The Chicago Plan Revisited - Debt-free Money, Growth, and Stability

Michael Kumhof

8th Budapest Public Finance Seminar
May 13, 2026

1 Introduction

- 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.

- It was supported by:
  - Irving Fisher, Henry Simons, Frank Knight, Milton Friedman, ...
  - Basically, the founders of the Chicago School.

- In a nutshell, the Chicago Plan proposed:
  - Separation of the monetary and credit functions of banking.
  - **Money Banks**: Deposits must be backed 100% by public money.
  - **Credit Banks**: Financing of credit ...
    * not through ex nihilo creation of private money,
    * only through on-lending of public money.

2 The Model Pre-Chicago-Plan

2.1 Households

- GHH Preferences (simplified):

$$E_0 \sum_{t=0}^{\infty} \beta_{hh}^t \left\{ \left(c_t - \nu c_{t-1} - \psi_h T_t \frac{{h_t}^{1+\frac{1}{\eta}}}{1+\frac{1}{\eta}} \right)^{1-1/\varsigma} / (1-1/\varsigma) \right\}$$

- Cobb-Douglas Technologies:

$$y_t = (T_t H_t)^{1-\alpha} (K_{t-1})^{\alpha}$$

- Deposits-in-advance constraints

$$\varkappa_x D_t^x \geq P_t^x A_t^x$$

Activity

- BGG-style bank participation constraints

$$E_t \left[\kappa_x O_{x,t} \left(\Gamma_{x,t+1} - \xi_x G_{x,t+1} \right) - i_{\ell,x,t} L_{x,t} \right] = 0$$

Collateral

Benefit of Deposits: Ability to Conduct Transactions
Cost of Deposits: Loans-Deposits Interest Spread

If the household/firm wants more deposits:
- Income or spending (saving) do not need to change at all
- In fact, saving cannot increase deposits, it can only move them around
- Instead, loans need to change

- Budget constraint (simplified):

$$\Sigma_x Deposits_t^x - \Sigma_x Loans_t^x + Q_t Capital_t = Income_t - Spending_t$$

Want more deposits?

Get more loans!

Again: Loans Create Deposits

2.2 Wholesale Banks

- Balance sheet:

$$Loans_t + GovBonds_t = Deposits_t + NetWorth_t$$

- Minimum capital adequacy rules impose penalties $\Longrightarrow$ capital buffers.
- FOCs: Spreads between wholesale lending rates $i^x_{\ell,t}$ and the policy rate i_t.

2.3 Retail Deposit Banks

- Monopolistic competitors towards retail holders.
- FOCs: Spreads between the policy rate i_t and retail deposit rates $i^x_{d,t}$.

2.4 Retail Lending Banks

- Bernanke et al. (1999) but with pre-committed lending rates.
- FOCs: Spreads between retail and wholesale lending rates $i^x_{r,t}$ and $i^x_{\ell,t}$.

2.5 Bond Investors

- Hold and arbitrage government bonds and wholesale bank deposits.

2.6 Monetary and Fiscal Policy

- Monetary policy - interest rate on reserves:

$$i_t = (i_{t-1})^{i_i} (\bar{i})^{(1-i_i)} \left(\frac{\pi^p_{t+1}}{\bar{\pi}} \right)^{(1-i_i)i_\pi}$$

- Fiscal policy - deficit rule:

$$gd^{rat}_{b,t} = gd^{rat}_b - d^b \left(b^{rat}_t - \bar{b}^{rat}_{ss} \right)$$

3 The Model Post-Chicago-Plan

- Preferences, technologies, calibration almost completely identical.

3.1 Banks

- **Money banks (**$M_t =$ reserves**):**

$$D_t = M_t$$

- **Credit banks** ($F_t =$ treasury credit):

$$L_t^k = F_t + N_t^b$$

  - All bank-held government bonds are repaid.
  - All loans except investment loans L_t^k repaid via a citizens' dividend.
  - The remaining balance sheet is financed through treasury credit.
  - Even F_t could be partly or wholly paid out as a citizens' dividend.

