Proposals for the Fiscal and Monetary System

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Contents

Introduction 4
The Neglect of Aggregate Quantity Management 8
Asset-Backed Currency Issuance 8
Backing That Does Not Back 9
Solving Fiscal and Monetary Problems Through Aggregate Quantity Management 11
Shortcomings of Indirect Finance (Asset-Backed Issuance) 11
Methods of Increasing and Decreasing M2 12
Wealth Disparity and the Money Game 14
Solutions Through Aggregate Quantity Management (Direct Finance) 15
Automatic Fiscal Revenue 18
Economic Expansion and Monetary Volume 18
The Multiplier Effect 19
Historical Background of the Modern Financial System 22
The Origins of Paper Money and Banking 22
Biblical Prohibitions on Interest 23
Interest on Loans to Fellow Members of the Community Is Prohibited in the Bible 23
The Difficulty of Creating Money 24
The Taboo in Economics 27
History of Macleod's Credit Creation Theory and Its Reception (Grok) 28
Historical Context: The Darkness of Europe 29
The Reality of the Danger of Being Burned at the Stake as a Heretic or Witch (Grok) 31
Goldsmith Bookkeeping 32
Where Should the Money Be Spent? 34
Competition and Importance of the Banking Industry 34
Qualitative Management of Bank Lending 36
The Direction of the Economy 36
How to Use Money 37
Public Assistance (Welfare) 37
Ten-Year Food Stockpiles 38
Reform of the Industrial Structure 40
The Curse of Productivity Improvement 41
Metabo Economy Theory 41
From Productivity Gains to Unemployment 42
From Productivity Gains to Credit Instability 42
From Productivity Gains to War 43
Continuing Productivity Gains 46
Treatment Proposals for the Metabo Economy 52
(1) Adjustment of Statutory Working Hours 52
(2) Reciprocal Tariffs 52
(3) Introduction of the Deemed Labor Cost Ratio System 52

Export Companies and Retained Earnings 54
Bank Lending and Bank of Japan Window Guidance 56
History of Window Guidance 56
Summary of the Proposal 59
The Financial Revolution / How Can the Proposal Be Realized? 61
Related Journal Entries 63
Journal Entries for the Proposal's Direct Finance 63
The Bank of Japan's Current Journal Entries 64
Credit Creation Quotas 66
Auxiliary Journal Entries for Credit Creation / Memos 67
Supplementary Notes 69
The Velocity of Money 69
The GDP Trap 69
Where Surplus Money Goes 69
Taxation of the Bank of Japan 70
International Rules That Protect Banks While Harming the Economy 70
Outline of the Financial Revolution (Draft) 73

Introduction

First, allow me to begin with the absolute basics of economics.

Prices are determined by supply and demand. This is a fundamental principle of economics. Yet many fiscal and monetary experts appear to ignore this basic rule.

Why?

Consider what is most essential for human survival. Food is essential, but water is even more so. A person can survive without food for a month, but without water, survival beyond a week becomes extremely difficult. Far more critical than either is air—oxygen. Few would disagree. Yet this most vital resource is free. Why?

Because its supply is overwhelmingly abundant. Even the most essential thing for human life becomes free when supply is vast.

Now consider something of little intrinsic importance to human survival: electronic “junk.” Take Bitcoin. Needless to say, it is overwhelmingly less necessary to human beings than oxygen. Without Bitcoin, humans would lack nothing at all. In fact, until very recently, Bitcoin did not even exist on Earth. Yet as of April 2026, one Bitcoin exceeds 10 million yen. Why?

I do not claim that Bitcoin has zero intrinsic or functional value. It can serve as a store of value (“digital gold”) and attracts speculative demand. Nevertheless, its extraordinary price is fundamentally the result of supply and demand.

If intrinsic value determined price, oxygen would be far more expensive than Bitcoin. Reality shows otherwise.

The Japanese yen operates under the same principle. When the supply of currency is scarce, its value rises (deflation). When supply is excessive, its value falls relative to goods (inflation).

What about the method of supply?

Oxygen can be produced through photosynthesis, electrolysis, or various natural chemical reactions. Yet the method of production has no bearing on its price. What is free remains free.

Cryptocurrencies, by contrast, have various issuance methods. Bitcoin is created through mining. XRP was fully issued in advance. As of October 2026, Ripple holds roughly one-third of the total supply (approximately 36%), most of it in escrow. In other words, issuance methods differ across cryptocurrencies.

Cryptocurrency Issuance (Grok)

Cryptocurrency	Bitcoin	Ethereum	XRP (Ripple)	Binance Coin (BNB)
Circulating / Issued Supply	Approx. 19.92 million (hard cap: 21 million)	Approx. 122.18 million ETH (no hard cap; burns via EIP-1559; as of Nov 2026)	100 billion XRP (fully pre-mined; Ripple holds approx. 36%, mainly in escrow; max 1 billion released monthly; as of Oct 2026)	Approx. 131.51 million BNB (initial cap 200 million; target reduction to 100 million via periodic burns; as of Oct 2026
Issuance Method	Mining (Proof of Work)	Proof of Stake (formerly Proof of Work)	Pre-mined + escrow releases	Pre-issued + periodic burns
Price Appreciation	Over ~1,000,000x (from approx. $0.08 in July 2010 to peak over $100,000 in 2025; varies significantly by starting point)[1]	Over ~10,000x (from approx. $0.4 near 2015 lows to peak of approx. $4,950 in 2025)	Approx. 500x (early 2012–2025; limited early price records)	Approx. 10,000x (from approx. $0.04–0.1 near 2017 lows to peak of approx. $1,370 in 2025; varies by starting point)

As the table shows, the method of issuance does not appear to determine price (though it is not entirely irrelevant, as it can affect trust and supply dynamics). Price is primarily determined by supply and demand.

The origin of oxygen—whether through photosynthesis or electrolysis—does not change its price. Similarly, whether a cryptocurrency is mined or pre-mined and released from escrow does not inherently make it expensive or cheap. Demand and supply determine the price.

What about the Japanese yen?

The relevant supply is the total amount of yen circulating in the private sector, commonly measured by M2 (money stock).[2] Demand for money roughly corresponds to the scale of economic activity. In principle, the

[1] Price multiples vary greatly depending on the initial price used. Bitcoin had no market price in 2009; using the earliest 2010 transaction price yields multiples ranging from hundreds of thousands to over one million. In any case, the method of issuance does not directly determine price; supply and demand remain the primary factors.

[2] From the Bank of Japan website:
M1 = Cash currency + Deposit money (issued by all depository institutions)
M2 = Cash currency + Deposit money + Quasi-money + CDs (issued by domestically licensed banks, etc.)

amount of circulating currency in an economy with a GDP of 1 trillion yen and in one with a GDP of 500 trillion yen differs by a factor of 500 (the velocity of money is also a factor). As legal tender, the yen is required for transactions and tax payments within Japan. In this sense, demand for the yen is essentially demand arising from the Japanese economy itself.

Nevertheless, there is a way of thinking according to which the *method* of issuance determines the price—that is, whether inflation occurs. It is like thinking that price is determined by whether something comes from mining or from photosynthesis. This idea that the method of issuing currency matters above all else appears to have become fixed in the minds of politicians, academics, bureaucrats, experts and others, and to have spread throughout the world.

What is that idea? … It is none other than the debate over direct finance (fiscal financing) versus indirect finance.

Inflation and deflation are fundamentally determined by the total quantity of currency (supply) relative to demand (the scale of economic activity). Yet many speak as if the method of issuance is decisive.

The method of issuance does not determine the value of currency (though it can affect trust and therefore demand). Cryptocurrencies have already demonstrated this. Oxygen has already demonstrated this.

Direct financing is currently prohibited by law.[3] It is claimed that if the Bank of Japan directly purchases government bonds, there will be no brake and hyperinflation will result. The inflation immediately after World War II is frequently cited as an example.

However, the post-war inflation was not caused by direct financing itself. If an unlimited quantity of money is issued, the balance of supply and demand collapses and hyperinflation follows. This is obvious.

The inflation was not caused by the Bank of Japan's direct underwriting of government bonds, but by the massive volume of currency issued, combined with the destruction of productive capacity (factories had

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M3 = Cash currency + Deposit money + Quasi-money + CDs (issued by all depository institutions)
Broadly defined liquidity = M3 + money trusts + investment trusts + bank debentures + straight bonds issued by banks + CP issued by financial institutions + government bonds + foreign bonds
Cash currency = Banknotes issued + coins in circulation
Deposit money = Demand deposits (current, ordinary, savings, notice, special, tax payment) minus checks and bills held by the surveyed institutions
Quasi-money = Time deposits + fixed savings + installment savings + foreign currency deposits
CDs = Certificates of deposit
Domestically licensed banks, etc. = Domestically licensed banks, foreign bank branches in Japan, Shinkin banks, Shinkin Central Bank, Norinchukin Bank, Shoko Chukin Bank
All depository institutions = "Domestically licensed banks, etc." + Japan Post Bank + credit cooperatives + National Federation of Credit Cooperatives + labor banks + Rokinren Bank + agricultural cooperatives + credit federations of agricultural cooperatives + fishery cooperatives + credit federations of fishery cooperatives

[3] In principle prohibited under Article 5 of the Public Finance Act. However, under its proviso, this is possible within the limits of a Diet resolution (BoJ rollover underwriting is carried out).

been destroyed by air raids).

Whether financing is direct or indirect becomes problematic only when the volume of issuance cannot be controlled. In other words, the problem is the quantity issued, not the method.[4]

Conversely, whether issuance is direct or indirect, if the volume of currency issued greatly exceeds demand, inflation (a decline in the value of the currency) will result.

Of course, limits on currency issuance are important. The methods for imposing such limits are discussed later. Prohibiting direct financing is neither the only nor a perfect brake on issuance.

Moreover, the prohibition of direct financing has serious drawbacks.

Is not the idea that “direct financing causes inflation” a misunderstanding—and quite a dangerous one at that?

[4] In 1932, under Finance Minister Takahashi Korekiyo, the Bank of Japan began direct underwriting of government bonds. A large portion of the underwritten bonds was subsequently sold to the market to adjust the volume of currency. Partly for this reason, no major inflation occurred in the following several years. This can be said to be an example showing that, even with direct finance, inflation can be avoided if the total quantity is managed.

The Neglect of Aggregate Quantity Management

The value of a currency can be maintained and stabilized by managing its supply—that is, the total quantity of currency in circulation—in accordance with demand.

- If inflation occurs, reduce the monetary aggregate.
- If deflation occurs, increase the monetary aggregate.

This is the basic principle. Yet at present, neither the government nor the Bank of Japan directly manages this. Nor do the major central banks of the world. The size of the monetary aggregate is not even a policy target. Statistics on the money stock exist, but that is essentially all.

This is not the responsibility of the Bank of Japan alone. The system of indirect finance makes it so. Herein lies the fundamental distortion of the modern world's financial problems.

As previously discussed, the value of currency is determined by supply and demand. How, then, does the current global financial system attempt to manage the value of currency in place of aggregate quantity management of supply and demand?

It appears to rely on asset-backed issuance—or, in other words, the collateral principle. This is not explicitly codified, but it seems to function as an implicit premise. The historical practice of establishing the credibility of currency through convertibility into gold (asset-backed issuance) appears to have continued unchanged.

Asset-Backed Currency Issuance

Current currency issuance appears to be based on the philosophy that "currency has value because it is backed by assets."

Let us consider specific examples.
The primary method is lending against collateral. In other words, currency is issued on the basis of asset backing.

1) Issuance by the Bank of Japan to private banks' current accounts

The Bank of Japan lends to private banks against their assets as collateral (even the special operations during the COVID-19 pandemic supplied funds at 0% interest on the condition that common collateral was posted). Alternatively, it purchases assets held by private banks (such as through government bond buying operations) and credits the proceeds to their current accounts.

2) Issuance by private banks to corporate and individual deposit accounts

Private banks extend loans against collateral (with exceptions such as unsecured loans to high-quality firms) and credit the loan amount to the borrower's current deposit account. Taking collateral is, of course, a matter of the bank's risk management and business operations; it is not itself the problem. However, the result is that currency appears to be issued on the basis of asset backing.

3) Issuance of Bank of Japan notes

When the Bank of Japan (and major central banks in general) issues banknotes (by paying them out to financial institutions), it treats the banknotes as a liability account, conducting accounting entries as if asset backing (in this case, the Bank of Japan's assets) were a prerequisite.

If these were convertible notes, it would be natural for them to be recorded as a liability of the Bank of Japan, since the Bank would be obligated to exchange them for gold or other assets. However, Japan transitioned to a floating exchange rate system in 1973.[5] The value of Bank of Japan notes is determined by the market, and it is not surprising that some find the liability treatment uncomfortable.[6]

In short, the appearance is maintained that currency is issued on the premise of asset backing.

The history of finance is deeply connected to this point, which will be discussed later. Specific journal entries will also be explained in due course.

Backing That Does Not Back

The idea that "currency has value because it is backed by assets" appears correct at first glance. But is it really? In fact, this philosophy contains a fundamental contradiction.

The value of the assets themselves is denominated in the currency. There is circular logic here.

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[5] Bank of Japan notes have not been directly convertible into gold since the suspension of gold convertibility in 1931–32 (the managed currency system was legally established under the Bank of Japan Act of 1942). After the war, a fixed exchange rate with the dollar continued under the Bretton Woods system, providing an indirect link through the dollar, but Japan moved to a floating exchange rate in February 1973.

[6] The Bank of Japan itself has explained that banknotes continue to be recorded as liabilities because they retain the character of "debt certificates for which the Bank of Japan must maintain credibility." At the same time, the Bank has also acknowledged that the stability of the value of banknotes is ensured not by its holdings of assets, but by appropriate monetary policy. Source: "Why are banknotes recorded as liabilities on the Bank of Japan's balance sheet?" https://www.boj.or.jp/about/education/oshiete/outline/a23.htm

For example, in real estate collateral lending within Japan, real estate is treated as the backing for the loan. Yet the value of that real estate is denominated in yen.

According to the law of supply and demand, if the supply of currency increases, the value of the currency falls. In other words, the nominal price of assets rises. If the supply of currency decreases and deflation occurs, the nominal price of assets falls. Asset prices are by no means fixed.

Let us illustrate with concrete numbers.
Suppose there is real estate worth 100 million yen, and 70 million yen is lent against it as collateral. In general, people think, “Even if the price of the real estate falls by 30%, there is still adequate collateral.” This rests on the assumption that real estate prices do not change significantly.

However, during the collapse of the bubble, real estate prices fell to a fraction of their former value. Declines to one-fifth were not uncommon. As a result, many banks’ loans became under-collateralized, and the banks were driven into insolvency.

In other words, the prices of the assets that are supposed to back the value of the currency fluctuate greatly due to inflation and deflation—that is, changes in the value of the currency. “The value of the currency is preserved by the backing of assets whose prices rise and fall with the value of the currency” is circular logic and contains a fundamental contradiction.

