Fiscal Policy in Advanced Economies: Fiscal Adjustment, Efficiency and Growth

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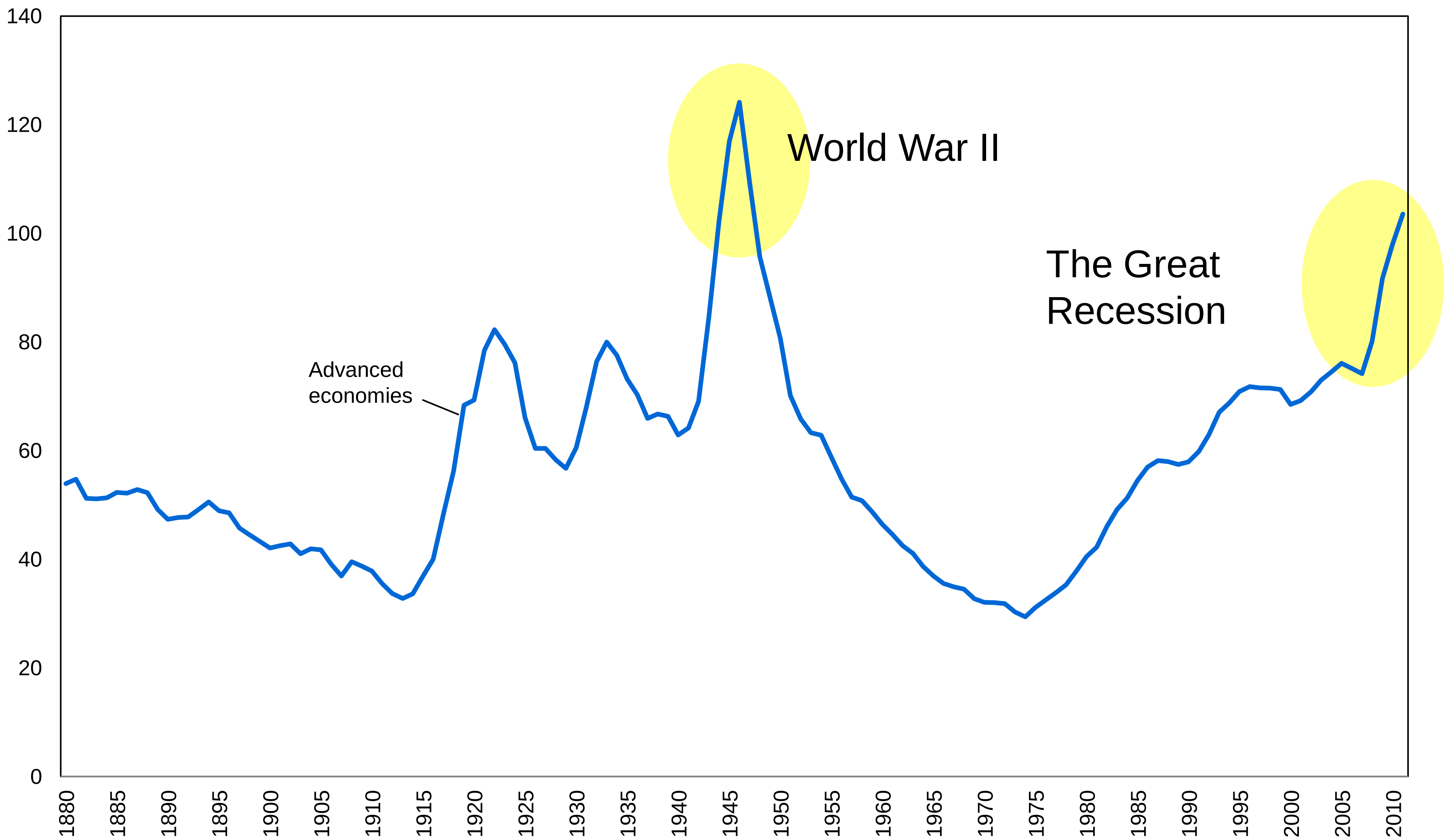
March 2012

Public Debt to GDP Ratio, percent



Interactions Between Fiscal Policy and Growth

The Short Term

- Fiscal policy affects growth
  - Through fiscal crisis
  - Through demand effects
- Growth affects fiscal tightening
  - Automatic stabilizers
  - Debt ratio effects
  - Market reaction to low growth

Policy Implications

The Long Term

- Fiscal policy affects potential growth
  - Macro channels
  - Micro channels
    - Revenue side
    - Spending Side
- Potential Growth affects fiscal sustainability
  - Effects on D/Y
  - Effects on primary balance

Policy Implications

Interactions Between Fiscal Policy and Growth

The Short Term

- Fiscal policy affects growth
  - Through fiscal crisis → Not enough fiscal tightening is bad for growth
  - Through demand effects → Too much fiscal tightening is bad for growth

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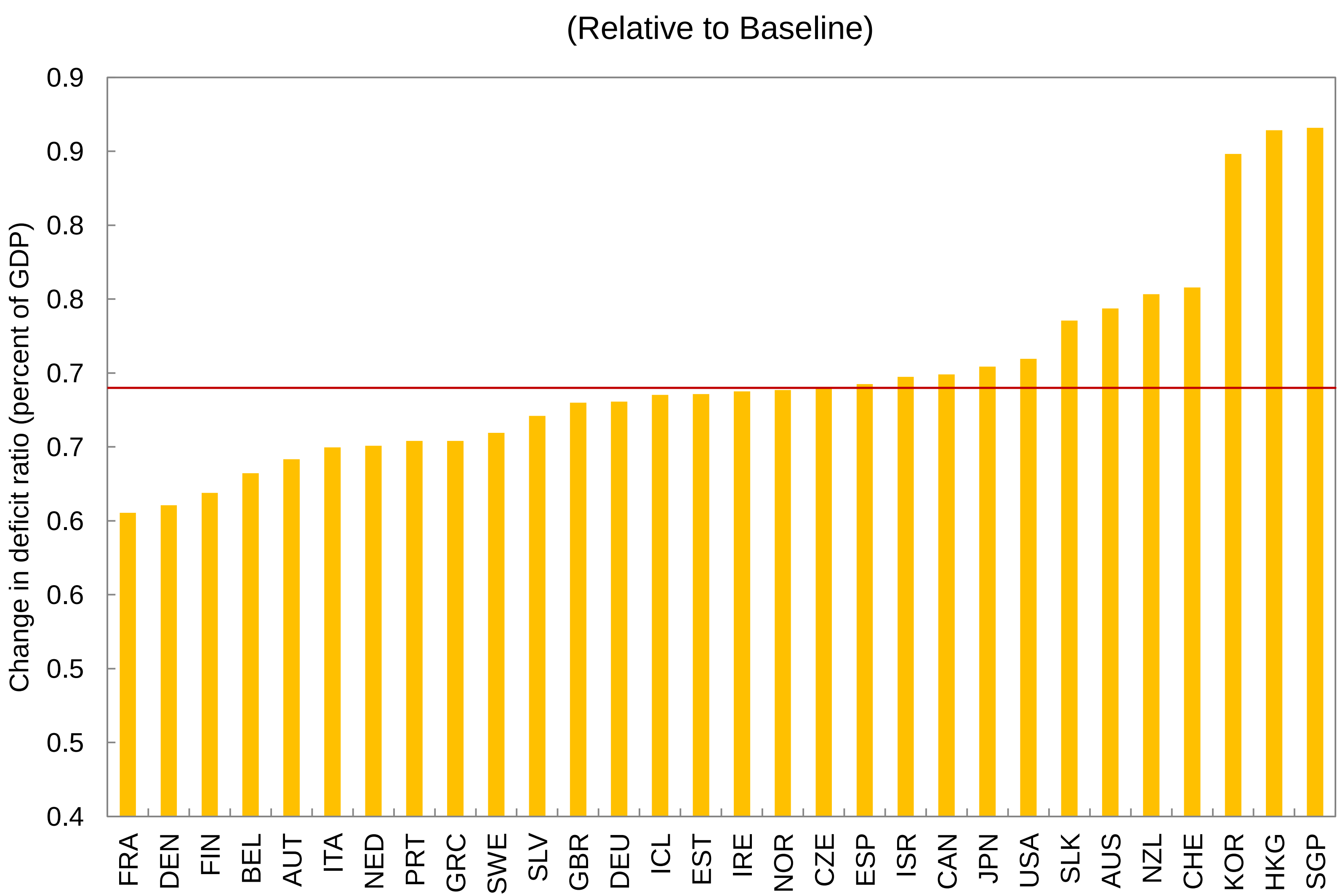
Impact on the Deficit Ratio of a 1 percent of GDP Discretionary Fiscal Tightening in the First Year



