

Will It Hurt? Who Will it Hurt?

Macroeconomic and Distributional Effects of Fiscal Consolidation

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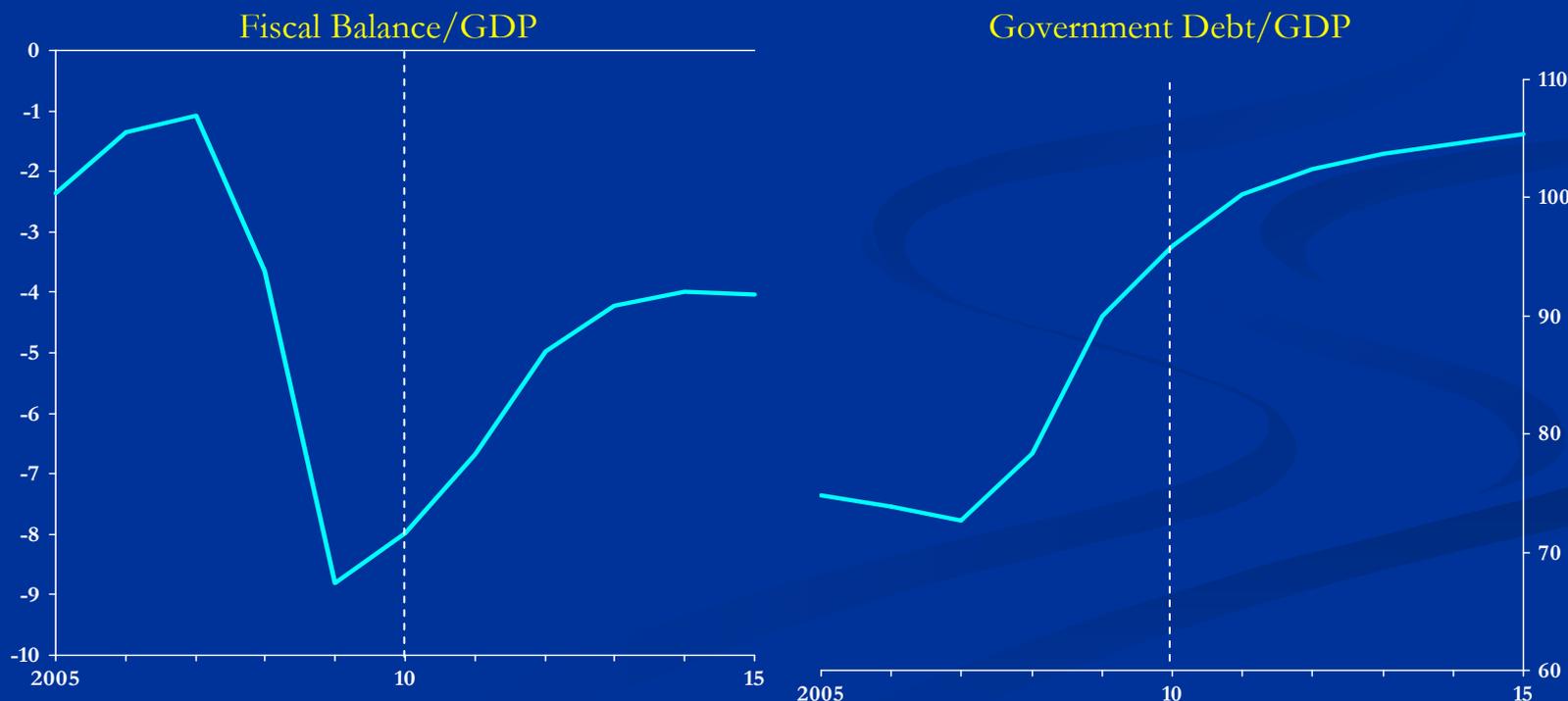
I thank Jair Rodriguez for outstanding research assistance.

Outline

- Will it Hurt? (IMF Fall 2010 WEO chapter 3)
- Who Will it Hurt? (ongoing work with Larry Ball and Daniel Leigh)
 - Impact on Long-term Unemployment
- Who Will it Hurt? (review of the literature)
 - Changes in Wage and Profit Shares
 - Changes in Inequality

Setting the Scene

- Advanced economies face challenge of fiscal consolidation.
- What are the macro effects of tax hikes and spending cuts?
- Role of monetary policy, international trade, tax-spending composition, perceived sovereign risk.

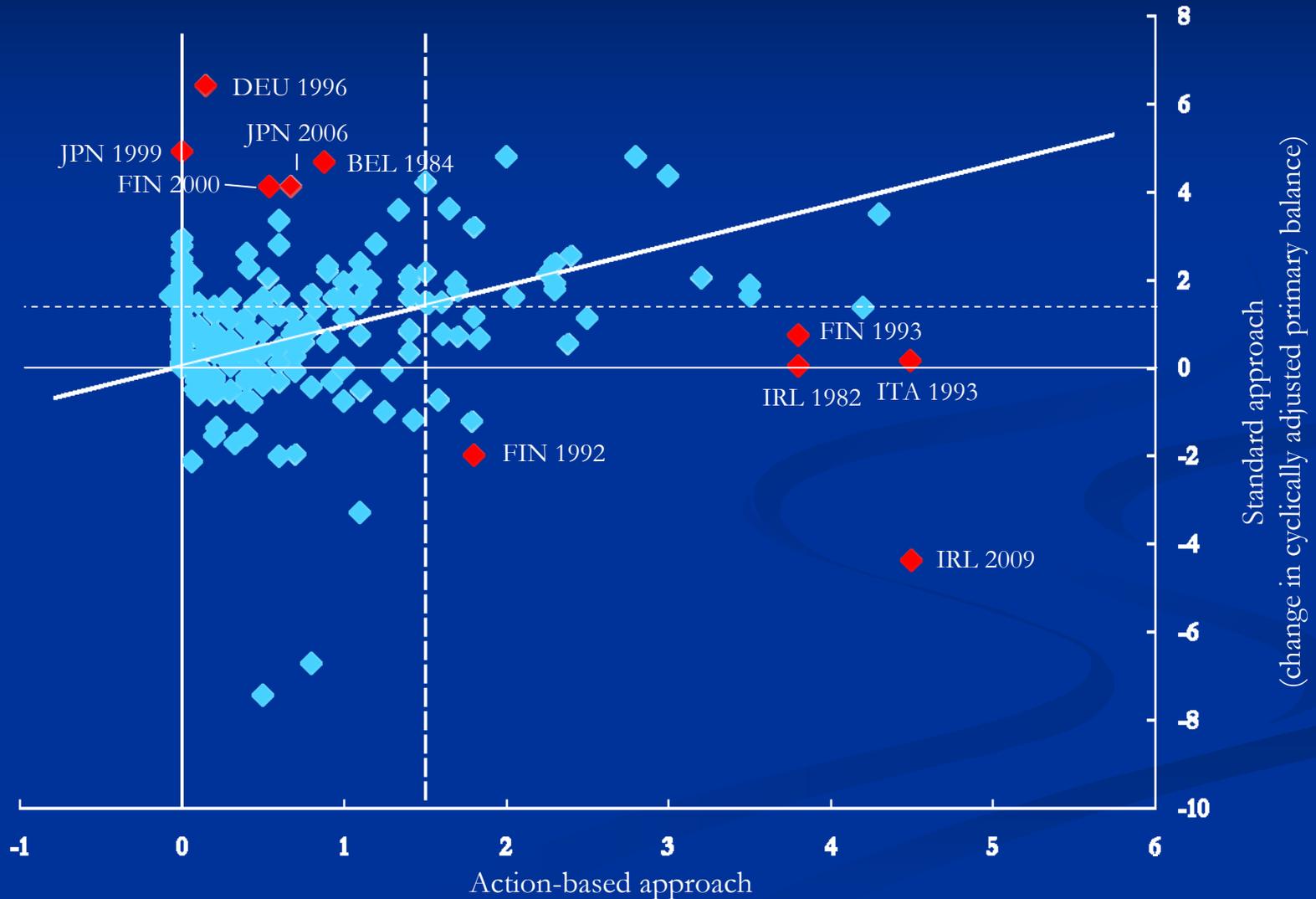


Source: IMF World Economic Outlook database. Note: Advanced economy weighted average. General government.