The same applies when the Bank of Japan lends against Japanese government bonds as collateral. Government bonds are denominated in yen. The idea that the value of the yen is backed by yen-denominated government bonds is equally circular logic. If the yen becomes worthless, yen-denominated government bonds also become worthless. The value of the yen is guaranteed by Japanese government bonds whose value is guaranteed in yen… It is a peculiar arrangement.

Yet this peculiar philosophy—that the value of currency is backed by assets—appears to continue to this day. Moreover, this philosophy is not limited to Japan; it seems to have become the common sense of fiscal and monetary policy in the major countries of the world. In other words, this is the root of the distortion in global finance.

In this manuscript, I wish to re-examine this basic philosophy and the world’s common sense. “The value of currency is determined not by asset backing, but by supply and demand.” This should be closer to economic reality. Changing the basic philosophy opens up an entirely different world.

By reforming this common sense, it becomes possible to correct the financial system itself. If that is done, most of the major fiscal and monetary problems of the present day should resolve themselves naturally.

Solving Fiscal and Monetary Problems Through Aggregate Quantity Management

What this manuscript proposes is, first and foremost, the principle of managing the total quantity of circulating currency.

Specifically, the following:

1. Manage inflation and deflation primarily through the management of the monetary aggregate.
2. Actively utilize seigniorage by recording it in the accounting entries of the Bank of Japan.
3. Conduct direct financing and manage the monetary aggregate directly rather than indirectly (under the current indirect system, aggregate management is difficult).
4. Manage the destination of the issued currency so that it flows into the real economy rather than into money games.
5. Include the volume of credit creation by private banks within the scope of aggregate management.

Of course, not all of these proposals can be implemented at once. However, we should change what we can, starting from where it is possible. The distortions in the financial and economic systems of Japan and the major countries have already reached a point of “no further delay.”

It hardly needs to be pointed out that, despite collecting such high taxes, the government is always short of fiscal resources. And the government continues to pile up debt. Outstanding government bonds are on the scale of approximately 1,100–1,200 trillion yen; when national and local government debt are combined, the total reaches roughly twice GDP. Measures to address the declining birthrate make little progress, and the public’s sense of economic well-being continues to deteriorate. Stagnation has continued for 30 years.

We are already at the point of “no further delay.” The stage at which superficial reforms might suffice has long since passed.

Shortcomings of Indirect Finance (Asset-Backed Issuance)

Let us first explain the mechanism of indirect finance with respect to inflation and deflation. It is important to understand how “indirect” the process of increasing or decreasing M2—the total quantity of currency circulating in the private sector, which is the determinant of inflation and deflation—actually is.

The key point in the mechanism of indirect finance is that the monetary base (MB) and M2 are distinct concepts.

MB is the monetary base (base money / high-powered money). It consists of the current accounts of private banks and others held at the Bank of Japan, plus cash. The Bank of Japan can control this amount to a

certain extent (there is some debate on this point. However, buying and selling operations can almost directly control it, provided banks cooperate. The deposit reserve ratio can also be adjusted).

Under Abenomics, MB increased several-fold, yet deflation was not overcome. In an era when demand for funds was pressing, increasing MB would almost automatically increase M2 (through the money multiplier). Unfortunately, that is no longer the case.

In other words, MB does not directly change M2. Put differently, MB is not directly related to inflation or deflation.

What matters for managing the monetary aggregate—that is, for managing inflation and deflation—is not MB, but changes in M2.

Methods of Increasing and Decreasing M2

First, let us consider how M2 increases. Where does the currency circulating in the private sector (M2) come from?

There are two main channels through which M2 increases:

1. Fiscal deficits. To the extent that government spending exceeds revenue, currency flows into the private sector and M2 increases. The deficit is financed by issuing government bonds.
2. Lending by private banks (credit creation).

Under the current system, fiscal deficits increase M2. A fiscal deficit means that currency moves from the government to the private sector.

However, this is not always the case. Looking only at the fiscal deficit, it increases M2, but whether the overall M2 actually increases depends on how the funds to finance the deficit are raised.

Under the current system premised on indirect finance, the Bank of Japan cannot directly purchase newly issued government bonds that finance the fiscal deficit. Banks, insurance companies, or private individuals must purchase them.

Broadly speaking, these purchases reduce M2. If government bonds are purchased solely with funds already circulating in the private sector (M2), the increase in M2 from the fiscal deficit is offset.

If a bank purchases government bonds with its own funds, this reduces MB. When the funds used to purchase the bonds flow into the private sector through the fiscal deficit, overall M2 increases. In that case, however, the bank's funding capacity may decline. If the reduction in the bank's MB reduces its funding capacity, this works as a factor reducing M2 (at present, however, a large amount of MB has accumulated, so this is unlikely to become a significant factor reducing M2).

If a bank purchases government bonds as a broker for companies or individuals, there is no change in MB and it is simply a reduction in M2.

At the present moment, however, fiscal deficits and the issuance of government bonds appear to result in an increase in M2.

Above all, private banks' current accounts at the Bank of Japan increased abnormally under Abenomics. In other words, there is excess MB.

In terms of the real economy, this is merely a transfer of Bank of Japan current deposits. (Assuming the current situation in which Bank of Japan current deposits have expanded,) if banks purchase government bonds and that amount is spent as a fiscal deficit, MB simply decreases and M2 increases. There is also the issue of Basel III regulations, which will be discussed later.

I apologize for the rather complicated discussion so far, but the point is that the government and the Bank of Japan cannot directly control how banks raise the funds to purchase government bonds. In other words, the government and the Bank of Japan cannot directly control M2. This is precisely the drawback of indirect finance.

The most that can be said is that "the issuance of government bonds and fiscal deficits have a directional effect of supplying currency to M2."

On the other hand, interest payments on government bonds are almost unconditionally an inflationary factor (if paid into MB, the inflationary effect is indirect). The multiplier effect (discussed later) is also low. In other words, they contribute little to economic growth.

Interest payments on government bonds are, from the perspective of the Japanese economy as a whole, a considerable waste of expenditure.

Furthermore, if the Bank of Japan's holdings of government bonds expand, it becomes difficult to raise market interest rates. There is a risk that the Bank of Japan and private banks holding government bonds will become insolvent (the Bank of Japan does not mark government bonds to market. Private banks can also avoid mark-to-market valuation if they hold the bonds to maturity. However, if they are forced to sell before maturity—for example, in a liquidity crisis—the risk can surface all at once. This is by no means sound. There are also Basel III regulations).

In other words, out of fear of insolvency, the authorities cannot even raise interest rates significantly to defend the value of the yen against cost-push inflation caused by yen depreciation.

In short, under the current system, the Bank of Japan is in a rather powerless position with respect to defending the value of the yen. This is also a drawback of indirect finance.

Raising interest rates is also one of the important means of restraining bank lending. In other words, raising interest rates serves as a measure against inflation. If interest rates cannot be raised out of fear of insolvency, it is also difficult to directly reduce the supply of M2 as an anti-inflation measure.

Let us return to the discussion of increasing M2.

At present, the only ways to increase M2, besides fiscal deficits (which have the many drawbacks described above), are the lending activities of private banks—so-called credit creation.

By booking the loan amount into a current deposit on its books, a bank issues currency.

This, too, depends on the private sector. If private banks do not increase lending, Japan's M2 does not increase.

Under Abenomics, the Bank of Japan tried to increase M2 by increasing MB. As is well known, the effect was almost nonexistent.

Contrary to the intention of increasing private-sector M2 for the purpose of economic recovery and overcoming deflation, banks were reluctant to lend because of the recession and deflation, and the result was merely a wasteful increase in MB. With respect to increasing M2, it was a case of "blowing the flute but no one dancing."

In other words, the government and the Bank of Japan cannot directly manage the behavior of private banks, and the Bank of Japan cannot directly increase M2.

Wealth Disparity and the Money Game

Furthermore, entrusting the supply of currency to private banks has a fatal defect.

There is a saying that mocks banks: "They offer an umbrella on a sunny day and take it away on a rainy day."

In other words, banks tend to lend to wealthy clients and not to poor people who lack collateral. Banks do not lend to those who are short of money; they lend to those who already have money to spare.

Some may say that this is the way currency is issued under capitalism, but it still needs to be corrected. Leaving everything to the private sector and financial liberalization is not acceptable.

At present, the destinations of currency issuance are inevitably limited to high-quality firms (large corporations) and asset holders. Private banks, fearing loan losses, naturally prioritize lending to wealthy

borrowers with strong collateral. As a result, currency is issued to parties that do not particularly need it. The multiplier effect of currency issuance through bank lending does not appear to be high.

Unnecessary or excess currency does not flow into the real economy. Where does it go?

It flows into land, gold, stocks, and other money games. The result is asset inflation. Meanwhile, the real economy tends to shrink.

Through asset inflation from money games, wealthy individuals and large corporations that hold excess assets become even richer. In other words, under the current fiscal and monetary policy, the widening of wealth disparity is almost inevitable.

Solutions Through Aggregate Quantity Management (Direct Finance)

All of the problems of indirect finance (asset-backed issuance) described above can be resolved through direct finance and aggregate quantity management.

Under direct finance, without relying on the issuance of government bonds, the Bank of Japan records seigniorage in its accounts (the journal entries and related issues will be discussed later), issues Japanese yen as an asset item, and provides direct financing to the government (whether through underwriting of government bonds, transfer to a government or Bank of Japan current account, or interest-free loans). If this is used for fiscal expenditure, M2 can be increased directly. In other words, deflation can be overcome in an instant.

As a concrete example, monthly child-rearing benefits could be distributed as helicopter money. The source of funds would be Japanese yen created out of nothing by the Bank of Japan through seigniorage. This would directly increase M2 and resolve the economic stagnation caused by deflation. Child-rearing households have a high propensity to consume, and the benefits would lead directly to economic activation.

Of course, the funds need not be limited to child-rearing. They can be distributed to wherever they are needed, with the real economy in mind.

In this way, overcoming deflation is straightforward. How, then, is inflation managed?

What is important here is that someone must take responsibility for aggregate quantity management. Under the current legal framework, this would be the Bank of Japan.

On the government side, there is always the temptation to engage in indiscriminate spending. This is a structural temptation inherent in democratic politics, in which politicians seek to curry favor with voters in

order to win votes.

Therefore, ensuring the independence of the Bank of Japan, which is responsible for aggregate quantity management, is of the utmost importance. This must be firmly established in law, although it is already provided for to a certain extent under existing legislation.

Furthermore, there may be room to discuss legislating an “automatic brake rule” that completely eliminates human political pressure—for example, a rule under which “if the inflation rate exceeds a certain threshold, direct disbursements to the government from the Bank of Japan’s seigniorage are automatically suspended and forcibly locked, even if there is a Diet resolution.”

The following kinds of safeguards could be considered:

- A brake when domestic demand overheats. If the rate of increase in consumer prices excluding fresh food and energy exceeds 3% for two consecutive quarters, and it is judged that, with wages and service prices also rising, demand exceeds supply, new funding to the government through seigniorage shall be automatically suspended. It shall not resume until the rate falls below 2%. (These figures are merely an example.)

- Ensuring transparency. The upper limit on expenditures using seigniorage shall be set by the Diet each fiscal year, and the Bank of Japan shall publish monthly actual results and changes in M2.

- Advance consideration of exception measures. In the case of price increases caused by rising import prices, or in emergencies such as war or disasters, measures to reduce the burden on the public’s livelihood through the use of seigniorage may instead be necessary. Because successive ad-hoc exception measures are likely to render the brakes ineffective, it is necessary to carefully consider in advance, during normal times, under what circumstances exceptions would apply.

Ultimately, however, the final brake is not the system but the human heart. People who have hope for the future and who value this country will not wish for currency issuance on a scale that would destroy their own country. Conversely, if people act solely out of fear and short-term interest, any system can be circumvented.

This is not limited to the present proposal, but the realization of a happy society requires both institutional safeguards and soundness of mind.

Below is a simple comparison table of the current approach and the proposed approach to aggregate quantity management.

Management of Inflation, Deflation, and Asset Inflation (Grok)

Category	Current System Asset-Backed Issuance (Indirect Finance)	Proposal Aggregate Quantity Management (Direct Finance)
Inflation management	Raising interest rates (constrained by risk of insolvency), selling operations	Raising interest rates (can be raised significantly without risk of insolvency), selling operations, plus regulation of bank lending, raising the deposit reserve ratio, window guidance Independence of the Bank of Japan is important; consideration of an automatic brake rule
Deflation management	Increasing MB through buying operations (M2 cannot be increased directly; continued fiscal deficits become difficult due to rising government debt), lowering interest rates (unable to overcome the liquidity trap)	Active fiscal policy becomes possible without concern over fiscal deficits through the use of seigniorage. Helicopter money (e.g., monthly benefit of 50,000 yen per child) also becomes possible
Asset inflation (response to money games)	Concentration on wealthy borrowers under the collateral principle; activation of money games	Strengthened regulation based on the quality of bank lending; adjustment of risk weights and collateral valuation ratios for real estate speculation, etc.; total volume regulation of bank lending. Currency issuance by banks and fiscal expenditure are complementary. In addition, revival of Bank of Japan window guidance and management of credit creation

How specifically to implement the proposal is discussed later under “The Financial Revolution / How Can the Proposal Be Realized?”

Next, let us touch on the idea of automatic fiscal revenue—that is, that fiscal resources are secured as the economy develops under a direct finance system.

Automatic Fiscal Revenue

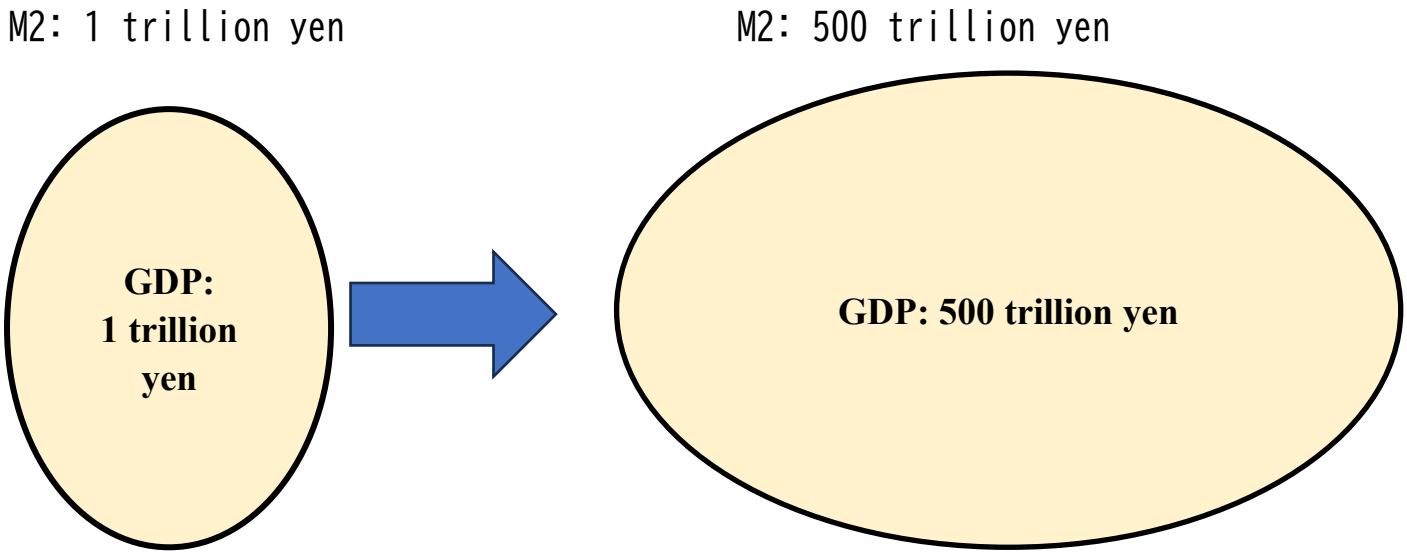
Under the proposed financial system of direct finance combined with aggregate quantity management of currency, appropriate fiscal expenditure has the potential to automatically increase fiscal resources.

