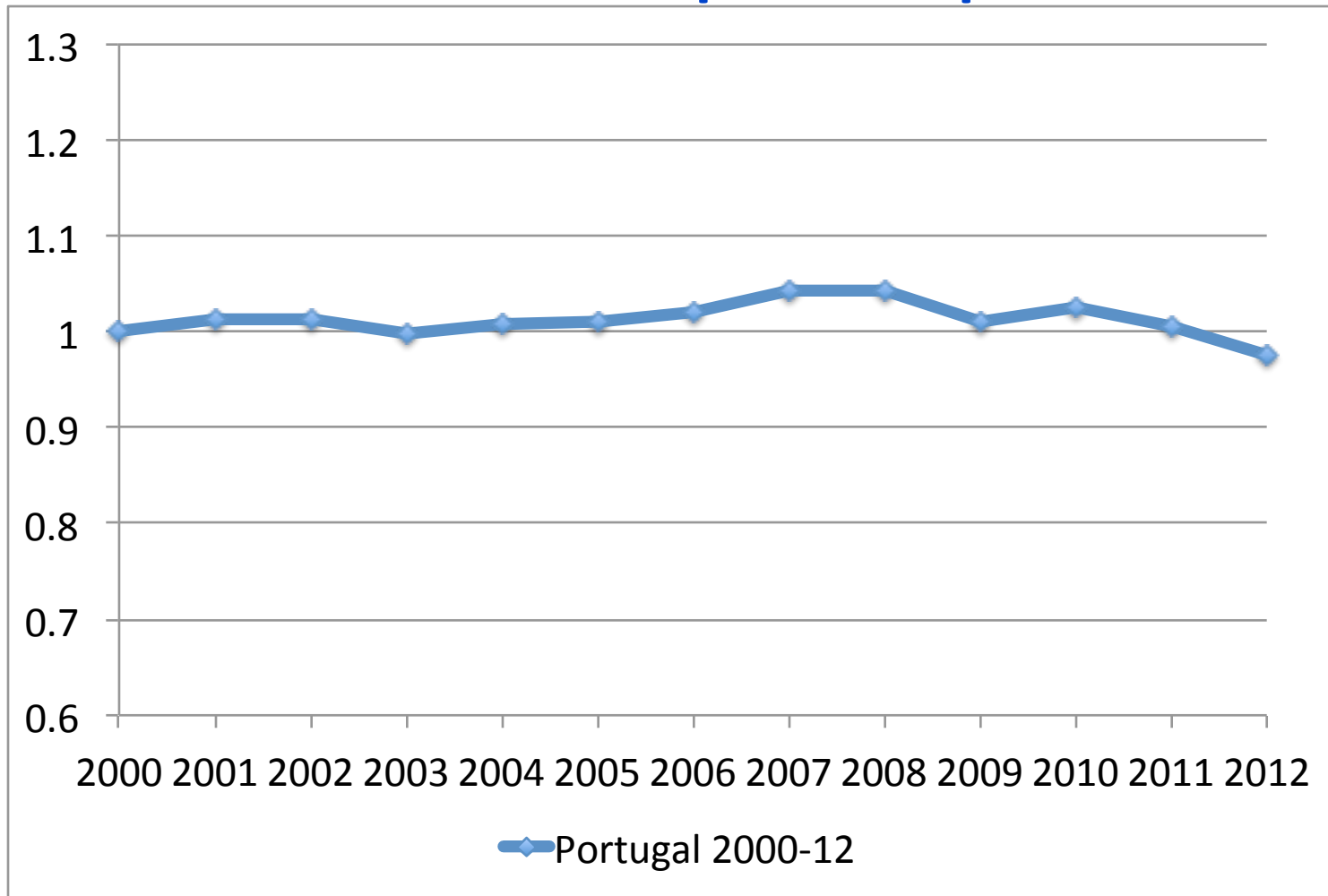


The Portuguese Slump and Crash and the Euro Crisis

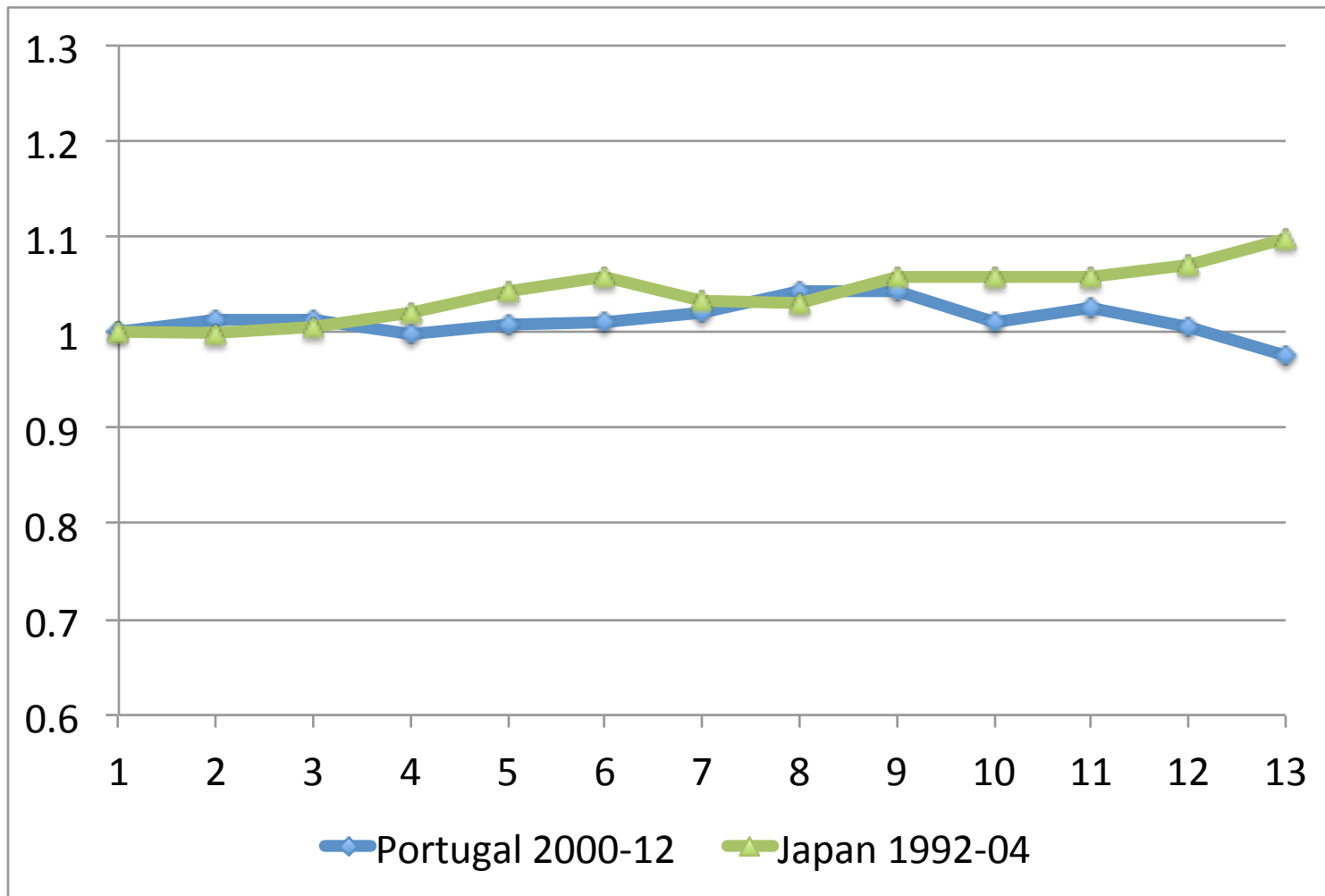
Ricardo Reis
Columbia University

BPEA meeting
Washington, DC
22nd of March 2012

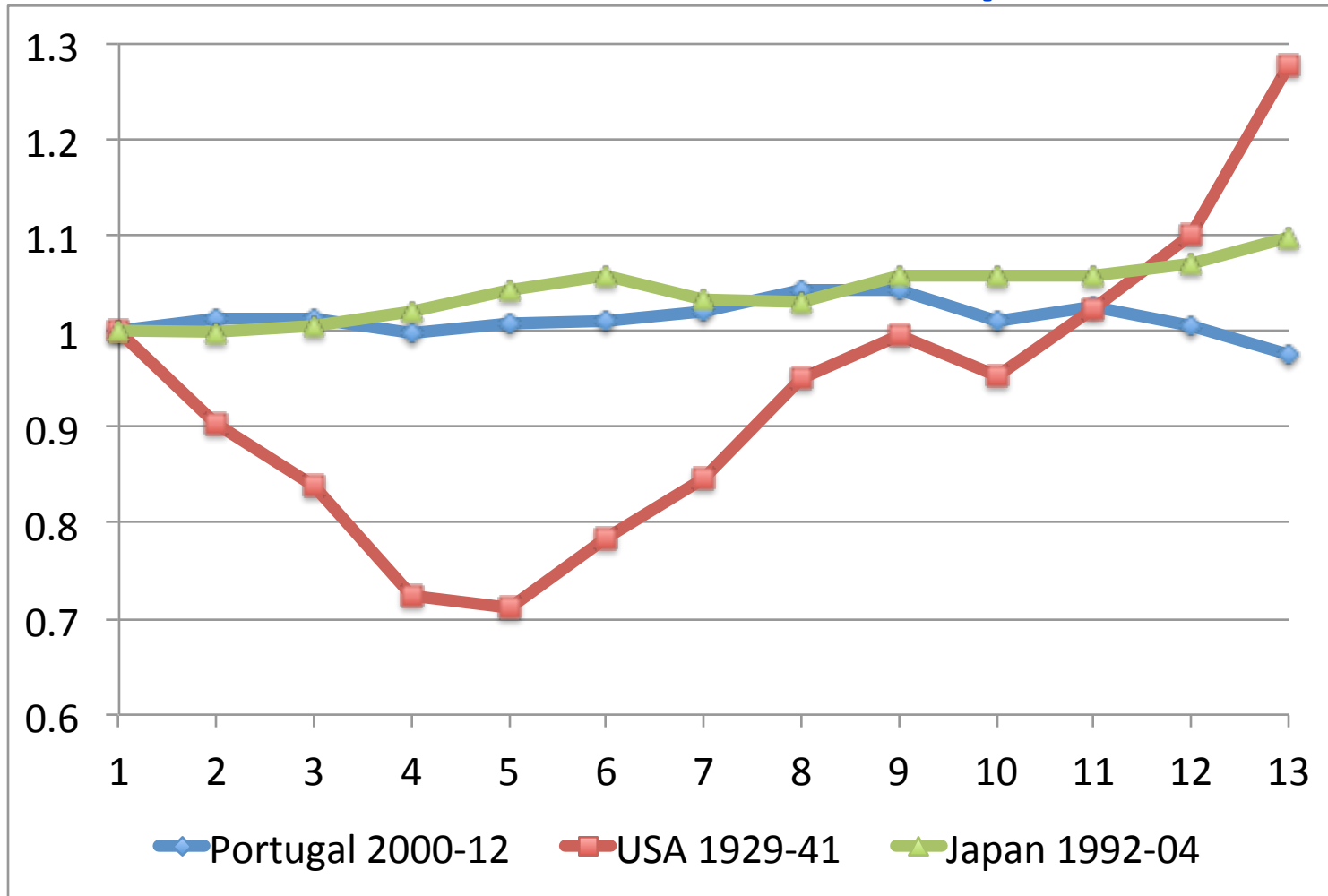
Real GDP per capita



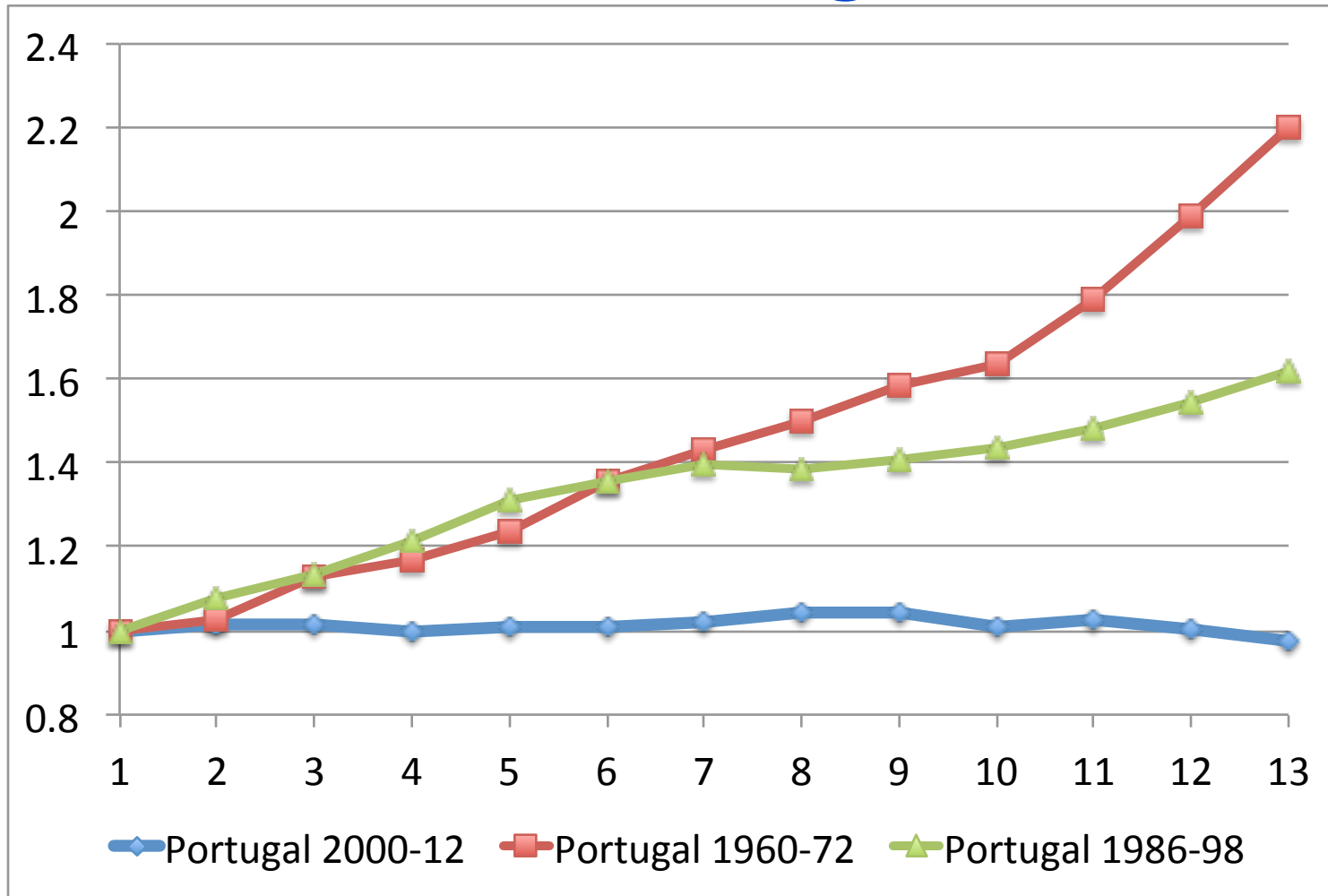
...versus the Lost Decade



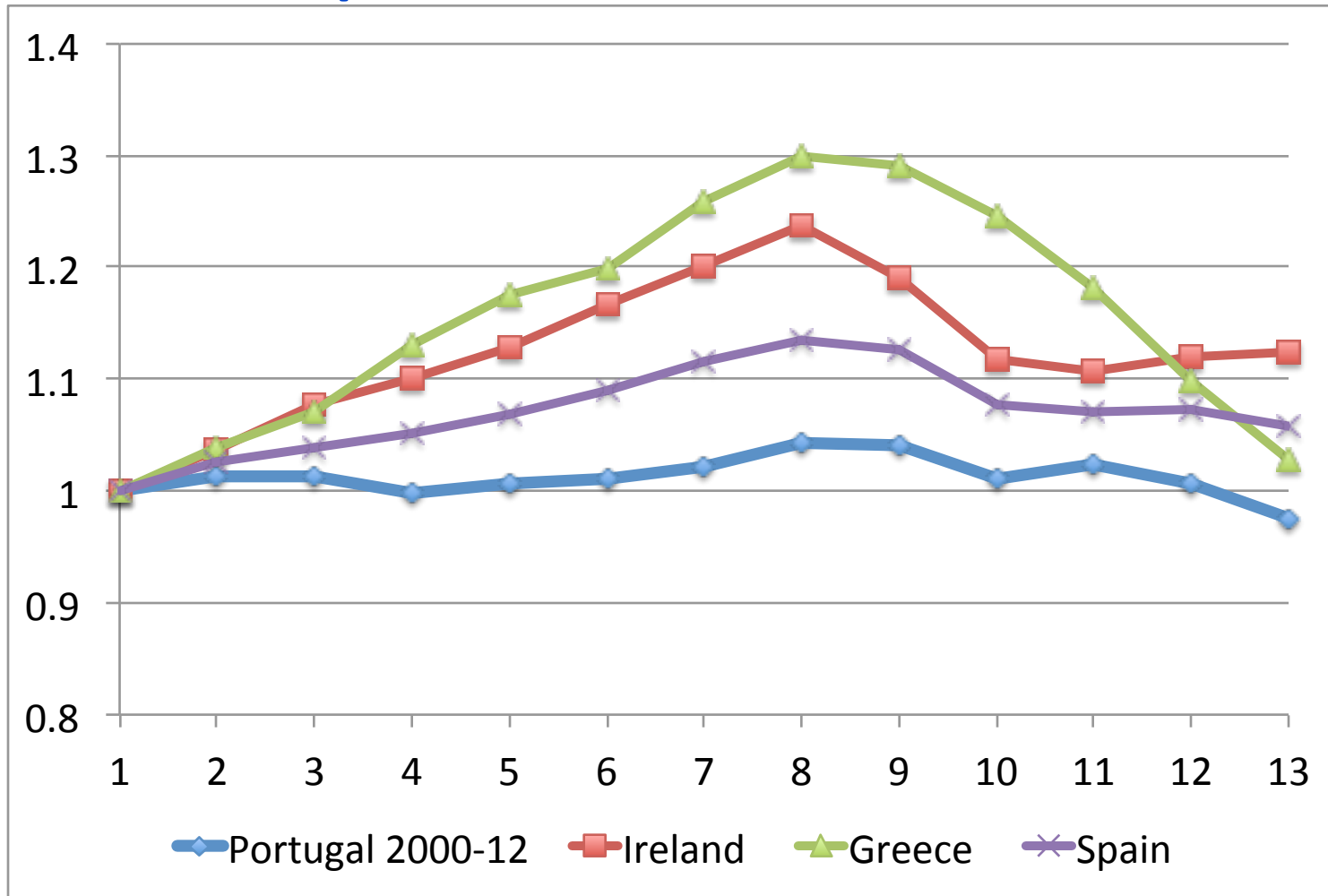
...versus the Great Depression



Economic integration?



The first patient of a euro disease?



A narrative: the shock

	Percentage of GDP in 2007
Net foreign assets	-97.5
Change in NFA 00-07	-75.8
Cumulative Current Account	-49.3
Cumulative Trade Balance	-44.9
