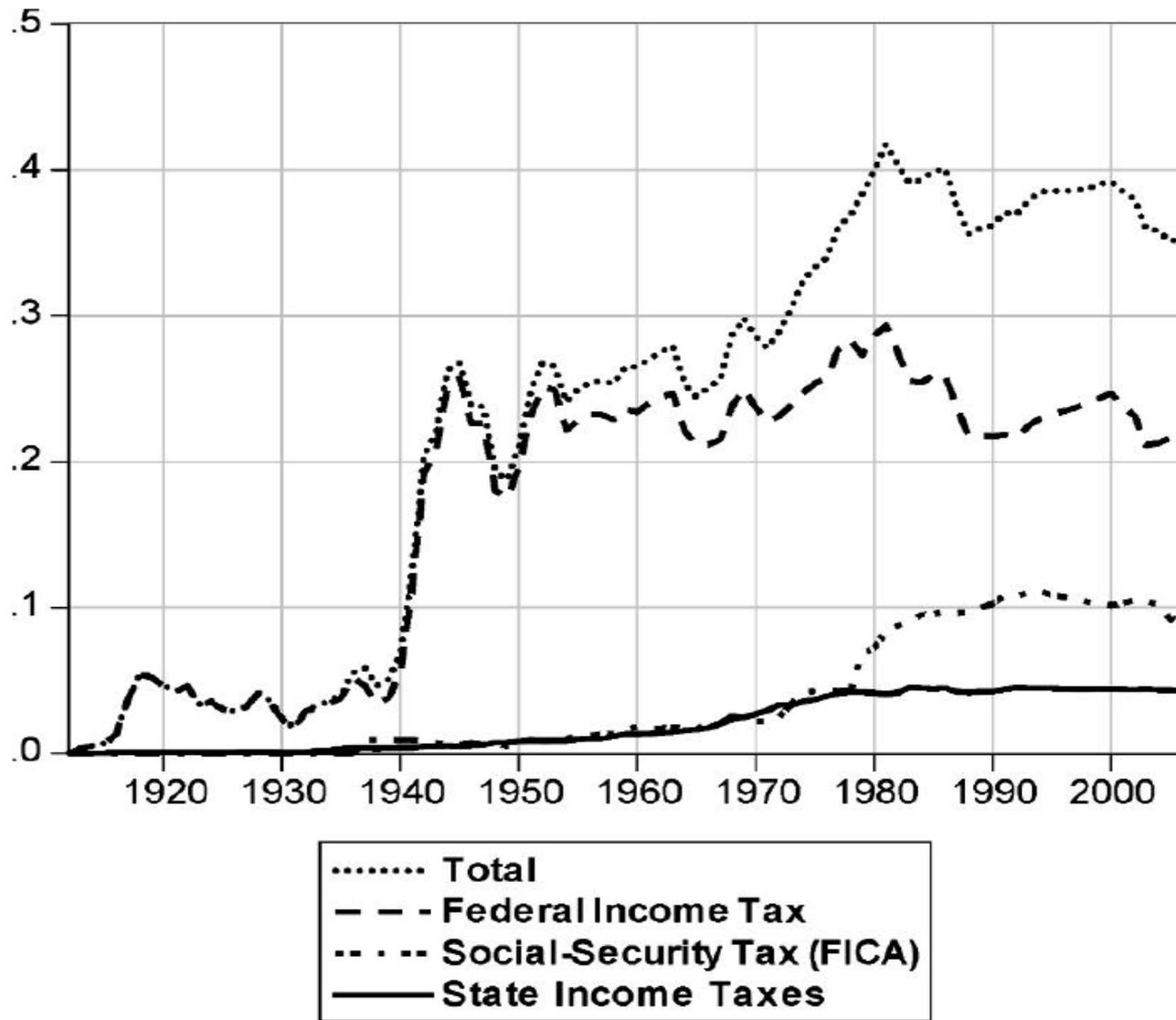


FIGURE III
Average Marginal Income Tax Rates, 1912–2006

From: Barro and Redlick, “Macroeconomic Effects from Government Purchases and Taxes”

TABLE II
Equations for GDP Growth, Various Samples

	(1)	(2)	(3)	(4)	(5)	(6)
Starting date	1950	1939	1930	1930 (w/o 1949)	1917	1954
$\Delta g: \text{defense}$	0.68* (0.27)	0.44** (0.06)	0.46** (0.08)	0.48** (0.08)	0.47** (0.08)	0.98 (0.65)
$\Delta g: \text{defense}$ (-1)	0.01 (0.28)	0.20** (0.06)	0.21* (0.09)	0.25** (0.08)	0.16 (0.08)	-0.54 (0.56)
$\Delta g^*: \text{defense}$ <i>news</i>	0.026 (0.016)	0.039** (0.011)	0.034* (0.015)	0.034* (0.014)	0.034* (0.017)	-0.120 (0.112)
$U(-1)$	0.50** (0.17)	0.58** (0.14)	0.61** (0.10)	0.58** (0.10)	0.47** (0.10)	0.51** (0.18)
$\Delta \tau(-1)$	-0.54** (0.21)	-0.16 (0.16)	-0.26 (0.22)	-0.52* (0.23)	-0.19 (0.25)	-0.48* (0.22)
Yield spread squared	-43.9* (20.7)	-37.8 (22.0)	-101.5** (12.8)	-103.4** (12.4)	-73.6** (12.2)	-43.1* (21.8)
p -value, defense variables	0.030	0.000	0.000	0.000	0.000	0.47
R^2	0.48	0.82	0.75	0.77	0.66	0.45
σ	0.017	0.019	0.027	0.026	0.030	0.018

From: Barro and Redlick, "Macroeconomic Effects from Government Purchases and Taxes"

