

Economics 442
Macroeconomic Policy

Lecture 26
12/2/2020

Instructor: Prof. Menzie Chinn
UW Madison
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Outline

- Fixed exchange rates in the medium run
- Application to Euro Area
- US policy & Emerging Market Strains
- Coming Challenges

Fixed Exchange Rates in the Medium Run

Fixed Exchange Rates

- Removes the “shock absorber” of flexible exchange rates
- This means adjustment has to take place through price, wage changes
- Since these are “sticky”, adjustment could be slow

The Medium Run

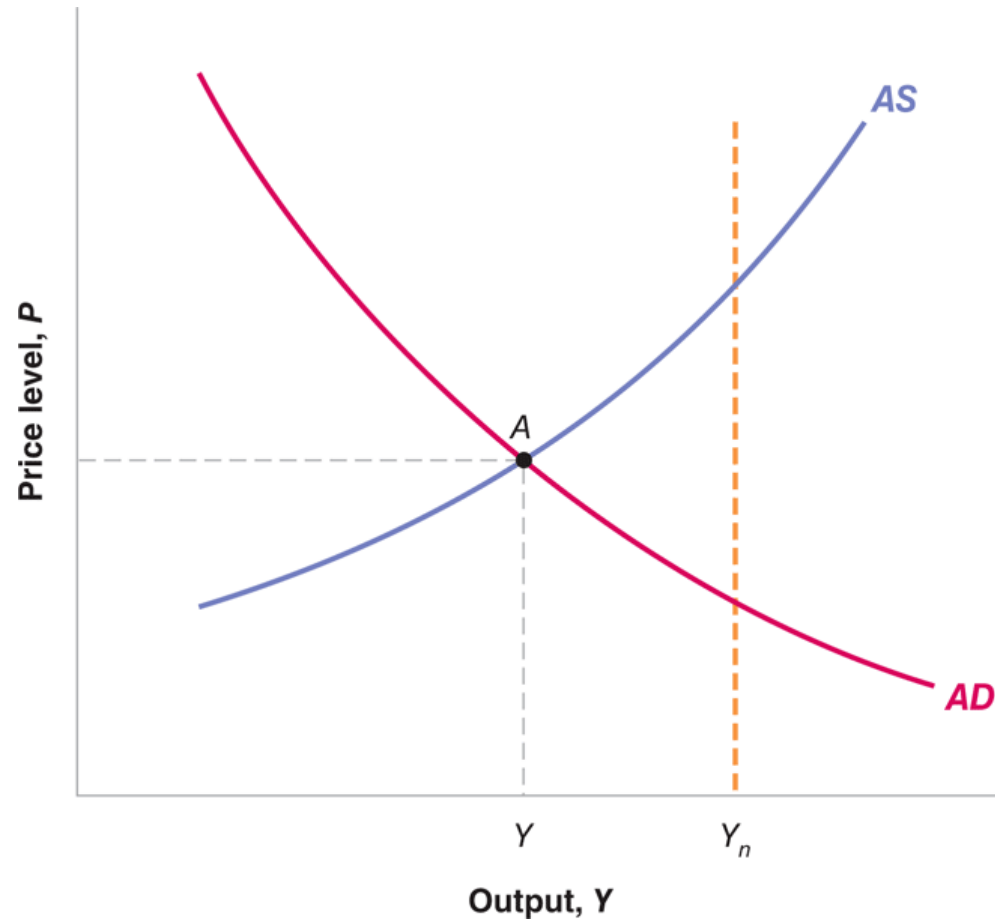
$$Y = Y \left(\frac{\bar{E}P}{P^*}, G, T \right) \quad (21.1)$$

(−, +, −)

$$P = P^e (1 + m) F \left(1 - \frac{Y}{L}, z \right) \quad (21.2)$$

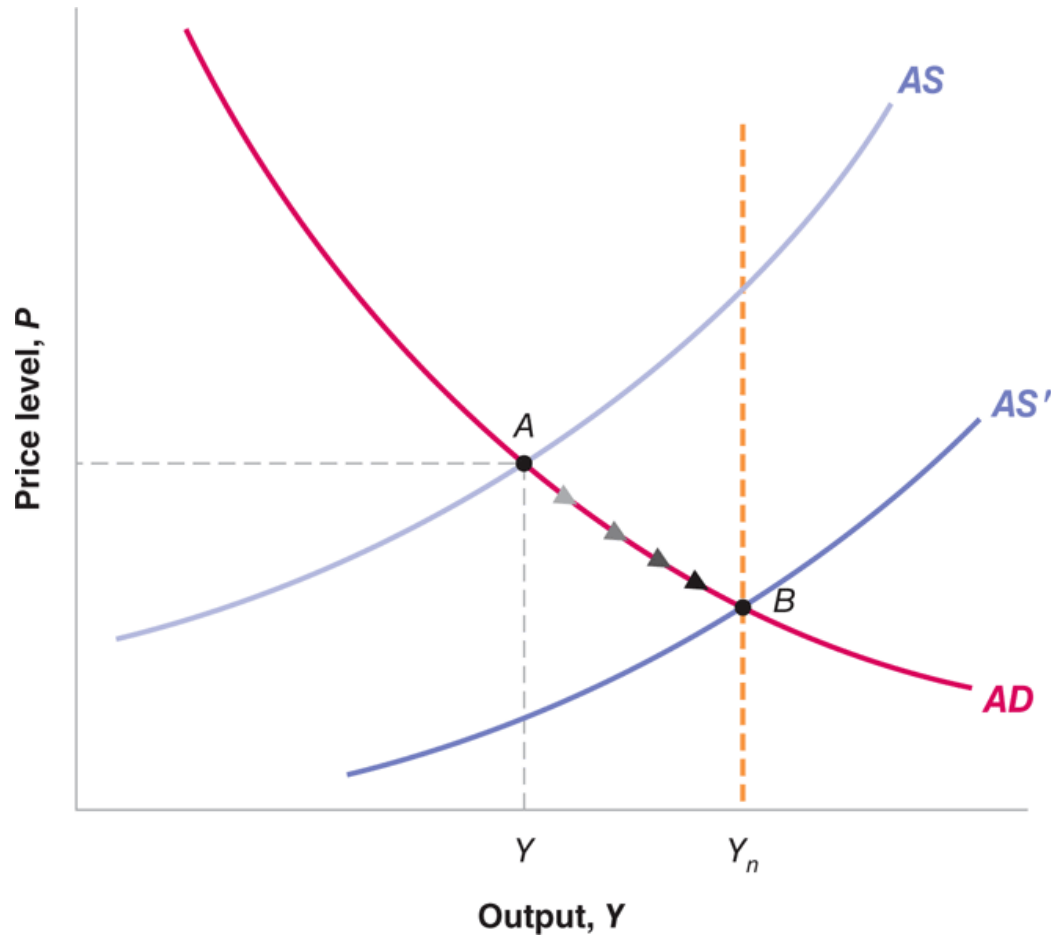
The Medium Run

Figure 21-1 Aggregate Demand and Aggregate Supply in an Open Economy under Fixed Exchange Rates