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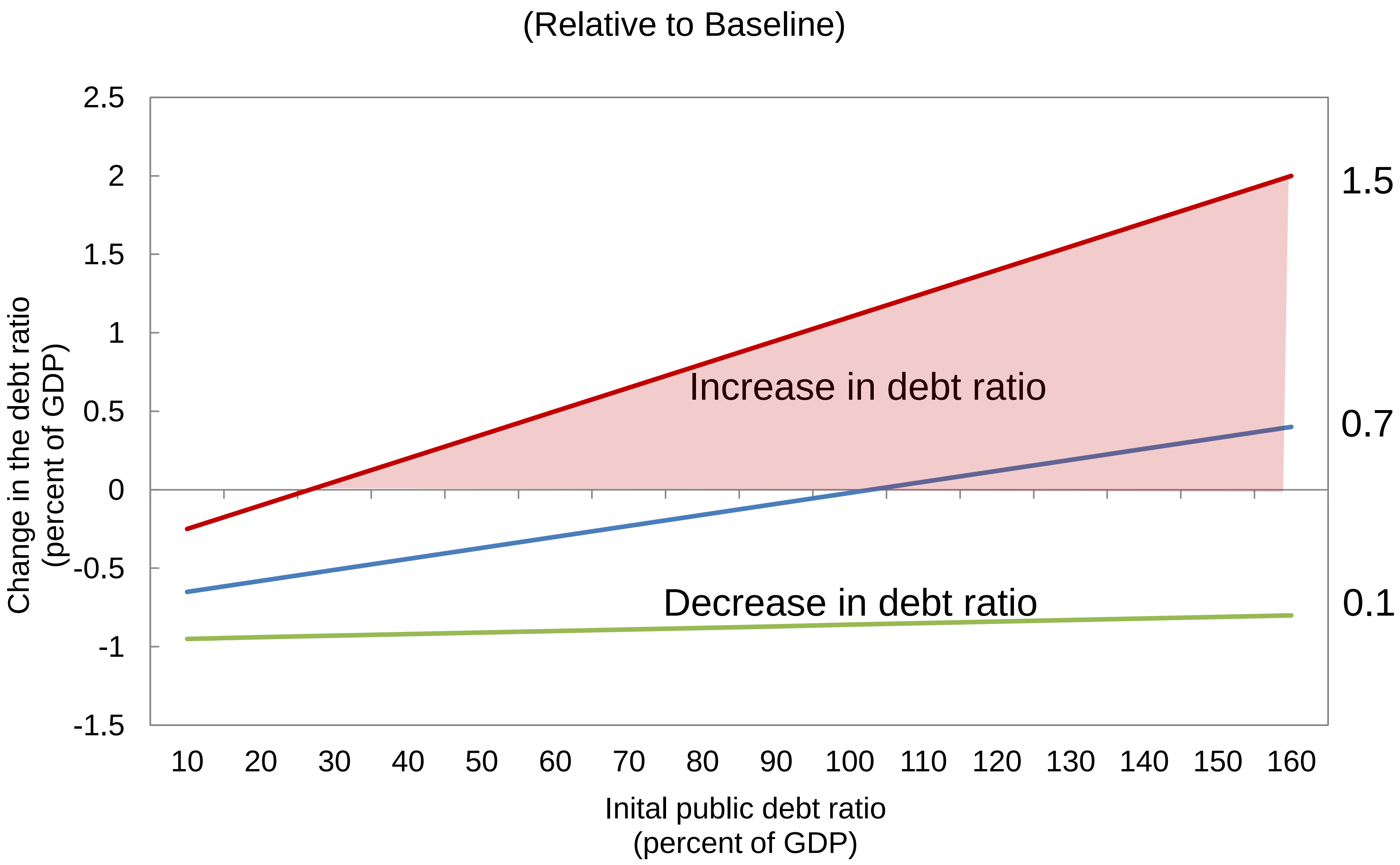

Note: We use a range of spending multipliers, following the literature.

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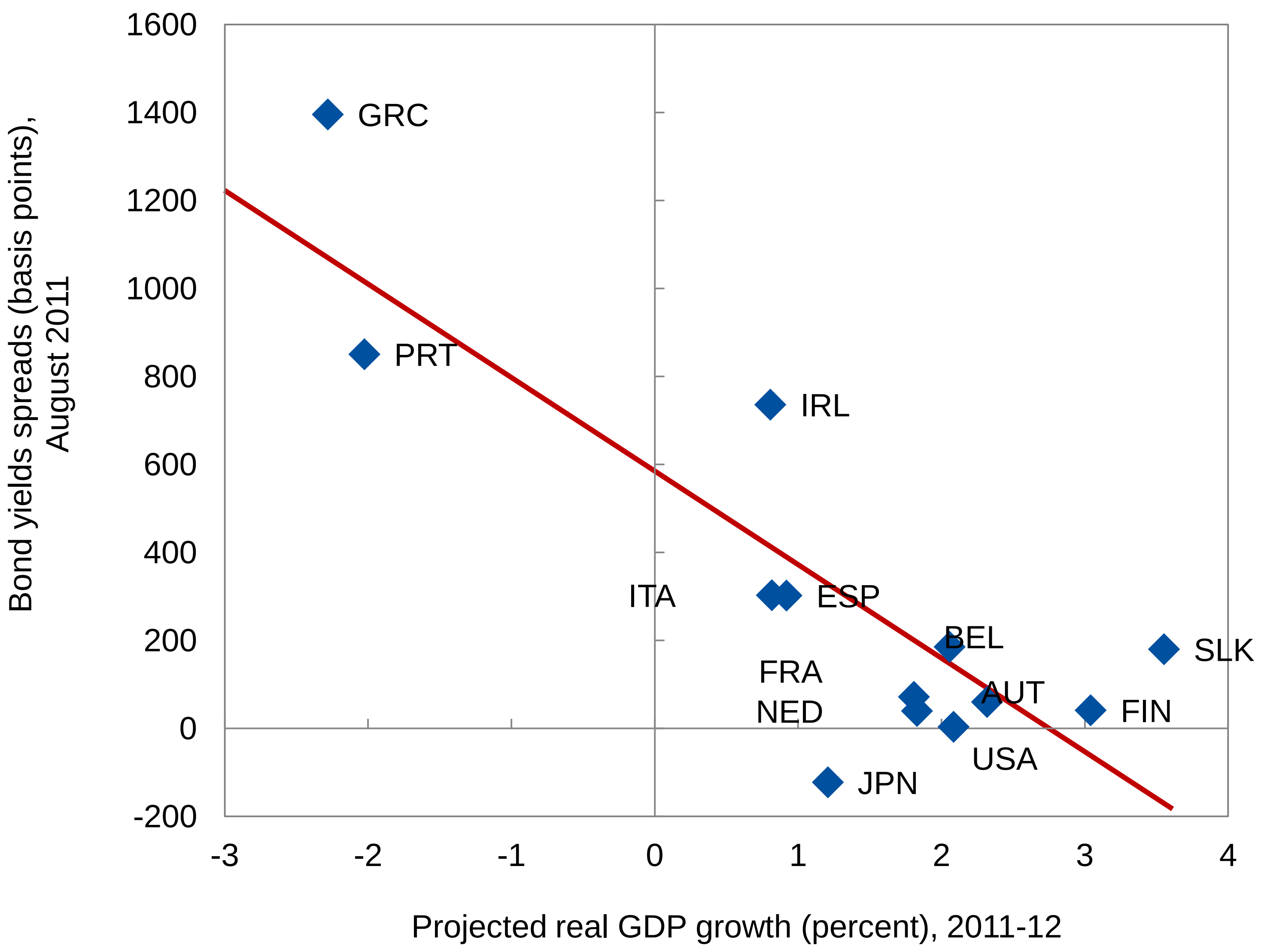
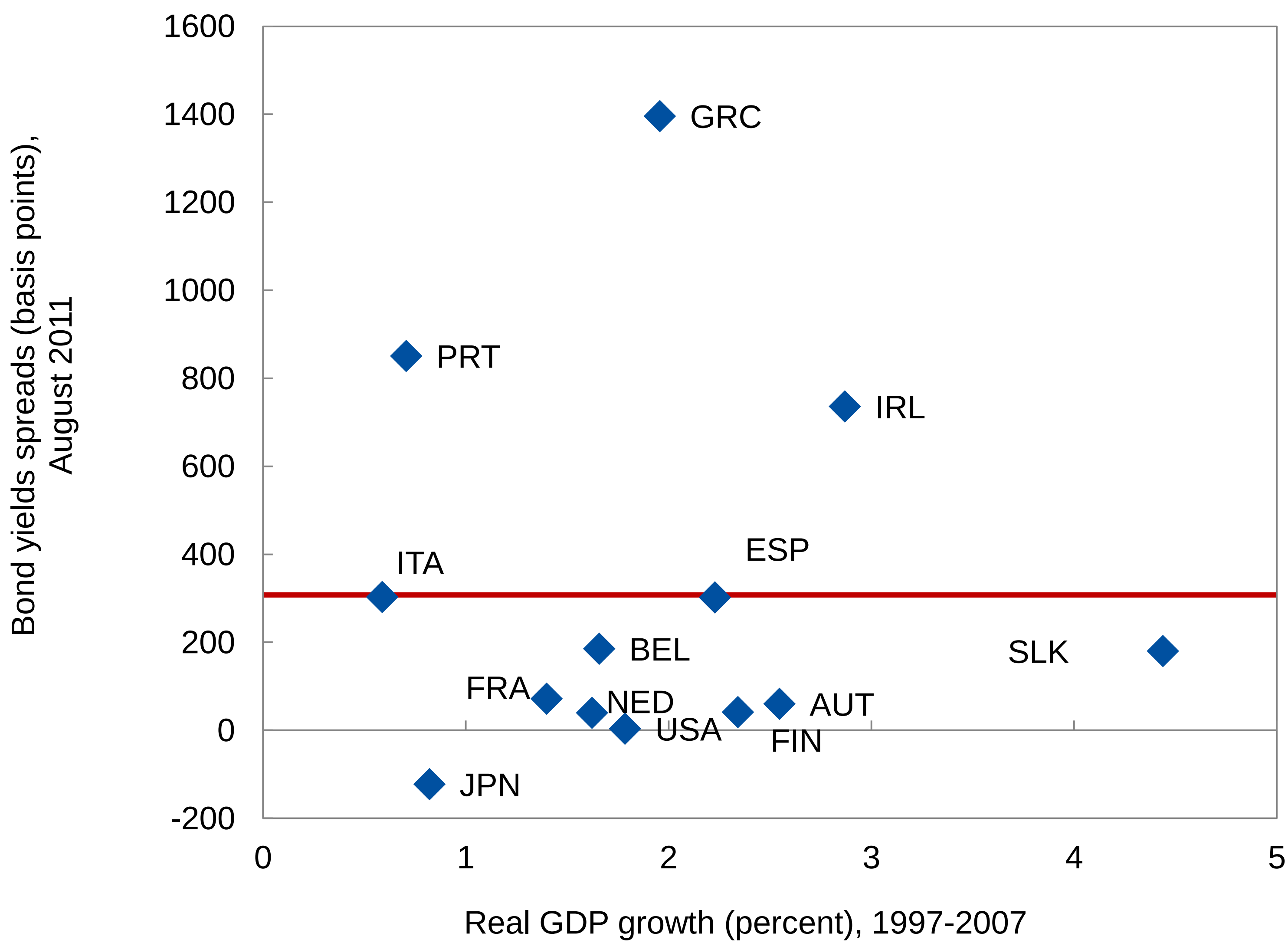
Sovereign Bond Yield Spreads and Projected Real GDP Growth



