



**Creating Strong Communities,  
Food Systems and Prosperity  
BY TAKING BACK OUR MONEY SYSTEM**

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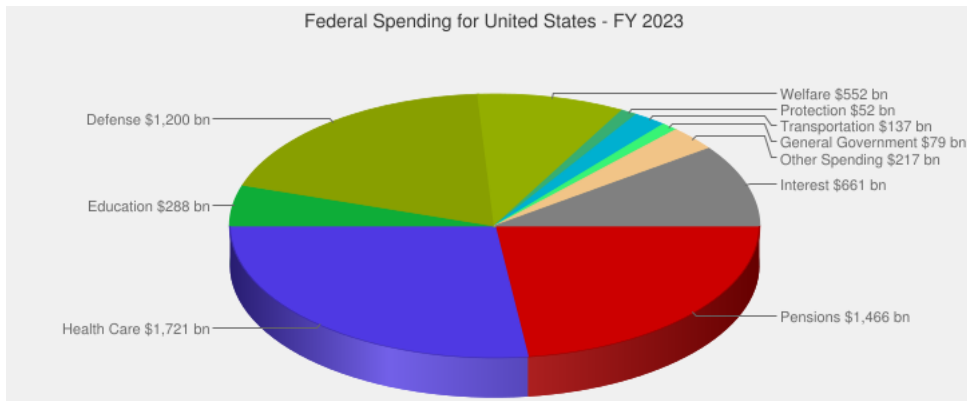
**Weston A. Price Foundation  
23<sup>rd</sup> Annual Conference, Kansas City, MO  
10:45-12 am, October 22, 2023**

# We are facing a confluence of financial crises ...

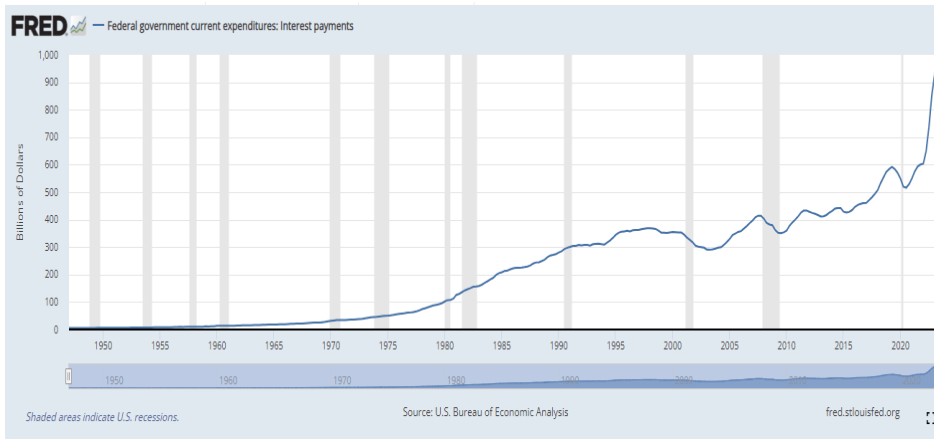


- Debt ceiling crisis.
- Banking crisis --
  - Bank runs
  - Banks aren't lending.
- Infrastructure crisis.
- Threat of war.
- Supply chain disruptions from lockdowns and sanctions ...
  - Driving inflation ...
  - Driving interest rates from 0.25% to 5.5% ...
  - Driving up consumer prices ...
  - Driving up inflation!

# Military budget and interest on the debt are consuming federal spending.



- Federal debt is nearing \$33T.
- Military budget is \$886B, over half of discretionary budget.
- Record inflation prompted Fed to raise prime rate from 0.25% to 5.5% -- driving up interest on debt.
- Interest on debt is nearing \$1T.





# Meanwhile, our infrastructure is failing.

- Nearly \$3T needed, per American Society of Civil Engineers.
- But Congress resists new borrowing, because we already have a \$32+ trillion federal debt.



# Our founding fathers had some creative solutions to these problems.

- Precious metals were scarce, and the colonists resisted taxation.
- The American colonists therefore used government-issued money and credit for trade. Called the “American system”, it allowed the American colonists to escape the British colonial system.
- But it was easier to issue paper scrip than to tax it back, leading to another problem -- inflation.



# The Treasury could take back the money power today ...

- It could issue the money Congress needs directly, perhaps with some trillion dollar coins or digital ECash (not CBDCs).
- Interest could be avoided by selling the debt to the Fed, which returns profits to the Treasury after deducting costs.
- Both options are legal; but they won't happen today, because of the conventional presumption (not necessarily true) that they would cause price inflation.



# The solution of the PA Quakers to the inflation problem: form a government bank, which lent government-issued paper scrip.

- The money went out from the PA “land bank” as loans and was repaid: it was a closed-loop, sustainable system.
- Adam Smith wrote that Pennsylvania's paper currency "is said never to have sunk below the value of gold and silver which was current in the colony before ... the issue of paper money."





# Meanwhile in England, the Bank of England was founded in 1694.

- Lending was based on the fractional reserve model developed by the goldsmiths: up to 10 times as many notes could be issued and lent as the creditors had in gold.



SEALING OF THE BANK OF ENGLAND CHARTER. 1694.  
SIR JOHN HOUBLON,  
*Governor.*

SIR JOHN SOMERS,  
*Lord Keeper.*

MR. MICHAEL GODFREY  
*Deputy Governor.*



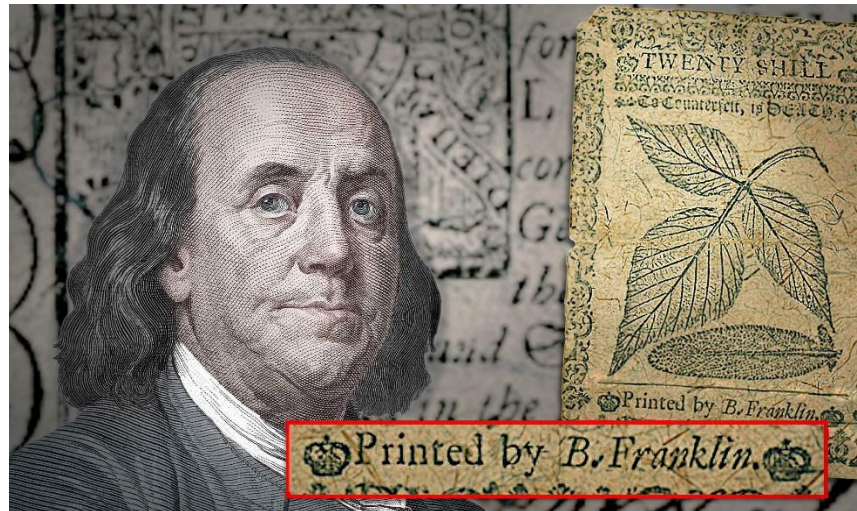
The colonists issued paper scrip until the Bank of England leaned on King George to forbid it.

