9. Potential reforms I. – The original Chicago Plan and the Chicago plan revisited

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EVROPSKÁ UNIE
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The Chicago Plan

- Original Chicago plan (see Fisher, 1936): banks should hold 100% reserve backing for deposits
- This would separate the monetary and credit functions of the banking system. Fisher claims:
  1. Better control of business cycle fluctuations
  2. Elimination of bank runs
  3. Dramatic reduction of net public debt
  4. Dramatic reduction of private debt
- Benes and Kumhof (2012) support these claims
- Realize that in many aspects the proposal is similar to an increase in equity requirements

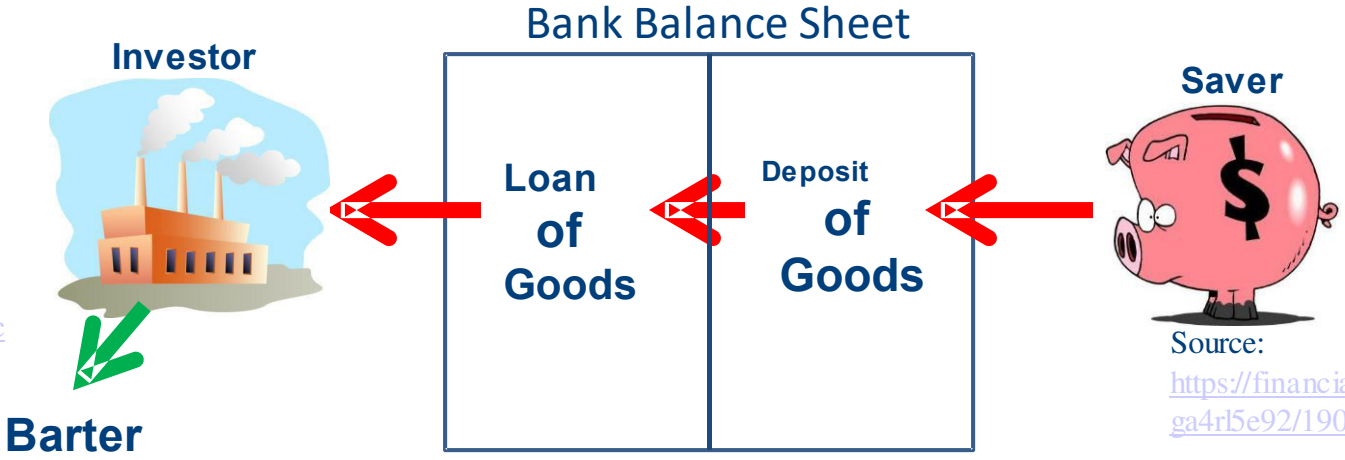
1 Key features

- The 1930s Chicago Plan was the result of a profound debate about how to make the financial system safer in the wake of the Great Depression.

- In a nutshell, the Chicago Plan proposed:
  - **Separation of the monetary and credit functions of banking.**
  - **Deposits must be backed 100% by reserves of public money**.
  - **Credit cannot be financed by creation of bank deposits.**

- **It was supported in the 1930s by Irving Fisher, Henry Simons, Frank Knight, many others, and after WWII by Milton Friedman. Basically, by the founders of the Chicago School.**

Intermediation of Loanable Funds Model



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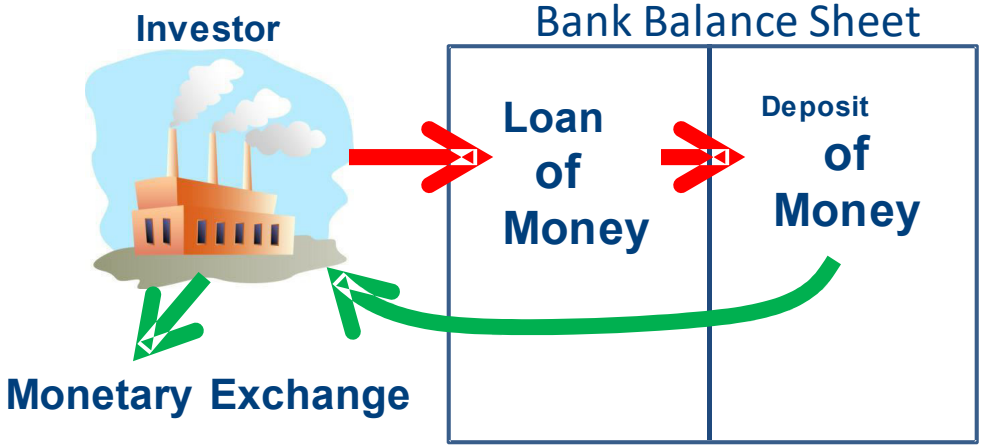
Financing Through Money Creation Model



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- The founders of the Chicago School differed from today's exponents:
  - **Advocacy of laissez-faire in industry**.
  - **But strong rejection of laissez-faire in finance**.
  - **Control of finance seen as precondition for laissez-faire in real economy.**

- Why was the Chicago Plan not adopted?
  - Ronnie Phillips, "The Chicago Plan and New Deal Banking Reforms".
  - The Chicago Plan was proposed as legislation.
  - But it lost out against the Glass-Steagall reform alternative.
  - Reason: Strong lobbying from the banking industry.

2 Overview: Benefits and Costs of the CP

Potential Benefits of the Chicago Plan (CP)

1. **Dramatic reduction of public and private debts**
2. **Dramatic reduction of financial fragility**
3. **Large output gains**.
4. **Better control of financial boom-bust cycles**
5. **No liquidity traps**

Potential Costs of the Chicago Plan (CP)

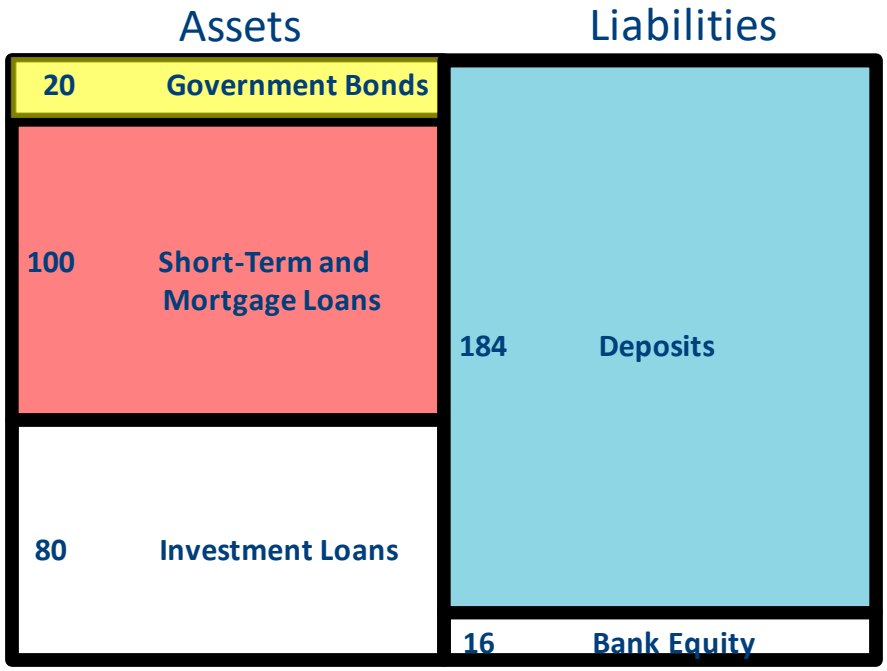
1. Government abuse : Simultaneous fear of two things
   (a) Inflation: Excessive money creation.
   (b) Deflation: Inadequate money creation + circulation (credit).
2. Lack of maturity transformation
3. Money substitutes and monetary control.
4. Transition risks: Can we get everything right?

