

AcF 304 Financial Markets

Topic 2 - Why Do Financial Crises Occur and Why Are They So Damaging to the Economy?

1.Theory of Financial Crisis



QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

AcF 304 Financial Markets

Topic 2: Why Do Financial Financial Crises Occur and Why Are They So Damaging to the Economy?

Topic 2

Part 1 – Theory of Financial Crisis

Part 2 – 1929 Mother of all Financial Crisis: The Great Depression

Part 3 – Mortgage-Backed Securities

Part 4 – 2008 Financial Crisis

Part 5 – 2008 Financial Crisis 'Punk FT' Video

Part 6 – The European Sovereign Debt Crisis

Part 7 – Summary & Next Week's Preview

Core Textbook: Financial Markets & Institutions – Mishkin & Eakins
Chapter 8 (*We follow the chapter closely except MBS*)

QUADRUPLE-ACCREDITED, WORLD-RANKED



Topic 2 Preview (1 of 3)

Financial crises are major disruptions in financial markets characterised by sharp declines in asset prices and firm failures. Beginning in August 2007, the U.S. entered into a crisis that was described as a “once-in-a-century credit tsunami.”

QUADRUPLE-ACCREDITED, WORLD-RANKED



Topic Preview (2 of 3)

Why did this financial crisis occur? Why have financial crises been so prevalent throughout US history, as well as in so many other countries, and what insights do they provide on the current (covid-19) financial crisis? Why are financial crises almost always followed by severe contractions in economic activity? We will examine these questions in this topic.

QUADRUPLE-ACCREDITED, WORLD-RANKED



Topic Preview (3 of 3)

In this session, we develop a framework to understand the dynamics of financial crises. Topics include:

- What Is a Financial Crises?
- Dynamics of Financial Crises in Advanced Economies

QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

What Is a Financial Crises? (1 of 2)

- We discussed briefly in Topic 1 how a functioning financial system is critical to a robust economy...
- However, both adverse selection and moral hazard are still present. The study of these problems is the basis for understanding and defining a financial crisis.

QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

What Is a Financial Crises? (2 of 2)

- Asymmetric information creates barriers between savers and firms with productive investment opportunities.
- A financial crisis occurs when information flows in financial markets experience a particularly large disruption. Financial markets may stop functioning completely.