Sovereign Bond Yield Spreads and Real GDP Growth

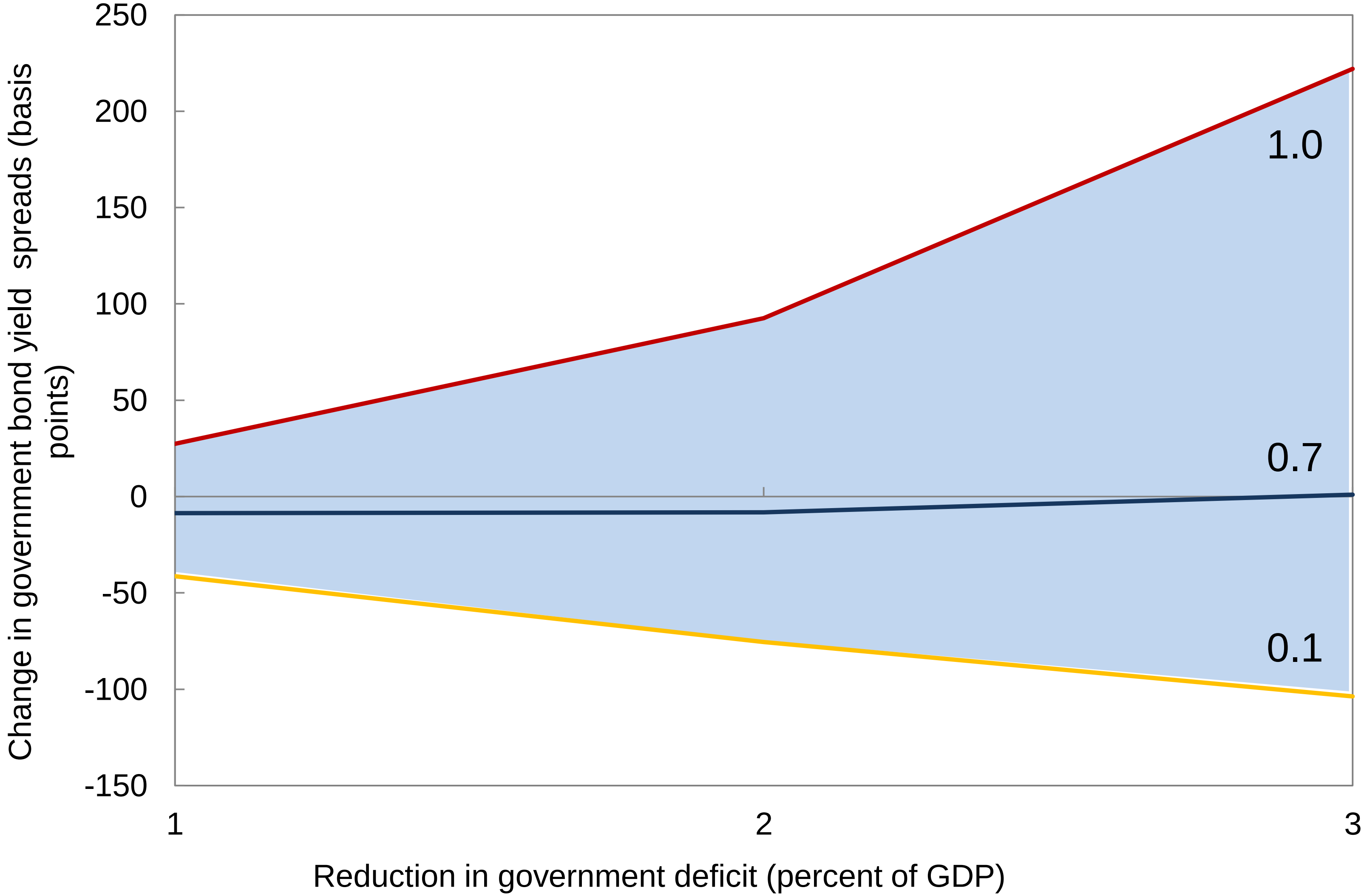


Determinants of Spreads, Cross Section Analysis, 2011

VARIABLES	(1)	(2)	(3)	(4)	(5)
Gross debt to GDP 2011	0.0159**	0.0137**	0.0149***	0.0149***	0.0150***
	(2.697)	(2.643)	(3.957)	(4.063)	(4.122)
Primary balance to GDP 2011 for Euro Area	-0.206***	-0.202***	-0.188***	-0.186***	-0.191***
	(-3.708)	(-3.325)	(-3.288)	(-3.661)	(-3.821)
Real GDP Growth 2011	-0.212***	-0.190**	-0.207***	-0.209***	-0.200***
	(-3.260)	(-2.711)	(-3.361)	(-3.501)	(-3.684)
Real GDP Growth Squared 2011	0.00843	0.0176	0.0192*	0.0198*	0.0198*
	(0.493)	(1.617)	(1.727)	(1.934)	(1.897)
Debt held by a country's central bank or by foreign central banks to GDP	-0.0262	-0.0244	-0.0285*	-0.0279*	-0.0321***
	(-1.473)	(-1.430)	(-2.020)	(-1.986)	(-2.800)
Inflation Rate 2011	0.294**	0.311***	0.324***	0.322***	0.304***
	(2.593)	(2.939)	(3.610)	(3.731)	(3.835)
NPV of health spending in percent of GDP 2010	-0.00244	-0.00149	-0.00157	-0.00168	
	(-0.883)	(-0.579)	(-0.614)	(-0.658)	
NPV of pension spending in percent of GDP 2010	-0.000412	2.68e-05	-0.000390		
	(-0.0985)	(0.00651)	(-0.104)		
Primary balance to GDP 2014 for Euro Area	0.0721	0.0516			
	(0.706)	(0.488)			
Potential output growth, average 2011-2016	0.247				
	(1.171)				
Constant	2.704***	3.089***	3.061***	3.054***	2.984***
	(4.075)	(5.514)	(5.866)	(5.968)	(6.301)
Observations	31	31	31	31	31
R-squared	0.784	0.767	0.765	0.765	0.763