3 CBDC and the Chicago Plan (see presentation Nr. 10)

- CBDC = Central-Bank Digital Currency.
- CBDC is a hybrid of Fractional Reserve Banking and the Chicago Plan.
- CBDC is now being actively investigated by a number of central banks.
- CBDC realizes many of the benefits of the CP but on a smaller scale.
- Under CBDC, unlike under CP, banks would operate as they do today.

4 Benefits of the Chicago Plan

4.1 Dramatic Reduction of Public and Private Debts



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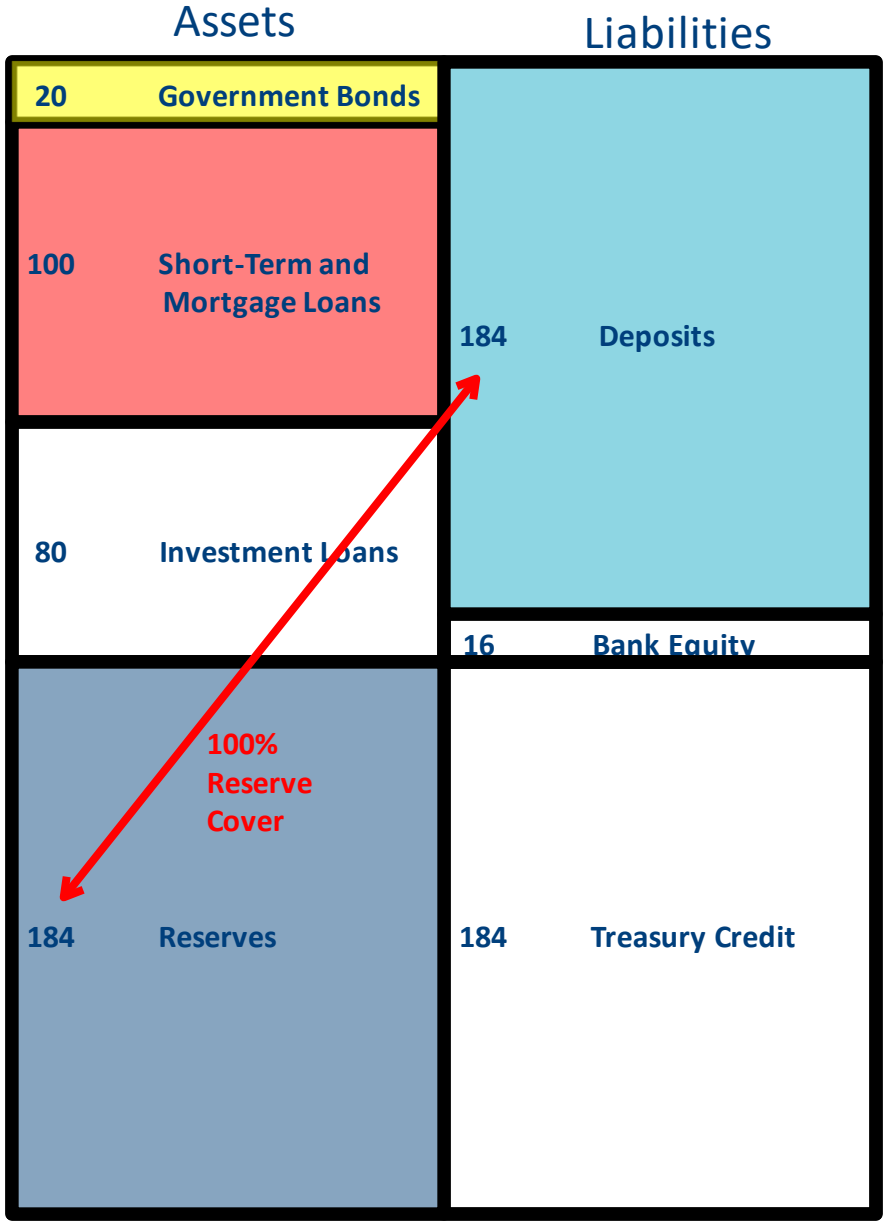
Current Banking System Balance Sheet