Cumulative Trade Balance ex-EU	-0.02

Large influx of capital from 2000 onwards, mostly of goods from the rest of the Euro-zone, yet still stagnant consumption, and real wages grew little.

Competitiveness and non-tradables

	All trading partners	Euro-area	Main trading partners
Real exchange rate	11.91	5.98	4.01
Nominal exchange rate	7.70	0	0
Terms of Trade	1.33	1.70	-5.74
Relative price of non-tradables	10.58	4.28	9.74
Price of all industries	8.81	10.71	-0.77
Price of manufacturing		2.41	-4.22

Real exchange rate rose, but in large part because euro appreciated, and because of increase in price of non-tradable sectors

Not construction, but trade and public

	2007 level	Change 2000-07	Relative to the Euro-area	Relative to main trading partners
Shares in total economy				
Manufacturing employment	16.41	-3.06	-0.73	0.21
Manufacturing value-added	14.06	-3.00	-1.11	-0.81
Shares in industry				
Employment				
manufacturing	17.74	-2.72	-0.47	-0.31
construction	10.22	-1.33	-1.56	-2.11
real estate	6.38	0.96	-0.98	-0.90
community services	24.06	1.12	0.22	0.45
wholesale and retail trade	17.42	1.95	2.11	2.24
Value Added				
manufacturing	14.43	-2.66	-1.60	-0.40
construction	6.61	-1.00	-1.39	-2.91
real estate	14.59	0.14	-1.07	-2.23
community services	26.51	2.53	2.58	2.58
wholesale and retail trade	12.85	-0.52	0.13	0.10

Sectors that grew were those where TFP fell or markups grew

	Growth/change 2000-07	Relative to the Euro-area	Relative to main trading partners
Total economy			
Total Factor Productivity	-0.19	-3.31	-1.77
Log inverse labor share	-3.38	0.24	2.57
TFP in industries			
Total	-8.92	-9.30	-7.87
manufacturing	-3.99	-8.67	-7.32
construction	-11.72	-8.76	-8.08
real estate	-20.32	-16.59	-15.82
community services	-8.56	-7.59	-6.20
wholesale and retail trade	-13.96	-15.66	-13.31
Markups in industries			
Total	-0.02	-2.47	-4.92
manufacturing	-3.50	-7.14	-6.55
construction	-5.56	-12.87	-14.72
real estate	-2.93	5.91	-1.17
community services	3.50	2.57	1.00
wholesale and retail trade	-8.51	-8.65	-8.70