Identifying Fiscal Consolidation

- Conventional approach: outcome-based (CAPB).
 - Sample selection bias → expansionary effects.
 - Alesina and Ardagna (2010), many others.
- Action-based definition: historical accounts and records (*OECD Economic Surveys*, IMF documents, budgets).
- 15 OECD countries 1980-2009: 173 cases of fiscal consol
 - G7, AUS, BEL, DNK, FIN, IRL, PRT, ESP, SWE.
 - Mean size of 173 cases: 1% of GDP.

Episodes of Fiscal Consolidation: Action-based vs. Standard Approach



Macroeconomic Effects

- Estimation approach: Romer-Romer-style.
 - g : growth rate of real GDP.
 - FC : action-based consolidation in % of GDP.
 - Cumulate responses to estimate GDP *level*.

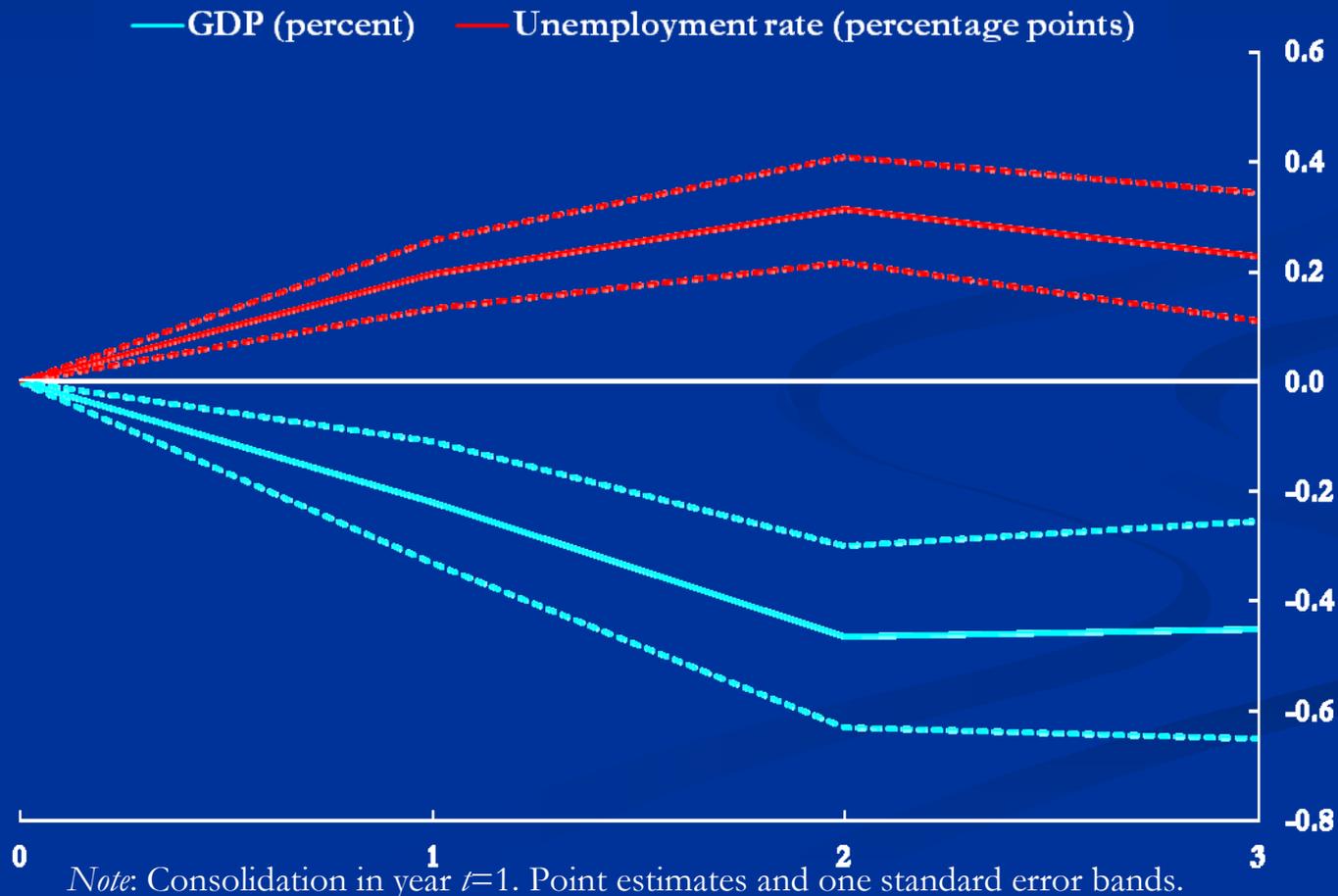
$$g_{it} = \alpha + \sum_{j=1}^2 \beta_j g_{i,t-j} + \sum_{s=0}^2 \beta_s FC_{i,t-s} + u_{it}$$

$$u_{it} = \mu_i + \lambda_t + v_{it}$$

Robustness: different lag lengths (up to 4), no lags of growth. Similar results.

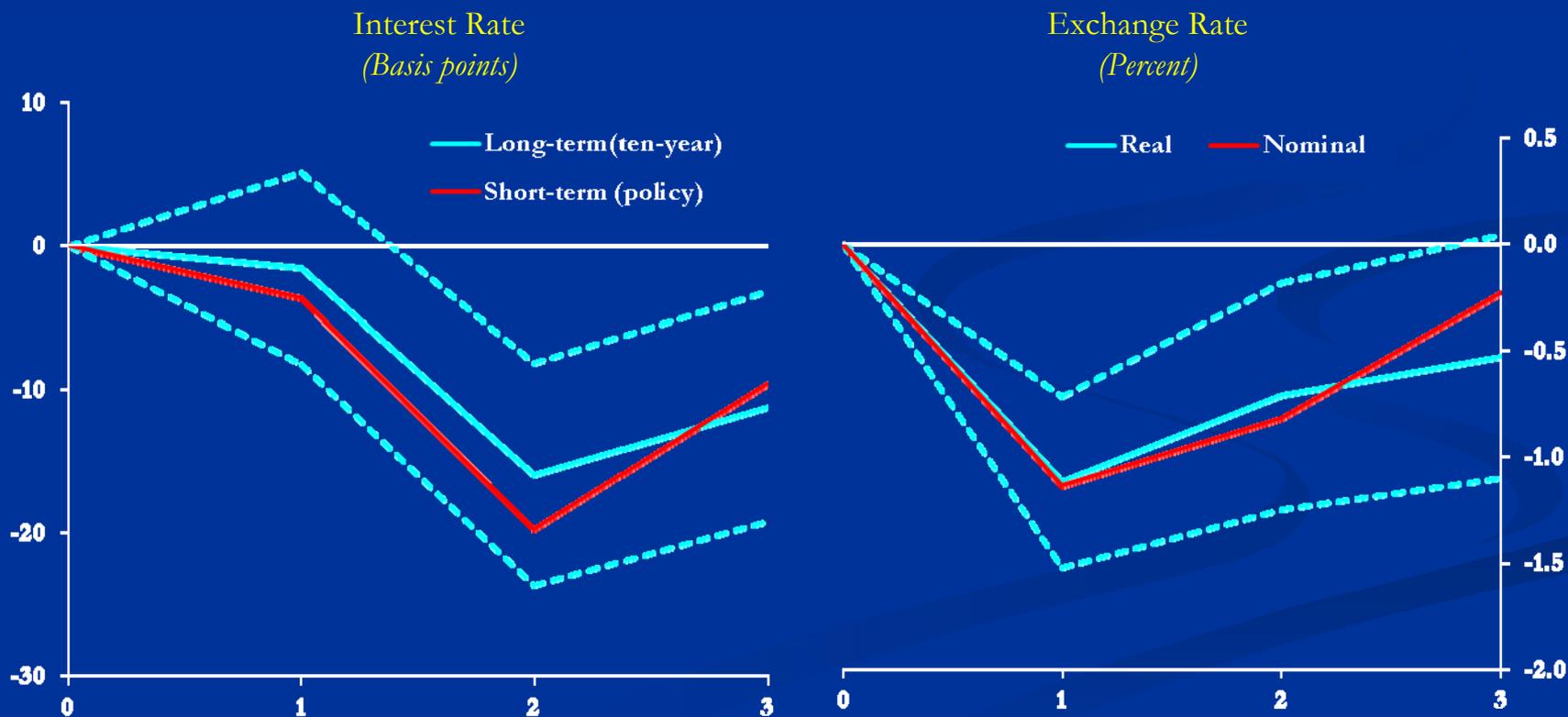
Fiscal Consolidation is Contractionary

- Impact of 1% of GDP fiscal consolidation.
- GDP down ½ percent. Unemployment rate up ⅓ point.