- The money supply then collapsed, leading to a major depression and the American Revolution.
- The colonists won the war, funded largely with paper Continentals backed solely by the “anticipation” of tax revenues.



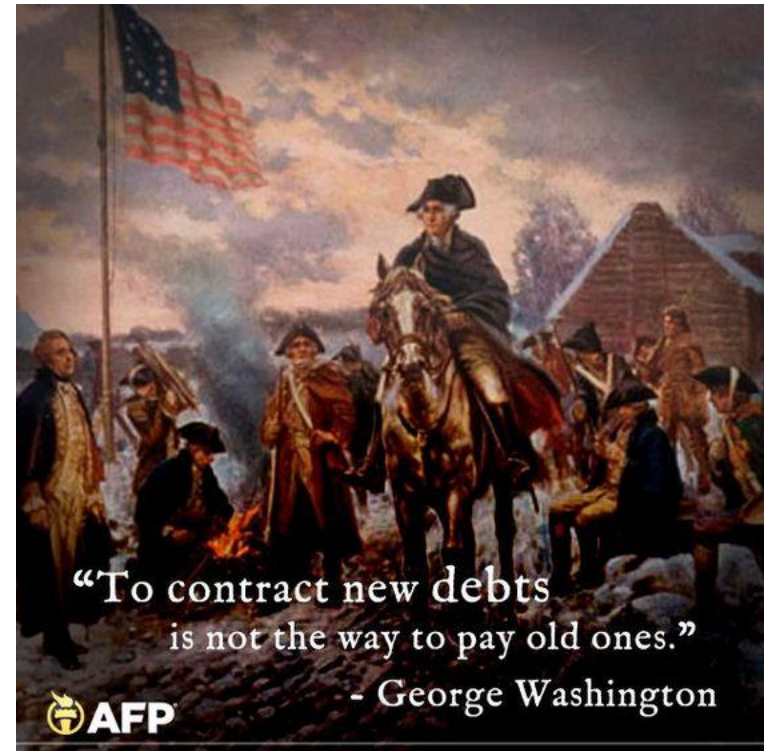
# A cornerstone of the Revolution

- Franklin wrote that “the whole is a mystery even to the politicians, how we could pay with paper that had no previously fixed fund appropriated specifically to redeem it. This currency as we manage it is a wonderful machine.”
- Thomas Paine called it a “corner stone” of the Revolution.
- The problem again was over-printing, this time by the British as a war tactic. By the end of the war, the Continental was devalued virtually to zero.



# Hamilton's work-around: turn debt into equity.

- In 1791, the new country was drowning in debt.
- Per Hamilton's First Report on the Public Credit –
  - \$40M in domestic debt
  - \$12M foreign debt
  - \$25M state debt incurred in the Revolution.
  - **\$77M total**





# The First US Bank

- Hamilton solved the problem with debt-for-equity swaps.
- State debt was accepted in partial payment for stock in the First US Bank, paying a 6% dividend.
- The Bank leveraged this capital into credit, issued as the first US currency.





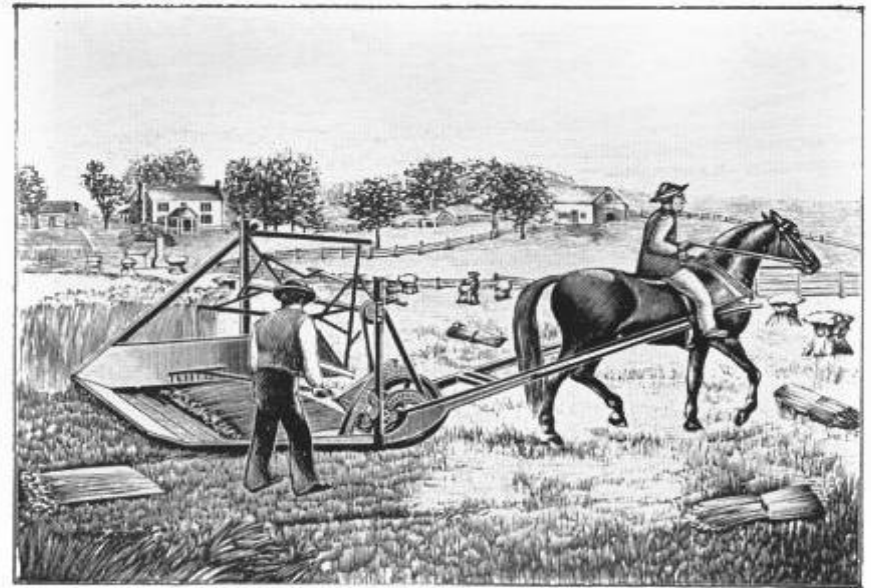
# Putting fractional reserve banking to better use.

- BUS loans were based on the fractional reserve model. Hamilton wrote, "It is a well established fact, that Banks in good credit can circulate a far greater sum than the actual quantum of their capital in Gold & Silver."
- That was the model of the Bank of England, the financial engine of the oppressors; but there were fundamental differences between the BUS and BOE models: one was for public development, the other for private gain.



# A bank for agriculture and industry

- Hamilton's bank was intended to establish a sovereign currency, a banking system, and a source of credit to build the nation, creating productive wealth, not just financial profit.
- He said a bank's function was to generate active capital for agriculture and manufactures, increasing the quantity and quality of labor and industry.



**The original McCormick reaper**  
As invented in 1831

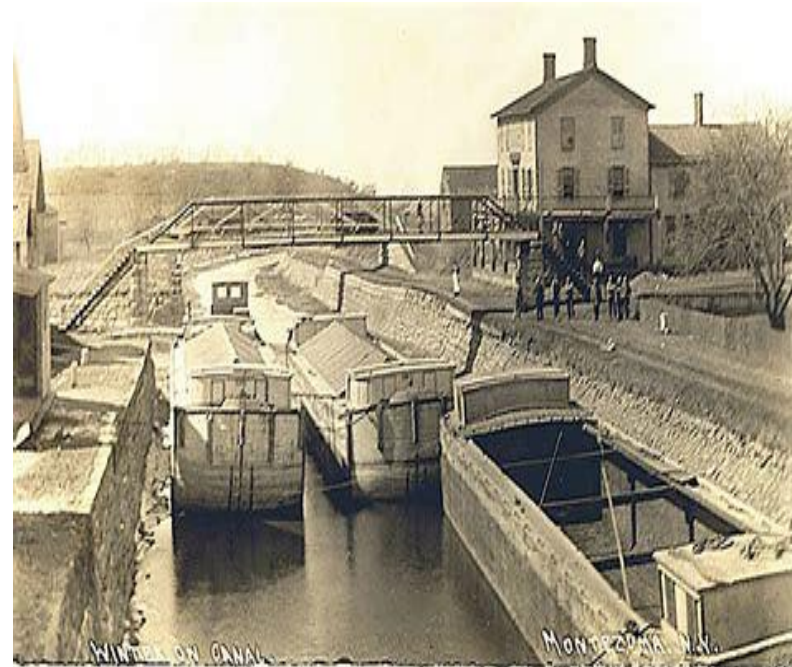
# The Bank of England and the “British System”

- Only later did Wall Street use this credit for speculation rather than building the economy, gouging the public with usurious interest rates for short-term financial gain.
- That predatory model was what early American economists called the “British System,” geared to exploiting the colonies through “free trade” and the government through usurious interest payments.



