

Learning how to deal with financial crises:

Two French 19<sup>th</sup> experiences

Pierre-Cyrille Hautcoeur

Paris School of Economics

# Motivation

Recent financial crisis :

- Role of derivatives' markets, moral hazard and « too big to fail »
- Unconventional responses from the Central banks;

Lessons from history ?

- To rescue or not to rescue ?
- Who to rescue and how ?

# Why the 19th century ?

- Emergence of modern central banks

*Previously*

*From 1870s*

notes issue

business cycle regulation

clubs of banks

banks of banks

- Emergence of large scale banks (in Europe)

*Previously*

*From 1870s*

Individuals' banks

Corporations limited liability

Various specializations

Progressive specialization

No branches

Many branches

Small capital (<10M fr)

Large capital (> 100M)

NB French GDP 1890: 22 bn fr.

# Main message

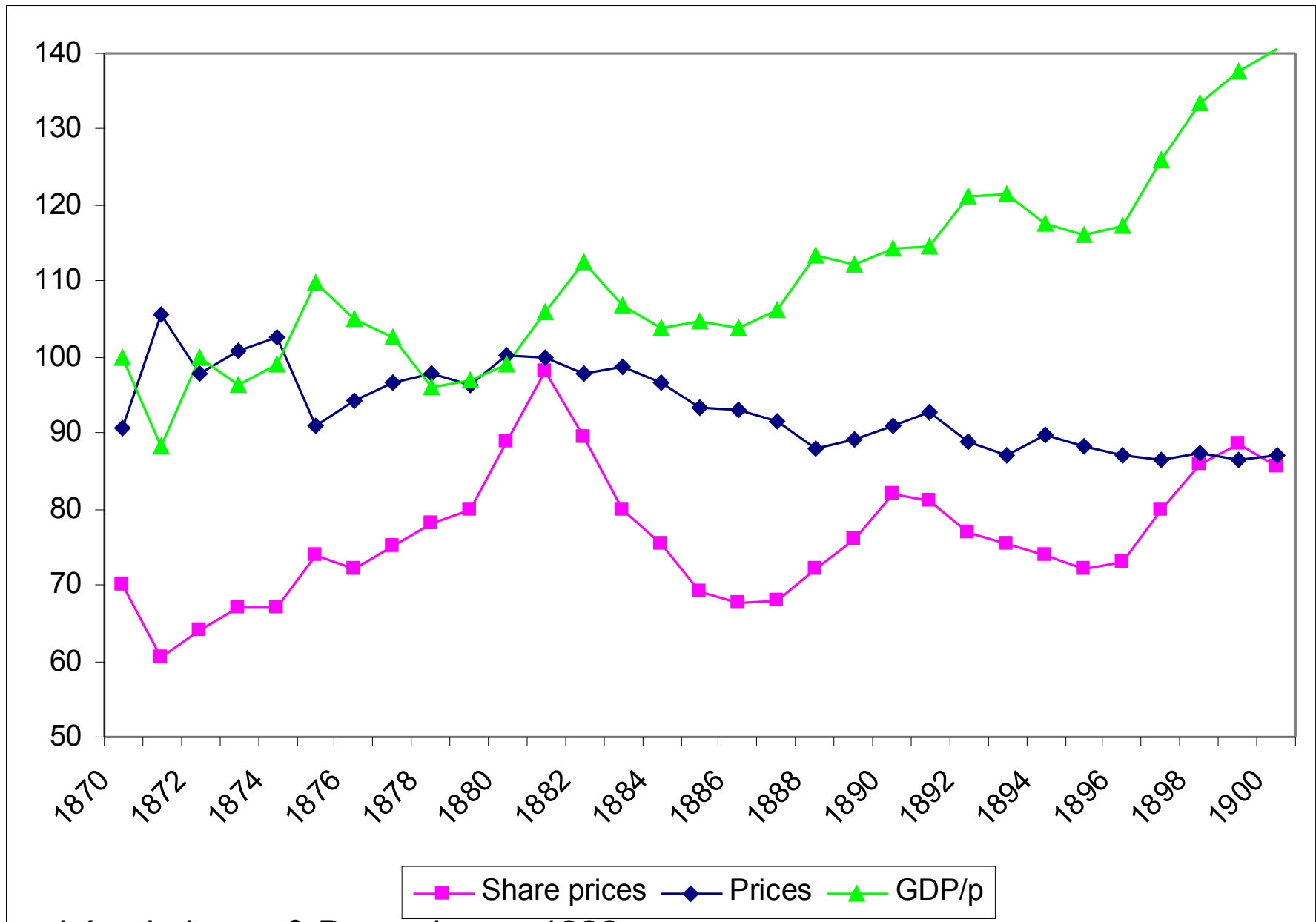
Banque de France learned how to deal with crises in a somewhat different way from the English / Bagehot model:

- It intervened in stock exchange crises (not only bank crises);
- It involved the financial sector in rescue operations;
- It imposed harsh sanctions on those found responsible ;
- It deviated from Bagehot' rules, but only when necessary and legitimate.

