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The Causes and Consequences of Banking Regulation: The Case of Sweden, 1834 – 1933

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Regulations

Why are they implemented?

- Results of financial crises (opinion)
- Stabilizing the financial system (economic rationale – systemic risk, information asymmetries)
- Self interests (hidden by rhetoric)

What effects do they have?

Problems to measure as 1) several regulations may work simultaneously,

2) other factors affecting the financial sector might interfere with the regulation, and

3) the time lag that passes between the implementation and the effect is difficult to estimate

The political discourse on banking legislation

What does the parliamentary debates tell us

– Why were they implemented (rational, interest)

– Can we detect any specific regulatory regimes?

Also:

– How does these regimes on banking legislation correspond to the development of the banking system

– Were there any un-anticipated effects of regulatory changes

Policy interventions

(From White, E.N. (2009))

- Establishment controls
- Capital requirements (reserves)
- Limits on economies of scale (branch banking, mergers)
- Limits on economies of scope and on diversification
- Price limitations
- Liability insurances
- Disclosure rules and accounting standards
- Bank examinations and auditing
- Bank supervision

Swedish monetary and banking system

1834 (1830) – 1873 Silver standard, 1874 – 1914 Gold standard, 1914 – 1922 Floating exchange rate, 1922 – 1931 Gold standard

- The Riksbank (1668) Bank of Parliament (1897), Formally responsible for issuing legal tender and maintaining specie standard, Central bank? (LLR, clearing, bank of the state, bank of the banks) Issued base money kept as reserves by all banks.

- The National Debt Office (NDO) Importing capital for infrastructure investments (from 1859). Places the capital domestically (RB o Commercial banks) LLR?

- Savings banks (1824 – today). Co-operated (shared board members, offices etc) and competed with commercial banks. Law of 1892 limited their possibility to do business (reformed as limited liability Folkbanks).

- Enskilda banks (1831 – 1906) Private, unlimited liability, right to issue notes (ınsıde money that was based on, and redeemed for Riksbank notes), Individual charters (10 years) granted by the Government (HM) (formality after 1864)

- Filial banks (1851 – 1864) Private, unlimited liability, operating with Riksbank credit and equity capital (no right to issue notes or to accept deposits (charter)). Individual charters (10 years) granted by the Government (HM).

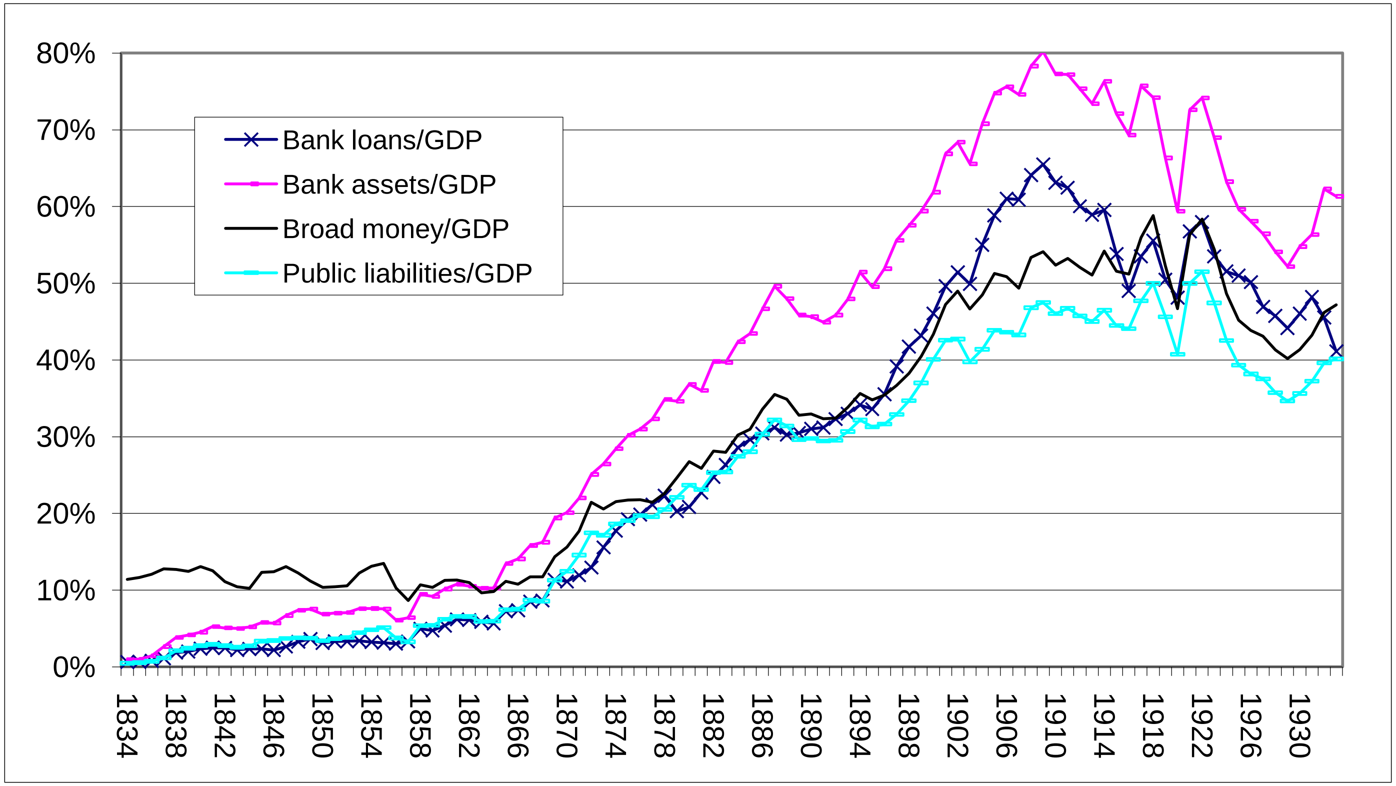
- Limited liability banks (1864 – today) Operating with equity capital and deposits (no right to issue notes). Established in the major cities.