Usually: Monetary Mitigation

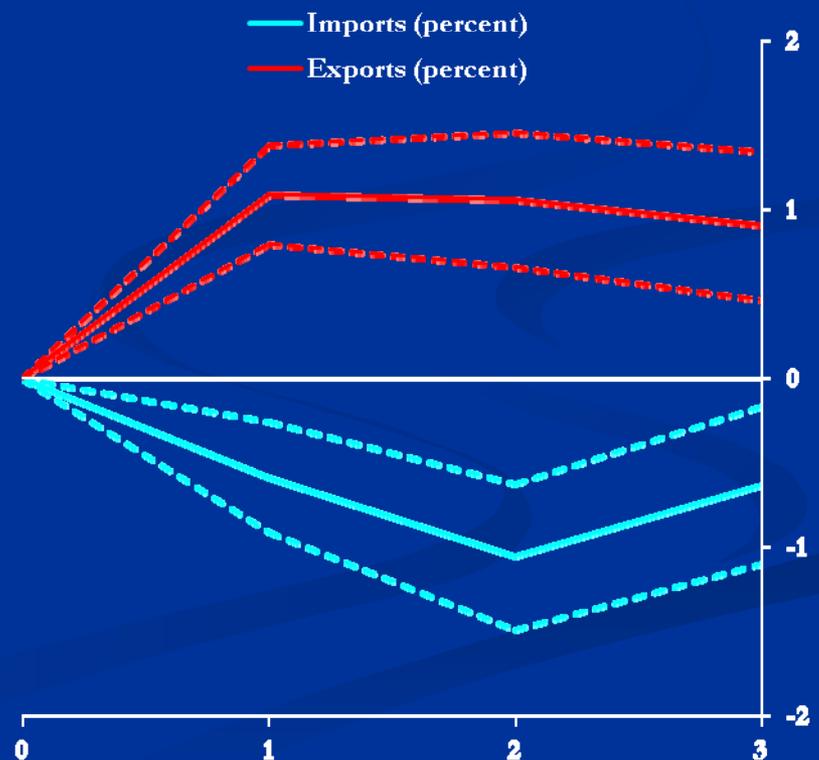
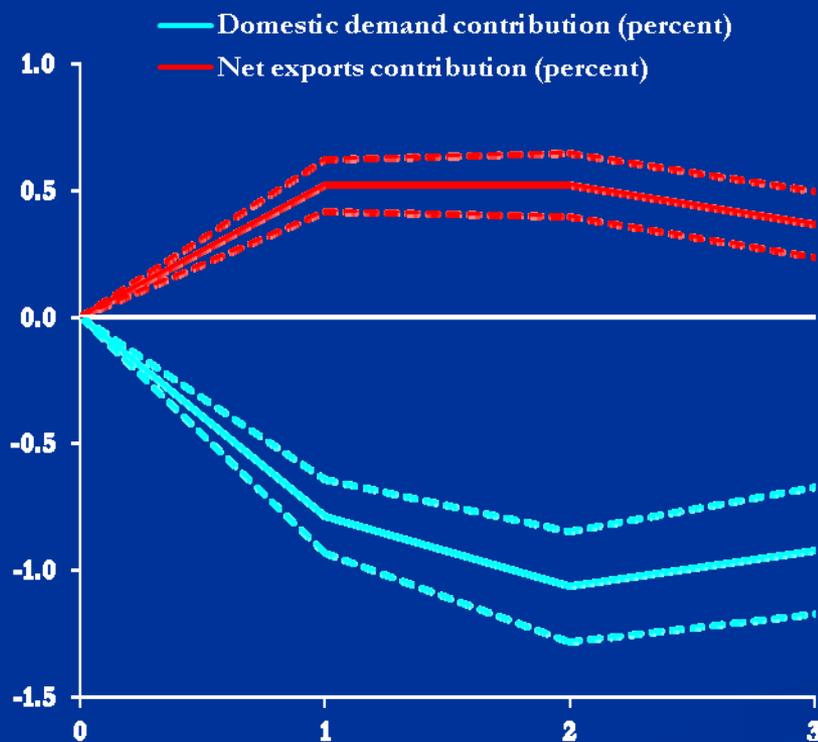
- Monetary conditions ease in response to fiscal consol.
 - Interest rates fall.
 - Currency loses value (both real and nominal).



Note: Impact of 1% of GDP consolidation in year $t=1$. Point estimates and one standard error bands.

Transmission Channel: Net Exports

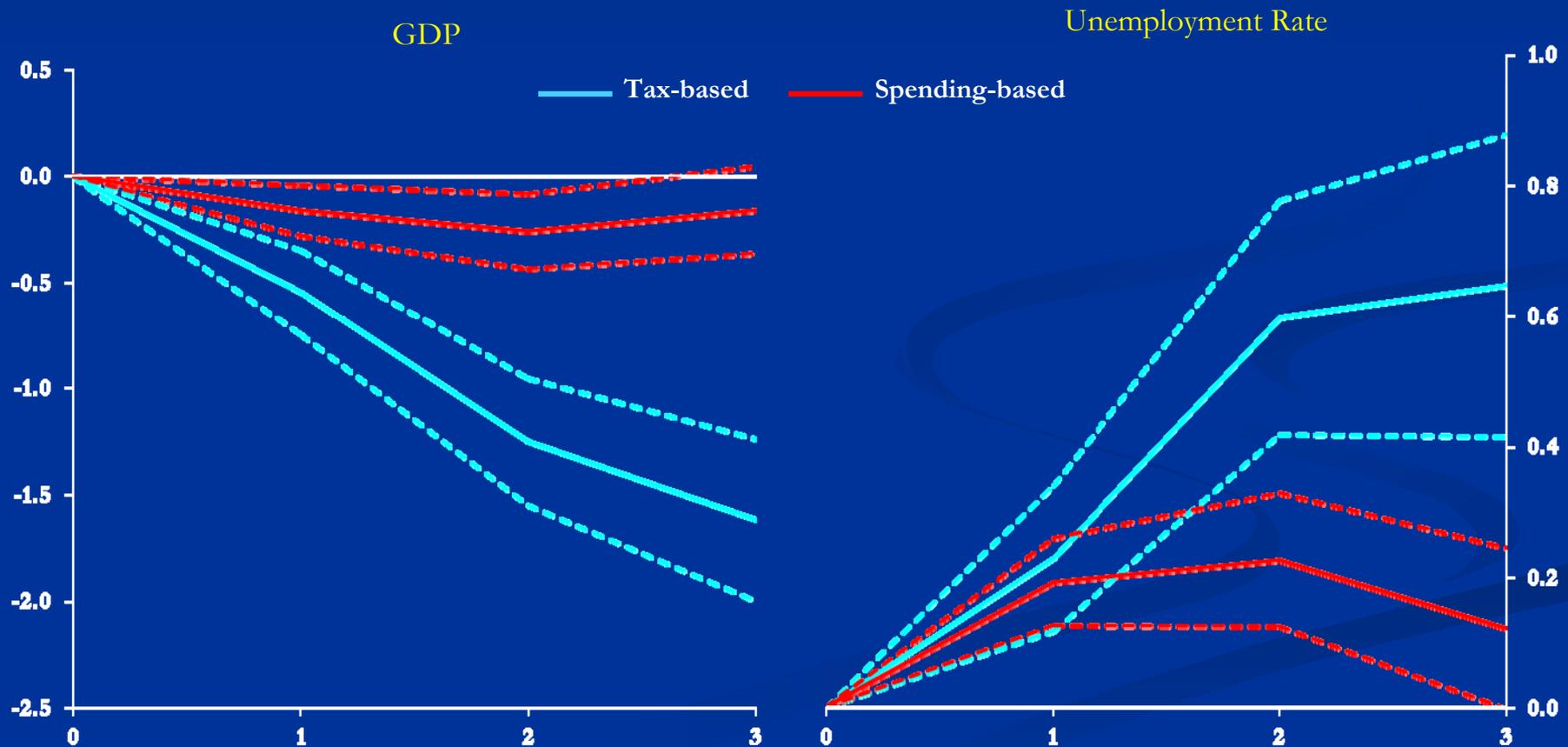
- NX increase plays key offsetting role. Contribution \uparrow 0.5%.
- Domestic demand \downarrow 1%.
- Exports rise 1%, imports fall 1%. CA/GDP \uparrow 0.6pp.