# Two crises

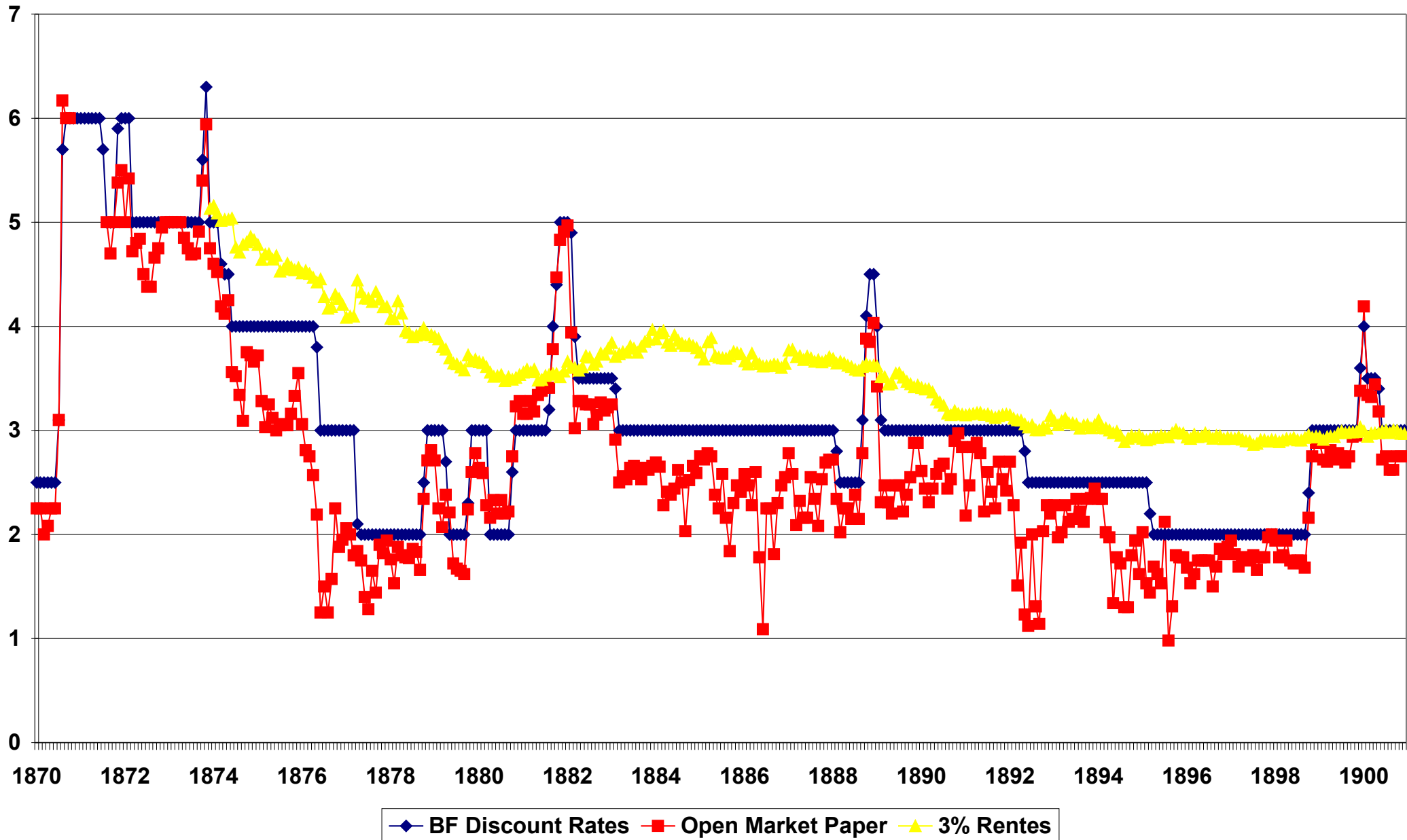
- 1882 :
  - A major bank gone bankrupt;
  - A stock exchange bubble burst;
  - A long recession: a consequence of a long bubble or of the crisis ?
- 1889 :
  - A run on a major bank
  - No stock exchange crisis
  - negligible macroeconomic impact
- What did the Banque learn ?
  - Liquidity provision.
  - Sharing losses; avoiding moral hazard.

