

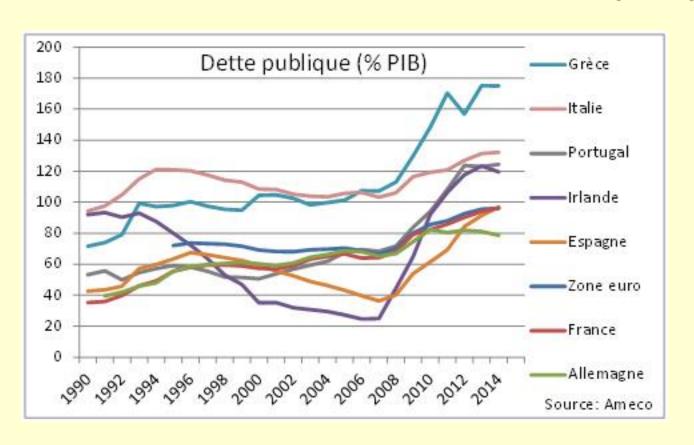
European Congress of Actuaries Brussels 21-22 April 2016 Régis de Laroullière



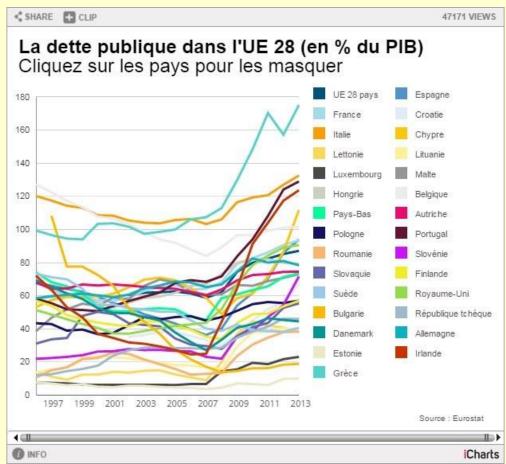
Part 1

Why interest rates might remain low

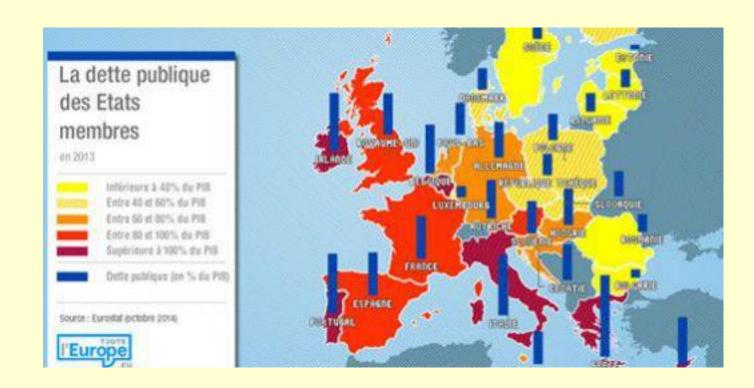




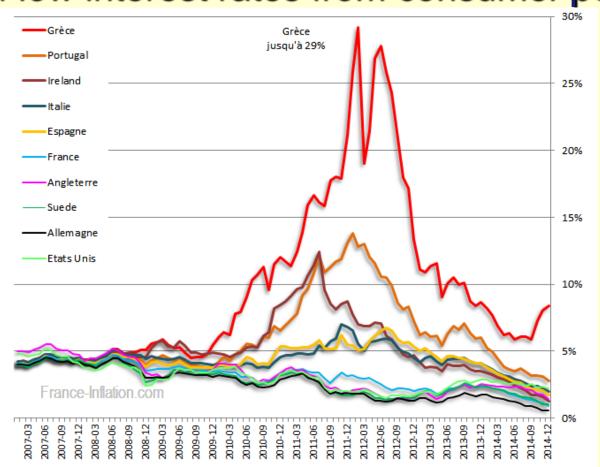




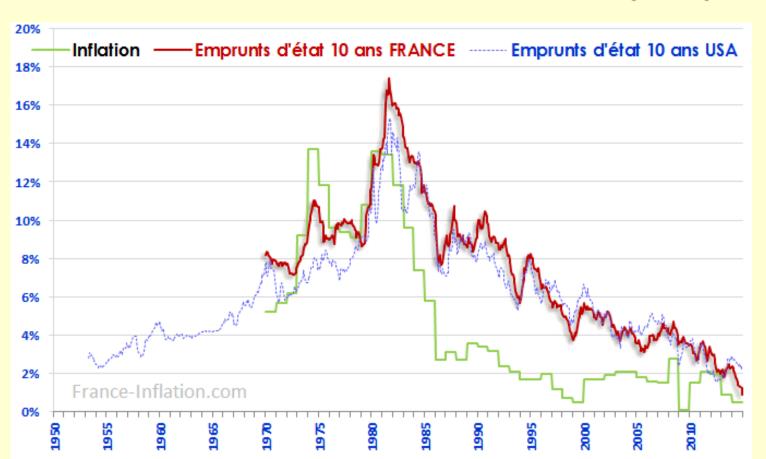














Drivers of growth: 1945-1974

Reconstruction

Baby boom

Rate of activity of women

Abundant and inexpensive fossil energy



Drivers of growth: 1974-2008

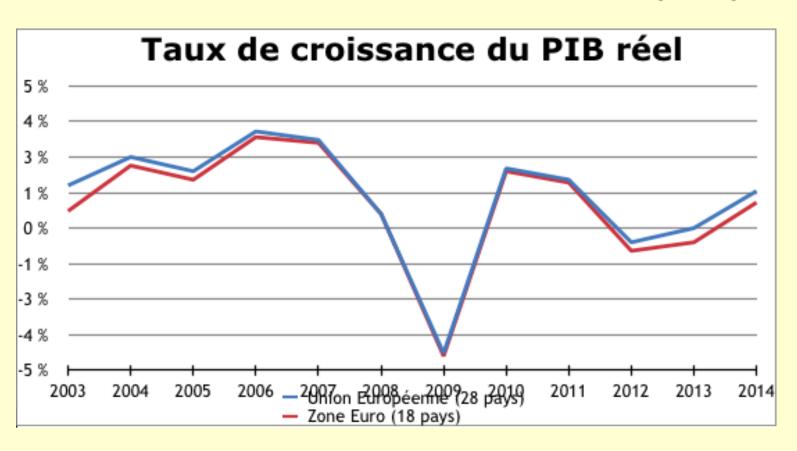
Exportation
Public deficit
Increase of debt public and private



Drivers of growth: 2009-2030

High debt, public and private, deleveraging
Remaining deficits
Competition of emerging countries
Technical progress, e-revolution







What are the ways out of the debt crisis?

Economical adjustment Inflation?

Hair cut (restructuration)?

Troubles?

Low interest rates ("Japanese scenario")



Part 2

Impact from consumer perspective



Short term guarantees: Health

Expenditures		Revenues	
Claims	80	Premium income	100
Management and distribution	17	Investment income	1,5
Profit	4,5		



Long term guarantees, interest rates 3%

Expenditures		Revenues	
Claims	101	Premium income	100
Management and distribution	17	Investment income	1,5+21
Profit	4,5		



Long term risk, interest rates 1%

Expenditures		Revenues	
Claims	101	Premium income	100+14
Management and distribution	17	Investment income	0,5+7
Profit	3,5		



Savings
Depends on the country and the product
The French "fonds en euros"
Short term
Long term



Is solvency of insurance undertakings at risk?

The Japanese experience

"The Japanese experience in the 1990s and early 2000s demonstrates both the plausibility of a prolonged period of low interest rates, as well as the impact of such a scenario. Many Japanese life insurers had built up substantial books of guaranteed business from the 1980s and were vulnerable to a prolonged period of low interest rates. The result was that between 1997 and 2001, seven Japanese firms failed and legislation was passed to allow insurers to alter guaranteed rates on policies where they face a high probability of bankruptcy."

Source: Opinion of EIOPA of 28 February 2013 on Supervisory Response to a Prolonged Low Interest Rate Environment



Thanks for your attention

Questions?