Robust t-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Fiscal Adjustment and Bond Yields with Alternative Fiscal Multipliers



Note: Intial debt level = 100 percent of GDP

Policy Implications in the Short Term

- Fiscal policy must be tightened but, if you do not have to, avoid tightening too much

- Clearly defined medium term adjustment plans

- Even for countries that are under pressure, tightening of fiscal policy cannot be the only adjustment tool

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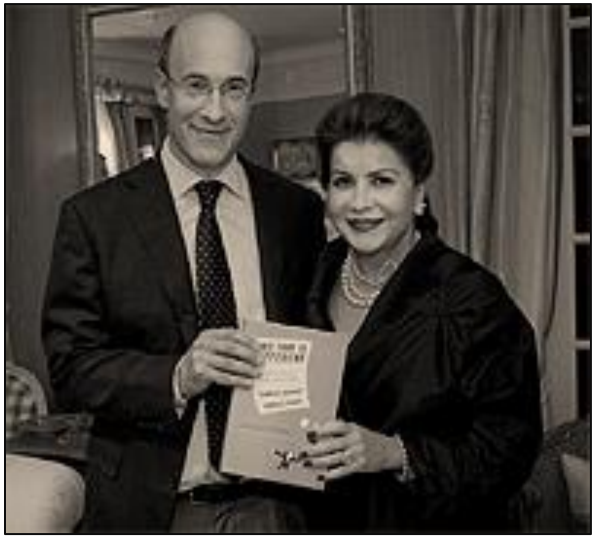
Policy Implications

High Public Debt is Bad for Growth

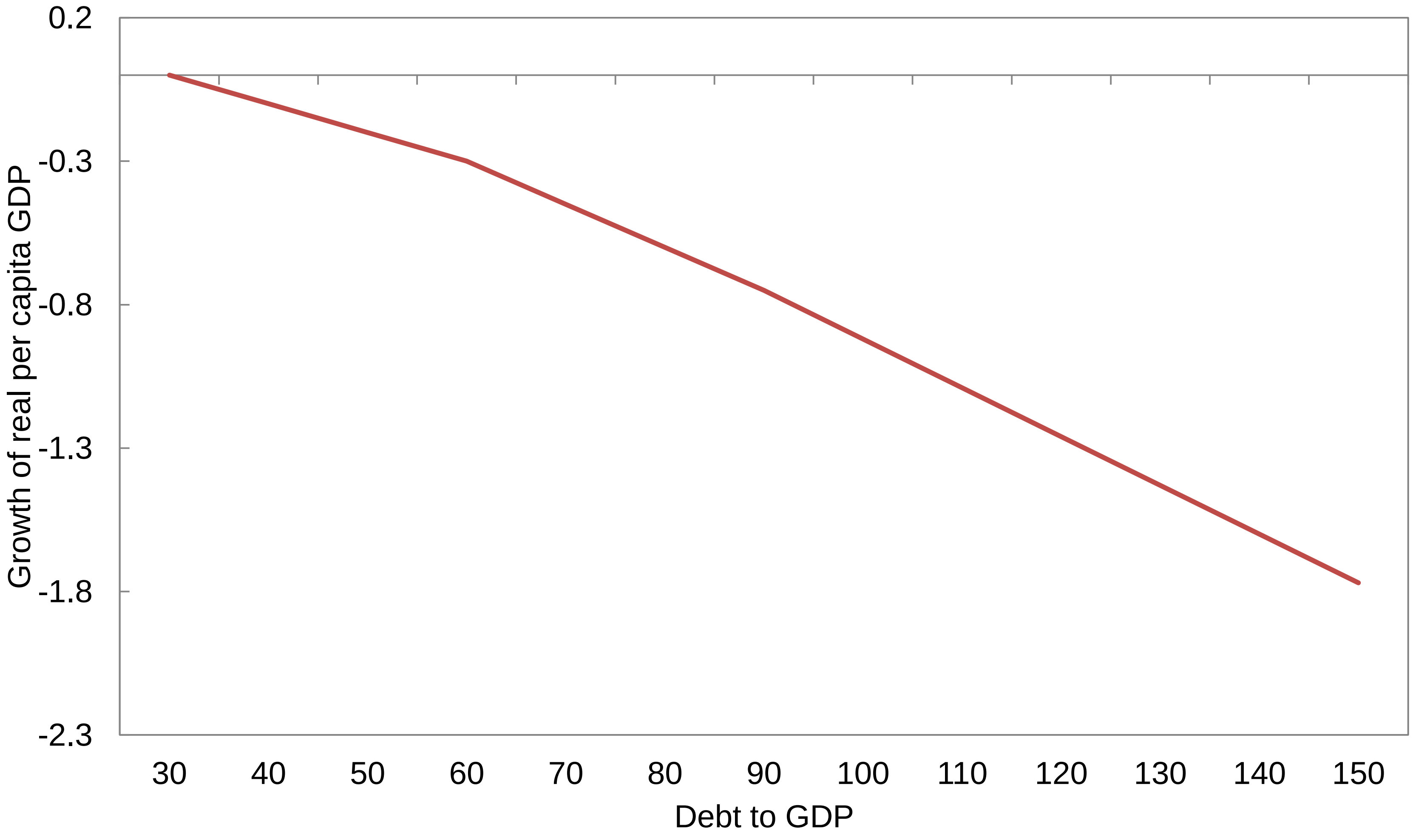


Rogoff and Reinhart: "This Time is Different: Eight Centuries of Financial Folly" (2009)

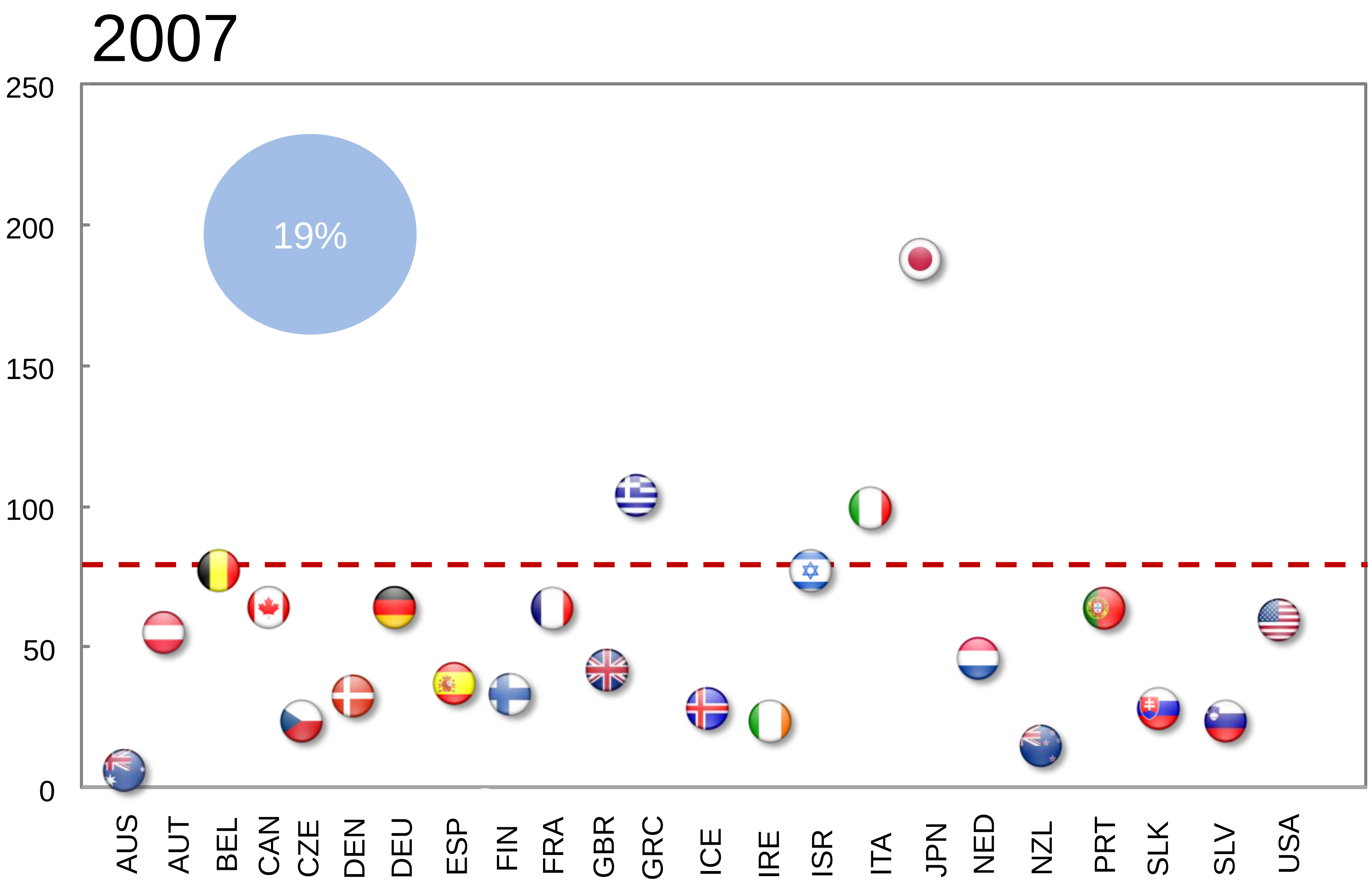
Kumar and Woo: "Public Debt and Growth" (2010)