Distilling the political discourse

- General rhetoric: Competition destabilizing
- Business in general and financial business in particular a privilege
- Insiders for high barriers of entry coupled w total freedom for asset and liability management
- Outsiders the opposite (against notes but for establishment right)
- Note issuance in the focus of the debate until 1900
- Unlimited liability against limited liability banks
- Insiders for exclusive right to gain access to funds from the RB under any circumstance (RB disagree w reference to fixed exchange rate (1880))
- Commercial bankers against freedom for Savings banks (1892)
- Insiders pressure for rescuing operations (1857, 1878/79, 1922, 1931)
- Every crises creates pressure for more regulations and the instigation of a special committee (1858, 1883, 1909 etc)
- Bankers part of the legislative discourse => barriers of entry traded for some limitations in asset and liability management (1911) – a bargaining game (right to trade in shares but capital requirements)
- Political pressure changes the regulatory regimes

Development of commercial banking

Figure 3: Broad money supply, Public lending, Public liabilities and Turn over in commercial banks, 1834-1933 in percentage of GDP (Market prices)



Sources: Brisman (1934) pp.219-221, Ekonomisk Tidskrift 1899-1933, Krantz, O. and Schön, L. (2007), Lilja, K. (2010) p.46, Post & Inrikes tidning 1835-1871, Sammandrag af Bankernas Uppgifter, 1871 – 1911, Sveriges Riksbank (1931) pp. 172-185

Regulatory regimes

The formative years 1824 – 1864 (1856)

- High barriers on entry, re-charter, economies of scale and scope (discretion)
- High profits, low diffusion of banking services
- Loose restrictions on public liabilities (capital, minimum denomination, right to redeem etc.)
- Limited competition (regional monopolies)
- Small interest group (insiders on the market) well represented in parliament
- Summing up charters into banking law of 1846 (no real news)
- Costly process of renewing charters (redeem all liabilities before applying)
- The Riksbank to facilitate clearing (1854/55) SEB 1856 w RB
- Challenged by political changes (Filial Banks, but prevented from competing)
- Crisis 1857 – targeted bank bail out (RB *Statslånefonden*) and regulatory committee
- Supervision from local authorities, reports and possible surprise visits
- Capital imports from NDO (1859)

Regulatory regimes

The developed banking system 1864 – 1897 (1903)

- End of usury law (1864)
- Limited liability banks (no note issuing right) (1864)
- Detailed EB law (1864)
- Lower barriers on entry, automatic charter renewal but still limits on scale and scope (non-discretionary)
- Some restrictions on liabilities (notes option clause)
- Good profits, higher diffusion of baking services
- Somewhat limited competition
- Larger interest group
- Crisis 1878/79 – targeted bank bail out (NDO + RB (*Jernvägshypoteksfonden))* and regulatory committee
- Supervision – 1868 special assistant under MF plus local authorities (surprise visits)
- Silver standard turned into gold standard (1873) Bank law “based on gold” only in theory
- Pressure State consolidation (Government + Parliament = True (1897))

Regulatory regimes

The transformation period 1900 –1911

- Ending note issuance (1897, 1903, 1906)
- Object Same law for all commercial banks (unlimited and limited)
- Low barriers on entry (two levels of equity based on the bank size and types of business)
- Kept limitations on scope
- Banking expansion
- 1907 crisis, capital shortage, RB liquidity provision!
- Regulatory committee (1909) (proposed solution by bankers not used because of the legislation of 1911)
- Banking inspection established (no surprise visits – to facilitate)
- Expansionary monetary policy

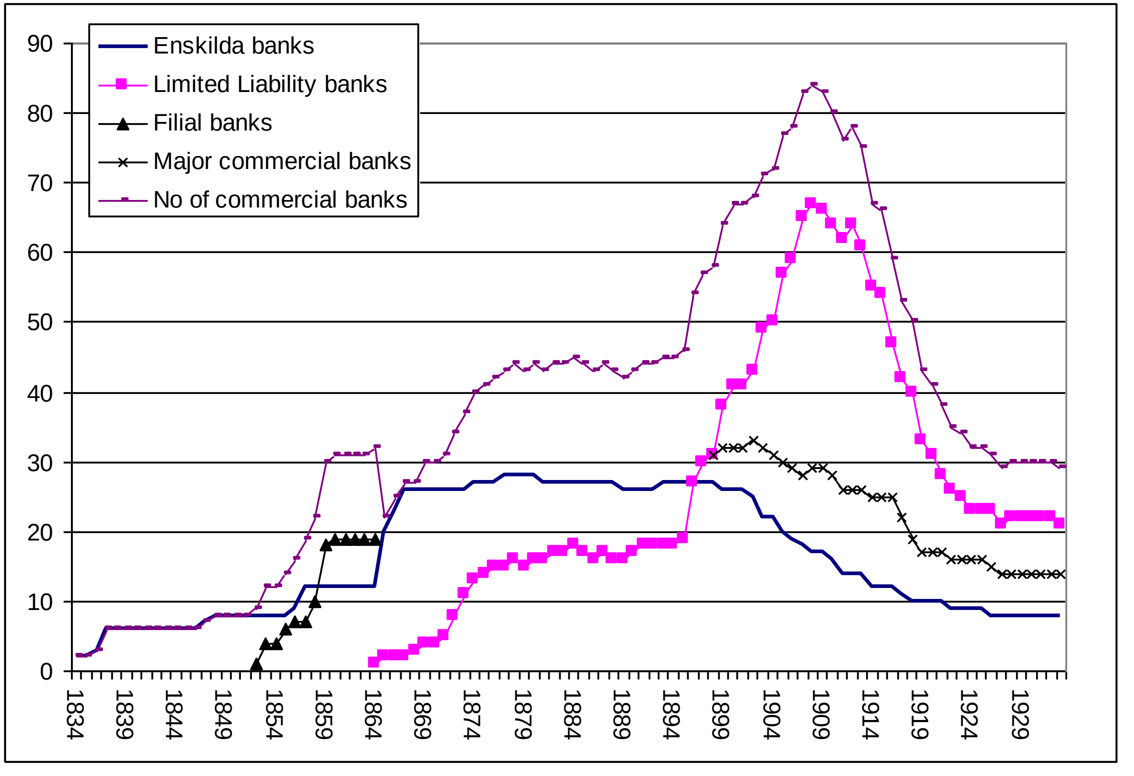
Regulatory regimes

Extensive regulatory package 1911 - 1939

- Most important bankers involved in the legislative process
- Increased barriers on entry (more discretion)
- Decreased limitations on scope (shares/stocks)
- Increased limitations on liability management Capital requirements (discretionary + changing focus on what reserves consist of)
- Banks circumvented legislation (and transparency)
- Mergers and acquisitions
- Regulatory changes amplified economic trends (1917 o 1922)
- Bankers could push the legal limits in booms and the opinion in busts
- Bank and bourse inspection (1919)
- End to shares (1922, 1931)
- Deflationary monetary policy
- Rescue packages crisis 1921/22 (*Kreditkassan*) after pressure from banks (1931)

