



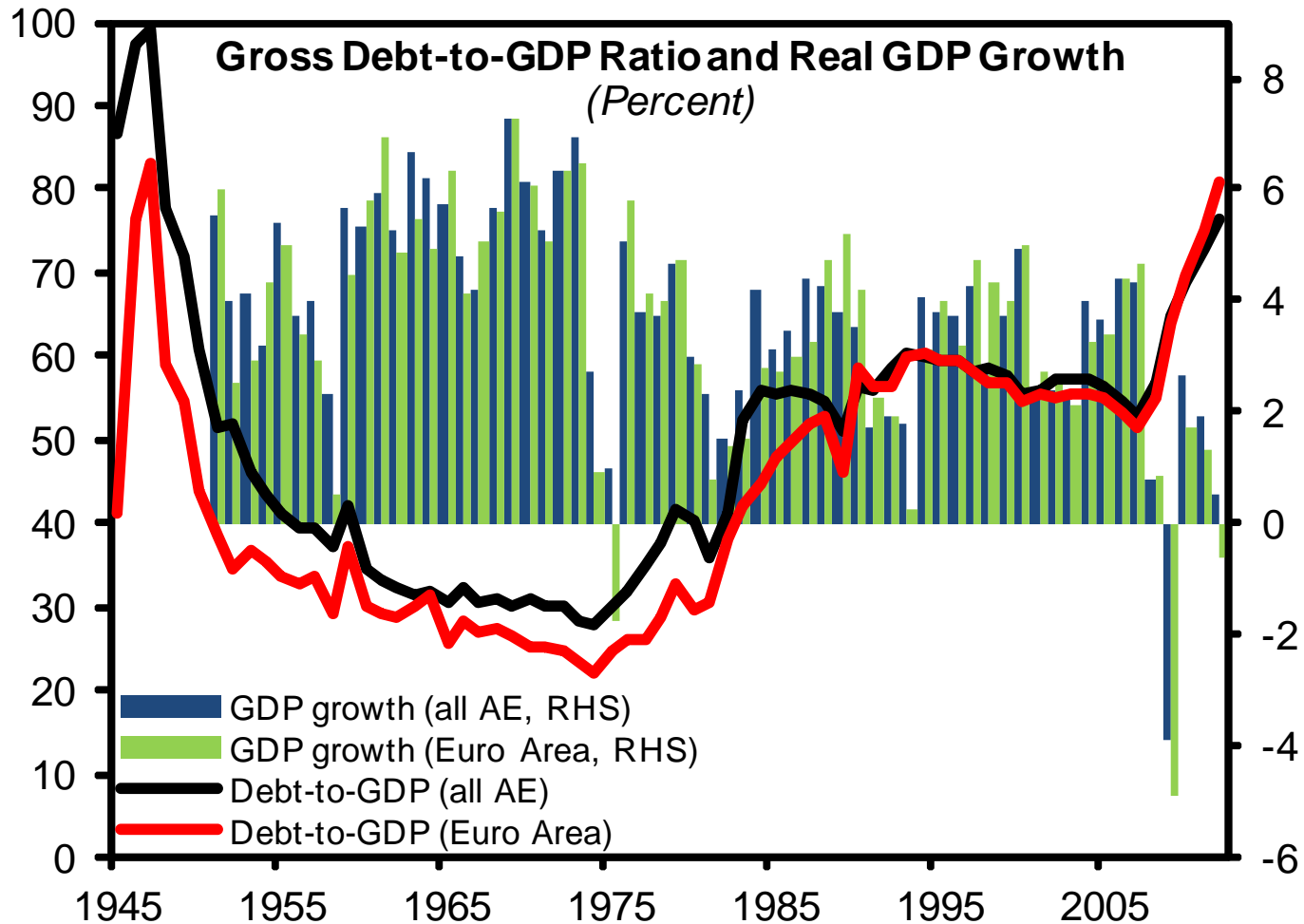
# DEALING WITH HIGH DEBT IN AN ERA OF LOW GROWTH

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# SCALE OF THE PROBLEM

# Debt at historical highs amid modest growth



Sources: Historical Public Debt Database, IMF Fiscal Monitor, IMF World Economic Outlook, and IMF staff calculations.

# A challenging macro-fiscal environment

## Main Macroeconomic Indicators for Selected Advanced Economies

(Percent unless otherwise indicated)

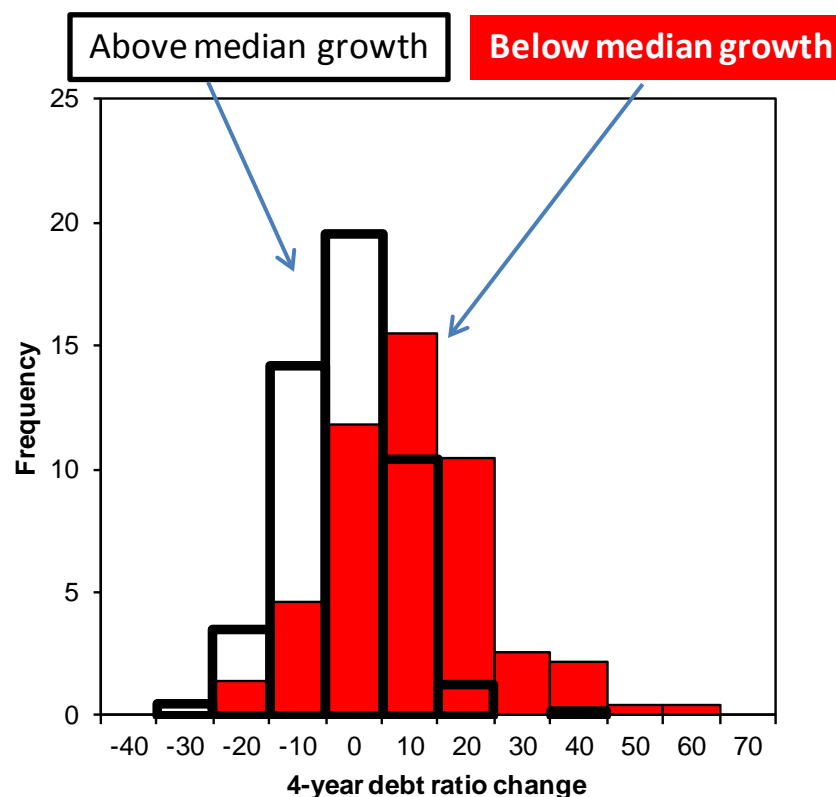
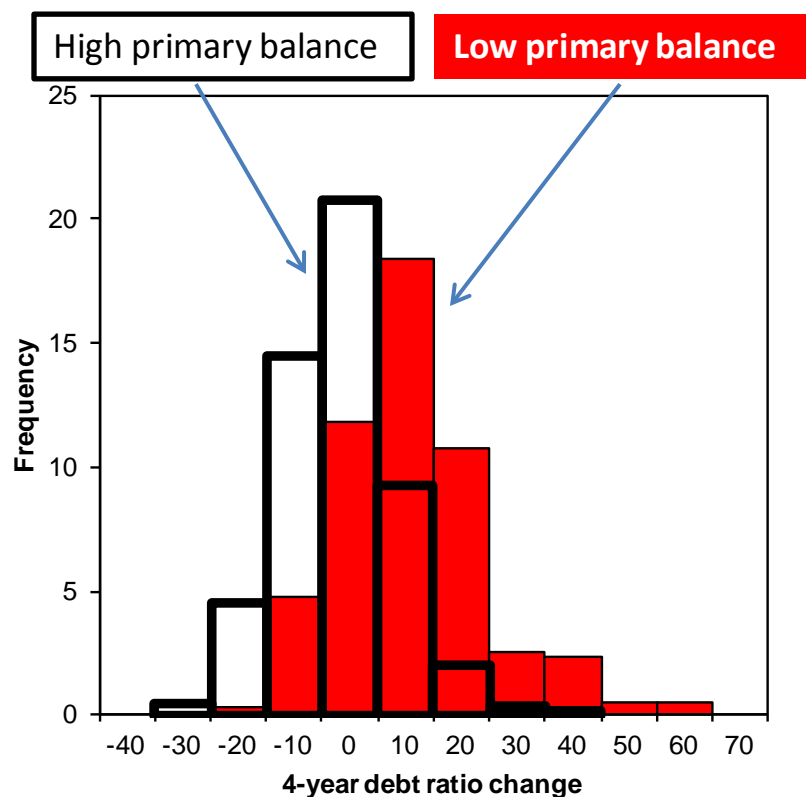
	2013	2014-19 Average			
	Debt ratio	Inflation Rate	Real Average Interest Rate	Real Growth Rate	r-g
<i>Selected Euro</i>					
France	93.9	1.4	0.8	1.7	-0.8
Germany	78.1	1.6	1.2	1.4	-0.2
Ireland	122.8	1.3	3.0	2.4	0.6
Italy	132.5	1.2	2.8	1.0	1.8
Portugal	128.8	1.3	2.1	1.6	0.5
Spain	93.9	0.9	2.8	1.1	1.7
<i>Non-Euro G7</i>					
Canada	89.1	1.9	1.7	2.2	-0.5
Japan	243.2	2.0	-0.1	1.0	-1.1
UK	90.1	2.0	1.9	2.5	-0.5
US	104.5	1.8	2.1	2.7	-0.6