Transition to Chicago Plan Step 1



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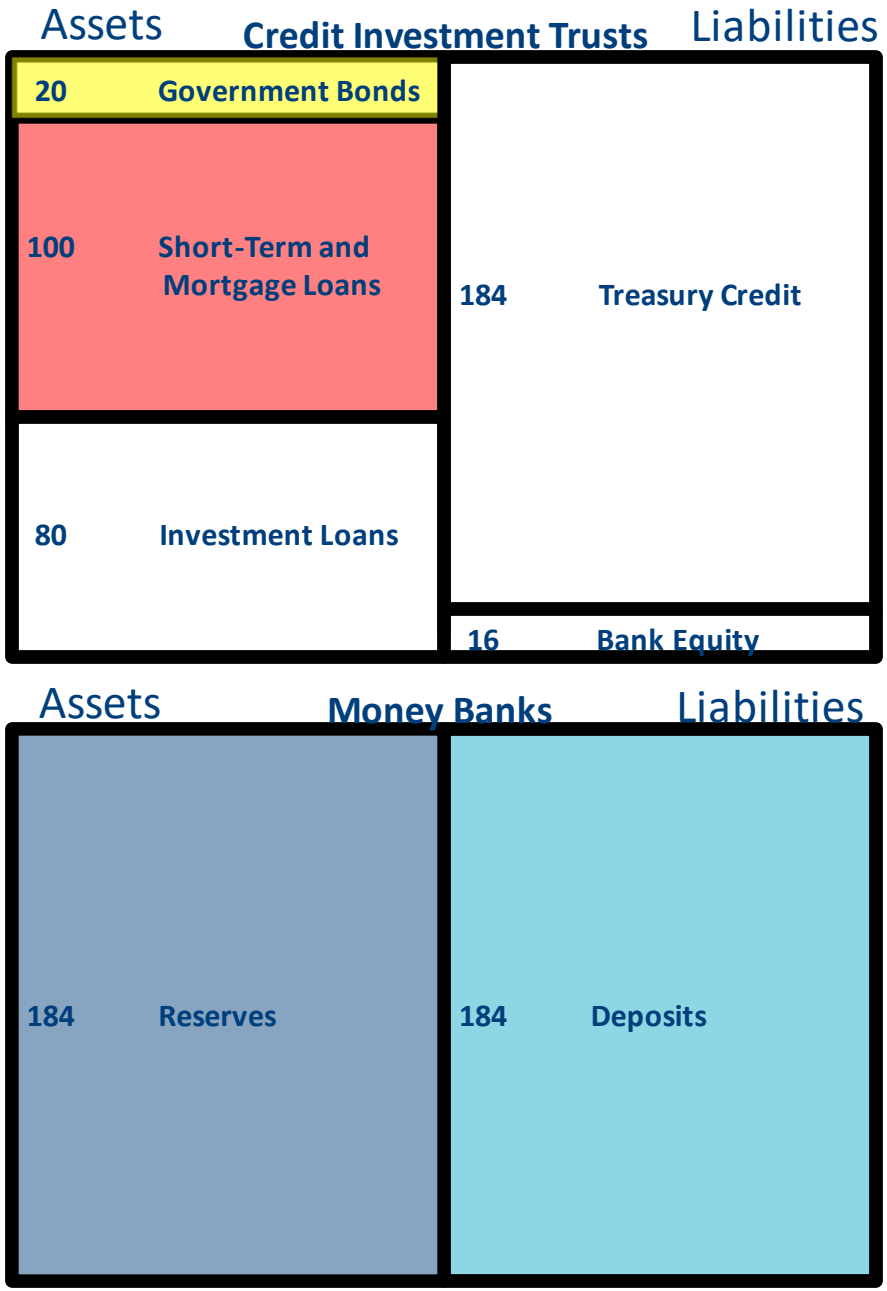
Banks purchase 100% reserve cover against treasury credit IOU

Transition to Chicago Plan Step 2

Banks are split into money banks and credit investment trusts



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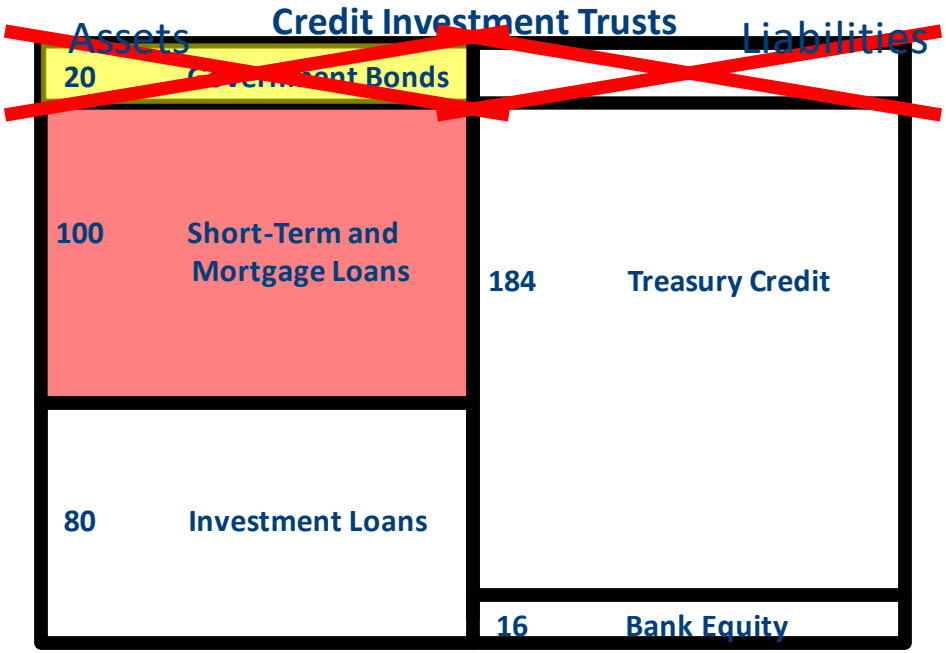
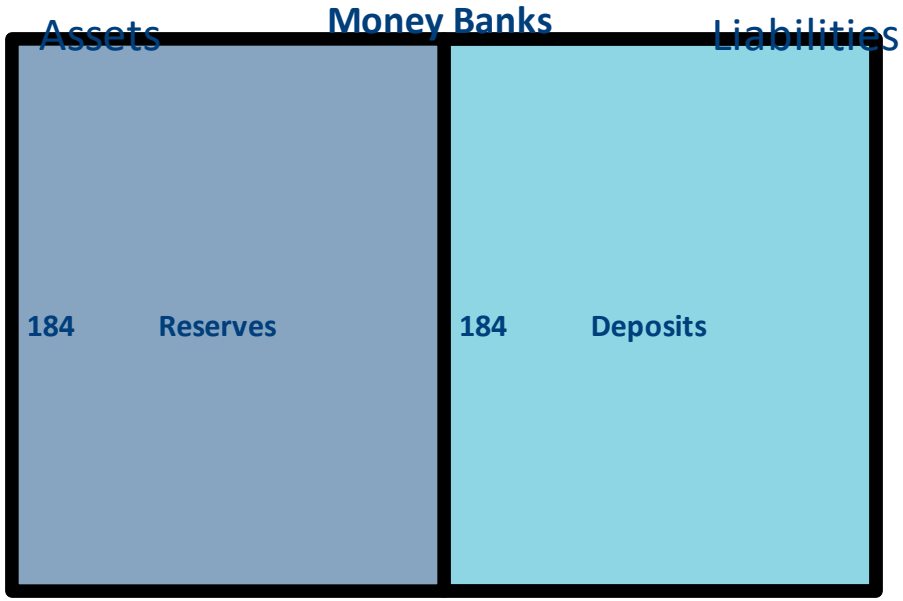
Transition to Chicago Plan Step 3