Commercial banks

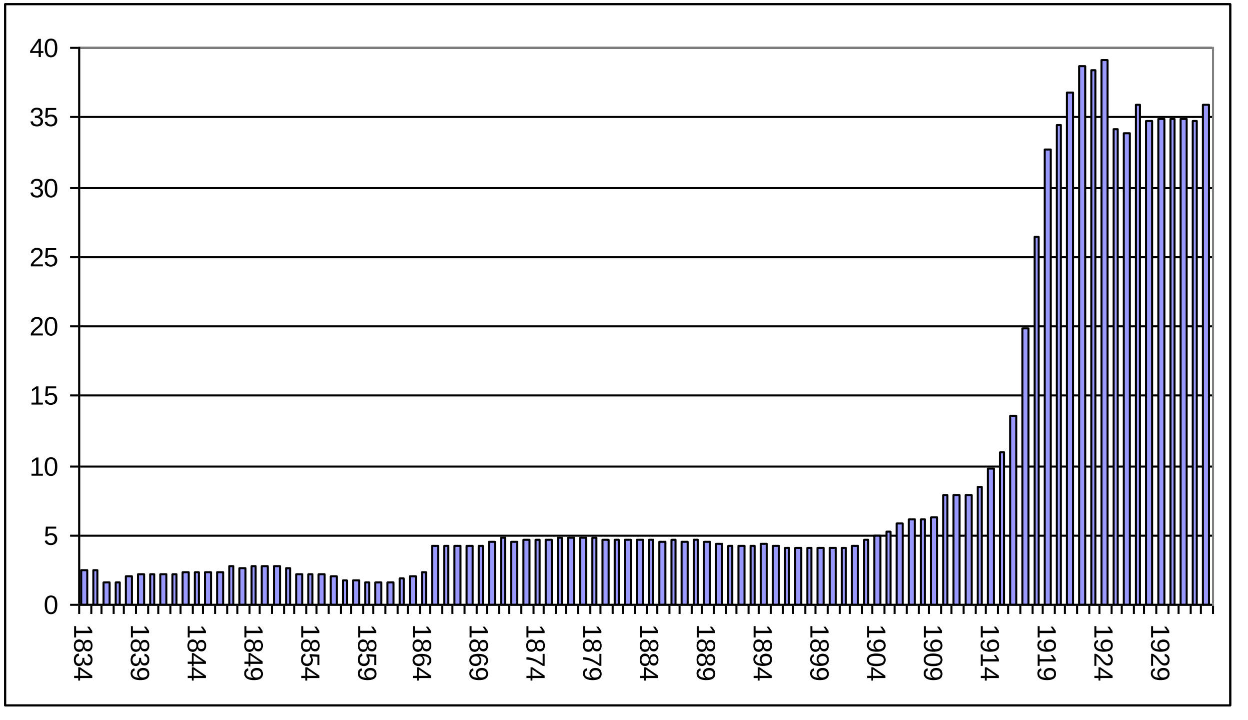
Figure1: No. of Enskilda, Limited Liability, Filial and Major Banks, 1834-1933



Sources: Brisman, S. (1924) p. 245, Brisman (1934) pp.219-221, Ekonomisk Tidskrift 1899-1933, Sammandrag af Bankernas Uppgifter, 1871 – 1911, Sveriges Riksbank (1931) pp. 172-185

Branch banking

Figure 2: Branches per Commercial bank, 1834 – 1933



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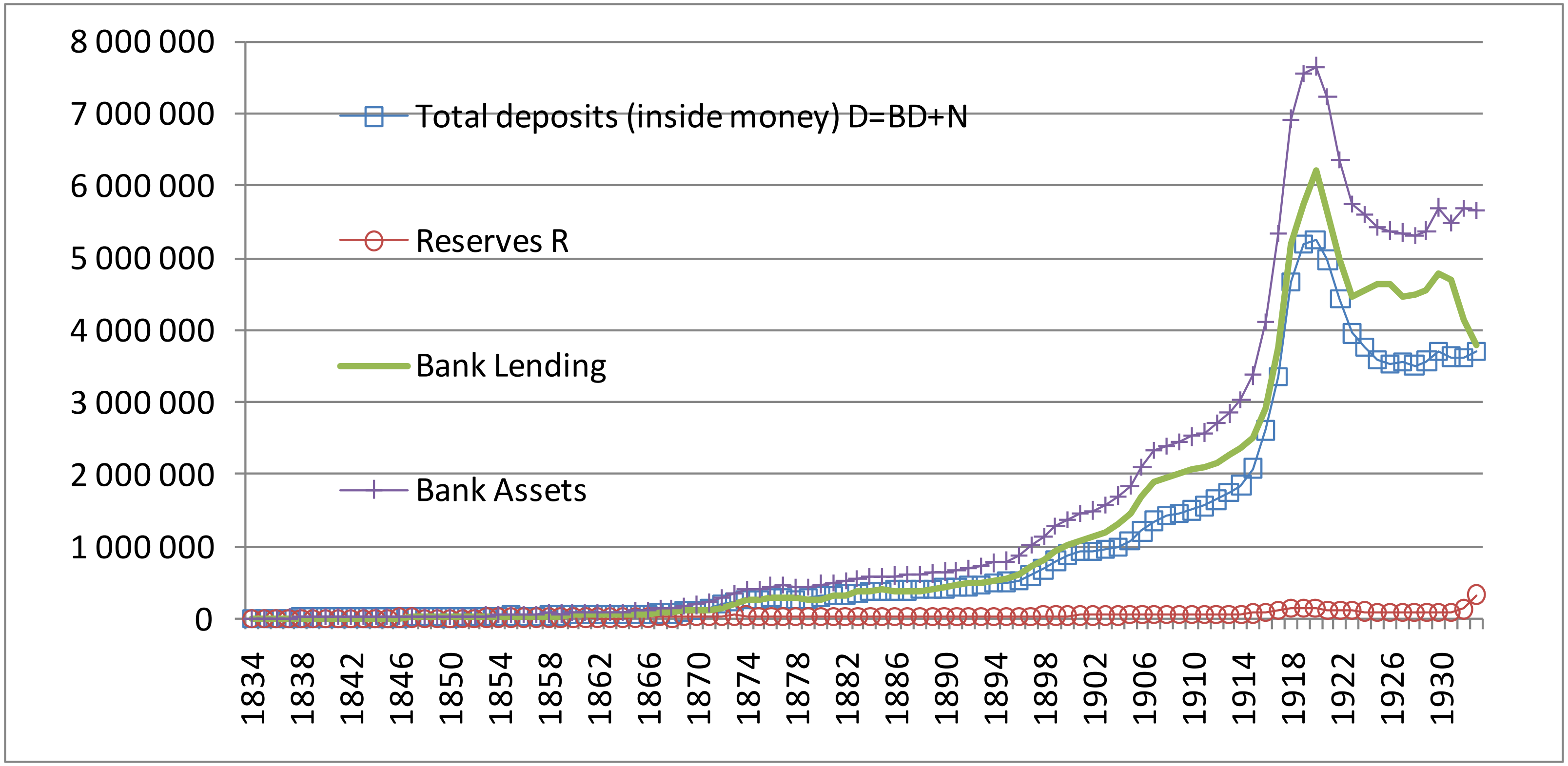
Commercial banking

Figure 4: Public lending, Public liabilities and Turn over in commercial banks, 1834-1933 (1000's SEK)



Sources: See figure 3

What can we learn from the sub-crime crisis?

- Seemingly sound regulations may have un-anticipated effects
  - Dividing assets after riskiness
  - Less risky assets needs less coverage
  - Who and on what basis are the risks evaluated?
  - What happens if the risk assessment process is not working properly?