It is a very simple idea. Let me explain.

Economic Expansion and Monetary Volume

Let us explain with a concrete example.

Suppose there is a country whose economic scale has grown 500-fold. Assume that when GDP was 1 trillion yen, the total amount of currency in circulation was also 1 trillion yen. Now suppose that this country's GDP has expanded 500-fold to 500 trillion yen. Naturally, the currency circulating domestically is also assumed to have expanded in line with the expansion of GDP, reaching 500 trillion yen.



As shown in the figure above, M2 (the total amount of currency circulating in the private sector) has increased by 499 trillion yen.

In other words, if GDP expands, room is created to expand M2 by that amount. In this case, there is room to expand M2 by 499 trillion yen.

Of course, even under direct finance, credit creation by private banks is not denied. If private banks' credit

creation accounts for about half of the 499 trillion yen—249 trillion yen—then the room for currency issuance by the central bank is 250 trillion yen. The 250 trillion yen of Japanese yen created out of nothing by the Bank of Japan can be used directly for fiscal expenditure. In short, fiscal resources automatically increase as GDP expands.

Note that, for the sake of simplicity, the velocity of money was assumed to be 1 (currency is used once a year). If it is 0.5 (close to the current level in Japan), then 500 trillion yen of GDP ÷ 0.5 means that the required total monetary aggregate M2 would be 1,000 trillion yen.

The Multiplier Effect

The multiplier effect refers to the extent to which fiscal expenditure, such as government infrastructure investment, raises gross domestic product (GDP). Because the income of firms and individuals who receive funds from the government increases, and this in turn generates new consumption and investment (which becomes someone else's income), a chain of economic circulation occurs. As a result, the ultimate economic effect often exceeds the initial amount of expenditure.

If the multiplier is 1, GDP increases by 1 when fiscal expenditure of 1 is made.

If the multiplier is 1.5, GDP increases by 1.5. Assuming the velocity of money remains unchanged at 0.5, the room for an increase in M2 required to circulate the expanded economy becomes three times as large.

In the "Short-term Japanese Economic Macroeconometric Model (2022 version)" of the Economic and Social Research Institute (ESRI) of the Cabinet Office (ESRI Research Note No. 72), the multiplier for public investment is estimated at approximately 1.1 in the first year. On the other hand, empirical studies focusing on the zero lower bound (ZLB) have produced higher values. The following are reference values based on the official model and major empirical studies.

Note that some of the projected multiplier figures in the table are merely AI estimates (Grok estimates), and the author is not a specialist and is not in a position to evaluate the validity of those figures.

In addition, the multiplier effect is expected to vary greatly depending on economic conditions and the combination of policies (during Japan's high-growth period, the multiplier for public works was far higher than it is today). For example, if anxiety about the future is high and consumption is depressed, most of any additional income will be saved, and the multiplier should be low.

Conversely, the author believes that it is fully possible to raise the multiplier through ingenuity (direct finance that delivers money where it is needed, reassurance about the future, elimination of waste, and so on).

The multiplier figures below should therefore be regarded not as fixed values, but merely as rough guides.

Approximate Multipliers (Official Estimates, Empirical Studies, and AI Estimates Shown Together)

Target	Projected Multiplier (First-Year Guide)	Basis and Source
Military expenditure	0.6–0.8	Reference value (Grok estimate) based on the observation that the high overseas procurement ratio of defense equipment (Ministry of Defense materials) limits the domestic demand-creation effect
Public investment	Approx. 1.1 (official) / Approx. 1.5 (under ZLB)	Approx. 1.1 in the Cabinet Office ESRI short-term Japanese economic macroeconometric model (2022 version). Miyamoto, Nguyen & Sergeyev (2018, *American Economic Journal: Macroeconomics*) find an impact of approx. 1.5 under the zero lower bound and approx. 0.6 in normal times
Educational investment	Roughly 1.1–1.5	Range (Grok estimate) based on the official public investment value (ESRI 2022) and the ZLB empirical value (Miyamoto et al. 2018)
Regional revitalization	Around 1.1	Guide (Grok estimate) based on the official public investment value (ESRI 2022)
Tax cuts / income support for low-income groups	Roughly 0.2–0.6	Reference range (Grok estimate) based on the official value for personal income tax cuts (approx. 0.2 in ESRI 2022), taking into account the general observation that the effect may be higher when targeted at groups with a high marginal propensity to consume
Consumption tax cut	Roughly 0.4–0.6	Reference range (Grok estimate) based on the observation, in analyses using the ESRI model, that the effect of a consumption tax cut is roughly twice that of an income tax cut

Let us consider a concrete example based on the table above.

Suppose 1 trillion yen of fiscal expenditure is allocated to public investment. Regarding the multiplier, the Cabinet Office's official model estimates approximately 1.1 for public investment in the first year (ESRI 2022), while an empirical study using Japanese data finds approximately 1.5 during the zero-interest-rate period and approximately 0.6 in normal times (Miyamoto, Nguyen & Sergeyev 2018). Let us therefore consider a range of 0.6–1.5.

Multiplier	**GDP Increase**	**Required M2 Increase (Velocity 0.5)**	**Additional Issuance Room After the Initial 1 Trillion Yen**
0.6 (normal-times empirical value)	0.6 trillion yen	1.2 trillion yen	Approx. 0.2 trillion yen
1.1 (Cabinet Office official value)	1.1 trillion yen	2.2 trillion yen	Approx. 1.2 trillion yen
1.5 (zero-interest-rate-period empirical value)	1.5 trillion yen	3.0 trillion yen	Approx. 2.0 trillion yen

In other words, appropriate fiscal expenditure has the potential to generate fiscal resources equal to part, or more than all, of itself. However, this is a purely theoretical calculation based on a one-time boost, constant velocity, and the assumption that private credit creation is zero. As noted above, measures to raise the multiplier are important.

Nevertheless, the possibility that the use of direct finance could ease fiscal resource constraints is worth considering.

Next, let us look at the historical background of why the distortion of indirect finance arose, and why ideas such as automatic fiscal revenue through direct finance have not been considered until now.

Historical Background of the Modern Financial System

There are historical reasons for the way the modern financial system is structured. I would like to discuss them.

The Origins of Paper Money and Banking

The origins of modern paper money and banking can be traced back to 17th-century Britain.[7]

At that time in Britain, gold was the foundation of the currency.

However, there was a risk that gold would be confiscated by the king, and the practice of depositing gold with trusted individuals developed.

Goldsmiths were trusted as specialists in the storage and processing of gold, and gold owners began depositing their gold with them out of fear of theft or loss. The goldsmiths issued receipts, which came to circulate as a means of settlement that allowed transactions without carrying the physical gold. This was the beginning of paper money in Britain.

One day, the goldsmiths realized something.

No one was coming to withdraw the gold. And the gold receipts were somehow being used like currency. They further realized that they could issue gold receipts without having the gold on hand.

Of course, issuing gold receipts in excess of the amount of gold held was a problematic act. However, if it was kept secret among themselves, they could print as many receipts—that is, effectively paper money—as they wished. This was truly alchemy, equivalent to “obtaining a money tree.” Of course, it must have felt somewhat underhanded.

Furthermore, there were people who wanted to borrow from the goldsmiths. There was a large amount of gold in the vault. They asked to borrow it. Naturally, a storage fee was charged when the gold was deposited. If the goldsmiths then “re-lent” it, some goldsmiths must have felt a further sense of guilt.

Nevertheless, the goldsmiths began lending. However, they handed over the gold and then had it immediately re-deposited. “It is dangerous to carry the physical gold around,” they would say. In other words, what the borrower actually took home was not the physical gold, but a gold receipt. The gold almost never left the goldsmith’s vault.

In this way, the goldsmiths were able to lend as much as they wished, regardless of the amount of gold they held.

Lending in excess of the amount of gold held is precisely credit creation, and it marks the beginning of currency issuance, the fractional reserve system, and the banking business.

Thus, early banking began as a mechanism of issuing gold receipts in excess of the gold held, while keeping it secret. Ironically, however, this mechanism supplied the liquidity needed by the economy of the time and, as a result, developed into the banking business.

Even modern banks would fail if a bank run occurred. People deposit cash knowing this (even with the existence of the Deposit Insurance Corporation).

[7] Reference: Richard A. Werner, *Princes of the Yen: Japan's Central Bankers and the Transformation of the Economy* (Japanese edition: 『円の支配者 ― 誰が日本経済を崩壊させたのか』).

Biblical Prohibitions on Interest

Excessive issuance of receipts was not the only problem. On top of that, charging interest actually violated biblical provisions (in medieval Italy, techniques such as bills of exchange and discounting developed in order to circumvent the prohibition on interest). In other words, there was a sense of guilt here as well.

Interest on Loans to Fellow Members of the Community Is Prohibited in the Bible

Let us quote the relevant passages from the Bible.

> "You shall not charge interest on loans to your brother, interest on money, interest on food, or interest on anything that is lent for interest. You may charge a foreigner interest, but you may not charge your brother interest, that the Lord your God may bless you in all that you undertake in the land that you are entering to take possession of it." (Deuteronomy 23:20–21, Japanese New Interconfessional Translation [Shinkyōdōyaku]) [Translator's note: The Bible quotations in this section are English translations of the Japanese Shinkyōdōyaku text cited by the author, not quotations from an English Bible. In most English Bibles, Deuteronomy 23:20–21 is numbered 23:19–20 and Exodus 22:24 is numbered 22:25.]
>
> "If your brother becomes poor and cannot maintain himself with you, you shall support him as though he were a stranger and a sojourner, and he shall live with you. Take no interest from him or profit, but fear your God, that your brother may live beside you. You shall not lend him your money at interest, nor give him your food for profit." (Leviticus 25:35–37, Japanese New Interconfessional Translation)

> “If you lend money to any of my people with you who is poor, you shall not be like a moneylender to him, and you shall not exact interest from him.” (Exodus 22:24, Japanese New Interconfessional Translation)

On the other hand, there was a gray area. It was permissible to charge interest if the borrower was not a fellow member of the community.

> “Then you ought to have invested my money with the bankers, and at my coming I should have received what was my own with interest.” (Matthew 25:27, Japanese New Interconfessional Translation)

In other words, in the early period of banking in the 17th century, people were issuing gold receipts for gold they did not possess, re-lending the gold that had been deposited with them, and charging interest, which was prohibited in the Bible. At the time, after the Reformation, Protestant thought had spread and the charging of interest itself had been legalized, but religiously and morally a sense of guilt probably still remained.

Is it not possible to speculate that this “sense of guilt” was one of the backgrounds for the low transparency of later banking and the fact that the mechanism of credit creation was not sufficiently discussed for a long time?

The Difficulty of Creating Money

There is a historical dynamic here.

Without money or currency as a medium of exchange, the economy cannot develop. Yet creating money is by no means easy.

Money must be something that everyone commonly recognizes as having value, and it must exist in sufficient quantity. However, if the quantity becomes too large, value disappears according to the economic law of supply and demand. If the quantity is small, value rises, but there is insufficient quantity to serve as a medium of exchange.

In other words, money has a contradictory character from the outset. It must have value that everyone is willing to accept in exchange, and it must exist in sufficient quantity for everyone to use.

This contradictory condition was ultimately resolved by the “problematic” acts described earlier. It could be said that this made the Industrial Revolution (roughly 1760–1840) possible.

Below is a rough summary of the history of modern banking and gold-convertible paper money.

History of Modern Banking, Paper Money, and Asset-Backed Issuance (Grok)

Period / Year	**Major Event**	**Explanation in Relation to Asset-Backed Issuance**
1640	Seizure just before the English Civil War and increase in deposits with goldsmiths	Just before the Civil War, the king (Charles I) seized gold (silver bullion) to raise funds. As a result, the practice of people depositing gold with goldsmiths spread. Receipts were issued and circulated as a gold-backed substitute for currency.
1660–1670s	Development of goldsmiths' lending business and establishment of the fractional reserve system	Receipts came to be used like paper money, and goldsmiths lent out most of the gold they had received. The issuance of receipts in excess of actual gold holdings generated currency creation. Fraudulent aspects were also pointed out.
1694	Establishment of the Bank of England	Established as a private joint-stock company to lend 1.2 million pounds to the government as war funds for the war against France. It issued banknotes and later developed into the bank of banks (lender of last resort).
1717	De facto adoption of the gold standard in Britain (Newton's decision)	Isaac Newton, Master of the Royal Mint, set the exchange rate between silver and gold, leading to a de facto shift to the gold standard. Asset-backed issuance, in which currency value is fixed to gold, was clarified and promoted the stability of international trade.

Period / Year	Major Event	Explanation in Relation to Asset-Backed Issuance
1797	Temporary suspension of gold convertibility in Britain (Bank Restriction Act)	To prevent gold outflows due to the war with France, the Bank of England suspended gold convertibility of paper money. The rigidity of asset-backed issuance was exposed and inflation risk increased, but it became a turning point that promoted flexibility in the supply of paper money. The suspension continued until 1821, demonstrating the limitations of the gold standard.
1816–1821	Establishment of the gold standard in Britain and resumption of gold convertibility	The Coinage Act of 1816 made the gold standard statutory. Gold convertibility of banknotes was resumed in 1821. Asset-backed issuance, in which currency value is fixed to gold, was clarified and promoted the stability of international trade.
1914–1918	Temporary suspension of the gold standard due to World War I	To finance the war, countries suspended gold convertibility. The rigidity of asset backing was exposed, and inflation and currency expansion occurred. Efforts were made to return to the system after the war, but distortions in the balance of supply and demand surfaced.
1925	Return of Britain to the gold standard	The gold standard was resumed in the reconstruction after World War I. Asset-backed issuance, in which currency value is fixed to gold, was strengthened, but in the context of overproduction (the Metabo Economy) it encouraged deflationary pressure.
1931	Abandonment of the gold standard by Britain	Gold convertibility was suspended due to the impact of the Great Depression. The limitations of asset backing became clear, and the collateral principle of currency value wavered. The depreciation of the pound led to trade frictions.