Sources: IMF Fiscal Monitor, IMF World Economic Outlook, and Fund staff calaculations.

# WHAT MOVES THE DEBT RATIO?

# Debt falls with high growth and primary balances...

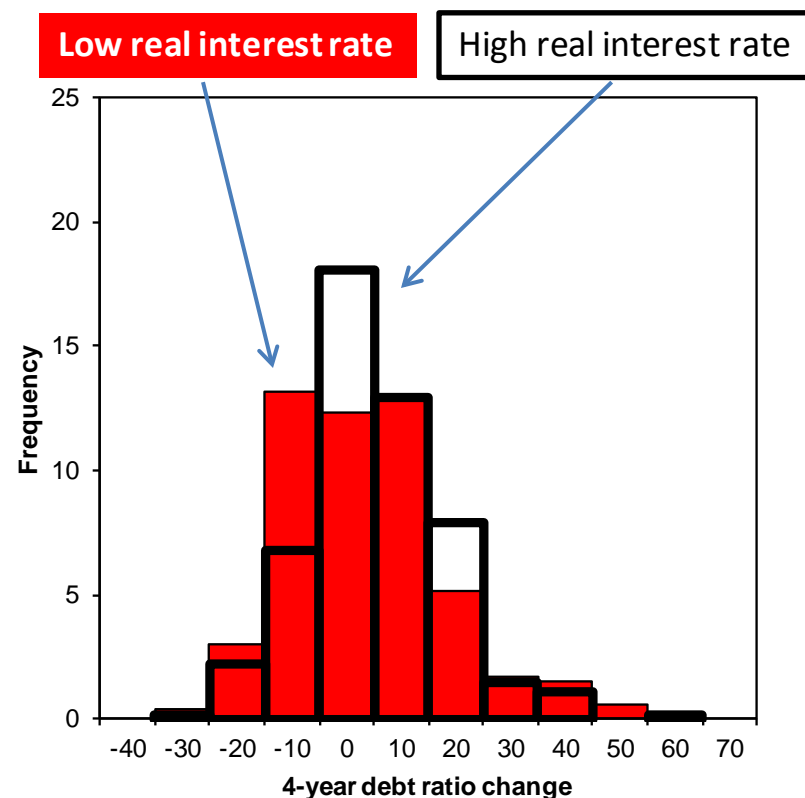
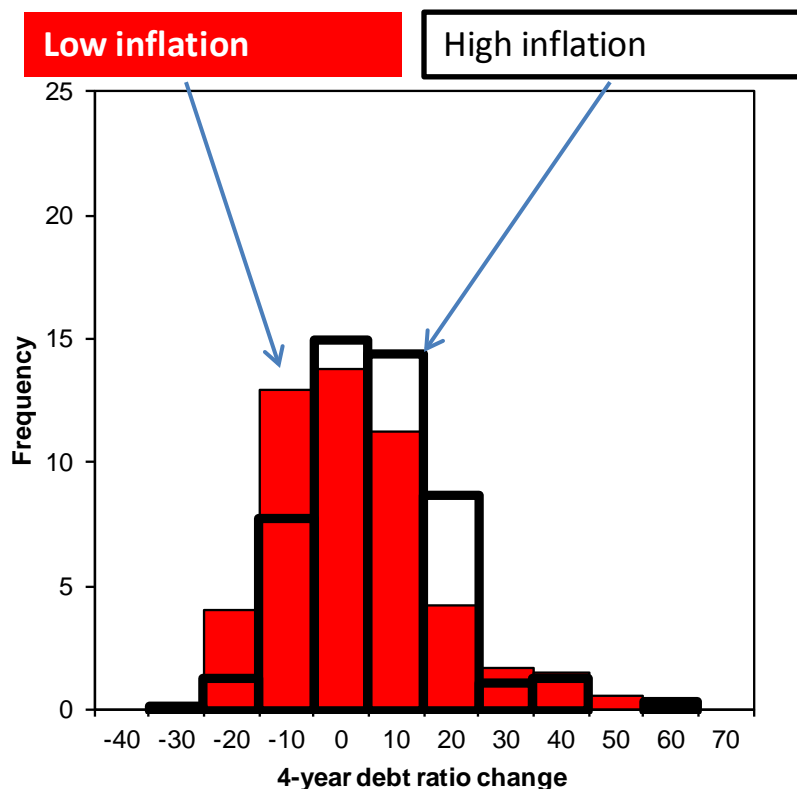
## Distribution of Debt Ratio Changes (1)



Sources: IMF WEO; and IMF Staff calculations and estimates.