# The first national development banks

- Per Hamilton's system of Public Credit, the primary function of the BUS would be to issue credit to the government and private interests for internal improvements and other economic development.
- It was thus a national development bank, and so was the 2<sup>nd</sup> U.S. Bank.
- But Pres. Andrew Jackson declared war on the bank and shut it down, leaving the country without a national bank or national currency.





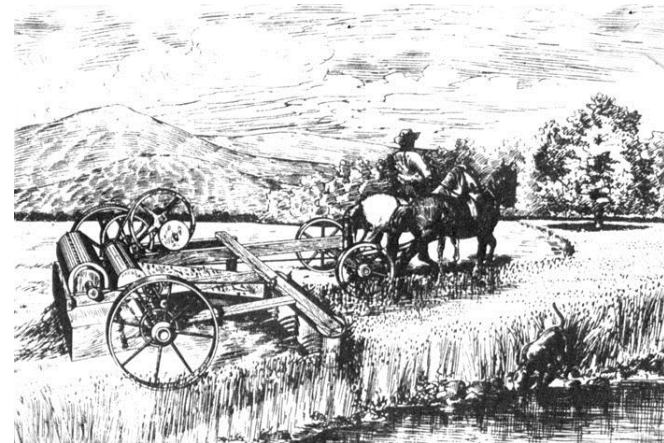
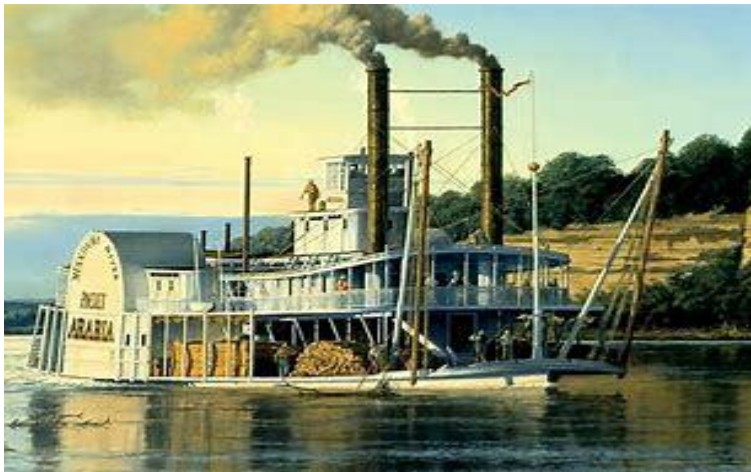
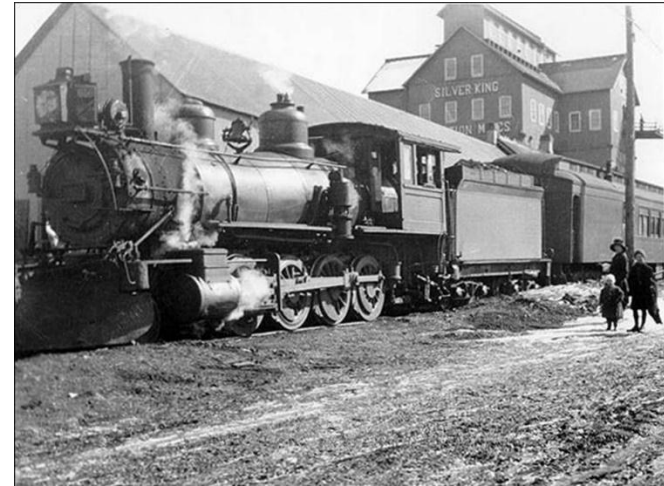
# President Lincoln avoided a crippling civil war debt by returning to the “American system.”

- He issued paper Greenbacks, doubling the money supply.
- His government founded the National Bank system: national banks had to capitalize their banknotes with government debt on the Hamiltonian model.
- These new monies funded the war effort and rapid economic development, including the transcontinental railroad – which actually returned a profit to the government.



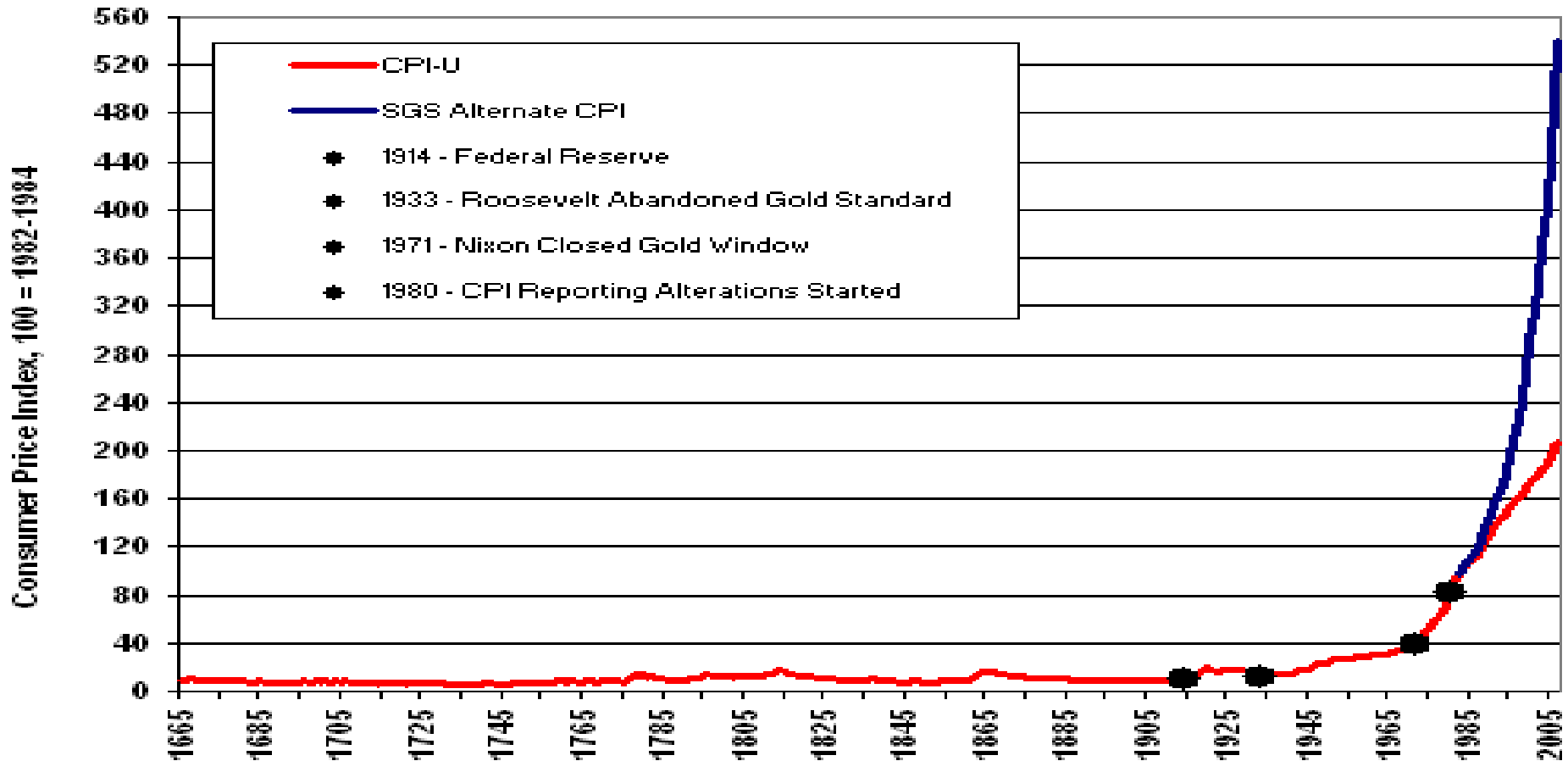
# The Lincoln Administration triggered rapid economic expansion.