Period / Year	Major Event	Explanation in Relation to Asset-Backed Issuance
1933	Abandonment of the gold standard by the United States (Roosevelt's New Deal)	As a measure against the Great Depression, gold convertibility of the dollar was suspended and a gold confiscation order was issued. A typical example in which the rigidity of asset-backed issuance, lacking flexibility, hindered economic recovery.
1944	Establishment of the Bretton Woods Agreement	In the international monetary system after World War II, the dollar was fixed to gold (35 dollars = 1 ounce). Other currencies were pegged to the dollar, maintaining indirect gold backing (asset-backed issuance). The IMF and World Bank were established to support global collateralism.
1971	Nixon Shock (suspension of gold convertibility)	Amid the dollar crisis (including Britain's request for gold conversion), President Nixon suspended gold convertibility of the dollar. With the collapse of asset-backed issuance, the era of inconvertible paper money began. It became a turning point toward a philosophy of aggregate quantity management in which currency value is determined by the balance of supply and demand, although the illusion of collateralism still remains.

Gold-convertible paper money began, as described above, as a somewhat opaque practice. Thereafter, the financial system was formally institutionalized by states.

Yet even after formal institutionalization, for the roughly 300 years until gold convertibility was suspended in the Nixon Shock, with only a few exceptions, the currency-issuing institutions (central banks, governments, and banks) did not hold a sufficient quantity of gold for convertibility.

In other words, the "opaque" practice was not limited to the early period of banking. With respect to gold-convertible paper money, it continued for 300 years.

The Taboo in Economics

Perhaps because it arose from such an "opaque" mechanism, credit creation appears to have been a taboo in economics. On this point, the interview between Richard Werner and Tucker Carlson is instructive.[8]

According to the interview, there were economists who noticed the mechanism of bank credit creation, but all of them were co-opted by the banks, withdrew their theories, and became very wealthy in return.

Conversely, it is said that those who did not bend their theories were ridiculed by the mainstream and treated as eccentrics. I also checked this with AI. The following is provided for reference.

History of Macleod's Credit Creation Theory and Its Reception (Grok)

Credit creation theory itself is old and was formally proposed in the 19th century. However, in mainstream economics, the "financial intermediation theory" (banks merely collect deposits and lend them out) remained dominant for a long time, and credit creation was a minority view.

Henry Dunning Macleod (1821–1902) was a Scottish economist and lawyer who argued in works such as *The Theory and Practice of Banking* (1855–56) that banks create credit (deposits) through lending. He emphasized the role of banks by stating that "money is the liability of credit," and this was a precursor to modern credit creation theory.

However, the mainstream of the time (classical economics) presupposed the financial intermediation theory, and Macleod's argument was regarded as heretical. Although it received a certain evaluation in the context of banking practice, it was outside the mainstream in academia and was not sufficiently discussed.

There was a tendency from that time for those who publicly advocated credit creation to be regarded as heretics, and this is considered to have been one factor that delayed the later acceptance of the theory.

According to the interview, it was extremely difficult for Werner to make the mechanism of credit creation public and break the taboo. He said that he had considerable difficulty publishing *Princes of the Yen*, which became a bestseller in Japan, and also in publishing related papers.

In other words, it is said that credit creation was treated almost as a taboo for 300 years.

In present-day Japan, not only MMT advocates but even the Bank of Japan acknowledges that banks issue currency (credit creation). When did this come to be publicly recognized?

As I recall from my time as a banker, no one said that banks create currency out of nothing. At the time, the understanding was that banks collect deposits and lend them out.

According to AI Grok, "Private currency issuance came to be recognized after 2010, and it is possible that this book broke the taboo."

If it is not recognized that banks issue currency, aggregate quantity management of M2 is impossible. When one thinks about this, it may be natural that even now there is no discussion of the use of seigniorage by the

Bank of Japan or of aggregate quantity management.

[8] Interview: https://youtu.be/StTKHskg5Tg?si=1VMeotjWAcyLImHU

Historical Context: The Darkness of Europe

Let us look a little more deeply at the historical background. The aim is to understand why a somewhat opaque system came into being and remained a taboo for as long as 300 years.

It was in 17th-century Britain that goldsmiths pioneered the dawn of banking, but Europe at that time was in fact an era of great turmoil.

It was an age in which, after the Great Famine in 14th-century Europe, people were periodically struck by plague and fell into panic, the authority of the Catholic Church wavered, religious wars continued, and large numbers of people were burned at the stake in inquisitions and witch hunts.

Below is the historical background to the birth of modern banking.

Historical Background to the Birth of Modern Banking (Grok)

Period / Year	**Major Event**	**Explanation (Connection Between the Chaos and the Birth of Banking and Paper Money)**
1315–1317 (recurring periodically throughout the 14th century and continuing into the 15th century)	The Great Famine and recurring famines	A great famine caused by bad weather struck all of Europe, and many cities lost 10–25% of their population. Thereafter, owing to climate change (the Little Ice Age), crop failures and famines recurred periodically throughout the 14th century and continued into the 15th century (e.g., the French famine of 1390). This became the basis for the spread of fear of God's curse or the work of the devil.

Period / Year	Major Event	Explanation (Connection Between the Chaos and the Birth of Banking and Paper Money)
1347–1351 (recurring periodically from the 14th century to the end of the 17th century, every few decades)	The Black Death pandemic and recurring plague	Plague struck Europe, killing 30–60% of the population. Thereafter it recurred periodically from the 14th century to the end of the 17th century (e.g., the Great Plague of London, 1665–1666), breaking out every few decades in conjunction with famine and war. Epidemics were believed to be God's punishment or witches' curses, and the panic became a precursor to the witch hunts.
1517	Start of Martin Luther's Reformation (the Ninety-five Theses)	Luther criticized the Catholic Church's indulgences, giving rise to the Protestant movement. Religious division split Europe, and the Protestant vs. Catholic conflict brought war and fear.
c. 1450–1750 (peak: 1560–1630)	Intensification of witch hunts and inquisitions	Witch hunts peaked in Europe, with 40,000–50,000 people burned at the stake or executed. Plague and famine were attributed to the devil, and panic dominated society.
1618–1648	The Thirty Years' War (a war of religion)	The Protestant–Catholic conflict escalated into a major war. The German lands (the Holy Roman Empire) lost 20–30% of their population (estimates vary, and in some regions the losses were greater). A state of chaos in which famine, epidemics and witch hunts proceeded simultaneously.

I would ask you to imagine: in such an era, what would happen if it became known that goldsmiths were issuing receipts in excess of the gold they held?

They would surely not have escaped being burned at the stake.

In other words, the goldsmiths became thoroughly secretive—literally in order to survive.

Then why did they carry out credit creation—that is, issue receipts exceeding the gold on hand—even at such risk?

That they did it to make money is no doubt true. This mechanism was truly a money tree. Thinking more deeply, however, it could also be said that this, too, was for survival.

In Europe at that time, anyone faced a real danger of being burned at the stake as a heretic or a witch. And the best way to avoid that (then as now) would have been to form close ties with the powerful.

On this point, too, I had Grok AI explain the circumstances of the time; please take a look.

The Reality of the Danger of Being Burned at the Stake as a Heretic or Witch (Grok)

Late medieval and early modern Europe was in a state of chaos brought about by religious wars (e.g., the Thirty Years' War), recurring plague epidemics and cycles of famine; people believed these to be "God's punishment" or "the work of the devil" and fell into panic.

Inquisitions and witch hunts escalated against this background of fear, and an estimated 40,000–50,000 people were burned at the stake or executed. The risk applied to everyone:

> Vulnerability of ordinary people: The poor, women and isolated people were easily targeted, and social upheaval (e.g., economic crises or war) increased witch hunts. At times they were used as a means of confiscating property, and accusations arose from neighbors' jealousy or disputes.
>
> In the German lands, economic factors (e.g., confiscation of property) drove the witch hunts, and anyone could fear being burned at the stake as an "accomplice of the devil."
>
> Even the elite were not safe: Even nobles and merchants were liable to be accused of heresy amid religious rivalry (Catholic vs. Protestant), and because the authority of the Church was absolute, everyone felt in danger.
>
> The Inquisition (such as the Spanish Inquisition) was backed by royalty and also functioned as a political tool—those in dependent positions (women and the poor) were at particularly high risk.

Countermeasure: Close ties with the powerful were best

To avoid accusations of heresy or witchcraft, close ties with the powerful (church priests, royalty, nobles, local lords) were the most effective strategy. This is a historically documented survival strategy, because in a society in panic, "isolation" was the greatest risk.

> Methods of forming ties: Buying protection through donations, loans and service was common. Offerings to the Church served as proof of "purification" and prevented accusations.
>
> Medieval elites justified their wealth through charity (donations to hospitals and monasteries),

avoiding criticism from the poor while gaining the protection of the Church.

Ties with royalty (e.g., military participation or marriage) were also effective; those who gained wealth through exploration or trade secured their safety by connecting with the nobility.

In the context of the Inquisition, there were many cases in which testimony from an authoritative representative (a priest or lord) nullified an accusation, so it can be said that close ties were the best course.

The necessity of making money: as a means of forming ties

Making money was indispensable for maintaining ties with the powerful. Without wealth, one could not make offerings or loans, and one became isolated and at greater risk.

The role of making money: The main methods were military participation (gaining wealth through rewards), trade and exploration (vast fortunes from the New World and Asian routes), and marriage (raising one's status through ties with the nobility).

Charitable donations became a means of spreading wealth, returning wealth to the Church and lords in order to gain their protection.

Elites displayed their wealth through silverware and banquets while justifying it through donations to the Church—while the poor starved, wealth was the key to survival.

Just as economic turmoil drove the witch hunts, making money was an essential tool for avoiding the panic.

Looking back on history in this way, it is possible that the historical course by which banking developed has influenced why the accounting treatment of seigniorage at modern central banks, and the debate on managing the total quantity of currency, have long not been sufficiently pursued.

Goldsmith Bookkeeping

Let us consider what kind of journal entries were made in early banking (by the goldsmiths). Take the case where a customer asked to borrow the gold in the vault and the goldsmith issued a gold receipt instead of physical gold.

The amount of these receipts issued greatly exceeded the amount of gold on hand.

When a gold receipt was lent to a customer, the journal entry would be as follows:

Debit: Loans (increase in assets) / Credit: Gold receipts issued (increase in liabilities)

As you can see, the amount of gold held by the goldsmith does not appear in this entry. To take an extreme case, the entry holds even if no gold at all is on hand. And unless everyone came at once asking to exchange their receipts for physical gold, the gold on hand would never run short. In other words, gold receipts could be over-issued.

Now, if the gold receipt was a registered one, such as "Received from Count So-and-so, X pounds of gold," it would be difficult for the goldsmith to disguise the amount of gold on hand.

But what if the receipts became payable to the bearer and were further subdivided into small denominations?

No one would know how much gold the goldsmith held. Moreover, bearer receipts subdivided into small amounts would surely be more convenient to use—exactly as convertible paper money.

It can be inferred that in this way an environment arose in which over-issuance was easy and receipts were easy to use as paper money.

Furthermore, using gold receipts that one had over-issued oneself as paper money for one's own benefit would surely have been far too conspicuous. If a goldsmith who had lived an ordinary life suddenly built a mansion, he would surely have been suspected of embezzling gold.

But what if it took the form of lending and making money from interest? You will see that the "back-room business" of over-issuing receipts changes its character into the "front-of-house business" of lending. Even if he built a mansion, people would surely have accepted it.

This concludes my examination of the historical background to the way the modern financial system works.

Where Should the Money Be Spent?

Next, I would like to consider what money should be spent on. Under direct finance, the Bank of Japan can issue currency. In addition, private banks issue currency through lending.

The question is where to direct the money thus issued.

As far as fiscal expenditure is concerned, this is precisely what becomes an extremely important political theme, and transparency is required.

For example, if the government spends, say, 50,000 yen per child per month on child allowances, that is a large transfer of income, and it is necessary to debate it thoroughly and obtain the public's acceptance.

Now, in fact, bank lending is just as important as this debate over fiscal expenditure. Let me explain.

Competition and Importance of the Banking Industry

Japan's M2 is currently around 1,300 trillion yen (of which cash is about 110 trillion yen), and about half of it consists of outstanding loans (over 600 trillion yen). It can be understood as roughly half-and-half between currency issued by the Bank of Japan originating from fiscal deficits and bank lending.

In other words, fiscal expenditure and bank lending can be said to be about equally important with respect to the question of "what should money be spent on?"

In this case, when considering the funding of direct finance, currency issuance by the Bank of Japan to fill fiscal deficits and currency issuance through bank lending can also be said to be in a competing relationship. If bank lending increases, the quantity of currency increases and becomes an inflationary factor, leaving no room for fiscal deficits (since tax revenues also increase, it cannot be said categorically whether the absolute amount decreases). Conversely, if lending decreases, this becomes deflationary pressure, and the need for fiscal expenditure rises accordingly.

Seen in this way, although the Bank of Japan has the power to issue currency without limit, recording Bank of Japan notes as a liability (not recording seigniorage) is nothing other than curtailing and restraining the power of the Bank of Japan.

I do not think Japanese bankers would think such a thing, but considering that the central bank, born in 17th-century England as a joint-stock company, had the character of a mutual-aid organization for private banks, there seems to be room for the unkind speculation: are they deliberately preserving distorted journal entries so as not to get in the way of private banks' business (currency issuance)?

Furthermore, the claim that "direct finance causes inflation" is an impossibility if the total quantity is managed, and the room to suspect that it might be propaganda spread by the private banking side is not zero.

In other words, there is room to suspect that, in order to protect their somewhat "opaque business" of lending out gold they did not possess and earning interest, they may have deceived politicians with propaganda that direct finance invites inflation, and, by not having seigniorage recorded in the accounts, restricted the central bank's currency issuance and protected their own privileges.

The above is nothing more than the author's own speculation, but if by any chance it were correct, resistance to the author's proposals from international financial elites would be expected.

It is difficult to imagine how strong this resistance would be. But looking at the development of the cryptocurrency industry, I also have a sense that the resistance of established international finance may be unexpectedly not that large. For example, SWIFT, the international remittance system, is being shaken by cryptocurrency technology and Ripple's technology. The SEC sued Ripple, but the case effectively ended in Ripple's victory. No one at Ripple has been assassinated, and the founder of Binance, the world's largest cryptocurrency exchange, pleaded guilty in the United States and served a prison sentence, but was later pardoned.

In other words, there may be resistance, but it is probably not so absolute that the Japanese economy, or the world economy, would have to be sacrificed to it.

Of course, private banks are not the enemy. The 17th-century goldsmiths' business may have been a little opaque, but thanks to their issuing currency widely, the economy developed. Had they not started the banking business, liquidity would have been insufficient, there would have been no accumulation of capital, and as a result even the Industrial Revolution might not have come about.

