ARC Course on money creation Lesson Seven See also **Thinking notes for January 27, 2022, pdf** 

Working Title: "The Disease and the Cure"

Subject: Politicians' reaction to our national debt

Theme: Politicians' reaction to our unpayable national debt will be to inflate demand and

suppress interest rates

Contrast: Government budget deficits are big but can be paid.

### INTRODUCTION

Last week's lesson was titled "Uncle Sam's Unpayable Debt," in which I argued that the US government debt has grown so big and its future obligations so extensive and open-ended that the government's total financial obligations cannot be repaid in today's money, that is, in money of today's purchasing power.

The problem is not exactly that there is "too much debt"; more precisely, there is too much debt relative to our ability to pay for it. Imagine you have an annual salary of \$100,000, but you owe \$200,000 with an annual interest rate of 10%. Your annual interest costs are \$20,000, or 20% of your income. This is a huge burden on a salary that size, so big you could not service that debt under normal circumstances, which is why no one would lend you the money in the first place.

But if you can figure out how to earn a lot more money – say you can get a new job that pays \$500,000 per year – the interest burden falls to a trivial four percent of your income. So, \$100,000 of debt would not be too much with a much larger income. Problem solved!

While this kind of rapidly improving financial condition is possible (though rare) for an individual, it is literally impossible for an entire sovereign nation. Advanced economies grow in real terms at less than five percent per year, and usually much less. But modern economies can easily grow in nominal terms when their banks create money faster than real output. In other words, inflation is likely going to be the politicians' answer to our debt problem

The debt burden is becoming urgent, so our politicians need to act soon. But exactly what actions will governments and monetary authorities take as they attempt to alleviate the debt burden? What will central banks do? The financial regulators? The legislatures? The commercial banks? What are their real options?

[slide – disease and cure]

In my view, the likely answer will create an odd paradox: Money creation in the hands of the government is a major cause of our debt problems, and ironically, money creation will also be the government's proposed solution to this problem. That is why I named this lesson "The

disease and the cure." Money creation was the problem, and money creation will be the attempted fix for our massive debt.

Today we will delve, in some detail, into the options open for the government to address its debt problem. We divide the analysis into three parts to answer three questions:

[slide-overview]

**Part One:** A summary of why inflation (excessive money creation) causes governments to accumulate unpayable debt. We should understand this point in concrete terms.

Part Two: Government's four cashflow options to keep its financial promises.

**Part Three:** What will financial repression look like in practice?

# PART ONE: HOW DOES INFLATION (EXCESSIVE MONEY CREATION) ENABLE POLITICIANS TO ACCUMULATE UNPAYABLE SOVEREIGN DEBT?

To start the discussion, let's ask a few questions related to government taxation and borrowing. Why simple taxing and borrowing are not inflationary (no money created):

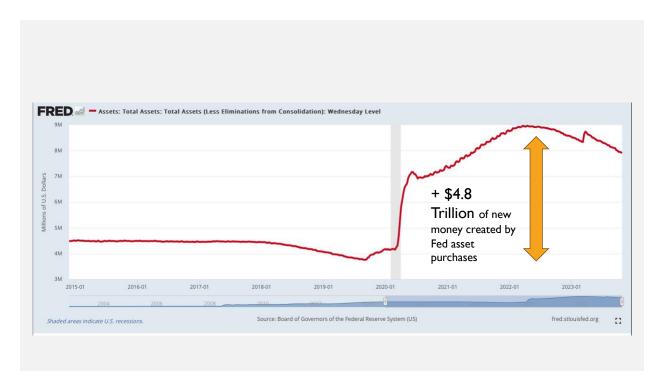
- If a government taxes one group and gives the money to another, is this inflationary? No, this simply shifts spending from those who were taxed to those who receive the money collected. This is just robbing Peter to pay Paul.
- If the government borrows money from one group (investors) and gives this money to the unemployed, is this inflationary? No, this simply shifts spending from those who loan the government money (bought the bonds at auction) to those who receive the money collected.
- If the government could not create new money, but could only borrow from the investment community's pool of savings, would there be any limits on how much the government could borrow? (Yes, of course, they would run out of "other peoples' money.")
- If the government (through any action) causes new money to be created and spent, is this inflationary? Yes, new money spent by its first recipients raises prices without creating a new income stream to service the associated loan.
- It's "inflation" only if new money is created.