# Two very different macroeconomic contexts



Source : Lévy-Leboyer & Bourguignon, 1986

# Interest rates



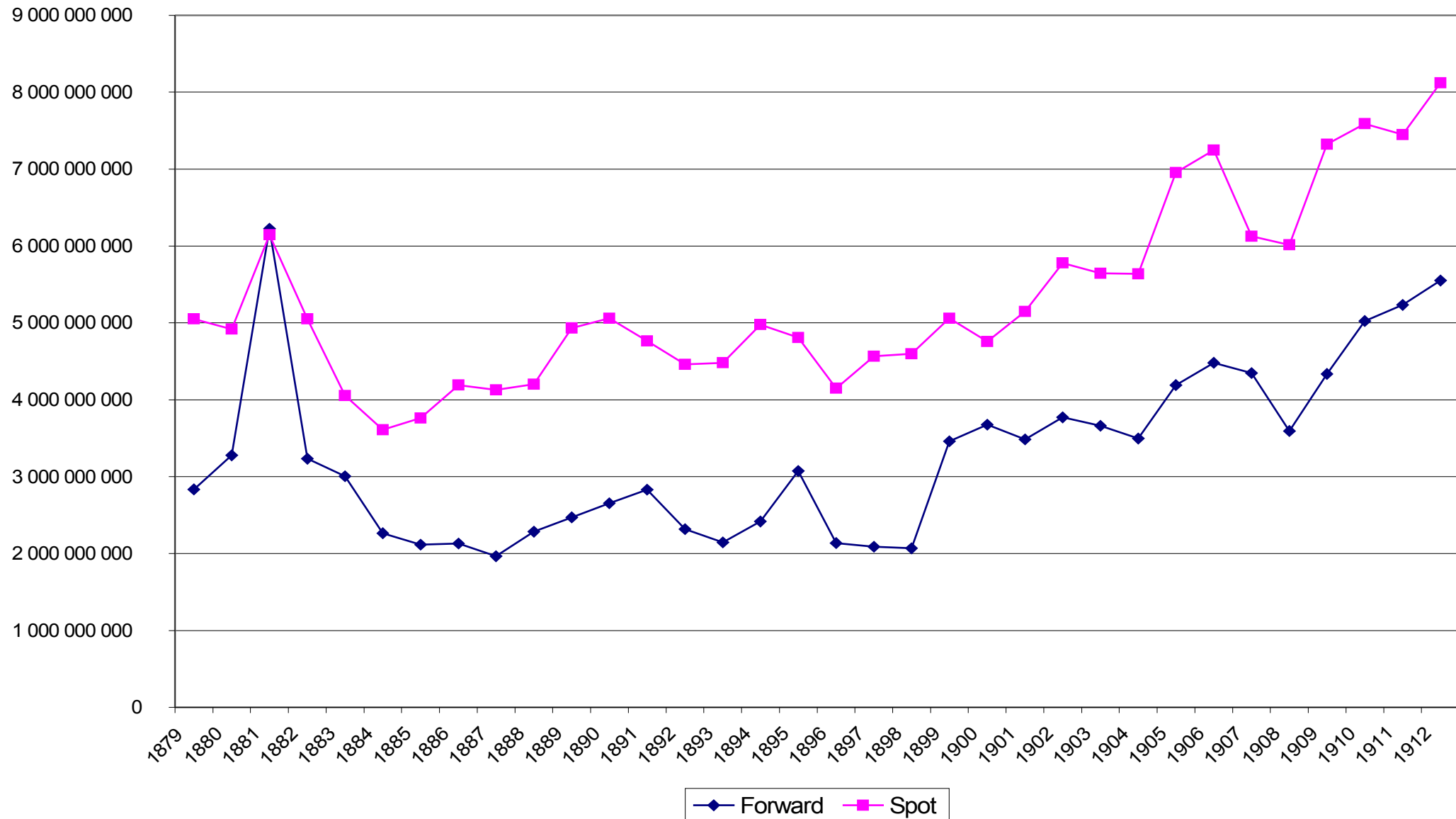
Source : NBER macro database

# 1882

- The end of a decade of low interest rates and excessive investment.
- Union générale
  - Risky investments (new ventures abroad); illiquid position;
  - Rapid growth taking advantage of a stock market bubble;
  - Stopped when new stock issue fails; buys own stocks; fails.
- Stock market
  - Huge positions in the forward market, despite rising « reports » rates (more so in Lyon);
  - Brokers defaults (« exception de jeu » by clients);
  - Stock exchange default: Lyon vs Paris.



# Spot and forward delivered transactions on the Paris official stock exchange (1879-1913)



Source: Hautcoeur & Riva, 2007

## Banque de France intervention

- Union générale: bankruptcy; no bailout; no reorganization. Large losses, including on deposits.
- Bagehot rules followed:
  - Banque lends to the market at high rate;
  - solvent banks with collaterals borrow;
  - UG not solvent, goes bankrupt
  - Run on other banks also avoided because they anticipate the crisis and liquidate their positions.

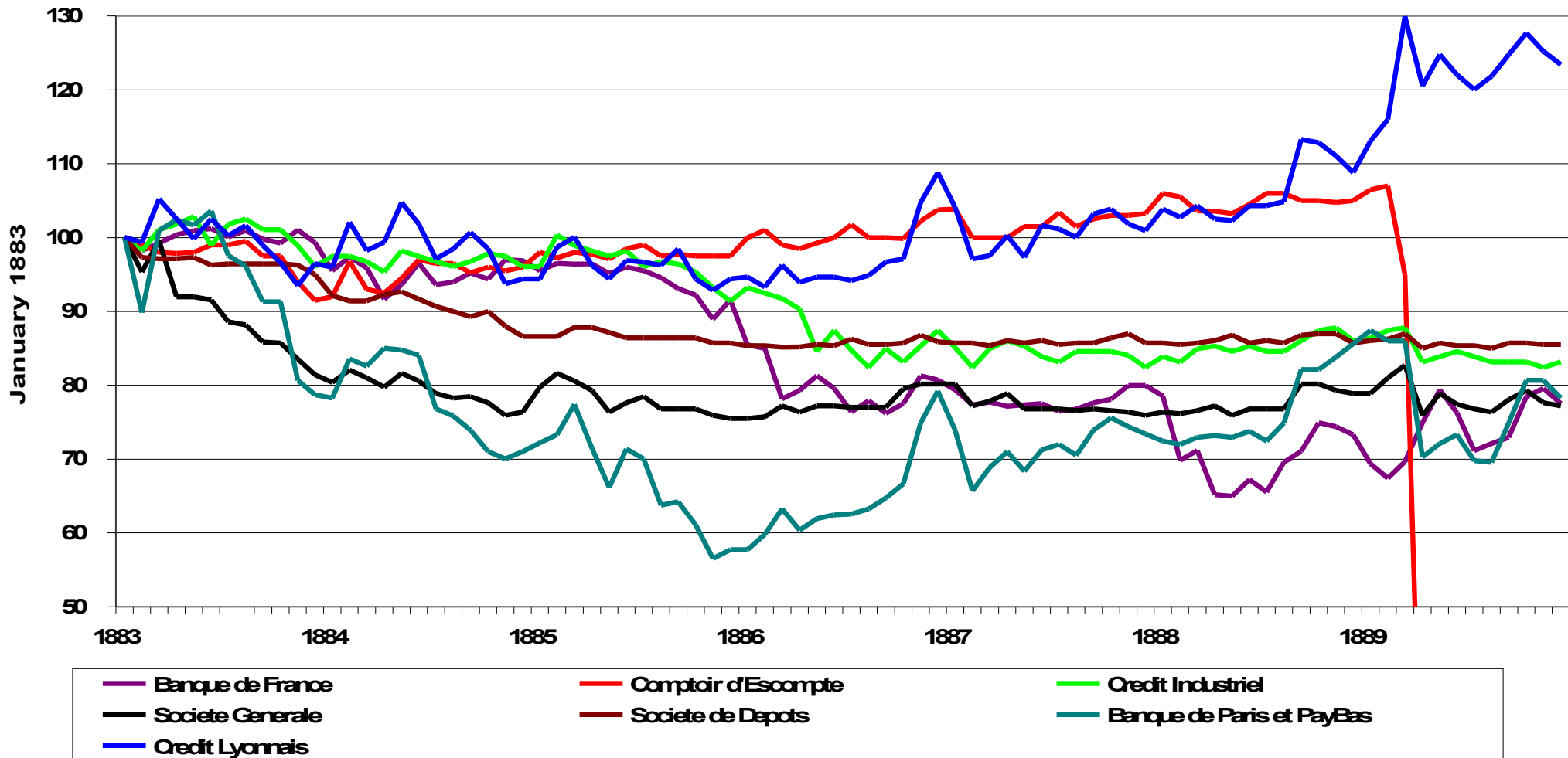
## ● Stock exchanges:

- Lyon Bourse asks for a loan of 125 millions fr. (guaranteed by banks up to 30); BdF refuses; bankruptcy (all the brokers);
- Loan to the Bourse in Paris by a group of banks, which the Banque de France refinances (up to 80 millions + 18 mn Rothschild loan on the next day.
- Loan rapidly repaid (50+18 before October).
- 7 brokers go bankrupt or retire.

Long decline in stock prices, CPI and GDP despite favourable monetary policy : liquidation of 1870s excesses in investment and debt.