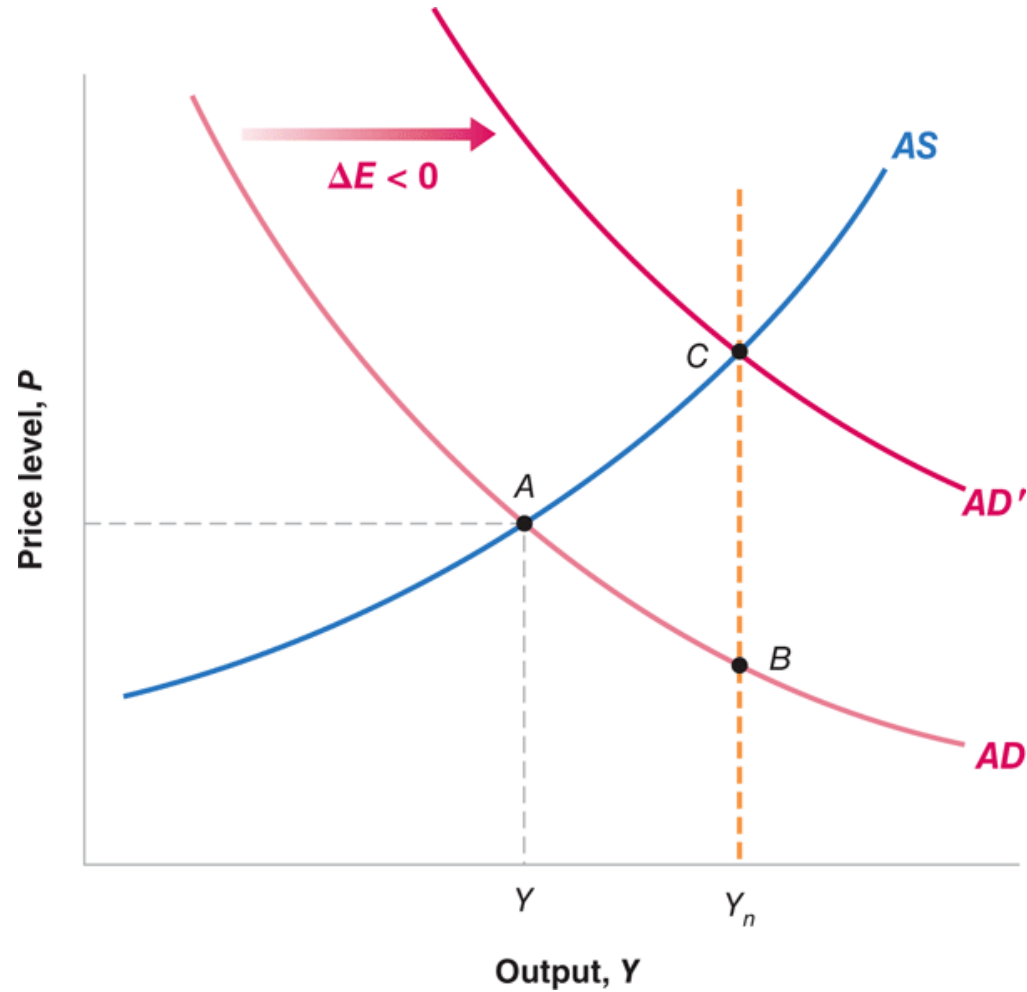
The Medium Run

Figure 21-2 Adjustment under Fixed Exchange Rates



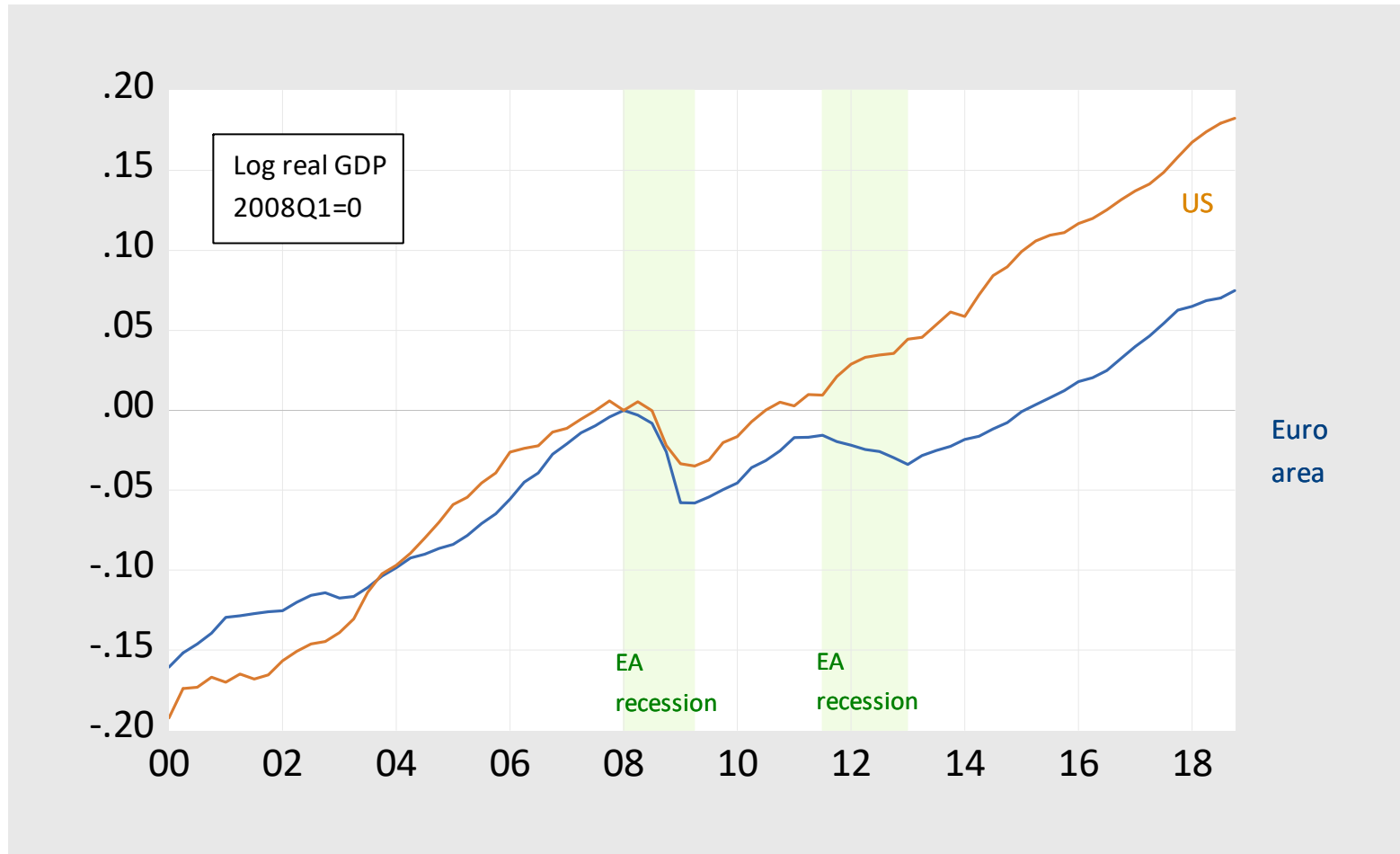
The Medium Run

Figure 21-3 Adjustment with a Devaluation

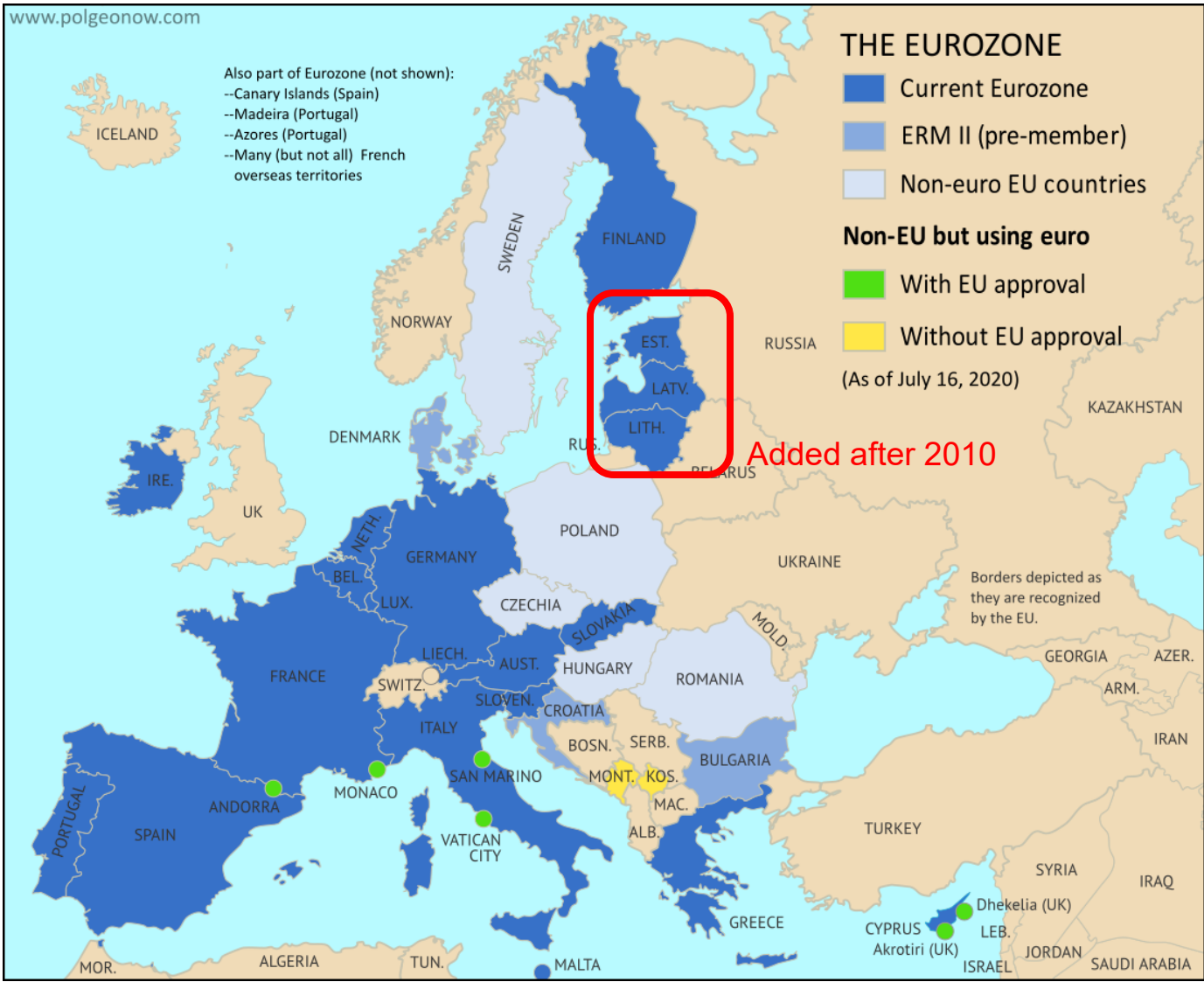


Application to Euro Area

Euro Area Falls into Recession in 2011