TABLE VII
More Results on Taxes, 1950–2006

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Δg : defense	0.67*	0.53	0.66*	0.61	0.53	0.71*	0.72*	0.49
	(0.28)	(0.27)	(0.28)	(0.35)	(0.28)	(0.30)	(0.29)	(0.31)
Δg : defense (-1)	0.01	-0.23	-0.05	0.05	-0.23	-0.21	-0.03	0.10
	(0.28)	(0.28)	(0.29)	(0.32)	(0.28)	(0.28)	(0.29)	(0.26)
Δg^* : defense news	0.025	0.029	0.027	0.023	0.029	0.016	0.021	0.015
	(0.015)	(0.016)	(0.016)	(0.018)	(0.016)	(0.017)	(0.017)	(0.018)
$U(-1)$	0.51**	0.51**	0.48**	0.50**	0.51**	0.49**	0.49**	0.43*
	(0.17)	(0.18)	(0.17)	(0.17)	(0.18)	(0.18)	(0.18)	(0.17)
$\Delta\tau(-1)$	-0.53**	—	-0.43	-0.58*	—	—	-0.45	-0.52**
	(0.21)		(0.24)	(0.28)			(0.24)	(0.18)
$\Delta\tau$	—	—	—	0.12	—	—	—	—
				(0.47)				
Romers: exogenous [$\Delta tax/Y(-1)$] (-1)	—	-1.08	-0.56	—	-1.08	—	—	—
		(0.57)	(0.62)		(0.58)			
Romers: exogenous $\Delta tax/Y(-1)$	—	—	—	—	-0.03	—	—	—
					(0.55)			
[$\Delta(fed\ rev.)/Y(-1)$] (-1)	—	—	—	—	—	-0.46	-0.17	—
						(0.27)	(0.30)	
$\Delta(fed\ rev.)/Y(-1)$	—	—	—	—	—	—	—	0.46
								(0.53)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Yield spread squared	-47.2*	-43.4*	-41.8*	-44.4*	-42.9	-64.9**	-52.5*	-37.4
	(20.2)	(21.7)	(21.2)	(21.9)	(21.9)	(20.7)	(21.3)	(21.0)
p -value: τ	0.015	—	0.074	0.039	—	—	0.070	0.006
p -value: Romers	—	0.063	0.37	—	0.17	—	—	—
p -value: fed. revenue	—	—	—	—	—	0.091	0.56	0.39
p -value: all tax vars.	0.015	0.063	0.029	0.039	0.17	0.091	0.037	0.010
R^2	0.49	0.46	0.49	0.50	0.46	0.45	0.49	0.63
σ	0.017	0.018	0.018	0.017	0.018	0.018	0.018	0.015

From: Barro and Redlick, “Macroeconomic Effects from Government Purchases and Taxes”

III. OVERVIEW OF THE IMPACT OF FISCAL CONSOLIDATIONS

Fiscal consolidation

- Deliberate measures to get the government budget deficit down.
- Other terms: fiscal reform, austerity program, deficit reduction, fiscal contraction.
- In a standard, Keynesian model, tax increases and government spending reductions lower GDP and raise unemployment.

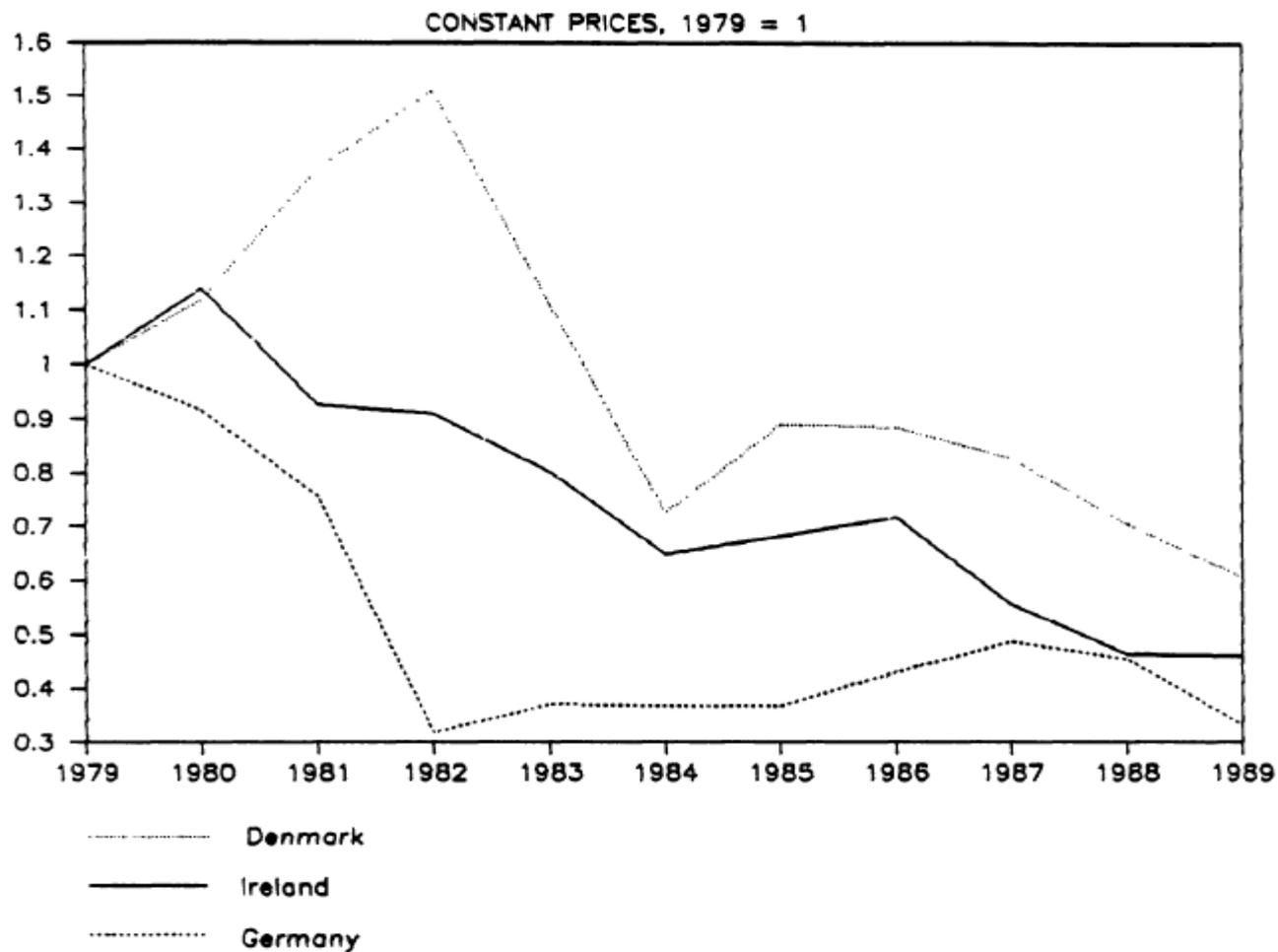
How could fiscal contractions be expansionary?

- Wealth effect: A decrease in G makes people expect more decreases and so lower future taxes, wealth rises and consumption could rise.
- Confidence effect: If budget problems are severe, dealing with them may prevent having to take more extreme measures later on. Thus, consolidation can have positive confidence effects on C and I .
- Interest rate effect: Fiscal consolidations may lower risk premium and so lower long rates. This may raise both I and C .

How could fiscal contractions be expansionary?

- Omitted variable bias: Budget problems are a symptom of dysfunctional government. Fiscal consolidation is a sign that the government is functioning, and so may be correlated with other measures that are good for growth (i.e. relationship could be present but not causal).

Figure 3 PDV OF PREDICTED PUBLIC SPENDING



SOURCE: OECD, National Income Accounts

From: Giavazzi and Pagano, "Can Severe Fiscal Contractions be Expansionary?"

