“Protecting Financial Stability in the Aftermath of the Great War: The Experience of the Federal Reserve Bank of Atlanta”

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Workshop on Monetary and Financial History
Federal Reserve Bank of Atlanta
May 11-14, 2015

Price Stability and Financial Stability Rules v. Discretion?

- For Price Stability, a central bank should…?
- Recent History: Great Inflation led to recognition of time-inconsistency problem of discretionary monetary policy→ consensus for target rule commitments by central banks.
- Nineteenth century: Tie governments' hands: gold standard to ensure long-term price stability; central banks maintain mandated gold reserve ratios for currency and deposits and follow "rules of the game" for their discount rates to speed up adjustment process.

Rules v. Discretion for Financial Stability?

- For financial stability, a central bank should……follow a rule…..
- Walter Bagehot, Lombard Street (1873)----Financial Stability: In crises: lend freely at a high rate on good collateral.
- ----Permits all financial institutions that are solvent but illiquid to obtain liquidity but will limit moral hazard by ensuring borrowing is short-term, an automatic exit strategy
- ----Attracts gold from abroad, adding to liquidity
- Should other central banks extend a threatened central bank credit to moderate this policy or rescue banks? No?

The Fed and ECB post-2008?

- Criticism by Alan Meltzer (2009) and John Taylor (2009): Fed fails to follow Bagehot's recommendations .
- Federal Reserve Act Section 13(3) Fed may lend to "any individual, partnership, or corporation" in "unusual and exigent circumstances."
- Dodd-Frank Act of 2010 prohibits emergency lending to an individual entity. Secretary of the Treasury must approve of any lending program which must be broad-based and loans cannot be made to insolvent firms. Collateral must be sufficient to protect taxpayers.
- In the EU, allow member states (central banks) to aid banks, running up intra-system imbalances in response to regional shocks?

Historical Evidence for Strict Rules?

- Presumption that Bagehot’s rule was strictly followed by central banks under gold standard.
- Mishkin & White (2014): contingent rules
- For Price Stability:
  - (1) example for Gold Standard (Bordo & Kydland, 1995); paper pound 1797-1821;
  - (2) Post Act of 1844: contingency is institutionalized by issue of “chancellor’s Letter” to permit Bank of England to violate Act of 1844 and manage crises
- For Financial Stability
  - (1)Banque de France 1889 (Hautcoeur, Riva & White, 2014)
  - (2) Barings Crisis 1890 (White, 2015)
  - (3)Early Fed, 1919-1921 [precursor to Richardson & Troost (2009), Atlanta’s Great Depression activism]

The Example of the Atlanta Fed post-WWI

- Structure of Federal Reserve System 1914-1935 resembles that of European Union today. A federalized system of central banks in a monetary union subject to regional shocks
- World War I caused huge dislocating shocks---central banks in the front lines of managing those shocks. Their role grew bigger during the War and remained bigger. Key to understanding how to manage large shocks

The Federal Reserve System 1914-1935

- Twelve semi-autonomous Federal Reserve banks, governed by Board of Directors—elected by their members---and the president
- Each individually responsible for maintaining its gold reserves of 40% to Federal Reserve notes
- Supervising its member banks
- Set discount rates with the approval of the Federal Reserve Board.
- Asymmetric shocks among regions

