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— Lord Mervyn King

Former Governor, Bank of England

Reforming Money and Banking - How a full-reserve, interest-free system can eliminate government debt, deficits, and inflation.

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Executive Summary

Pakistan's ongoing economic problems high inflation, growing public debt, recurring fiscal crises and weak growth are often blamed on poor governance, inadequate tax collection or external shocks. This article argues that such explanations are incomplete. The real reason for Pakistan's chronic instability lies deeper in the framework of the monetary and banking system in particular the use of fractional reserve interest-based money creation.

Under the present system most of the money in Pakistan is not created by the state but by the commercial banks by way of lending. When banks make loans, they create new deposits in other words new money enters the economy in the form of interest-bearing debt. With reserve requirements of only about *5-6 percent* bank-created money dominates the total money supply by about *95 percent* with sovereign money a small fraction of total money supply. This structure requires the government to borrow to spend and public debt begins to pile up continuously.

The consequences of this in the long term can be seen in the data from Pakistan. Over the past *fifty years* money supply has increased almost *1,000-fold* while real economic output has only increased about *9-fold*. Prices have soared by over 70-100 times and average inflation has remained high close to 8-9 percent, much higher than that of advanced economies. Today, public debt is about *70-75 percent* of GDP and *35-40 percent* of federal revenue is used for interest payments. In some years interest servicing has been more than development health and education spending combined.

The article shows these outcomes are structural and not accidental. High interest rates which have often been adopted to curb inflation have instead hurt investment, employment and exports. The recent hike in policy rates from *7 percent to 22 percent* is a good example of how conventional tools often add to economic stress without addressing the underlying cause.

Drawing on historical and modern research in economics including the work of *Irving Fisher, Milton Friedman*, and *IMF* economists *Benes and Kumhof* the article presents full-reserve banking as a viable and evidence-based alternative. Under a full-reserve system the

power to create money is brought back to the state, transaction deposits are fully backed and banks operate strictly as financial intermediaries with investment-based funds.

For Pakistan, the potential benefits are high. Full-reserve banking would allow: *Gradual reduction of domestic government debt, Approximately Rs. 6,000 bn savings in interest annually*, *Seigniorage gains of about Rs. 2000 billion from debt-free money creation*, *Increased monetary stability, reduced inflation, safer banking.*

Contrary to popular fears, there need be no decrease in the availability of credit. Estimates suggest that with a partial move of deposits to investment accounts the private-sector credit could rise from *Rs. 10-12* trillion to *Rs. 18-19* trillion and become more closely linked to real economic activity.

The article concludes that Pakistan's repeated economic crises cannot be solved by incremental policy adjustments alone. Without reforming the creation of money inflation debt and instability will continue. A full-reserve, no-interest monetary system provides a credible basis for long-term stability, economic sovereignty and inclusive growth.

Money and Banking Reform: Why Pakistan Should Have a Full-reserve, interest-free monetary system.

The economic challenges in Pakistan are usually attributed to bad policies, political instability or external shocks. The world price of commodities, weak governments on high debts and poor taxation are accused of causing inflation. However, the same ills continue to reoccur even after reforms, *IMF programmes* and policy adjustment. Inflation has been steady debt keeps increasing and the growth in the economy has been weak. When the same consequences are replicated over decades and regimes the problem cannot be treated as the case of short-term mismanagement. It is structural. The institution that should be questioned in the case of Pakistan is the monetary system.

At the center of this structure lies a widely misunderstood fact *most money in Pakistan is not created by the state*. While the State Bank of Pakistan issues physical currency the overwhelming majority of money exists as bank deposits. These deposits are created by commercial banks when they issue loans. When a bank approves a loan it does not lend existing money from someone else's savings. It creates new money by crediting the borrower's account.

This reality has been openly acknowledged by central banks around the world. As the Bank of England explains:

"When a bank makes a loan, for example, to someone taking out a mortgage to buy a house, it does not typically do so by giving them thousands of pounds worth of banknotes. Instead, it credits their bank account with a bank deposit of the size of the mortgage. At that moment, new money is created."

(Bank of England, Quarterly Bulletin, 2014 Q1)

This system is known as *fractional-reserve banking*. Banks keep only a small fraction of deposits as reserves around *5-6 percent* in Pakistan and lend out the rest. Through repeated lending, a relatively small amount of base money supports a much larger stock of bank-created money. In practice *around 95 percent of money* in the economy is created by commercial banks while only *about 5 percent* is sovereign money issued by the state.

Inflation is often misunderstood as rising prices of goods. In reality, inflation means an *excessive expansion of money supply* relative to real production. In Urdu, *Afrat-e-Zar* literally means an overflow of money. Prices rise not because goods suddenly become expensive, but because too much money is chasing the same amount of goods.