Table 2 KEY STATISTICS ON THE DANISH AND IRISH STABILIZATIONS^a
(percentage values per year)

	<i>Denmark</i>		<i>Ireland</i>		
	1979–82	1983–86	1979–81	1982–84	1987–89
<i>Government</i>					
Average growth rate of:					
Public consumption	4.0	0.9	4.0	0.7	-3.7
Public investment	-9.4	-1.1	6.5	-6.0	-13.3
Average change in full-empl. net taxes as % of GDP	-.03	1.3	-0.5	4.1	0.4
Average change in full-empl. deficit as % of GDP	1.8	-1.8	1.3	-1.8	-1.9
Public debt as % of GDP	10.2	0.0	4.0	6.8	-0.8

From: Giavazzi and Pagano, "Can Severe Fiscal Contractions be Expansionary?"

Alesina and Ardagna's Measure of Fiscal Consolidations

- A year when the cyclically adjusted primary balance improves by at least 1.5% of GDP.
- Primary balance is the budget position net of interest payments.
- Cyclically-adjust the budget data using simple regression against the unemployment rate.
(CBO and OECD uses more detailed methods.)

Table 9: GDP growth during and in the aftermath of a fiscal adjustment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	GDP growth	GDP growth	GDP growth	GDP growth	Avg. GDP gr.	Avg. GDP gr.	Avg. GDP gr.	Avg. GDP g
GDP growth (-1)	0.296*** (2.99)	0.288*** (3.12)	0.269*** (3.04)	0.30*** (3.29)	0.198** (2.41)	0.197** (2.56)	0.182** (2.48)	0.202*** (2.66)
GDP growth (-2)	-0.0013 (-0.01)	0.08 (0.98)	0.123 (1.50)	0.07 (0.86)	-0.059 (-0.80)	0.01 (0.14)	0.045 (0.66)	0.007 (0.10)
G7 GDP growth (-1)	0.116 (0.76)	0.038 (0.27)	0.018 (0.13)	0.025 (0.18)	0.005 (0.04)	-0.068 (-0.58)	-0.08 (-0.72)	-0.07 (-0.63)
Debt (-1)	-0.011* (-1.84)	-0.006 (-1.11)	-0.007 (-1.33)	-0.009 (-1.54)	-0.008 (-1.42)	-0.006 (-1.05)	-0.006 (-1.22)	-0.006 (-1.20)
Δ Curr. G		-0.433** (-2.55)				-0.296** (-2.10)		
Δ Gov. Inv		0.082 (0.60)				0.046 (0.41)		
Δ Tax		-0.22 (-1.09)				-0.26 (-1.56)		
Δ Pr. Deficit	-0.044 (-0.33)		-0.023 (-0.19)	0.016 (0.13)	-0.027 (-0.24)		0.006 (0.06)	0.024 (0.23)
Δ Curr. G/ Δ Pr. Deficit			0.017*** (4.70)				0.015*** (4.81)	
Δ Gov. Inv/ Δ Pr. Deficit			0.0013 (0.28)				0.004 (0.96)	
Δ Curr. G + Δ Tax				0.34*** (3.80)				0.284*** (3.84)
Constant	0.027*** (3.85)	0.024*** (3.44)	0.019*** (2.97)	0.027*** (4.23)	0.029*** (4.90)	0.029*** (4.87)	0.024*** (4.28)	0.03*** (5.41)
Observations	88	88	88	88	83	83	83	83
R-squared	0.22	0.35	0.40	0.34	0.12	0.27	0.34	0.27

Notes: OLS regressions. Dependent variables: real GDP growth rate during the fiscal adjustment in columns 1-4; average real GDP growth rate during the fiscal adjustment and in the following two years in columns 5-8. T-statistics in parenthesis. See the Data Appendix for the exact definition of the variables.

From: Alesina and Ardagna, "Large Changes in Fiscal Policy: Taxes Versus Spending"

IV. WEO: “WILL IT HURT? MACROECONOMIC EFFECTS OF FISCAL CONSOLIDATION”

Why might the standard approach tend to find that fiscal consolidations are expansionary?

- It may identify as consolidations times when revenues rose because of asset price booms (which are also times when output tends to rise).
- It may include consolidations that were followed by growth, but exclude consolidations that were followed by recessions (because the consolidations followed by recessions were reversed).
- It may identify as consolidations the end of one-time dramatic actions that may be associated with other factors aiding growth (such as the reunification of Germany).

Action-based approach (WEO)

- Identify fiscal consolidations from narrative sources.
- OECD, IMF, and country budget reports and documents.

Figure 3.1. Action-Based Fiscal Consolidation

There were about 170 cases of action-based fiscal consolidation over the past 30 years in advanced economies. Consolidation has often relied primarily on spending cuts. On average, action-based fiscal consolidation amounted to 1 percent of GDP a year, but the range was wide.