That said, they are private entities, and it cannot be helped that they act for their own profit.

In other words, the activities of private banks do need to be managed within the whole. Needless to say, in the broad view this is also for the banks' own sake. If the world economy fails, banking cannot survive either.

In other words, both for the development of banking and for the development of the economy as a whole, we cannot simply go in for unbridled financial liberalization.

Let us return to the subject.

How much the government spends, and on what, is extremely important. Likewise, the author considers managing both the quantity and the quality of bank lending to be as important as government fiscal expenditure.

Qualitative Management of Bank Lending

Making a loan means nothing other than creating, for the borrower, purchasing power equal to the amount of the loan. This purchasing power determines what is produced. In other words, it determines the direction of economic activity.

The Direction of the Economy

In the sense that the direction of the economy is determined, what fiscal expenditure is spent on and what bank lending is extended to are of equal importance.

Total-volume regulation of private banks alone is entirely insufficient (even if it can manage major inflation and deflation).

There are loans that are not very desirable. There are also antisocial industries. In other words, a certain degree of regulation is necessary. Furthermore, there are loans for speculation. I would like to discuss that danger separately as well.

On the other hand, there are borrowers to whom we would actively want to lend. These are loans that benefit the real economy, loans that lead to people's happiness, and also loans to the small and medium-sized enterprises that support employment.

For that purpose, it is desirable to be able to lend on the basis of business plans, without relying on collateral.

The value of banks' existence lies precisely in their ability to screen loans. Fine-grained lending and individual screening, which only the private sector can offer, are things that the central bank or the government can hardly do.

If direct finance creates fiscal leeway, I would like to abandon the collateral principle and open the way to a business-plan principle plus government guarantees (more substantial than at present).

Of course, it would be pointless if borrowers easily went bankrupt. Some kind of evaluation system will be necessary.

For banks to survive as an institution, too, what to lend to should become a very important debate.

The small and medium-sized enterprises that support the real economy are also the core of employment. In many cases they are also the bearers of new businesses. Every business, however gigantic, was at first

nothing more than a small sprout.

On the other hand, wealthy borrowers with strong collateral find it easy to obtain loans precisely because they have collateral. But in general their spillover effect on the real economy is low. In other words, the multiplier effect is low. Worse still, such loans easily become the source of funds for land transactions and money games. This also leads to future credit instability (discussed later).

In other words, it is necessary to give priority to loans that go to the real economy, such as capital investment, and to regulate loans that go to money games.

The question is whether a loan benefits the Japanese economy or does something unnecessary.

How to Use Money

Let us continue the discussion of what to spend money on. Concrete ideas are countless, but here I will discuss just three.

Public Assistance (Welfare)

Do not many people believe that public assistance (seikatsu hogo) is someone else's problem?

Unfortunately, in modern Japan, no one knows when they might lose their job. As the use of AI and robots spreads, human labor will become increasingly unnecessary.

I would ask you to consider which you would choose: more "it's me" phone scams (ore-ore sagi) with strict operation of public assistance, or more public assistance and a life lived in security.

A major defect of Japan's public assistance system is that people who are truly in need are kept away from assistance by the psychological resistance to inquiries made to their relatives about support (fuyō shōkai), and by the "waterfront strategy" (mizugiwa sakusen) of turning applicants away at the counter and pressure to withdraw applications. The tragedy of the man in Kitakyushu City who died after leaving behind the words "I want to eat a rice ball" (2007) is a symbol of this.

I would rather think of public assistance in the direction of expansion. Even if extra money is channeled to high-income earners, only a very small portion goes into consumption. Most of it is directed to savings and investment, with no effect of increasing consumption, that is, GDP.

On the other hand, money channeled to low-income people, like child allowances, can be expected to go straight into consumption and to have the effect of expanding GDP.

Ten-Year Food Stockpiles

One of the things the author is concerned about is a ten-year food stockpile—that is, building storehouses for rice and other foods throughout the country.

If kept in the form of unhulled rice (momi), it can be stored for any length of time. It should also contribute to regional revitalization. Unused old mine tunnels or vacant houses could also be used.

If millions of boat people were to pour in from neighboring countries, the first thing needed would be food. It is only natural that people who are starving will riot.

In famine relief for other countries as well, if it is provided in kind rather than in money, situations in which only dictators' pockets are lined can be avoided.

The basis for ten years is as follows.

Basis for a Ten-Year Stockpile (Grok)

Scenario	**Duration of Impact**	**Recovery Estimate**	**Role of the Stockpile**
War / blockade of sea lanes	A few months?	A few months?	Imported food (wheat, soybeans, etc.) halted; 60% or more of the population affected. Short-term avoidance of famine.
Nuclear war (nuclear winter)	5–15 years	Agriculture resumes in 10 years	Endure until the dust settles; rebuild society.
Volcanic eruption	1–10 years	5–10 years	Get through the period of poor harvests.
Climate change (drought)	1–5 years	Several years	Absorb fluctuations; buy time for countermeasures.

Incidentally, raising the food self-sufficiency rate is often put on the agenda in debates on food security, but given the premise of pressure from the United States to import its food, it has to be said that this is a policy with little feasibility. As you can see below, Japan's food self-sufficiency rate halved from 79% in FY1960 to 40% in FY2000, and since then it has been unable to escape a low level of around 38%.

Japan's Food Self-Sufficiency Rate

(Calorie Basis, Every Five Years) (Grok)

Fiscal Year	Self-Sufficiency Rate (%)	Notes (Key Factors and Context)
1960	79	Post-war recovery peak. Predominantly domestic production.
1965	73	Rapid economic growth initiated imports. Dietary diversification begins.
1970	60	High-growth era; surging meat/dairy imports. Sharp drop in self-sufficiency.
1975	54	Deepened import dependency following the Oil Shock.
1980	53	Stabilized plateau; expanding grain imports.
1985	53	Acceleration of Westernized dietary patterns.
1990	48	Consumption surge during the Bubble economy drives further decline.
1995	43	Stockpile debates rise post-Hanshin Earthquake, but decline continues.
2000	40	Peak import dependency under globalization.
2005	40	Plateau; agricultural population aging becomes acute.
2010	39	Food security discourse reignited after Great East Japan Earthquake.
2015	39	Climate anomalies cause fluctuations; structural decline persists.
2020	37	Global supply risks exposed during COVID-19.
2023	38	Decline in rice consumption, etc.
2024	38	The Reiwa rice crisis intensifies; the importance of stockpiles is recognized anew.
2025	37	Latest figure. The effects of the rice crisis continue; the lowest level on record.

Assuming direct finance, a lack of funding for food stockpiles would be impossible; but even assuming the funding shortages of the current indirect finance, there is also an AI estimate that the investment efficiency of food stockpiles is far higher than that of other measures. Please see below for reference.

ROI Comparison: Stockpiles vs. Other Investments (Grok)

Investment Item	Initial Investment	ROI (Death Reduction / Stabilization Effect)	Why Prioritize Stockpiles?
Food stockpile (10 years)	20 trillion yen	High (immediate avoidance of famine; prevents millions of deaths)	Low risk, highly immediate effect.
Raising self-sufficiency	Several trillion yen/year	Medium (long-term increase in production)	ROI improves when pursued in parallel with stockpiling.
Climate change countermeasures	4–5 trillion yen/year	Low (uncertain long-term effects)	Investment becomes more efficient after stockpiling.

Moreover, food stockpiling is not an issue that stops at the security of a single nation. In situations where planting is interrupted on a global scale over a long period—such as a naval blockade, a catastrophic eruption or a nuclear winter—not only population but also seeds (genetic resources) and agricultural technology itself could be lost at the same time.

In such extreme emergencies, a ten-year physical stockpile will play a decisive role—by no means an exaggeration—as "physical survival insurance supporting the continued existence of humanity as a species."

Reform of the Industrial Structure

The major problems of the modern financial economy lie not only in the distortions of indirect finance. Not many people raise it as an issue, but excessive productivity improvement and the accompanying economic metabolic syndrome ("metabo") are also an extremely serious economic problem.

This problem is expected to become increasingly serious in the future, partly because of the spread of AI. A fundamental reform of the industrial structure is surely needed right now.

I would like to examine this in detail in the next chapter.

The Curse of Productivity Improvement

In considering what to spend money on, the topics of productivity increases, overproduction and the metabo economy cannot be avoided. This is also deeply related to the question of why speculative lending arises.

Humanity survived for a long time through eras in which food was absolutely scarce. As a result, we acquired bodies that store everything whenever there is even a little surplus food. This is the cause of so-called metabolic syndrome ("metabo").

In exactly the same way, humanity has survived through eras of scarcity of goods. From this arises the economic behavior of habitually producing too much. The author calls the harm of this overproduction "economic metabo."

Metabo Economy Theory

Please look at the following. This is the basic idea of the metabo economy theory.

1) In the Edo period, 1,000 people work and produce what all of them consume. Full employment is achieved.

2) Suppose the present day has 500 times the productivity of the Edo period, with all other conditions the same. The same output can be secured with 2 people working (1,000 ÷ 500). 998 people are unemployed.

3) Suppose the present-day standard of living (quantity of consumer goods) is 100 times that of the Edo period. 100 times the output can be secured with the labor of 200 people. 800 people are unemployed (1,000 − 200).

If we assume that modern people have 500 times the productivity of the Edo period, then even if they enjoyed 100 times the luxury of that time, the unemployment rate should be 80%. In reality, however, it stays at a few percent. Why?

It can be inferred that this is because work is being forcibly increased. And that work often becomes harmful and unnecessary—just like the fat of a person who has eaten too much.

Examples are endless: persistent telemarketing, hundreds of spam e-mails arriving every day, excessive medical care, investment fraud, special public corporations created for amakudari (post-retirement placements of bureaucrats), war, and so on.

Even more frightening, AI is raising productivity further, and there is an estimate that in the United States up

to 30% of working hours could be automated by 2030 (McKinsey Global Institute, 2023). If this productivity growth is not dealt with, there will be more unemployment and, as its trade-off, more unnecessary and harmful work.

This metabo economy is nothing other than a fundamental disease eating away at the modern world economy.

Below, let us consider anew what problems arise if the metabo economy is left unchecked.

From Productivity Gains to Unemployment

As stated above, productivity increases are a direct cause of rising unemployment and recession. I have shown this in the form of the following flow.

[From Productivity Gains to Recession and Unemployment]

Productivity improvement → Supply > demand → Production glut; inventories increase → Goods do not sell (recession); surplus of labor → Workforce is reduced → Unemployment increases and consumption falls; demand falls → Unemployment and recession become more severe

From Productivity Gains to Credit Instability

Productivity increases are also a cause of credit instability. This, too, can be expressed as a simple flow. Productivity increases directly squeeze bank management and create credit instability.

[From Productivity Gains to Credit Instability]

Productivity improvement → Production glut; inventories increase → Capital investment falls → Demand for funds falls → To maintain earnings, banks all at once make speculative loans for real estate, stocks, etc. → Asset prices rise; collateral values rise (repeatedly) → A bubble arises (a boom in appearance only) → The bubble bursts → Banks face unrecoverable loans and under-collateralization; credit instability arises

One bank making one speculative transaction is no great matter.

But if many banks do the same thing, land prices naturally rise. Newly issued currency becomes funds for purchasing real estate.

As this is repeated, collateral values keep rising. Borrowers can flip land and make as much money as they like. Land prices keep rising.

Then, how long will they keep rising?

For as long as banks keep lending. Conversely, the moment lending is regulated, buyers of land disappear. Loans become under-collateralized. Banks all become under-collateralized at once, borrowers cannot repay their loans, and banks easily become insolvent. In other words, credit instability arises. This is exactly what happened in Japan from the late 1980s to 1990.

From Productivity Gains to War

Productivity increases are also one of the major causes of modern wars. Please look at the following chart.

[From Productivity Gains to Conflict and War Between Nations]

Country A: Productivity improvement → Supply > demand; unemployment pressure → Looks for export markets → Exports to Country B → Unemployment pressure → Conflict → War

Country B: Productivity improvement → Supply > demand; unemployment pressure → Looks for export markets → Exports to Country A → Unemployment pressure → Conflict → War

Below, I have summarized in timeline form the destructive effects of productivity increases since the 1920s.

Timeline of Crises Caused by Productivity Increases (Grok)

Period / Year	**Major Event**	**Explanation of Excess Productivity**	**Result: Links Between Unemployment Pressure, Depression and War**
1920s	U.S. productivity explosion (Ford's assembly line, mass production of electrical appliances)	Production efficiency rose sharply as an extension of the Industrial Revolution (oversupply in agriculture and manufacturing; inventories piled up). The supply–demand balance broke down.	Rising unemployment (falling farm incomes, factory overcapacity). The 1929 stock crash began the Depression. Deflation and widening disparity.

Period / Year	Major Event	Explanation of Excess Productivity	Result: Links Between Unemployment Pressure, Depression and War
1929–1933	The Great Depression	Overproduction exposed a shortage of demand (wages did not keep up with productivity gains, and purchasing power fell). Agricultural prices collapsed; manufacturing inventories were excessive.	Unemployment of about 25% (1933, U.S. peak). Banking crises and a vicious circle of deflation. Poverty fueled nationalism.
1930s	Rise of bloc economies (protectionist trade such as the Smoot–Hawley Tariff Act) and Germany's plight	Each country tried to dispose of its overproduction surpluses through domestic protection; trade fell by 60%.	A game of "Old Maid" with unemployment (babanuki: export restrictions toward other countries—each tries to pass the "joker" of unemployment to others). German unemployment peaked at about 30–40% (1932; over 6 million, with some estimates including unofficial figures close to 50%). Bloc formation widened disparity. A remote cause of the Nazis' rise (1933) and WWII. Germany lost the Old Maid game of unemployment and turned to rearmament to raise demand and counter unemployment.
1939–1945	World War II	Unemployment pressure justified rearmament and aggression (Hitler rose on Germany's high unemployment; Japan sought to secure resources).	War functioned as an "unemployment measure." The structural problem of overproduction escalated global tensions into war.