# ...while inflation & interest rates have little impact

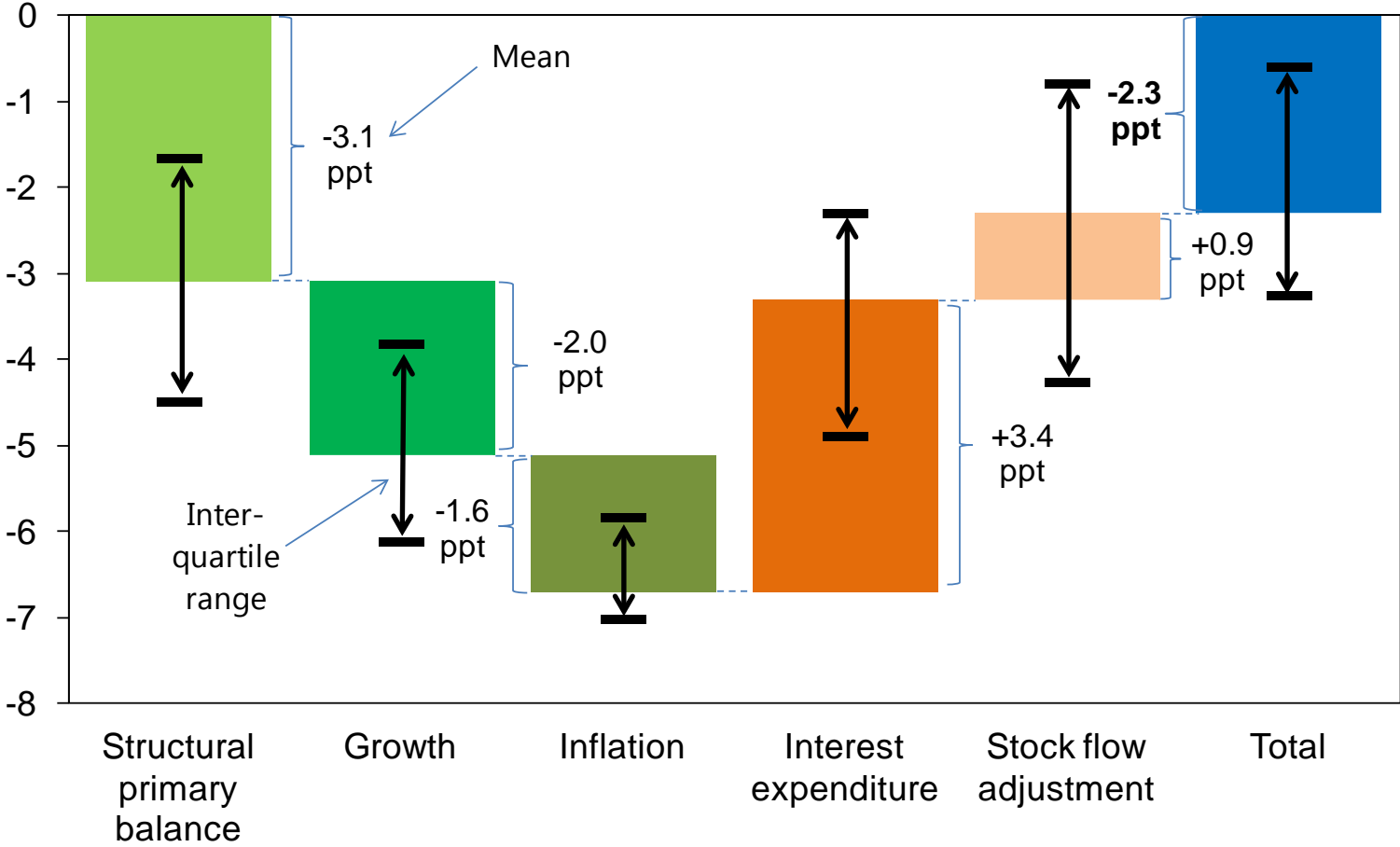
## Density of Debt Ratio Changes (2)



Sources: IMF WEO; and IMF Staff calculations and estimates.

# Decomposition of debt changes points to fiscal effort

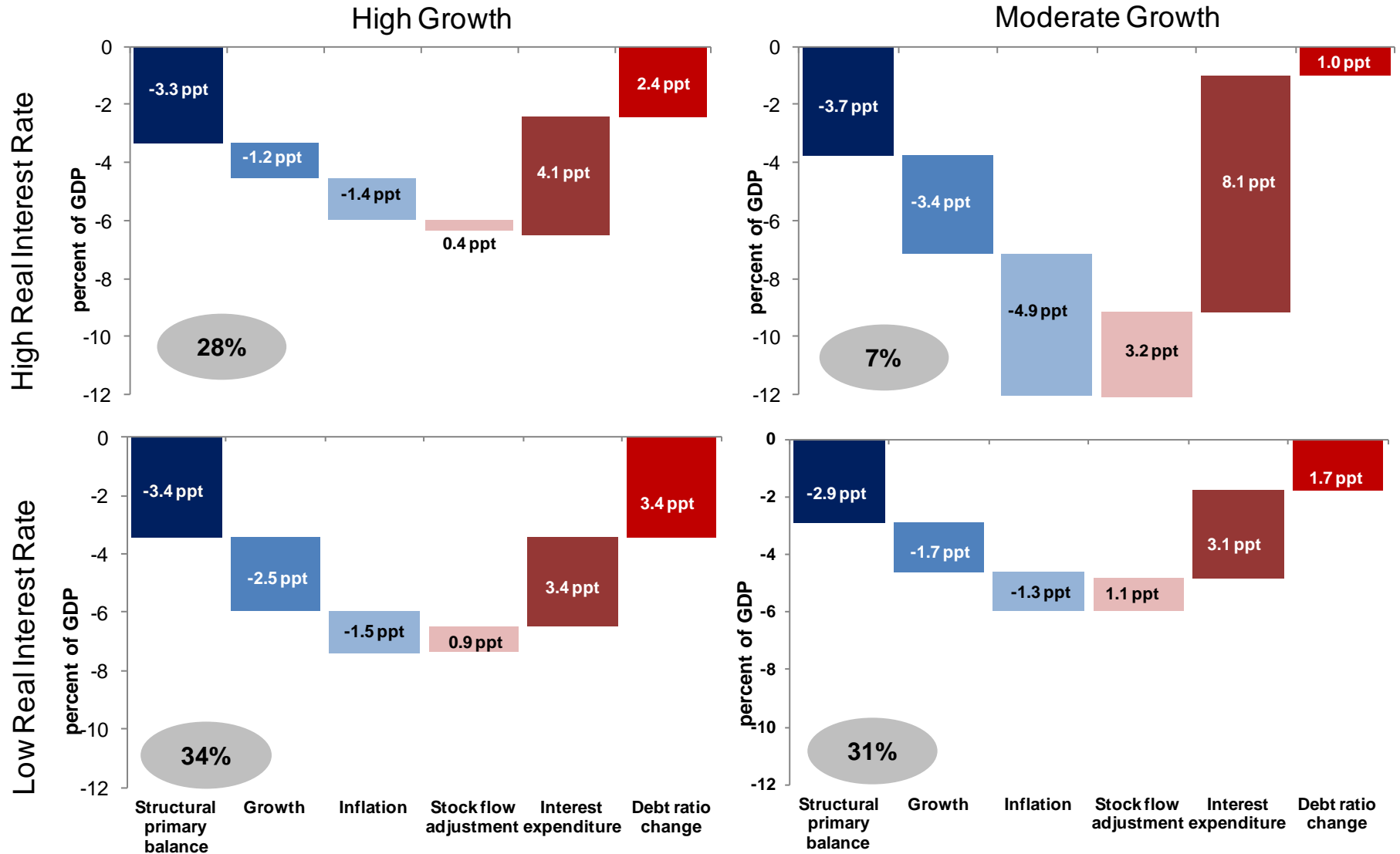
**Contribution to Annual Debt Ratio Reductions**  
(Percent of GDP)



Sources: IMF World Economic Outlook; and IMF staff calculations.