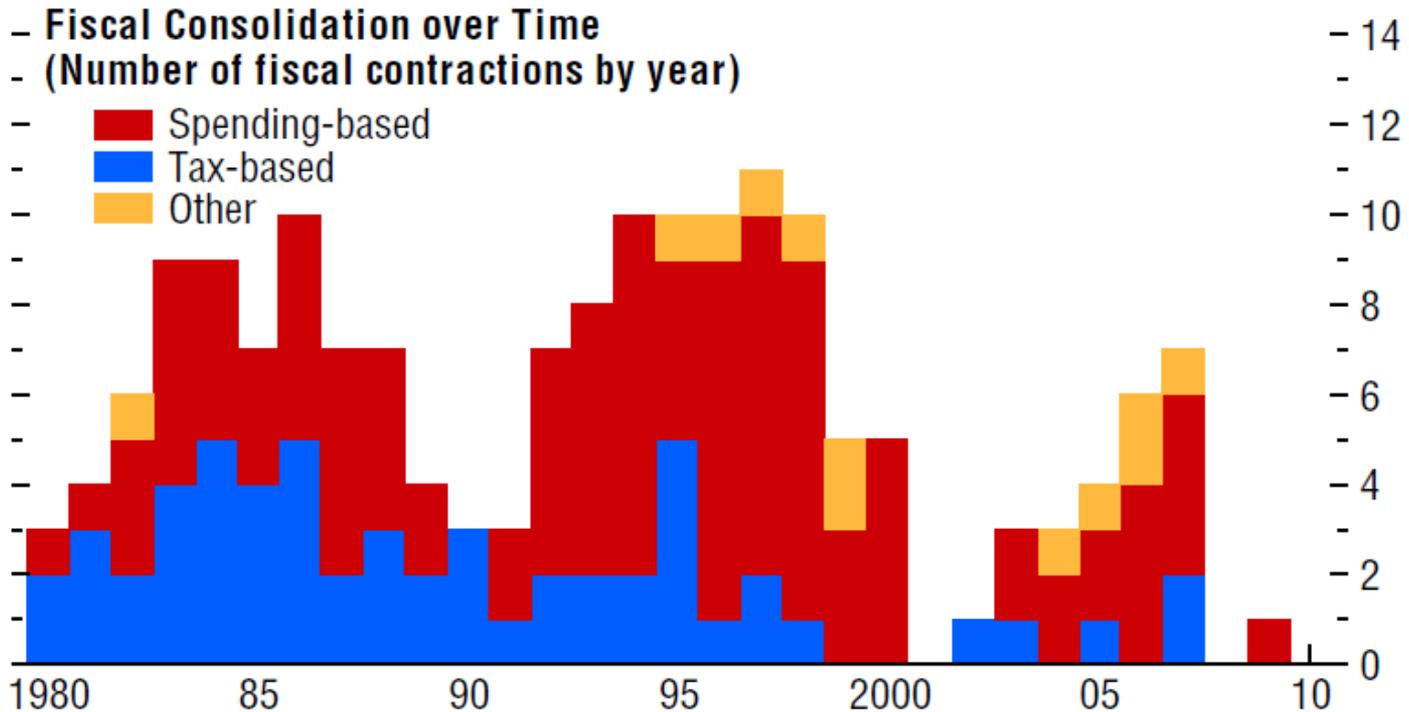


Table 3.4. Action-Based Approach: Episodes of Large Fiscal Contraction*(Greater than or equal to 1.5 percent of GDP)*

Economy	Fiscal Consolidation					
Australia	1986	1987				
Belgium	1982	1983	1987	1993		
Canada						
Denmark	1983	1984	1985	1986		
Finland	1992	1993	1994	1996	1997	1998
France						
Germany	1997					
Ireland	1982	1983	1987	1988	2009	
Italy	1992	1993	1995	1997		
Japan	1997					
Portugal	1983	2002				
Spain						
Sweden	1983	1993	1995	1996	1997	
United Kingdom	1981	1997				
United States	1991					

Source: IMF staff calculations.

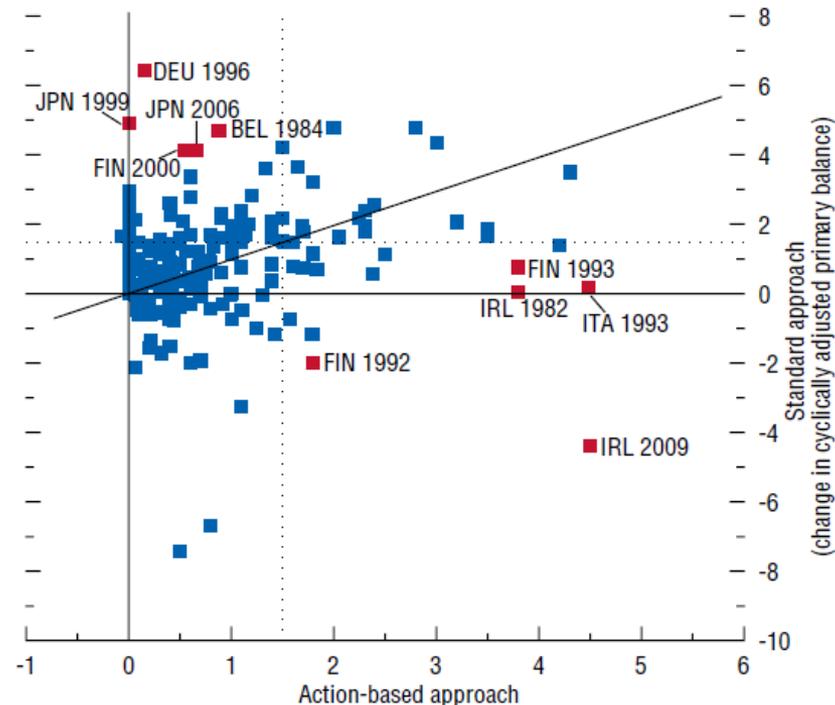
Table 3.5. Large Fiscal Contraction Episodes Identified by Alesina and Ardagna (2010)

Economy	Fiscal Consolidation								
Australia	1987	1988							
Belgium	1982	1984	1987	2006					
Canada	1981	1986	1987	1995	1996	1997			
Denmark	1983	1984	1985	1986	2005				
Finland	1981	1984	1988	1994	1996	1998	2000		
France	1996								
Germany	1996	2000							
Ireland	1984	1987	1988	1989	2000				
Italy	1980	1982	1990	1991	1992	1997	2007		
Japan	1984	1999	2001	2006					
Portugal	1982	1983	1986	1988	1992	1995	2002	2006	
Spain	1986	1987	1994	1996					
Sweden	1981	1983	1984	1986	1987	1994	1996	1997	2004
United Kingdom	1982	1988	1996	1997	1998	2000			
United States									

Source: Alesina and Ardagna (2010).

Figure 3.15. Size of Fiscal Consolidation: Action-Based Approach versus Standard Approach¹ (Percent of GDP)

There are numerous cases in which the standard approach and our action-based approach differ regarding the presence and size of fiscal consolidation. After analyzing in detail the 10 largest discrepancies between the two approaches, we conclude that our action-based approach more accurately identifies the size of fiscal consolidation.



Sources: Alesina and Ardagna (2010); and IMF staff calculations.

Note: The diagonal line reports the 45-degree line, where the action-based approach and standard approach agree. Dotted lines indicate episodes of consolidation equal to 1.5 percent of GDP. Highlighted observations indicate years for which the two approaches differ by more than 3 percent of GDP.

¹BEL: Belgium; DEU: Germany; FIN: Finland; IRL: Ireland; ITA: Italy; JPN: Japan.

Cases where the standard measure shows a larger consolidation:

- Germany (1996)
- Japan (1999)
- Finland (2000)
- Japan (2006)
- Belgium (1984)

Cases where the standard measure shows a larger consolidation:

- Germany (1996) Capital transfer
- Japan (1999) Capital transfer
- Finland (2000) Asset price boom
- Japan (2006) Government asset operations
- Belgium (1984) Capital transfer

Cases where the standard measure shows a smaller consolidation:

- Ireland (2009)
- Italy (1993)
- Finland (1992, 1993)
- Ireland (1982)

Cases where the standard measure shows a smaller consolidation:

- Ireland (2009) Asset price collapse
- Italy (1993) Fiscal adjustment inadequate for particularly severe recession.
- Finland (1992, 1993) Banking crisis and severe recession make cyclical adjustment inadequate
- Ireland (1982) Consumption tax hike makes cyclical adjustment incorrect