- Transcontinental Railroad: Two lines linked the nation by 1869.
- Factory output boomed, due to increased transportation infrastructure.
- Mechanization allowed agriculture to flourish, despite 1M men under arms.



The money supply was doubled but did not trigger price inflation. Why? Supply and demand went up together.

**Consumer Inflation in the American Colonies/  
United States 1665 to 2007, CPI vs. SGS Alternate**  
Sources: ShadowStats.com, Robert Sahr, BLS



But Lincoln was assassinated, the Greenbacks were discontinued, and silver was demonetized. A deep depression again resulted.





# Meanwhile, the American System and its leaders inspired an international movement.

- Other British colonies revolted, including Australia, New Zealand and Canada.
- And other countries rebelled against the British imperial free-trade doctrines and developed their own infrastructure and manufacturing, including Germany, Ireland, Russia, Japan, India, Mexico, and South America.



In the early 20<sup>th</sup> century, public development banks flowered in other ex-British colonies – first Australia, later New Zealand and Canada.

- Commonwealth Bank of Australia, founded in 1911, followed the Hamiltonian model. It funded major national development and Australia's participation in WWI, simply with national credit issued by the bank.
- In Canada from 1939-74, the government borrowed from its own Bank of Canada, effectively interest-free. Major government projects were funded without increasing the national debt.



# Japan and the Postal Bank Model

- Japan Post Bank was at one time the largest depository bank in the world.
- Called “Japan’s second budget,” it invests chiefly in government bonds.
- But it has slowly been privatized and is now only half owned by the government.
- The US also had a popular postal banking system, established in 1912, closed in 1957.



# Then we got the Federal Reserve – and the worst depression in history.

- A major banking crisis in 1906 led to passage in 1913 of the Federal Reserve Act, modeled on the Bank of England.
- The 12 Federal Reserve Banks are all 100% owned by the private banks their districts.
- The national currency is issued as “Federal Reserve Notes,” which are lent or sold to banks and bond dealers.
- Rather than issuing dollars, the US government issues debt (bonds, bills and notes), which it sells on the “open market” to these bond dealers at interest.
- Dollars are created on the books of banks as loans.





# Today private banks, not the government, issue most of the money supply.

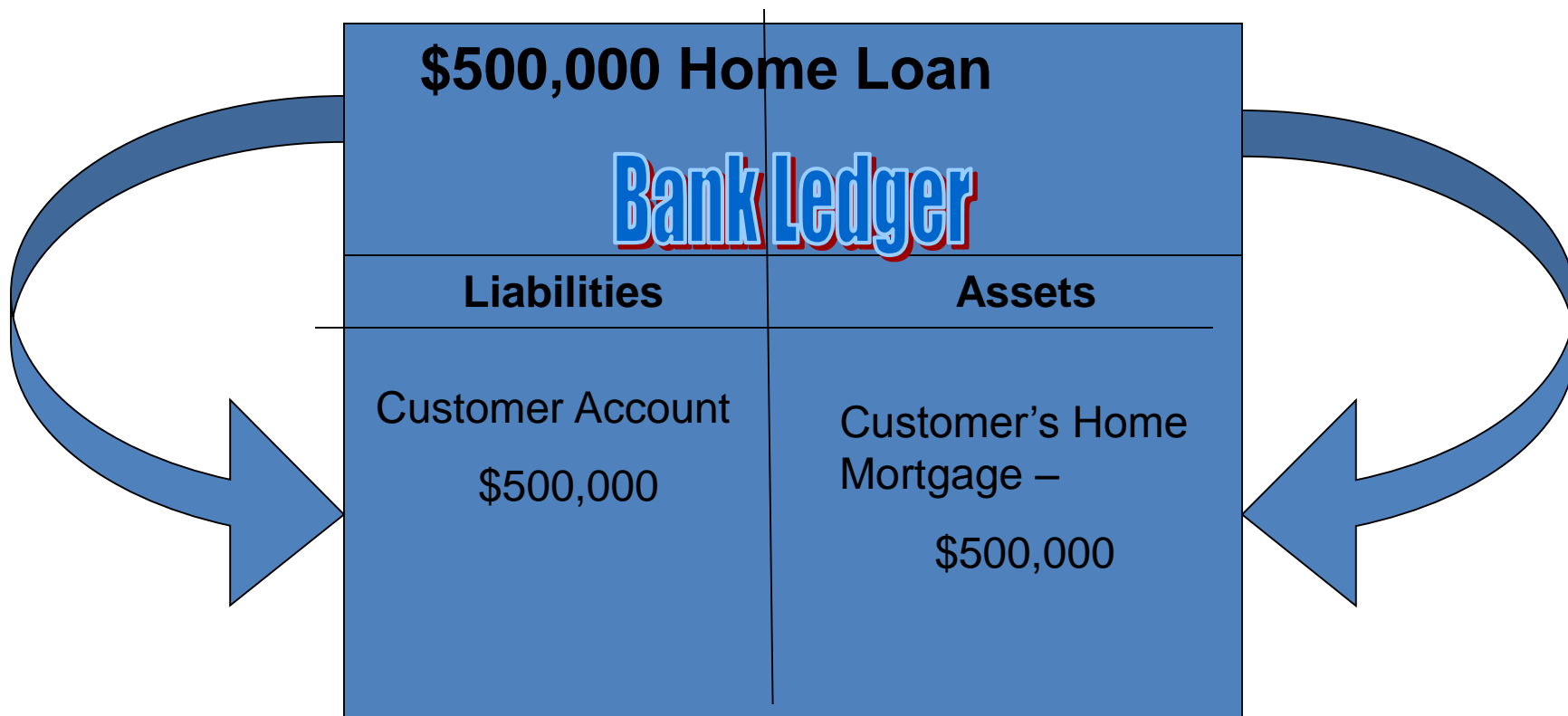
- Before the 1860s, banks printed paper promissory notes (“banknotes”) redeemable in gold and lent them to borrowers, typically leveraged at 10 to 1.
- The National Bank Act imposed a 10% tax on state-chartered banks issuing their own banknotes. Many banks avoided the tax by replacing banknotes with checkbooks: the loan amount was just written into the borrower's account as a "deposit."
- Deposits are counted in the M2 money supply. That is how banks "create money" today ...