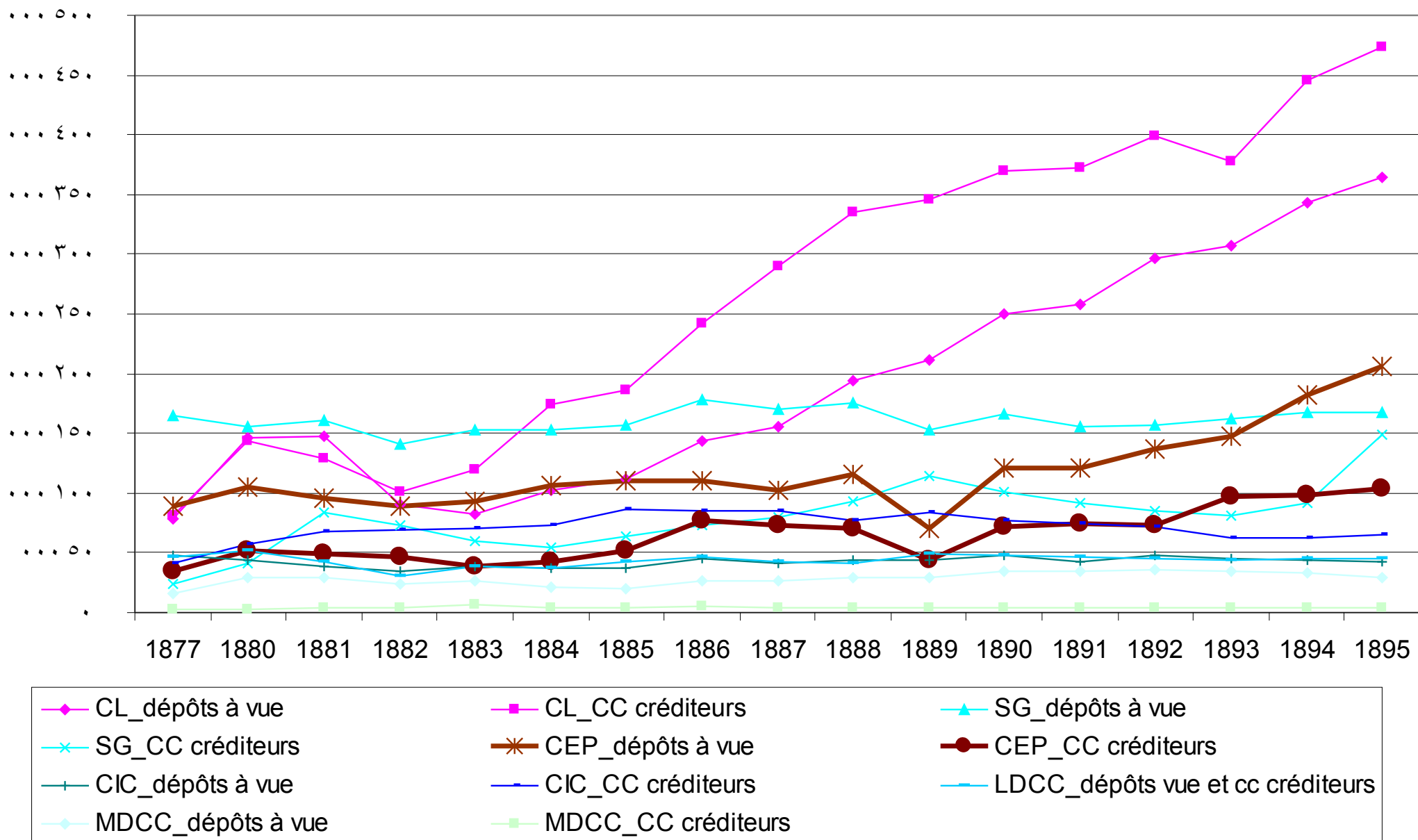
# 1889

- Different context : long recession of 1880s; only solutions to make money : increase size (Lyonnais) or risks (Paribas, Comptoir ?). See share prices vs deposits: Comptoir as an exception.



- Source : Hautcoeur, Riva, White (ongoing research)