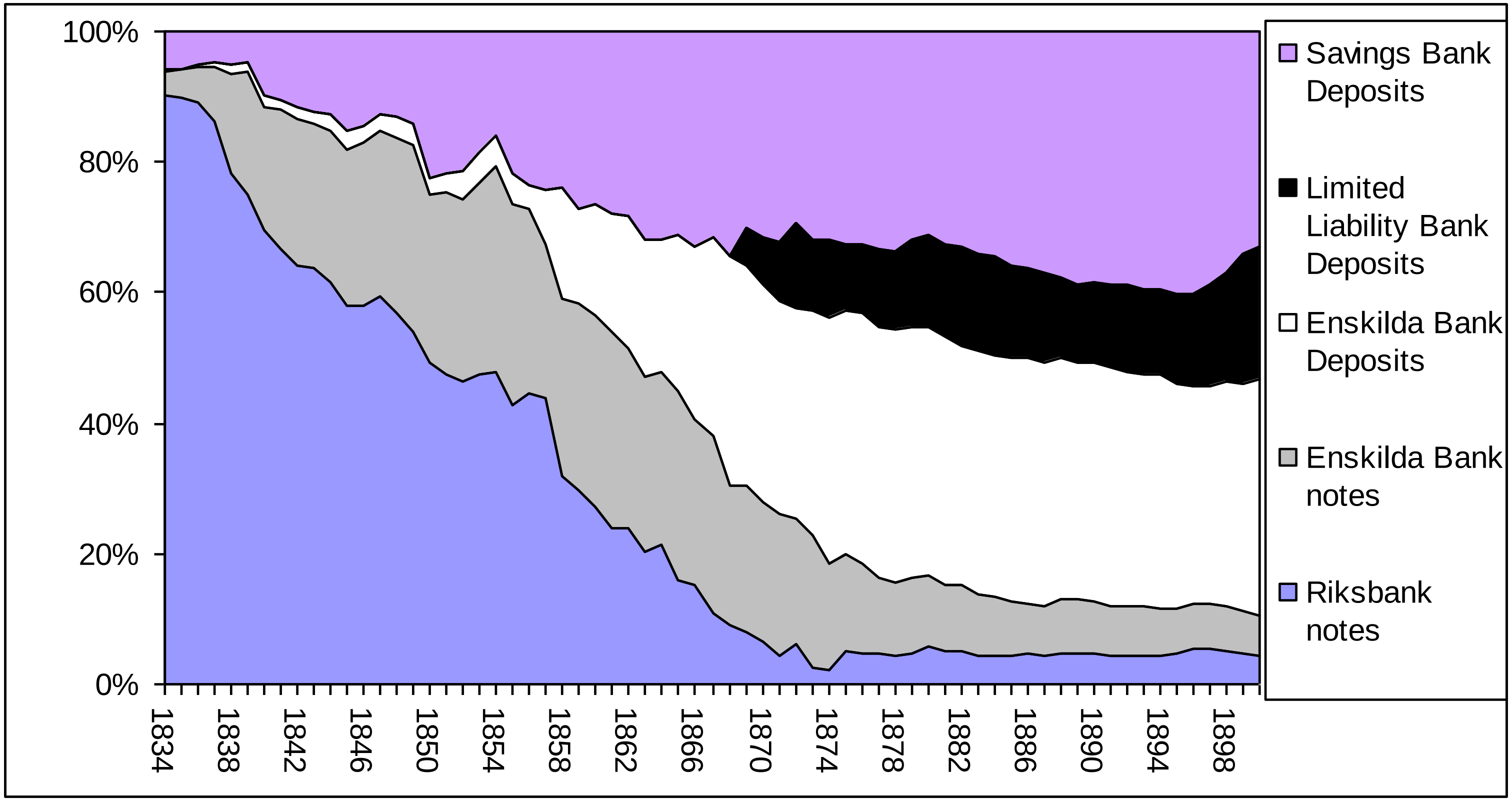
More generally – how much do we know about the context in which the regulatory change is implemented?

Banning commercial bank note issuance

- A general view (discourse) on private bank notes:
  - Destabilizing
  - Backwards
  - Same as Riksbank notes (mistaken for Base money that deprived the Riksbank of the possibility to run monetary policy and in extension to defend the fixed exchange rate - The same view prevails today among central bank supporters as well as among free banking proponents)
  - No concern for other liabilities (nor legally nor in the political discourse on banking)
  - Commercial bank notes were banned (1897, 1903) and peaked 1900

The Banking System and the Broad Money Supply, 1834 - 1900

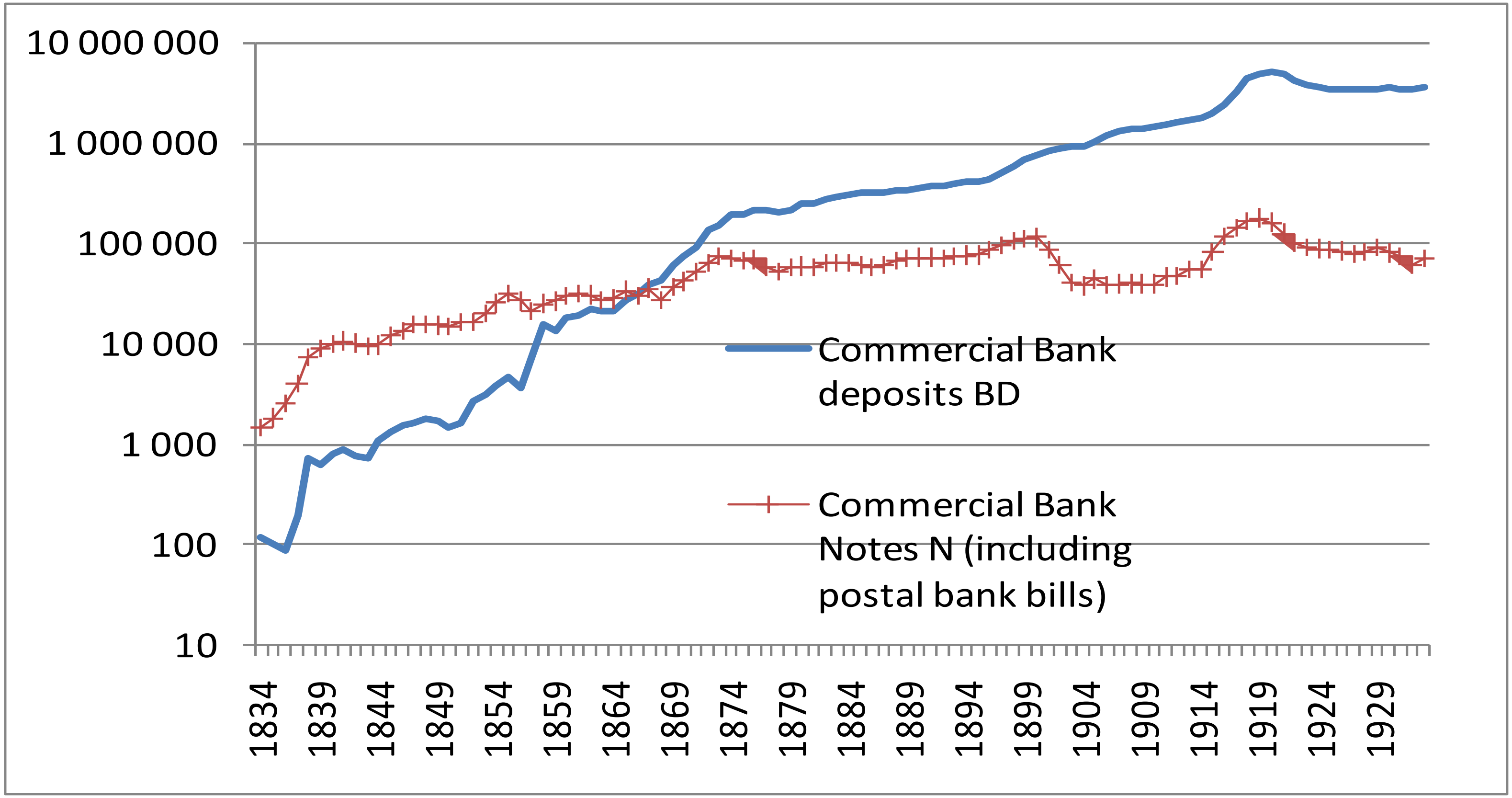
Components of the Broad Money Supply (M2) in percentile distribution, 1834 – 1900.



