



COEN TEULINGS

University of Cambridge

Secular stagnation, deflation & fiscal policy



Stockholm

October 19, 2015

Secular Stagnation: Facts, Causes and Cures

Edited by Coen Teulings and
Richard Baldwin



CEPR Press

A VoxEU.org Book

Larry Summers

There is increasing concern that we may be in an era of secular stagnation in which there is insufficient investment demand to absorb all the financial savings done by households and corporations, even with interest rates so low as to risk financial bubbles.

Boston Globe, April 11, 2014

Secular Stagnation, deflation & fiscal policy

- Menu of the day
 1. What causes Sec Stag?
 2. Its consequences
 3. Options for absorption of excess savings
 4. Global or regional phenomenon?
 5. Low real rates, deflation, and Japan
 6. Fiscal Compact
-

1. What causes Sec Stag?

1. Supply of loanable funds? Sure

1. China (1% of world GDP)
2. Savings glut: root cause of financial crisis?
3. Demography
4. Japan, China, Germany

2. Demand for loanable funds? Maybe

1. Lower growth
2. Rise of IT industry

3. Excess demand for save assets? Sure

Demography and supply of funds

	Share of world GDP (%)	Life expectancy (years)			Required stock of savings (share of GDP)		
	2010	1970	1990	2010	1970	1990	2010
US	23.37	70.90	75.30	78.60	-2.28	-0.20	0.52
China	9.26	62.90	69.50	74.90	-0.40	-0.48	0.86
Japan	8.58	72.00	78.90	82.90	-1.76	-0.27	1.19
Germany	5.17	70.60	75.30	80.50	1.89	2.49	3.25