# Deposits at main banks

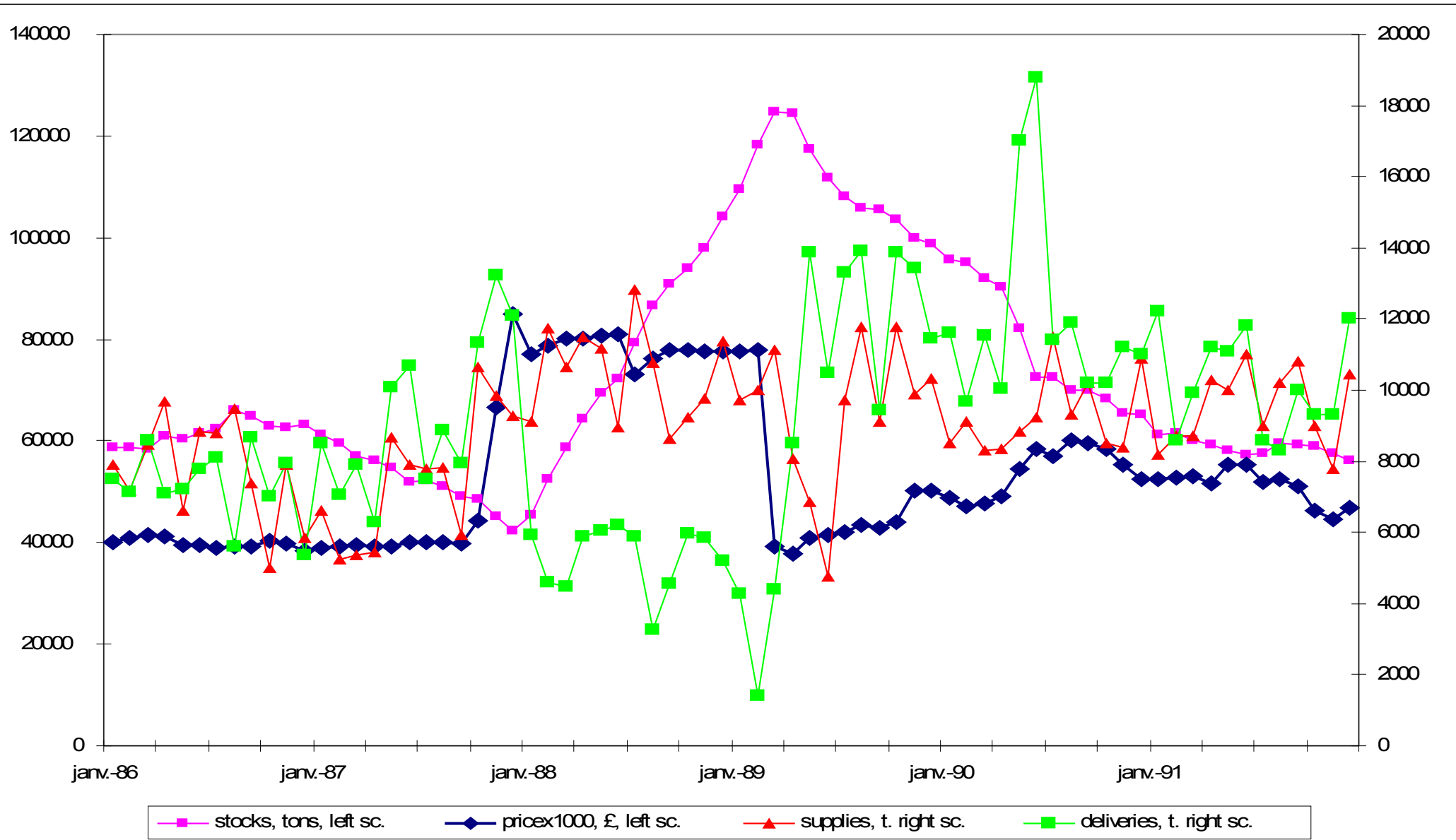


Source : Hautcoeur, Riva, White (ongoing research)

# The copper corner

- Organized by Société des métaux (Secrétan) based on credit by Comptoir d'escompte (+ private bankers Rothschild, Hentsch and Girod, and Paribas).
- Raises copper prices. + guarantees by the Comptoir on forward contracts (total = 700 millions fr; Comptoir paid capital = 80m). Medium purchase price : 75£
- Market reaction: consumption declines, production increases.
- When SM and CEP cannot borrow more, prices fall to 40£. SM bankrupt. Comptoir insolvent ? Denfert-Rochereau commits suicide on March 4. Run.

# Copper market in France and Britain



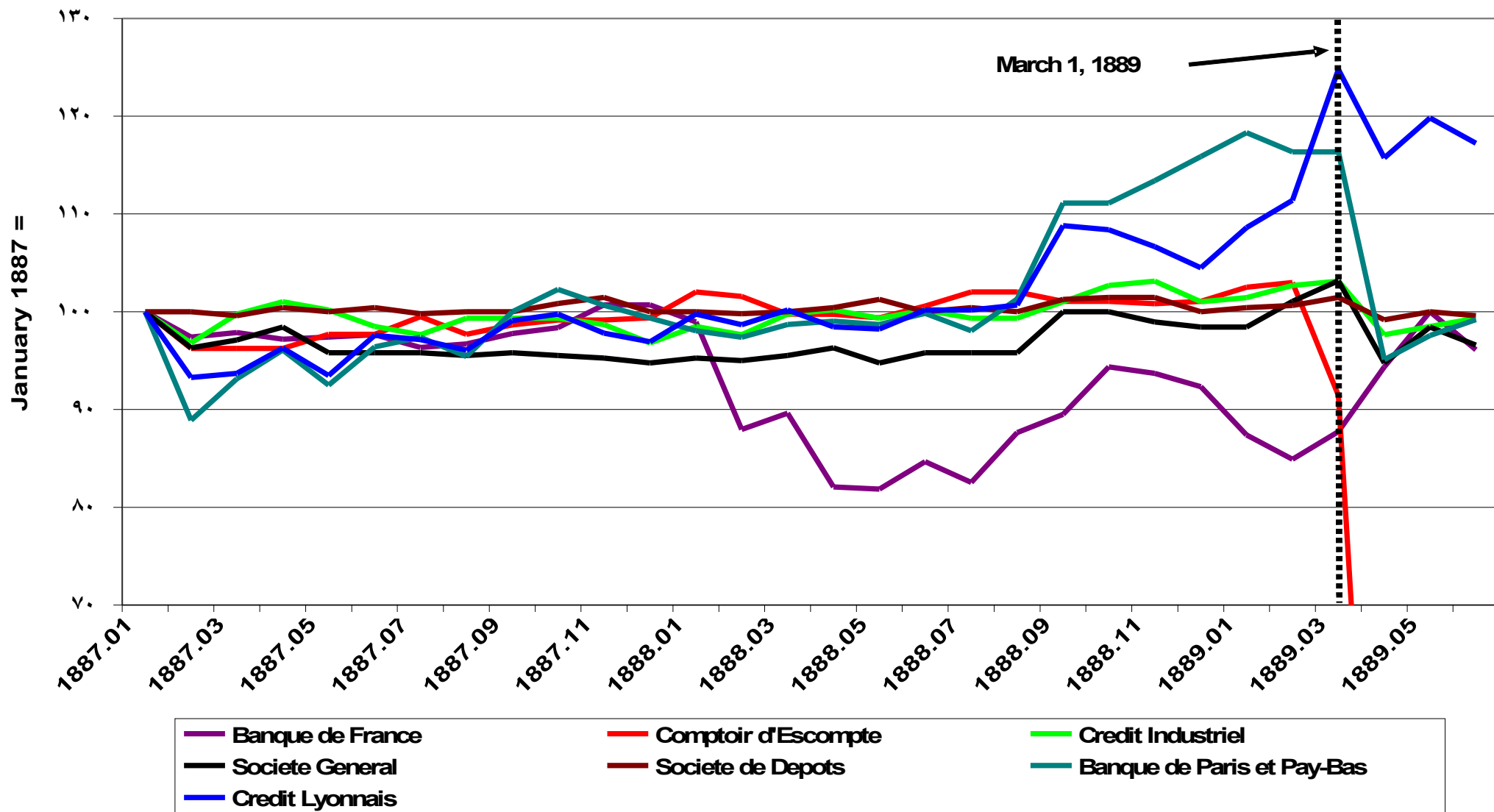
Source : Hautcoeur, Riva, White (ongoing research)

# Banque de France intervention

- 100 millions emergency loan (with all the assets of the Comptoir + guarantee by a group of banks up to 20M); increased later by 40 M.
- Did it deviate from the Bagehot rule (« only on good collateral ») ?
  - Yes: Comptoir had little good collateral; some Banque board members discuss the loan on that ground; one resigns.
- Was this deviation legitimate ?
  - Comptoir ended up repaying all its debts (by luck ? Copper prices rebounded).
- Fear of contagion ? Some flight to quality but no run because other banks were more liquid and the Banque lended abundantly (at high rates).