3.2 Monetary and Fiscal Policy

- Monetary policy - interest rate on **reserves**:

$$i_t = (i_{t-1})^{i_i} (\bar{i})^{(1-i_i)} \left(\frac{\pi^p_{t+1}}{\bar{\pi}} \right)^{(1-i_i)i_\pi}$$

  Optimum: $i^*_\pi = 3$ (inflation response at upper bound)

- Monetary policy - interest rate on **public money**:

$$i_{d,t} = \tilde{\mu}^{hh}_d i_t \left(\frac{gdp_t}{pot_{ss}} \right)^{-(m_y/4)}$$

  Optimum: $m^*_y = 0$ (fixed spread to policy rate)

- Monetary policy - interest rate on **public credit**:

$$i_{f,t} = \tilde{\mu}_f i_t \left(\frac{\ell^k_t}{\ell^k_{ss}} \right)^{(f_\ell/4)}$$

  Optimum: $f^*_\ell = 0.84$ (aggressive increase in rate when credit is high)

4 The Six Advantages of the Chicago Plan

Advantage 1: Dramatic Reduction of Private Debts

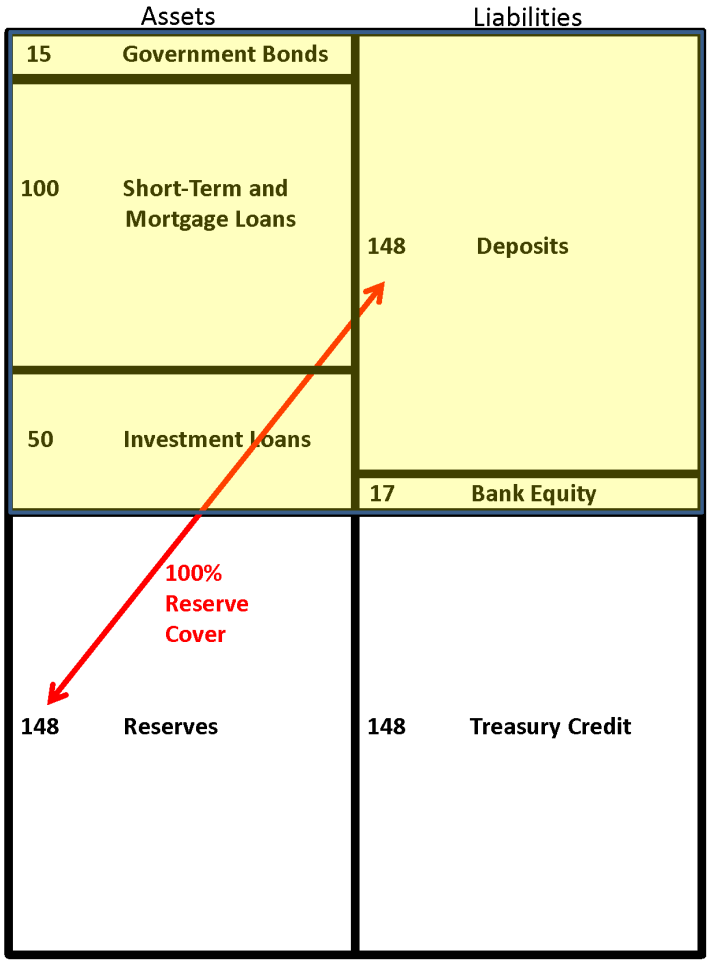
Advantage 2: Dramatic Reduction of the (Net) Public Debt