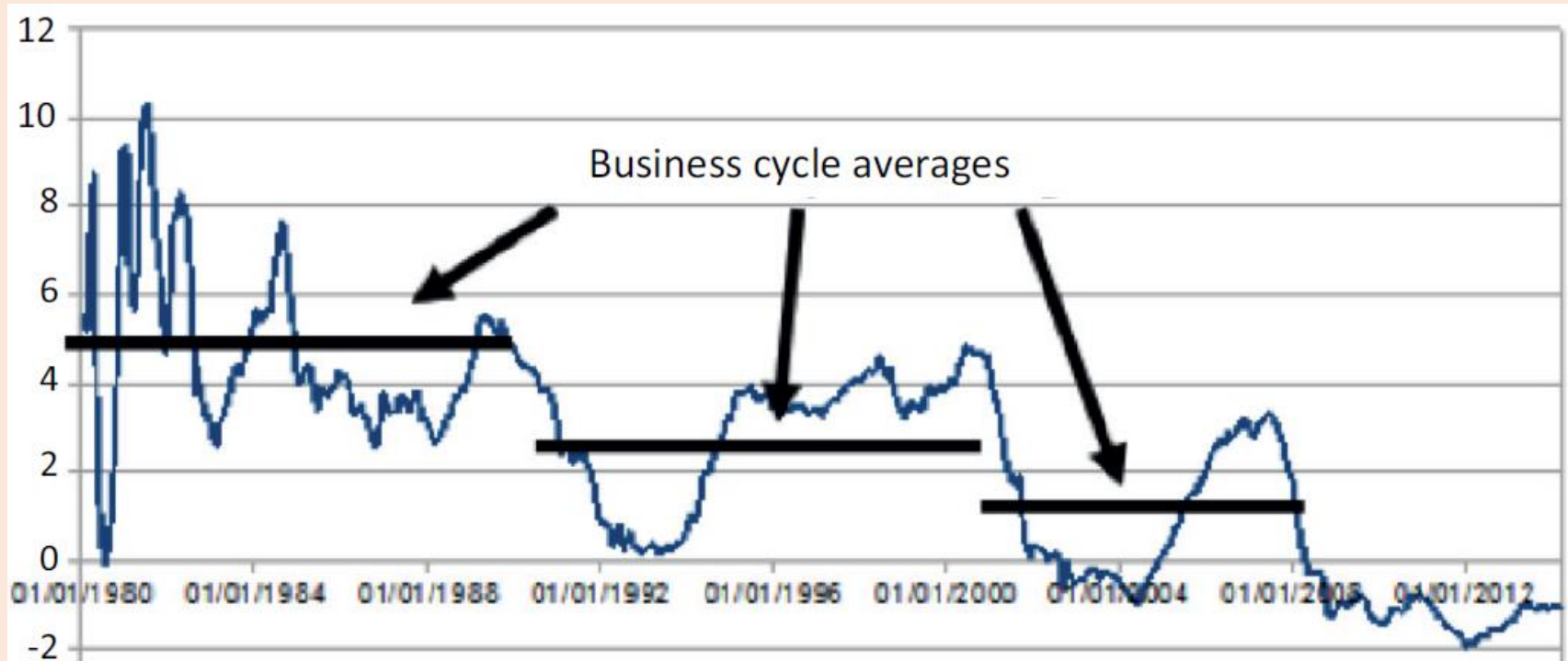
Demand for funds

- Increasing share of IT in total market cap
 - Take top 100 public companies
 - Exclude financials to avoid double counting
 - IT (including Amazon) accounts for 25%
 - Investment demand probably limited
 - Network rents
 - High margins for low investment activities
-

Shortage of safe assets

	USD bn		% of world GDP	
	2007	2011	2007	2011
US Federal government debt held by the public	5,136	10,692	9.2%	15.8%
Held by the Federal Reserve	736	1,700	1.3%	2.5%
Held by private investors	4,401	8,992	7.9%	13.3%
GSE obligations	2,910	2,023	5.2%	3.0%
Agency- and GSE-backed mortgage pools	4,464	6,283	8.0%	9.3%
Private-issue ABS	3,901	1,277	7.0%	1.9%
German and French government debt	2,492	3,270	4.5%	4.8%
Italian and Spanish government debt	2,380	3,143	4.3%	4.7%
Safe assets	20,548	12,262	36.9%	18.1%

2. Its consequences: low real interest rates



Zero lower bound

- Low real interest rate required for equilibrium
 - Zero lower bound to nominal interest rates
 - Classical case of a liquidity trap
 - Low inflation worsens the problem
 - Excess risk aversion by regulators