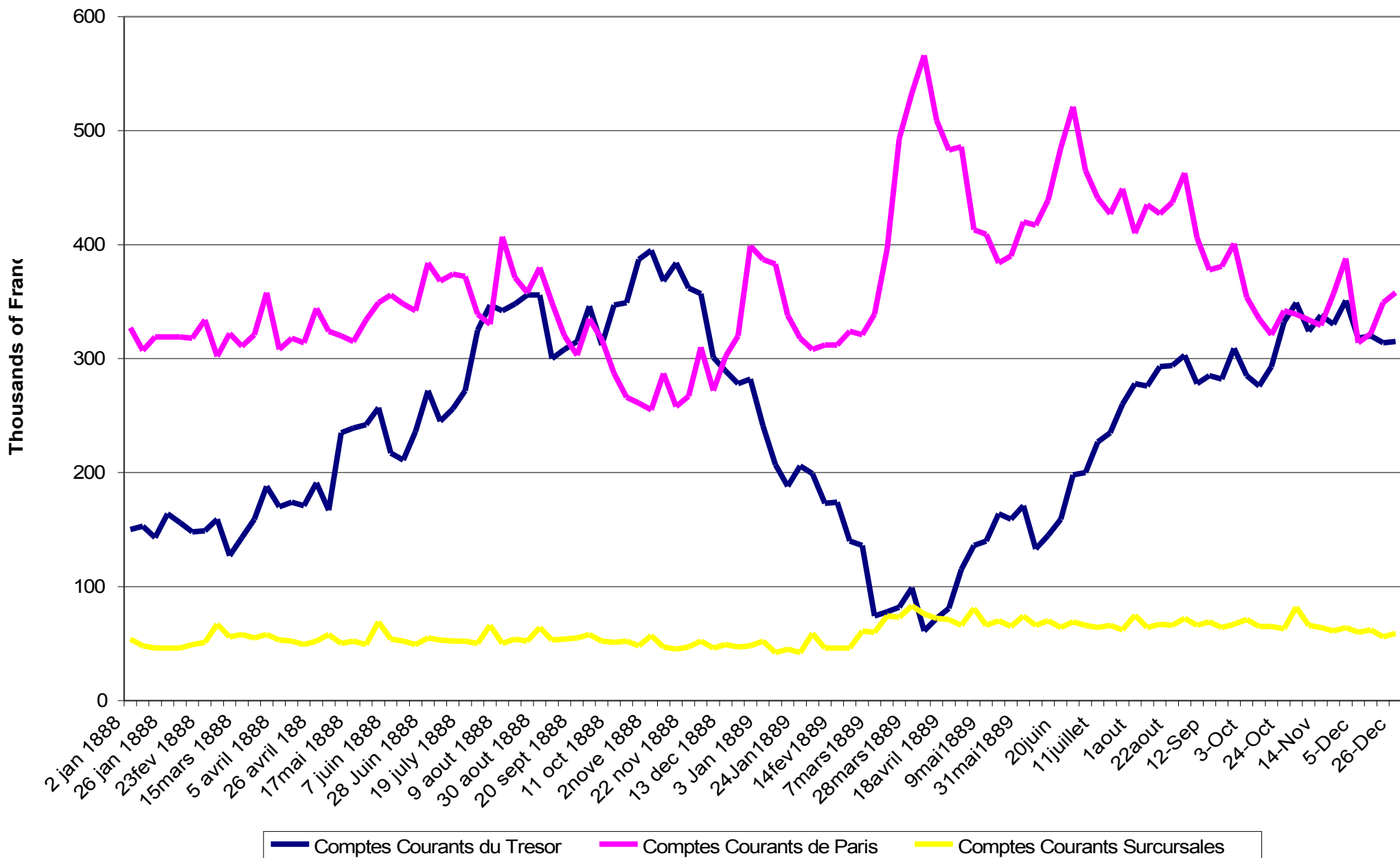


# Flight to quality, 1: share prices of main banks



Source : Hautcoeur, Riva, White (ongoing research)

# Flight to quality 2: deposits at Banque de France



Source : Hautcoeur, Riva, White (ongoing research)

# Conflicts of interest

- Participants to the copper corner (through Société des métaux) : Rothschild; André, Girod & Co; Hentsch br., Comptoir, Paribas, Joubert, Laveissière;
- Private bankers Hentsch (2 brothers) and Girod + Laveissière (merchant), Baudelot (TC) and Teissonnière (TC) at the board of the Comptoir; intimately linked to the director, Denfert-Rochereau. Berthier (TC) as censor.
- Berthier, Hentsch and Joubert also at the board of Paribas
- Rothschild and André (from André, Girod and Co) are at the Conseil de régence of the Banque de France. Baudelot and Teissonnière are censors.

Pillet-Will resigns from Banque de France Régents because of « anti-statutory » decisions and conflicts of interest (see his manuscript at the Banque's archives).

# Frauds ?

- Balance sheets « cooking » ? Likely at Comptoir in the 1880s. Also between Secrétan, SM and Auxiliaire.
- Dividend paid without actual profits in 1888 (Comptoir and Société des métaux).
- Abuse of power from Denfert Rochereau (takes risk beyond his powers and the statutes).

Then governance and control problems.

Apparently, interlocking directorates contributes to this rather than to control.

# Sanctions

- Comptoir's board pays : first, it guarantees the Banque's loan (160.000 fr per member, except for the Hentsch br. and the André & Girod banks, which pay 1 million each).
- During years, some families will make payments on their personal wealth (denfert-Rochereau children, board members).
- Other banks involved participate in the rescue operation in proportion to their involvement (Paribas, Rothschild, etc.); Crédit lyonnais doesn't...
- Many individuals sacked from their positions (in boards or executive positions).

# Conclusions on Banque de France interventions

## Peculiarities :

- Not only banks, but brokers (rather : exchanges) potentially rescued = a case in favor of organized exchanges (vs OTC) and their inclusion in Central banks' supervision.
- Banks rescue operations :
  - Banque de France imposed the financial sector to participate in rescue operations;
  - and imposed harsh sanctions on those found responsible ;
  - Does this correspond to a world of private bankers, individual wealth and reputation: something of the past ?