Part of treasury credit used to repay bank-held government debt

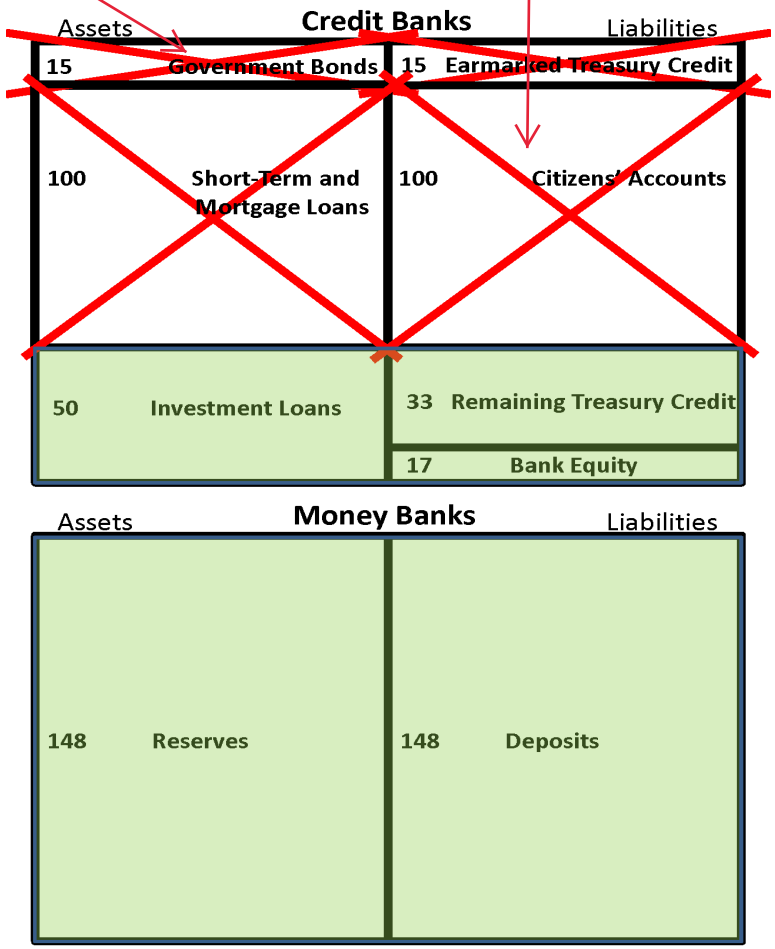
Part of treasury credit used to pay out a large citizens' dividend that citizens use to repay loans