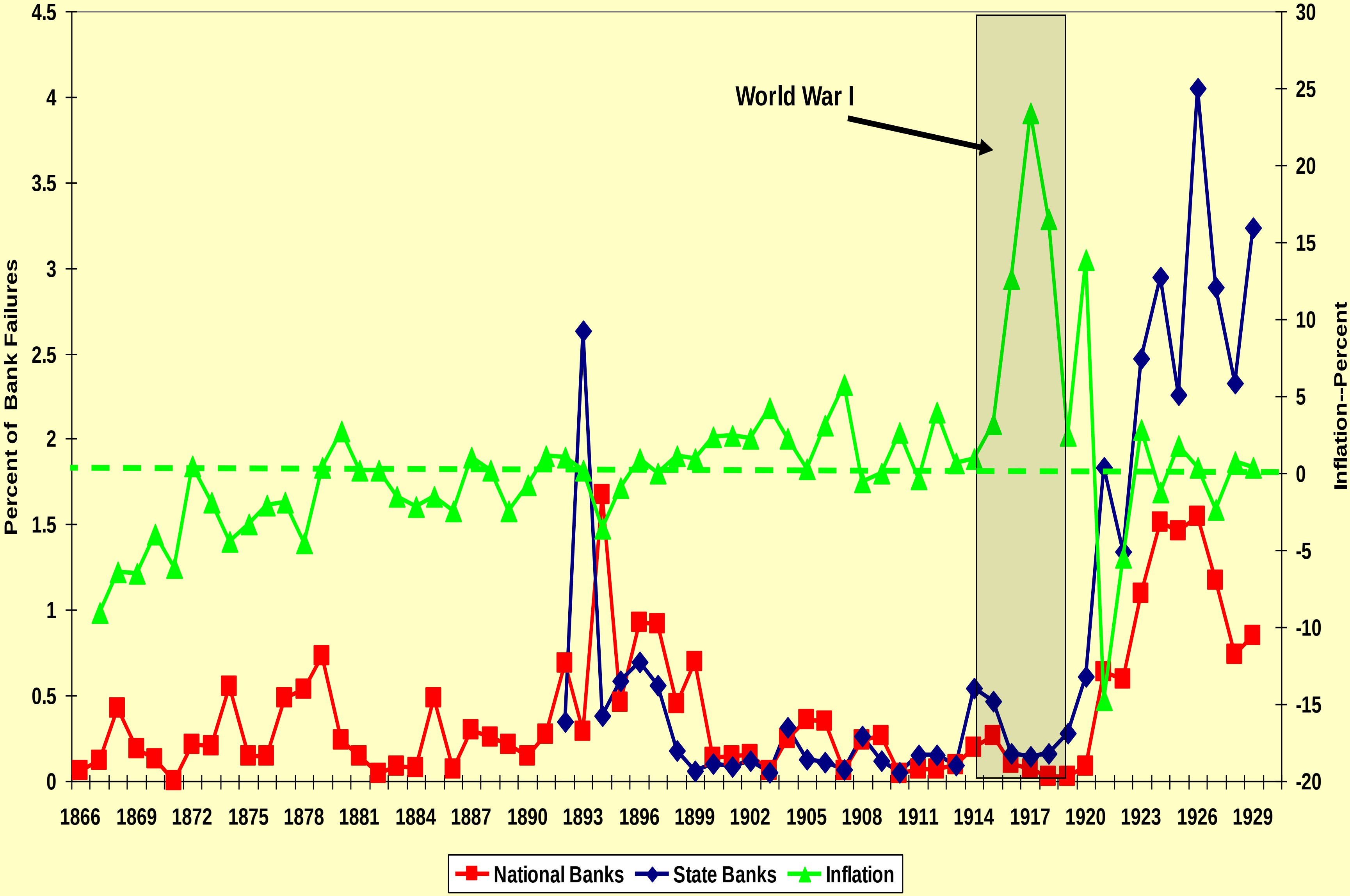
End of World War I

- Brief Recession: August 1918-March 1919
  - Fed Discount Rate at 4% to assist Treasury with bond sales----stays at 4% until November 1919
- Boom: April 1919-January 1920
  - Commodity boom uneven among FR Districts
  - Board permits discount rates of 6% 1/1920, then 7% 6/1920 but many borrowers willing to borrow at 10% because of commodity price boom
- Deep Recession: February 1920-July 1921

Policy Making at the Center (the Board) Time to Liquidate!

- Bank insolvencies: 1919: 63→1921: 506
- Unemployment 1920: 4% → 1921: 12%
- Industrial production falls 23%
- Agricultural production fall 13%
- FR Board opposes any reduction in discount rates because market rates are higher
- Benjamin Strong: "Bagehot's Golden Rule" wants a penalty rate
- Strong—member borrowing fell 4%, he wants it 20%
- Rates only cut to 6 ½ % in May 1921
- Deflation and huge gold inflows to the U.S.
- October 1921: FRBNY Gold Reserve Ratio 82%

Figure 1: Inflation and Bank Failures, 1866-1929



NB: (1) Civil War deflation & Effects (2) Prior to Fed 1913—only OCC no means to mitigate shocks to banks, only close them.

The Asymmetric Regional Shock
Figure 2: Monthly Wholesale New York Cotton Prices

Real Prices and the Scissors

	Price of Cotton per Pound (cents)	CPI	1913 Price of Cotton (cents)
1913	10	100	10
1920	42	202	21
1921	12	170	7

Cotton was the dominant crop of the 6th District (1921 largest crop—but also all commodities suffer.