Sources: Post & Inrikes Tidning 1849 – 1871, Sammandrag af Bankernas Uppgifter, 1871-1900, SCB (1960) pp. 99, 102-103, Sveriges Riksbank (1931) pp. 172-185

Commercial Bank Liabilities

Figure 5: Deposits and Notes issued by commercial banks, 1834-1933 (1000's SEK). Semi-logarithmic scale.



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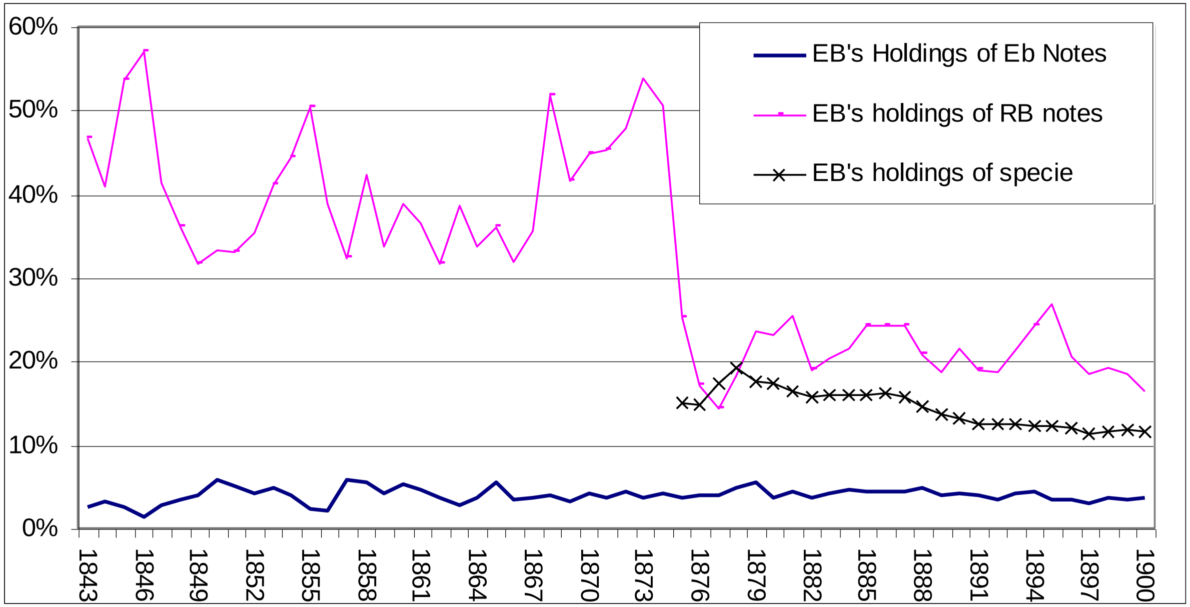
Enskilda bank reserves

Annual data on Enskilda banks cash assets in relation to issued notes, 1843 – 1900



Source: Ögren, A. (2006)