# Per the Bank of England:

- '[B]anks do not act simply as intermediaries, lending out deposits that savers place with them, and nor do they 'multiply up' central bank money to create new loans and deposits ... **Commercial banks create money, in the form of bank deposits, by making new loans.**' ... [B]ank deposits make up ... 97% of the amount [of money] currently in circulation.'
  - *'Money creation in the modern economy', Quarterly Bulletin, 2014 Q1, Bank of England.*

# How banks create money: The magic of double-entry bookkeeping.



Net result: 0.

# Banking alchemy

- Bank A creates \$500K loan =
  - \$500K check =
  - \$500K deposit in Bank B
- Bank B creates \$500K loan =
  - \$500K check =
  - \$500K deposit in Bank A

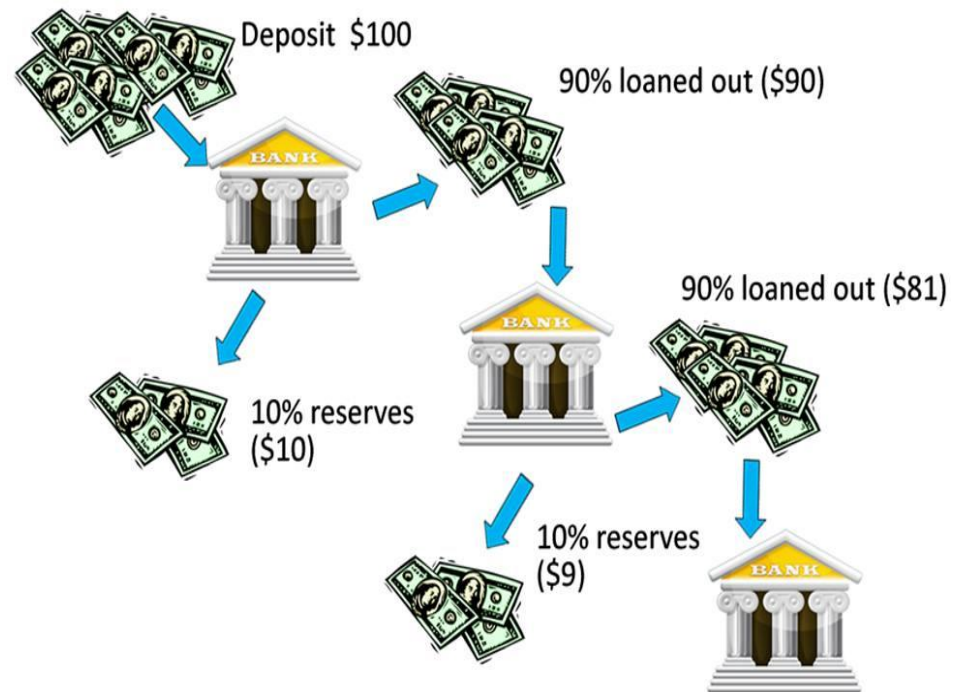


\$1 million created; both banks' books balance



# But there are limits ...

- Capital requirements (typically 10% of assets/loans) protect against default.
- Reserve requirements (typically 10% of deposits/liabilities) protect against bank runs.
- Only the Fed can create reserves, which are used to clear transfers and withdrawals (similar to the gold system but without the gold).



Set up to prevent bank runs, the Fed failed to prevent the worst systemic bank run in history -- and may have caused it.

- Loose credit in the 1920s triggered speculative bubbles on leveraged borrowing. (On a 10% margin, \$1 backed \$9 in loans.)
- Crash of 1929 forced liquidation of assets. Depositors rushed to withdraw funds, triggering runs.
- 9,000 banks failed; \$7B in deposits were frozen; and the money supply shrank.
- The Fed did not intervene.



# FDR then stepped in.

- 1933: bank holiday declared and Glass-Steagall passed –
  - separated commercial from investment banking
  - backed \$100K in deposits with **FDIC insurance**.
- Numerous New Deal programs were passed for infrastructure construction and worker and consumer protections, including Social Security, unemployment compensation, the Fair Labor Standards Act and the National Labor Relations Board.



# For funding, FDR reverted to Hamilton's "American System": leverage bank credit for manufacturing and development.

- The US economy was rebuilt with credit from the government-owned Reconstruction Finance Corporation.
  - \$500 million capitalization
  - Issued bonds
  - Loaned or invested over \$40 billion from 1932 to 1957
  - Funded the New Deal and World War II
  - Net profit to the government: \$690 million