QUADRUPLE-ACCREDITED, WORLD-RANKED

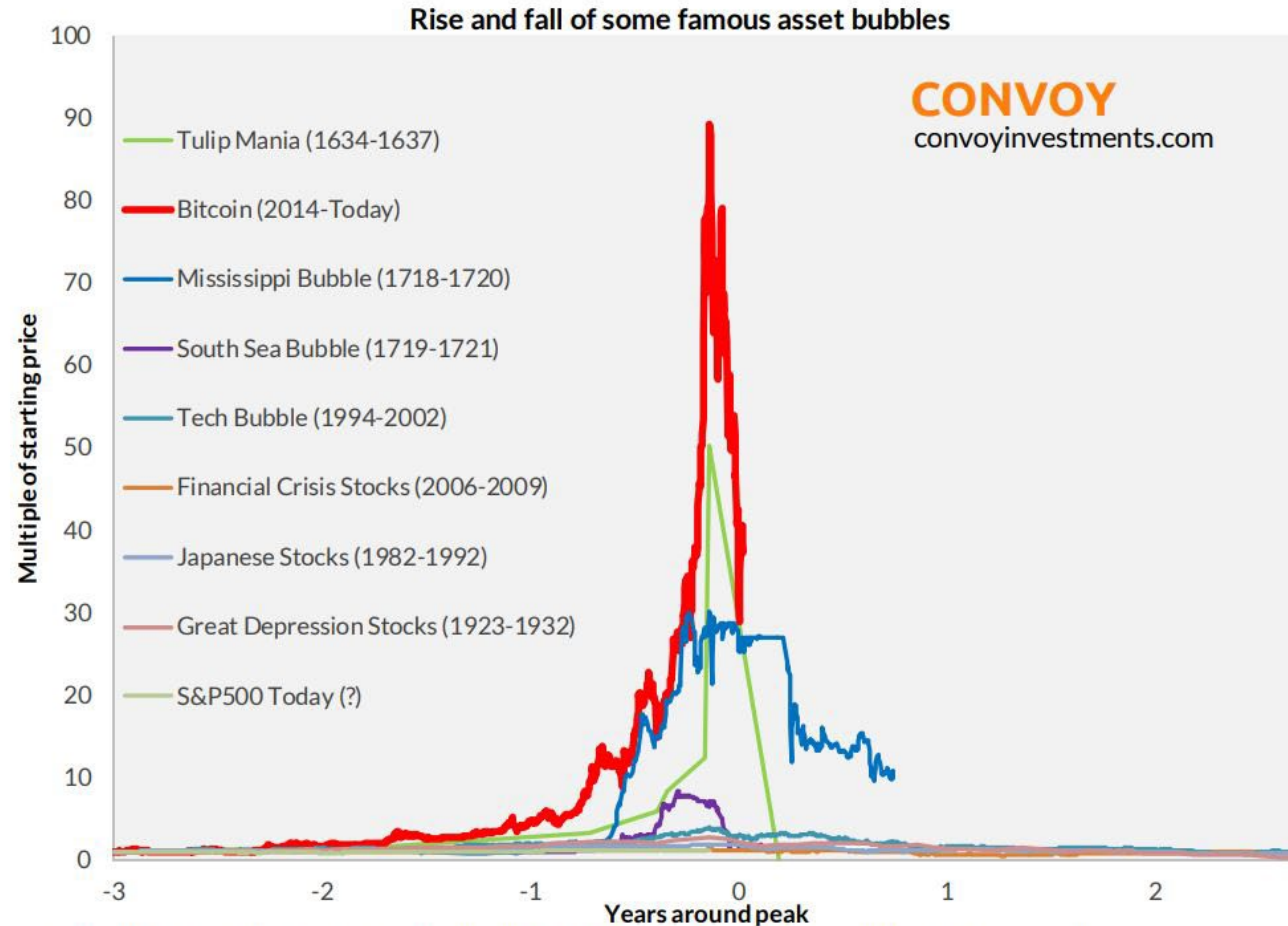


Dynamics of Financial Crises in Advanced Economies

- Financial crises hit countries like United States (+ Europe, Asia) every so often, and each event helps economists gain insights into that crisis and present-day turmoil.
- But financial crises have always been with us...

QUADRUPLE-ACCREDITED, WORLD-RANKED





As of 2/12/2018. Source: Elliot Wave International, Yale SOM, St. Louis FRED, Global Financial Data, and Convoy analysis.

QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

The four most expensive (investing) words in history!

“This time it’s different!”