-

3. Options for absorption of excess saving

1. Raising the retirement age
 2. PAYG benefits
 3. One time increase in sovereign debt
 4. Bubbles: risky?
 5. An external surplus: risky?
 6. A severe Keynesian recession: surely bad!
-

What about bubbles?

- What is a bubbly asset: price $>$ NPV future returns
 - Jean Tirole's theory of rational bubbles: $r < g$
 - Why?
 - Fixed supply of bubbly assets
 - When savings grow at rate g , so do bubbly assets
 - \rightarrow bubbly assets more attractive than investment
 - Dynamic inefficiency: too low investment demand
 - Analogies: Aaron: PAYG vs. funded pensions
 - The reverse of Thomas Piketty
-

Consider an island economy

Overlapping generation model

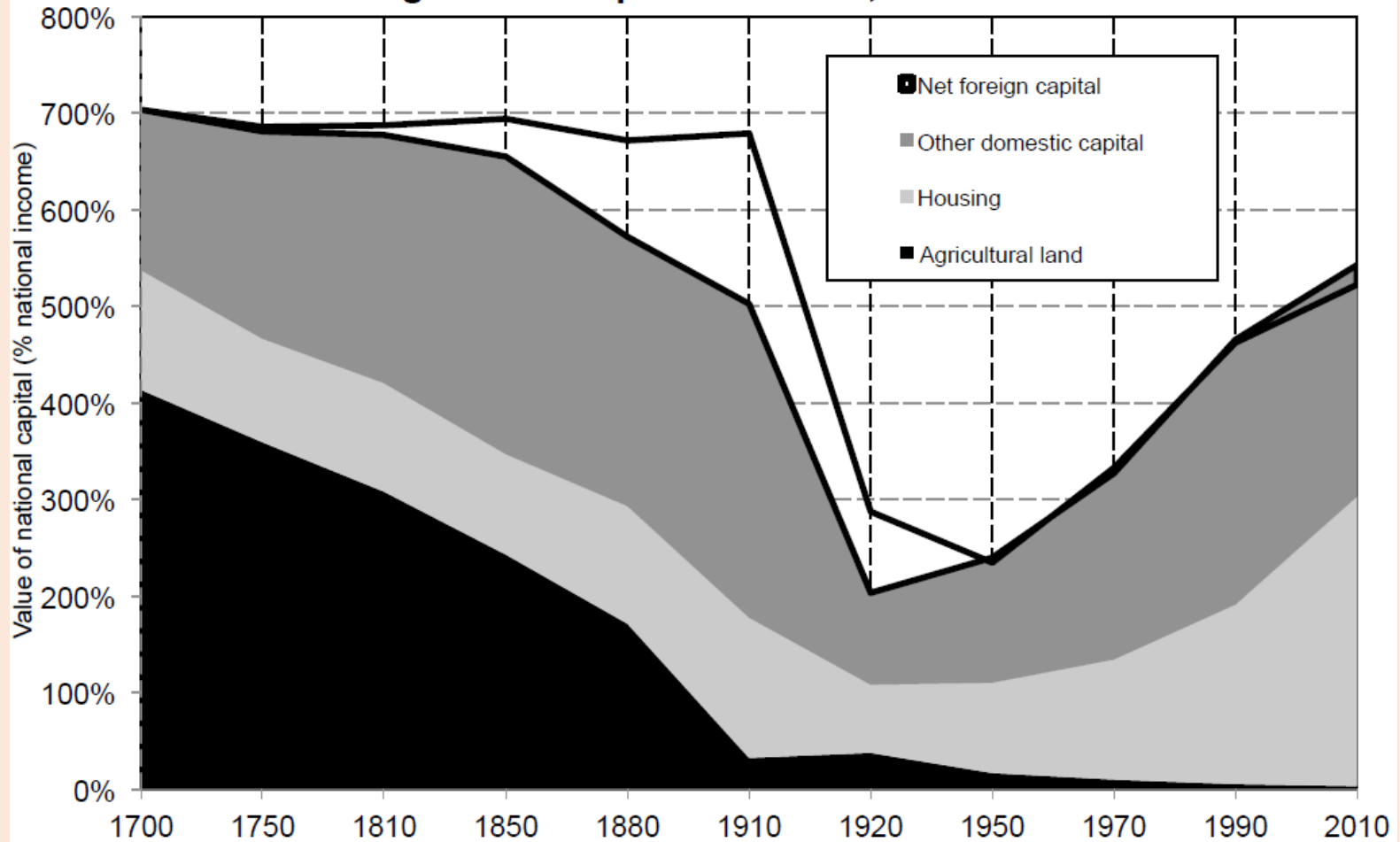
1. Case: no stores of value
 - Consumption = production (by definition)
 - PAYG, sovereign debt, and bubbles equivalent
2. Case: capital as a store of value
 - Young invest; old can sell their investment
 - Requires a sufficient demand for capital
 - ... such that $r > g$
 - Again: PAYG, sovereign debt, and bubbles
 - Conclusion: limits to physical stores of value