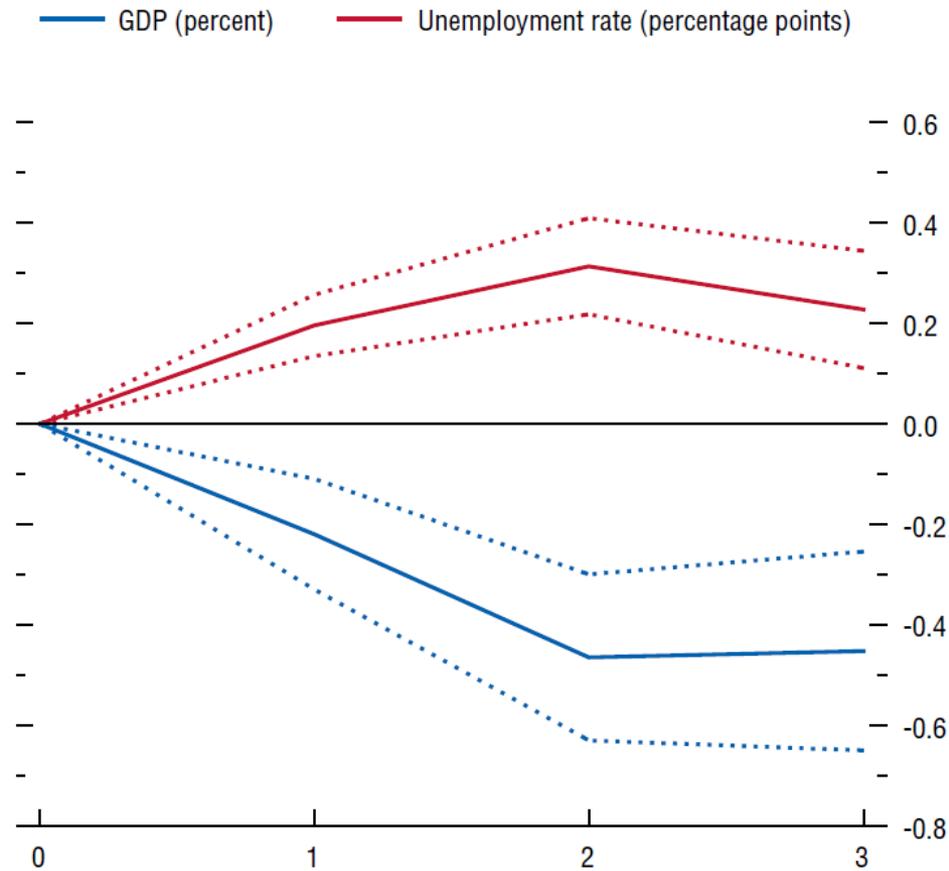
WEO Regression Specification

$$g_{it} = \alpha + \sum_{j=1}^2 \beta_j g_{i,t-j} + \sum_{s=0}^2 \beta_s ABFC_{i,t-s} + \mu_i + \lambda_t + v_{it},$$

where the subscript i denotes the i th country, and the subscript t denotes the t th year; g is the percent change in real GDP; and $ABFC$ is the estimated size of the action-based fiscal consolidation measures as a percent of GDP. The approach includes a full set of country dummies (μ_i) to take account of differences among countries' normal growth rates. The estimated equation also includes a full set of time dummies (λ_t) to take account of global shocks such as shifts in oil prices or the global business cycle.

Figure 3.2. Impact of a 1 Percent of GDP Fiscal Consolidation on GDP and Unemployment

Fiscal consolidation is normally contractionary. A fiscal consolidation equal to 1 percent of GDP typically reduces real GDP by about 0.5 percent and raises the unemployment rate by about 0.3 percentage point.



Source: IMF staff calculations.

Note: $t = 1$ denotes the year of consolidation. Dotted lines equal one standard error bands.

Figure 3.10. Impact of Large Fiscal Consolidation on GDP and Unemployment: Action-Based Approach versus Standard Approach

(Impact of each additional 1 percent of GDP fiscal consolidation)

Fiscal retrenchment usually triggers faster growth and lower unemployment according to the standard approach, exemplified by Alesina and Ardagna (2010). But according to our action-based approach, the opposite is true.

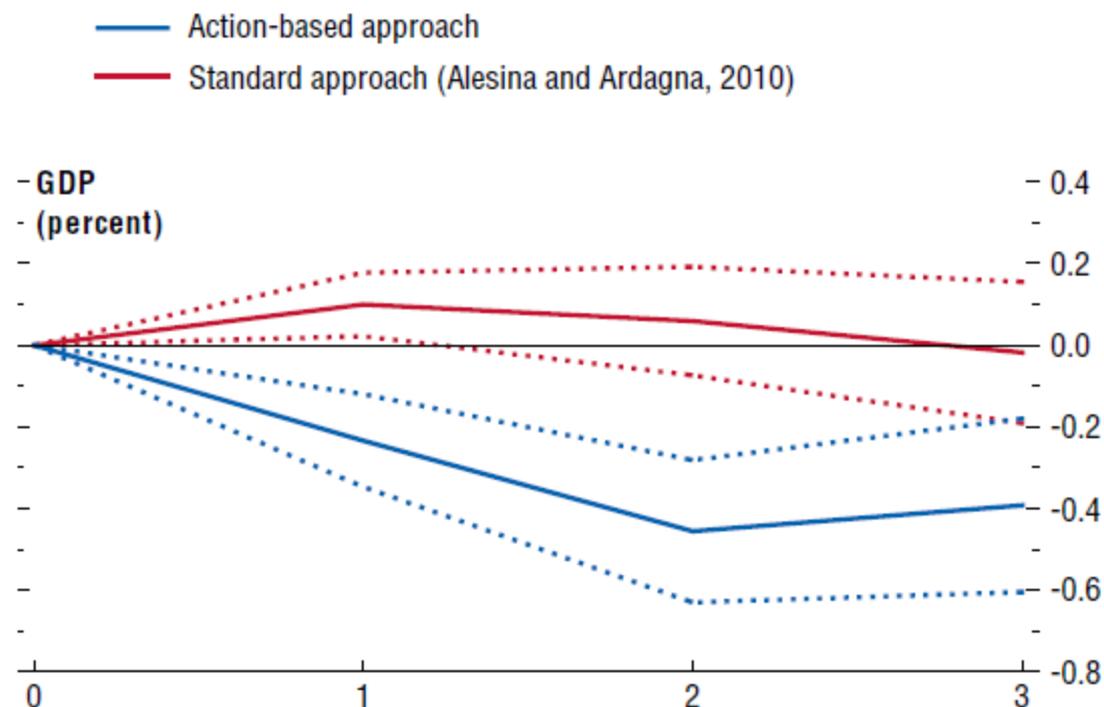
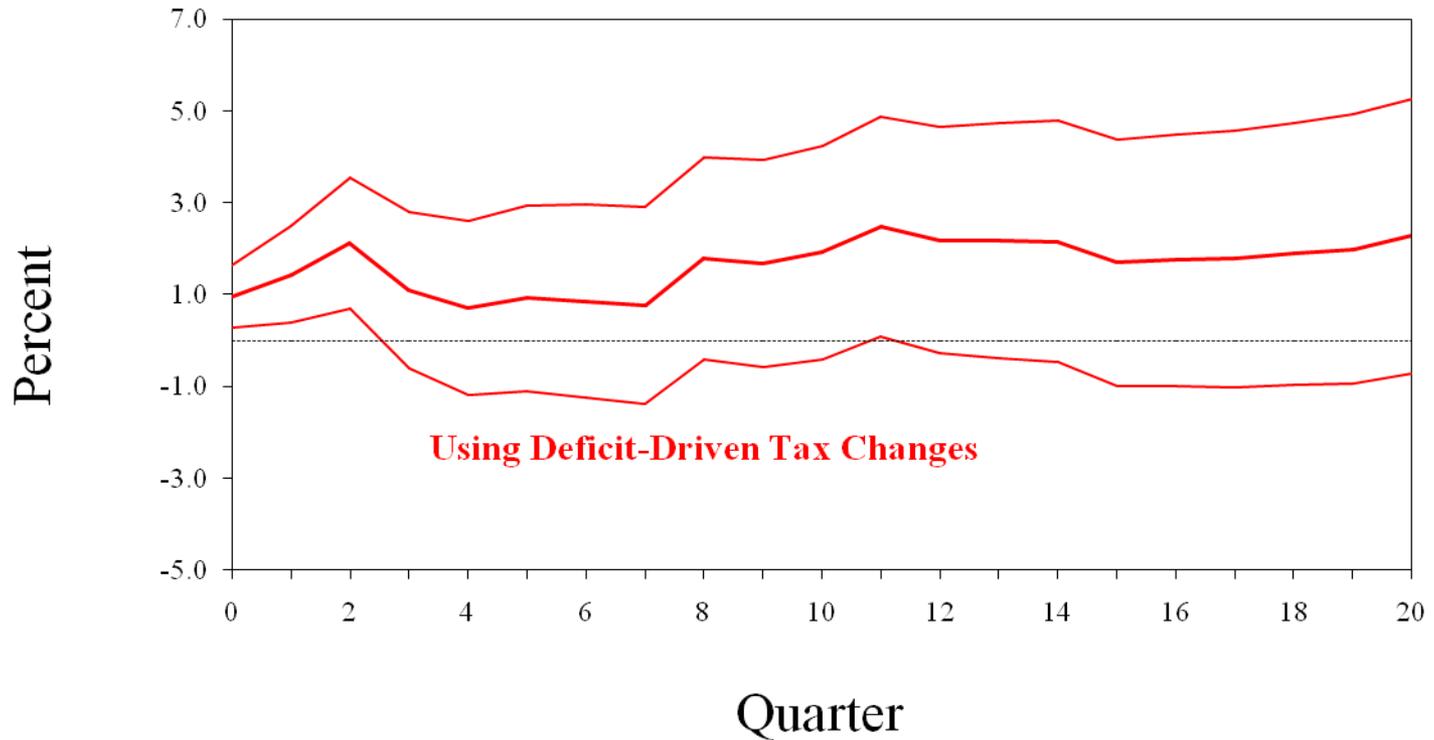