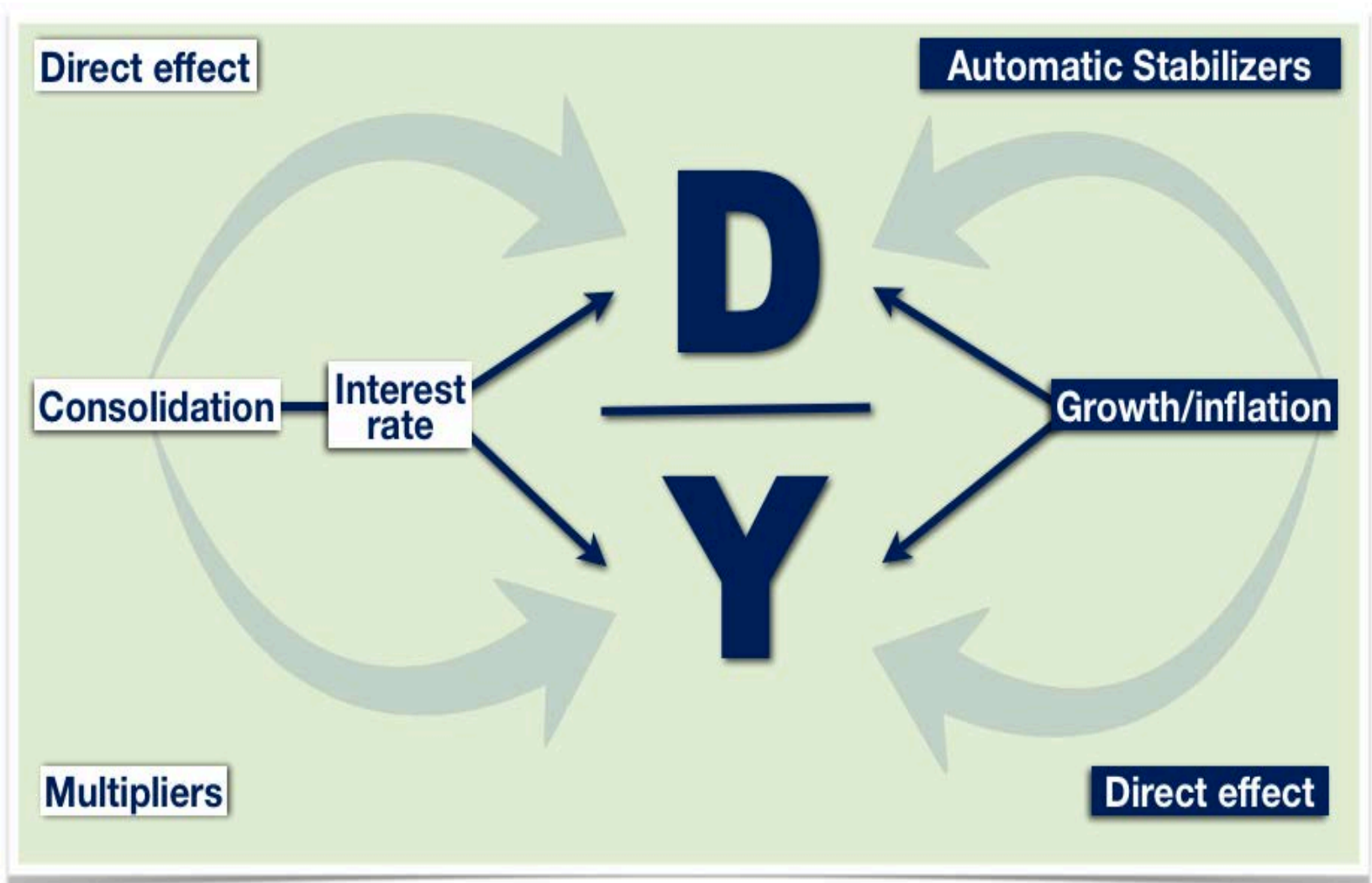


# ...but success shaped by economic conditions

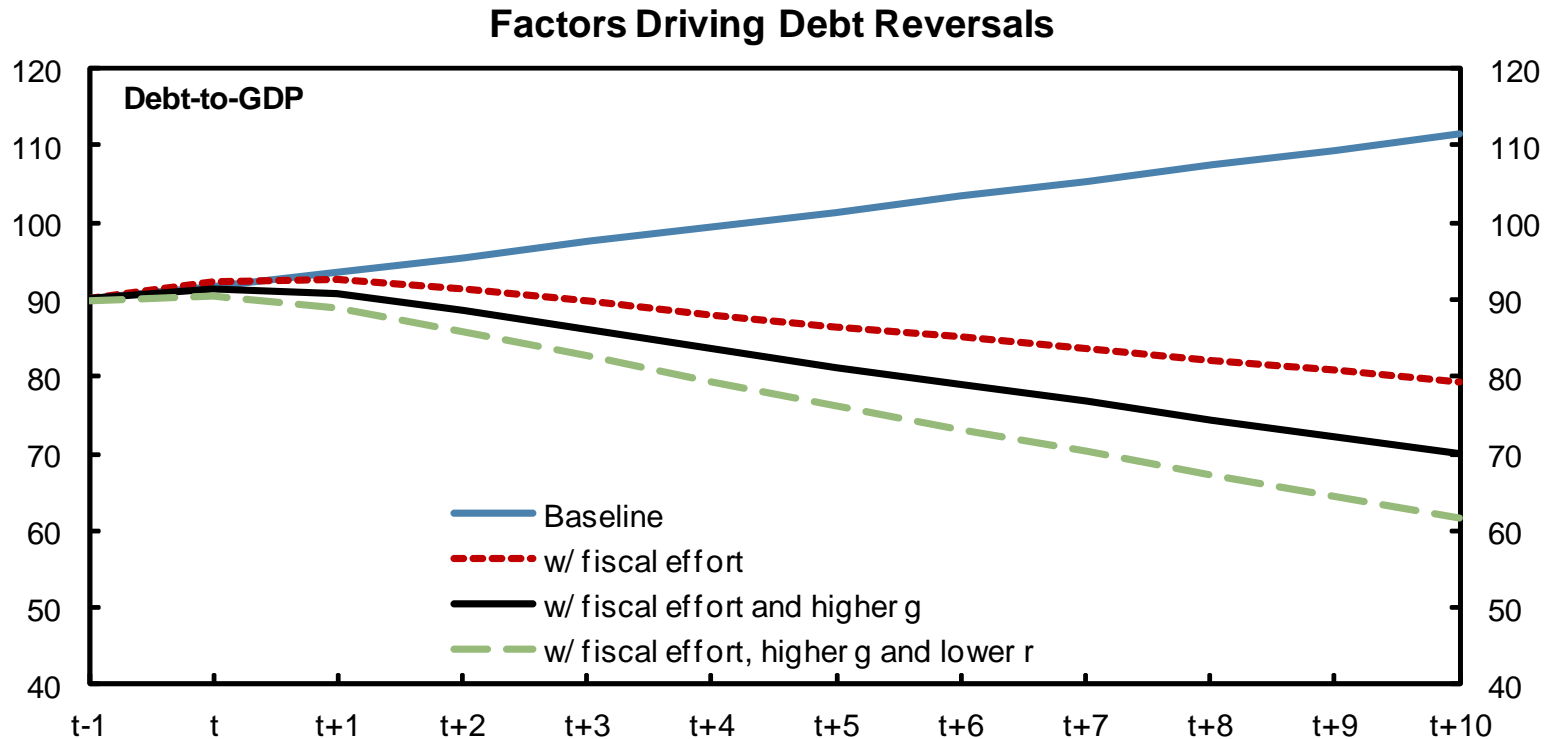


# **CONSOLIDATION AND GROWTH**

# Complicated interaction and trade-offs



# Drivers of debt: fiscal effort, growth, interest rate



## Assumptions:

Baseline real growth: 1.2 percent (excluding drag from risk premium).

Starting debt-to-GDP ratio: 90 percent.

Fiscal multiplier: 1 and persists for 4 years.

Underlying interest rate: 2 percent.