Quick review: Why is government-caused money creation inflationary?

Recall from Lesson Three that when money is created by banks that are regulated by the profit motive, this is generally productive money creation, i.e., new money is backed by a productive income stream that pays off the loan over time. Lesson Four then showed us that bank lending directed by the government is indeed inflationary. We surveyed two examples:

- In the 1980s, Japanese window guidance mandated banks to make real estate loans based on rising asset values, not on the project's ability to pay the interest and principal. The resulting asset inflation caused a major banking crisis that lingered for many years.
- During the recent pandemic, from 2020 to 2022, the government borrowed heavily from investors in the bond market; then sent this money to citizens and businesses; almost simultaneously the Fed purchased an equal amount of bonds from investors, reloading their bank accounts with new money. Result: Now the Treasury has money to spend on the unemployed, AND bond investors get new money to re-stock their Treasury portfolios or buy other investments.





- Graphic of how much money the Fed created during "Pandemic QE." From January 2020 till April 2022, the Fed caused \$4.8 Trillion in new money (blue arrow) to be created in the commercial banks, increasing the broad money supply (M2) by almost 30%. M2 rose during this period by \$6.1 Trillion. 4.8 Trillion, or almost 80% of that, was created solely by Fed bond purchases.
- This was money created and distributed without any new products or services. It is from new debt not backed by any new income streams. This is because there is no new productivity behind a loan from the public to the Treasury.
- Reprise of how inflation encourages and enables excessive sovereign debt:

- Politicians are incentivized to think short term, just till the next election.
   Therefore, they think of budgeting as an annual, recurring cash flow problem.
- They tax and borrow as much as possible to fund their expanding promises.
   To them, the only constraint is near-term cash flow.
- O If they were limited only to taxation and borrowing without creating new money, the appetite for lending to the government (demand for bonds) would be limited by the public's limited investment funds. As more bonds were issued, marginal bond buyers would demand higher and higher interest rates. Eventually, very high interest rates would put a lid on how much government could borrow.
- But now, enter government monetary authorities, usually central banks, which force their commercial banks to monetize the government debt, which means the debt is taken out of the market and replaced by new money.

[slide – how central banks create money]

 Let's now review how central banks cause their member banks to monetize government debt. (Motivation alert! If you understand this, you are well on your way to becoming one of John Maynard Keynes's "one in a million" who understands how inflation can wreck an economy.)

HOW CENTRAL	BANKS USE C	OMMER	CIAL BANKS TO	CREATE MONEY
Central Bank		Commercial Bank		
Assets	Liabilities		Assets	Liabilities
+1000 Treas Bond	+ 1000 Cash Res due Bank		+1000 Cash Res	+ 1000 Deposits
				(NEW MONEY)
Investor				
Assets	Liabilities			
+1000 Deposits				
- 1000 Treas Bond				

First let's go through the transaction to understand the mechanics, then we'll review the economic implications.

There are three parties to this transaction: a private owner of a bond, an investor; the investor's commercial bank, which has the authority to create deposits; and the central bank, which has the authority to create cash (or cash reserves, standard money).

To "monetize" the Treasury Bond, the central bank (Fed in this case) first offers to purchase the Treasury bond from a private investor who is NOT a bank but who has a bank account. The investor agrees to sell. To pay the investor for the bond, the central bank creates new cash reserves out of thin air and gives them to the commercial bank. Simultaneously, the central bank directs the investor's commercial bank to credit the seller with new bank deposits. This is the point where the new money is created, highlighted in red.