Many Bank Loans collateralized by cotton

1. Policy-Making at the Regional Level

- Each FR bank sets discount rate subject to FR Board approval, divergence up to 1%, some discretion over collateral—lend to member banks
- Each FR bank gold reserve of 35% for deposits and 40% for notes—gold in vault or gold certificates at Treasury
- If falls below minimum--a deficit FR bank—must contract lending <u>**or**</u> request a surplus FR bank to rediscount bills for gold via the Gold Settlement Fund in Washington DC where gold certificates would be exchanged. Board may compel assistance

2. Policy-Making at the Regional Level

- FR Bank Supervision----call reports & examination of member banks
- NO legal authority beyond this…..but…..act like clearing houses to aid, rescue or orderly liquidation of members
- 1915: weak Third National Bank of Fitzgerald GA, FRBA offers discounts and puts agent on Board of Third, then rescued, assisted with new stock subscription---can be paid for in notes that are discounted with FRBA
- Post WWI Recession of 1920-21 Challenge—FRBA gives discounts to member banks—does <u>not liquidate</u> . Moves into deficit with other FRBs

Current Literature?

- FR Board <u>Annual Report</u>: "spontaneous spirit of cooperation between the Federal Reserve Banks"
- Eichengreen, Mehl, Chitu & Richardson (2014): "Mutual assistance [of FRBs] did not excite experts or the American public."
- Actually---lots of excitement
- How big? Huge?
- Inter-FRB accommodation = $280 million in October 1920 when assets of FRBA = $275 million