Bank-held government bonds are cancelled against treasury credit





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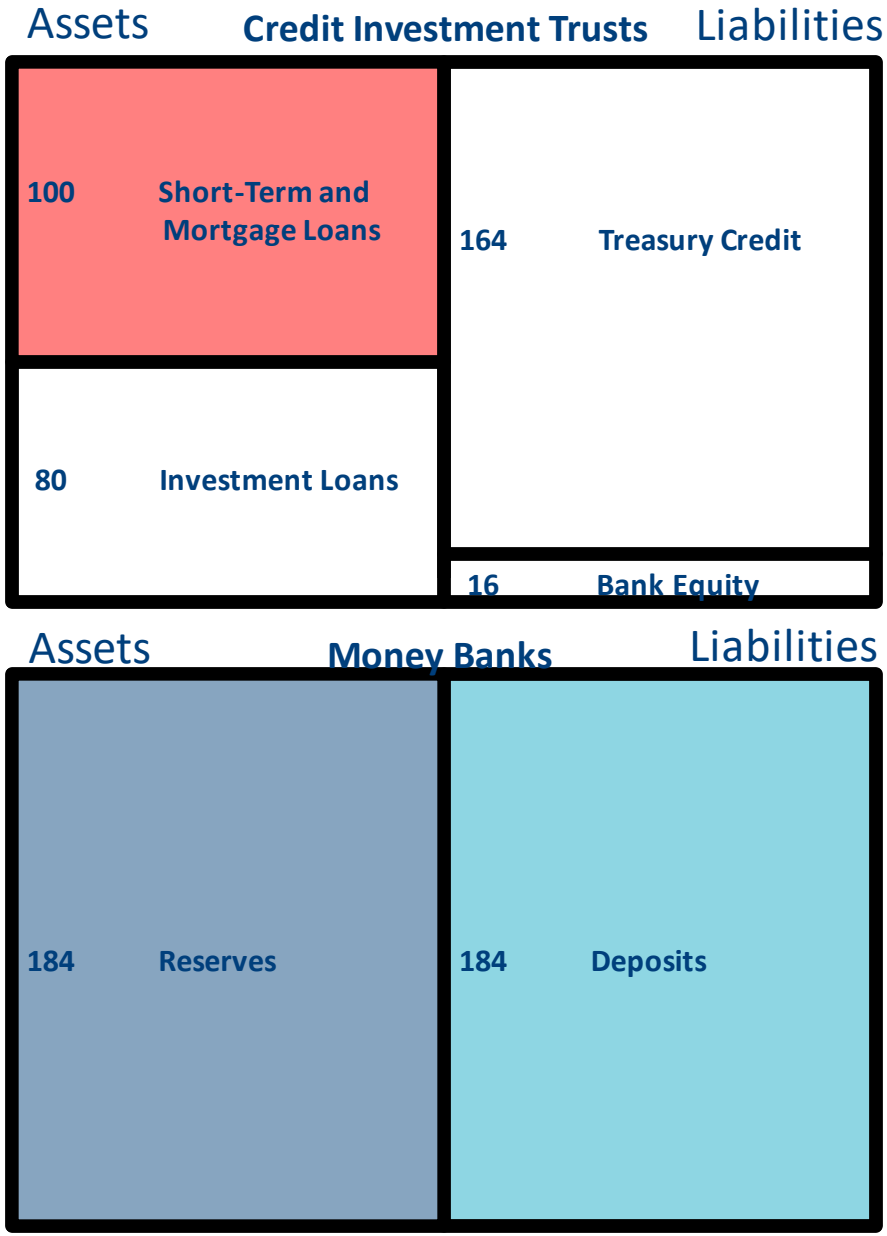
Transition to Chicago Plan Step 3 - completed

Bank-held government bonds are cancelled against treasury credit



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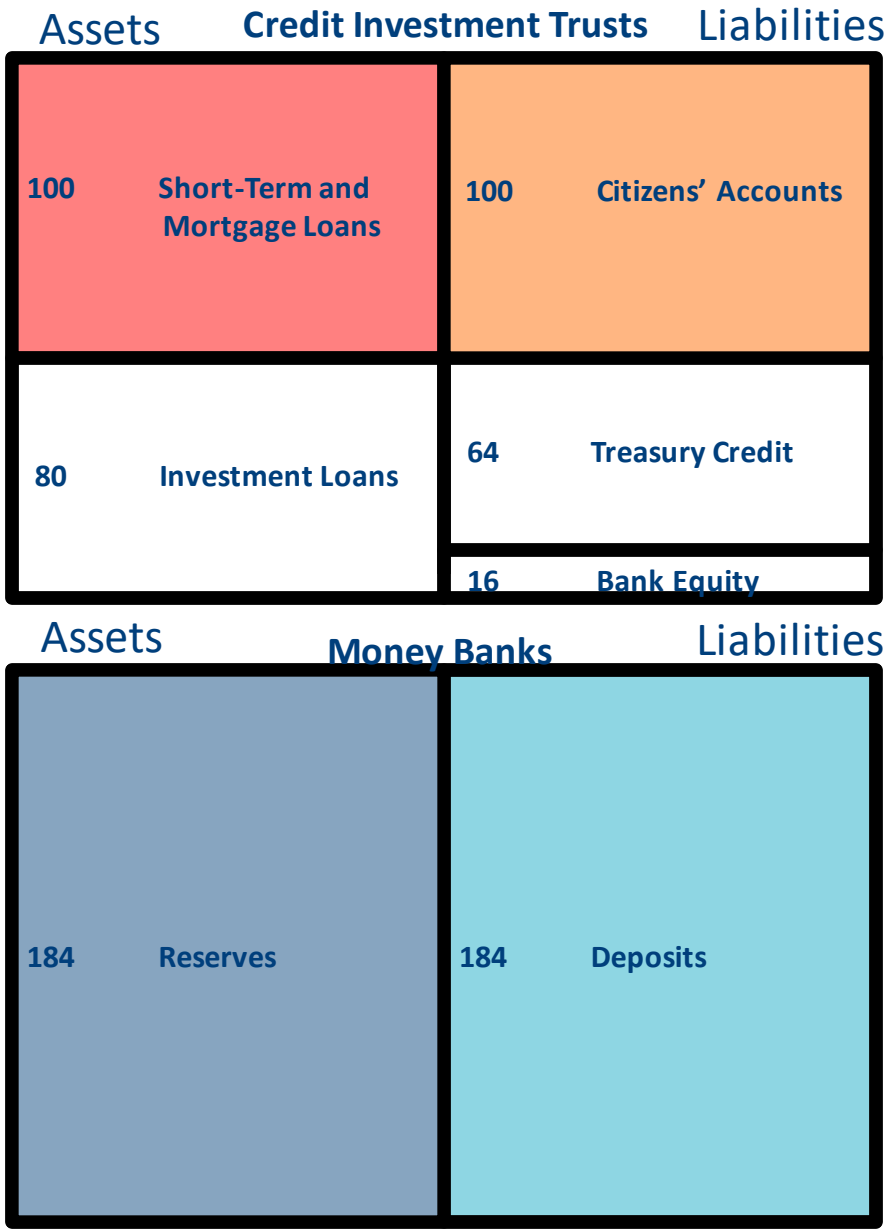
Transition to Chicago Plan Step 4