Steven Cecchetti: "The Real Effects of Debt" (2011)

Effect on Growth of Higher Debt to GDP Ratio



Advanced Economies: Debt Above 80 percent of GDP



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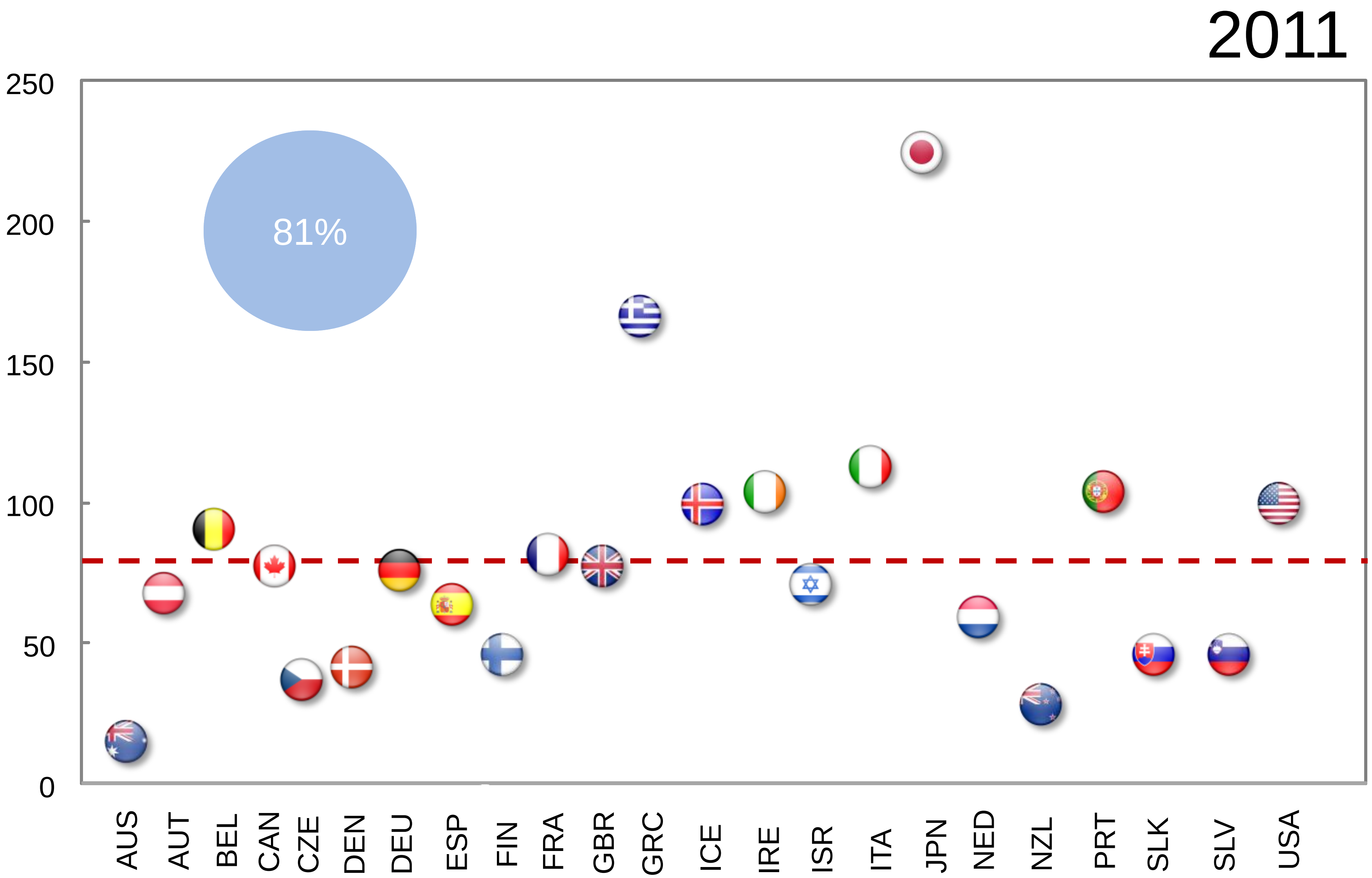

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Policy Implications

Revenue Side

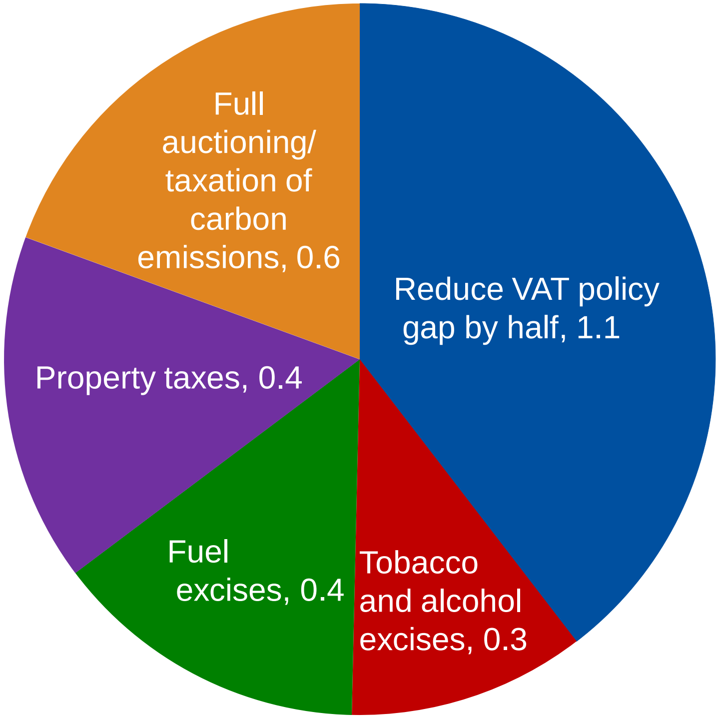
- Overall tax pressure
- Composition of revenues
- Broadening the tax base by reducing tax expenditures
- Externality correcting taxes
- Property taxes
- Fight in tax evasion