Note: Impact of 1% of GDP consolidation in year $t=1$. Point estimates and one standard error bands.

Does Composition Matter?

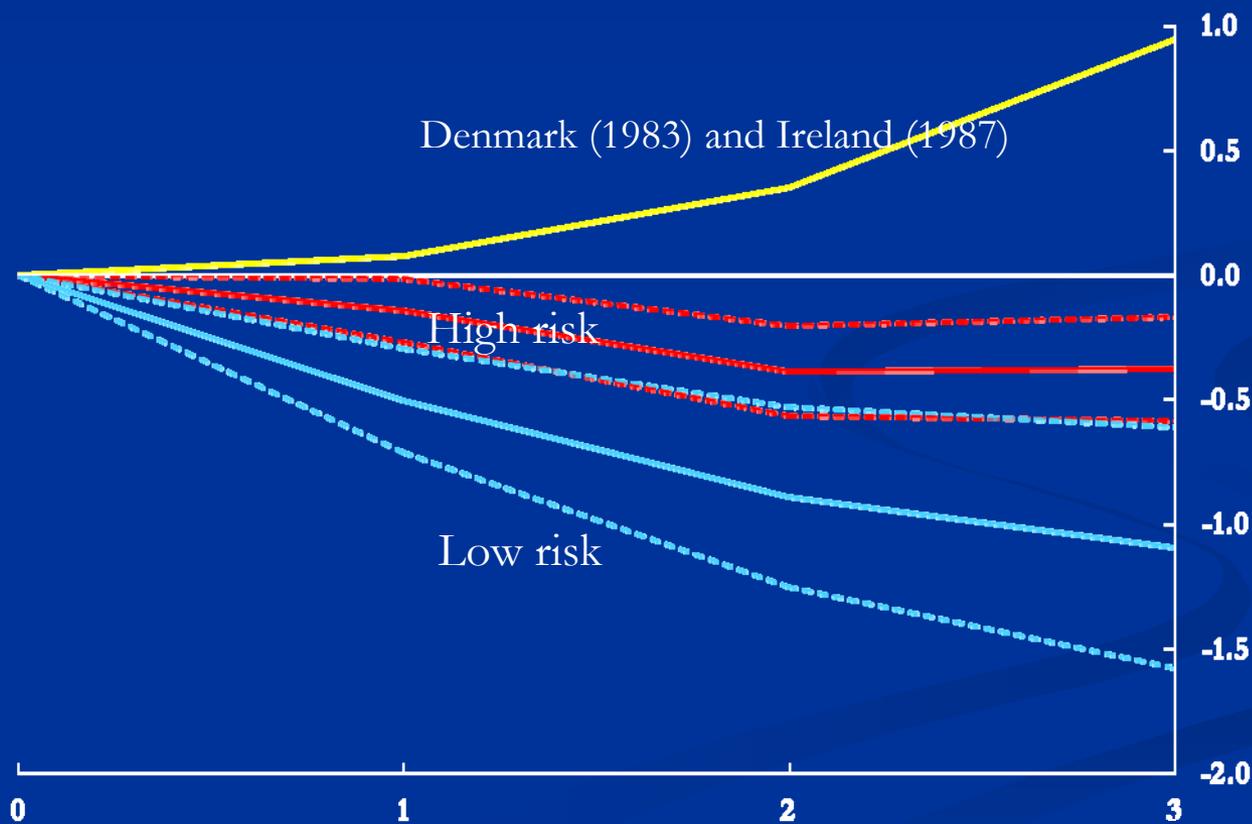
- Tax-based vs. spending-based consolidation.
- *Both* are contractionary, but spending-based less so.



Note: Impact of 1% of GDP consolidation in year $t=1$. Point estimates and one standard error bands.

Role of Perceived Sovereign Default Risk

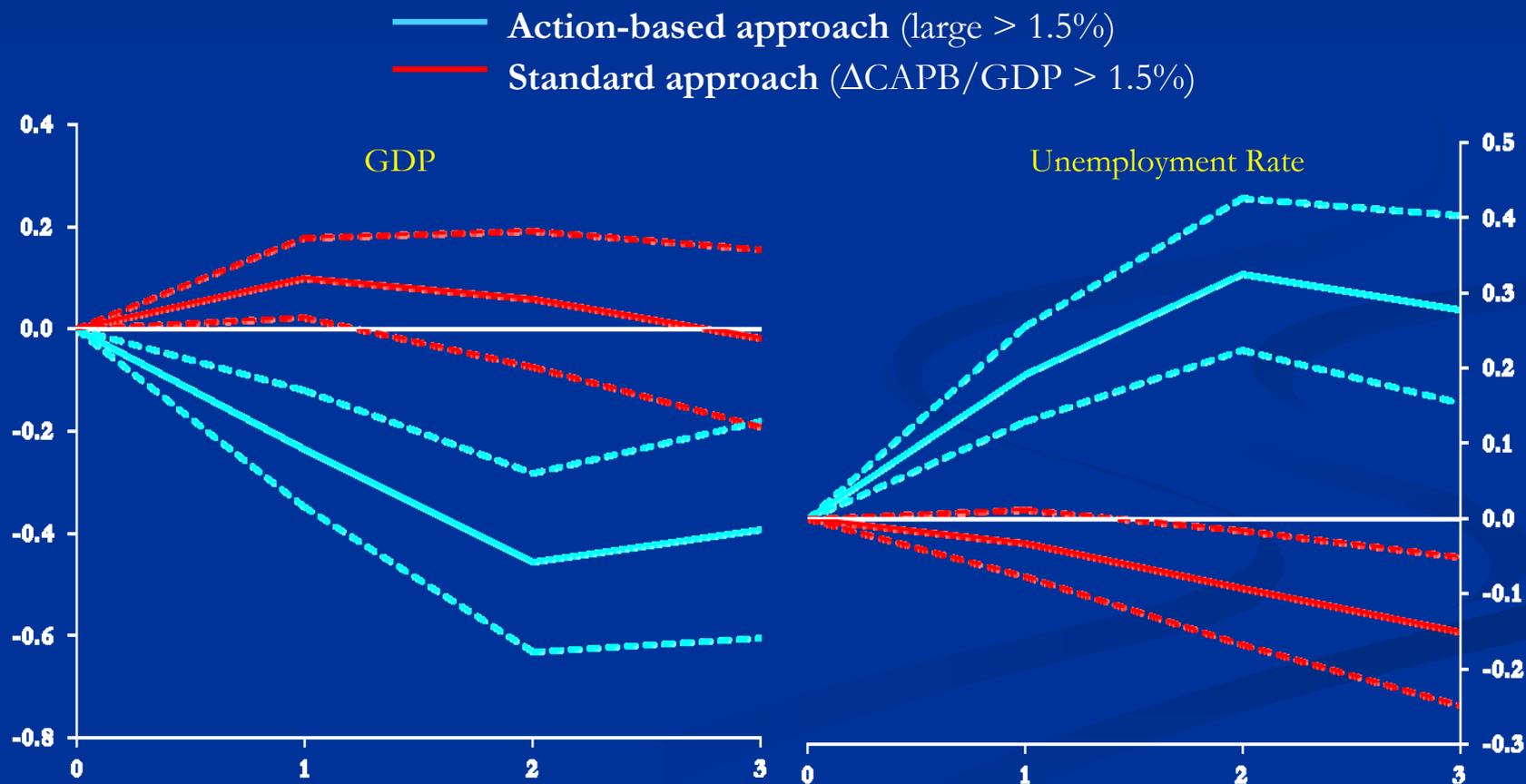
- Low perceived risk \rightarrow “Keynesian” contraction.
- High risk \rightarrow milder contraction.
- Denmark/Ireland = outliers.



Note: Impact of 1% of GDP consolidation in year $t=1$. Point estimates and one standard error bands.

Contrast with the Literature

- Our sample using AA (2010) episodes \rightarrow expansionary effects.
- Interpretation: sample selection bias.