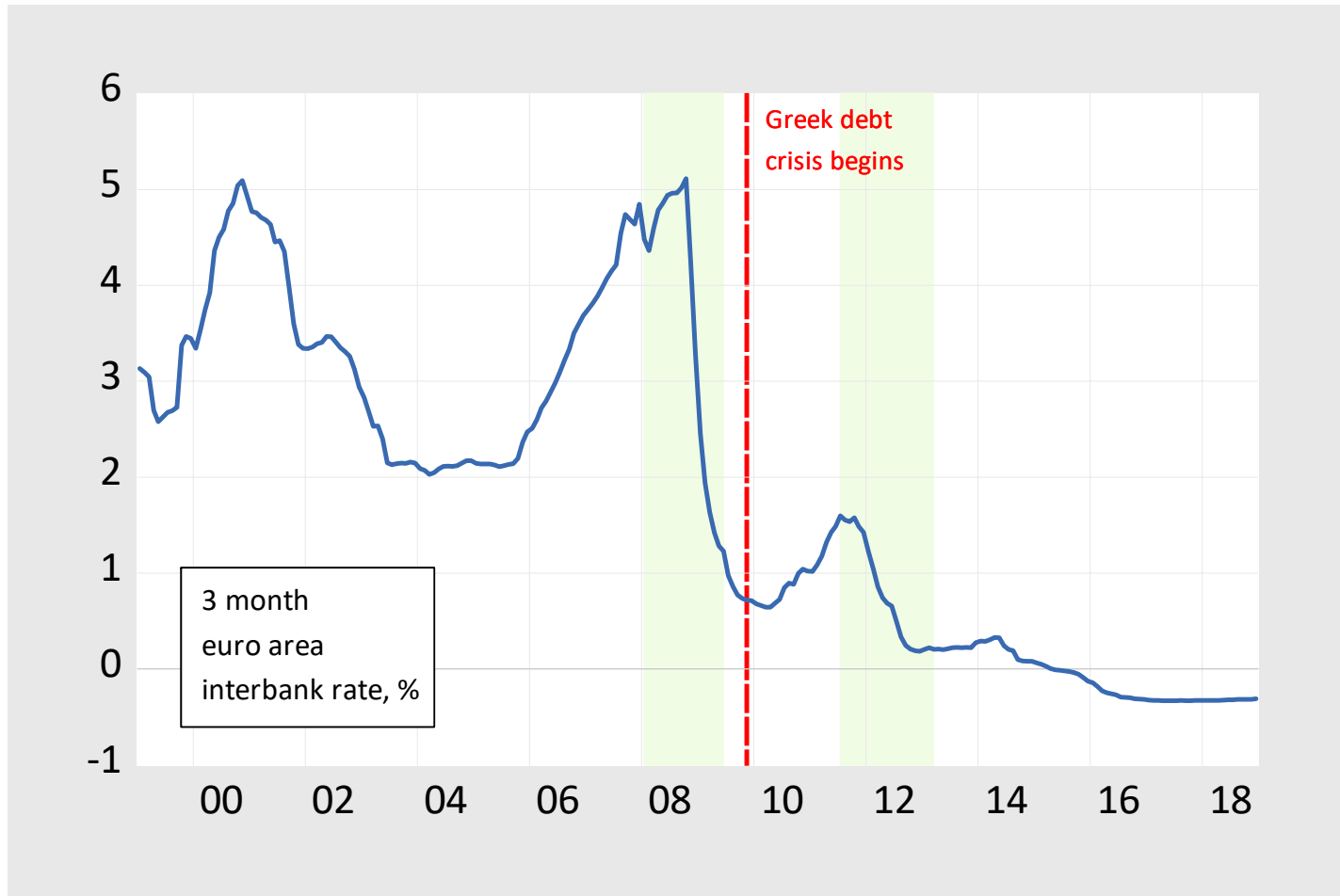


Euro Area



<https://www.polgeonow.com/2014/08/map-which-countries-use-euro-plus-this.html>

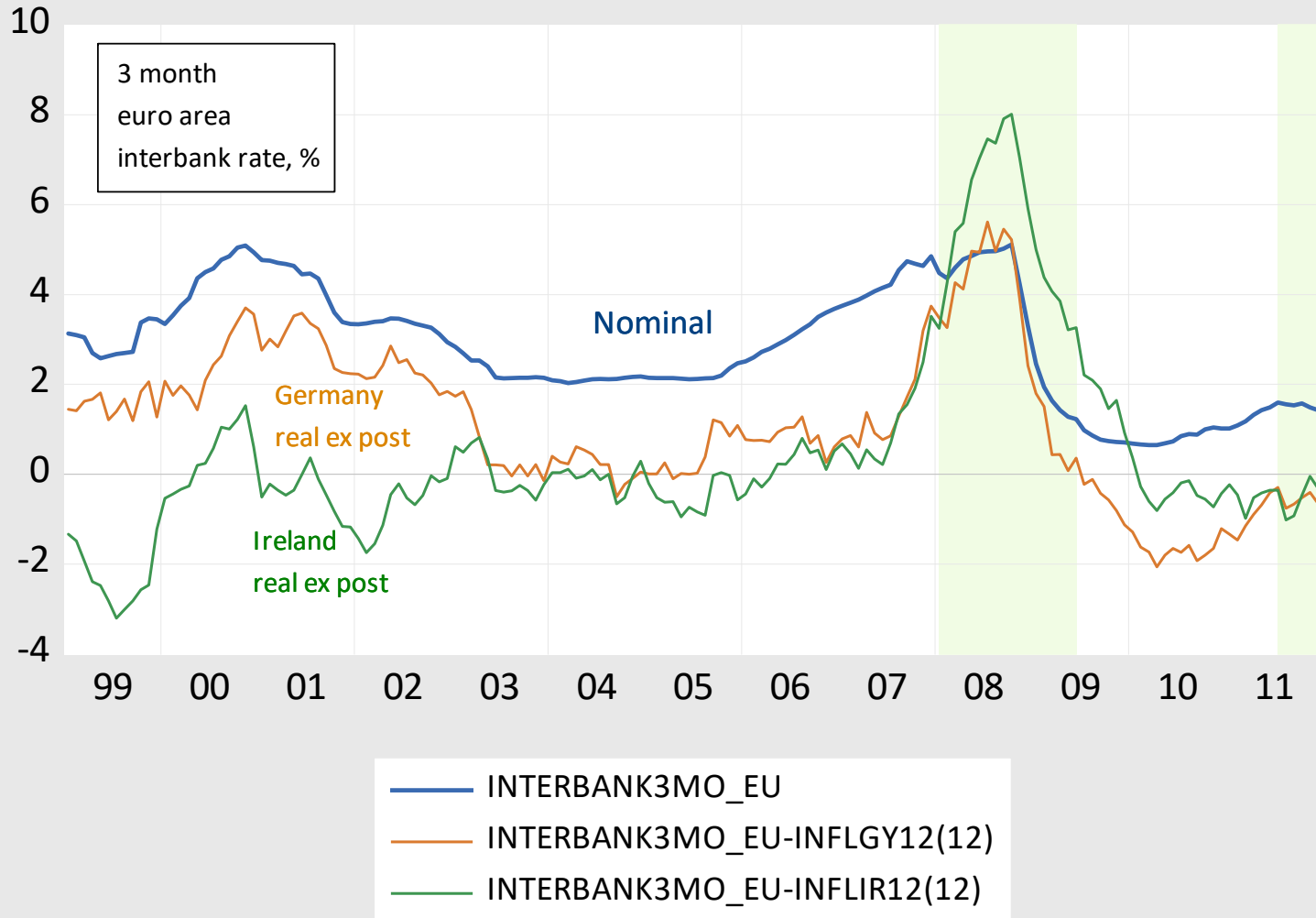
Does One Size Fit All Monetary Policy Work?



Implications

- One central bank for 12 (and then more) economies