QUADRUPLE-ACCREDITED, WORLD-RANKED



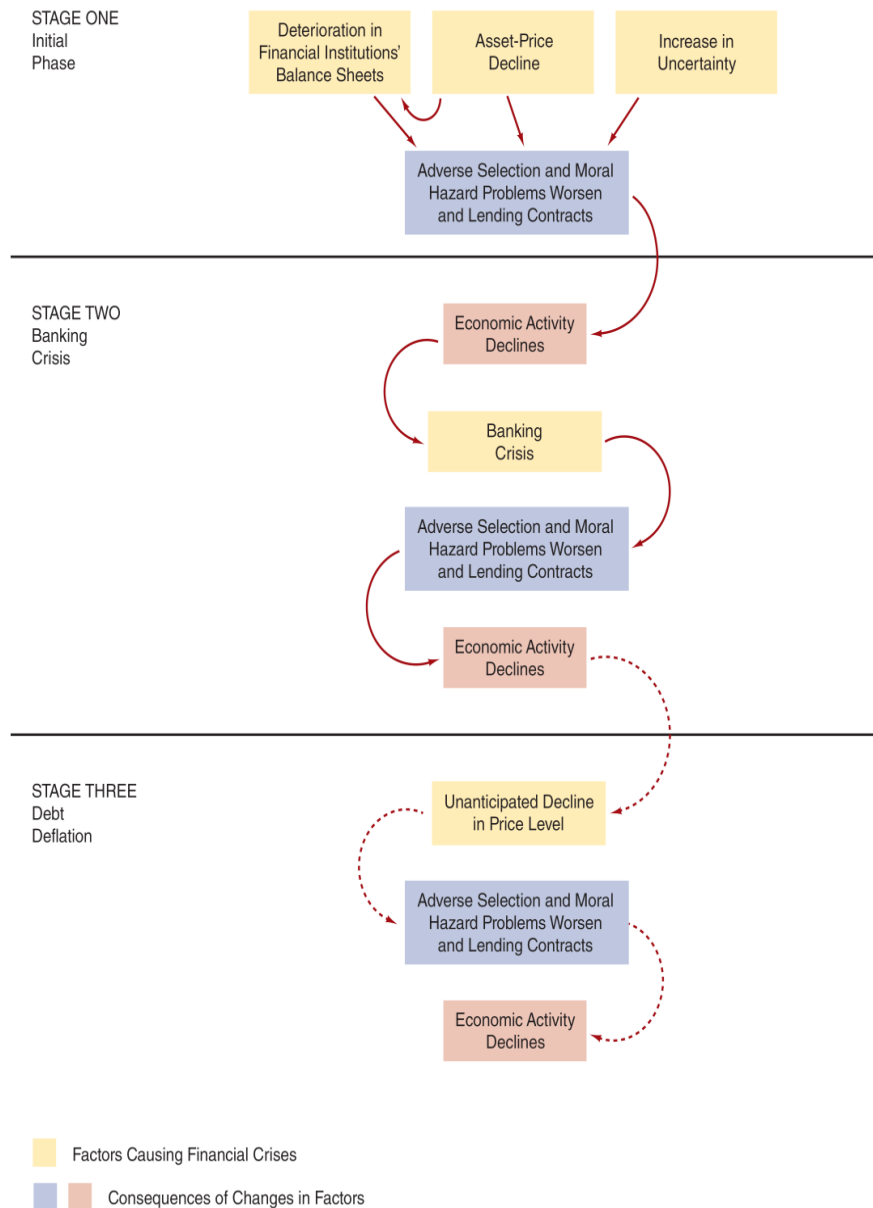
Lancaster University
Management School

Dynamics of Financial Crises in Advanced Economies

- Financial crises hit countries on average every 20 – 30 years (?).
- These crises usually proceed in 2 or 3 stages, as the next slide outlines:

QUADRUPLE-ACCREDITED, WORLD-RANKED

Figure 8.1 Sequence of Events in Financial Crises in Advanced Economies



Stage One: Initial Phase (1 of 6)

Financial crisis can begin in several ways:

- Credit Boom and Bust
- Asset-Price Boom and Bust
- Increase in Uncertainty

QUADRUPLE-ACCREDITED, WORLD-RANKED



Stage One: Initial Phase (2 of 6)

- The seeds of a financial crisis can begin with **mismanagement of financial liberalisation or innovation**:
 - elimination of restrictions (Trump & Dodd Frank)
 - introduction of new types of loans or other financial products (Mortgage Backed Securities, CDS)
 - Either can lead to a credit boom, where risk management is lacking.

QUADRUPLE-ACCREDITED, WORLD-RANKED



Stage One: Initial Phase (3 of 6)

- Government safety nets weaken incentives for risk management. Depositors ignore bank risk-taking e.g. The Greenspan 'Put' .
- Eventually, loan losses accrue, and asset values fall, leading to a reduction in capital.
- Financial institutions cut back in lending, a process called **deleveraging**. Banking funding falls as well.

QUADRUPLE-ACCREDITED, WORLD-RANKED



Stage One: Initial Phase (4 of 6)

- As FIs cut back on lending, no one is left to evaluate firms. The financial system loses its primary institutional function to address adverse selection and moral hazard.
- Economic spending contracts as loans become scarce.

QUADRUPLE-ACCREDITED, WORLD-RANKED



Stage One: Initial Phase (5 of 6)

A financial crisis can also begin with an **asset-price boom and bust**:

- A pricing bubble starts, where asset values exceed their fundamental values.
- When the bubble bursts and prices fall, corporate net worth falls as well. Moral hazard increases as firms have little to lose.
- FIs also see a fall in their assets, leading again to deleveraging.

QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

Stage One: Initial Phase (5 of 6)

Asset values exceed their fundamental values.



Tulipmania: "A small quantity of prototype bulbs recently was sold for 1 million guilders (US\$ 480,000 at 1987 exchange rates)"

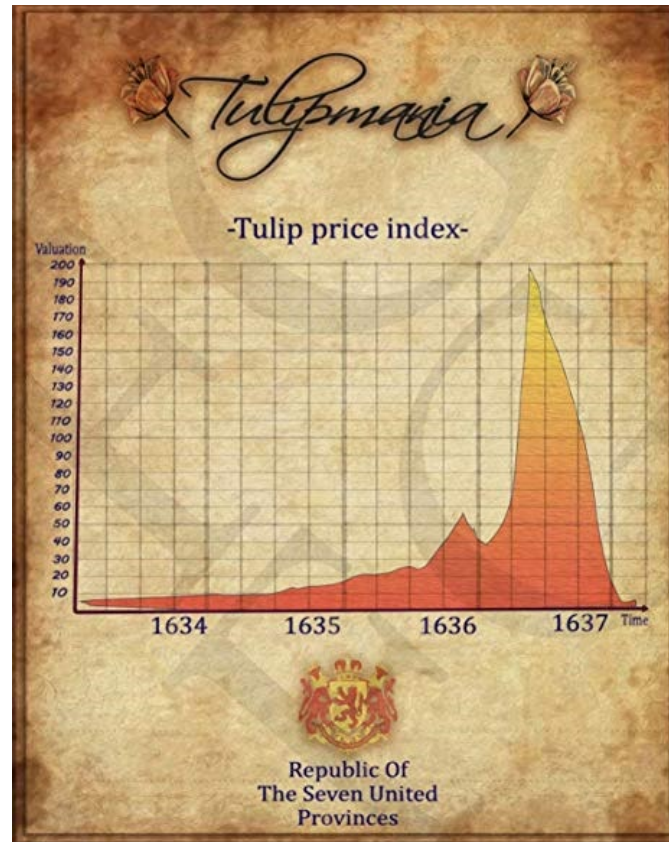
QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