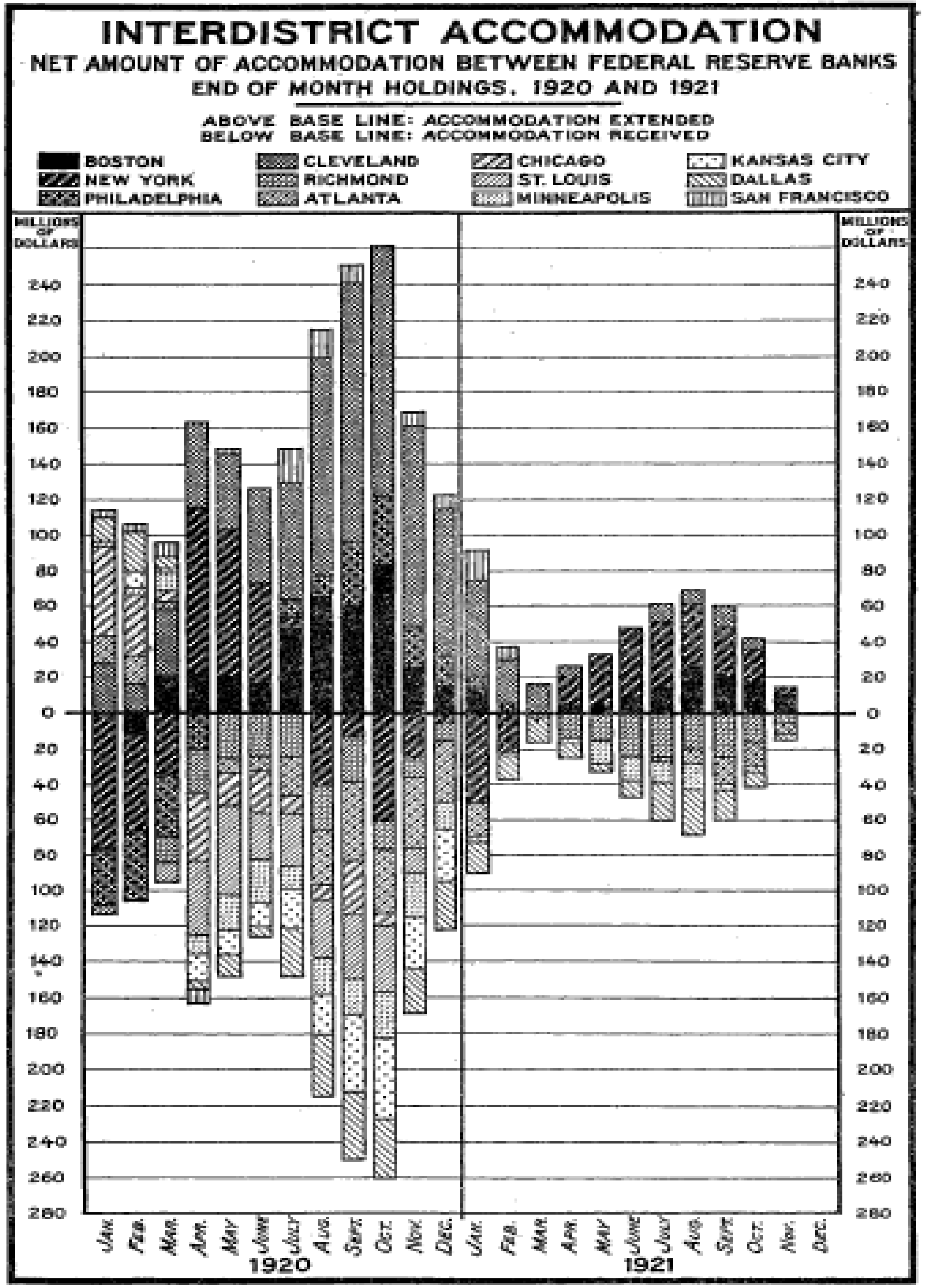
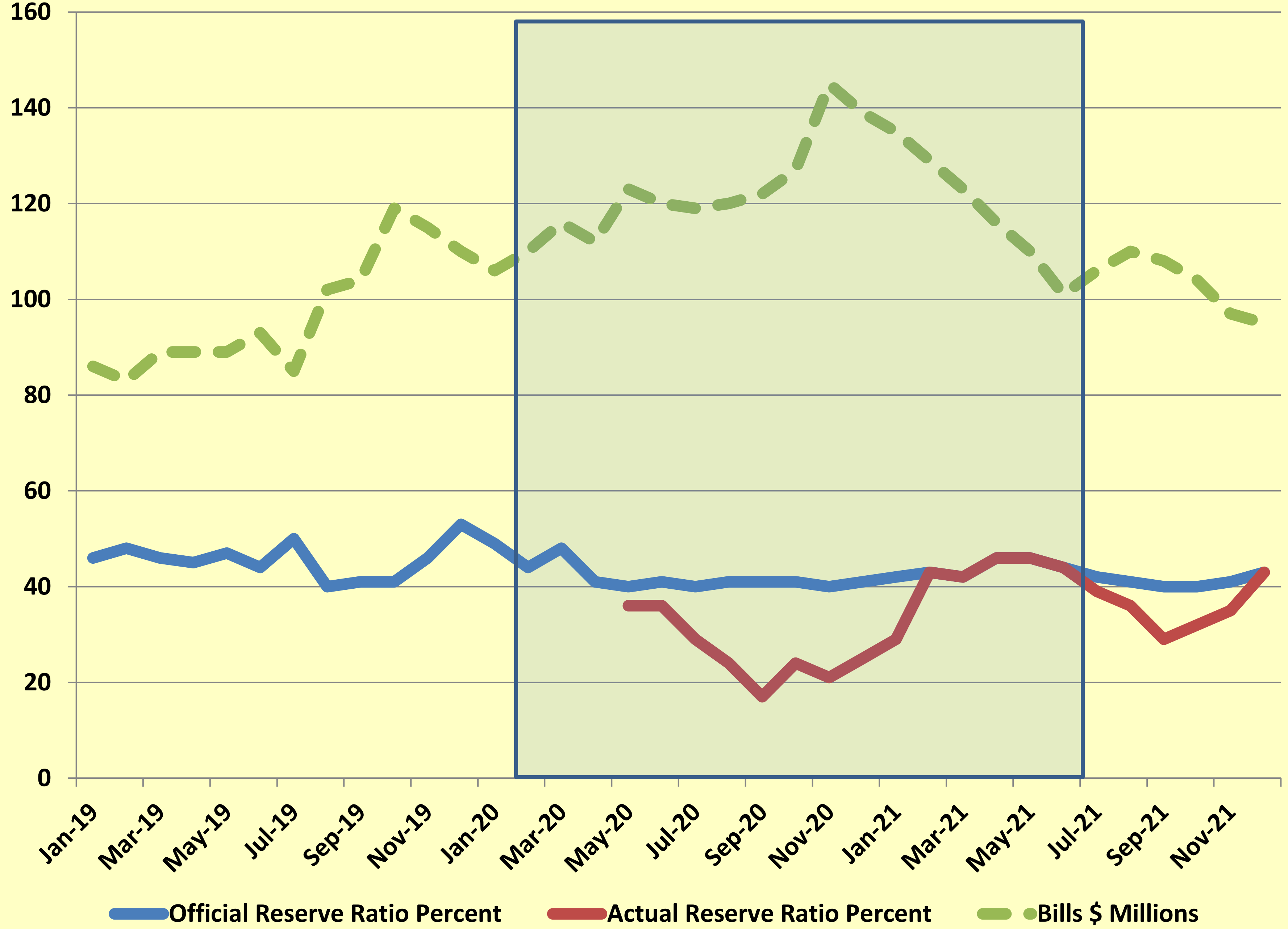