- Can only have one “Main Refinancing Rate” (like a Fed funds rate) for all 12 economies
- So essentially one monetary policy for all countries
- But might be too loose for some, too tight for others (see real interest rates)

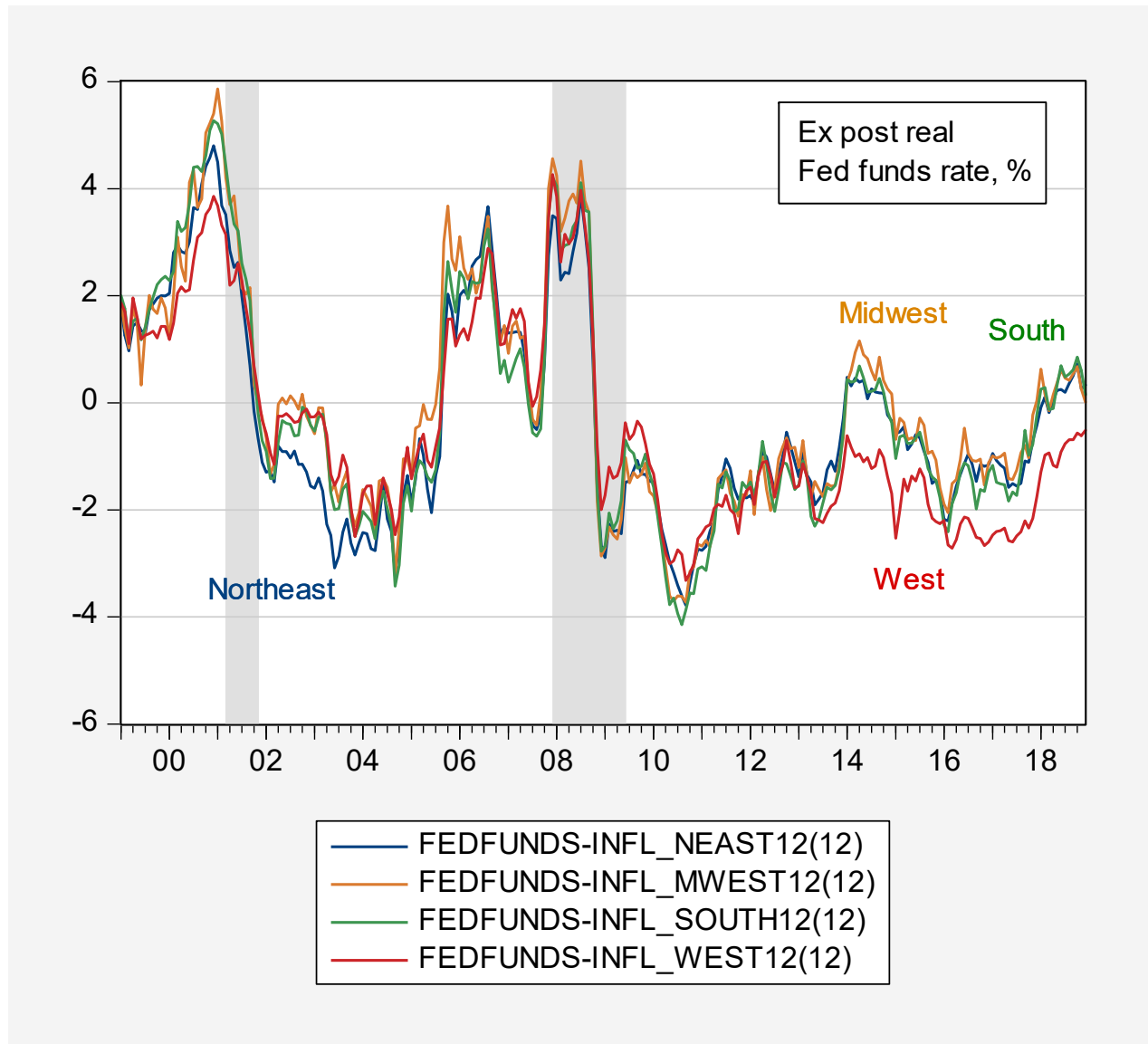
Does One Size Fit All Monetary Policy Work?