# What about Bagehot's rules ?

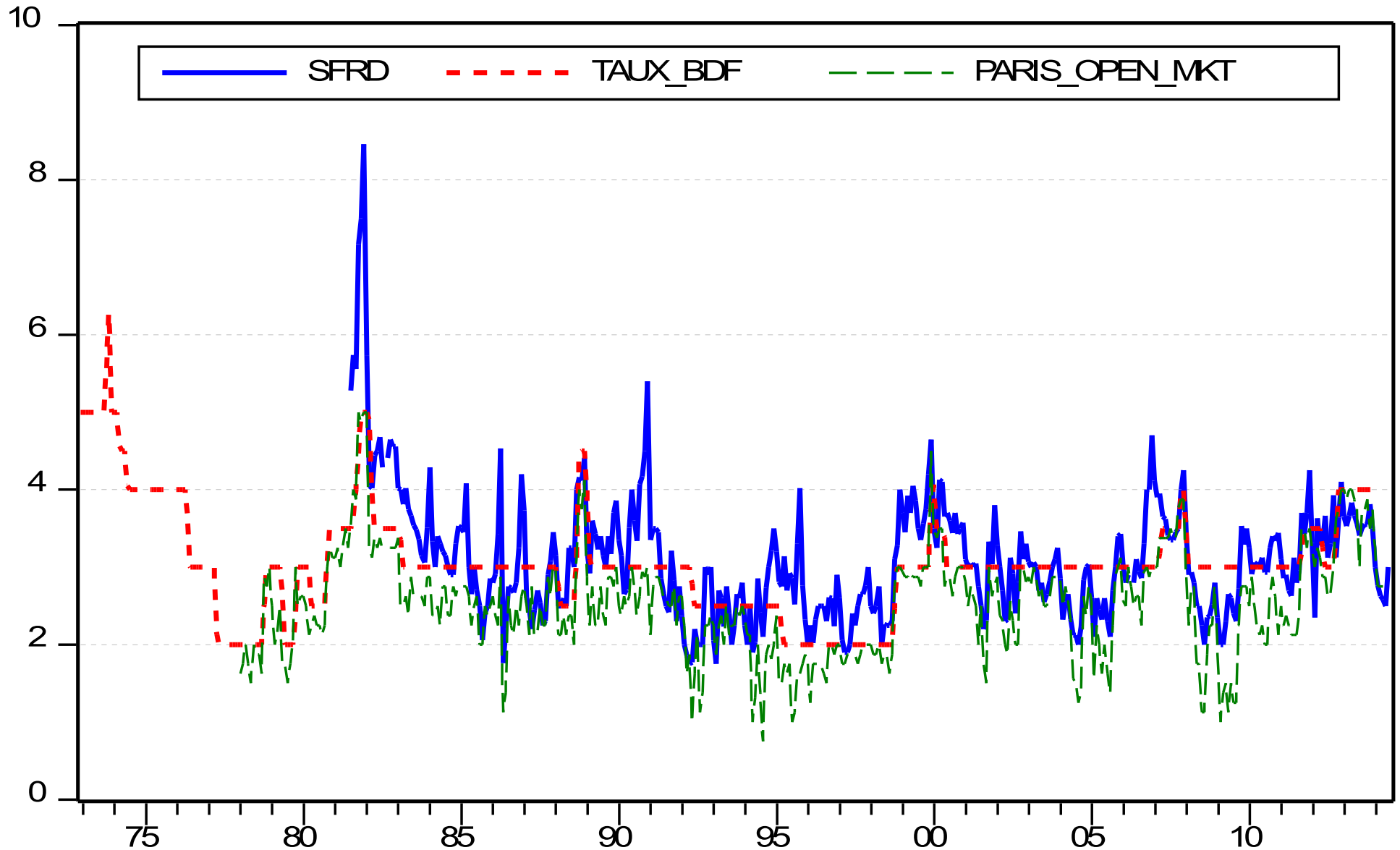
- Lending without limit : done;
- Lending at penalty rates : done;
- Lending to the market, not to individual banks : done in the 1882 case (indirect loans to the Bourse as a whole). But only when possible (Comptoir) ; maybe anonymity not so important (Capie vs Flandreau).
- Lending only on good collateral: the Banque deviated.
  - Lent indirectly on brokers' personal wealth in 1882; in 1889, the Comptoir had little good (liquid and secure) collateral, at least to the knowledge of the Banque on March 8<sup>th</sup>, 1889;
  - Was this deviation legitimate ?
    - Union Générale failure didn't repay all its debts, when Comptoir did (not only to the Banque).
    - Lyon exchange didn't repay all its debts, when Paris Bourse did.

Then : Deviations from rules, but only when necessary and legitimate

More material...