Less Distortionary Tax Measures

Potential Revenue Increases in Advanced G-7 Countries

PPP weighted averages

Total Increase in Revenue: 2.8 percent of GDP



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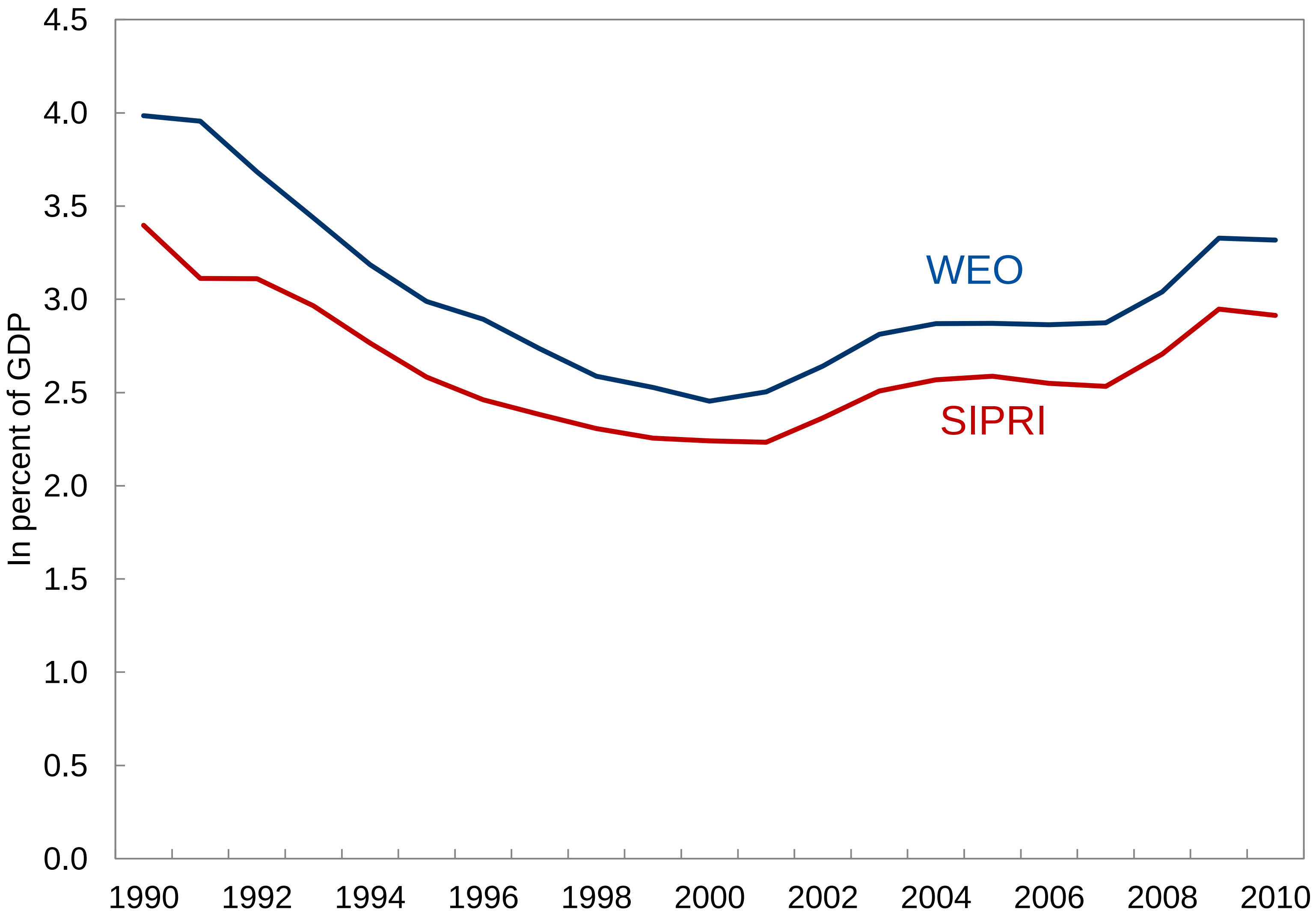
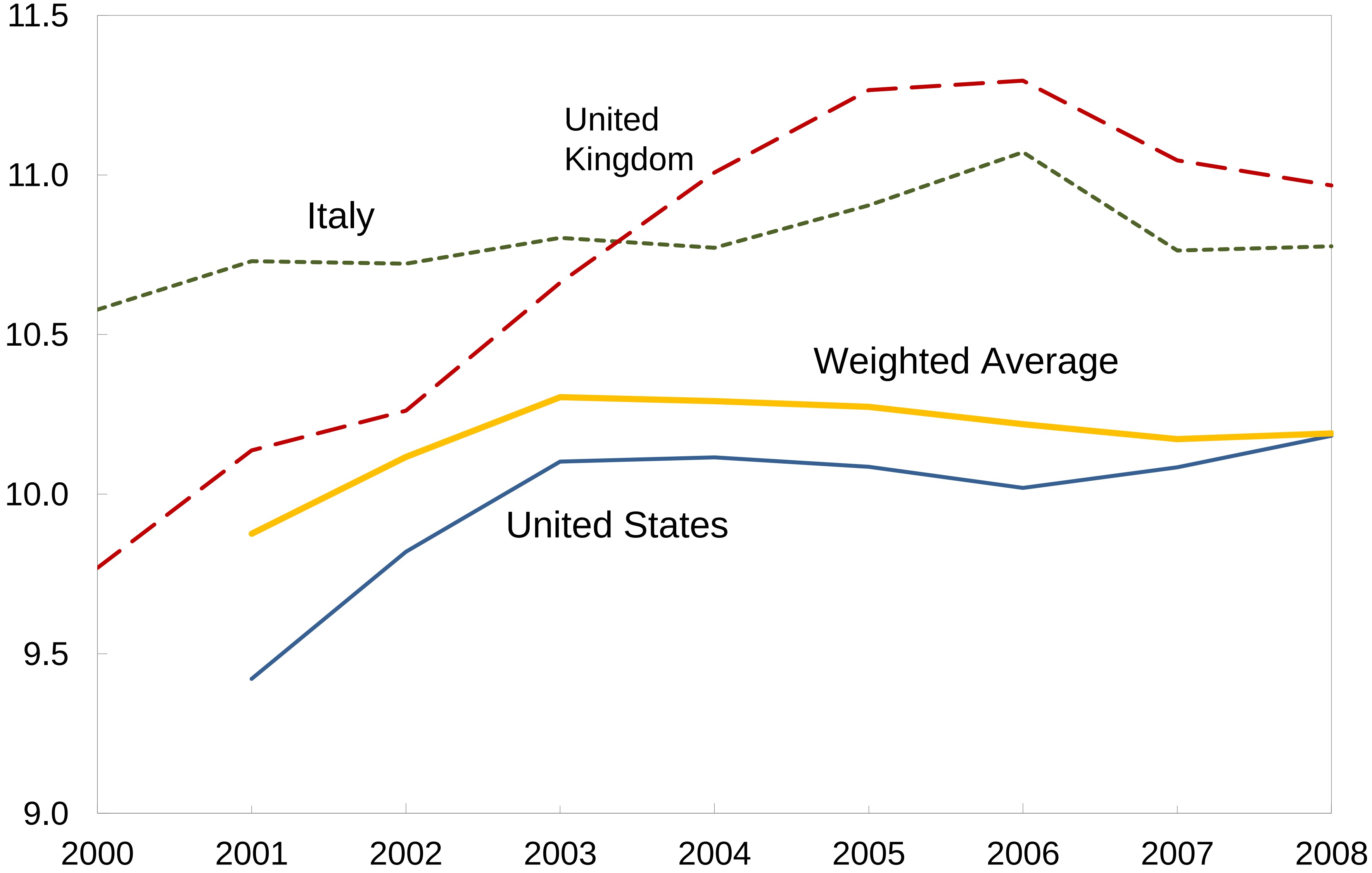
Spending Side

- Spending reviews
- Subsidies
- Military Spending
- Spending for public sector wages
- Non-means tested social welfare programs
- Spending for pensions

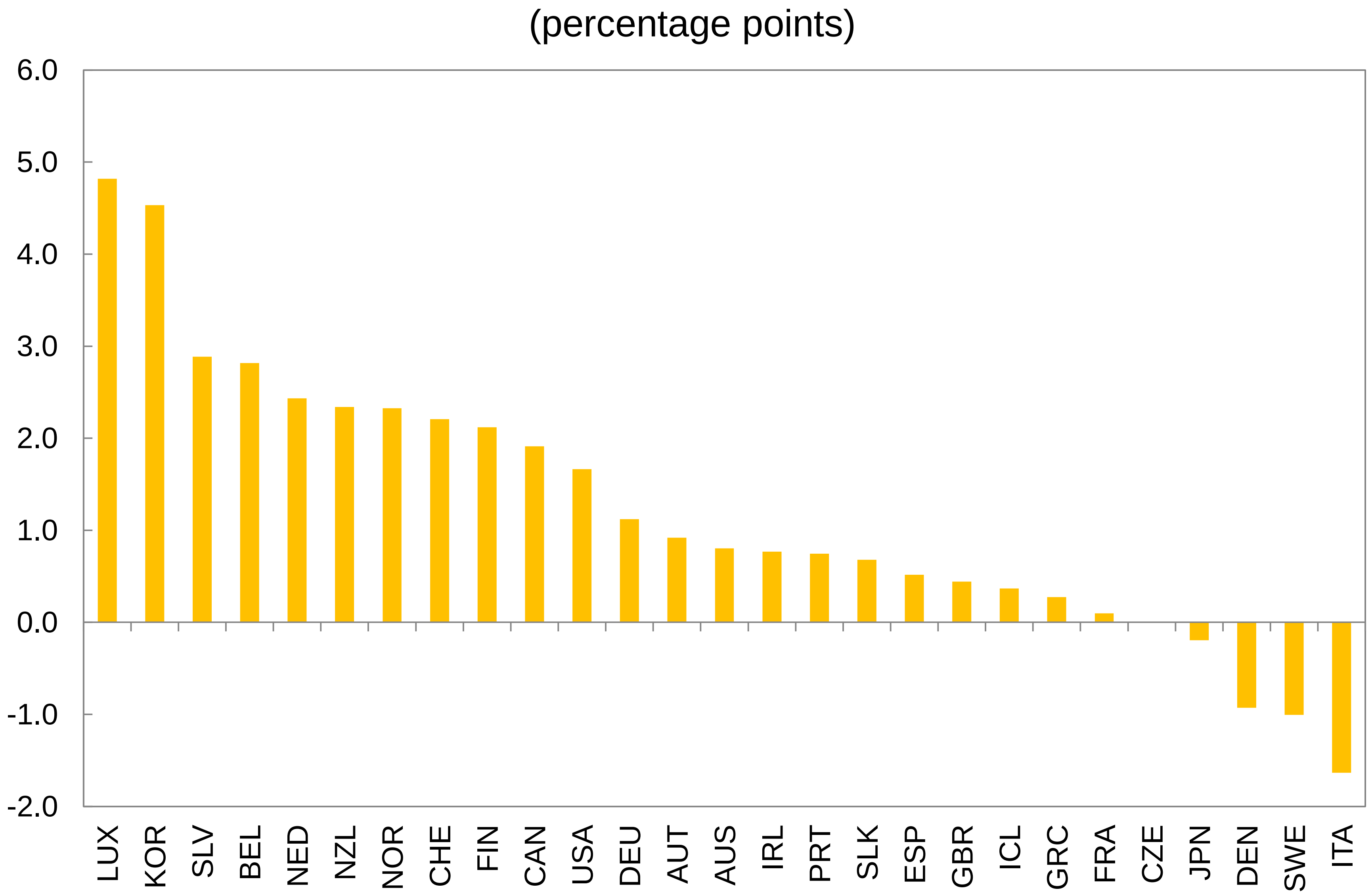
Military Expenditures in Advanced Economies, 1990-2010