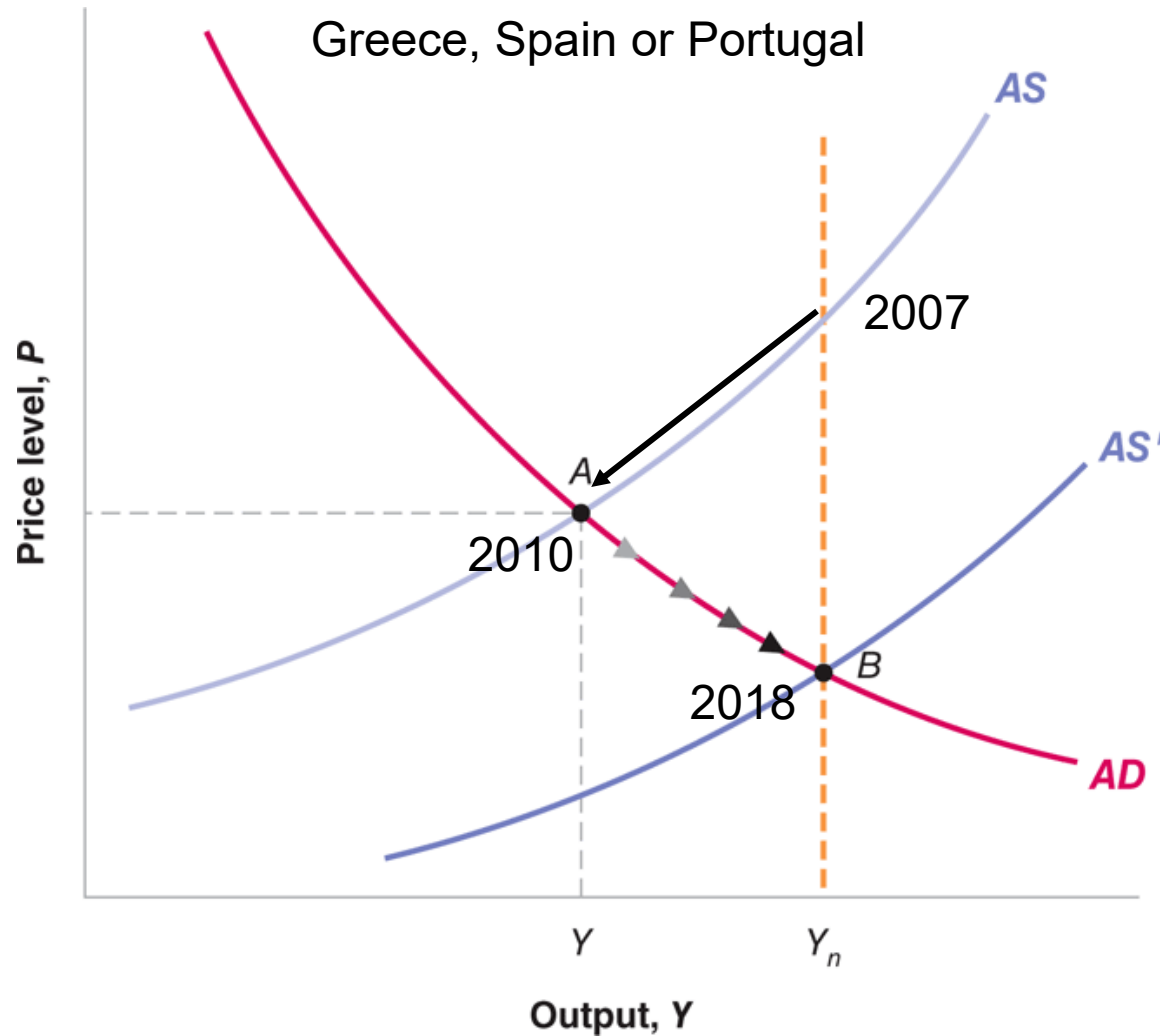
What's Different Between US and Euro Area

- US has one currency; Euro Area has one currency
- Different regions of US have different inflation rates too
- But US has a fiscal union (one overall government that taxes, transfers across borders)
- And has lots of labor mobility