Part of treasury credit is distributed as a citizens' dividend



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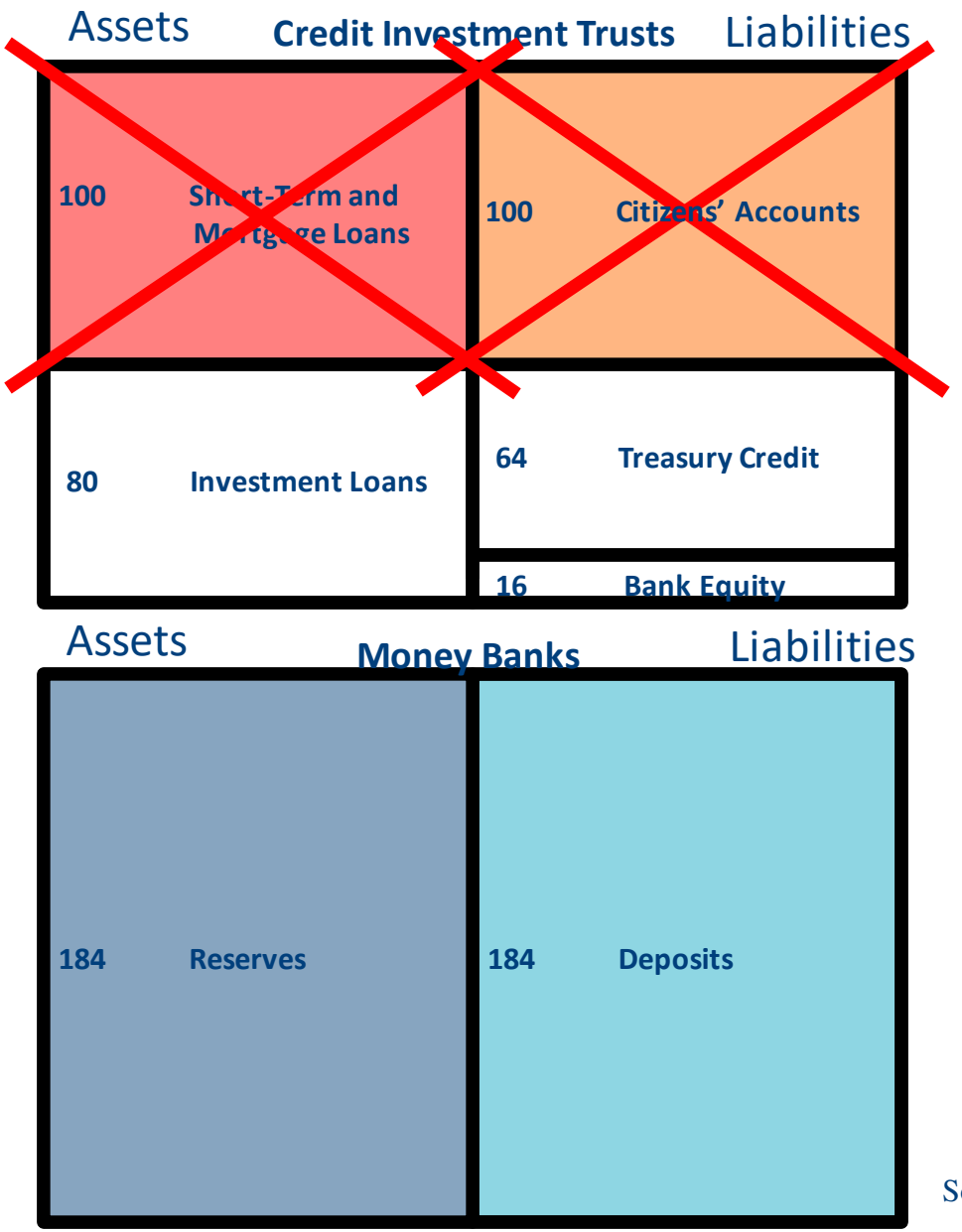
Transition to Chicago Plan Step 5

Mandatory first use of citizens' dividend is repayment of any debts



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Transition to Chicago Plan Step 5 - completed

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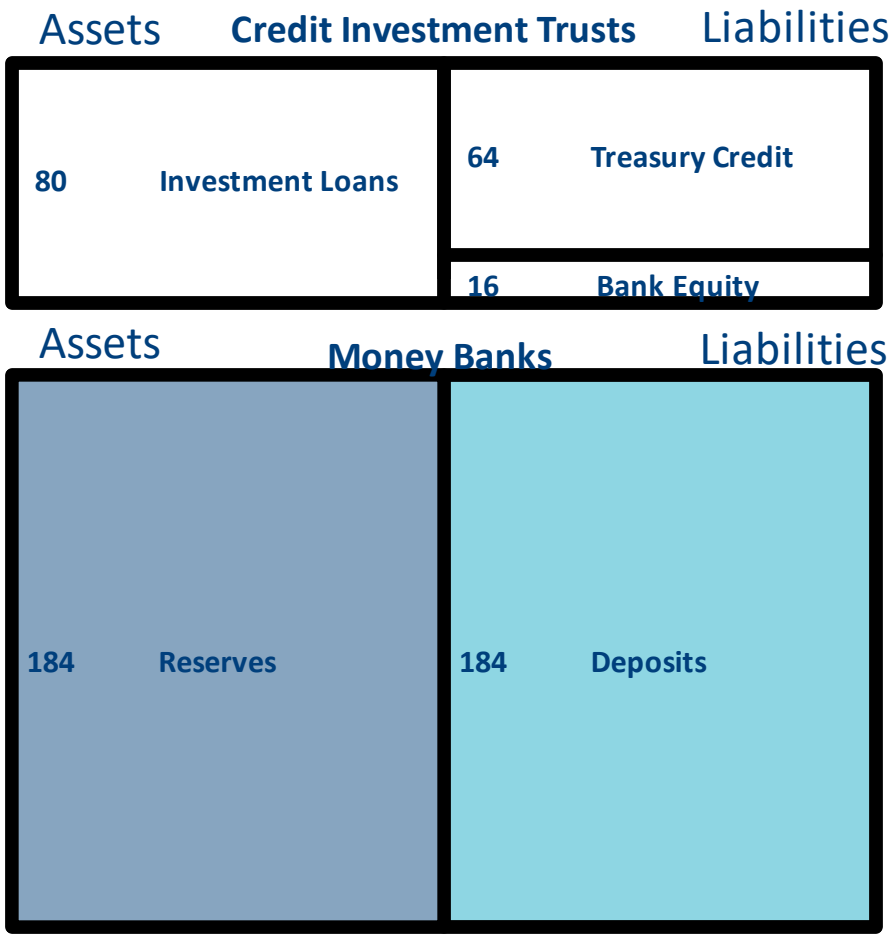