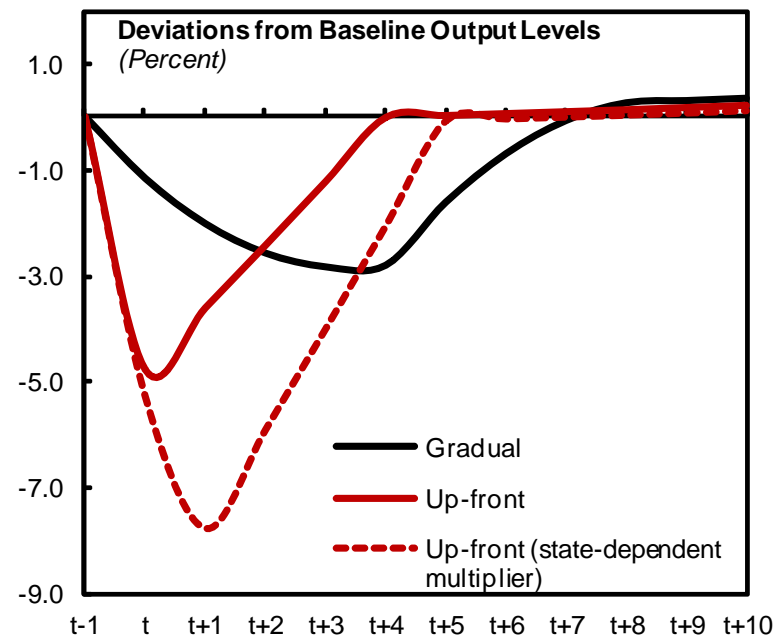
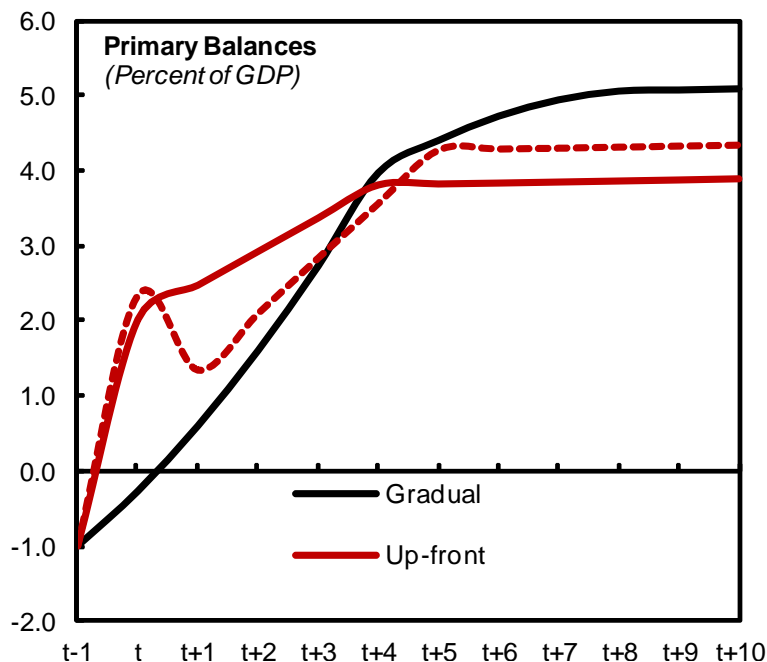
Maturity (average): 7 years.

Credibility effect: 15 bps per 1 percent of GDP adjustment.

The structural primary balance is adjusted by 2 percent of GDP in t and 1 percent more in t+1. Higher growth and lower interest scenarios increase/decrease baseline rates by 1 percentage point respectively.

# Consolidation: to frontload or not to frontload?

## Growth and Primary Balance Paths for Achieving a Given Debt Reduction



### Assumptions:

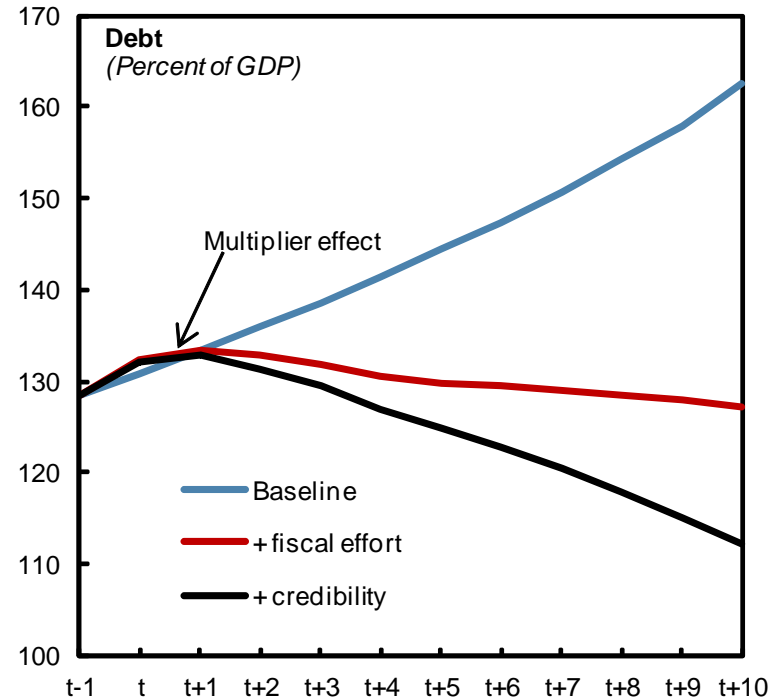
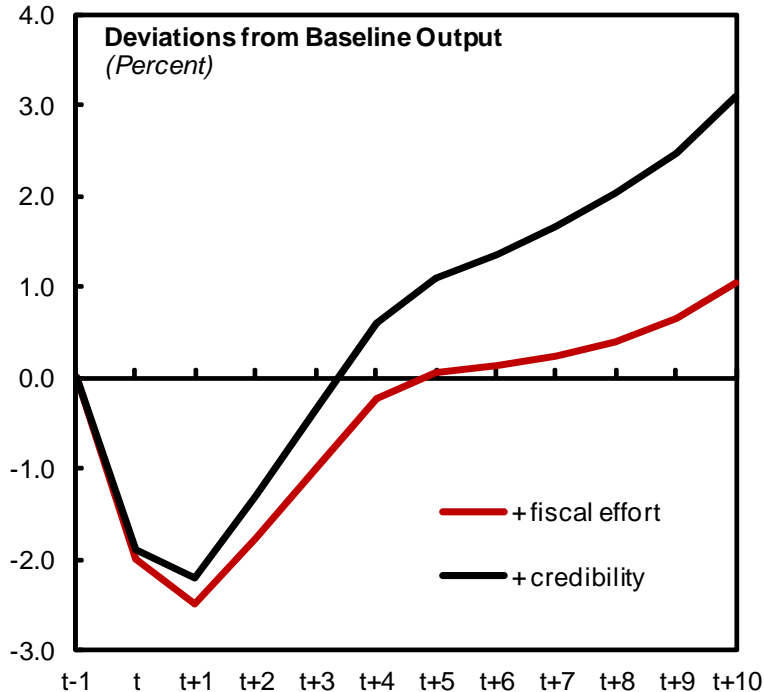
Baseline real growth: 1.2 percent (excluding drag from risk premium).  
 Starting debt-to-GDP ratio: 90 percent.  
 Fiscal multiplier (regular): 1 and persists for 4 years.  
 Fiscal multiplier (state-dependent): 1.5, peaks in t+1 and persists for 5 years.

Underlying interest rate: 2 percent.  
 Maturity (average): 7 years.  
 Credibility effect: 15 bps per 1 percent of GDP adjustment.

The structural primary balance is adjusted in order to meet a 60 percent of GDP target by t+10 under two strategies: gradual adjustment over 5 years (total adjustment needed is 6 percent of GDP) or up-front adjustment (total adjustment needed is 4.8 percent of GDP with regular multiplier and 5.3 percent of GDP with state-dependent multiplier).

# Credibility effects: Relatively small?

## Debt Reversals with Credibility Effects



### Assumptions:

Baseline real growth: 1.2 percent (excl. drag from risk premium).  
 Starting debt-to-GDP ratio: 130 percent (closer to  $D_{max}$  of 170).  
 Fiscal multiplier: 1 and persists for 4 years.  
 Baseline primary balance: -1.