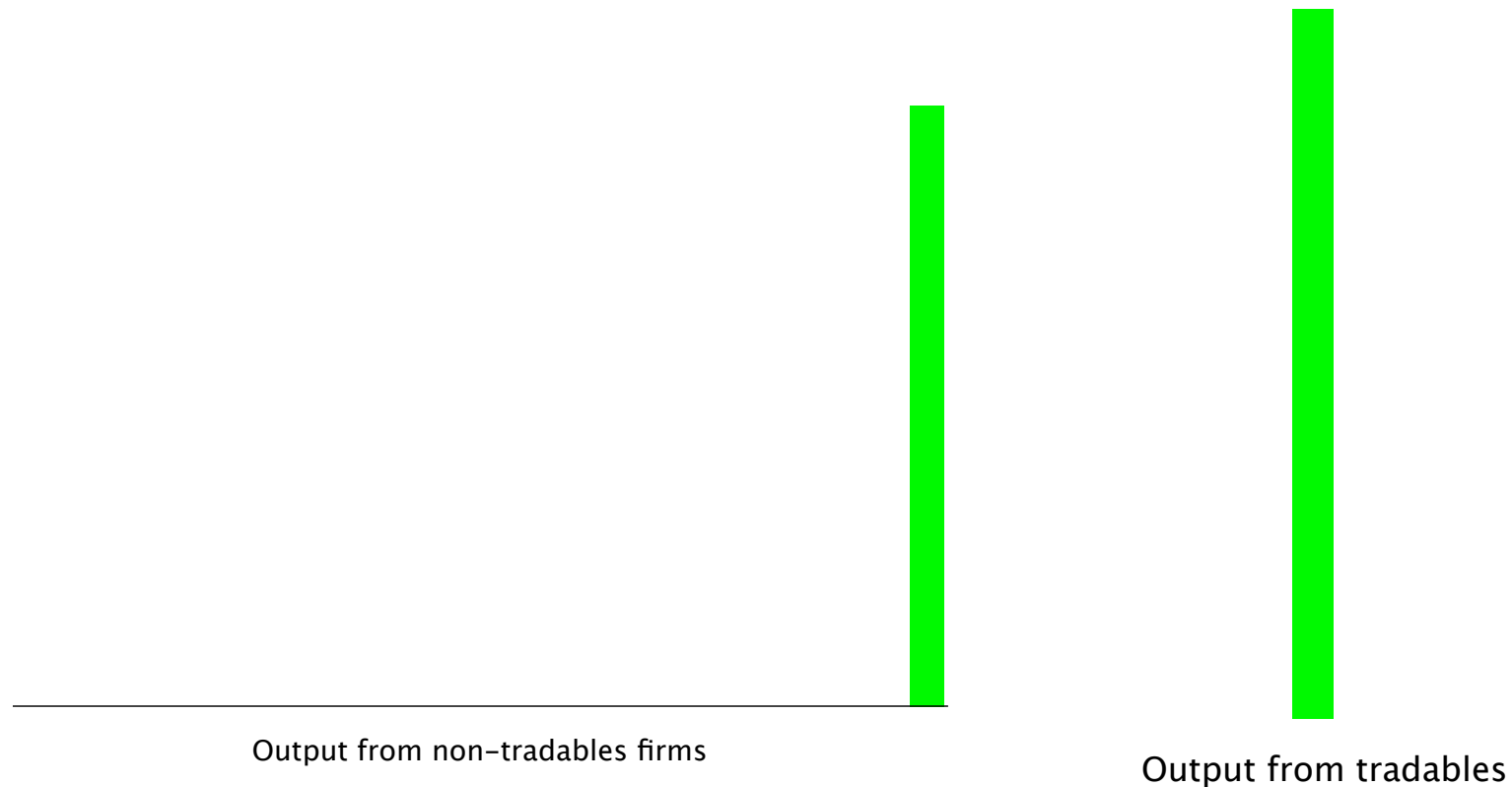
Taxes and old-age pensions

	2007 level	Change 2000-07	Relative to the Euro-area	Relative to main trading partners
Debt / GDP	68.3	17.9	20.8	26.6
Taxes / GDP				
Total	32.8	1.7	2.6	1.1
Consumption	12.6	0.8	1.2	1.3
Labor	12.4	0.9	2.1	1.4
Capital	7.8	-0.1	-0.7	-1.5
Government spending / GDP				
Total	44.4	2.7	2.9	3.0
Purchases	19.8	0.9	0.6	0.4
Social Protection	15.3	3.3	3.6	3.5
Old age	9.3	3.2	N/A	3.2
Old-age pension statistics				
Share population >65	17.3	1.2	-0.4	0.1
Pensioners / Labor Force	59.0	3.4		
Effective Retirement Age	66.3	2.5	N/A	2.0

The narrative

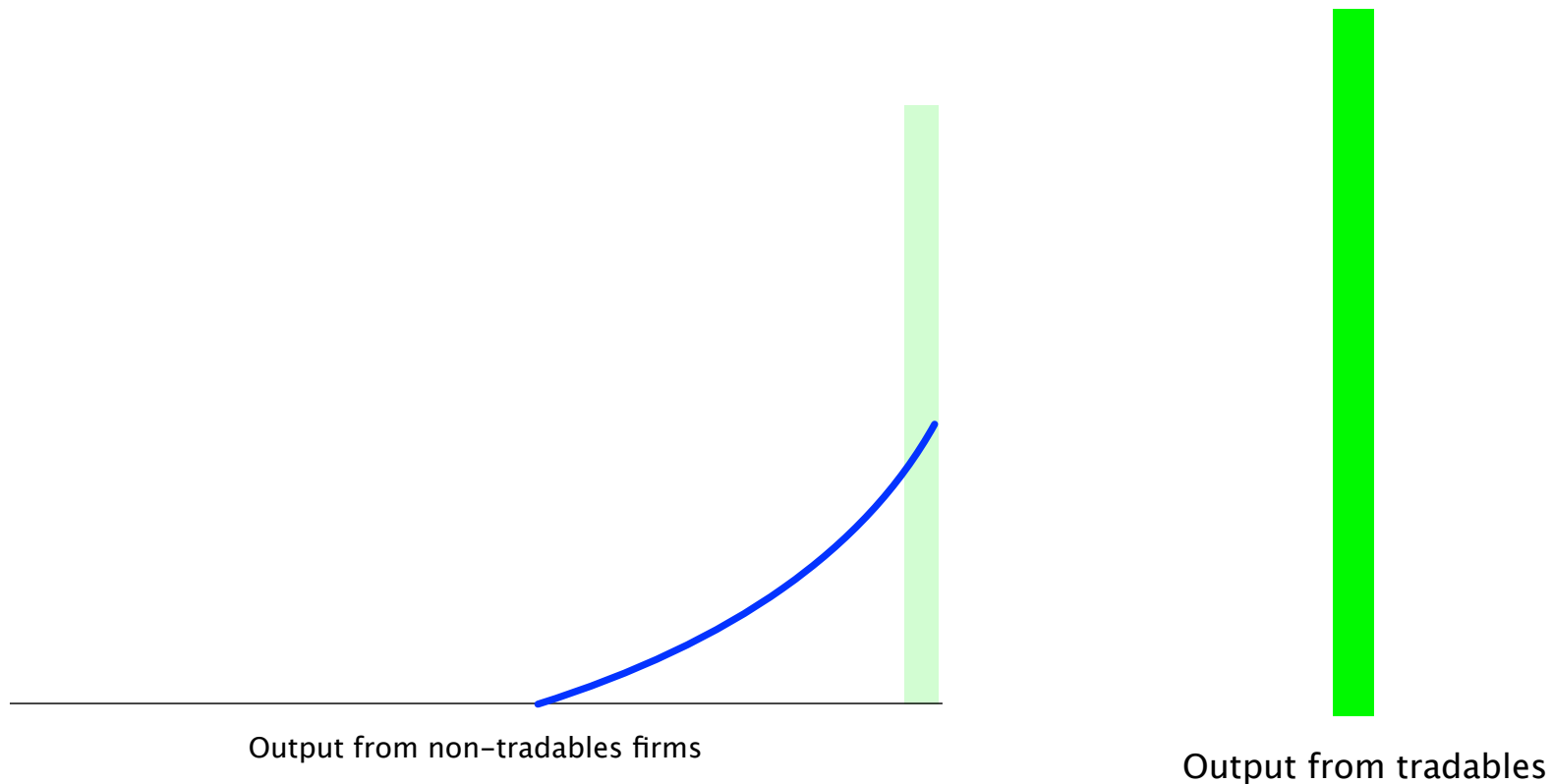
- With euro, capital flowed in to GIPS countries.
- It went mostly to non-tradable sectors, raising their price and so the real exchange rate.
- And the capital was allocated to low-productivity sectors, lowering TFP.
- In Spain and Ireland got a boom, especially in construction, in spite of declining productivity.
- In Portugal, retail trade and community services, little to no growth came from it.
- Moreover, taxes continuously increased to finance past pension promises.
- Altogether, production and employment slumped.