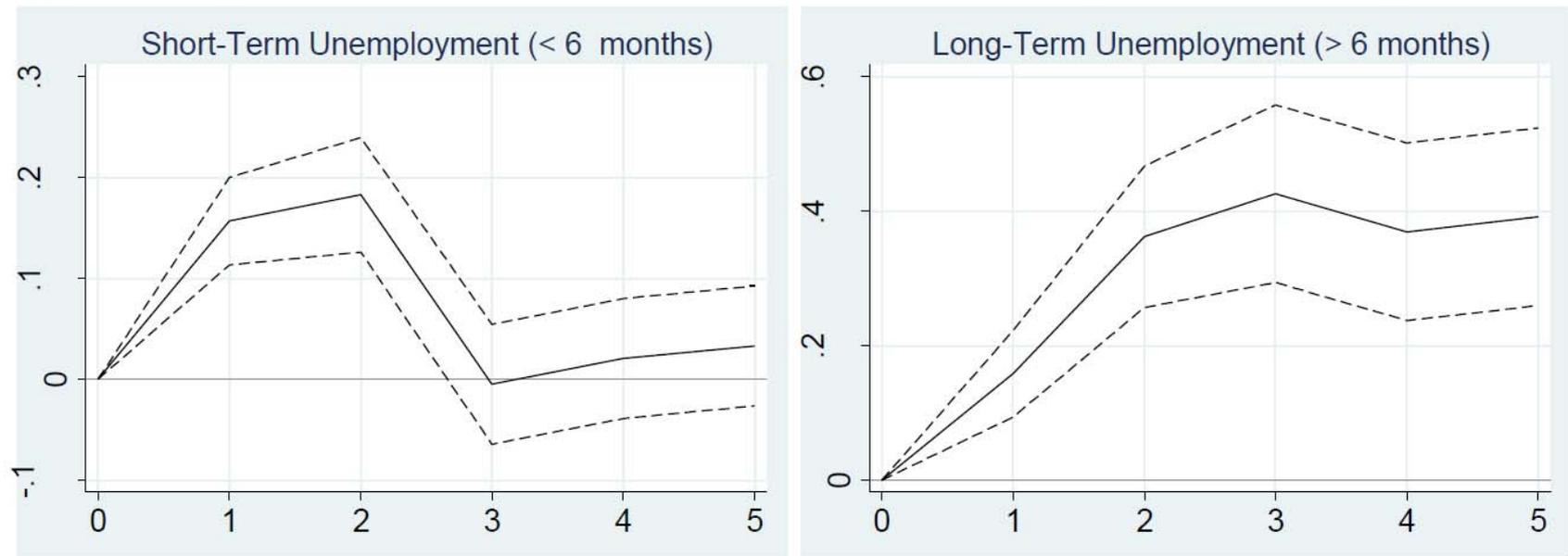
Note: Impact of additional 1% of GDP consolidation in year $t=1$. Point estimates and one standard error bands.

Lessons for Today

- Fiscal consolidations are contractionary in short-term.
- Monetary easing ($ER \downarrow$, $R \downarrow$) + NX boom = key cushioning role. But less today (zero R , synchronized).
- Less contractionary for high risk than for low risk.
- Reforms needed: retirement age, entitlement programs.
- Long-term gains. Lower interest rates, lower taxes.

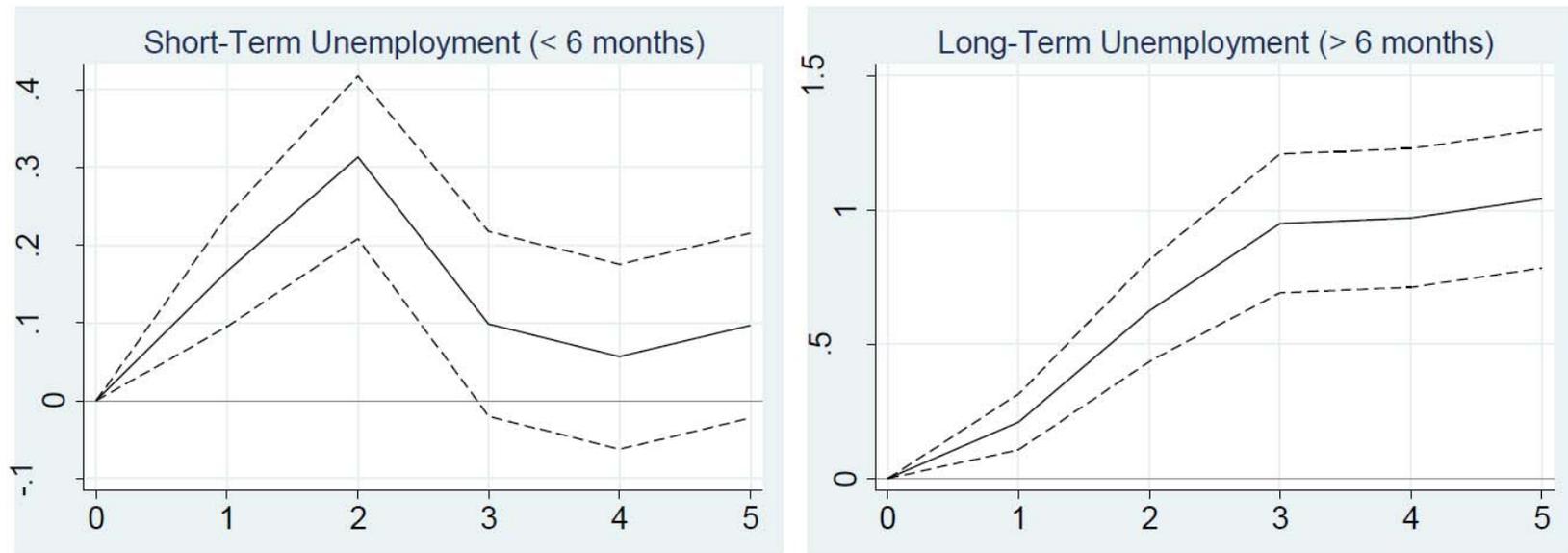
Fiscal Consolidation and Unemployment

Figure 1. Impact of 1 % of GDP Fiscal Consolidation on Unemployment Rates, by Duration