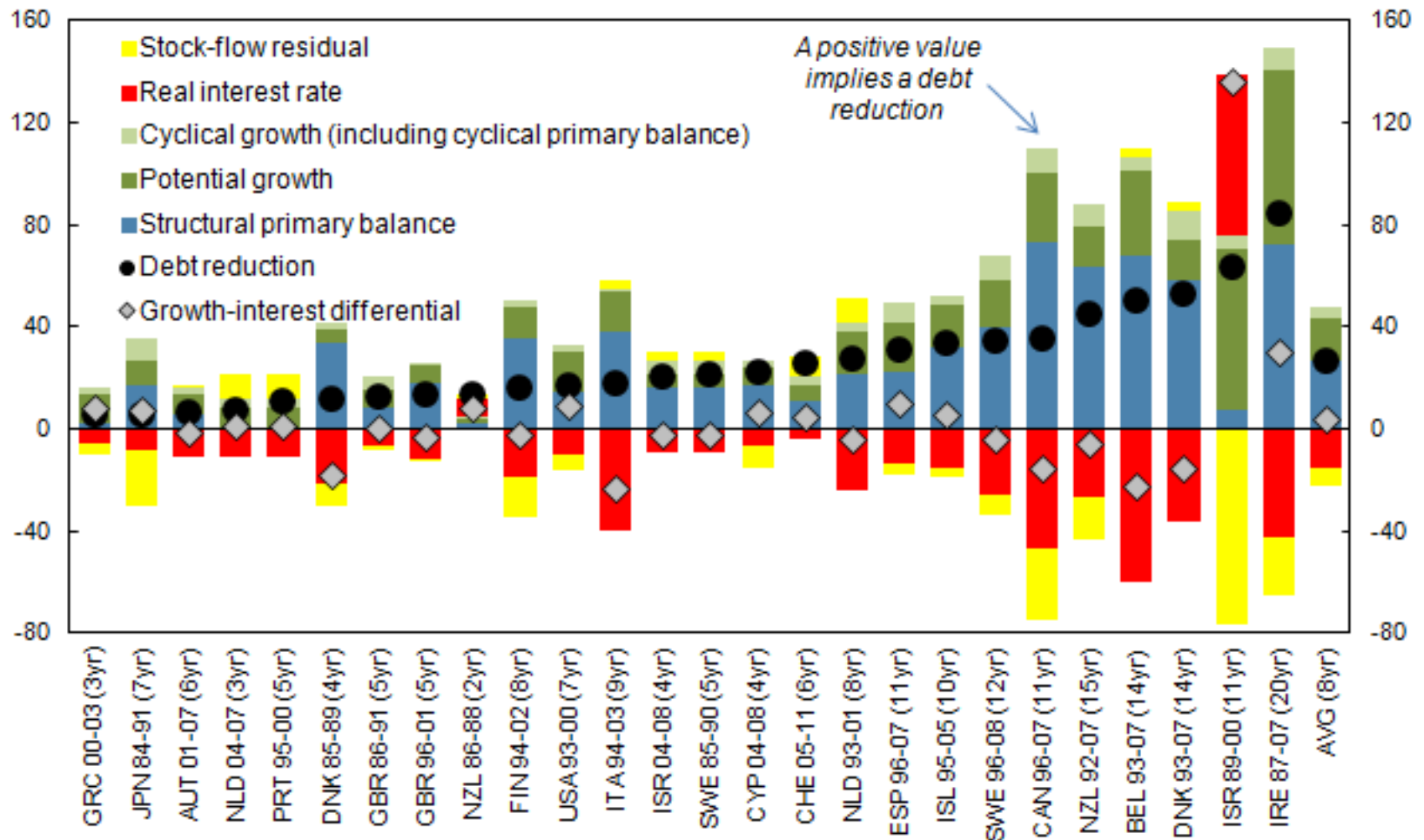
Underlying interest rate: 2 percent.  
 Maturity (average): 7 years.  
 Credibility effect: 30 bps per 1 percent of GDP adjustment.

The structural primary balance is adjusted by 2 percent of GDP in  $t$  and another 1 percent of GDP in  $t+1$ .

# **UNDERSTANDING PAST DEBT REDUCTIONS**

# 26 major debt reductions since 1980

**Components of Major Debt-to-GDP Reductions** (percent of GDP)

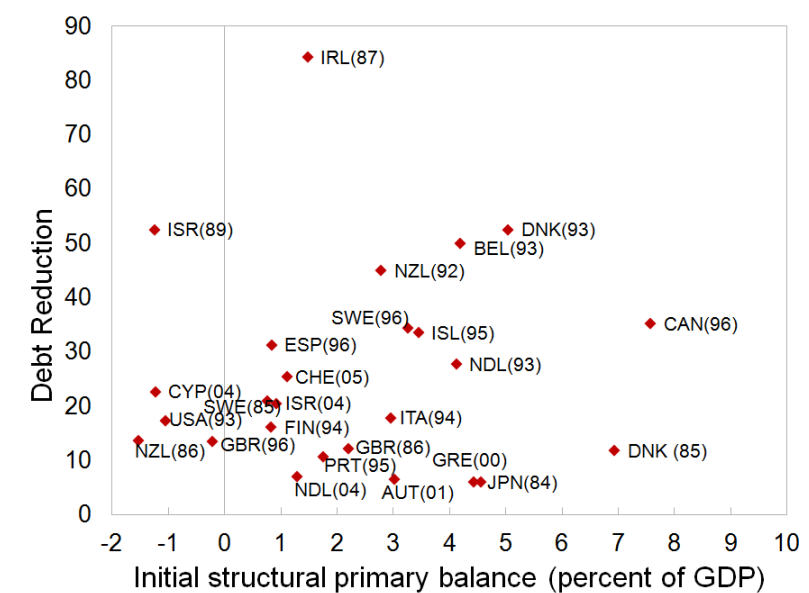
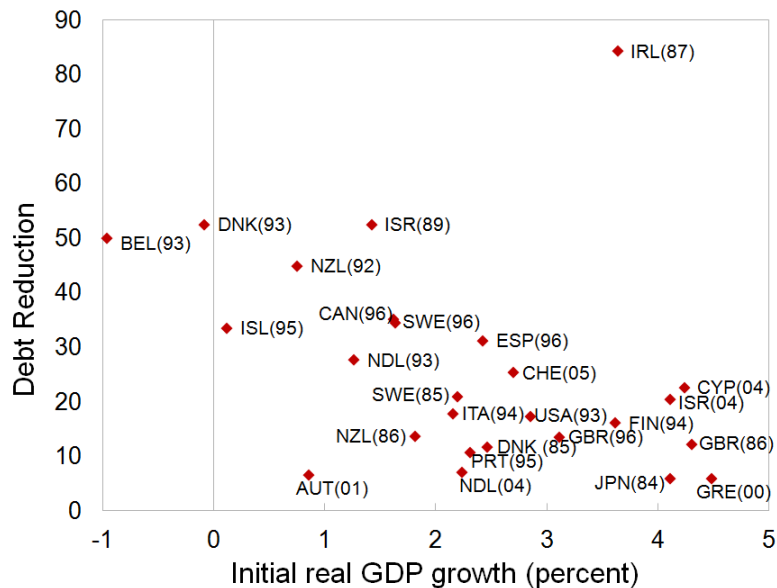
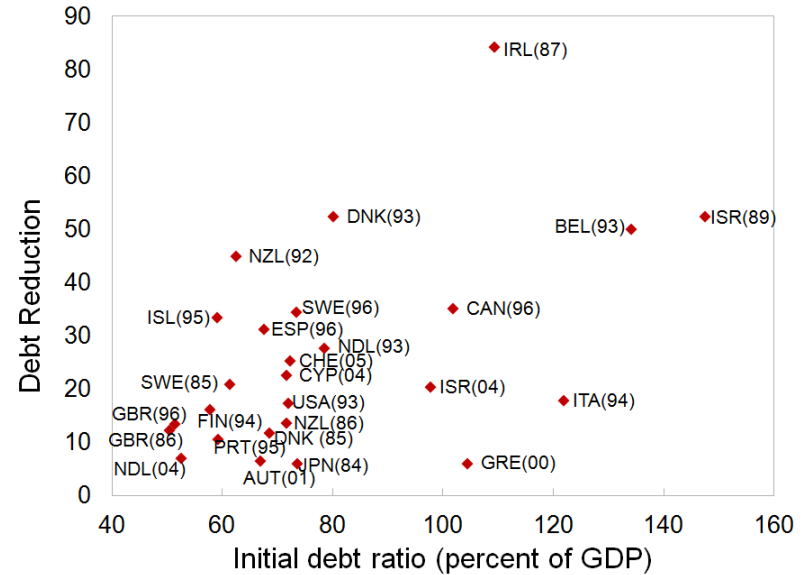
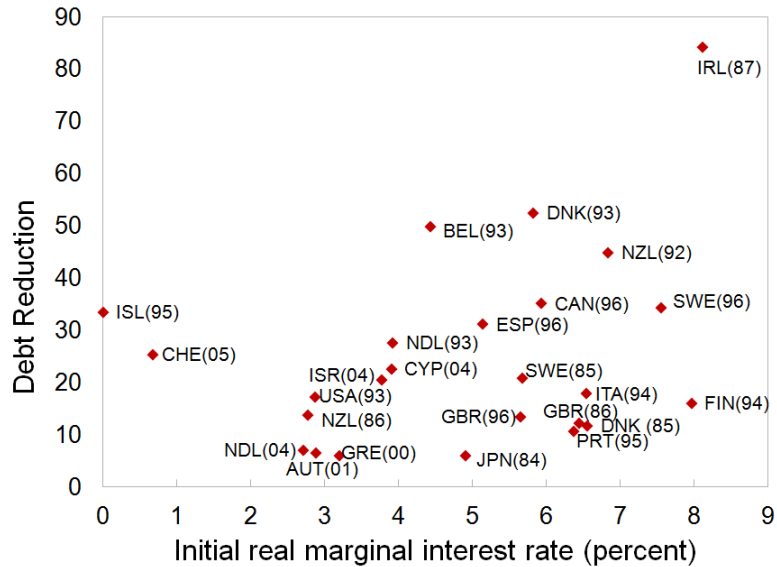


