

Roots of the crisis

Fault lines



### 2013.4

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Roots of the crisis

Fault lines

### 1 Aftermath of financial crisis

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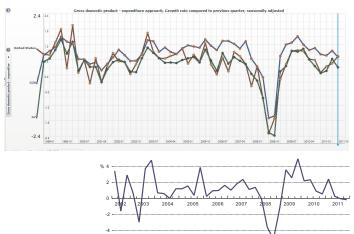
2 Roots of the crisis





Roots of the crisis

Fault lines



- 2008Ⅳ, 台灣 GDP 成長率約 -5%, G7 約 -2.4%
- 台灣景氣波動大於 G7, G20, 美國



### **Effects on Taiwan**

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Aftermath of financial crisis

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### • 金融海嘯對台灣銀行業的直接影響似乎不大

### **Effects on Taiwan**

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- 金融海嘯對台灣銀行業的直接影響似乎不大
- 台灣 GDP 的波動幅度更甚於 G20
- Why?

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# Effects of financial crisis

#### A long, hard slog

Peak-to-trough changes in severe financial crises\*

Cumulative change, %	Duration, years
-36	5.0
-56	3.4
7.0	4.8
-9.3	1.9
	-36 -56 7.0

#### Percentage of years spent in banking crises

	Advanced economies	Emerging economies
Since 1800 or independence	7.2	8.3
Since 1945 or independence	7.0	10.8
*Argentina (2001), Colombia (1	998), Hong Kong (1997), Indo es (1997), Thailand (1997), Jaj	

• Rogoff and Carmen (2009): results from 14 severe banking busts

### Spend to save

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- "Drastic times", *Economist*, Jan 20, 2009
- "Nearly all were agreed that a massive fiscal stimulus was needed to stop a deep recession turning into something worse. But there was not much consensus about the form of a package should take."

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# Effects of fiscal policy

- Robert Hall: tax rebates?
  there is no guarantee that they will be spent
- Direct government purchase?
  Much of the benefit maybe captured by producers

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### John Taylor (Stanford University)

 "there was scant evidence that tinkering with tax and spending policies does much to lift the economy"

A dissenting voice

- Taylor: Debating Stimulus and Harvard and Stanford
- America's 2008 tax rebates had little discernible impact
- 台灣發放消費券有何效果?

### An example

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- "Mr Taylor's scepticism may well be shared by other academic economists but the scale of economic meltdown leaves them reluctant to rule out any options."
- Rogoff: A terminally ill patient who is offered a risky treatment that may cure the disease but is sure to have nasty long-term side-effects



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# An interpretation on the crisis

- US's Dot com bubble in late 1990s spending in information technology
- A bust in early 2000 and US and Taiwan were in recession (Taiwan was a major supplier)
- 911 attacks (2001)



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# An interpretation on the crisis

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- In 2001, Fed lowered interest rate to induce investment
- Loose money:



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# An interpretation on the crisis

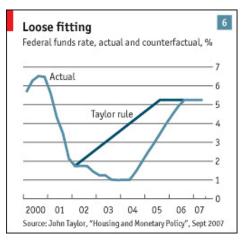
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- In 2001, Fed lowered interest rate to induce investment
- Loose money: How big and how long?



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# **Taylor Rule**



 According to Taylor Rule, Fed should start raising interest rates (reduce money supply) in 2002–2005

# **Taylor Rule**

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$${\rm R}=\pi+{\rm 2.0\%}+{\rm 0.5}(\pi-{\rm 2.0\%})+{\rm 0.5}({\rm GDP\,gap})$$

where R is short-term nominal interest rate (Federal funds rate),  $\pi$  is inflation rate, and

$$\text{GDP gap} = \frac{\text{RGDP} - \text{trend RGDP}}{\text{trend RGDP}}$$

- When inflation or GDP are higher, Fed should raise interest rate
- debate: rule vs. discretion

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# Interest and investment

- However, firms had already invested too much
- Lower interest rate prompted U.S. consumers to buy houses

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# Interest and investment

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• Not only US, but also European countries

### Loose money and housing

Change in construction investment as a percentage of GDP. 2001g1-2006g4 6 y = 0.063x - 0.388 $R^2 = 0.834$ 5 IRI ESP 4 3 2 ERA OTT 0 AUT -1 O DEU -2 -3 -20 0 20 40 60 80 100 Sum of differences between IRS and Taylor, 2001q3-2006q4

 Rudiger Ahrend et al. (2008), Monetary Policy, Market Excesses and Financial Turmoil

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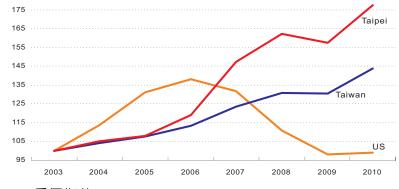
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# Loose money and housing



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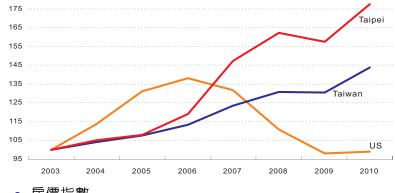
• 房價指數

# Loose money and housing



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- 房價指數
- If there was a financil crisis in the US and the Europe, why there is none in Taiwan?

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### Who were the lenders?

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- Who lends to the US house buyers?
- Not only the US Fed, Germany, Japanese, Chinese, and Taiwanese all supply loans to the U.S. firms and consumers

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# If there were no foreign lenders

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 Interest rate would be much higher, and there would be fewer buyers



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# If there were no foreign lenders

- Interest rate would be much higher, and there would be fewer buyers
- Consider an example: both US Treasury and families want to borrow
- If many foreign lenders buy a lot of US government bonds, and US domestic lenders lend to the domestic borrowers, then US interest rate would be much lower



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# International credit market

• How do you know that Taiwan is a lender or a borrower in the international credit market?

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 How to Taiwan's foreign lending or borrowing?



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# International credit market

- How do you know that Taiwan is a lender or a borrower in the international credit market?
- How to Taiwan's foreign lending or borrowing?
- lending: current account surplus (or trade surplus)

borrowing: current account deficit

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# Fault lines (斷層線)

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- In summary, the financial tsunami was caused by two policy distortions:
  - the push for universal home ownership in the US
  - the push for export-led growth in some countries such as Germany, China, Japan, and Taiwan

### **Fault lines**

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"This crisis has resulted from a confusion about the appropriate roles of the government and the market. We need to find the right balance again, and I am hopeful we will."