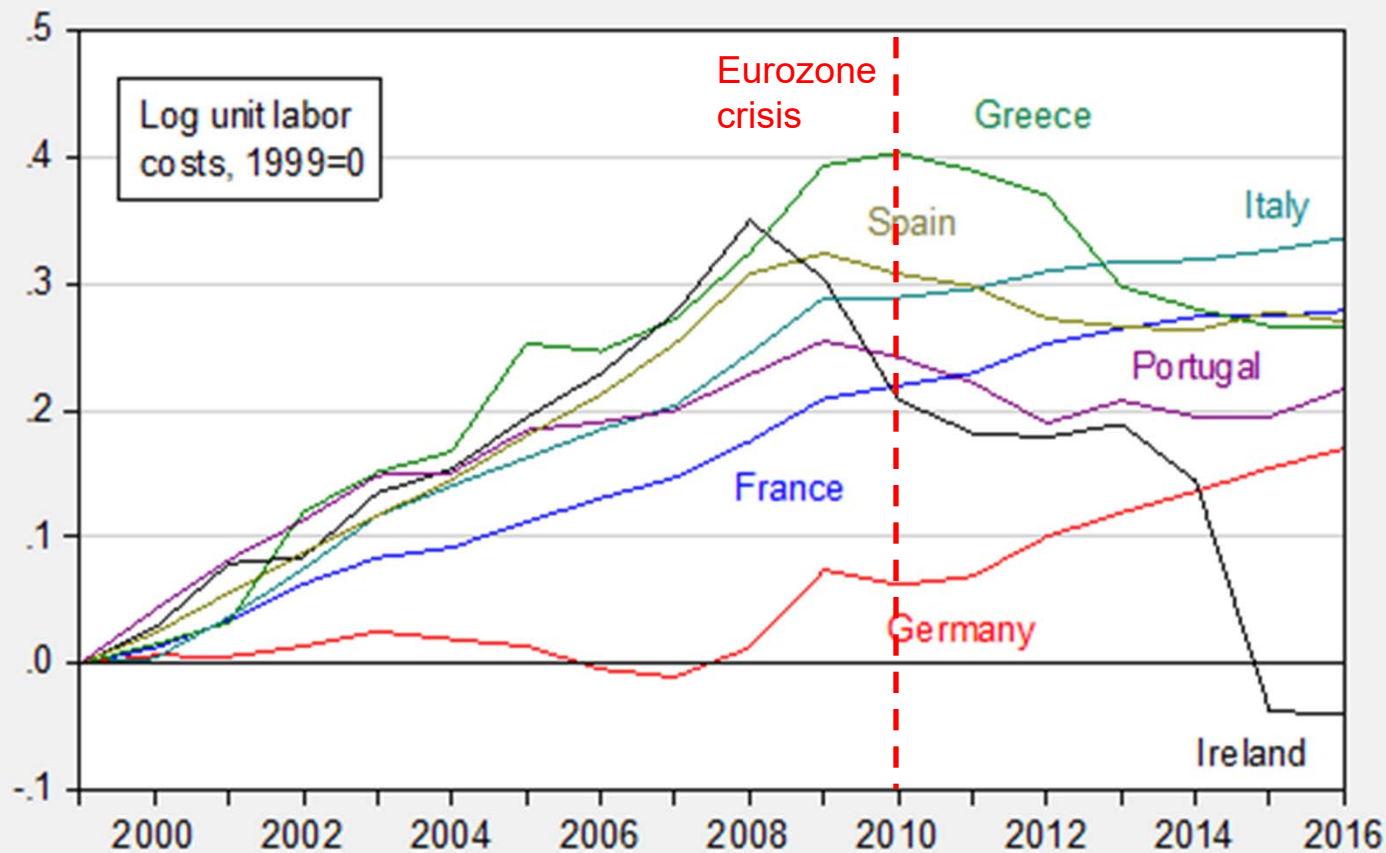
Dispersion of Real Rates in US



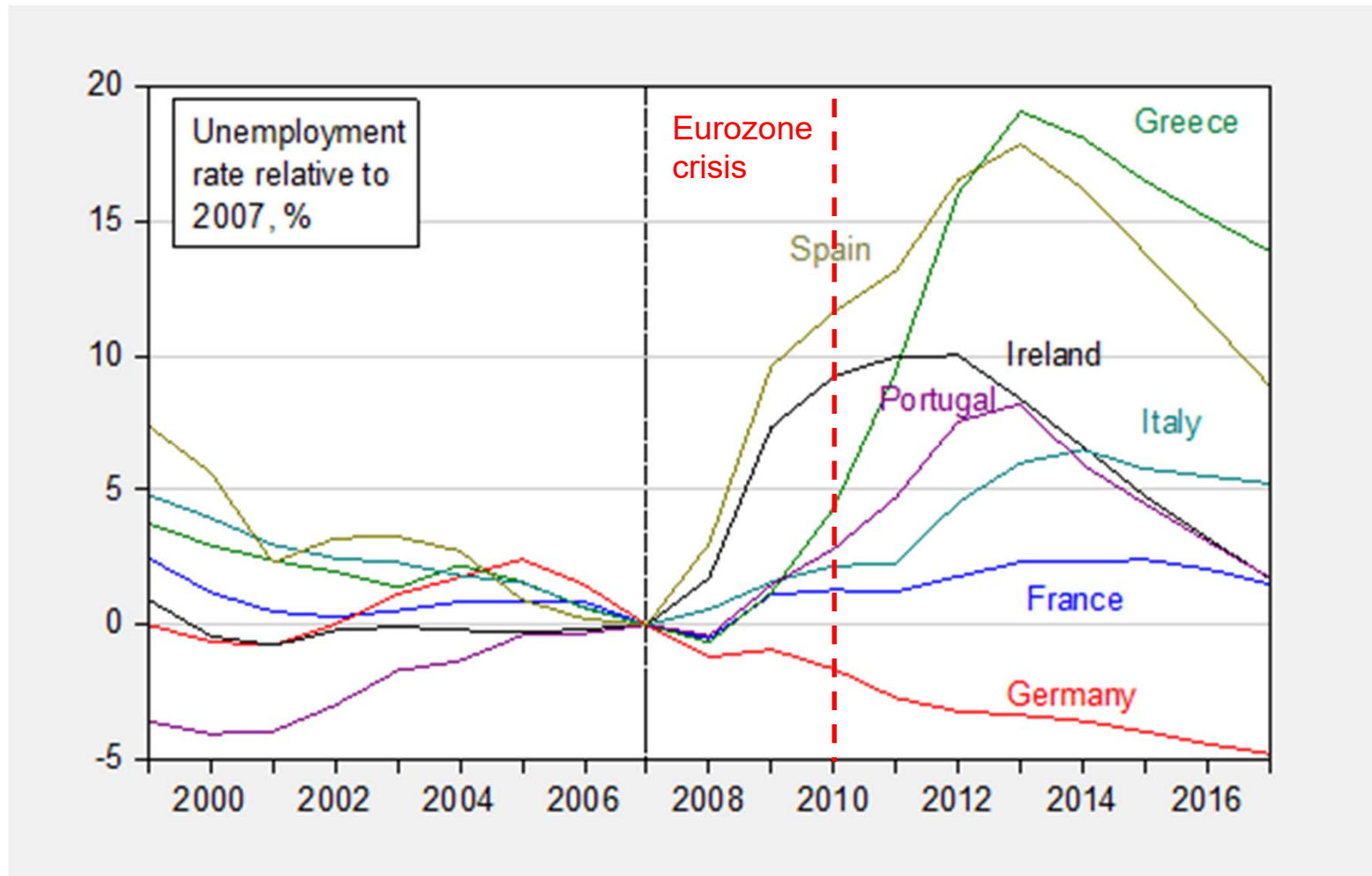
The Medium Run Adjustment under Currency Union



Adjustment of Wages (Productivity adjusted)