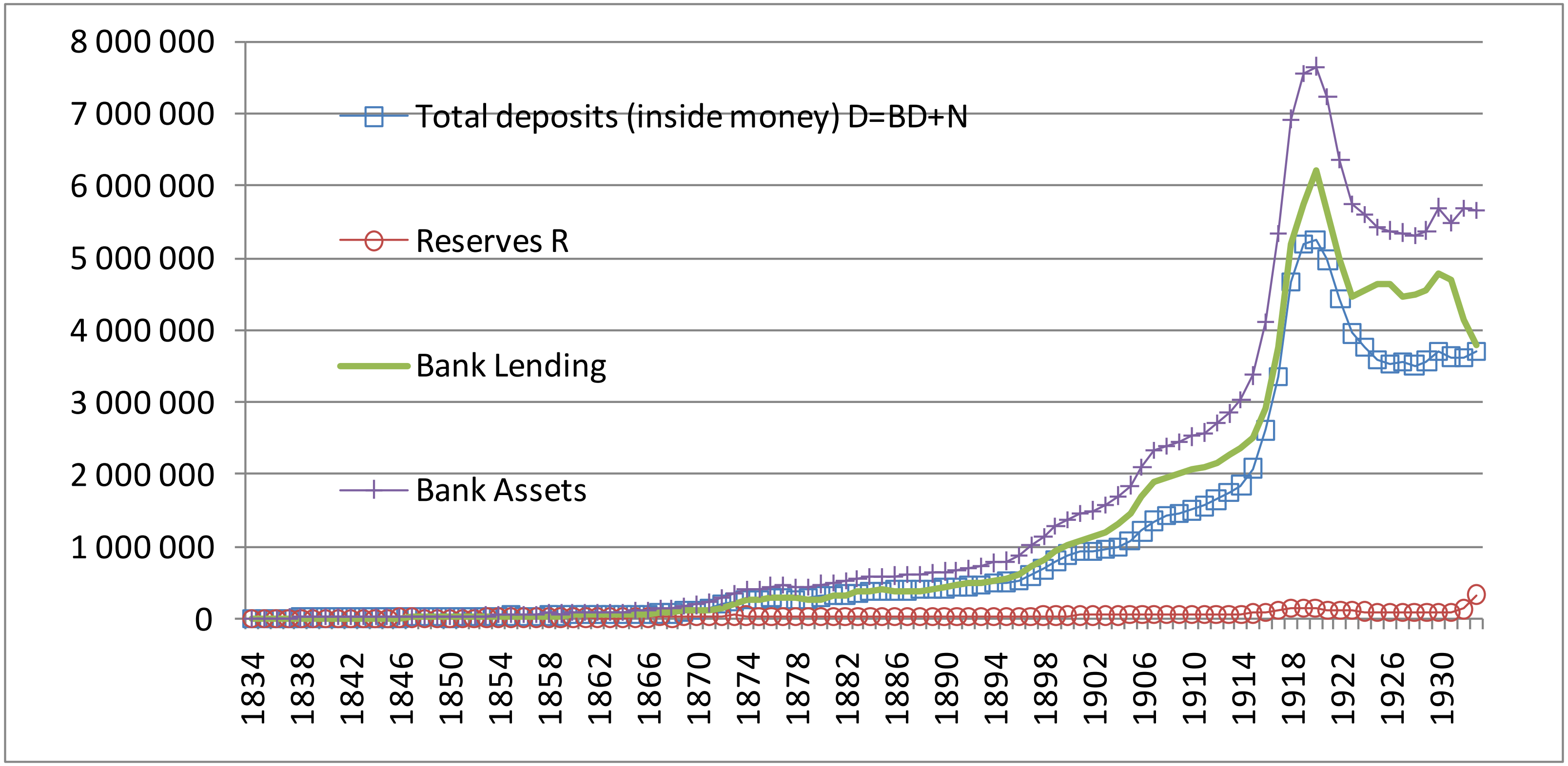
Basis of note issuance

OLS-Regression on the Determinants of Enskilda Bank Note Issuance, 1878 – 1900, Monthly Data (276 observations)

Dependent Variable: DLOG(EBNOTES)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0,01	0,00	-2,07	0,04
DLOG(RBNOTERES)	0,05	0,02	2,37	0,02
DLOG(GOLDRESERVES)	0,00	0,10	-0,01	0,99
JANUARY	-0,05	0,01	-6,90	0,00
FEBRUARY	0,04	0,01	5,30	0,00
MARCH	0,07	0,01	9,82	0,00
APRIL	-0,02	0,01	-2,58	0,01
MAY	-0,02	0,01	-2,88	0,00
JUNE	0,04	0,01	4,93	0,00
JULY	-0,06	0,01	-8,02	0,00
AUGUST	0,03	0,01	4,75	0,00
SEPTEMBER	0,13	0,01	17,29	0,00
NOVEMBER	-0,03	0,01	-3,74	0,00
R-squared	0,78	Adjusted R-squared	0,77	

Commercial banking

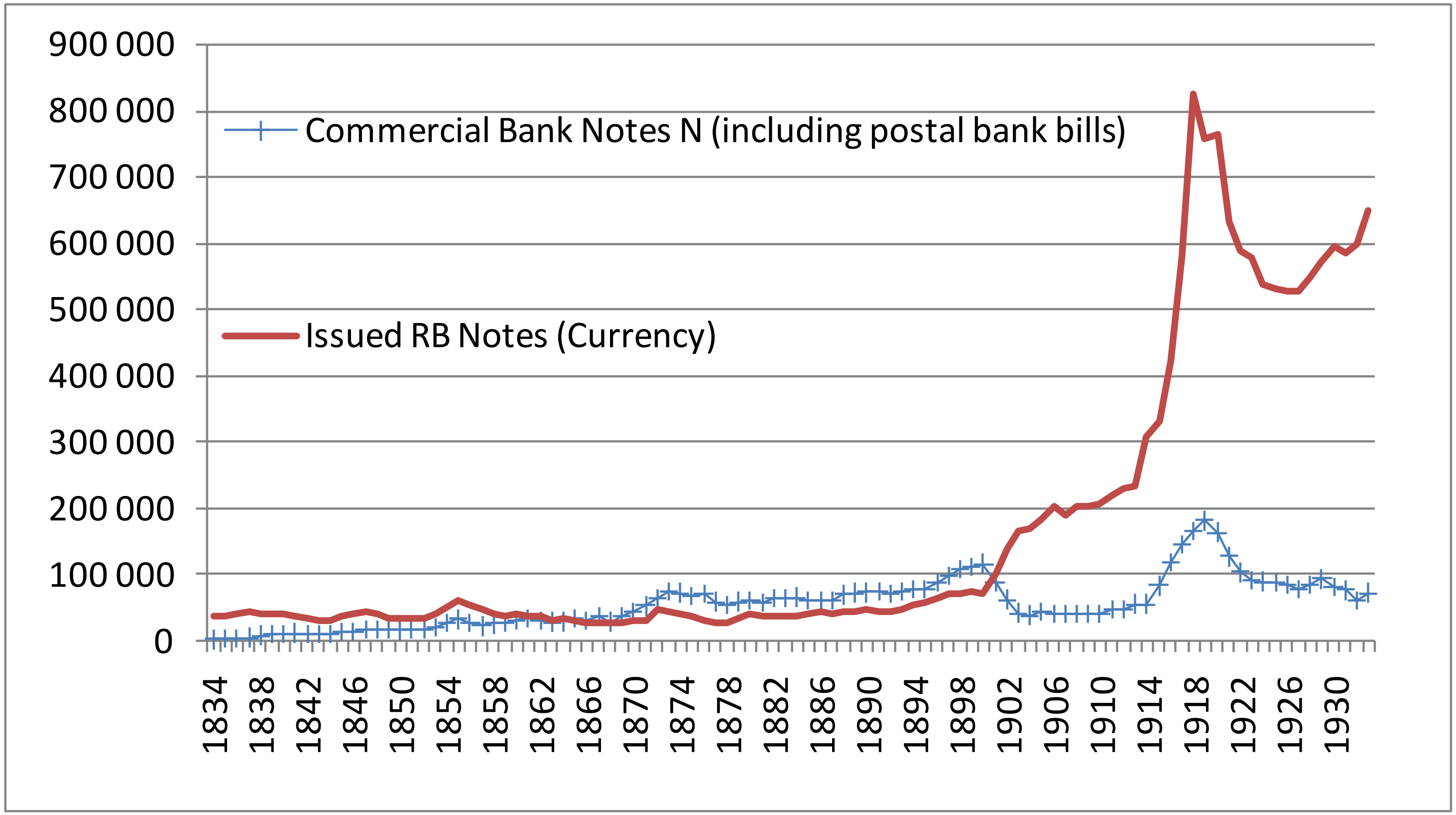
Figure 4: Public lending, Public liabilities and Turn over in commercial banks, 1834-1933 (1000's SEK)



Sources: See figure 3

The Commercial Banks and the Central Bank

Figure 6:Notes issued by commercial banks and the Riksbank, 1834-1933 (1000's SEK).