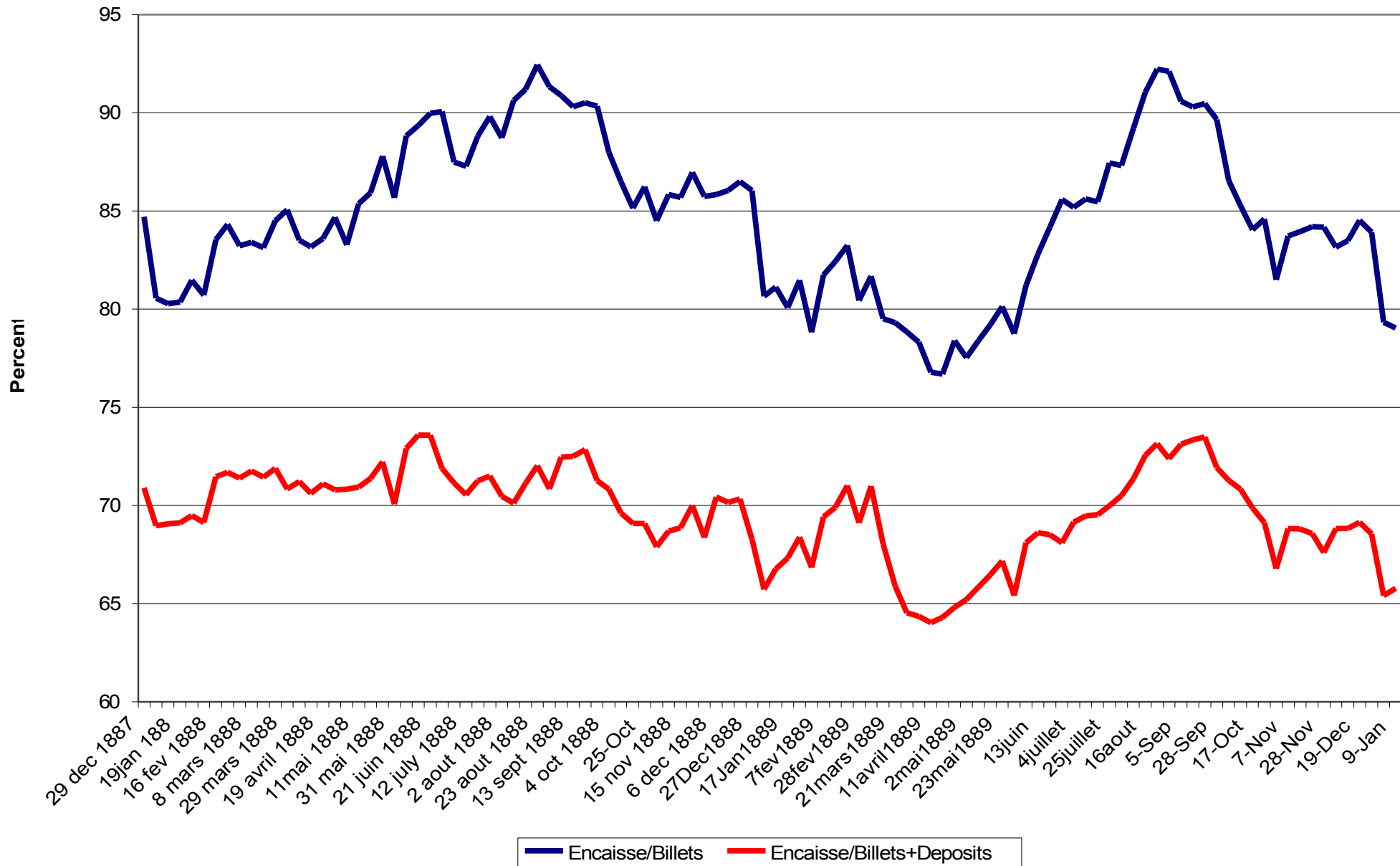


# Rates on reports (SFRD) compared to Banque de France and open market



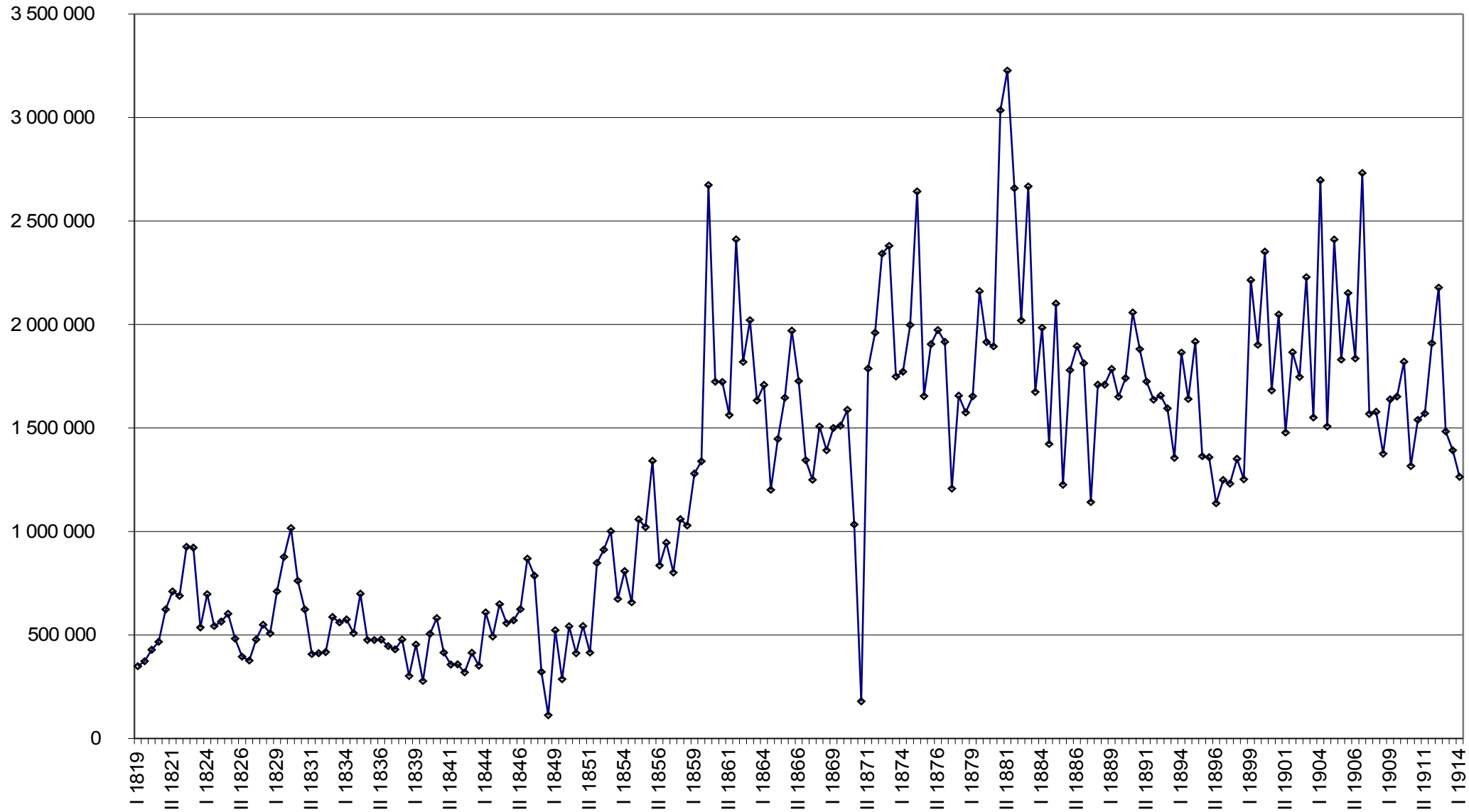
Source : Flandreau & Sicsic 2000

# Soundness of Banque de France



Source : Hautcoeur, Riva, White (ongoing research)

# A measure of transactions on the Paris official stock exchange (1819-1914) (from internal stamp)



Source: Hautcoeur & Riva, 2007