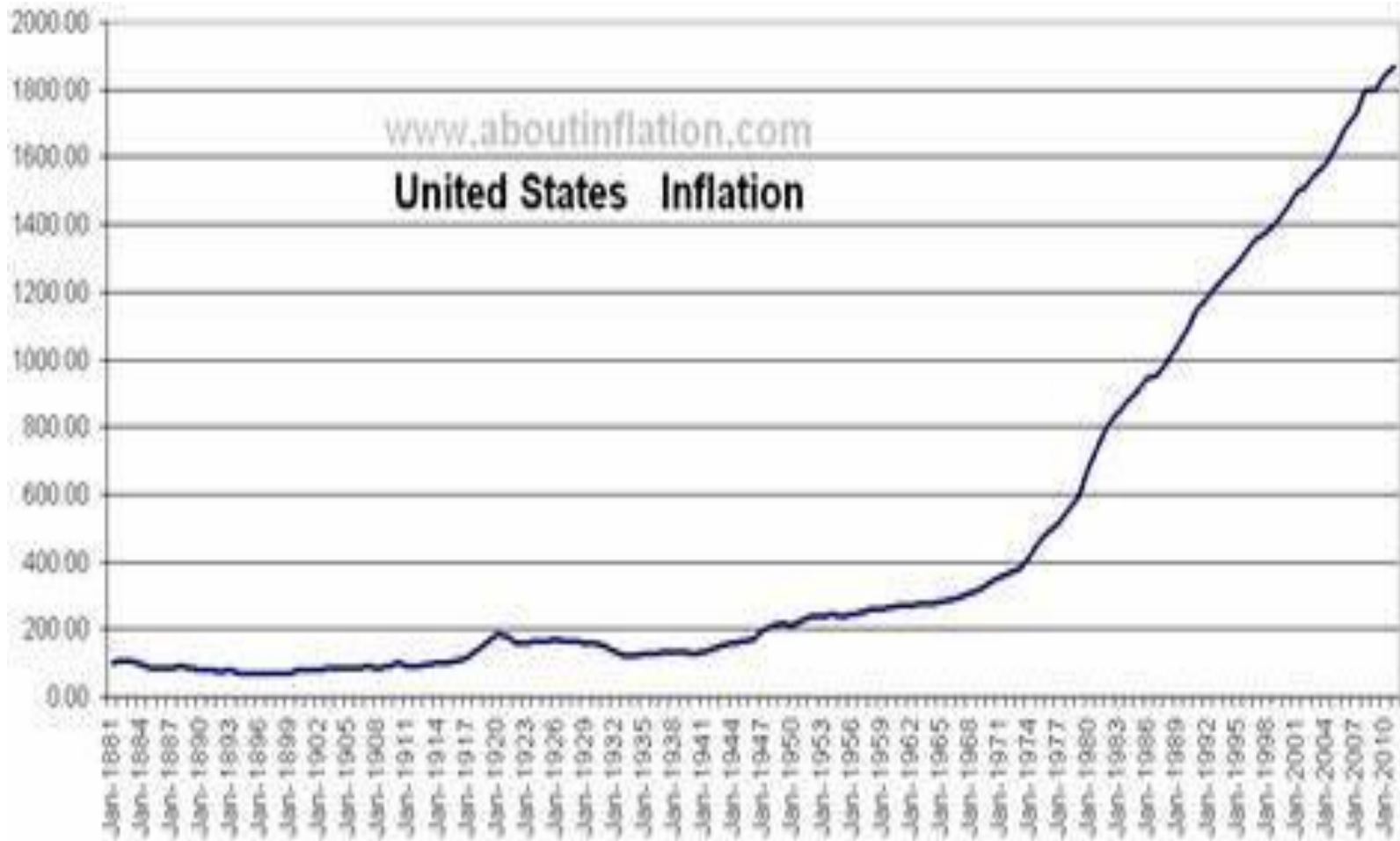




# The RFC's major funding achievements in the New Deal (1932-38)

- 1933---Invested \$50 million to capitalize the **Tennessee Valley Authority**, providing electricity to the rural South.
- 1933---Invested \$400 million to start the **Public Works Administration**, providing large-scale public works construction).
- 1935---Invested \$1 billion to start the **Works Progress Administration**, providing jobs to millions.
- Capitalized many other govt entities:
  - **Rural Electrical Administration**, \$435 million.
  - **Electric Home and Farm Authority**, financing sale of small electrical appliances to farm families.
  - **Home Owners Loan Corporation**-- stopped foreclosures
  - **Farm Credit Administration**
  - **Federal Home Loan Bank Board**--- credit for banks to lend for housing and more.
  - **Federal Farm Mortgage Corporation**--- home and farm loans.
  - **Federal Housing Administration**---FHA insurance for house purchases.
  - **Disaster Loan Corporation**
  - **Commodity Credit Corporation**--- maintain high prices for farm products
  - **Federal National Mortgage Association (Fannie Mae)**---finance home loans

\$40B issued in new, productive loans  
without consumer price inflation.  
Why? Supply increased with demand.



# The RFC provided off-budget funding.

According to James Butkiewicz, professor of economics at the University of Delaware:

The RFC was an executive agency with the ability to obtain funding through the Treasury outside of the normal legislative process. Thus, the RFC could be used to finance a variety of favored projects and programs without obtaining legislative approval. RFC lending did not count toward budgetary expenditures, so the expansion of the role and influence of the government through the RFC was not reflected in the federal budget.

# We need that sort of work-around today!

- Two major infrastructure bills were passed in 2021-22, but they were limited:
  - 2021 Bipartisan Infrastructure Law – chiefly highway programs
  - Inflation Reduction Act of 2022 – chiefly energy security and climate change
- Congress is done for now with appropriations; but critical funding needs remain.
  - Esp. for drought, affordable housing, high-speed rail, power transmission lines.





# A promising bill currently before Congress is H.R. 4052, the National Infrastructure Bank Bill.

- Proposed to be a depository bank, capitalized with federal securities paying a 2% dividend, redeemable after 20 years.
- On the Hamiltonian model, we could in theory turn the \$33T federal debt into a \$330T infrastructure bank!
- The NIB will curb inflation by generating supply, which will rise to meet demand.

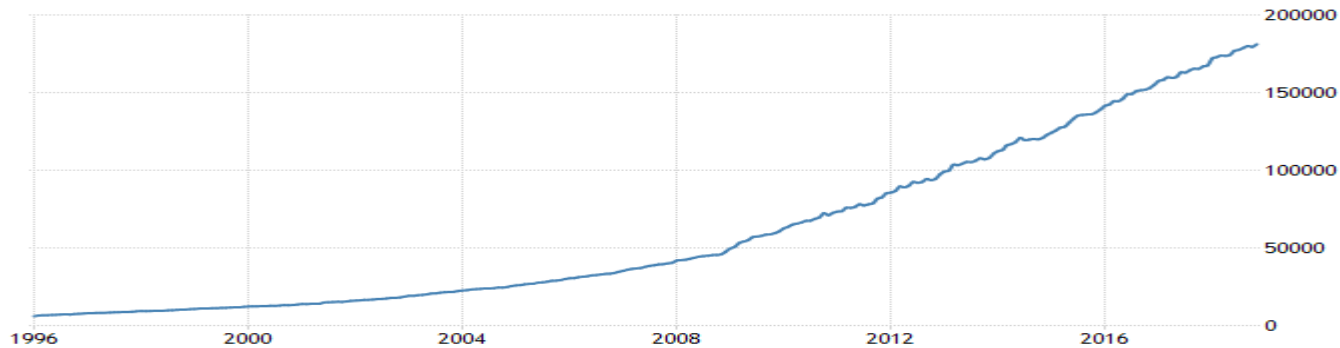


# The solution both to deflationary depression and cost-push inflation is to increase local productivity. Today the stellar model is China.

- It went from one of the poorest countries in the world to global economic powerhouse in 4 decades.
- Among other achievements, China built 12,000 miles of high-speed rail in a decade, along with the world's largest dam and power station. How?
- The government owns 80% of Chinese banking assets, including 3 massive development banks.
- Government banks funded the projects with credit, and the fees repaid the loans.



China's money supply (M2) grew *1800%* in 23 years, yet prices remained stable.