Public Sector Wages in Selected G-7 Countries
(As share of potential GDP)



Pension Spending Increase, 2010-30



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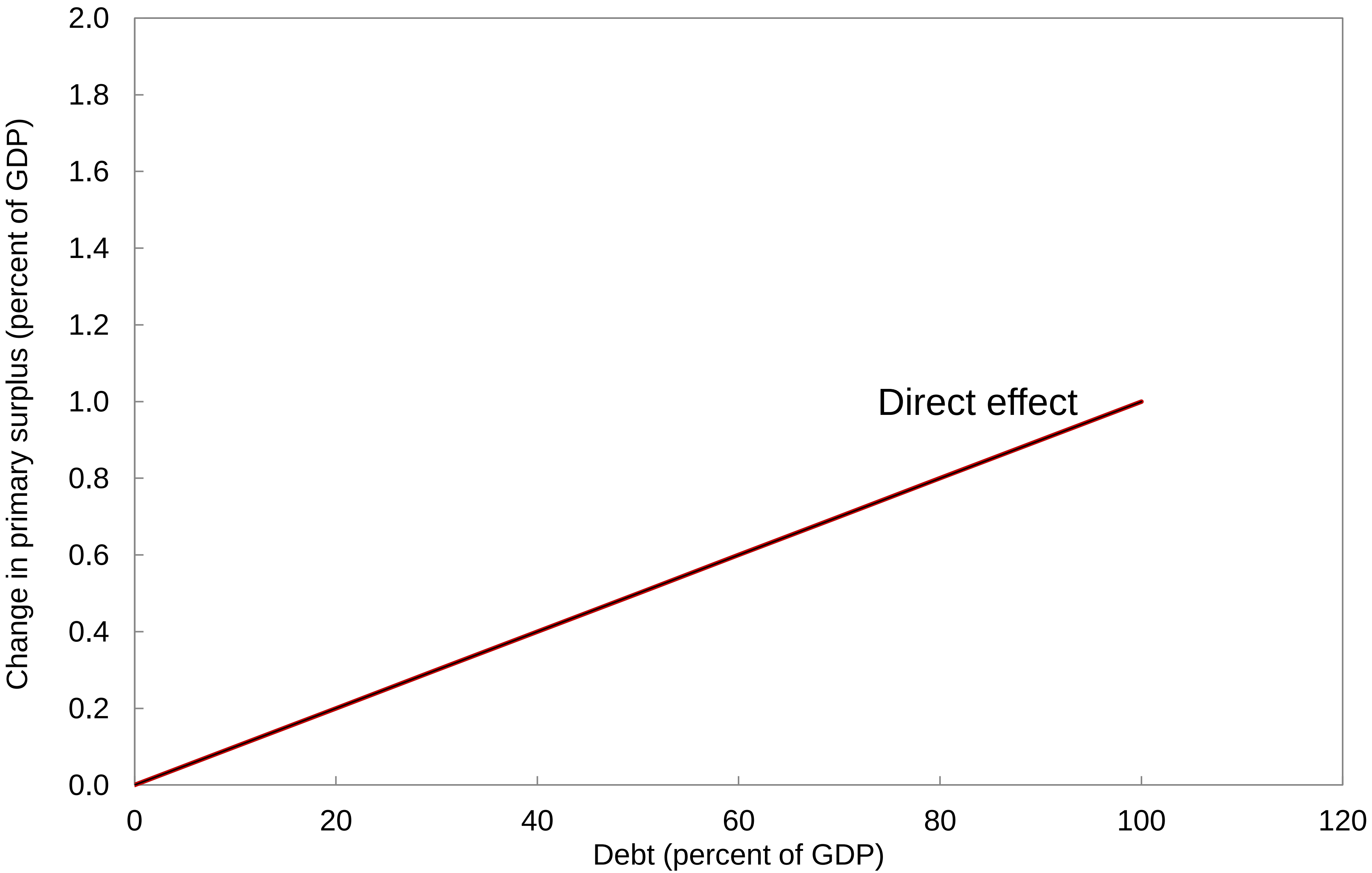
Debt Dynamics Equation

$$\Delta \frac{D_t}{Y_t} = -\frac{\Pr imarysurplus}{Y_t} + \frac{(r-g)}{(1+g)} \times \frac{D_{t-1}}{Y_{t-1}}$$

$$\frac{\Pr imarysurplus}{Y_t} = \frac{(r-g)}{(1+g)} \times \frac{D_{t-1}}{Y_{t-1}}$$

Effect of a 1 % Drop in Growth on Debt Stabilizing Primary Surplus



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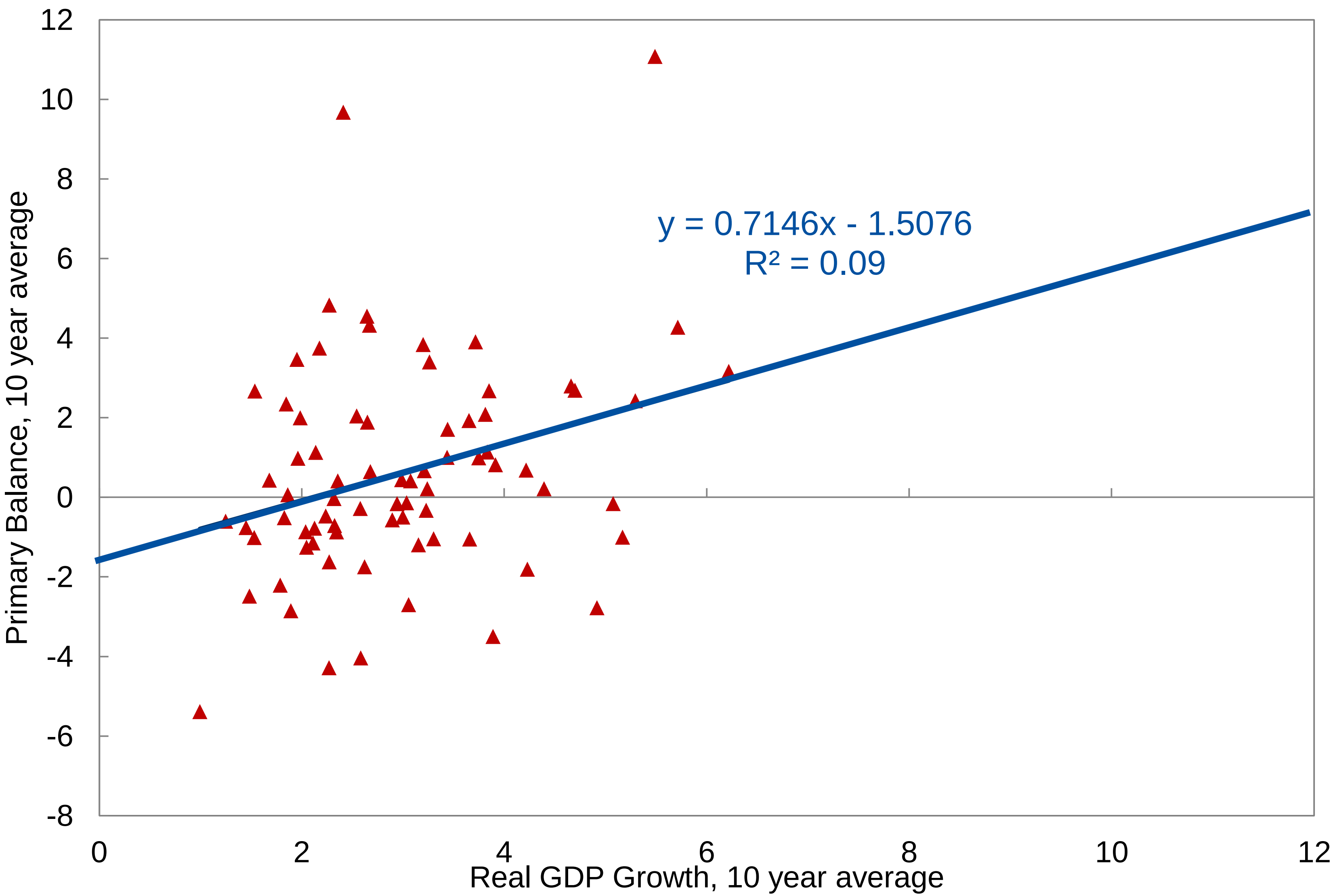
Average Primary Balance and Real Growth during 10 years