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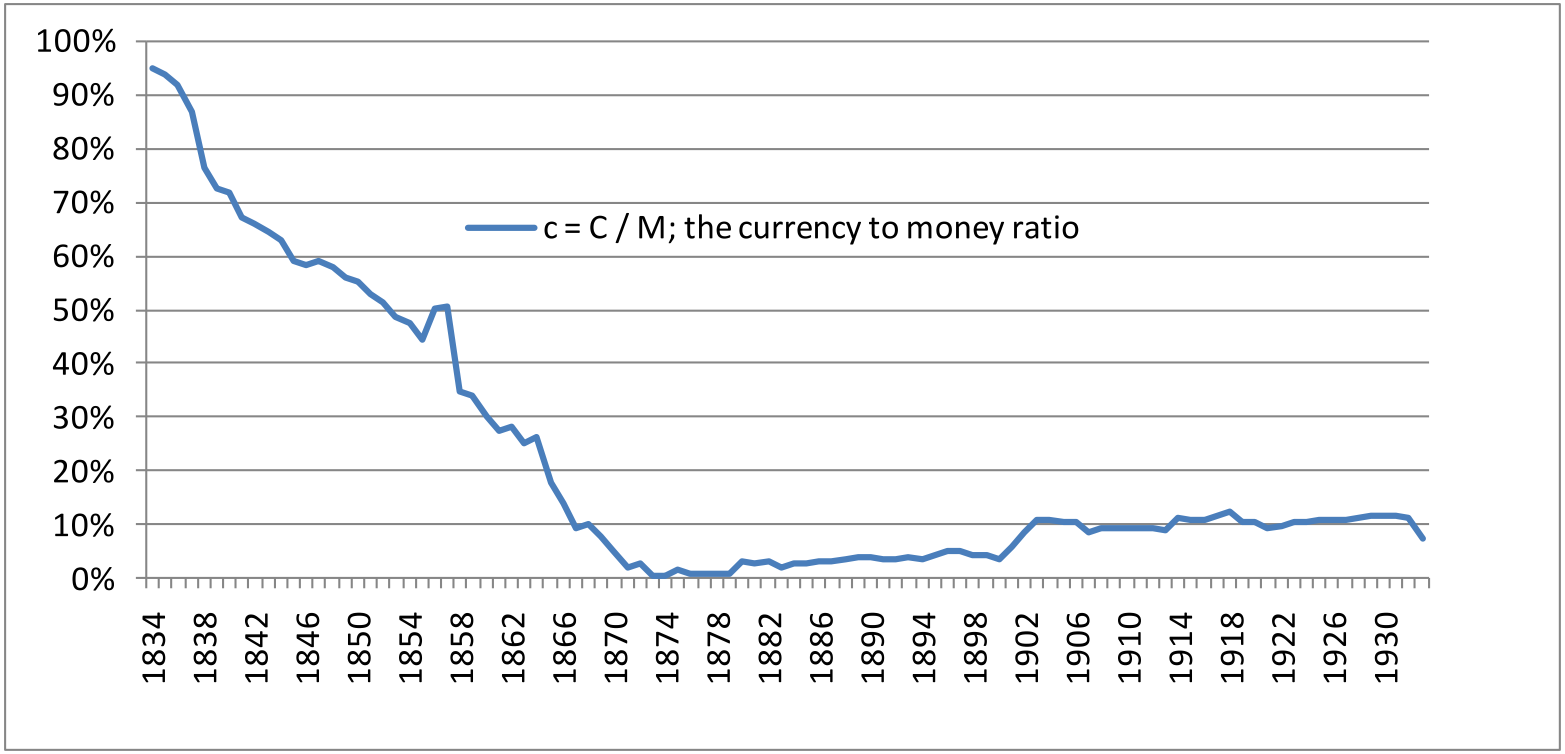
Base Money Expansion

- Why did the amount of base money expand?
  - End of Enskilda bank notes in 1903 (peak 1900)
  - Riksbank to fill the lack of liquidity due to the ending of Enskilda bank notes
  - Ending of the gold standard (WWI)
- What was the result of this expansion?

The public preference for holding Base Money

Figure 7: The currency to money ratio, 1834-1933



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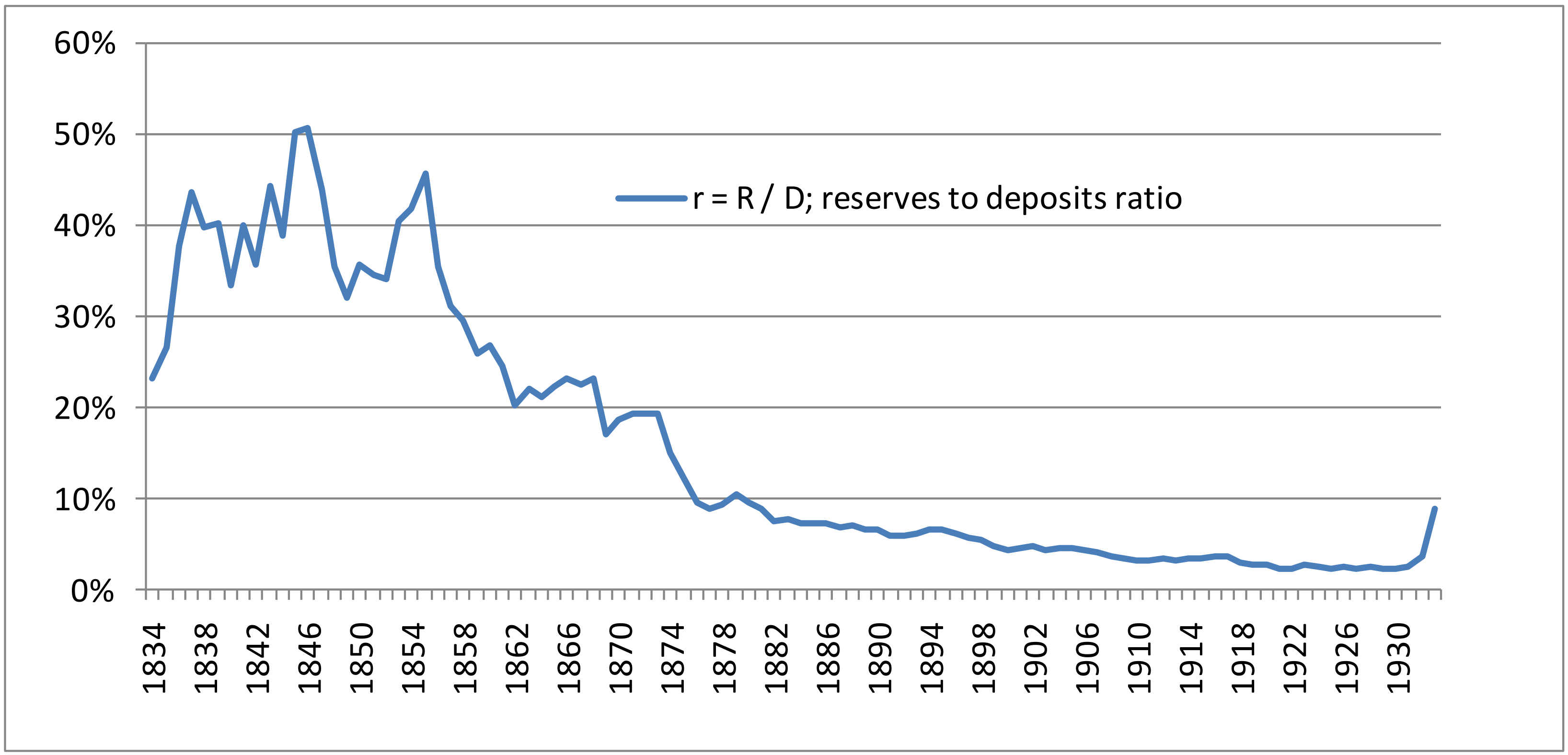
The Banks' preference for backing demand liabilities