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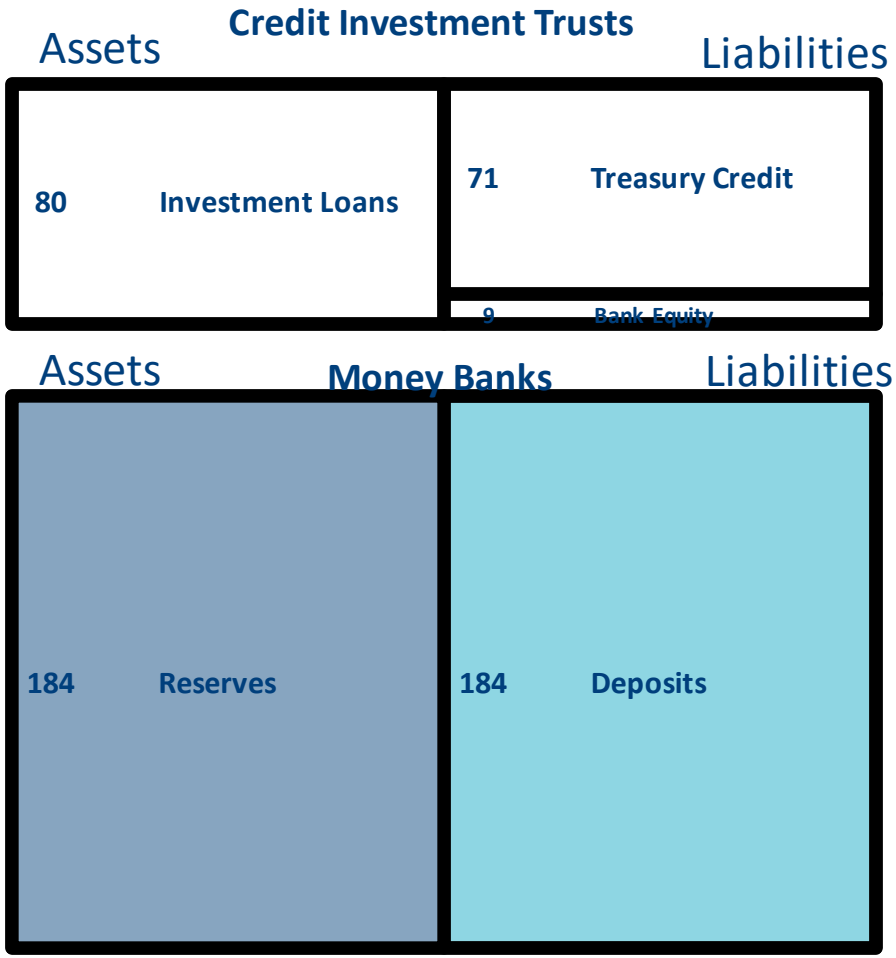
Transition to Chicago Plan Step 6

Bank equity distribution due to reduced balance sheet size

Equity replaced by additional treasury credit

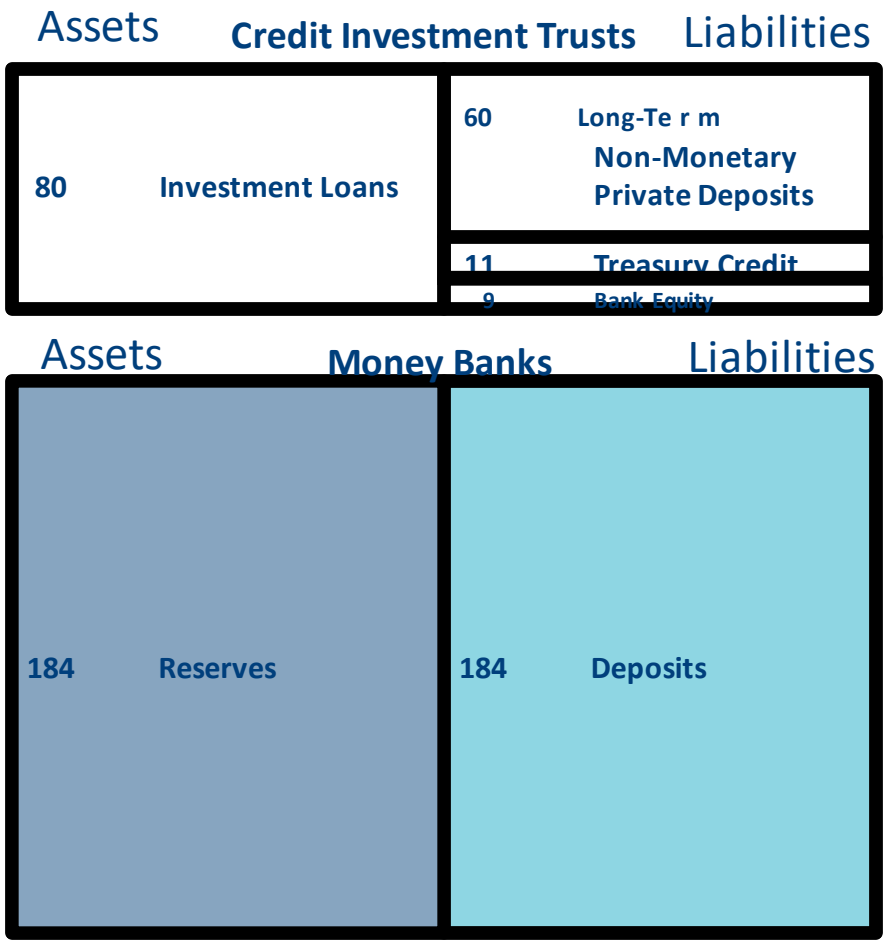


Source: Author

Transition to Chicago Plan Step 7 - Optional

Treasury credit used to repay all remaining government debt held outside the financial system

- This is shown to illustrate that there is no need for government to have a dominant role in credit provision
- But the drawback is that this completely removes an important financial market benchmark and saving instrument



Source: Author

Prior to Chicago Plan

80 Other Net Assets	80 Gov. Bonds (Debt)

Chicago Plan: 100% Reserve Backing

80 Other Net Assets	80 Gov. Bonds (Debt)
184 Treasury Credit (Financial Asset)	184 Reserves (Equity)

Chicago Plan: Final Balance Sheet

80 Other Net Assets	91 Reserves minus Loan Buy-Backs (Equity)
11 Net Treas. Credit	

4.2 Elimination of Bank Runs

- Money is completely safe because its value no longer depends on:
  - The quantity of private debts.
  - The performance of private debts.