Figure 9

VARs for the Two Types of Exogenous Tax Changes and Real GDP

d. Response of GDP to Tax



From: Romer and Romer, "A New Measure of Fiscal Shocks"

Figure 3.3. Response of Monetary Conditions to a 1 Percent of GDP Fiscal Consolidation

Interest rate cuts and a decline in the value of the domestic currency usually play a key supportive role during episodes of fiscal consolidation.

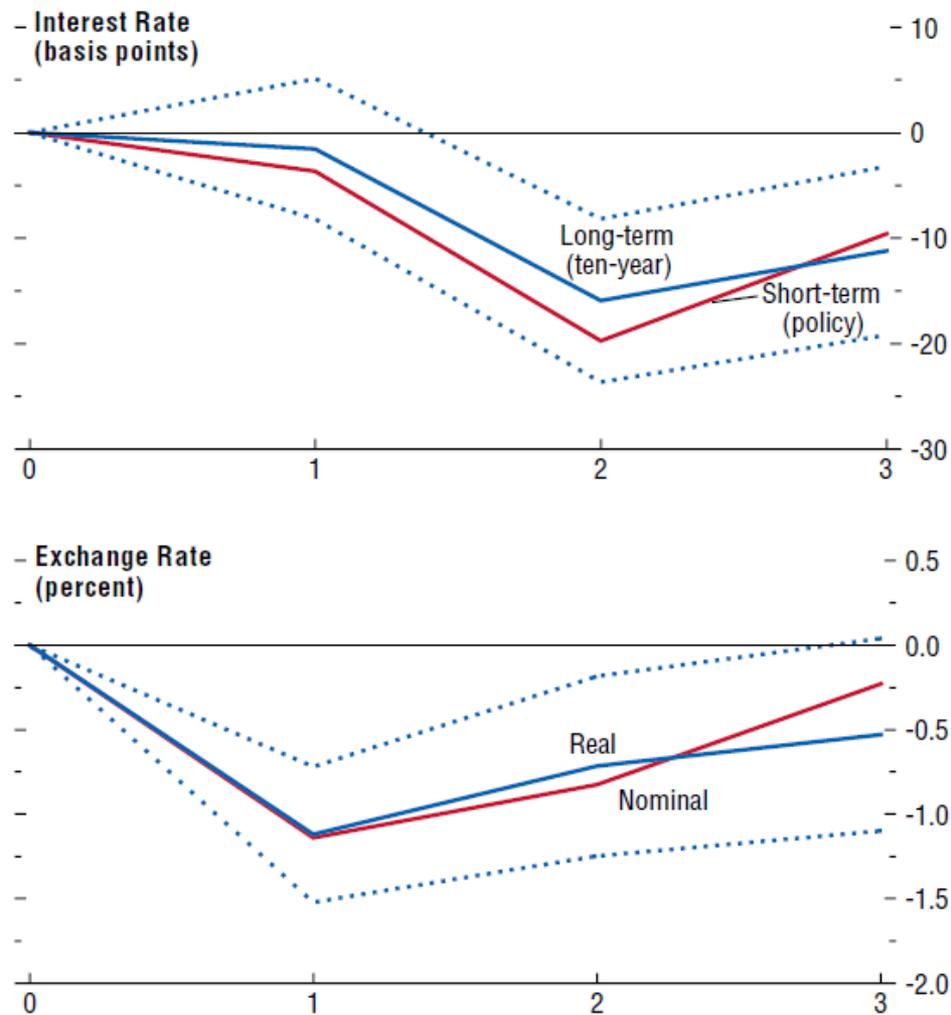


Figure 3.4. Impact of a 1 Percent of GDP Fiscal Consolidation on GDP Components

(Percent)

Net exports typically expand in response to fiscal consolidation, providing a key cushion for GDP. In contrast, domestic demand contracts. The boom in net exports reflects both an increase in exports in response to the real exchange rate depreciation and a decline in imports reflecting the fall in income.