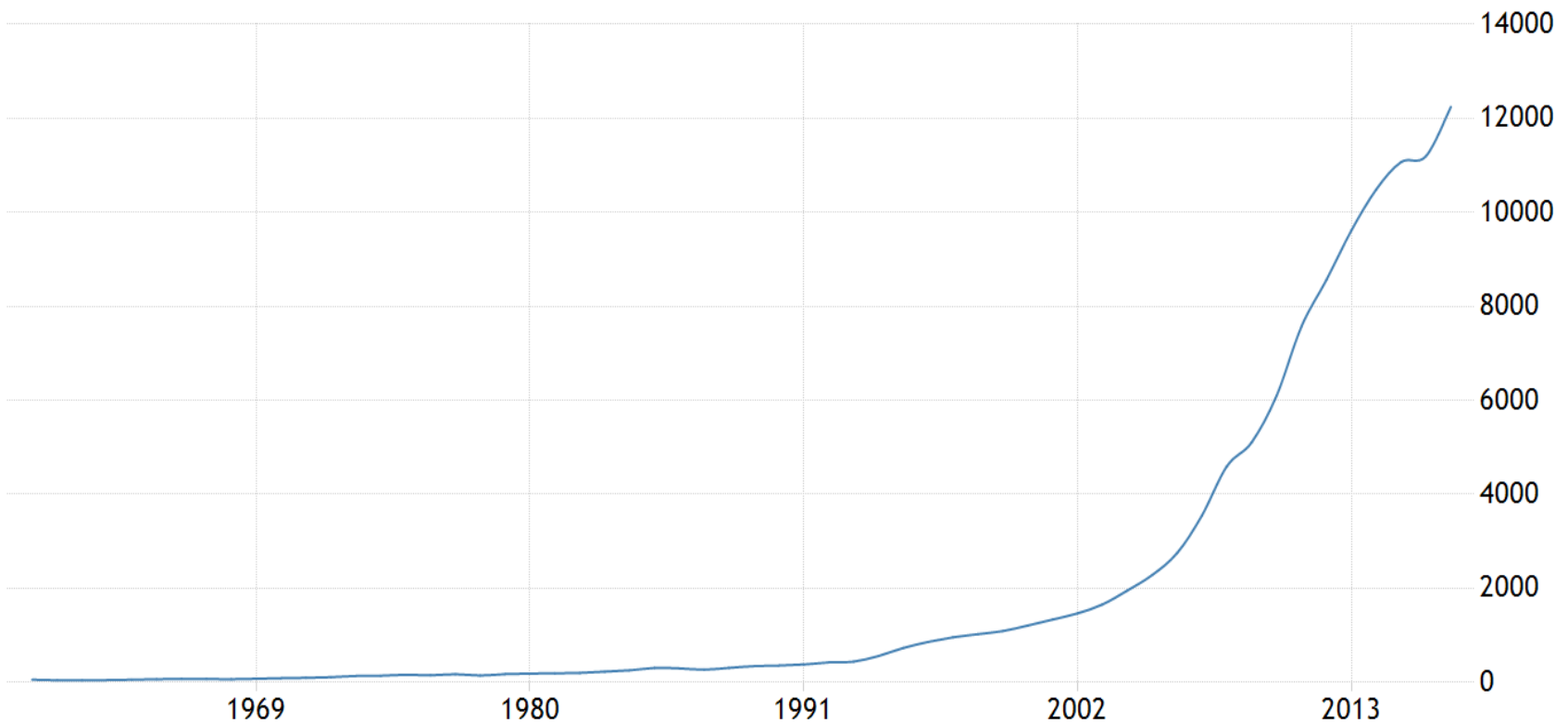


SOURCE: TRADINGECONOMICS.COM | PEOPLE'S BANK OF CHINA



SOURCE: TRADINGECONOMICS.COM | NATIONAL BUREAU OF STATISTICS OF CHINA

Why? China's GDP shot up in tandem.  
Supply and demand remained in balance.



SOURCE: TRADINGECONOMICS.COM | WORLD BANK

# Per Prof. Richard Werner, a network of local banks is also important.

- China has a broad network of local banks, which know the local economy and businesses, and are willing to take risks because of the backing of big national government banks.
- Germany's development bank KfW also works with an extensive local banking network (the Sparkassen banks).
  - KfW provided 1% loans to small businesses during the pandemic.
  - KfW assumes a large part of the risk of business loans for investment or working capital.

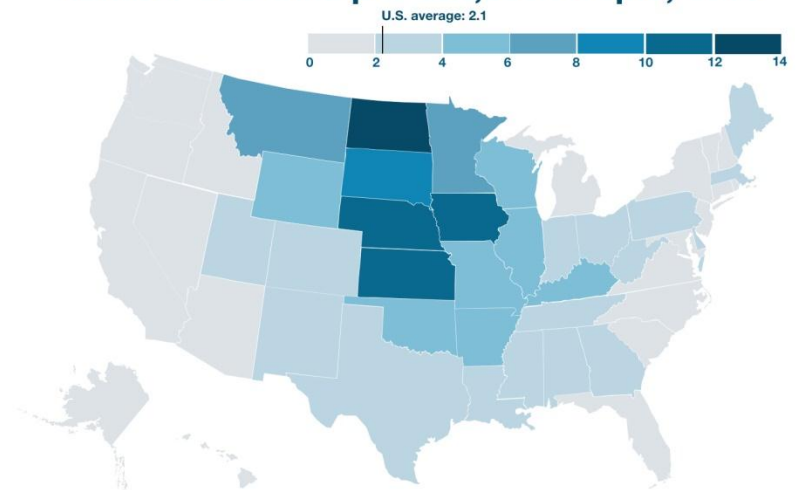




The U.S. has more local banks than any other country in the world, but no national coordinating bank for infrastructure and development.

- Community banks have shrunk from over 8000 to about 5000 in 15 years.
- ND has the most local banks per capita. Why?
- The state-owned Bank of North Dakota partners with them, augmenting available capital and alleviating risk.

Number of Banks per 100,000 People, 2013



Source: Federal Deposit Insurance Corporation

The BND was founded in 1919, following a farmers' revolt against out-of-state banks that were foreclosing on their farms.

- North Dakota was the only state to escape the 2008-09 credit crisis.
- Per the Wall Street Journal in 2014, the BND is more profitable than Goldman Sachs or JPMChase. Per the 2022 BND annual report, it has an ROI of 19% and over \$10 billion in assets.
- ND distributed unemployment benefits through community banks coordinated by the BND 10x faster than the slowest state.
- Small businesses in ND secured more PPP funds per worker than any other state.



