The 1873 German financial crises: Causes, consequences, and relevance for today

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What is a banking crisis?

- A bank goes into bankruptcy if:
  - Liabilities are larger than assets (Insolvency).
  - Cash at hand does not cover current payments (Illiquidity).
- We have a crisis whenever a larger number of banks is insolvent or illiquid.

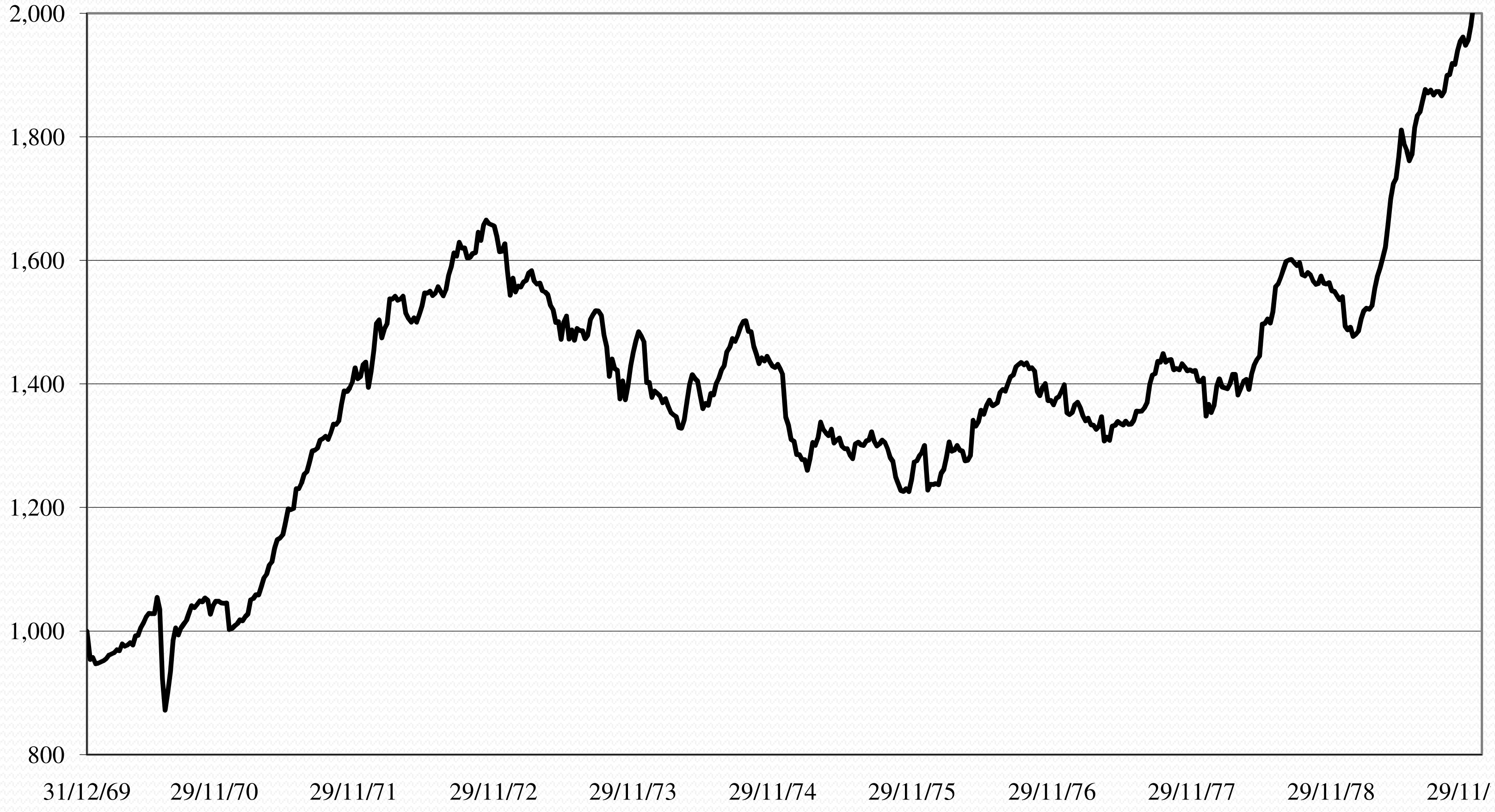
Causes of banking crises – Theory I

- Asymmetric information between customers and the bank regarding the status of the bank.
  - Customers do not know the structure and value of assets and liabilities.
  - Customers do not know how many cash the bank needs to fulfill payment obligations.

Causes of banking crises – Theory I

- The value of assets and liabilities and the amount of cash required to meet current payments varies over time.
  - Value of assets can decline, for example due to losses on the loan book, declining securities prices or declining real estate prices.
  - Value of liabilities can increase, for example due to changes in the exchange rate whenever the bank has net liabilities in foreign currencies.
  - Seasonal and / or cyclical variations in cash required to meet current payments, e.g. during harvest season, end-of-month, Christmas.

The development of the German economy in the mirror of the stock market, 1870-1879



The crisis of 1873: Causes I

- De-regulation of corporate law in June 1870 – from royal concession to legal norms.
- Resulted into a foundation boom. 800 new joint-stock companies until autumn 1873. 400 IPOs during the this period.
- French war indemnity of about 5 billion Mark (about 15 % of GDP) paid during 1871/73.