Bubbles and demography

- Bubbles require $r < g$
 - Fall in fertility lowers g
 - Hence: less chance on a bubble?
 - No: non-steady state situation
 - Fall in fertility occurred around 1970
 - Last big cohorts now in their '60
 - Heavily saving
 - Non-steady state theory of bubbles (Teulings 2015)
 - Bubbles achieve intergenerational transfers
 - Fiscal policy needed for intragenerational transfers
-

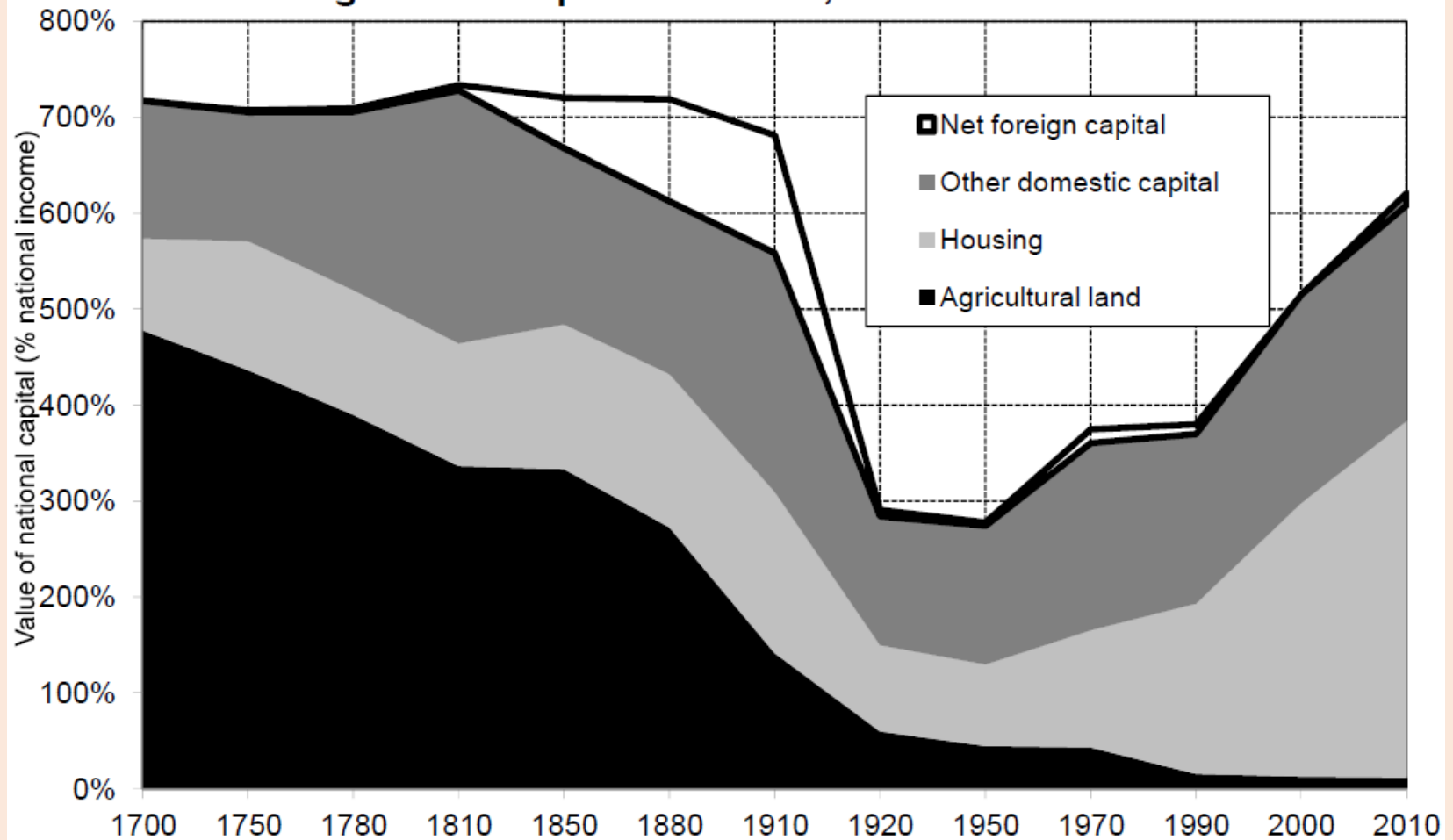
House price in Britain

Figure 3.1. Capital in Britain, 1700-2010

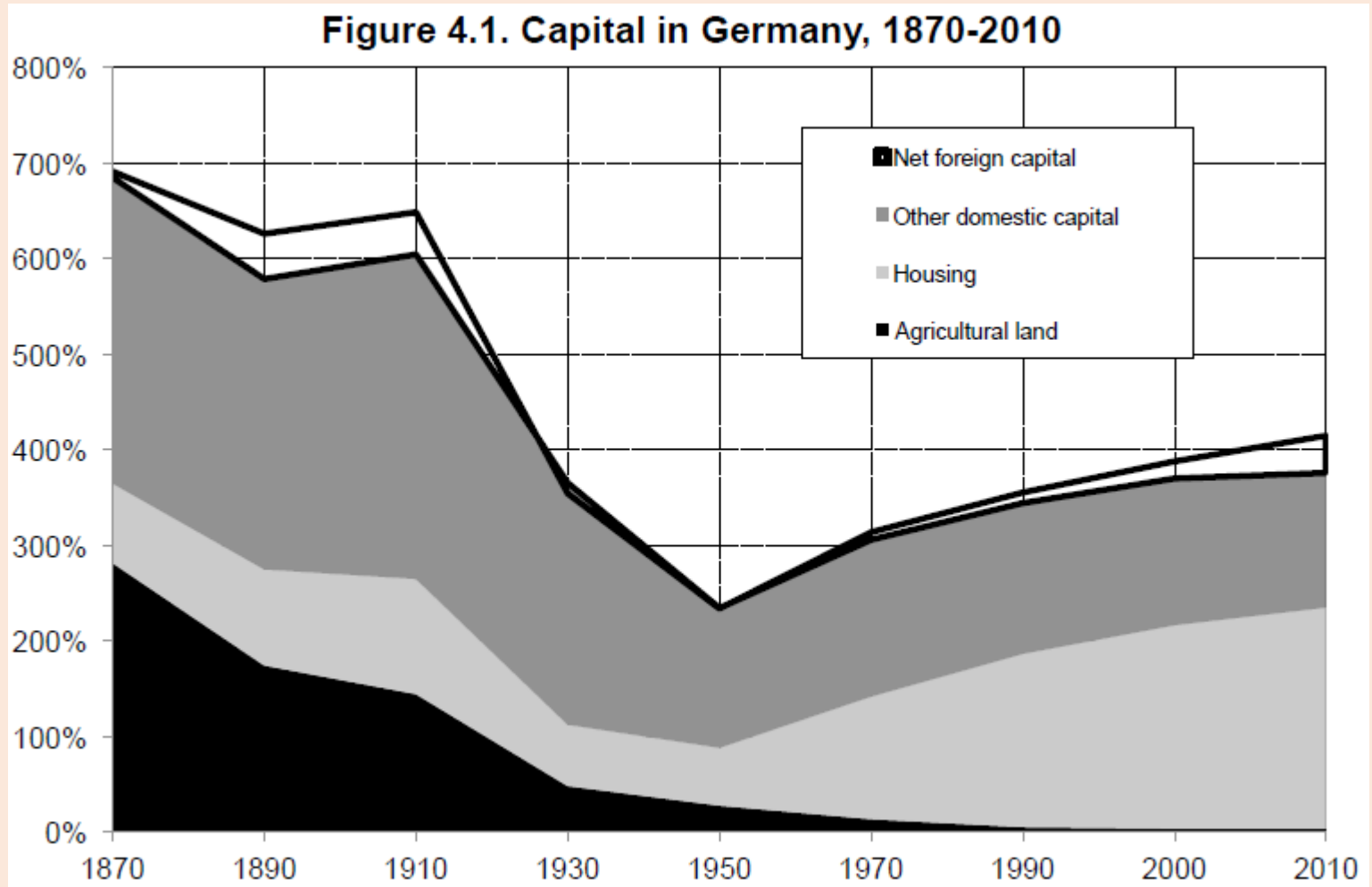


... and France

Figure 3.2. Capital in France, 1700-2010



What about Germany?



A German fear

February 17, 2014 2:56 pm

German house prices overheating, Bundesbank warns

By Alice Ross in Frankfurt and Claire Jones in London



House prices in Germany's biggest cities are overvalued as much as 25 per cent, the **Bundesbank** warned on Monday, adding to fears that international investment has helped to fuel a **property bubble** in the eurozone's largest economy.

The German central bank said that residential real estate prices in 125 cities rose by 6.25 per cent on average last year. In October, it reported that property prices in the biggest German cities were 20 per cent overvalued, suggesting the problem is getting worse.

Is the German fear legitimate

- On the one hand: NO!
 - Bubbles are inevitable in a world with Sec Stag
 - Needed for absorption of excess saving
 - ... and for intergenerational transfers
 - On the other hand: Yes
 - Low real rates complicates valuation of assets
 - More volatility, bubbles might collapse
 - But either PAYG or higher sovereign debt
-

4. Global or a regional phenomenon?

- In a world with an integrated capital market
 - ROW will absorb excess saving, e.g.
 - China's purchase of US treasuries
 - Germany's investment in Spanish housing
 - Unless Sec Stag is global
 - Though: Eggertson, Mehrotra, Summers (2015)
- But: Feldstein-Horioka paradox