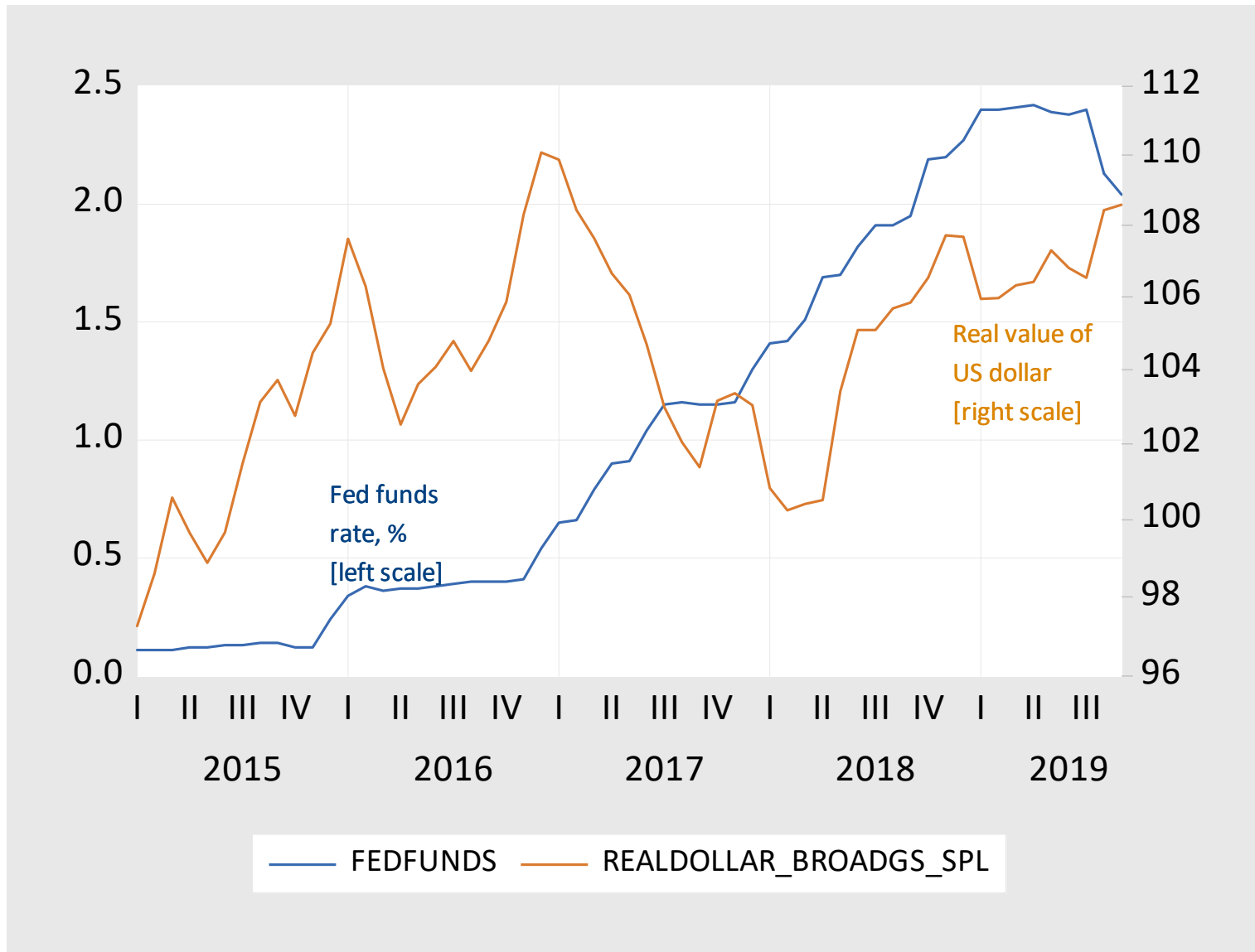


Unemployment



US Policy and Emerging Market Strains

Rising US Rates Stress Emerging Markets



Emerging Market Country Response to Rising US Interest Rate

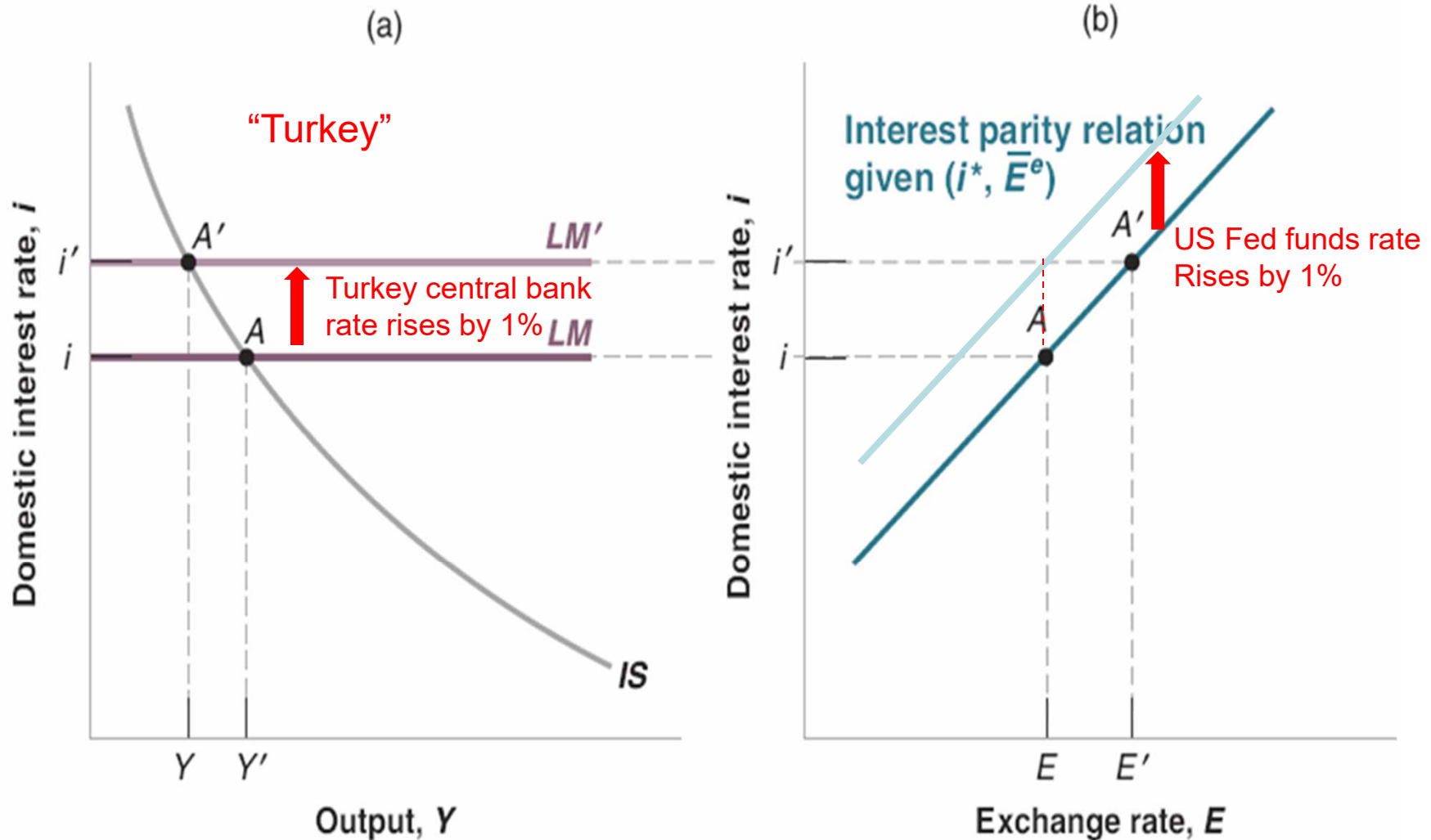
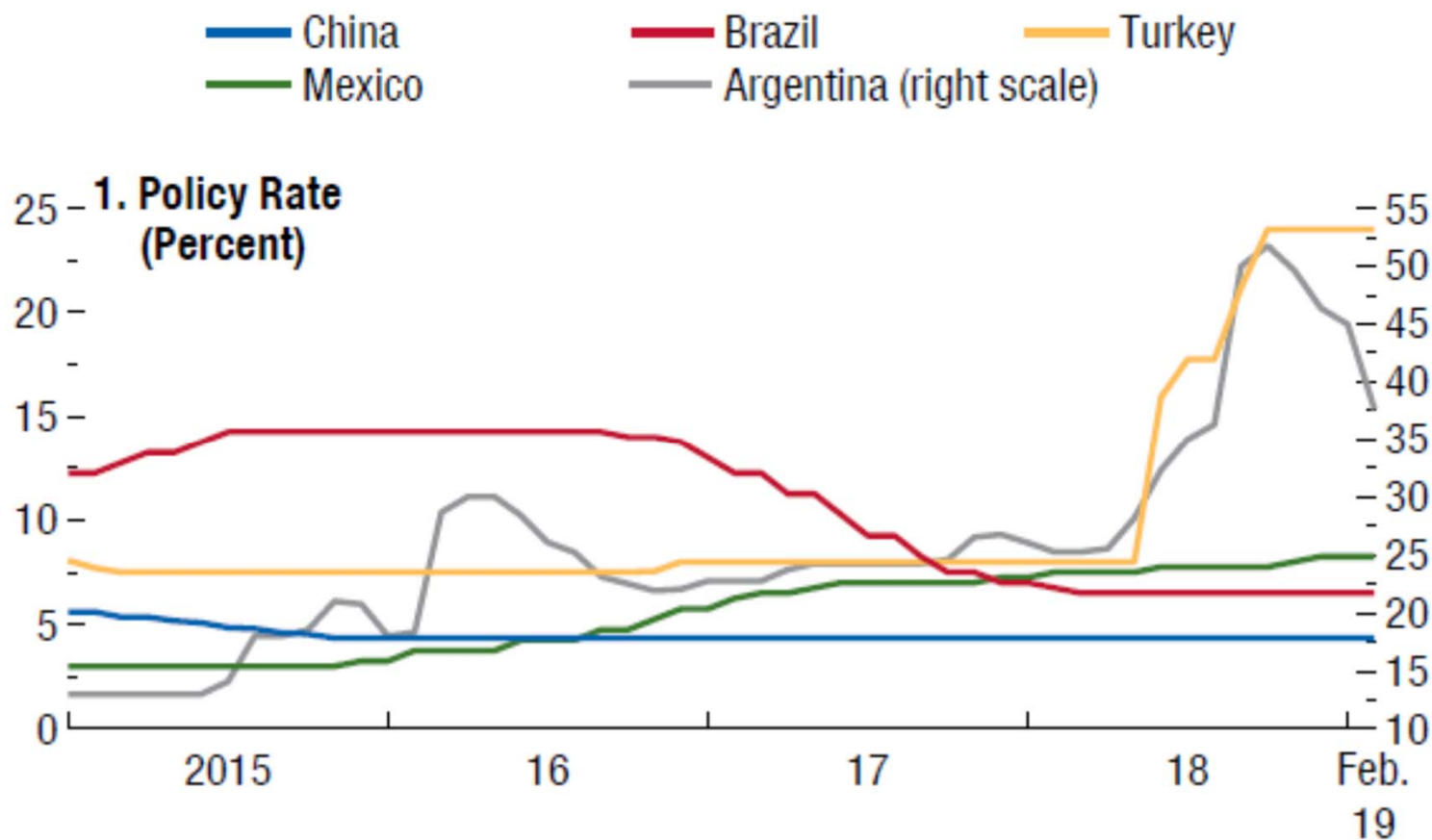