Pakistan's long-term data illustrates this clearly. Over the past five decades, *money supply has grown at an average rate of around 15 percent per year*, while *real GDP has grown at only about 4 percent.* Compounded over time, the results are striking: *Money supply increased nearly 1,000 times*, *Real production increased only about 9 times* and *Prices increased more than 70–100 times.*

A simple everyday example makes this tangible. Bread that costs *Rs. 25 today* used to cost *25 paisa* around fifty years ago. This is not because bread became inherently expensive, but because money expanded far faster than production.

If money grows at *15-20 percent* annually while GDP grows at *2-4 percent*, inflation of *10-15 percent* becomes inevitable. This is precisely Pakistan's experience. Over decades, Pakistan's average inflation rate has hovered around *8-9 percent*, compared to *2-3 percent* in advanced economies. Inflation is therefore not accidental or imported; it is structural.

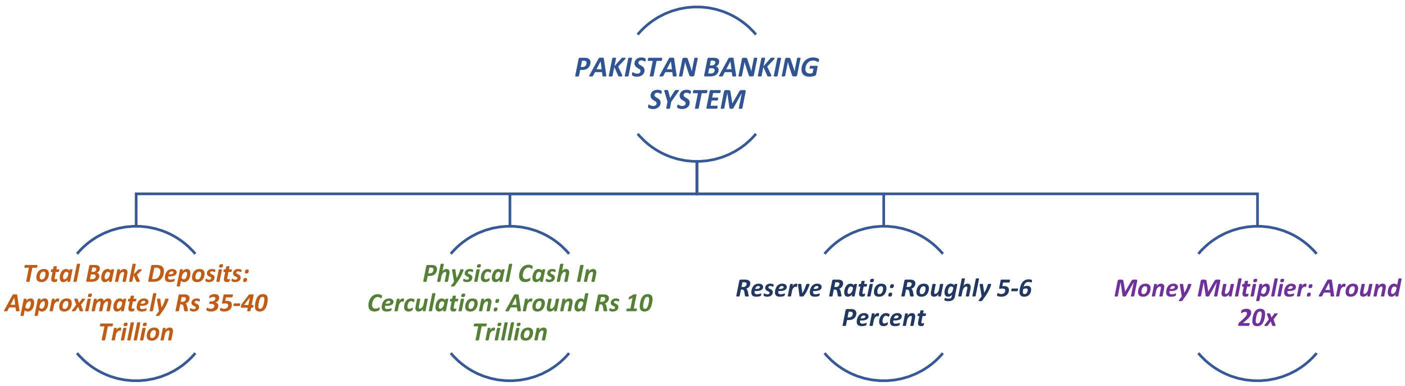
Inflation does not affect everyone equally. Those who own assets real estate, stocks, gold often benefit as asset prices rise with inflation. Those without assets suffer. The salaried class, small savers, and low-income households lose purchasing power every year.

Consider a household earning *Rs. 40,000 per month*. With *20 percent inflation*, maintaining the same standard of living requires *Rs. 48,000*. Salaries rarely adjust this quickly. The result is silent redistribution from wage earners to asset holders. Over time inequality deepens not because of productivity differences but because of monetary design.

The modern monetary system has a structural contradiction at its core. The main entry point of money into the economy is Indirectly through borrowing which has inevitable effects on the overall debt.

"Under the present system, money is created primarily as interest-bearing debt. This implies that for the economy as a whole, outstanding debt must always exceed the money available to repay it."
(Irving Fisher, 1936; reinforced by Benes & Kumhof, IMF, 2012; Jackson & Dyson, 2016)

The banking data of Pakistan indicates the mechanics



This implies that a number of deposits such as *100,000* can eventually fund the overall amount of money generated by *1 million* dollars. This leverage inflates booms in credit expansion and exacerbates crises in slowing lending.

Banks also perform two conflicting roles simultaneously:

1. *Safekeeping of deposits (short-term, liquid)*
2. *Lending for long-term, risky investments*

This contradiction of the structure allows bank runs and requires bailouts and deposit insurance. Deposit insurance in Pakistan is limited to the amount of *Rs. 1 million*, and payment is usually slow. In the meantime, approximately *97 percent* of money in the world is in form of bank credit.

Because the government does not create most money, it must borrow to finance spending. In Pakistan, the government borrows approximately *Rs. 400 billion every month* from commercial banks. Over time, this has produced a massive debt burden. The effect of 1 per cent rise in the SBP policy interest rate is approximately 300 billion, which is higher than the amount spent on the construction of metro bus infrastructure in all the metro cities of Pakistan. It is nearly similar to the social security programme expenditure. Following are some *Fiscal* realities include: Public debt**:** around *70–75* percent of GDP, Interest payments**:** absorb *35–40 percent of federal revenue*, after interest payments and provincial transfers, *almost nothing remains* for federal development spending.