Period / Year	Major Event	Explanation of Excess Productivity	Result: Links Between Unemployment Pressure, Depression and War
1944–1947	Establishment of the postwar free-trade system (Bretton Woods Conference, founding of GATT)	Promotion of free trade based on the lessons of the bloc economies (faith in Ricardo's theory of comparative advantage). The root of overproduction was ignored, and productivity gains through trade liberalization were treated as "good."	Trade growth brought temporary growth, but the global Old Maid game of unemployment went latent and sowed the seeds of later trade wars.
1950s–1980s	Japan's economic miracle (export-led growth)	Credit creation was concentrated in export industries (automobiles, steel, shipbuilding), raising productivity. Overproduction surpluses were disposed of through exports abroad.	Rising unemployment in U.S. manufacturing (exporting unemployment). Widening disparity gave rise to harmful employment (excessive marketing, etc.), and U.S. pressure (the Maekawa Report) forced Japan to expand domestic demand.
1985–1989	Japan's bubble economy (after the Plaza Accord)	Credit was expanded through BoJ window guidance to ease the strong-yen recession, shifting toward speculation (real estate, stocks).	The aim of expanding domestic demand produced a bubble; Japanese buying up of U.S. buildings alarmed the U.S., leading to tightening.
1990s	Collapse of Japan's bubble (the "lost 30 years")	Overproduction surpluses brought about a collapse of supply and demand and prolonged deflation. The bill for productivity gains came due.	Rising unemployment and widening disparity. The fat of economic metabo could not be shed, and harmful employment (amakudari, etc.) became entrenched. A lesson of the global Old Maid game of unemployment.
2000s–2010s	China's export flood (growth after WTO accession)	Over-investment in manufacturing sent productivity soaring (oversupply in steel, solar, etc.). Rapid GDP growth through export dependence (trade up more than 1,000% from 2000 to 2024).	Rising manufacturing unemployment in the U.S. and Europe (China's trade surplus peaked at 10% of GDP). Overproduction generated the export of unemployment and laid the groundwork for trade friction.

Period / Year	Major Event	Explanation of Excess Productivity	Result: Links Between Unemployment Pressure, Depression and War
2018–present	U.S.–China tariff war (trade war)	China's overproduction pressured other countries through low-priced exports. As free trade reached its limits, the U.S. restricted imports.	The Old Maid game of unemployment intensified (blows to U.S. manufacturing). Escalation to military tension (South China Sea, etc.). Unresolved overproduction raises the risk of war.

What do you think? The metabo economy can also be a direct cause of conflict and war between nations. I would ask you to consider how many lives have been lost because of it.

Continuing Productivity Gains

Although productivity increases have such destructive effects, few people seem to be aware of the danger even now. Below, I have summarized the debate on productivity increases. There is no need to look at it in detail. The point is that productivity increases are still being called for to this extent.

I hope you will feel how frightening this is.

List of Contemporary Debates, Efforts and Policies on Raising Productivity (Mainly 2024-2025) (Grok)

Period / Year	Major Event / Organization / Report	Description (Focus of Productivity Improvement)	Potential Risks of Excess Productivity (Metabo Perspective)
Dec 2024	Gallup, "Workplace Challenges for 2025" report	Emphasizes change management in the workplace. Debate on supporting teams through leadership and raising productivity through the use of AI.	Automation by AI increases unemployment pressure. Generates harmful employment (excessive management systems) and accumulates the metabo fat of widening disparity.

Period / Year	Major Event / Organization / Report	Description (Focus of Productivity Improvement)	Potential Risks of Excess Productivity (Metabo Perspective)
Mar 2024–2025	Deloitte, "2025 Global Human Capital Trends"	Human-centered capital trends. Policy recommendations aiming at productivity gains through AI and talent development.	Bias toward technology investment causes supply–demand imbalance. Overproduction surpluses flow into speculation; risk of the Old Maid game of unemployment.
Jan 2025	WEF, "Thriving Workplaces" report	Advocates investment in a healthy workforce. Efforts to boost productivity by improving employee well-being.	If well-being is skewed toward short-term productivity, it creates the metabo of harmful medical care (overdiagnosis). Wasteful systems increase as unemployment measures.
Jan 2025	McKinsey, "AI in the Workplace" report	Productivity growth potential of 4.4 trillion dollars from AI. Debate on efficiency through corporate use cases.	AI automation (estimated to affect 30% of employment) accelerates overproduction. Risk of a repeat of global tensions from exporting unemployment, a remote cause of war.
Mar 2025	Global Wellness Institute, "Workplace Wellbeing Initiative Trends"	Trends in brain-health and recovery programs. Policies for raising productivity through holistic well-being.	When well-being efforts become excessive, they create harmful systems of nuisance vaccines and excessive medical care, exposing how hard it is to shed metabo fat.
Mar 2025	HR Digest, "HR Best Practices 2025"	HR strategies against layoffs. Future-oriented efforts to raise productivity through skills development and flexibility.	Job instability increases harmful employment such as amakudari and fraud; a metabo vicious circle of widening disparity.

Period / Year	Major Event / Organization / Report	Description (Focus of Productivity Improvement)	Potential Risks of Excess Productivity (Metabo Perspective)
Apr 2025	LumApps, "Employee Productivity Guide"	A complete guide to labor efficiency. Productivity debate on converting time and effort into valuable output.	Efficiency bias fails to eliminate unnecessary work (telephone sales, etc.), and unemployment pressure explodes. Induces protectionism like the bloc economies.
May 2025	Lingio, "12 Ways to Increase Staff Productivity"	Strategies for business leaders. Boosting productivity in 2025 through higher engagement.	Engagement efforts ignore the fat of overproduction. Disparity fuels nationalism and becomes a remote cause of trade wars.
Sep 2025	Qualtrics, "Employee Experience Trends 2025"	Trends in using young employees' ideas. Debate on raising productivity through development and improvement.	Efforts to improve experience upset the supply–demand balance, and the metabo of overproduction exports unemployment globally.
Nov 2025	EY, "Productivity Reset Megatrends" report	Redefining value through AI and megatrends. Policies to raise productivity through human–machine collaboration.	The AI boost fuels soaring productivity. A chilling risk of inviting a chain of depression and war, as in history.
2025–present	Promotion of U.S.-led free trade agreements (FTAs) (e.g., CAFTA-DR, debate on renewing the USMCA)	Reducing trade barriers within FTA frameworks to promote productivity gains globally. The Trump administration's trade policy agenda uses FTAs while emphasizing the prevention of "free riding" by third countries.	Free trade intensifies productivity competition but fuels the metabo of overproduction. The Old Maid game of unemployment (e.g., Chinese exports vs. blows to U.S. manufacturing) invites trade wars and becomes a remote cause of military tension. Promoted without understanding the risks?

Period / Year	Major Event / Organization / Report	Description (Focus of Productivity Improvement)	Potential Risks of Excess Productivity (Metabo Perspective)
2025–present	Expanded application of antitrust law (e.g., tech-company lawsuits, food supply-chain investigations)	Under the Sherman Act, Clayton Act and FTC Act, antitrust suits against Amazon/Google/Meta/Apple continue. Under a Trump administration executive order, anticompetitive conduct in food chains is investigated, and labor-market guidelines promote competition.	Promoting competition aims at innovation (productivity gains) but ignores the risk of overproduction. The accumulation of metabo fat widens disparity and generates harmful employment (excessive marketing), threatening the health of the economy.
1947–present (2025 WTO reform debate)	GATT activities and the transition to the WTO (e.g., 2025 WTO annual report, U.S.-led reform proposals)	Established tariff reductions and trade rules as the foundation of postwar free trade. In the 2025 WTO reform, activities by which the U.S. seeks to rewrite the historical context (a review of preferential treatment for developing countries). Aims at productivity gains by promoting competition.	Criticism: promoting free trade disadvantages developing countries and widens disparity. It fuels the metabo of overproduction globally and produces tariff wars (the U.S. tariff increases of 2025). An illusion that ignores the lessons of the bloc economies; a remote cause of the Old Maid game of unemployment.

Period / Year	Major Event / Organization / Report	Description (Focus of Productivity Improvement)	Potential Risks of Excess Productivity (Metabo Perspective)
2015–present (2025 CPTPP continuation debate)	Promotion and impact analysis of TPP/CPTPP (e.g., latest SCMP news, critical reports)	Promotes intellectual property protection and trade liberalization through a multilateral agreement. Continued as the CPTPP after the U.S. withdrawal; the 2025 debate aims at productivity gains through stronger labor and environmental standards.	Criticism: loss of economic sovereignty through putting companies first, and adverse effects on workers (widening disparity). Productivity competition fuels the metabo of overproduction, increasing trade friction and unemployment pressure. Without understanding the risk of becoming a remote cause of war?
Jul 2025	White House, "America's AI Action Plan"	A national plan built on more than 90 federal AI policy actions, aiming at productivity gains by accelerating innovation and building infrastructure.	AI promotion explosively fuels overproduction. It ignores the metabo fat of rising unemployment (McKinsey estimates a 30% impact on working hours), increasing the chilling risks of disparity and trade friction.
2025–present	U.S. Congress, "Productivity Growth: Trends and Policy Issues" report	Recommends long-term productivity gains through policies to improve educational performance. Boosting the growth of the whole economy through investment in education.	Education policy promotes productivity competition but ignores the collapse of supply and demand from overproduction. Generates the metabo of harmful employment (excessive marketing), a remote cause of the global Old Maid game of unemployment.

Period / Year	Major Event / Organization / Report	Description (Focus of Productivity Improvement)	Potential Risks of Excess Productivity (Metabo Perspective)
Jan 2025	Brookings Institution, "Innovation policies to boost productivity"	Proposes a Grand Innovation Challenge Fund. Aims to raise U.S. productivity by increasing R&D spending.	The innovation fund's technology bias accelerates overproduction. The metabo fat of widening disparity accumulates, raising the risk of depression and war, as in history, to a chilling degree.
Apr 2025	McKinsey, "Boosting productivity in the US federal government"	Recommends productivity measures for the federal government. Promotes efficiency policies to address economic challenges.	Government efficiency encourages automation of the public sector but ignores the metabo of unemployment pressure. Harmful systems (amakudari, etc.) become entrenched, a remote cause of social unrest.
Jun 2025	OECD, "Government at a Glance 2025" report	Promotes productivity gains through public-sector efficiency on multiple fronts. Recommends a multifaceted approach for governments.	Public efficiency fuels the metabo of overproduction globally. Creates a vicious circle of unemployment and disparity and reproduces, to a chilling degree, tensions like those of the bloc economies.
Feb 2025	SHRM, "2025 Policy Outlook: Addressing Modern Workforce Challenges"	Politically promotes productivity gains through AI, skills gaps and labor-law reform.	Labor policy prioritizes boosting productivity but passes over the risk of overproduction. Increases harmful employment as an unemployment measure; a spark for nationalism.

As the table above shows, renowned consulting firms are single-mindedly researching how productivity can be raised—right in the middle of the world economy gasping under overproduction.

Is modern economics not doing research that is the exact opposite of what is needed? At this rate, are not the stability of the world economy, and by extension world peace, nothing but a distant dream?

To solve this problem of the metabo economy, what is needed first is a change in people's awareness, and then a change in the industrial structure. If that cannot be done—I do not want to say anything too dark—the nightmare of another world depression and world war may await us.

Treatment Proposals for the Metabo Economy

I would like to present three solutions for correcting the metabo economy and redirecting overproduction to the benefit of society as a whole.

(1) Adjustment of Statutory Working Hours

During recessions, reduce working hours per person (e.g., from 40 hours to 32 hours per week) so that work is shared, curbing excess productivity and the growth of harmful work.

(2) Reciprocal Tariffs

To curb surges in productivity driven by free trade, countries impose moderate tariffs on each other. Through global coordination, the "fat" of overproduction is reduced. For example, if Japan and the EU set mutual 5% tariffs, both could protect local industries while curbing excessive global production, promoting cooperation rather than confrontation.[9]

Unlike unilateral tariffs, this reduces the risks of trade wars and dollar shortages. It may face challenges such as WTO compliance and possible retaliation by trading partners, but by appealing to the dangers of economic metabo, it could probably be coordinated through multilateral negotiations and within the WTO framework.

Note that this is purely domestic industry protection, that is, an unemployment measure; there is no need to impose tariffs on imports that do not exist domestically (e.g., resources that cannot be obtained in Japan).

[9] Many tariffs between Japan and the EU have already been eliminated under the Japan–EU EPA, so this presupposes a review of the agreement.

(3) Introduction of the Deemed Labor Cost Ratio System

This is the author's original countermeasure against economic metabo. The productivity gains from corporate rationalization (labor cost reduction) are not to stop at increasing internal corporate profits, but are to be applied to improving the welfare of society as a whole, while also serving as an unemployment measure.

Using this system, it should be possible to deal without difficulty even with rising unemployment caused by AI. Below, I explain it concretely.[10]

First, a statutory labor cost ratio (whether it is the industry average or each company's labor cost ratio in the previous period or the period before, the purpose of the system is the same) is set as the minimum required labor cost ratio (labor costs ÷ sales; e.g., if labor costs are 3 billion yen against sales of 10 billion yen, the labor cost ratio is 30%).

If the above labor cost ratio is not achieved, a labor cost shortfall tax (labor cost shortfall × labor cost shortfall tax rate) is levied on the labor cost shortfall (the shortfall obtained by subtracting actual labor costs from statutory labor costs; it is finally adjusted by the inclusion of donations described below). As an incentive, however, companies may include donations in their labor cost calculation. The sum of these donations and actual labor costs is called "deemed labor costs."

Deemed labor costs = Actual labor costs + (Donations × Donation inclusion rate for deemed labor costs)

Examples:

1. If the donation inclusion rate for deemed labor costs is 200%:

Labor costs 2 billion yen + Donations 500 million yen (inclusion rate 200%) = 3 billion yen (deemed labor costs)
2. If the donation inclusion rate for deemed labor costs is 100%:

Labor costs 2 billion yen + Donations 200 million yen (inclusion rate 100%) = 2.2 billion yen (deemed labor costs)
Deemed labor cost ratio = Deemed labor costs ÷ Sales (capped at the statutory labor cost ratio). If sales in this example are 10 billion yen, the deemed labor cost ratio is 30% in case 1 above and 22% in case 2.

The labor cost shortfall is the amount obtained by subtracting deemed labor costs from statutory labor costs.

If the statutory labor cost ratio is 30%, no labor cost shortfall tax arises in case 1 above. In case 2, the shortfall of 800 million yen becomes the labor cost shortfall, and the labor cost shortfall tax is levied on it.

These rates can be adjusted based on the unemployment rate and economic trends, making them a new policy tool for economic stabilization. For example, raising the statutory labor cost ratio during a recession, when unemployment is rising, can curb productivity increases and encourage employment. A similar effect

can be expected by raising the labor cost shortfall tax rate or lowering the donation inclusion rate for deemed labor costs.

Conversely, lowering the statutory labor cost ratio, lowering the labor cost shortfall tax rate and raising the donation inclusion rate for deemed labor costs are likely to increase unemployment and raise productivity. The precise effects of these adjustments on unemployment and productivity will need to be verified through actual policy implementation.

[10] Please also see the author's picture book "Deemed Labor Cost Ratio" (みなし人件費率):

https://www.j15.org/Money/LaborCost/index.html

This mechanism balances companies' productivity incentives with social responsibility: tax revenue is allocated to unemployment measures, and donations make it possible to turn important work—such as elderly care, emotional healing, the arts and rehabilitation—into paid jobs, or to improve its pay.