The result – all the accounts balance:

- 1. The central bank has a new asset (the bond) and a new liability (cash reserves due to commercial banks). This is how the central bank's assets grow. Important note: the central bank returns the interest received back to the Treasury. This neutralizes the bond because it is no cost to the government.
- 2. The commercial bank has a new asset (cash reserves) and a new liability (deposits promise to pay investor cash on demand, i.e., new money)
- 3. The investor has swapped his previous asset (the bond) for a new asset (money in the form of a bank deposit).

What are the **market implications** when this transaction is repeated many times and in large size? The central bank can create unlimited demand for bonds because it has the legal power to create new cash reserves without restraint.

- The increased demand for bonds drives up bond prices. (Imagine if the Fed was purchasing cars this way and storing them in the parking lot at the Eccles building. What would happen to the price of cars?)
- Rising bond prices drive down market interest rates. Example: Investor owns a very long-term bond issued at a price of 100 that paid \$5 per year in interest. Thus, the bond yielded 5% when issued. The Fed's purchase drives up the price by 10% to a price of 110. This bond now yields about 4.5% (\$5/\$110). This means new bonds issued at a price of 100 will pay lower annual interest to yield 4.5%. Over time, persistent purchases of bonds by a virtually unconstrained buyer like a central bank will put downward pressure on interest rates.
- The investor will now reinvest his new money, possibly in a new Treasury, possibly in some other asset with a yield higher than the new market yield. (The Cantillon Effect works on investments, too.)
- The **overall effect** on the market is to **push bond prices higher** and **push interest rates lower** over time, while **demand for investment rises** due to the increasing amount of money investors must deploy.

**This procedure is often called "monetizing debt"** because the central bank takes the debt instrument, a bond, out of the pool of bonds available to public investors and replaces it with new spendable money.

Here is the point for Part One of today's lesson: Continued monetizing of public debt along with falling interest rates makes it easier for the government to expand its borrowing for the following reasons:

- First, because the bonds available to investors are (temporarily) in limited supply because the Fed has bought so many, taking them out of the public market, making investors eager to buy new bonds.
- Second, because falling interest rates mean bond prices are continually rising, encouraging investors to buy them in the market and sell them to the Fed for a profit. (This is sometimes called "front-running the Fed.)
- **Third,** because when interest rates are low and falling, the cost to the government of borrowing appears minimal. The total amount of debt can rise a lot (i.e., government debt as a percent of national income or GDP can go up) but with low and falling interest rates the cost of servicing that debt does not immediately strain the government's spending budget.
- If this trend goes on long enough, politicians see it is a permanent condition, leading to the belief that increasing the deficits doesn't matter. (Dick Cheney, 2003).

**The result:** politicians, operating on their short-term political time horizon, continue to make more new promises and borrow more and more to pay for those promises, because they do not feel financially constrained. These promises include annual increases in entitlement spending, built into the law that governs the budget. Therefore, future spending must rise, requiring even more borrowing.

Eventually, as we saw in Lesson Six, rising interest costs (due to both the increasing quantity of debt and rising interest rates) start to overwhelm the government's ability to borrow. Once we go down this path, we know with certainty the government will not be able to fulfill its financial obligations without addressing its cashflow dilemma.

And that is where we are today. It's time for politicians to address their cash flow dilemma.

[Questions and comments?]

[slide - governments four options]

# Government's ( Kicking the can down the road

- Government's Cash Flow Levers
  - I. Reduce or limit promised payments
  - 2. Increase tax revenue
  - 3. Find more buyers for Treasurys
  - 4. Hold down interest costs

Let's now move on to the second question of the day, which was: what are the government's four options to improve its cash flow problem?

### PART TWO: THE GOVERNMENT'S FOUR WAYS TO ADDRESS ITS DEBT PROBLEM

Because politicians are incentivized short term, they are more concerned with year-to-year cashflow than long-term funding problems. They need to find money for this year and for their next election. Since funding problems generally arise gradually, they tackle the symptoms as they arise, making incremental adjustments to their cash flow formula year by year. So, they kick the can down the road, year after year.