Banking Sector Transition

Pre-Transition



Post-Transition

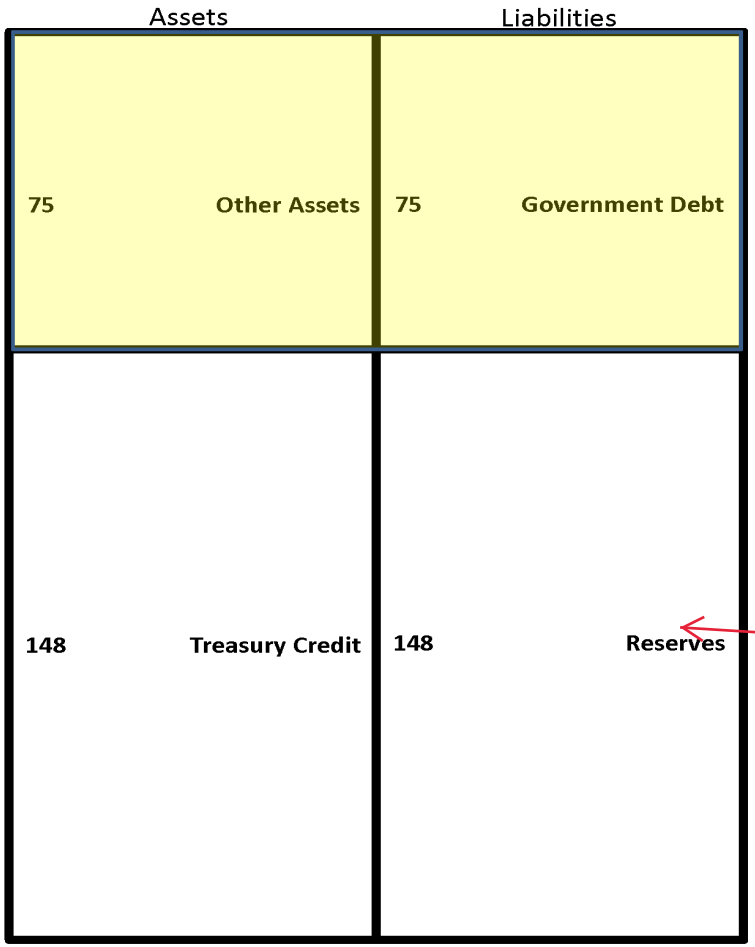


(numbers in % of steady state GDP)

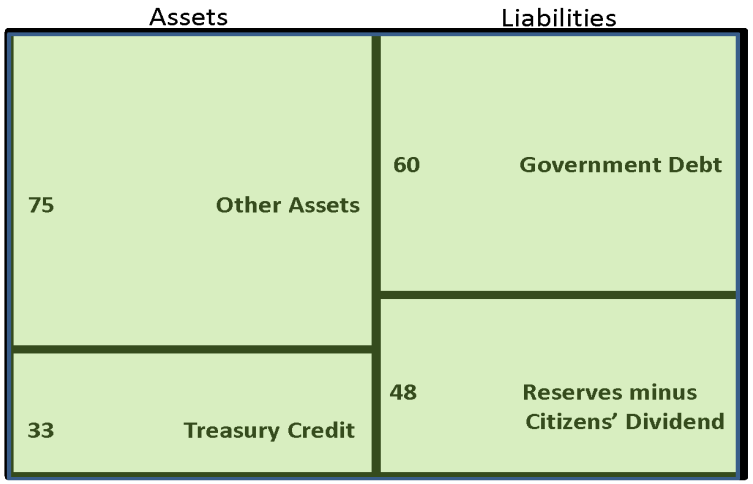
Private debt goes from 150% to 50% of GDP

Government Transition

Pre-Transition



Post-Transition



Reserves are not a debt of the consolidated government - they are "social equity" (Kumhof et al. (2021))

Net public debt goes from 75% to 27% of GDP
Public "equity" goes from 0% to 48% of GDP

Advantage 3: Complete 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.