An explanation: allocation of capital



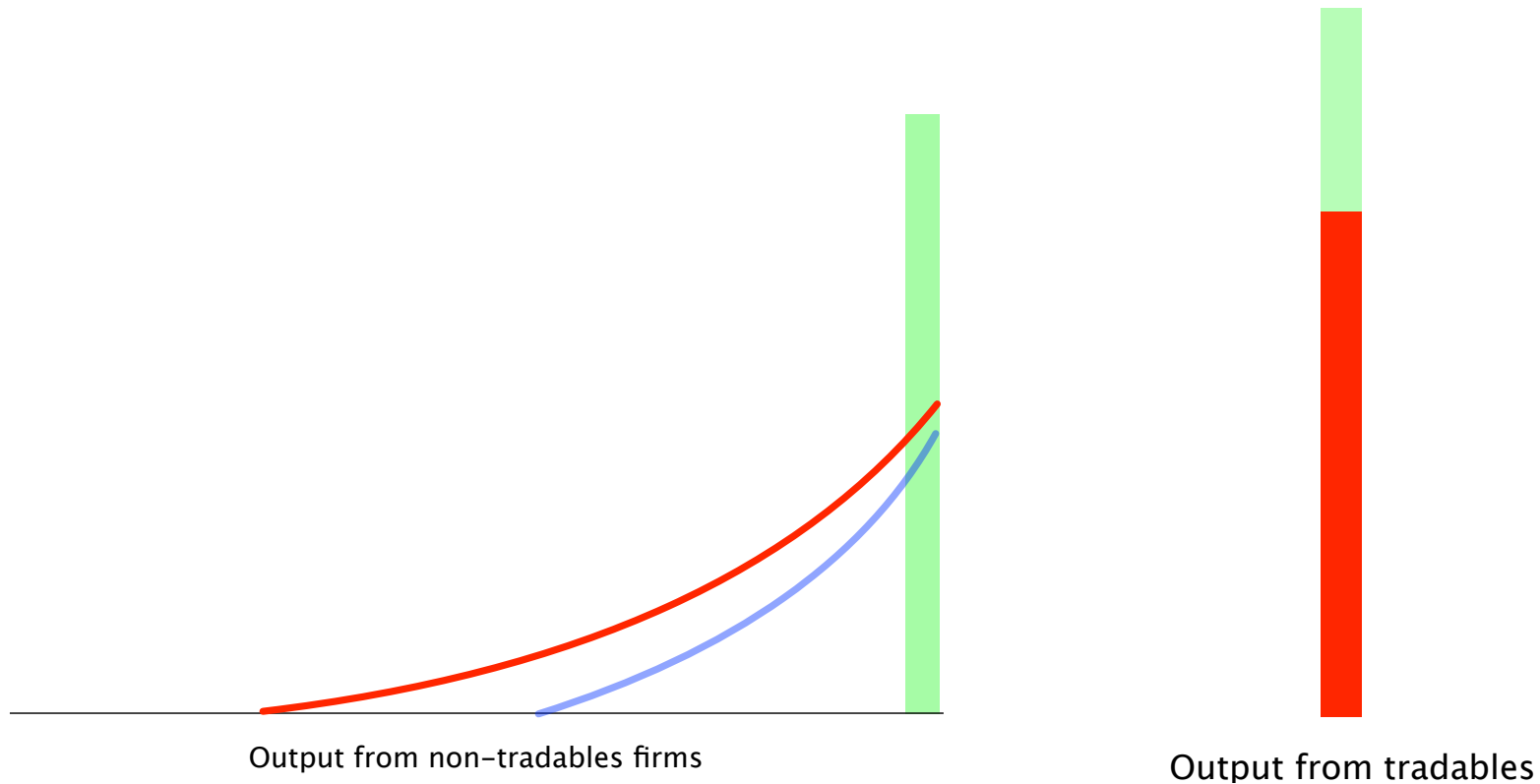
In efficient economy, capital split between tradables and most productive non-tradable firm in a sector