The concept is to direct part of the profits generated by corporate productivity gains to the volunteer sector, which inevitably tends to have low incomes and labor shortages, opening the way to a society in which everyone can play an active part. The more companies raise productivity, the more they increase corporate earnings while at the same time donating part of those earnings to the volunteer sector. This would greatly enhance the motivation of the people working at those companies and their sense of participating in society.

In the AI era, AI will take on basic production tasks, and humans will also be able to concentrate on unique work that provides love, warmth and comfort (conversation with lonely elderly people, preventing reoffending, supporting people with trauma, etc.).

Rather than creating harmful work under the unemployment pressure of productivity gains, the idea is to move money and labor together into socially indispensable work and build a future of mutual support and growth.

Export Companies and Retained Earnings

Deemed labor costs will, needless to say, be a burden on companies.

In fact, many export companies benefit from the weak yen. In the 1980s they increased trade and export volumes on the weak yen, and this became pressure for yen appreciation. Today, because of the trouble caused by trade friction, Japanese companies do not increase export volumes even when the yen is weak. Their behavior pattern is not to increase volume but to raise prices and raise earnings.

The problem is that this is not returned to society: retained earnings (earned surplus) exceeding 600 trillion yen simply pile up to no purpose, and companies' cash and deposits on hand have reached about 300 trillion yen—close to half of that—becoming, so to speak, dead money. If these huge retained earnings had been

returned to people's incomes, people's lives would have become richer, consumption would have been stimulated, and the Japanese economy would have been revitalized as well.

Because of the distortions of the consumption tax, paying for dispatched (temporary agency) workers is more advantageous for tax purposes than paying personnel costs. This only makes people poorer. In other words, consumption is not generated, and the Japanese economy remains in recession.

In other words, it can be said that, because of distortions in the tax system or distortions of excess productivity, the productivity gains that should have made people richer have turned into corporate retained earnings.

It can also be said that these retained earnings arose as a result of productivity improvements. In other words, it should be reasonable to levy deemed labor costs and the like on companies.

Of course, behind this lies the international race to cut corporate taxes, and it cannot be dismissed as a failure of Japanese policy. Japan's corporate tax fell amid international competition, and the consumption tax filled the gap.

If consumers have no leeway, the economy cannot possibly develop. With nearly half of national income going to taxes and social insurance premiums, the Japanese economy has no future. Even assuming the current distorted indirect finance, it should be possible to reduce the tax burden on individuals by raising corporate tax and tariffs together.

Of course, if the corporate burden increases, international competitiveness will fall. Until countries around the world align on deemed labor costs and unemployment pressure disappears, domestic companies need to be protected.

For that purpose, too, moderate tariffs will be necessary. If tariffs are imposed, companies have no choice but to keep production bases in Japan. In other words, unemployment does not increase, and excessive international competition can be avoided. Raising corporate tax and levying deemed labor costs should both become possible.

Bank Lending and Bank of Japan Window Guidance

You may wonder why we should talk about Bank of Japan window guidance now, of all times.

The author in fact considers it one of the causes of the lost 30 years. It is also a theme related to what money is spent on.

Many people take issue with the consumption tax. But almost no one seems to point to window guidance.

I have said that managing bank lending is as important as managing fiscal expenditure.

I have also said that if the quality of bank lending is not managed, situations like a land bubble arise and credit instability is also generated.

Window guidance was in fact deeply involved in the causes of the bubble's emergence and bursting. Window guidance is an economic policy tool powerful enough to create a bubble—and to burst one.

History of Window Guidance

I would like to talk about how Japan once in fact exercised extremely effective and powerful management over bank lending. This is described in detail in Werner's *Princes of the Yen* (『円の支配者』).

Please see the following for reference.

Timeline of Bank of Japan Window Guidance (Grok / Princes of the Yen)

Period / Year	**Major Event**	**Explanation of Window Guidance (Based on Werner's Book *Princes of the Yen*)**
1930s–1940s (prewar)	Concentration of lending in military industries	As a prototype of window guidance, the BoJ gave priority guidance to credit creation for military-related industries (weapons production, securing resources). Lending was devoted entirely to supporting rearmament, shifting the economy to a war footing.

Period / Year	**Major Event**	**Explanation of Window Guidance (Based on Werner's Book *Princes of the Yen*)**
1945–mid-1950s	Introduction during postwar reconstruction	The BoJ's role was reorganized under the U.S. occupation. From the 1950s onward, window guidance became established as a main instrument of monetary control, and management of total credit began in earnest. It laid the foundation of the postwar economy.
1950s–early 1970s	Concentration of lending in export industries (economic-miracle period)	Window guidance concentrated credit creation in export industries (automobiles, steel, electronics, etc.). It promoted productivity gains and realized Japan's high-speed growth. *Supplementary note: Werner's perspective emphasizes the concentration on exports, but in terms of GDP composition, domestic demand (private consumption + capital investment) generally accounted for over 70%, and the export share was around 10%. Domestic demand was the main foundation of growth, and exports played the role of an "accelerator" once domestic demand had been met. (Ratios are Grok's approximations.)*
Late 1970s	Export surge after the oil shocks	With the oil shocks (1973, 1979), domestic demand weakened and the export bias of window guidance accelerated. The export share rose to around 15% of GDP, and the trade surplus expanded rapidly (about 5 trillion yen on a customs basis in 1978; it expanded further in the 1980s). This increased unemployment in U.S. manufacturing and laid the groundwork for the yen appreciation induced by the Plaza Accord (1985). A typical period in which overproduction invites the Old Maid game of unemployment. *Supplementary note: domestic demand still remained in the 60% range, but the tinge of export dependence strengthened and became a cause of U.S. pressure. (Ratios are Grok's approximations.)*

Period / Year	Major Event	Explanation of Window Guidance (Based on Werner's Book *Princes of the Yen*)
Early 1980s (from around 1982)	Declining role of guidance	With the progress of financial liberalization, the influence of window guidance weakened. The role of lending programs diminished, with signs of a shift toward market mechanisms.
1985–1989 (bubble formation period)	Credit expansion skewed toward real estate and speculation	Credit creation was expanded to ease the strong-yen recession after the Plaza Accord, flowing into real estate lending and speculation (stocks, etc.). Intentionally? It induced the bubble.
1989–1991	Tightening and the bursting of the bubble	To curb the overheating bubble, lending was restrained using window guidance and the official discount rate was raised. The severe tightening around 1990 brought about the collapse of the bubble and led to recession—the beginning of the lost 30 years.
July 1991	Formal abolition of window guidance	Abolished amid financial liberalization and a review of policy tools. Aspects of declining effectiveness and evasion of responsibility (Werner's criticism). Thereafter, a retreat from direct guidance to indirect regulation.

Werner even claims that BoJ window guidance was an extremely powerful economic policy and that the BoJ officials in charge of it had authority exceeding that of the Prime Minister.

The author believes that excessive financial liberalization is one of the reasons the Japanese economy fell into a long recession. Could not reviving BoJ window guidance be put to great use in managing the total quantity of currency and in determining the direction of bank lending?

However, just as transparency is needed for fiscal expenditure, ensuring transparency is also extremely important for window guidance.

Summary of the Proposal

Below, I have briefly summarized the content of the proposal.

Comparison Table: Asset-Backing Philosophy vs. Aggregate Quantity Management Philosophy

Item	**Asset-Backing Philosophy (Current System)**	**Aggregate Quantity Management Philosophy (New Approach of the Proposal)**
Basis of currency value	Intrinsic value of collateral and reserve assets (e.g., gold, bonds, government bonds). An illusion of intrinsic value. In reality it changes greatly with fluctuations in supply and demand; collateral values fluctuate.	Inflation and deflation controlled dynamically through the supply–demand balance (aggregate quantity management). Transparency ensured by making the quantity issued visible. Record seigniorage in the accounts!
Basis of supply	Based on the collateral capacity of asset holders (favoring the wealthy and large corporations), not on need. Unnecessary lending (turning into money games) is rampant. Problems of bank profitability.	Based on people's needs (led by the government and central bank, which can take risks). Flexible supply to areas of need (innovation, social investment, poverty measures, social-structural transformation, etc.).
Stimulating the economy	Stagnation (low multiplier; speculative bias weakens the real economy and hinders growth). Assets that become objects of speculation inflate.	Accelerated growth (high multiplier; innovation driven by need-based supply; automatic fiscal resources). However, there is the problem of excess productivity. Fine-grained lending by banks and a transparent system similar to window guidance; public guarantees as well. Systems such as deemed labor costs as measures against excess productivity and unemployment. Lending supports the transition to volunteer industries and others that contribute to happiness.

Item	Asset-Backing Philosophy (Current System)	Aggregate Quantity Management Philosophy (New Approach of the Proposal)
Inflation management	Unpredictable (risk of over-issuance due to dependence on private credit). The illusion that asset backing prevents inflation; collapses in supply and demand are ignored.	Central-bank-led (visible total quantity, supply–demand adjustment). Early control of inflation through the supply–demand balance. Interest-rate policy without risk of insolvency. Raising the reserve requirement ratio, window guidance, considering legislation of an automatic brake rule, etc.
Fiscal soundness	Expanding government debt (total 1,100–1,200 trillion yen; interest burden about 13 trillion yen per year). Risk of insolvency.	The portion held by the BoJ is cancelled by recording seigniorage. Direct finance using seigniorage. Issuing government bonds becomes unnecessary (which does not mean they should be abolished).
Poverty relief and disparity	Low effectiveness (favoring the wealthy widens disparity; funds are skewed toward places that do not need them; social investment is insufficient).	High effectiveness (risk-taking supply narrows disparity; more spending for low-income groups). Fairness improves through need-based supply.
Risk of financial panic	High (wealthy-class bubbles swell, forming a top-heavy structure and weakening the real economy). From bubbles to credit instability and panic.	Low (bubbles detected and adjusted through aggregate quantity management). Structural stability centered on supply and demand, eliminating the inevitability of panics.

The Financial Revolution / How Can the Proposal Be Realized?

How, concretely, can the financial revolution be realized? The author believes that, as long as those in positions of responsibility deeply understand its necessity, there are in fact no very large obstacles to be seen.

The most realistic and simple way to carry out the financial revolution is for the Bank of Japan to use seigniorage to cancel the roughly 500 trillion yen of government bonds it holds (as of October 2026; about 590 trillion yen at the peak). This could possibly be started on a small scale within the current framework, after going through the prescribed procedures, such as approval by the Minister of Finance (Article 52 of the Bank of Japan Act). Nor do international rules (the IMF, Basel III) directly bind the BoJ's accounting treatment.

First, in the first year, 10,000 yen is fine. In any case, seigniorage is used to cancel government bonds held by the BoJ (an example of the journal entries is given later).

As a little thought should show, this is an accounting treatment between the government and the Bank of Japan, and there is no exchange of currency with the private sector whatsoever. In other words, in theory this cancellation of 10,000 yen causes neither inflation nor deflation. It is 100% neutral with respect to M2.

That said, it is probably something that no one in the world has done. Even if it is a mere 10,000 yen, directly recording seigniorage in the accounts should have a large impact internationally as well.

The government and the Bank of Japan will need to set out their stance on aggregate quantity management clearly. They will also need to make the case that these entries are an offset solely between the BoJ and the government.

In fact, it is a matter of a mere 10,000 yen. However things turn out, there will be no effect on confidence in the Japanese yen.

Then, while watching market reactions, the scale is increased over several years.

For example, in the following year only 100 million yen is cancelled. Once the market has grown used to it, 1 trillion yen in the third year, 100 trillion yen in the fourth year, and so on.

Then all of the roughly 500 trillion yen of government bonds currently held by the BoJ are cancelled.

Once this has been achieved, other countries with monetary sovereignty will follow.[11] People's thinking will surely have changed by 180 degrees.

Once things have reached the point where other countries are imitating it, the Bank of Japan Act and the Public Finance Act can then be amended, and almost all financial and fiscal problems can be solved through direct finance and aggregate quantity management.

There are also no international rules binding the recording of seigniorage by the BoJ, direct finance and aggregate quantity management, or even the revival of window guidance. Basel III basically aims at the soundness of private banks' management; central banks are a matter of each country's policy and are left to its discretion. Japan has not received loans from the IMF, so the IMF has no coercive power either.

[11] Article 123 of the Treaty on the Functioning of the European Union prohibits the ECB and the national central banks of the euro area from granting credit to governments and from directly underwriting government bonds. For the euro area to follow, a treaty amendment would be necessary.

Related Journal Entries

Let me touch on the related journal entries.

At present, in the BoJ's accounting treatment, Bank of Japan notes are treated as liabilities, whereas "Japanese Yen," the account newly established under the proposal, would be treated as an asset. An objection that this is contradictory is naturally anticipated, but in fact the current method of journal entries itself provides the answer to that objection.

Let us look at the details.

Journal Entries for the Proposal's Direct Finance

Below, I have considered how the BoJ would make journal entries in the case of the proposal's direct finance.

> Suppose the BoJ uses the (newly established) Japanese Yen account and seigniorage to transfer 100 million yen into the government's current account at the BoJ.

1) Recording seigniorage (creating currency out of nothing and recognizing it as revenue)

(Debit) Japanese Yen 100 million yen / (Credit) Seigniorage 100 million yen

2) Transfer to the government current account (use of the revenue)

(Debit) Government grant (expense) 100 million yen / (Credit) Government current account 100 million yen

3) Offsetting expense and revenue

(Debit) Seigniorage 100 million yen / (Credit) Government grant 100 million yen

> Cancelling 10,000 yen of BoJ-held government bonds using seigniorage

1) Direct recording of seigniorage and creation of Japanese yen (creating currency out of nothing)

(Debit) Japanese Yen (asset) 10,000 yen / (Credit) Seigniorage (revenue) 10,000 yen

2) Cancellation of government bonds

(Debit) Loss on cancellation of government bonds (expense account) 10,000 yen / (Credit) Government

bonds (asset account) 10,000 yen

3) Offsetting expense and revenue

(Debit) Seigniorage (revenue account) 10,000 yen / (Credit) Loss on cancellation of government bonds (expense account) 10,000 yen

Explanation: In these entries, the loss on cancellation of government bonds and seigniorage offset each other, so the BoJ's profit and loss is plus-minus zero. As long as currency issuance is recorded as an asset, cancelling government bonds does not, in the first place, give rise to problems of a deficit or insolvency at the BoJ.

The Bank of Japan's Current Journal Entries

The author is an outsider and, frankly, it was difficult to confirm the details, but I understand the following to be the current journal entries.

When a private bank withdraws Bank of Japan notes from its current account at the BoJ

(Debit) Current account XX yen / (Credit) Banknotes issued XX yen
Explanation: The printing of Bank of Japan notes takes place off the books (that is, it is not subject to journal entries). Only when a private bank withdraws the notes are they issued, become subject to journal entries, and become a liability of the BoJ.

On return (when a private bank returns notes to the BoJ and its current account increases)

(Debit) Banknotes issued XX yen / (Credit) Current account XX yen
Explanation: The liability decreases at the same time as the notes are returned. In other words, the physical notes go off the books.