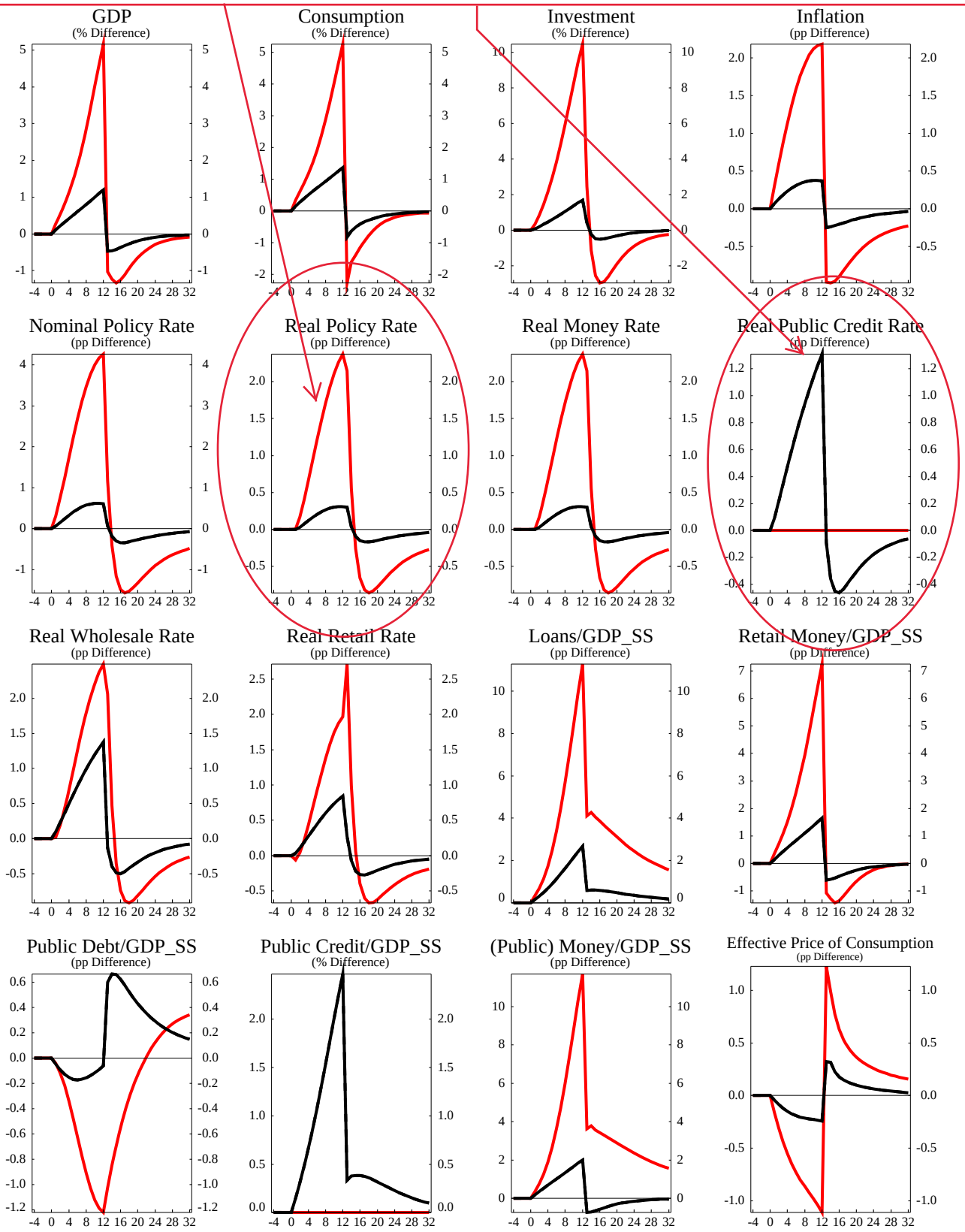
- Run on the credit system?
  - *Payments system*: Remains 100% safe.
  - *Credit system:*
    * Marginal source of funding is now treasury credit.
    * Regulation can ensure private funding is only long-term or equity.

Advantage 4: Much Better Control of Credit Cycles

- The money creation privilege of banks can be a major source of credit cycles:
  - Banks never face loan financing risks, only deposit refinancing risks.
  - Credit decision can be funded 100% in house, through money creation.
  - Government guarantees: Banks and depositors pay less attention to risk.
- Under the Chicago Plan this money creation privilege is removed:
  - Intermediary banks must first persuade investors to make cash deposits.
  - These risky deposits have (need) no government guarantee of any kind.
  - Investors will therefore be more cautious.
  - This makes credit-driven business cycles less likely.
  - But of course it does not rule them out completely.
- Under the Chicago Plan, policy controls 3 tools rather than 1:
  - Interest rate on **reserves**: Same as today.
  - Interest rate on **treasury credit**: Charged to credit banks.
  - Interest rate on **public money**: Paid to money banks.