The government has four near-term options (or financial levers) to improve their short-term cashflow enough to allow them to extend their tax-borrow-spend cycle year-by-year:

- 1. Reduce or limit promised future payments.
- 2. Increase tax revenue.
- 3. Find more buyers for Treasury bonds.
- 4. Hold down interest costs.

Last session, we ruled out severe austerity, wholesale default, or hyperinflation because these outcomes are unacceptable to voters and can probably be avoided by the politicians, at least in the near term.

The most likely near-term options all involve smoke and mirrors, i.e., tweaks to the cashflow problem involving artful deception of some kind on all four of these fronts. These tweaks will include a combination of "soft" defaults (selective broken promises); efforts to increase tax revenue; attempts to expand or maintain access to borrowing in the Treasury market; and an effort to suppress interest costs by capping interest rates.

### PART THREE: WHAT WILL FINANCIAL REPRESSION LOOK LIKE?

Let's look at each line of the government's cash flow formula to see what could be done.

### Option One: reduce or limit promised payments.

Discuss the possibility of a genuine change in the public's perception of entitlements (Perot-Clinton-surplus). Is it possible we'll see a constructive change in the public's understanding of the debt problem that would allow a rational solution, i.e., some kind of honest default on future government obligations?

There was a time only about 30 years ago when the country experienced a small wave of fiscal sanity. In the 1980s, we had a fiscal crisis. Debt-to-GDP was modest, but interest rates were so high (reaching 20% in 1980) that interest costs on government debt were causing big deficits. These deficits looked terrible then, attracting much political attention. Many politicians and economists were very alarmed.



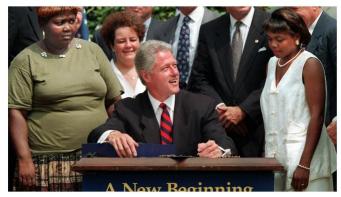
### https://en.wikipedia.org/wiki/Ross Perot

The political upshot of that widespread concern with the debt was this guy, Ross Perot, a Texas entrepreneur, who self-financed an independent third-party run for president. Based primarily on concerns about the rising deficit, Perot got 18.6% of the popular vote in the 1992 presidential election. He split the Republican party, and the result was that a Democrat, Bill Clinton, got elected president.

### The End of Welfare as We Know It

America's once-robust safety net is no more.

By Alana Semuels



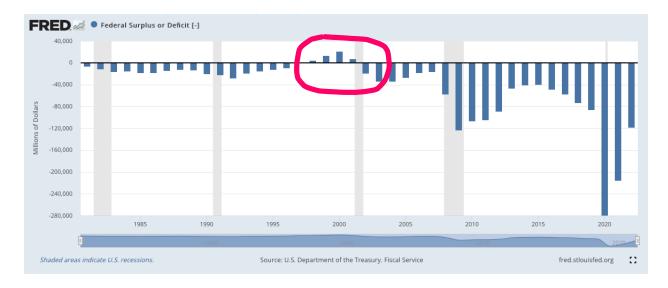
https://www.theatlantic.com/business/archive/2016/04/the-end-of-welfare-as-we-know-it/476322/

To illustrate how important the voters and the politicians thought the federal debt issue was at this time, President Clinton then cooperated with a majority Republican congress and balanced the federal budget to achieve a small budget surplus of \$21 billion in 2000.

[slide – surplus budget in early 2000s]

A combination of factors enabled the budget surplus of the early 2000s. Declining interest rates lowered the cost of public debt. Strong GDP growth accompanied by high taxes as a percent of GDP also helped. But there was also a cultural factor: a genuine desire to be more responsible with government spending.

Excessive government spending was such a big concern that President Clinton, a Democrat, said it was time to "end welfare as we know it." Presumably, he was driven by a genuine realization that there is a limit to other peoples' money, just as Margaret Thatcher had warned.



All credit to Bill Clinton and the Republican Congress for this rare bi-partisan achievement. However, as you see, the surplus didn't last long; the deficits resumed in the early 2000s and began an increasing trend.