On destruction of notes

Apart from destruction costs, this is an off-book transaction with no journal entry.

As described above, Bank of Japan notes are a liability account. On the other hand, as mentioned earlier, the newly established Japanese Yen would be an asset account. At first glance this appears contradictory, but in fact, considering the present situation, it turns out that there is no major problem. This is because, in the BoJ's current journal entries, Bank of Japan notes and coins are recorded differently even though both are cash. In other words, it could be said that Japan already has, for coins, a mechanism for treating the gain from issuing currency as income.

When the BoJ sells a used desk it owns for 10,000 yen and receives payment in Bank of Japan notes

(Debit) Banknotes issued 10,000 yen / (Credit) Tangible fixed assets 10,000 yen
Explanation: A decrease in "banknotes issued" (a liability). The 10,000 yen in notes received is immediately removed from the amount issued. The BoJ's balance sheet shrinks by 10,000 yen.

When the BoJ sells a used desk it owns for 10,000 yen and receives payment in coins (e.g., twenty 500-yen coins)

(Debit) Cash (asset) 10,000 yen / (Credit) Tangible fixed assets 10,000 yen
Explanation: Only the composition of assets changes. In other words, the balance sheet does not change.

What do you think? Even for the same cash, the BoJ's journal entries for Bank of Japan notes and for coins appear to differ. Bank of Japan notes are a liability; coins are an asset. In other words, even if Japanese yen is newly established as an asset account, the contradiction does not become any greater.

Incidentally, the production cost of a 500-yen coin is far below its face value (it is not published, but some estimate it at several tens of yen). It is the government that issues coins, and the difference between face value and cost is treated as government revenue. Although both are the same "yen," coins are an asset on the BoJ's books, and for the government that issued them, the difference is revenue.

If "it is a liability because its value is guaranteed" is the basis for treating Bank of Japan notes as liabilities, it would be odd not to treat coins the same way—but that is not how things stand at present. That being so, there should be no major problem in making the newly established account "Japanese Yen" an asset account.

Credit Creation Quotas

Criticism is also anticipated: "Even if you talk about managing the total quantity of currency, can such a thing really be done?" This criticism has a certain persuasiveness. Statistics such as M2 exist, but they alone are somewhat insufficient for carrying out aggregate quantity management.

Let me explain this point as well.

Japan's M2 is currently just under 1,300 trillion yen. But under the current statistical and accounting systems, it is extremely difficult to trace accurately where this M2 came from—the detailed breakdown of credit creation, or how much was created at what point in time.

This is because the statement that "private banks' credit creation (currency issuance) occurs through lending" is somewhat inaccurate. In practice, various cases can be considered, as follows.

The following is credit creation (currency issuance) when a private bank makes a loan:

(Debit) Loans ×× yen / (Credit) Deposits ×× yen
Explanation: The case where the loan is credited to a deposit at the bank itself in the name of the borrowing company.

The following is a private bank loan, but not credit creation (currency issuance):

(Debit) Loans ×× yen / (Credit) Cash ×× yen
Explanation: When a bank lends from cash on hand, no deposit money is created (credit creation in the narrow sense). However, because cash held by banks is not included in M2, M2 (cash currency) increases by the amount of cash handed to the borrower.

The following is credit creation (currency issuance) by a private bank:

Example: The bank purchases government bonds held by Toyota and pays the proceeds into Toyota's deposit account at the bank.

(Debit) Government bonds ×× yen / (Credit) Deposits ×× yen
Explanation: If payment is made into a deposit at the bank itself, it is credit creation, not only in the case of lending.

The following is not credit creation (currency issuance) by a private bank:

Example: The bank purchases government bonds held by Toyota and pays the proceeds in cash.

(Debit) Government bonds ×× yen / (Credit) Cash ×× yen
Explanation: As with lending, payment in cash is not credit creation.

Payment of deposit interest is also effectively credit creation

(Debit) Interest expense ×× yen (expense account) / (Credit) Deposits ×× yen (liability account)
Explanation: When a bank pays interest to depositors, deposit balances increase, so M2 increases. Some argue that, under a strict economic definition, this does not count as credit creation, but from the perspective of managing the total quantity of currency, it needs to be included in the scope of management as a transaction that increases M2.

Bill discounting is also credit creation (e.g., face value 1 million yen, discount fee 20,000 yen)

(Debit) Discounted bills 1,000,000 yen / (Credit) Deposits 980,000 yen; Discount fees received 20,000 yen

In addition, when a bank receives fees or loan interest (including when they are received in cash), M2 decreases through a decline in deposits, etc. On the other hand, when a bank pays salaries or expenses, M2 increases, and loan repayment also decreases M2.

Thus credit creation is not simply the amount of lending; in order to manage the total quantity of currency rigorously, it is considered necessary to require each bank to report its amount of credit creation and to manage credit creation quotas.

Below, I have also considered auxiliary journal entries (memos) for credit creation.

Auxiliary Journal Entries for Credit Creation / Memos

The main journal entries at the time of lending or asset purchases remain unchanged; credit creation is noted as a memo by means of an auxiliary entry. When credit creation occurs, the credit side is always deposits, so the origin of the credit creation is noted in the memo.

Example 1: Lending (credit creation occurs)

Main entry: (Debit) Loans ×× yen / (Credit) Deposits ×× yen
Auxiliary entry / memo: Credit creation ×× yen (in connection with a loan to Company XX; purpose: productivity improvement; within the aggregate quota)

Example 2: Purchase of government bonds (credit creation occurs)

Main entry: (Debit) Government bonds ×× yen / (Credit) Deposits ×× yen

Auxiliary entry / memo: Credit creation ×× yen (in connection with the purchase of government bonds held by Toyota; purpose: investment; within the aggregate quota)

Meaning: Credit creation is captured even outside lending. Reporting is made mandatory and the figures are aggregated at the BoJ.

Cases where credit creation does not occur: in the case of (Debit) Loans ×× yen / (Credit) Cash ×× yen, a memo of "No credit creation (but M2 increase of ×× yen: cash disbursement)" is made in the auxiliary entry to distinguish it.

Note that, to the extent that the credit creation quota allocated to a bank is insufficient, lending in cash may increase (how great a possibility this is, is questionable).

Also, at present the MB is abnormally large (past credit creation by the BoJ), and lending in cash leaves MB unchanged but increases M2, becoming an inflationary factor. In that case, there may also be a need to manage lending quotas.

If the BoJ revives window guidance, I expect its targets to be lending quotas + the amount of credit creation.

Supplementary Notes

Let me add a few supplementary points.

The Velocity of Money

Inflation and deflation management under direct finance is based on aggregate quantity management, but that alone is not sufficient.

A major factor is the velocity of money. For example, even if tansu yokin (cash hoarded at home) increases, inflation does not occur.

The GDP Trap

I explained automatic fiscal resources arising from GDP growth; let me add one point.

GDP increases at the point of production—not at the point of sale. In other words, GDP increases merely by piling up inventory.

China's current economic problem of rising inventories is largely due to having made GDP a policy target. In Japan's case, it is hard to imagine a similar problem arising, but when making GDP growth a policy target, it will be necessary to keep this in mind.

Where Surplus Money Goes

We live in a modern age with ample productive capacity. Limiting the discussion to domestic circumstances, I do not think that inflation will result immediately just because the total quantity of currency increases. Even considering individuals, if someone gains financial leeway, it is by no means the case that their consumption automatically increases. Demand is not infinite.

For people with annual incomes of a few million yen or less, consumption rises as income rises. But even if a person with a real annual income of 100 million yen comes to have a real 200 million yen, their consumption of food and everyday items does not increase.

If leeway arises across the board and a quantity of currency exceeding consumption circulates, it will not lead to price rises for daily necessities; the surplus money will go to luxury goods such as high-end cars and

yachts, or to savings and investment.

I do not think an increase in the number of rich people enjoying luxury goods is in itself a major problem. That in its own way raises the motivation to work and can serve as a goal in life.

From the standpoint of society, too, there is no particular problem with luxury goods selling. Even if a rich person buys a handbag costing several million yen, no one is hurt.

On the other hand, if this surplus money flows into things for which there is real demand, such as real estate, it seems likely to distort the economy. For things with real demand, it is desirable to strengthen capital gains taxation.

Meanwhile, for things whose rising prices pose no problem however high they go—such as bitcoin and art such as paintings and sculptures—I would like to reduce the capital gains burden and guide surplus currency in that direction.

At present, money does not circulate in the real economy but flows to unnecessary places, and the economy has become distorted. So to speak, deflation and inflation coexist. If the flow of money is managed through direct finance and window guidance, major problems can be expected not to arise, but I would also like to consider managing where money goes through capital gains taxation.

Taxation of the Bank of Japan

The Bank of Japan currently pays corporate tax, enterprise tax, inhabitant tax and so on as a special corporation.

Under the proposal's direct finance with aggregate quantity management, it is desirable to exempt the BoJ from taxation. There is also no need at all for it to return its surplus to the national treasury. These current systems only complicate aggregate quantity management.

Naturally, the 5% transfer to reserves would also become entirely unnecessary (under Article 53, paragraph 1 of the Bank of Japan Act, the BoJ is obliged to set aside 5% of its surplus for each period as a legal reserve).

International Rules That Protect Banks While Harming the Economy

Since Abenomics, the BoJ's government bond holdings at one point swelled to about 590 trillion yen. The funds used for these purchases sit in current accounts at the BoJ held in the names of private banks.

As a result, private banks still have large excess reserves. In other words, by this calculation they could purchase around 400 trillion yen of government bonds without strain. That is, there should be room for a considerable amount of fiscal expenditure.

However, international rules stand in the way: Basel III. The main ones are the leverage ratio regulation[12] and IRRBB.[13]

There are estimates that, under these regulations, the additional government bonds private banks can buy amount to at most 100–120 trillion yen (Japan Center for Economic Research, 2024, etc.).[14]

In other words, as long as the current financial system continues, Japan's fiscal crisis is at a point where it cannot be put off. There is no leeway to increase government bonds.

Needless to say, these international rules aim at sound bank management. On the other hand, however, these international rules make it difficult to carry out the perfectly ordinary fiscal consolidation policy of "increasing fiscal expenditure, expanding GDP, and lowering the ratio of outstanding government bonds to GDP." It seems to me that if the soundness of the Japanese economy is impaired, the soundness of bank management would be beside the point.

Another major problem is the risk weights in Basel III's capital adequacy ratio.[15] As shown below, the structure extremely favors lending to large companies and highly rated borrowers.

> Large companies / high ratings: For ratings of AA− or higher, the risk weight is 20% (50% for A ratings). Megabanks that can use the internal ratings-based (IRB) approach can often calculate even lower weights. Example: even if 100 million yen is lent, only 20 million yen is added to the denominator.
> SMEs / low ratings: The risk weight is 75–100% (85% for medium-sized and small enterprises; 75% for retail exposures that meet certain conditions). Example: if 100 million yen is lent, almost the full 100 million yen is added to the denominator.

As a result, an extremely irrational structure has arisen in which, for a bank, "lending tens of millions of yen to an SME" places a heavier burden on its capital than "lending 100 million yen to a large company."

This means that funds do not flow to the SMEs that support employment and new industries, and lending concentrates only on large companies and wealthy borrowers. In other words, there is a danger that money does not circulate in the real economy and flows only into asset inflation and money games.

This is fixed by international rules. Of course, these are regulations to protect bank management and the financial system, but on the other hand they are considered to be one of the major causes of the current distortions in the world economy.

Of course, with government guarantees, even SMEs can obtain loans on favorable terms. If we want to

protect the Japanese economy, countermeasures such as government guarantees through direct finance are desirable.

[12] The leverage ratio regulation is an international regulation (Basel III) to prevent banks from holding excessive assets relative to their capital. The following ratio (simplified) is required, in principle, to be 3% or more: capital ÷ total assets. Total assets include government bonds but do not include current account deposits at the BoJ; in that case, however, the ratio is required to be 3.15% or more.

[13] IRRBB (Interest Rate Risk in the Banking Book): "a simulation of how much a bank would lose when interest rates rise." The banking book refers not to positions for short-term buying and selling but to "loans," "deposits" and "government bonds held to maturity." When interest rates move, the "value" of these changes drastically. Banks whose decline in economic value under an interest-rate shock exceeds 15% of Tier 1 capital become subject to focused supervisory attention (this is not a prohibition on holdings, but it works in effect as a ceiling).

[14] Japan Center for Economic Research, "Banks' room to buy government bonds exceeds 100 trillion yen if they take the maximum interest-rate risk" (October 2024); same, "Deposit-taking financial institutions' capacity to purchase government bonds exceeds 120 trillion yen" (September 2025).

[15] Capital (net assets, etc.) ÷ risk-weighted assets (RWA: loan amount × risk weight) ≥ prescribed ratio.

Outline of the Financial Revolution (Draft)

This concludes the manuscript. Finally, I summarize in chronological order an image of how the proposed financial reform would be carried out.

1. **Start of recording seigniorage through the BoJ's accounting treatment**

Start on an extremely small scale (around 10,000 yen) in the first year. The government and the BoJ formally declare aggregate quantity management of currency, taking care not to give the market concerns about inflation. This can be handled by changing the BoJ's accounting rules (including procedures such as approval by the Minister of Finance), and the scale is expanded step by step while watching market reactions.

2. **Management of the total quantity and quality of private bank lending through the revival of window guidance**

In parallel, management of private banks' volume of credit creation and of the quality of their lending is gradually strengthened.

3. **Full-scale move toward offsetting government bonds on the order of 500 trillion yen**

If there are no problems with small-scale operation, the scale is gradually expanded and the offsetting of government bonds held by the BoJ proceeds. If inflation does not occur at this stage, the likelihood that the world's central banks will follow increases, and international debate on direct finance is expected to spread.

4. **Building a full-fledged system of direct finance and aggregate quantity management through institutional reform**

After building a track record, the Bank of Japan Act and the Public Finance Act are amended to give direct finance by the BoJ and aggregate quantity management of currency an institutional footing.

5. **Implementing measures against economic metabo**

While watching the progress of the financial reform, measures against excess productivity are pursued to the extent feasible. Specifically, the introduction of moderate tariffs, an increase in corporate tax, a reduction in consumption tax, and a shift toward employment and happiness industries using the deemed labor cost ratio are implemented as circumstances allow.

Note:

International rules (the IMF, and Basel III of the Basel Committee on Banking Supervision) do not directly

bind the BoJ's accounting treatment. Domestically, however, approval/authorization by the Minister of Finance under the Bank of Japan Act is a prerequisite. To minimize the impact on the market, it is considered appropriate to start on an extremely small scale (e.g., around 10,000 yen) in the first year and to expand step by step while checking reactions.

Jun Togo, Fiscal and Monetary Issues (YouTube playlist):

https://youtube.com/playlist?list=PLxi5LDdwzqr4S-CEEv_ZHW6uhEIaRagkQ&si=cdQfynfOQqC-g5Kq