Figure 1.6. Emerging Market Economies: Interest Rates and Spreads

Financial conditions in emerging market economies improved in early 2019, with differentiation across economies based on country-specific fundamentals.



Turkey (1/E)



SOURCE: TRADINGECONOMICS.COM | OTC INTERBANK

Up is depreciation against US dollar

Argentina (1/E)



SOURCE: TRADINGECONOMICS.COM | OTC INTERBANK

Up is depreciation against US dollar

Coming Challenges

Slow Recovery around the World

Table 1.1. Overview of the World Economic Outlook Projections
(Percent change, unless noted otherwise)

| | 2019 | Projections | | Difference from June 2020 WEO Update ¹ | | Difference from April 2020 WEO ¹ | |
|---|------------|--------------|------------|---|-------------|---|-------------|
| | | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 |
| World Output | 2.8 | -4.4 | 5.2 | 0.8 | -0.2 | -1.1 | -0.5 |
| Advanced Economies | 1.7 | -5.8 | 3.9 | 2.3 | -0.9 | 0.3 | -0.6 |
| United States | 2.2 | -4.3 | 3.1 | 3.7 | -1.4 | 1.6 | -1.6 |
| Euro Area | 1.3 | -8.3 | 5.2 | 1.9 | -0.8 | -0.8 | 0.5 |
| Germany | 0.6 | -6.0 | 4.2 | 1.8 | -1.2 | 1.0 | -1.0 |
| France | 1.5 | -9.8 | 6.0 | 2.7 | -1.3 | -2.6 | 1.5 |
| Italy | 0.3 | -10.6 | 5.2 | 2.2 | -1.1 | -1.5 | 0.4 |
| Spain | 2.0 | -12.8 | 7.2 | 0.0 | 0.9 | -4.8 | 2.9 |
| Japan | 0.7 | -5.3 | 2.3 | 0.5 | -0.1 | -0.1 | -0.7 |
| United Kingdom | 1.5 | -9.8 | 5.9 | 0.4 | -0.4 | -3.3 | 1.9 |
| Canada | 1.7 | -7.1 | 5.2 | 1.3 | 0.3 | -0.9 | 1.0 |
| Other Advanced Economies ² | 1.7 | -3.8 | 3.6 | 1.1 | -0.6 | 0.8 | -1.0 |
| Emerging Market and Developing Economies | 3.7 | -3.3 | 6.0 | -0.2 | 0.2 | -2.1 | -0.5 |
| Emerging and Developing Asia | 5.5 | -1.7 | 8.0 | -0.9 | 0.6 | -2.7 | -0.5 |
| China | 6.1 | 1.9 | 8.2 | 0.9 | 0.0 | 0.7 | -1.0 |
| India ³ | 4.2 | -10.3 | 8.8 | -5.8 | 2.8 | -12.2 | 1.4 |
| ASEAN-5 ⁴ | 4.9 | -3.4 | 6.2 | -1.4 | 0.0 | -2.8 | -1.5 |
| Emerging and Developing Europe | 2.1 | -4.6 | 3.9 | 1.2 | -0.3 | 0.6 | -0.3 |
| Russia | 1.3 | -4.1 | 2.8 | 2.5 | -1.3 | 1.4 | -0.7 |
| Latin America and the Caribbean | 0.0 | -8.1 | 3.6 | 1.3 | -0.1 | -2.9 | 0.2 |
| Brazil | 1.1 | -5.8 | 2.8 | 3.3 | -0.8 | -0.5 | -0.1 |
| Mexico | -0.3 | -9.0 | 3.5 | 1.5 | 0.2 | -2.4 | 0.5 |
| Middle East and Central Asia | 1.4 | -4.1 | 3.0 | 0.4 | -0.5 | -1.3 | -1.0 |
| Saudi Arabia | 0.3 | -5.4 | 3.1 | 1.4 | 0.0 | -3.1 | 0.2 |
| Sub-Saharan Africa | 3.2 | -3.0 | 3.1 | 0.2 | -0.3 | -1.4 | -1.0 |
| Nigeria | 2.2 | -4.3 | 1.7 | 1.1 | -0.9 | -0.9 | -0.7 |
| South Africa | 0.2 | -8.0 | 3.0 | 0.0 | -0.5 | -2.2 | -1.0 |
| <i>Memorandum</i> | | | | | | | |
| Low-Income Developing Countries | 5.3 | -1.2 | 4.9 | -0.2 | -0.3 | -1.6 | -0.7 |
| Middle East and North Africa | 0.8 | -5.0 | 3.2 | 0.7 | -0.5 | -1.8 | -1.0 |
| World Growth Based on Market Exchange Rates | 2.4 | -4.7 | 4.8 | 1.4 | -0.5 | -0.5 | -0.6 |
| World Trade Volume (goods and services) | 1.0 | -10.4 | 8.3 | 1.5 | 0.3 | 0.6 | -0.1 |

How Can Countries Stimulate Recovery?

- Government spending – but already massive increase in govt debt
- Monetary policy via target interest rate – but policy rates are at zero
- Quantitative easing/forward guidance have limited effect
- Temptation will be to depreciate exchange rate to switch expenditures away from foreign goods, toward home goods

Recovery? (2)

- Depreciating exchange rate requires expansionary monetary policy
- If every country expands money supply, real exchange rate won't depreciate much for anybody
- Then tariffs can switch expenditures
- But if every country puts tariffs on, then all goods become more expensive, while employment doesn't increase, or falls...

Recovery (3)

- Every country will be tempted to put tariffs on (i.e., “Prisoner’s Dilemma”) unless one can precommit (e.g., via World Trade Organization).
- World will recover faster if all countries stimulate via fiscal policy, no tariffs, since foreign imports are US exports, US imports are foreign exports...