Stage One: Initial Phase (5 of 6)

Asset values exceed their fundamental values.



QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

Stage One: Initial Phase (5 of 6)

Asset values exceed their fundamental values.

Nasdaq

Points



Source: Bloomberg

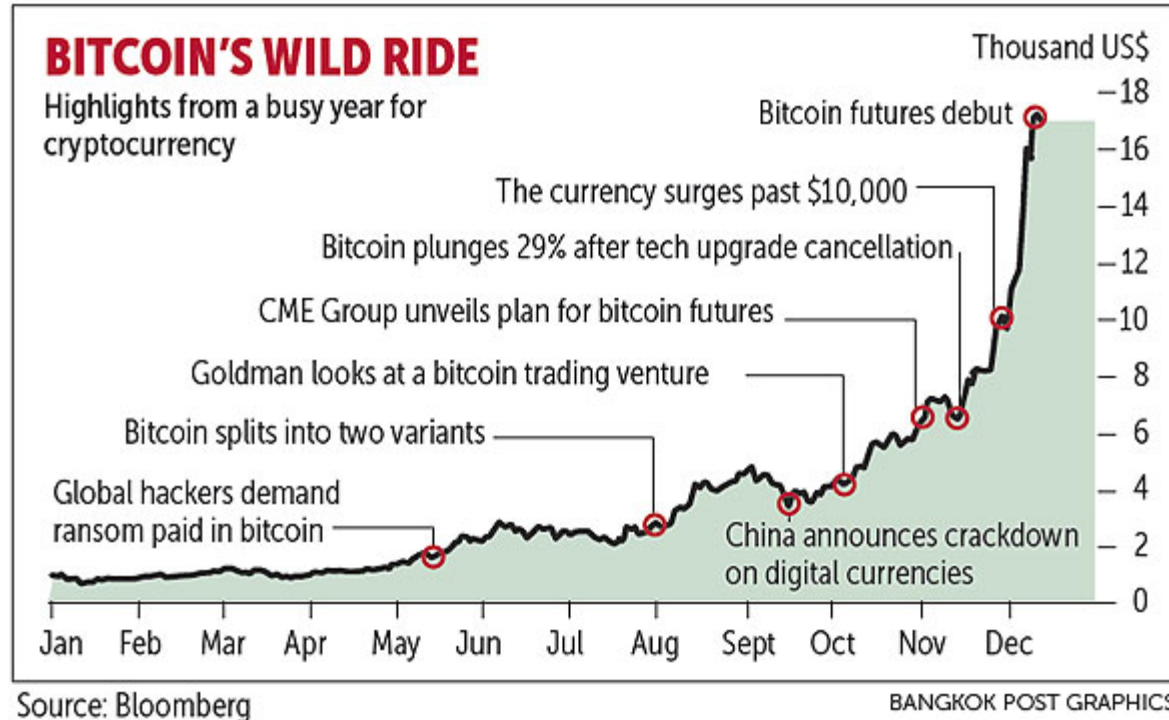
QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

Stage One: Initial Phase (5 of 6)

Asset values exceed their fundamental values.