The federal budget is estimated to spend about *60 percent* of the budget on interest servicing in certain years. This is not a case of fiscal mismanagement. It is a logical extension of a system in which money is produced as interest bearing debt.

To control inflation Pakistan has repeatedly relied on interest rate hikes. The high interest policy that is being taken by the SBP to contain inflation has failed miserably and led to the opposite outcome. According to the *Pakistan Economic Survey 2022-23,* the inflation and interest rates have been on a rising slope with positive correlation. A recent World Bank Report argues that the need to finance the fiscal deficit primarily due to high interest on domestic debt in the form of bank borrowing has escalated monetary base very quickly, which is adding on the inflationary pressure. In recent years, the policy rate was raised from *7 percent to as high as 22 percent*. The impact was severe: *Investment collapsed, Employment contracted, Export-oriented industries becomes unviable and small and medium enterprises struggled to survive.*

High interest rates increase production costs raise government borrowing costs and slow economic activity often without curing inflation. This approach treats symptoms while reinforcing the underlying problem. These concerns are not new during the Great Depression economist *Irving Fisher* identified private money creation as a core cause of instability. *Irving Fisher* the greatest mathematical economist and economic writer of all time wrote it in his book “100% Money”:

“I have come to believe that the (Full Reserve Banking) plan, properly worked out and applied, is incomparably the best proposal ever offered for speedily and permanently solving the problem of depressions.”
(Irving Fisher, 1936)

Decades later, *Milton Friedman* saw no difficulty in converting to Full Reserve Banking System. As he put it:

"There is no technical problem in achieving a transition from our present system to 100% reserves easily, fairly speedily and without any serious repercussions on financial or economic markets."

As to *Friedman's* use of the word *"speedily"* he was right to say that the conversion could be done more or less overnight.

Milton Friedman's explanation for the failure to implement FR cited vested interests *(Friedman (1960)):*

"The vested political interests opposing it are too strong, and the citizens who would benefit both as taxpayers and as participants in economic activity are too unaware of its benefits and too disorganized to have any influence." — Milton Friedman

Modern empirical research confirms these insights. IMF economists *Benes and Kumhof,* using a detailed macroeconomic model showed that full-reserve banking would:
Eliminate bank runs, sharply reduce public and private debt, Stabilise the business cycle,
Increase GDP by *around 10 percent* after transition
(Benes & Kumhof, IMF Working Paper, 2012)

The second reason why monetary reform is often opposed is that it is feared that the debt repayment in terms of money is going to be an inflationary process. This issue was directly covered in early full-reserve proposals.

"Government debt can be paid off through the issue of new sovereign money, provided that the quantity of money is regulated to correspond with real output.

(Chicago Plan; Irving Fisher, 1936)

Under a full-reserve system: Reserve requirement rises from *5% to 100%,* All transaction *deposits are fully backed,* Only the *State Bank* creates money and Banks lend only through *investment accounts*, not demand deposits. Money growth is aligned with real GDP growth. If GDP grows *4-5 percent* money supply grows *4-5 percent* inflation and deflation are both avoided.

The fiscal implications are transformative: Annual interest savings approximately *Rs. 6,000 billion,* new sovereign money creation (seigniorage) around *Rs. 2,000 billion,* Total fiscal improvement roughly *Rs. 8,000 billion.*

This amount is comparable to Pakistan's entire annual tax revenue. It allows public spending without perpetual borrowing.

Contrary to common fears, credit does not disappear: Current private-sector credit *Rs. 10-12 trillion,* Total deposits *Rs. 25-28 trillion,* if *25 percent of deposits* shift to investment accounts, available credit could rise to ***Rs. 18-19 trillion***

Credit becomes risk-based, market-driven, and tied to real investment rather than interest-rate manipulation. Economic problems facing Pakistan are not restricted in the present. High and continuing inflation, growing government debt and recurring financial crisis are costs which go far beyond political cycles. The thing is that the future generations will have to bear the weight of the modern-day monetary choices that people make.

"Change is, I believe, inevitable. The question is only whether we can think our way through to a better outcome before the next generation is damaged by a future and bigger crisis. This crisis has already left a legacy of debt to the next generation. We must not leave them the legacy of a fragile banking system too."

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A realistic transition involves: Gradually raising reserve requirements to ***100%,*** Transferring government bonds from banks to the State Bank, Cancelling or neutralising domestic debt *and* separating the role of bank: *Transaction accounts* (safe, no return) *and Investment accounts* (risk-sharing returns). This is a structural reform, not an overnight shock.