But if capital is mis-allocated



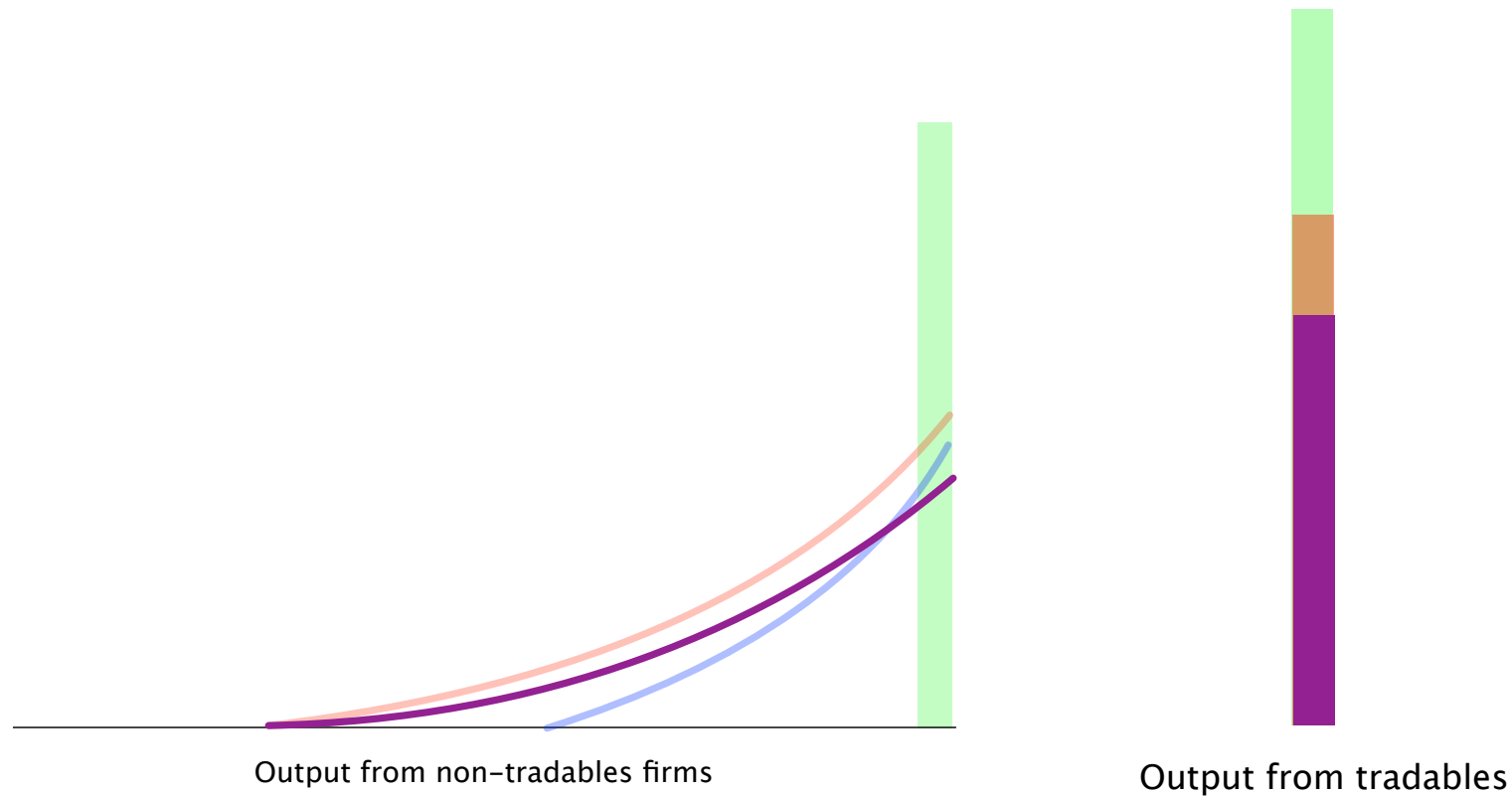
Tool: credit frictions, standing in for general mis-allocation of resources

If capital inflow shock



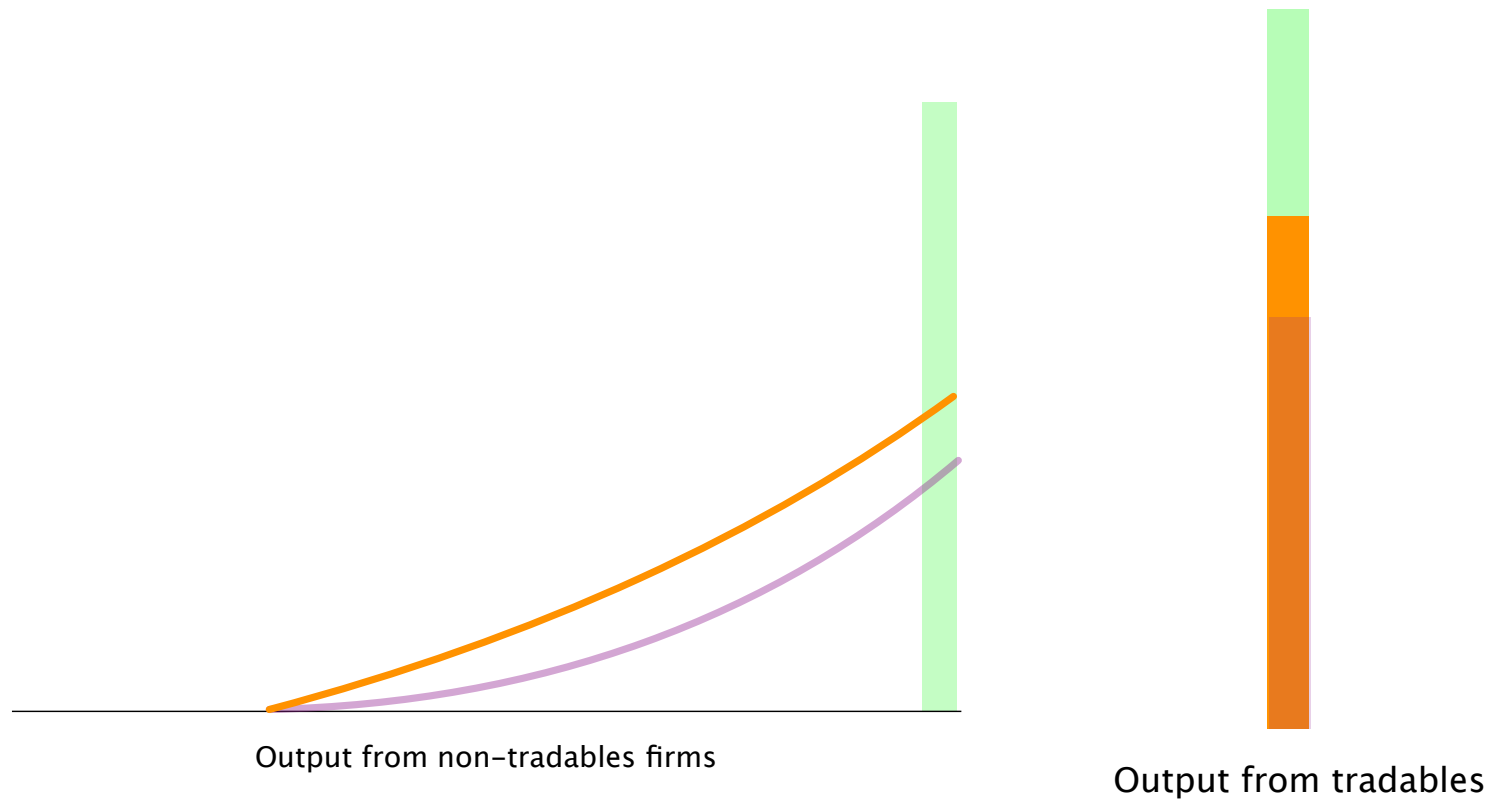
Abundant capital from abroad but efficiency of domestic allocation does not improve, so TFP falls.