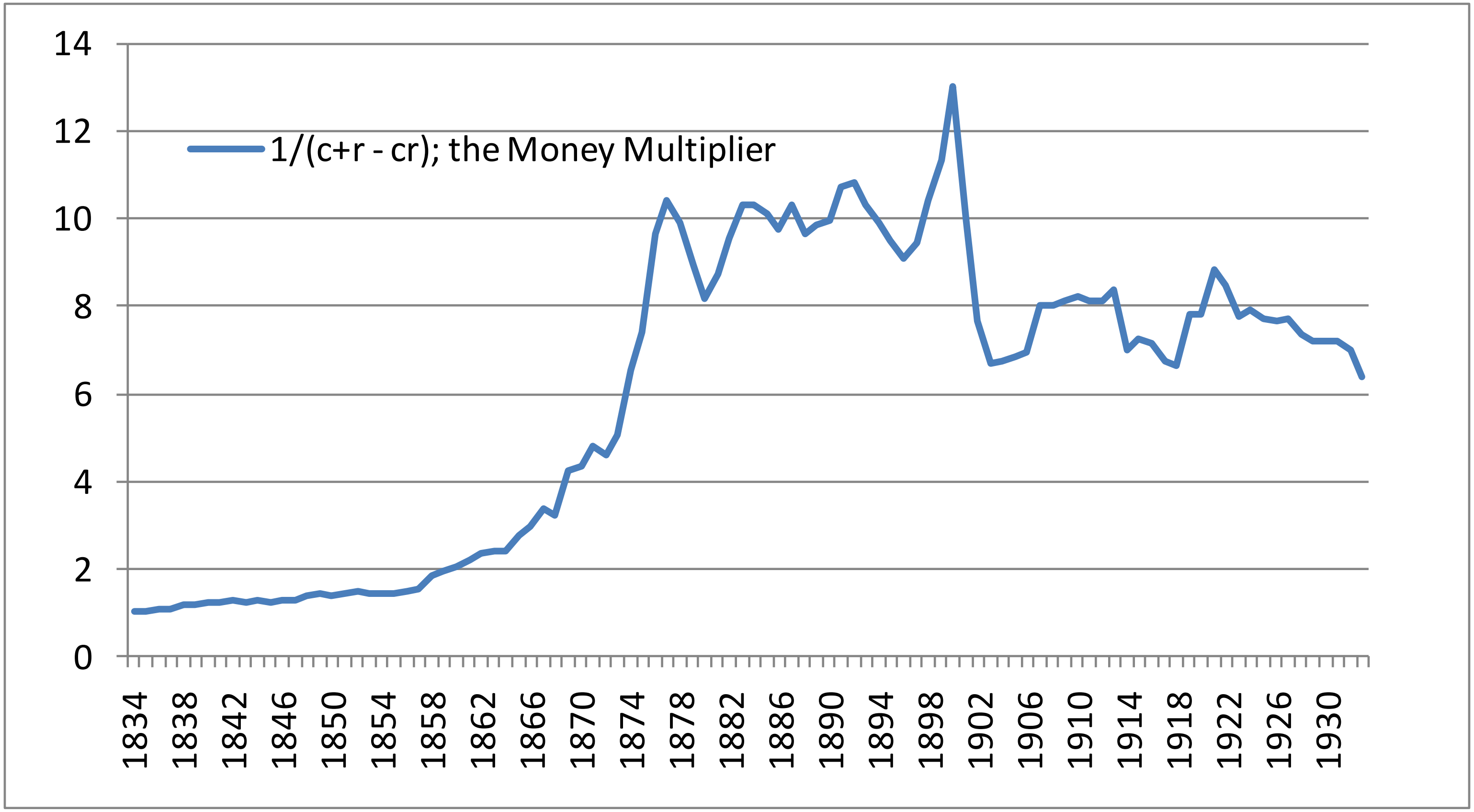
Figure 8: The Reserves to Deposits ratio, 1834-1933



Sources: Ekonomisk Tidskrift 1899-1933, Ögren, A. (2003) Post & Inrikes tidning 1835-1871, Sammandrag af Bankernas Uppgifter, 1871 – 1911, Sveriges Riksbank (1931) pp. 172-185

The Money Multiplier

Figure 9: The money multiplier, 1834-1933



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The effect of Base Money on Banking

Table 1: OLS-regressions with public liabilities, lending, reserves and bank assets as dependent variables, 1834 – 1933

	Eq. 1 **dlog(liabilities)**	**Eq. 2** **dlog(lending)**	**Eq. 3** **dlog(reserves)**	**Eq. 4** **dlog(bankassets)**
C	0.116	0.104	0.022	0.096
Prob.	0.179	0.160	0.879	0.197
DLOG(BASEMONEY(-1))	0.348***	0.412***	0.294*	0.345***
Prob.	0.002	0.000	0.099	0.003
DLOG(GDPCP)	0.163	0.142	0.528	0.063
Prob.	0.609	0.606	0.316	0.819
REGREGIMEI	-0.004	0.004	0.077	0.018
Prob.	0.9656	0.961	0.600	0.814
REGREGIMEII	-0.052	-0.035	-0.005	-0.030
Prob.	0.550	0.640	0.975	0.685
REGREGIMEIII	-0.096	-0.075	-0.046	-0.069
Prob.	0.296	0.342	0.761	0.384
REGREGIMEIV	-0.097	-0.100	0.036	-0.079
Prob.	0.270	0.185	0.804	0.301
R-squared	0.158	0.249	0.070	0.198
Adj. R-squared	0.103	0.200	0.008	0.145

Preliminary conclusions

- Regulatory changes a result of circumstances (crises) and special interests
- The importance of the discourse (economic ideas and theories)
- Unintended external effects of regulations (lock in effect on the discourse)
- Lax monetary policy seems to be driving
- Moral hazard and pressure for rescue operations
- Decreasing reserves/increasing banking vulnerability