The continued crises in Pakistan are not accidental. They are the logical conclusion of a financial system, which constructs money as debt, drives inflation, concentrates wealth, and puts the state in permanent debt. Other economic policies will still only provide temporary satisfaction without a need to reform the creation of money.

Full-reserve and interest-free monetary system will provide a stable basis. It reestablishes monetary sovereignty, shields the purchasing power, stabilises the inflation, and liberates the public finance against the liability of the debt. This is not just a theory to Pakistan. It is a practical necessity.

Full reserve banking proposal is not just a financial formula in Pakistan but a call to action in a country that is stumbling in efforts to deal with two main problems; economic instability and the pursuit of ethical banking. The proposal goes beyond the direct advantages of eradicating the government debts, and their enormous servicing expenditure. It includes a wider scope of vision of having a financial system that is not only stable but also inclusive and in line with the Islamic economic principles. The proposal is like a ray of hope that provides a view of the future where economic stability and ethical banking practices will meet.

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Section 2

Most Frequent Questions Raised Against Full-Reserve Banking

This section deals with the large number of arguments put against FR-Banking system.

***Qno1-* FR limits the availability of credit?**

Answer: The assumption that money creation and lending are identical. In full-reserve banking, lending is still possible under investment and savings accounts. It is not money creation on air that is bringing to a halt, but the real money creation on real savings.

***Qno2-* FR means the end of banks?**

Answer: Pre-fractional-reserve banks had existed and were making profits by means of intermediation, payment, and investment services. The changes in the business model do not alter the presence of banks but rather their business model, which is the full-reserve banking.

***Qno3-* Investments under FR might not be viable?**

Answer: The shift is more of a change in bank balance sheets, which is mainly an accounting adjustment. It does not involve closing banks and being able to freeze deposits. Smooth transitions in a gradual manner are well documented**.**

***Qno4-* Why is there still a problem with fractional reserve banking if credit money created by banks increases growth and the economy is growing?**

Answer

The issue is this: savings should turn into real investment. According to time preference theory, if people defer consumption today, that saving should become investment, which is more sustainable. But in the fractional reserve system, banks are given unlimited power to create loans and expand money, while the central bank uses a very poor and blunt tool interest rates to control it. When banks create money “out of thin air” (so-called magic money), it is not real saving.

***Qno5-* If money is owned by the state, why does the government borrow it from private banks and pay interest?**

Answer: This is how countries fall into debt traps, a state that can create its own money goes to private banks, asks them to create money as loans, and then pays interest on it.

***Qno6-* If banking-driven credit increases growth, then what is the problem?**

Answer: The real question is: after debt creation, what economic activity actually benefited? In many cases: Corporations used debt to buy back their own shares, They bought financial instruments, They invested in existing real estate, not new production As a result, the growth impact that should have occurred did not materialize.

***Qno7-* What happens when reserve requirements are raised from 5% to 100%?**

Answer: When reserve requirements are raised from 5% to 100%, banks will transfer government bonds to the State Bank. The State Bank can cancel these bonds or reduce their interest to zero. As a result, Pakistan's domestic debt effectively falls to zero.

***Qno8-* Why do boom-bust cycles occur?**

Answer: Banks compete to earn profits, pay bonuses, and increase executive salaries. To do this, they race to issue loans to anyone who looks creditworthy. Eventually, asset prices become unsustainable, the bubble bursts, and the economy enters recession.

***Qno9-* Why does Pakistan remain stuck in a debt trap?**

Answer: Nearly 60% of the federal budget goes to interest payments. After transfers to provinces, the federal government starts the year with almost nothing left.

***Qno10-* FR will reduce innovation by banks?**

That criticism was put by ***Van Dixhoorn (2013, p.22) and Aziz (2014).***

Answer. Under the EXISTING SYSTEM, commercial banks introduced debit and credit cards because those cards are more efficient for many transactions than cash or cheques. Any bank that had ignored those innovations would have lost customers. And exactly the same would apply under FR. That is, under FR, commercial banks would open current / checking / safe accounts for customers. And as to the EXACT WAY in which payments are made, that would be up to individual banks. And competitive forces would induce banks to adopt any sort of new technology (e.g. payment by mobile phones) just as those forces induce them to adopt new technology under the existing system.

Qno11- **Bank shareholders will demand a high return to reflect their uncertainty about what a bank actually does?**

Answer. Depositors and bond-holders who fund banks suffer from EXACTLY THE SAME asymmetric information problem. Thus Elliot's point is not an argument for reducing or increasing capital ratios.