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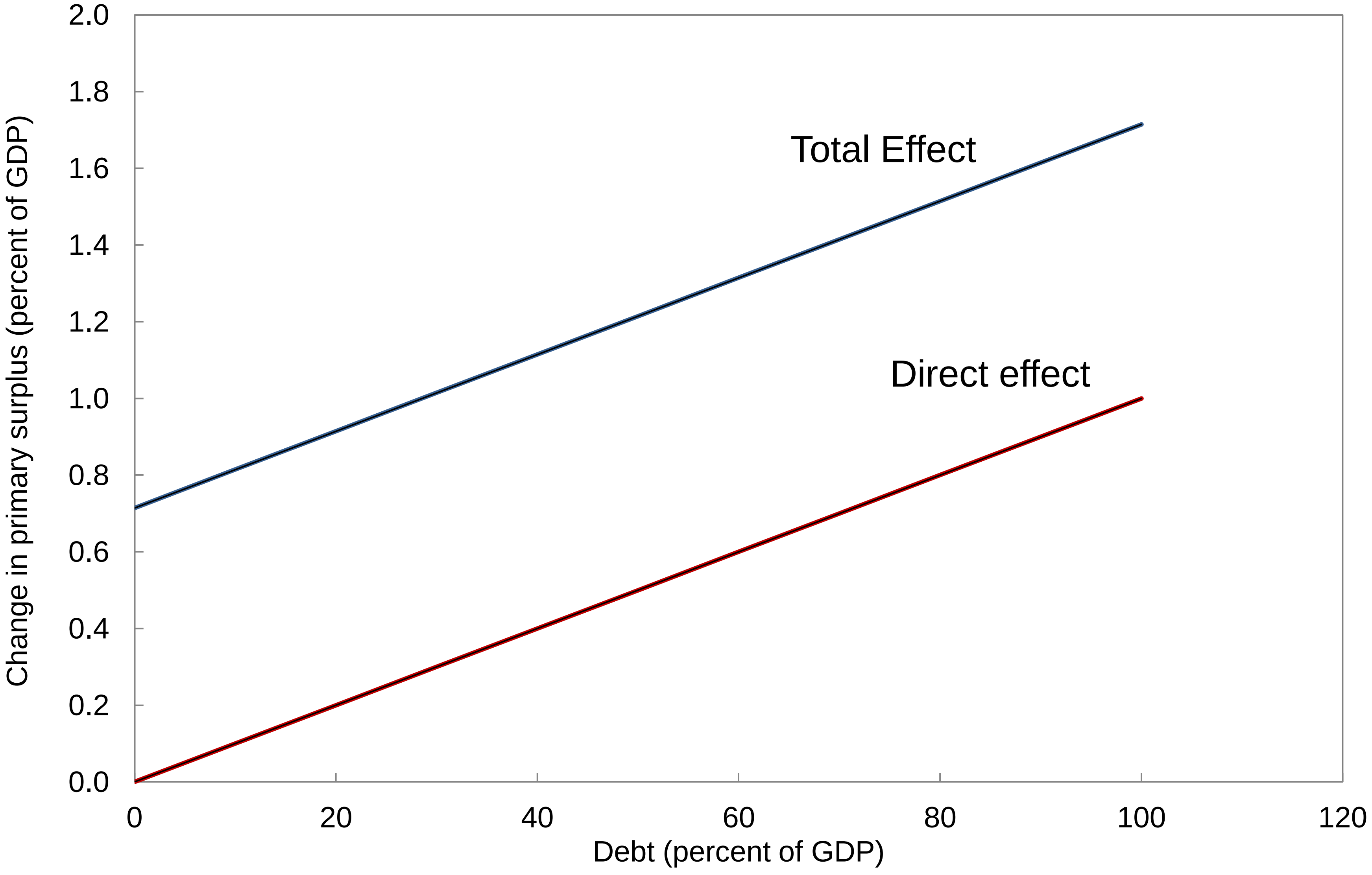
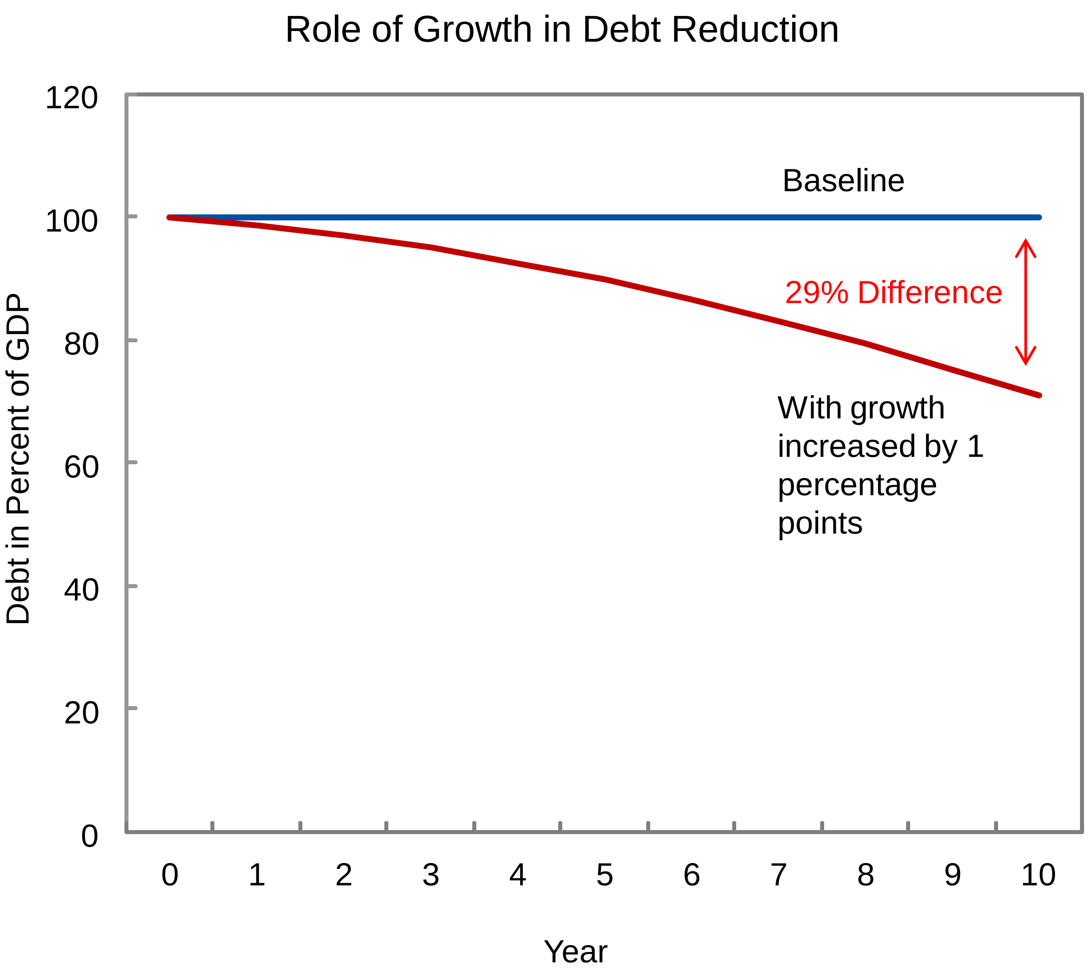


The Role of Growth Lowering Debt Ratios



- Initial debt ratio at 100%
- Increase the growth rate for 10 years by 1 p.p.
- Spending constant in per capita terms, assuming a 40% tax ratio
- Would lower public debt by 29% of GDP

Policy Implications in the Long Term

- Need to lower public debt over time
- Medium term growth is critical for successful adjustment
- Not all structural fiscal reforms are equally good
- Link between potential growth and fiscal policy should initiate a ‘virtuous cycle’, facilitating fiscal adjustment

Thank you!