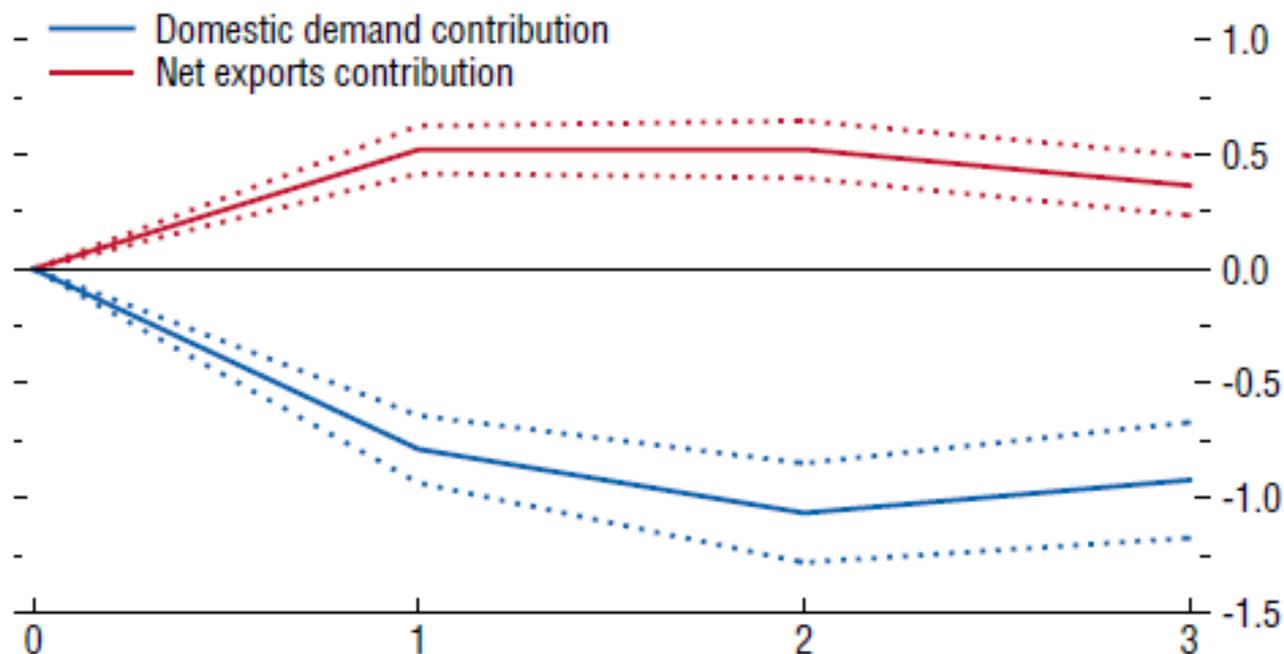


Figure 3.5. Impact of a 1 Percent of GDP Fiscal Consolidation: Taxes versus Spending

Spending-based consolidation is less contractionary than tax-based consolidation. GDP falls by less and unemployment increases less. Domestic demand contracts significantly as a result of both spending-based and tax-based consolidation, but the contraction is sharper after tax-based adjustments. A boom in net exports mitigates the contraction in both cases. A surge in exports drives the net export boom associated with spending-based consolidation. After tax-based consolidation, net exports rise mainly because imports fall.

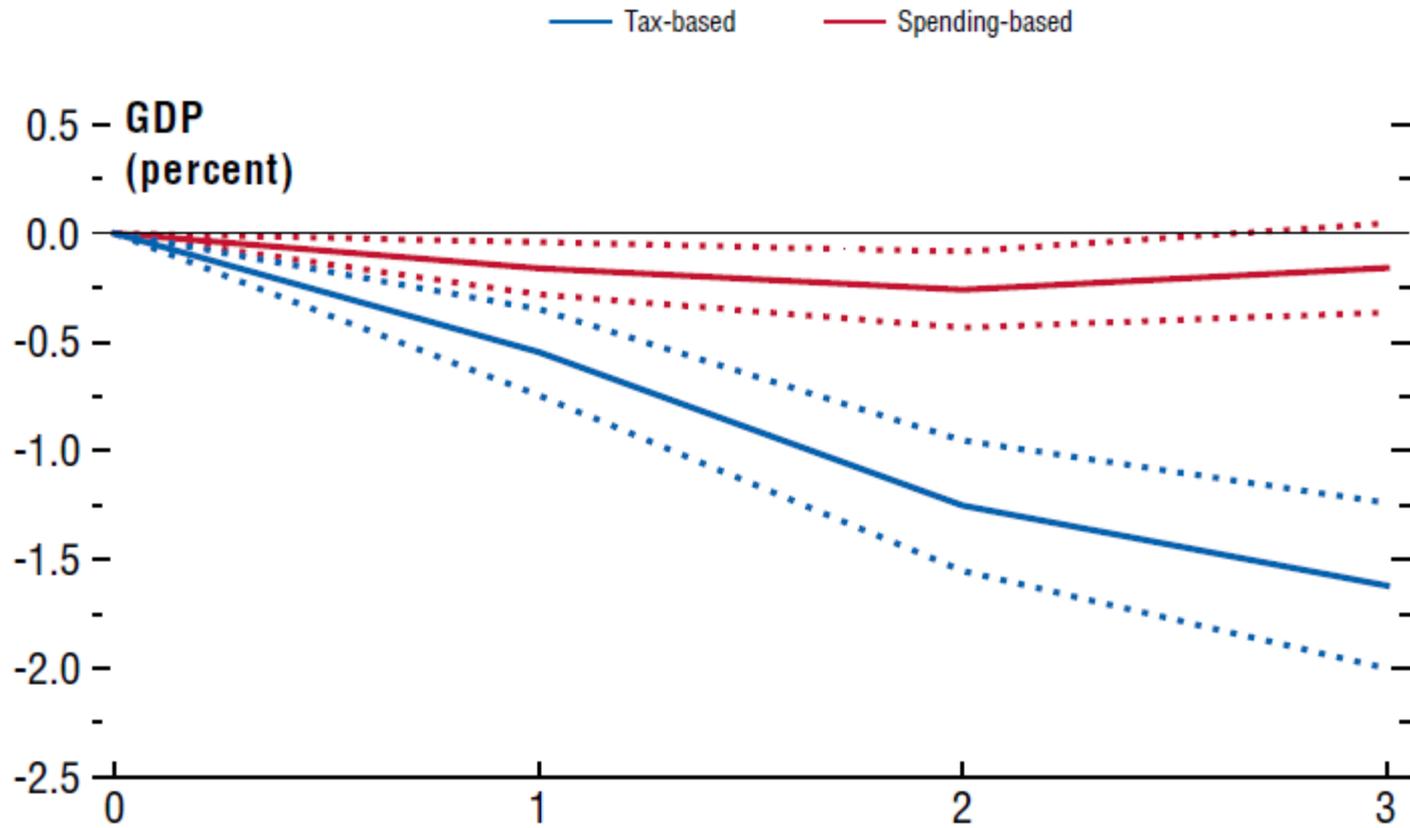


Figure 3.6. Composition and Monetary Conditions: Impact of a 1 Percent of GDP Fiscal Consolidation

Why are spending-based consolidations less contractionary? Partly because they benefit from monetary stimulus, whereas tax-based adjustments feature monetary tightening.