Credit Supply Shock Boom-Bust Cycle

The key is the much stronger effect of the public credit rate, compared to the conventional policy rate, on credit and thereby activity



red = pre-transition, black = post-transition

The same results (qualitatively) can be shown for all other shocks in the model

Advantage 5: Large Output Gains

1. Lower interest rates: Due to *lower debt levels*.

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

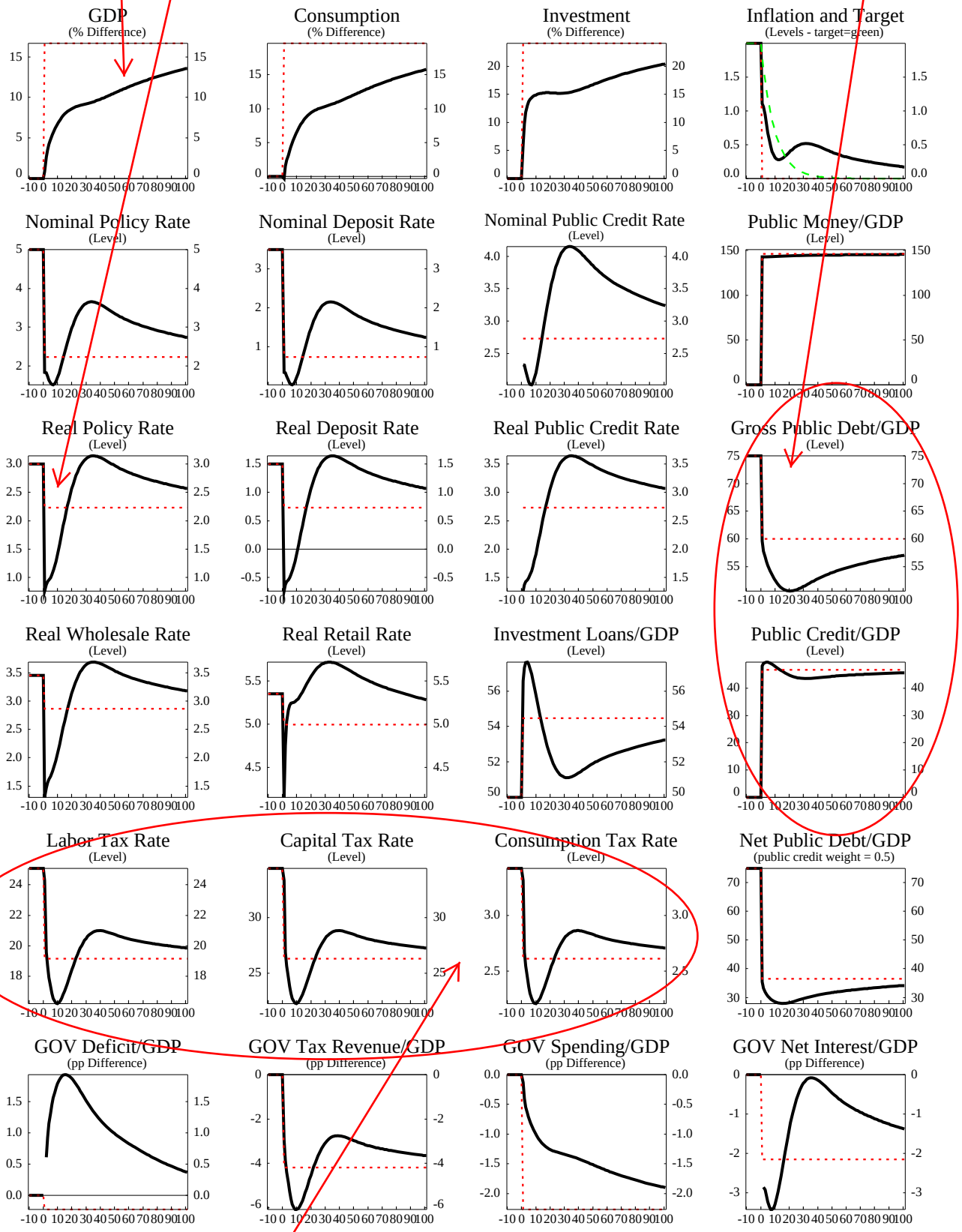
3. More abundant liquidity: Due to getting *closer to the Friedman rule*.