Sources: IMF World Economic Outlook ; and IMF staff calculations.

\* Total contribution of components over entire debt reduction period (length of period in brackets).

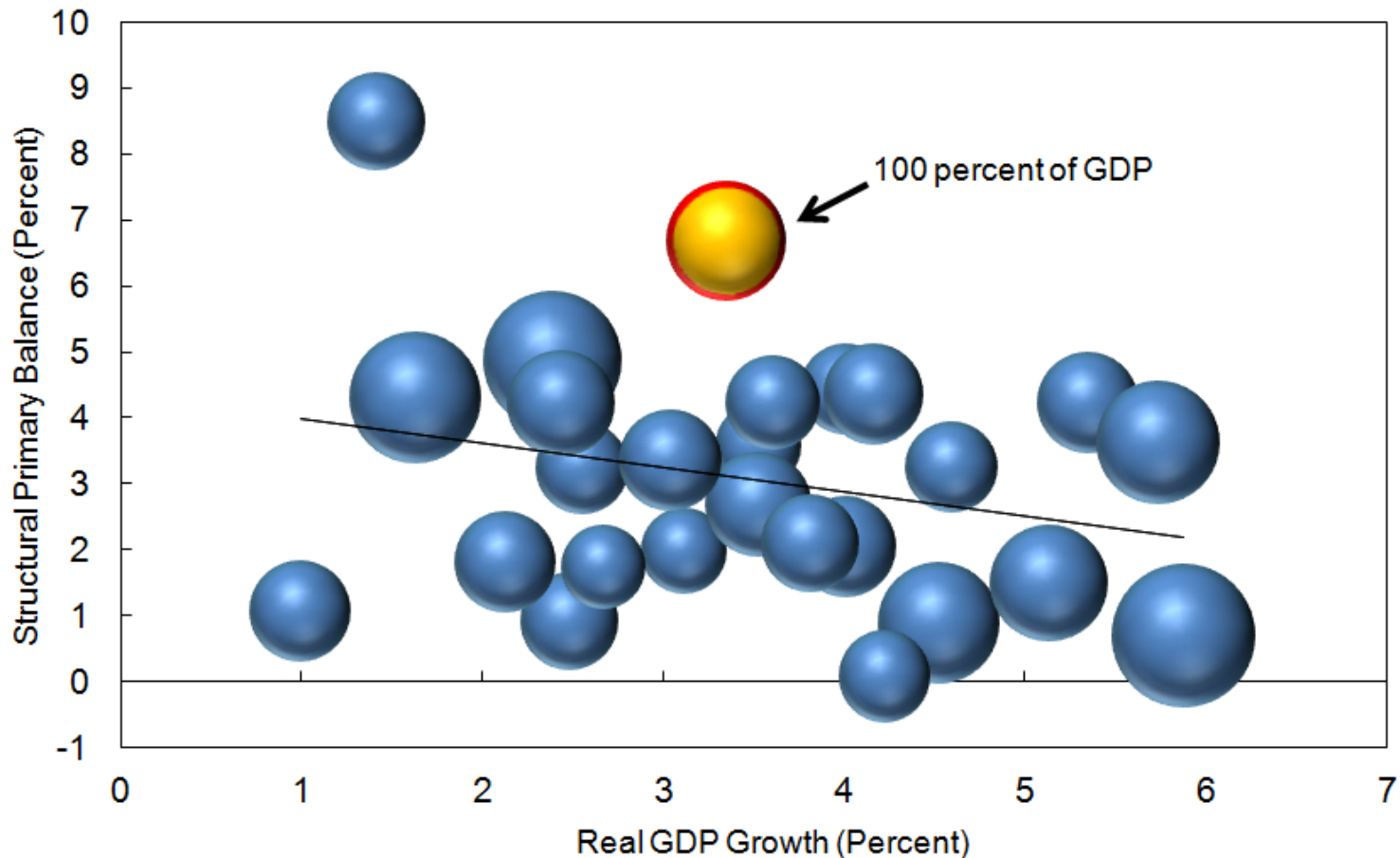


# Some starting in quite difficult conditions



# Did fiscal effort compensate for low growth?

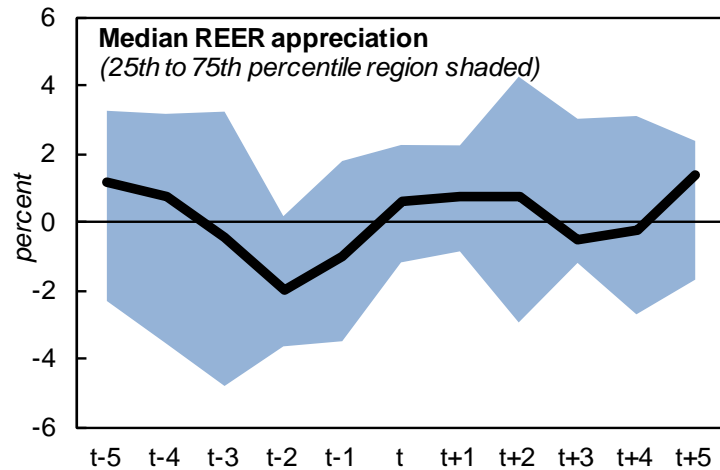
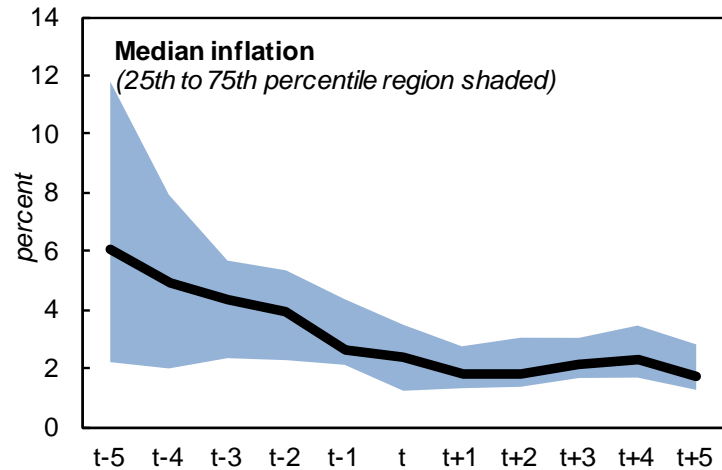
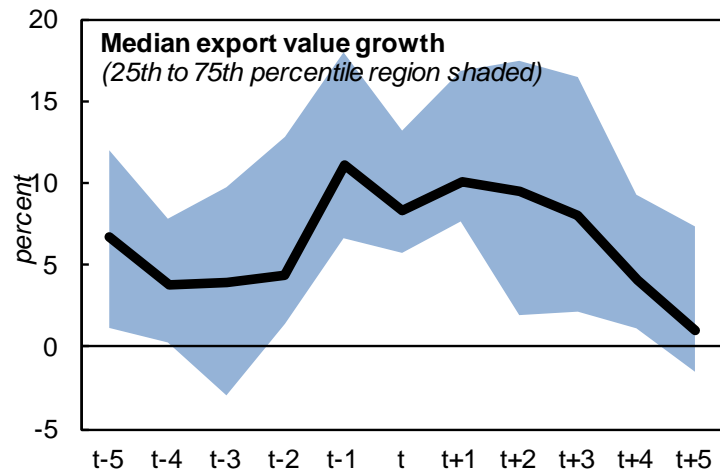
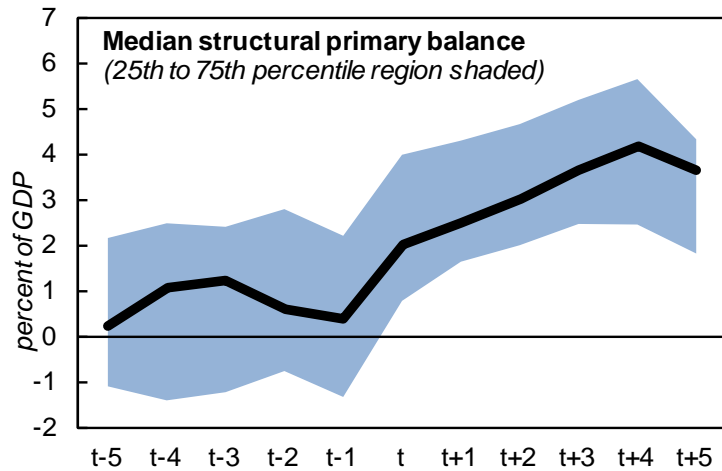
**Figure 10. Real GDP Growth, Structural Primary Balance, and Size of Initial Debt 1/**  
-- Advanced Economies Since 1980 --



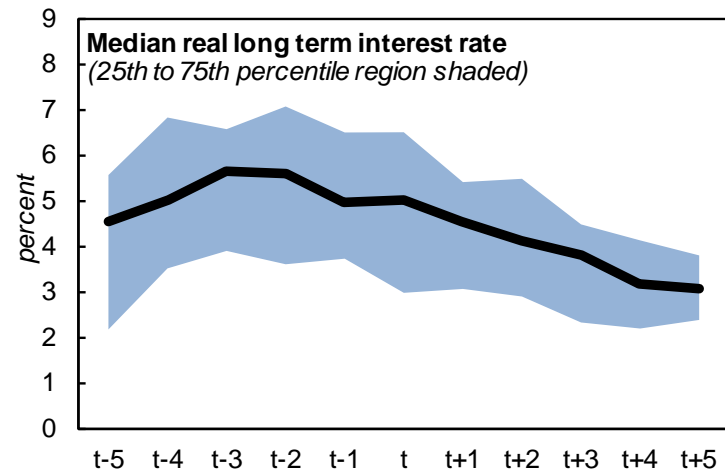
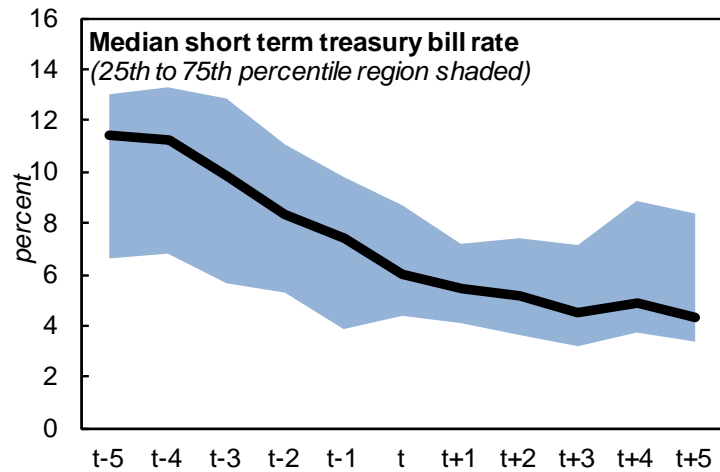
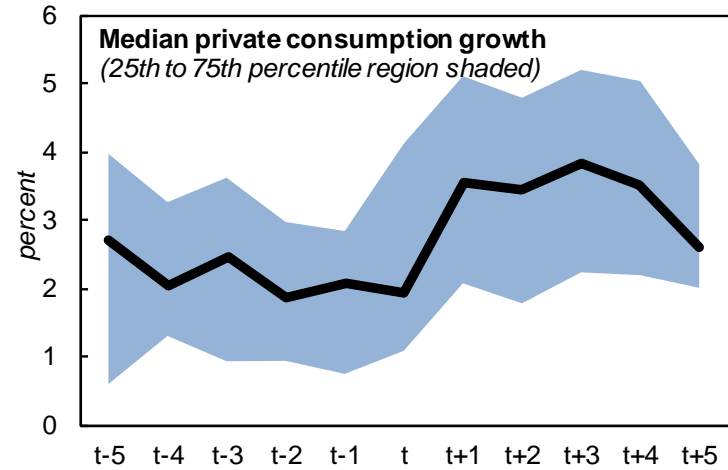