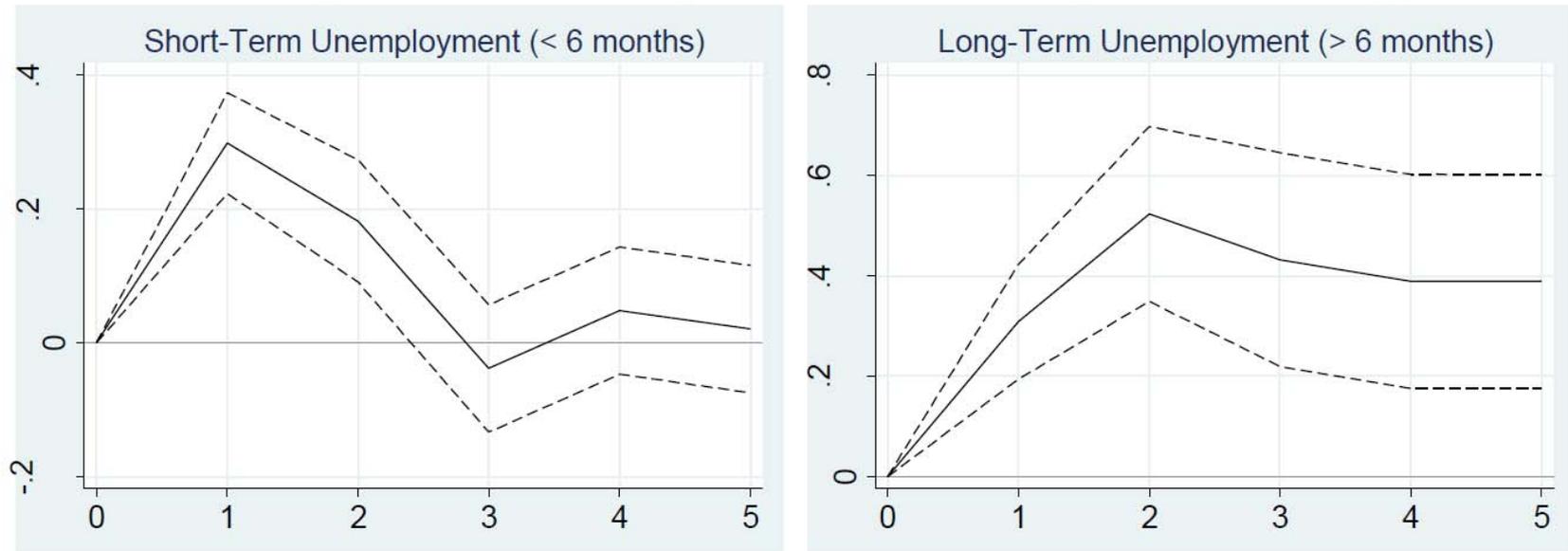
Tax Hikes and Unemployment

Figure 2. Impact of 1 % of GDP Tax Increase on Unemployment Rates, by Duration



Spending Cuts and Unemployment

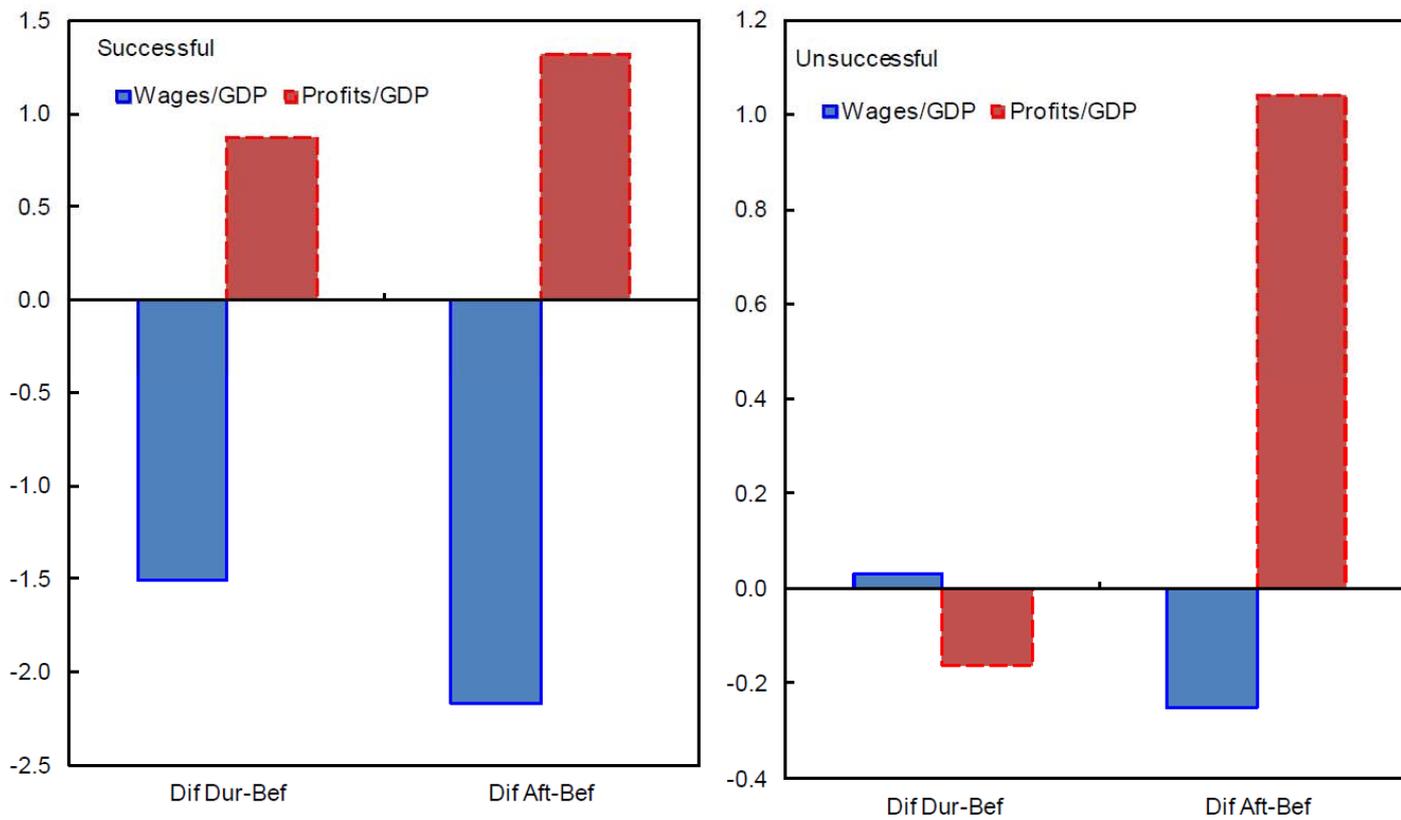
Figure 3. Impact of 1 % of GDP Spending Cuts on Unemployment Rates, by Duration



Wage and Profit Shares

(based on Alesina and Ardagna (1998))

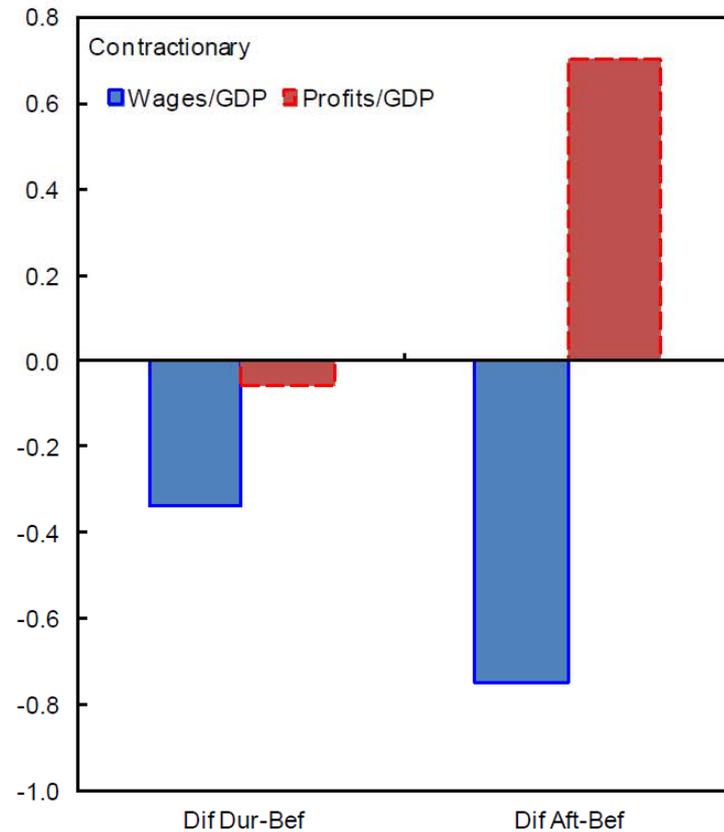
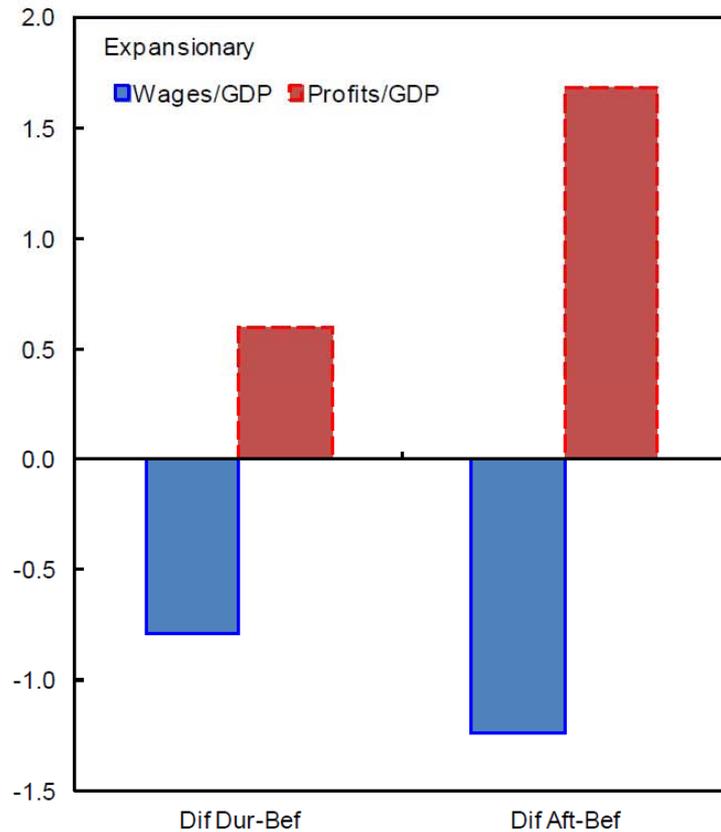
Figure 4. Successful and Unsuccessful Fiscal Adjustments



Wage and Profit Shares

(based on Alesina and Ardagna (1998))

Expansionary and Contractionary Fiscal Adjustments



Wage and Profit Shares: Case Studies

Figure 5A. Fiscal adjustment

These charts are based on the ten detailed case studies presented in Alesina and Ardagna (1998).