4. Higher output

2. Lower real interest rates

1. Big drop in net public debt

Full Dynamic Transition to Chicago Plan



(___ = transition path, - - - = final steady state)

3. Lower tax rates

5 Criticisms - and Rebuttals - of the Chicago Plan

5.1 Criticism 1: What Is the Market Failure?

- **Idea:** If it ain't broke, don't fix it.

- **Counterarguments**:
  1. *Rent Seeking*:
     - Seigniorage rents.
     - Due to market power and government support.
     - Extensive literature.
  2. *Increasing Returns to Scale*: In the trust needed for money creation.
     - Government/society: Maximum scale.
     - Silicon Valley Bank: Very small scale.

5.2 Criticism 2: Money Substitutes Prevent Monetary Control

- **Idea:** Public money control impossible due to private money substitutes.

- **Counterarguments:** 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*.
  5. *Legal incentives* to pay in public money.
  6. *Legal prohibition* on paying in private money.

5.3 Criticism 3: Maturity Transformation Benefits Will Be Lost

- **Idea:** CP cannot offer desired maturity profiles without transformation.
- **Counterarguments:** 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 Criticism 4: Competitiveness/Crowding-out of Banks

- **Competitiveness - Idea**: I am not really sure.

- **Counterarguments**:
  1. *Money banks*: Can operate payment system without worrying about asset quality.
  2. *Credit banks*: Can operate credit system with far fewer worries about liability risks.

5.5 Criticism 5: Too Much Money

- **Idea:** Public money creation becomes excessive and leads to inflation.

- **Counterarguments:** No reason to expect inflation, for three sets of reasons:

  1. Monetary Theory

  2. Institutional Arrangements for Money Issuance

  3. Monetary History

Monetary Theory

- Inflation is determined by the relative quantities of
  - goods and
  - money in private hands.
- CP: Quantity of money in private hands remains unchanged.
- The nature of money changes, not its quantity.

5.6 Criticism 6: Too Little Money

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

  Implications of much lower debt levels:
  - Public debt$\downarrow \Rightarrow$leverage$\downarrow \Rightarrow$**risk-free rate**$\downarrow \Rightarrow$cheaper borrowing.
  - Private debt$\downarrow \Rightarrow$leverage$\downarrow \Rightarrow$**spreads**$\downarrow \Rightarrow$cheaper borrowing.
  - Private cheap deposits$\downarrow \Rightarrow$**lending rates**$\uparrow \Rightarrow$ more expensive borrowing.
  - Our paper: Net effect is cheaper borrowing.
  - Average firm is less likely to have to **be** in debt to obtain cash.

5.7 Criticism 7: Government Control over Credit

- **Idea:** Government would interfere with credit and credit allocation.

- **Counterarguments:** Government ...

  1. would not control the *quantity* of credit,

  2. would not control the *allocation* of credit,

  3. could only affect the *price* of credit,

     and it could do that more effectively than today.

5.8 Criticism 8: Risk of Speculative Attacks

- **Idea**: Speculators could attack the currency if a country does the CP alone.

- **Counterarguments:**

  1. The country's economic fundamentals would get stronger, not weaker.

  2. The policy tools for fighting attacks would be stronger, not weaker.

6 Conclusions

1. What can we learn from the 1930s debate?
   - About the nature of the financial system:
     - Banks have the privilege of being able to create money to fund loans.
     - This implies that bank balance sheets can **grow and shrink rapidly**.
     - It also imparts a **debt bias** to the entire financial system.
     - This makes discontinuing that privilege a legitimate part of the debate.
   - About monetary and financial reform:
     - The Chicago Plan calls for the end of the money creation privilege.
     - It has maximal benefits, but also requires the most radical transition.

2. Do we have new reform options today that did not exist in the 1930s?
   - New technologies make sovereign money much more practically feasible.
   - Sovereign money proposals include both CP and CBDC.
   - CBDC is on the agenda of several central banks now.

THANK YOU