- Run on the credit system?
  - Payments system would remain 100% safe.
  - Credit problems could be dealt with separately from payments system.

- Unsustainable credit booms would be much less likely in the first place:
  1. Banks could not create the money they lend.
  2. Depositors of money would be much more careful (no FDIC).
  3. Central bank money creation would be an additional countercyclical tool.

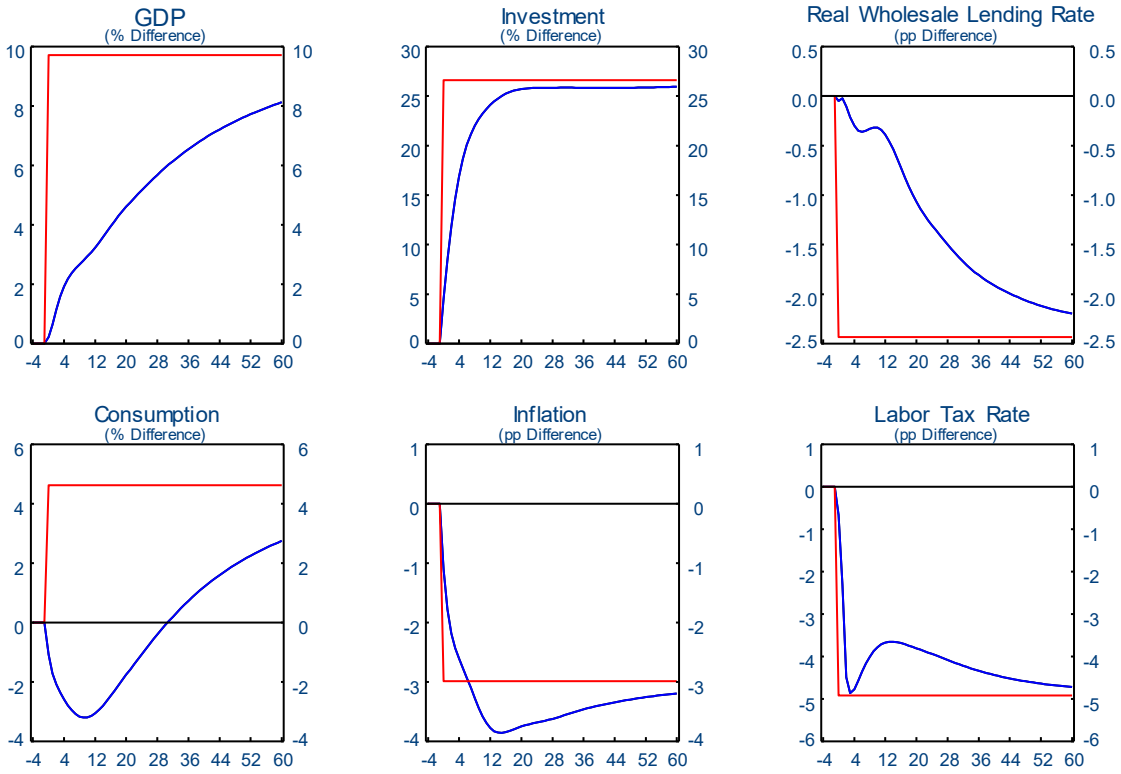
4.3 Large Output Gains

1. Lower real interest rates: Due to lower levels of defaultable debt.

2. Lower tax rates: Due to non-inflationary fiscal revenue from money creation.

3. Lower monitoring costs: No debt monitoring required for the money supply.

4. More and cheaper liquidity: Money creation without costly banking spreads.



Source: Author

4.4 Better Control of Financial Boom-Bust Cycles

- Under fractional reserve banking the money creation privilege of banks is a major source of credit cycles:
  - Banks create their own funds, do not need to obtain them elsewhere.
  - Because these funds are also the medium of exchange, they have government guarantees, which makes banks even more willing to lend.

- Under the Chicago Plan this privilege is removed:
  - Intermediary banks must first persuade investors to make a cash deposit.
  - This risky deposit has (needs) no government guarantee of any kind.
  - Investors will therefore be much more cautious.

- Summary — Key Factors in the Prevention of Credit Cycles:
  1. Banks could not create the money they lend.
  2. Depositors of money would be much more careful (no FDIC).
  3. Central bank money creation would be an additional countercyclical tool.

4.5 No Liquidity Traps

- Definition of liquidity trap: Central bank loses its ability to stimulate the economy by increasing the money supply (or lowering the interest rate).

- Under Fractional Reserve Banking:
  - Central bank only controls narrow money.
  - Increasing broad money is like pushing on a string.

- Under the Chicago Plan:
  - Central bank directly controls broad money.
  - Increasing broad money is like pushing on a steel rod.

- A similar argument holds for lowering the policy rate below zero.