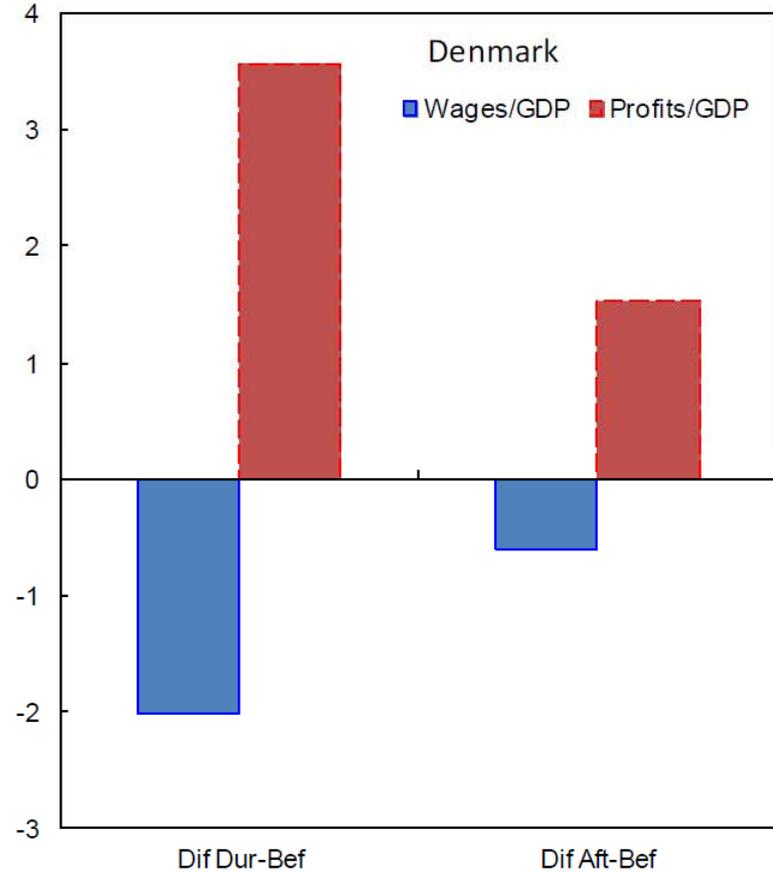
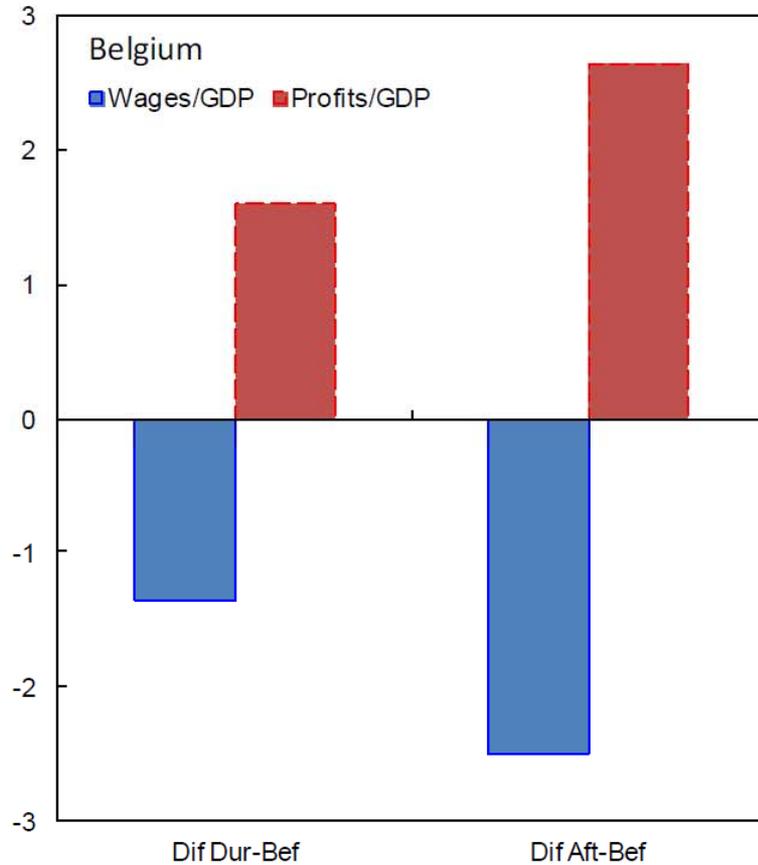
Figures 5A and 5B the impact of wage and profit shares in seven of those ten cases.

“Dif Dur-Bef” is the difference in shares “during” and “before” the fiscal consolidation.

“Dif Aft-Bef” is the difference in shares “after” and “before” the fiscal consolidation.

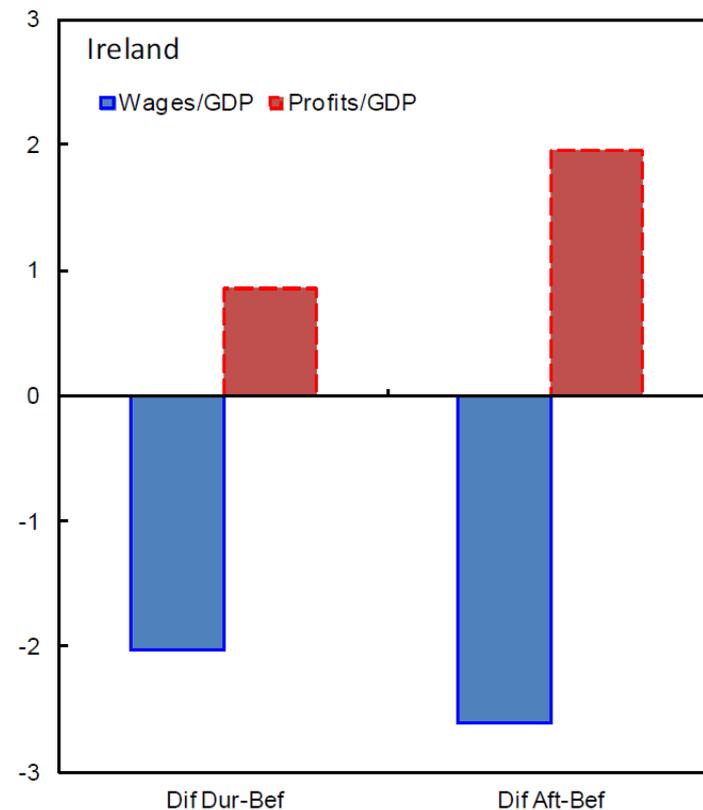
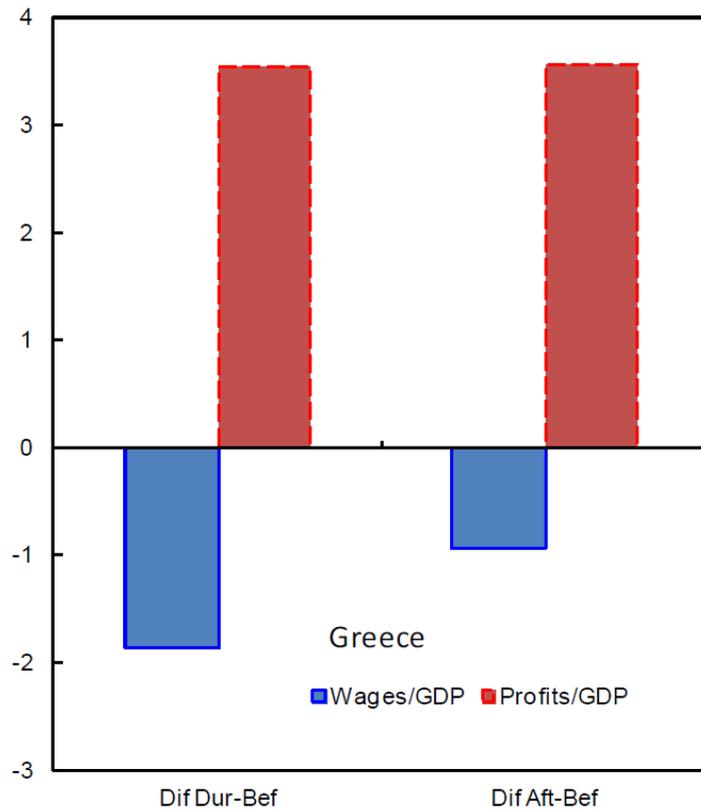