Figure 3: Federal Reserve Inter-District Accommodation 1920-1921

Critical Time: March-December 1920

- FRBs of Philadelphia, Cleveland & Boston (Surplus)
- FRBs of Atlanta, Richmond St. Louis, Minneapolis, Dallas, Kansas City & Chicago (Deficit)
- FRBAtlanta official reserve ratio 9/1920 = 40.5% but without aid, 17%
- FRBDallas---level would have been 10%

Response of FRBA to Cotton Crash



Individual Bank Assistance

- First National Bank of Colquitt—capital depleted 1921
- Chief national bank examiner advises FRBA that will only realize 20 cents on dollar of collateral if liquidated immediately
- FRBA releases bank from repayment of $30,000 and purchases $84,000 of doubtful assets from the bank for $30,000

Response of the Board: W.P.G. Harding Ch. of Bd. to M. Wellborn, Gov. FRBA

- "The Board is of the opinion that your present experience should convince you that your lending policy has been rather too lenient and that in some cases credit was granted in such large amount to banks when no emergency existed."
- "I do not believe the Board would permit such transactions to take place but would be more inclined to allow the reserve of the Atlanta Bank show a depreciation."
- Points out FRBA borrowed $35 million from FRB Cleveland but it had only $11 million in capital and surplus.

Wellborn replied…..

- “If this bank had failed to stand as a buffer between the business of this section and disaster, it would not only have failed in its duty, but it would have permitted a situation to develop which would have seriously affected all other sections of the country and every other reserve bank.
- “The commerce of all the states are too closely knit together to permit the confining of the results of financial upheaval to any one particular state or group of states.”

Wellborn replied…..

- "The restless Cleveland District counts this section one its principal markets. The Sixth District is filled with farm implements, trucks, automobiles and other manufactured products emanating from the Cleveland District. The banks of the Sixth District have financed the local dealers [of] many of these commodities, that such local dealers might pay cash to the manufacturers in the Cleveland District. To shut off completely, or hamper the buying power of this and other agricultural districts, would bring about a situation which would be felt from the Pacific to the Atlantic.

FR Board pressure continued:

- Harding: “Board at no time suggested drastic and immediate liquidation but has repeatedly reiterated its preference for orderly processes.”
- But….continued pressure as believe FRBA has taken excessive risks, forces contraction
- FRBA engineers repurchase agreements with weak member banks for U.S. government war bonds whose prices have fallen

The regional central bank's dilemma (December 7, 1921)

- "On the one hand, we are confronted with the danger of extending so much aid to a member bank that, if it failed we should incur a very considerable loss."
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- "On the other hand, if we go to a great length and save a member bank so that it can, in time, work out of its difficulties, I feel that we would be accomplishing what was intended in the establishment of the Federal Reserve System."

In Retrospect

- D.W. Crissinger Fed Chairman in 1923: “We were inclined at first to disagree with Governor M.B. Wellborn of the Atlanta bank, in some of the policies which he pursued, but…he was right and we---the members of the federal reserve board---were wrong.”
- In debate whether a central bank should assist troubled institutions, the Atlanta Fed stands in the corner of the interventionists.
- Nowhere in the Minutes of the Board of Directors of FRBA is there a discussion of the problem of moral hazard

In Retrospect

- FRBA saw the collapse of the post-WWI boom as an exceptional event that would not be repeated; a fact, that he believed the District’s banking community understood well.
- Member banks had not acted recklessly but patriotically by expanding credit during and after the Great War; excessive credit a minor factor. Consequently, the Atlanta Fed correctly accommodated member banks during the recession and readied them for 1920s recovery.
- Of course, what the FRBA did not anticipate was that a second and even greater shock would occur a decade later.
- Lessons employed in 1929-1933. Richardson & Troost (2009) Atlanta v. St. Louis

Fixed Rules Versus Contingent Rules for Financial Stability?

- Problem for a principal of writing a rule for a delegated agent that covers all contingencies, so allow discretion in extraordinary circumstances. Works, if there is a commitment to return to the rule and actions to mitigate moral hazard
- Post-1935 U.S.: Section 13(3) of the Federal Reserve Act: “unusual and exigent circumstances.”
- Atlanta Fed Post World War I a pre-cursor?