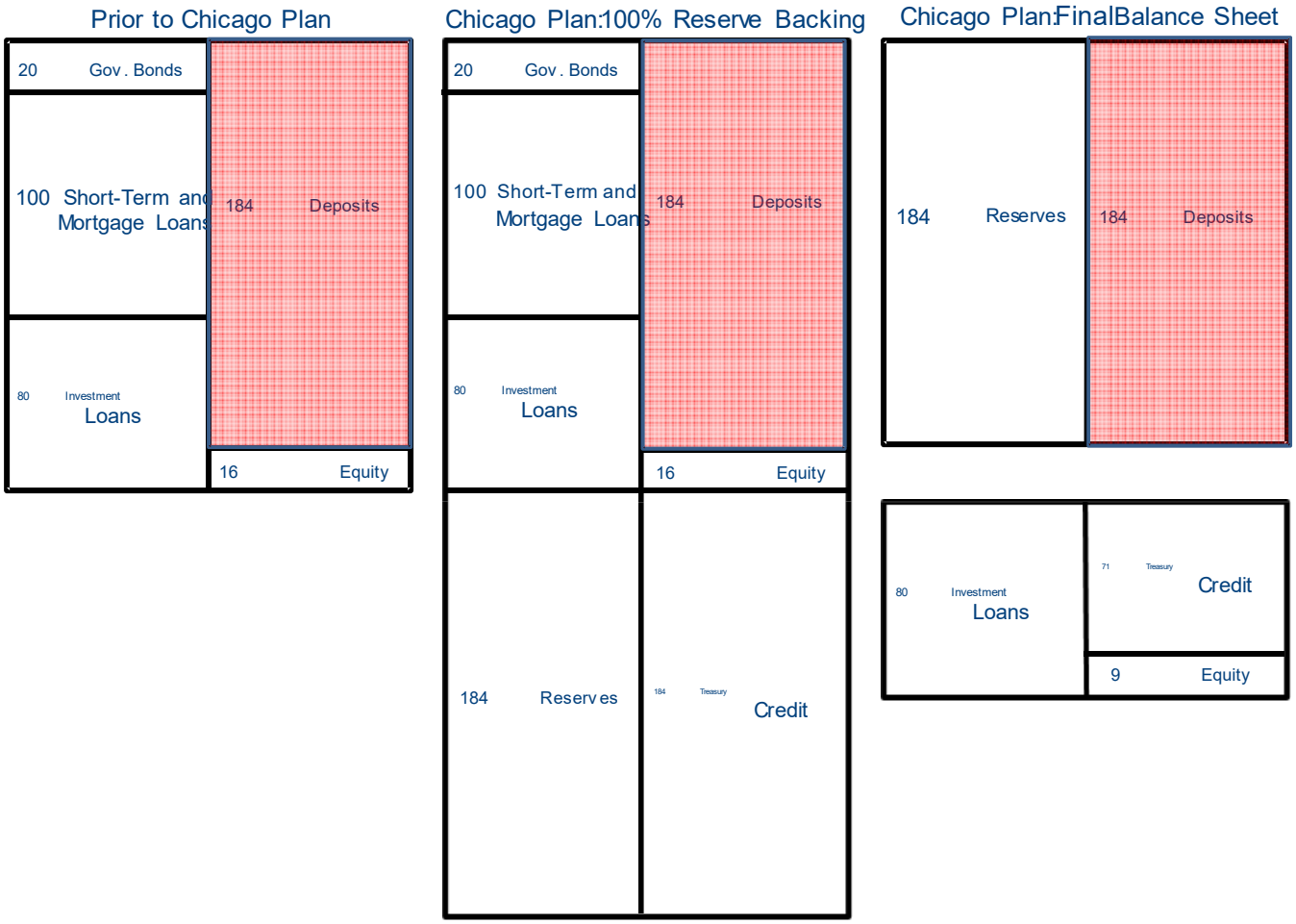
5. Costs of the Chicago Plan

5.1 Government Abuse #1: Too Much Money and Credit

- Idea: Public money creation becomes excessive and leads to inflation.
- Counterargument: No reason to expect inflation, for three sets of reasons:
  1. Monetary Theory.
  2. Monetary History.
  3. Institutional Arrangements for Money Issuance.

5.1.1 Government-Issued Money and Inflation - Theory

- Inflation is determined by the relative quantities of
  - goods and
  - money in private hands.
- CP: Quantity of money in private hands remains virtually unchanged.
- This can therefore not be inflationary.



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5.1.2 Government-Issued Money and Inflation - History

- A long line of distinguished thinkers has advocated government money issuance under the rule of law.
- Historical experience is very strongly in favor of it:
  - Periods of private money issuance: Regular financial crises.
  - Periods of government money issuance: Stability, far fewer crises.
- Are the many financial crises of the last 100 years a counter-argument?
  - This would be a serious logical error.
  - Over the last 100 years governments have only ever been in charge of narrow money, and private banks in charge of overall money.

5.1.3 Government-Issued Money and Inflation - Institutional Arrangements

- Proposal: Turn money issuance over to a fourth power of government.
- Constitutional independence, in U.S. context, similar to the Supreme Court.
- This would insulate money issuance from pressures coming from both:
  - Government.
  - Private interests.

5.2 Government Abuse #2: Too Little Money and Credit

- Idea: Small businesses will be starved of credit and money.
- Counterargument: This is a question of price. What does the model say?

1. Implications of much lower debt levels:
   - Private debt↓⇒leverage↓⇒spreads↓⇒cheaper borrowing.
   - Private cheap deposits↓⇒lending rates↑⇒ more expensive borrowing.
   - Public debt↓⇒leverage↓⇒risk-free rate↓⇒cheaper borrowing.
   - Our paper: Net effect is cheaper borrowing.
   - Average firm is less likely to have to be in debt to obtain cash.

2. If borrowers need to borrow:
   - There would be a huge interbank market.
   - Small variations in velocity could accommodate additional loan demand.

5.3 Lack of Maturity Transformation?

- Idea: System is unable to offer desired maturity profiles.
- Counterargument: Maturity transformation is not an end in itself
  The point is maturity, not transformation!
- Maturity transformation accomplishes two objectives:
  1. Provides desired maturity profiles:
     - Short-term liquid assets for savers.
     - Longer-term illiquid liabilities for borrowers.
  2. May reduce borrowing costs (not necessarily if banks have market power).
- The Chicago Plan not only accomplishes both objectives, it does better:
  1. Desired maturity profiles are available without maturity transformation.
  2. Borrowing costs are lower due to the large debt-to-equity swap.

5.4 Money Substitutes and Monetary Control

- Idea: Public monetary control impossible due to money substitutes.

- Counterargument: There are many reasonable countermeasures
  1. Only public money accepted by government: Private money less viable.
  2. No deposit insurance for private liabilities: The essence of money is trust!
  3. No tax advantages for borrowing + tax advantages for equity financing.
  4. Maturity mismatch regulations:
     (a) All short-term lending must be funded by 100% equity.
     (b) All longer-term lending must be funded by:
        — Equity.
        — Maturity-matched debt liabilities.
  5. Legal incentives:
     (a) Receiving private monies is legal and they can be kept.
     (b) Paying with private monies is illegal. Payees can sue for 2nd payment!
  6. Outright legal prohibition.

5.5 Transition Risks

- Transitioning to the Chicago Plan:
  - Would eventually have large benefits as outlined above.
  - But the transition would be complex and needs extremely careful design:
    - Hardware, software, communication protocols.
    - Security features.
    - Legal aspects.
    - Incentive structures and economics.

- It would therefore be nice if we could take intermediate steps.

- Central-bank-issued digital currencies could be that intermediate step.

- There is fast increasing interest in CBDC among central banks.

6. Conclusions

- The Chicago Plan was designed to make the financial system much safer:
  - Completely safe, 100% crisis-proof payments system.
  - Lending banks that act as conservative intermediaries.
- The CP was originally put forward by conservatives, not radicals.
- The benefits of the CP are potentially very large.
- Arguments behind many perceived costs of the CP are not strong.
- The exception is transition risks ⇒ intermediate steps may be useful.
- CBDC is one possible intermediate step.
- But CBDC need not be intermediate, it has many benefits in its own right.

References

1. **Fisher, Irving, 1936**. "100% Money and the Public Debt," Economic Forum, Spring Number, April-June 1936, pp. 406-420.
2. **Friedman, Milton, 1969**. "The Optimum Quantity of Money," Aldine Pub. Co.
3. **Kumhof, Michael & Benes, Jaromir, 2012**. "The Chicago Plan Revisited," Working Papers 202/2012, International Monetary Fund.

Thank you for your attention!

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