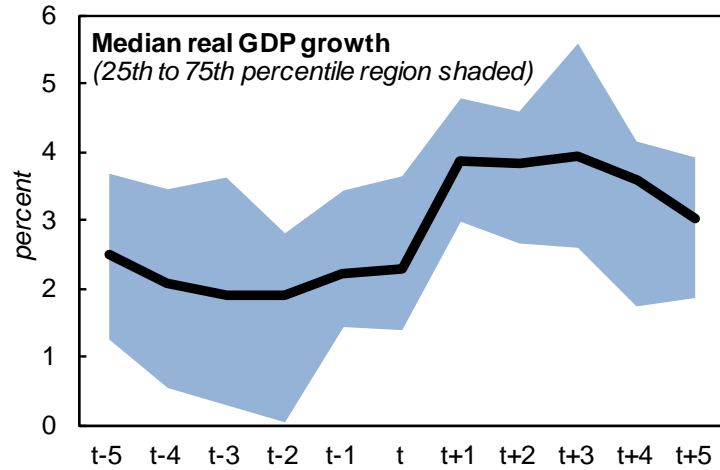
Source: IMF staff calculations.

1/ Real GDP growth and primary balance data are calculated as averages observed over the debt reduction period.

# Sustained effort + supportive external demand



# Accommodative monetary policy + credibility effects



# **POLICY LESSONS**

# Good news and bad news

- Examples of successful debt reductions, even under adverse circumstances
- Current environment shifts much of the burden to fiscal policy
- Trade-offs (where there is a choice)

# Policies

- Well-designed consolidation: targeted, gradual, within good medium-term strategy—for those that can wait
- Monetary policy
- Structural reforms for growth