Then, increase in taxes



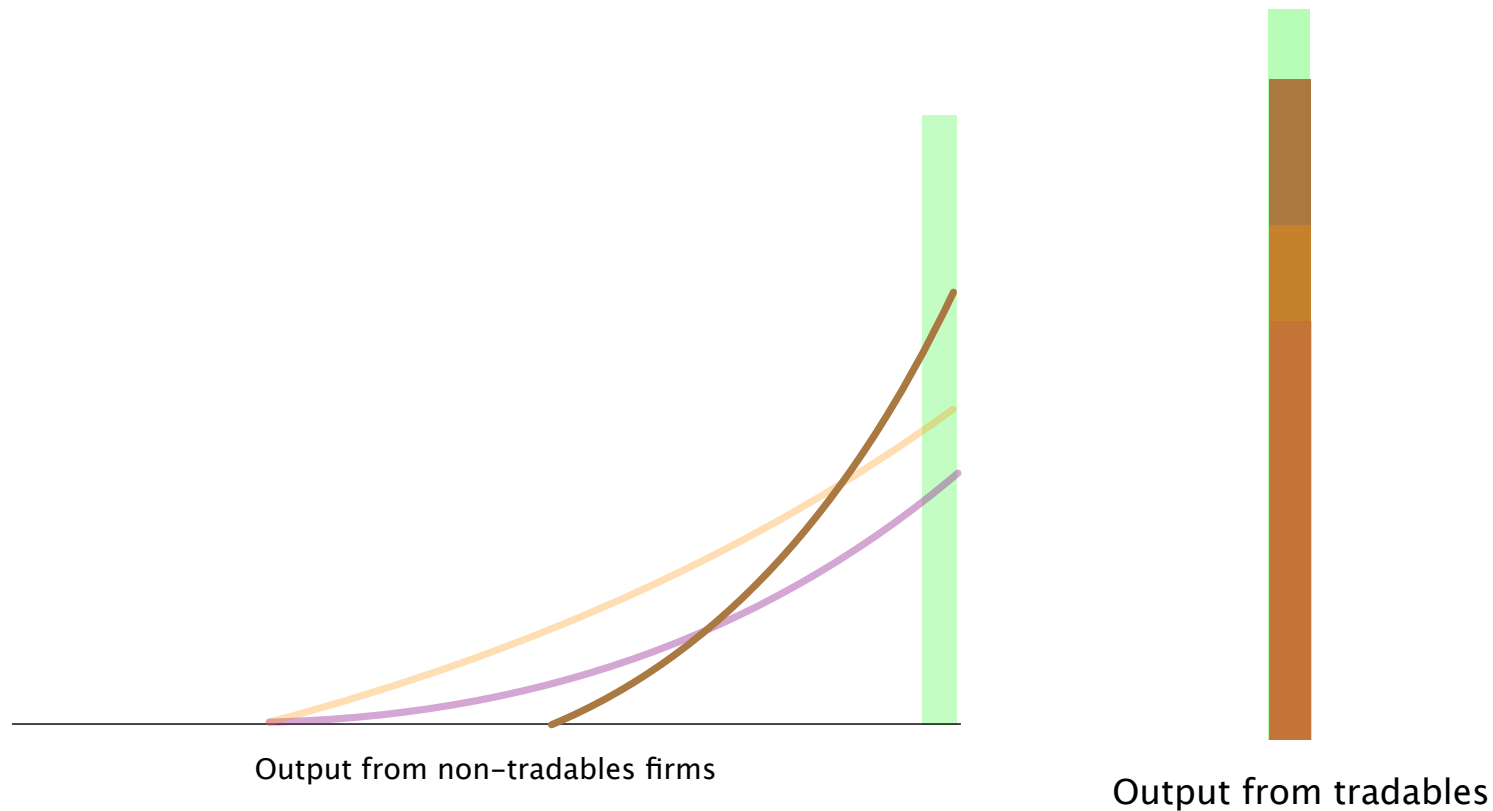
Adding an even modest increase in taxes makes a small increase in output easily become a slump.

What about Spain or Ireland?



Aggressive cut in taxes

What about Spain or Ireland?



Aggressive cut in taxes and better developed domestic financial markets

The sudden stop

Global shock: increase in risk perceptions and interest rate premia everywhere in the world, and especially in Europe with banks at the center.

Effect: wages must fall, economy contract, tradables and exports expand.

Barriers: wages don't fall fast enough (or at all), diabolic loop between banks and sovereigns, fiscal austerity. **Crash.**

Conclusion

Sudden capital-markets integration in an economy that has underdeveloped markets for allocating capital can lead to a slump: unlike trade integration, and an idea that extends beyond developing countries.

Can explain common features of euro-crisis pre-2007: appreciating real exchange rates, expansion in non-tradables, falling TFP, wage increases, huge borrowing from abroad, the sudden stop.

Portugal's mistakes? Not fixing the pensions problem early enough, protecting banks.