Wage and Profit Shares: Case Studies (continued)

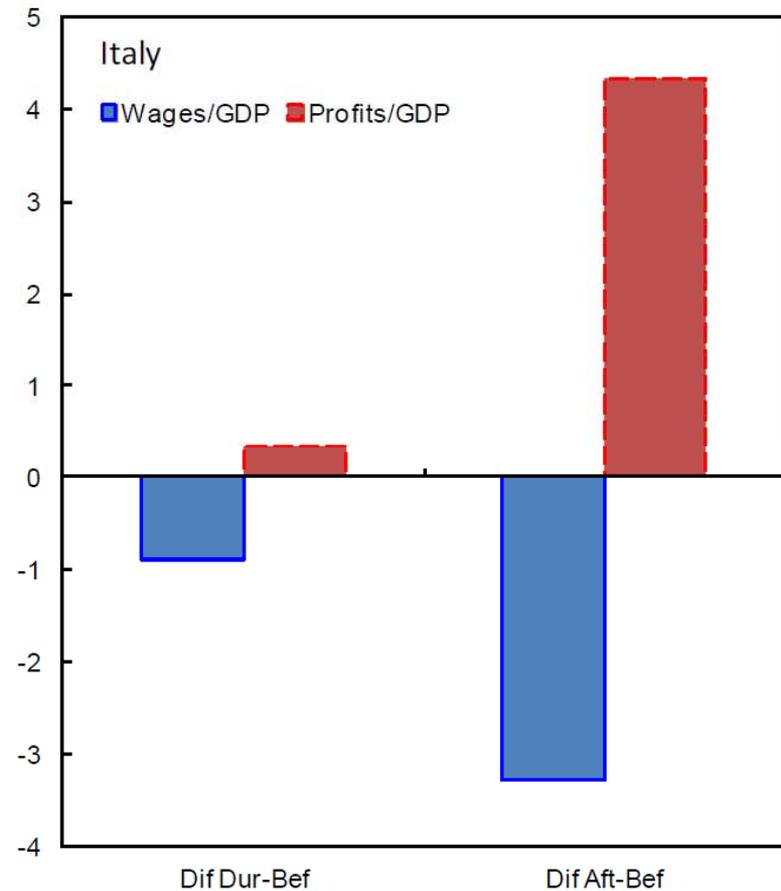
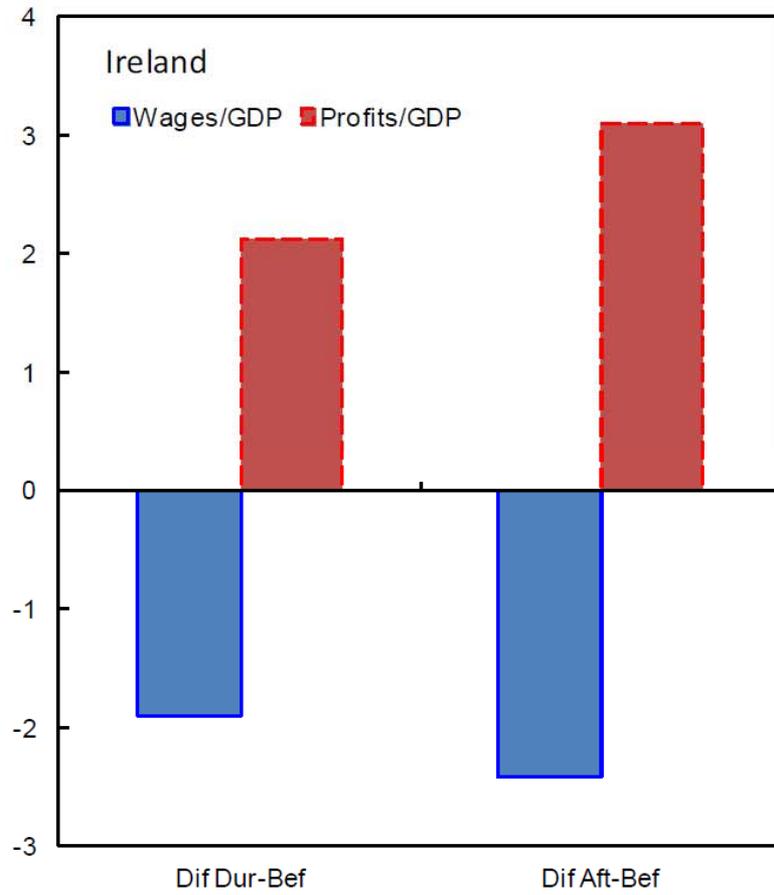


Wage and Profit Shares: Case Studies (continued)

Figure 5B. Fiscal adjustment



Wage and Profit Shares: Case Studies (concluded)

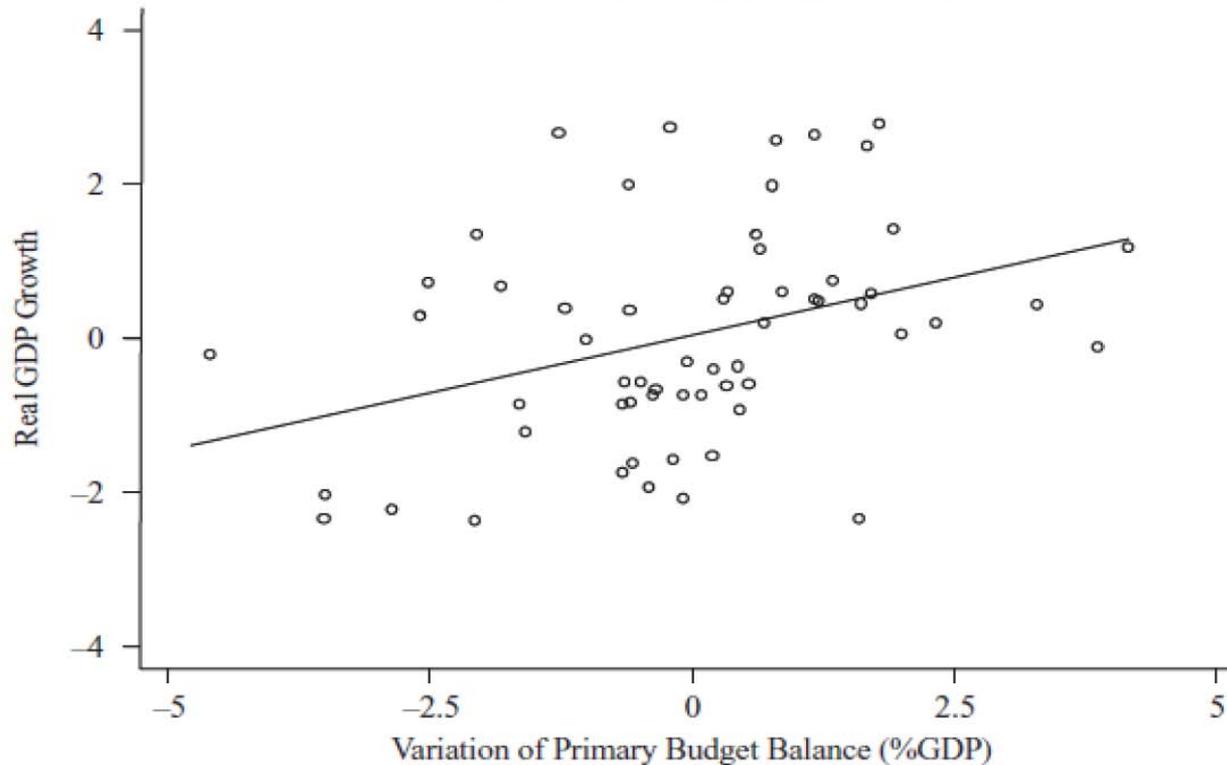


Fiscal Policy and Growth

(Based on Carlos Mulas-Granados, 2005)

Figure 7: Fiscal Adjustments and the Trade-off between Growth and Equality

Coef = .291; T = 2.9; Adj. R-Squared = 0.12; N = 60



Fiscal Policy and Inequality

(Based on Carlos Mulas-Granados, 2005)