- But: disintegration of global capital market
 - Despite banking union, even within Europe
- Hence: Sec Stag requires European policy

5. Low real rates, deflation, and Japan

- Why worry about deflation? Zero lower bound!
- Economists' problem: Why didn't it happen?
 - Both in Japan and Europe: only little deflation
 - Demise of Phillips curve: steep deflation,
 - Excess capacity both of capital and labour
- Theoretical responses
 - Fiscal theory of the price level: problematic
 - John Cochrane: low inflation due to low rates
 - Bob Hall: equilibrium with more uncertainty
- None of them undoes main advice:
 - Absorb the excess saving

Japan's experience

- What happened to Japan?
 - Lost decade? Low growth?
 - Its GDP per capita grow reasonably well
 - Maybe we can live with low inflation
 - As long as we absorb excess saving by sovereign debt: Japan's stand at 200% GDP+
 - **We ask the wrong question**
 - Wrong: why runs the government a high debt?
 - Right: why want the public to hold this debt?
 - Provided that it is hold domestically
-

6. Fiscal Compact

- Current system problematic
 1. Uncredible: countries should reduce their debt by 5% of the excess above 60% GDP
 - For Italy: 3% per year
 2. Undesirable: structural deficit at 1% GDP
 - Implies a long run debt of 33% GDP
 - ... assuming 3% nominal growth
 - Inconsistent with savings in Germany
-

Problem and potential solution

- States in monetary union cannot run high debt
 - See US experience
 - In that sense, rules are fine
 - But if so, federal debt needed to absorb savings
 - See US
 - See Japan
 - The European challenge
-

Democracy and macro policy

Richard Koo on balance sheet recessions:

“Democracies are ill-equipped to handle such recessions. For a democracy to function properly, people must act based on a strong sense of personal responsibility and self-reliance. But this runs counter to the use of fiscal stimulus, which involves depending on ‘big government’.”