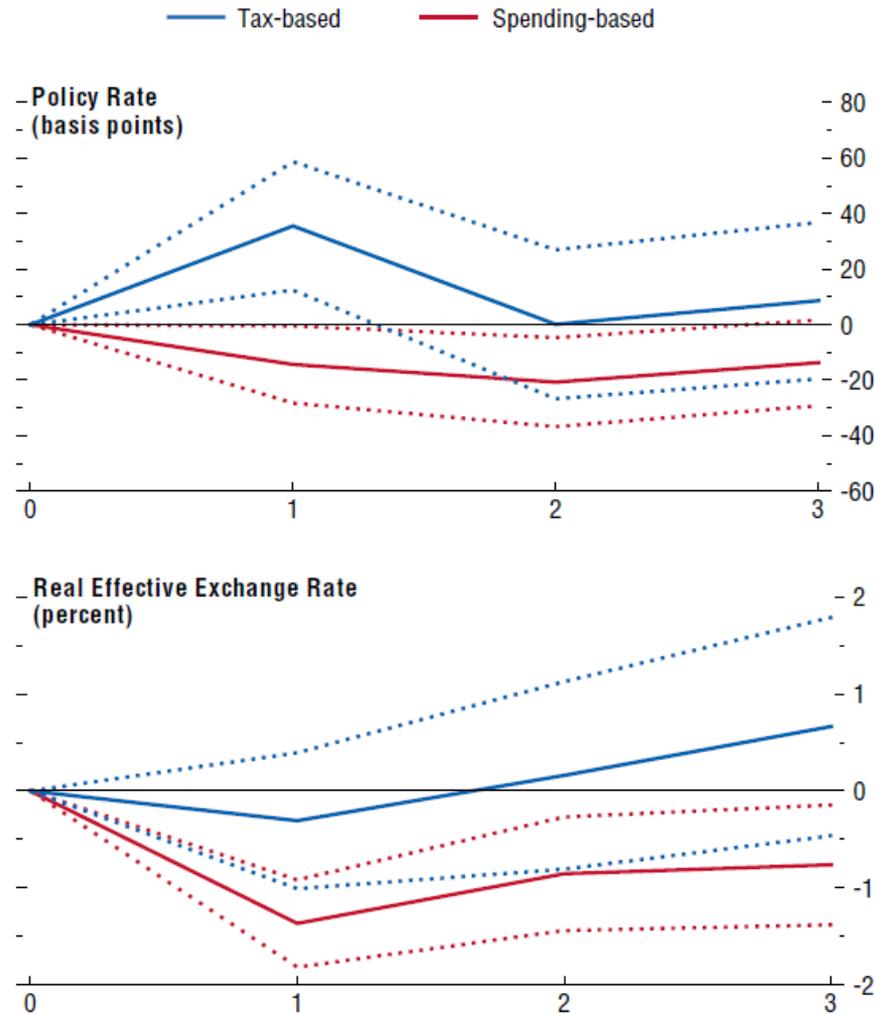


Figure 3.7. Composition and Monetary Conditions: Impact of a 1 Percent of GDP Fiscal Consolidation

The policy rate usually rises on impact for episodes of tax-based consolidation, particularly when they include some indirect tax hikes. In the case of indirect tax hikes, the output costs are particularly high.

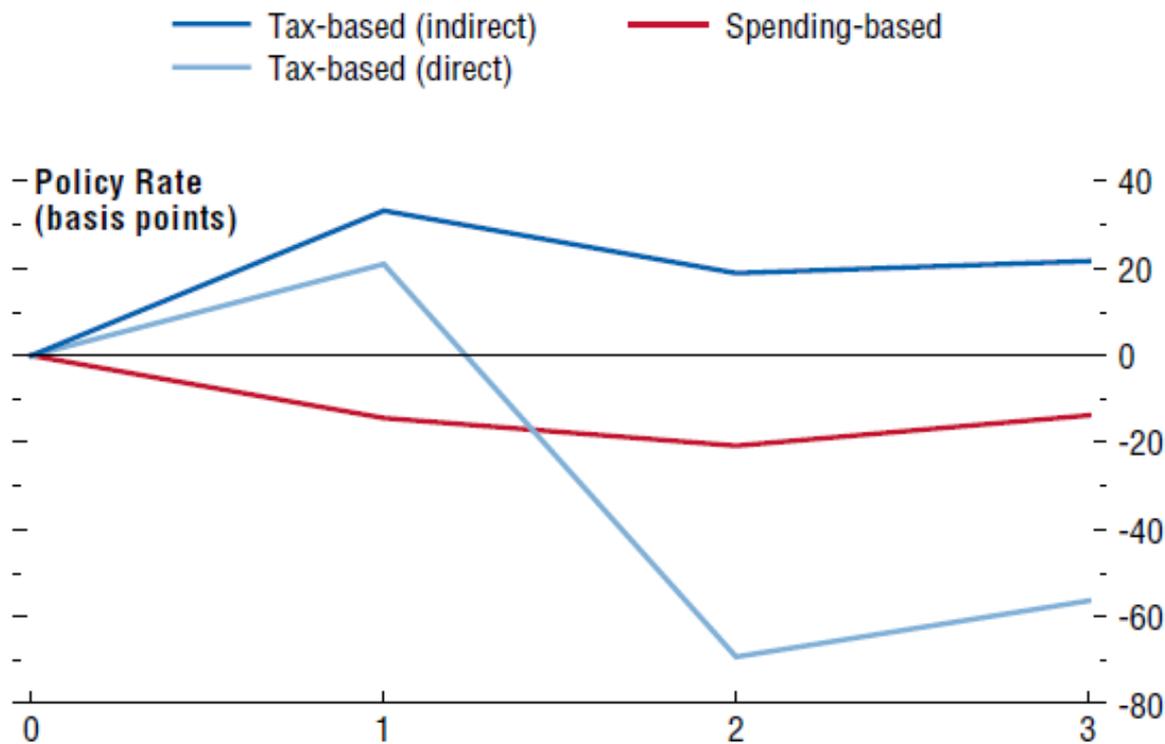


Figure 3.9. Estimated Impact on GDP of a 1 Percent of GDP Fiscal Consolidation

(Percent)

Fiscal consolidation preceded by high perceived sovereign risk is less contractionary than when preceded by low perceived default risk. But even for the group with high perceived risk, fiscal retrenchment rarely triggers faster growth. Exceptions include Denmark (1983) and Ireland (1987)—two cases of fiscal consolidation studied by Giavazzi and Pagano (1990)—which were expansionary.