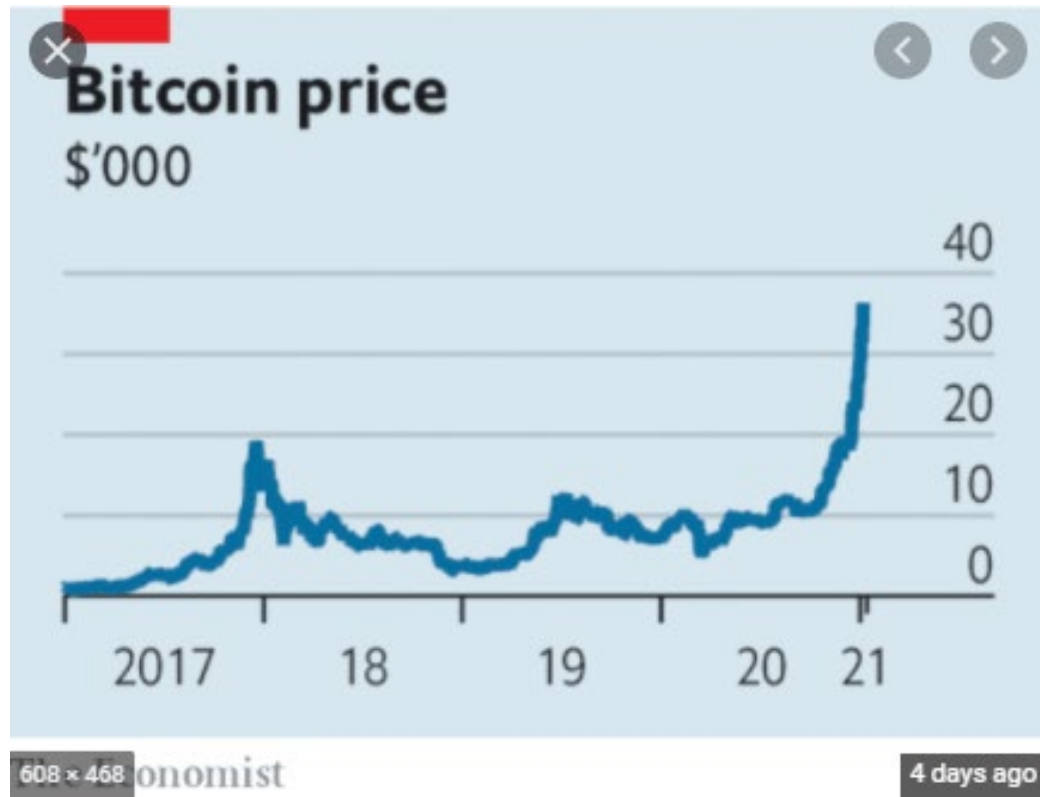
QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

Stage One: Initial Phase (5 of 6)

Asset values exceed their fundamental values.



QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

Stage One: Initial Phase (6 of 6)

Finally, a financial crisis can begin with an increase in uncertainty:

- Periods of high uncertainty can lead to crises, such as stock market crashes or the failure of a major financial institution. Examples include:
 - 1857, when the Ohio Life Insurance & Trust Company failed
 - 2008, when **AIG*** (*CDS exposure), **Bear Sterns**, and **Lehman Bros.** failed
- With information hard to come by, moral hazard and adverse selection problems increase, reducing lending

and economic activity

Case: The Global Financial Crisis of 2007-2009 – Lehman



QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

Case: The Global Financial Crisis of 2007-2009 - Lehman



Stage Two: Banking Crisis

Deteriorating balance sheets lead financial institutions into insolvency. If severe enough, these factors can lead to a **bank panic**.

- Panics occur when depositors are unsure which banks are insolvent, causing all depositors to withdraw all funds immediately
- As cash balances fall, FIs must sell assets quickly, further deteriorating their balance sheet
- Adverse selection and moral hazard become severe – it takes years for a full recovery

QUADRUPLE-ACCREDITED, WORLD-RANKED



Case: The Global Financial Crisis of 2007-2009 – Northern Rock (UK)



Case: The Global Financial Crisis of 2007-2009 – Northern Rock (UK)

This is not Argentina but the UK!!!



QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

Stage Three: Debt Deflation (1 of 2)

- Consider a firm in 2015 with assets of \$100 million dollars), \$90 million of long-term liabilities, and so \$10 million in net worth.
- Price levels fall by 10% in 2016.
- 2016 Assets (e.g. shares, property) value falls to \$90 MM
- 2016 Liabilities (e.g. bonds it has issued) remains the same \$90 MM
- *The firms net worth falls to zero.*
- What happens if prices fall 12%?
- This is why Central Banks target 2% not Zero inflation!

QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School

AcF 304 Financial Markets

Topic 2: Why Do Financial Crises Occur and Why Are They So Damaging to the Economy?

Part 2 – 1929-1933 Mother of all Financial Crisis: The Great Depression



Core Textbook: Financial Markets & Institutions – Mishkin & Eakins
Chapter 8

QUADRUPLE-ACCREDITED, WORLD-RANKED



Lancaster University
Management School