The crisis of 1873: Causes II

- Governments of German states use French indemnity to repay government debt. Investors re-adjust portfolios (risk-free assets in short supply).
- Incorporation of about 140 joint-stock banks. Managing IPOs and increasing the volume of credits available.
- Foundation of the German Empire (1871) and new monetary system (1871-75). Some German states establish new banks of issue or increase the supply of bank notes of existing banks of issue.

The crisis of 1873: Causes III

- Germany joined the Gold standard (1871/73). Part of French war indemnity was used to coin gold coins, but the existing silver coins remain in circulation.
- More coins and more bank notes increase monetary base, increasing number of commercial banks further increase money supply. M2 increased by about 45% between 1870 and 1873.

The crisis of 1873: Causes IIII

- Portfolio re-allocation: Investors buy shares, share prices surge, and more investors' buy shares (herd behavior?).
- Governance of joint-stock companies very bad, for example:
  - 'Small' shareholder (typically less than 10 shares) neither had voting rights on the annual meeting nor were allowed to attend the meeting.
  - No obligation to publish a profit-loss statement.

The crisis of 1873: The banks

- 140 new joint-stock banks were incorporated between 1871 and 1873. Many existing banks raised additional share capital.
- In total, share capital of banks increased by factor four within three years.
- Banks invested a large fraction of their assets into shares (1870: 18%, 1872: 28%).
- Most likely more risks in the loan book. Interest rate margin increased from 3.7 % (1871) to 4.2 % (1872).

The crisis of 1873: Events I

- Stock market turned downwards from November 1872 since many news about fraud emerged.
- Broad stock market index showed a decline of prices by 38% in 1873.
- Mark-to-market accounting rules since 1861 in force:
  - Joint-stock companies, in particular banks, paid huge dividends and bonuses out of non-realized profits. Paid-in capital was used to pay dividends and bonuses.
  - Accounting losses due to declining asset values (20% of banks' assets until 1878). Banks run out of cash.

The crisis of 1873: Events I

- Banks' return of equity decreased from 12% (1870/72) t 1.5% (1873/76).
- 71 joint-stock banks went bankrupt between 1873 and 1878.
- Aggregate loan volume declined by 35% between 1873 and 1878. Impact of financial crisis on real economy / investment.

The crisis of 1873: New institutions and rules

- Foundation of a central bank (Reichsbank) in 1876:
  - Restricted supply of base money.
  - Acted as lender of last resort.
  - Marked the beginning of banking regulation in Germany.
- 1884 joint-stock companies act.
  - Substantial improvements in corporate governance.
  - Stricter rules of incorporation / better quality of IPOs.

The history of banking regulation I

- 1876 bank law regulated supply of bank notes (§ 1)
  - Only the central government can grant existing banks of issue the right to issue more bank notes .
  - Only the central government has the right to grant concessions for new banks of issue.
  - Thus: regulation of market power.
- Bank notes are not legal tender(§ 2)
  - Thus: limiting monopoly profits.

The history of banking regulation II

- Established transparency for banks of issue (§§ 8, 29, 48)
  - Weekly publication of certain information ("balance sheet") in the Reichsanzeiger.
  - Reichsbanks' accounts checked by the Imperial Account Office.
  - Reich chancellor has the right to check the accounts of private banks of issue.
- Regulation of monopoly profits(§§ 9, 13, 17, 41, 44)
  - Tax on issue of bank notes above prescribed limit.
  - Coverage of bank notes by gold and bills of exchange.
  - Limiting the business on the assets side.

The history of banking regulation III

- 1876 banking law established a new central bank, the Reichsbank (§ 12)
  - Reichsbank produced public goods: Money supply, payment system, short-term loans to banks and other businesses all over Germany at identical rates (financial integration).
- Kind of banking supervision(§ 25)
  - Supervision of Reichsbank by Committee (Reich chancellor, member appointed by Emperor, three members appointed by the states).

1884 Corporate Law I

- New rules of incorporation:
  - Publication of incorporation report, including information about asset valuation, use of money raised, special rights for incorporators. Audited and published by local chamber of commerce.
  - Liability for incorporator and his associates (e.g., banks) for defective incorporation (2 years after incorporation).

1884 Corporate Law II

- Stricter corporate governance and more rights for shareholders.
  - All shareholders are allowed to attend the annual meeting.
  - All shareholders have voting rights.
  - Stricter separation of executive and supervisory board.
  - Non-shareholders (e.g., banks) could become members of the supervisory board.

1884 Corporate Law III

- New accounting rules:
  - Obligation to publish annually a balance sheet and a profit-loss statement.
  - End of mark-to-market valuation. Introduction of the strict lower value principle.

1884 Corporate Law III

- Effects of the 1884 reform include:
  - Less incentive pay for executive board members (decline of 50% after 1884).
  - Poorly performing executives were systematically fired after 1884.
  - Companies with one share – one vote provision paid lower bonuses to executives.
  - Companies with a bank representative in the supervisory board by lower bonuses to executives.

Conclusion

- Today, large banks are considered to be too big to fail.
- Are they also too big to save?
- Total assets of Deutsche Bank in percent of German GDP:
  - 1873: 0,5 %
  - 1930: 5 %
  - 2008: 88 %