## Why so profitable?

# Bank of North Dakota

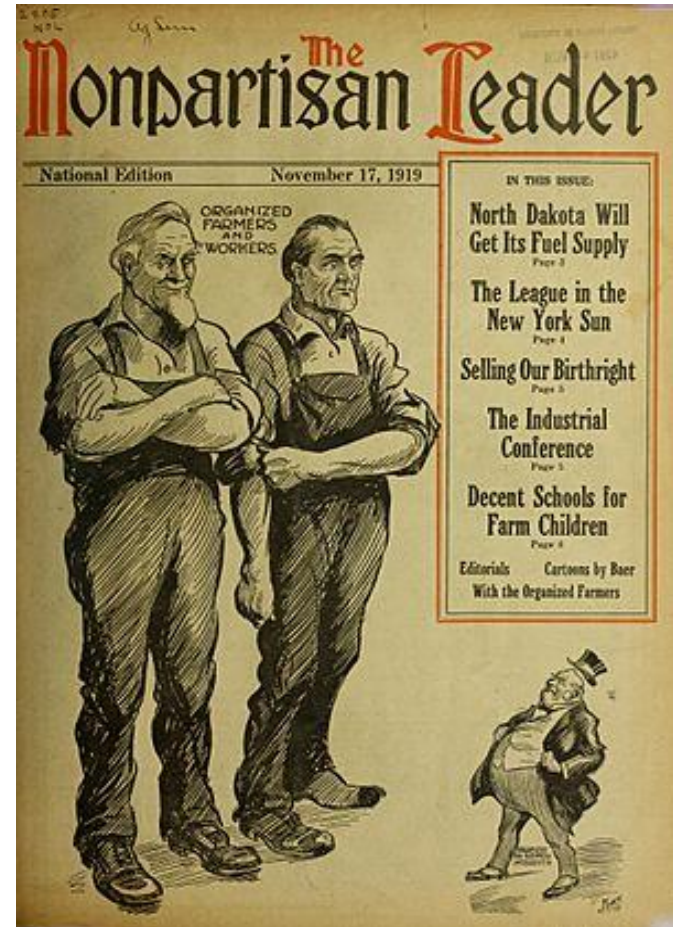
...Outperforms Wall Street - WSJ Reports

- No private shareholders.
- No bonuses, fees, commissions.
- No high-paid CEOs.
- No advertising.
- Massive deposit base – all state revenues.
- Partners with local banks. No need for branches or ATMs.
- Savings are passed on to borrowers and communities.



# Sovereign state money: BND is a “mini-Fed” for the state

- Partners rather than competes with local banks, helping with capitalization and liquidity.
- 6x as many banks per capita as natl avg.
- Escaped this year’s banking crisis – no bank failures or runs. Local economy is thriving.



# Summing up the role of publicly-owned banks in recapturing the money power

- Banks, not governments, create the money supply today.
- We can restore that power to the people by forming publicly-owned banks at local and national levels. They can provide affordable credit for
  - local government
  - local businesses
  - local infrastructure
  - affordable housing
  - community land trusts
  - worker co-ops
  - other under-served sections of the economy





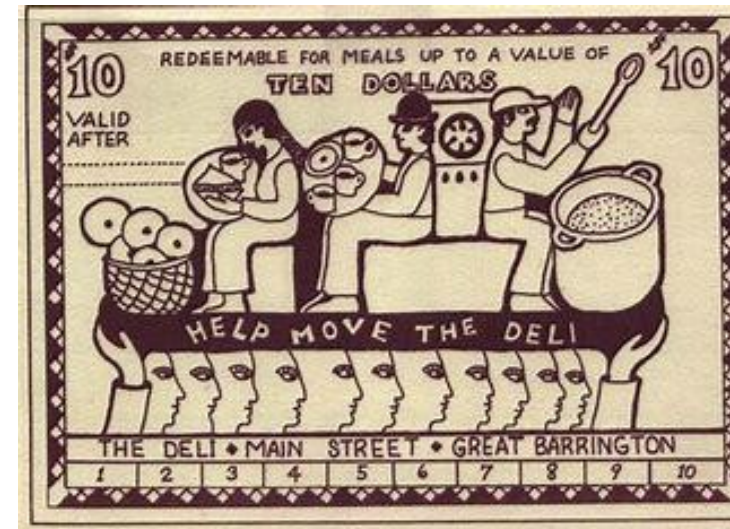
There is another way to restore the money power to the people that is technologically feasible today – **crypto community currencies.**

- Community currencies have been popular for centuries, particularly in recessions, when money is short.
- But they are limited – accepted only in their local communities.
- Today cryptocurrencies can be global, and the technology exists to make them interchangeable – a global crypto web.



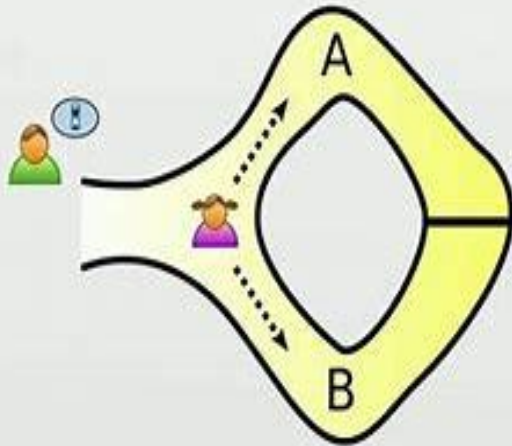
# The technology to create your own digital money.

- Community cryptocurrencies can be food-backed, labor-backed, etc. – essentially futures contracts (invest now, redeem later).
- Cryptos can duplicate cash – transferred on a blockchain without centralized clearing.
- “Smart contracts” can be encrypted with the transactions – dates, grades, specifications.
- Privacy can be protected with zero-knowledge proof technology – only reveal what you want.



# The technology to create your own digital money.

## Zero-knowledge proof



[https://en.wikipedia.org/wiki/File:Zkip\\_alibaba1.png](https://en.wikipedia.org/wiki/File:Zkip_alibaba1.png)

- “In [cryptography](#), a **zero-knowledge proof** or **zero-knowledge protocol** is a method by which one party (the prover) can prove to another party (the verifier) that a given statement is true, while avoiding conveying to the verifier any information *beyond* the mere fact of the statement's truth.”
- E.g. you can validate your balance and credit rating without disclosing your medical records or social media.

# Global innovations

- BRICS countries are discussing a gold-backed or commodity backed currency for clearing trade balances.
  - Trade in national currencies, clear in gold.
  - Similar to the “Bancor” system of Keynes at Bretton Woods (1944).





# All money is ledger money.

- The new BRICS system is not “gold money” but ledger money – a clearing system.
- In fact all money is ledger money – ledger strategies competing to get a sufficient critical mass of consensus to be self-sustaining.
- They rely on trust – the “full faith and credit” of the people accepting the currency.
  - Most businesses won’t take gold or bitcoin; but they will take dollars.
  - BRICS countries don’t want dollars – sanctions broke their trust.





# Money as a public utility.

- “Fiat” money is not unbacked. It is backed by the full faith and credit of the people, a valuable asset, difficult to acquire.
- Like water, power, roads and the airwaves, money and banks connect and serve people collectively. They should be and can be public utilities.
- The technology now exists to create publicly-generated and even self-generated currency that is
  - public and accountable
  - privacy-protected
  - globally interchangeable.





For more information –  
[PublicBankingInstitute.org](http://PublicBankingInstitute.org)  
[EllenBrown.com](http://EllenBrown.com)