In the early 2000s, right after the dot-com crash, deficits returned to stay, but the politicians no longer cared. In 2003 Republican Vice President Dick Cheney famously remarked, "Reagan taught us deficits don't matter." This was during the Iraq War. (Note that the big spenders and borrowers come from both sides of the political aisle. There are very few political heroes in this story.)

https://archive.thinkprogress.org/six-years-after-cheney-said-deficits-dont-matter-the-national-debt-hits-a-50-year-high-40193bdadd2e/

There was some plausible justification for Cheney's statement. The deficit (spending more than you collect in taxes and borrowing the balance) was not yet a big problem and would not become a problem for years. From 2000 to 2010, total debt rose, but as a percentage of the growing GDP, it grew slowly, and was only 60% of GDP at the start of the great financial crisis. Following the GFC, debt growth accelerated, but QE and falling interest rates masked its detrimental effects.

Today the public mood is much different. The future promises are much greater, and the deficit problems are much worse. So, while it's possible, I think it's unlikely we'll see a genuine social or cultural change that puts responsible legislators in power. Such a change would mean fewer government promises, reduced spending and more self-reliance on the public's part. I don't see anyone willing to forgive the government's promises to pay.

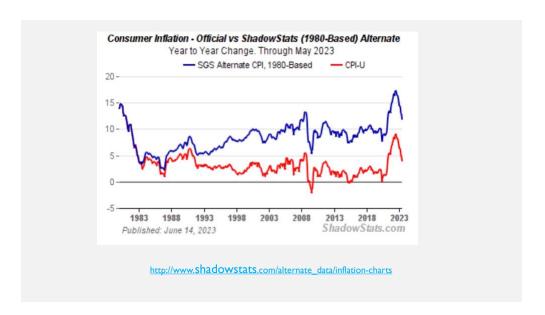
So, is the Line One option – reduce or limit promised payments – open as a real possibility to politicians?

# At the margin, some of the unpayable promises can be broken, but they won't be of great consequence:

- Non-essential voters can be paid less than promised. The very wealthy will take a hit, they won't get social security, will pay more for Medicare and disability, etc., but they will not be powerful enough to change an election.
- Important voting blocs (unions and minority groups) will get their promises. For example, minimum wages will be raised as usual. These votes are important.
- The prosperous middle class will bear the brunt because that is where so much of the wealth resides. Promises to this group will be underpaid by some sleight of hand.

### [Slide- 1990 inflation]

For example, the government will understate CPI inflation to control cost-of-living escalators in social security and disability. They are already doing this. According to Grants Rate Observer, over the last 50 years, the Bureau of Labor Statistics (BLS) has changed its inflation (CPI) calculations 25 times. Guess how many times their recalculation has resulted in a higher CPI number? Zero. 25 out of 25 adjustments have worked in the government's favor. They will continue to understate the cost-of-living adjustments in our entitlements. This is a form of soft default.



CPI annual rate of change, calculated by the 1990 standard, is still double-digit (blue line) but according to current measuring standards is low single digit (red line). Many tricks can be played here!

If you are the government, you want "inflation" in the form of rising prices because this means a rising nominal GDP. But you don't want the *optics* of high inflation numbers, so you simply change the way inflation is measured to make things look better than they are. This takes some

pressure off the Fed, which can pretend not to raise its inflation targets, allowing it to reduce interest rates sooner while still retaining some anti-inflation credibility.

**Bottom line:** Promises will be paid for the most part. They will be reduced selectively only when the government can get away with it and still stay in power. In other words, reneging on promises will <u>not</u> be a big source of improved cash flow in the near term.

[slide of Line 2]

### Option Two: Increasing tax revenue. How can the government increase tax revenue?

- Tax revenue as a percent of GDP is likely maxed out at ~ 20% of GDP.
- Can't squeeze too much more due to the Laffer Curve.
- Bracket creep due to inflation will raise effective tax rates on many.
- But some taxes can be raised at the margin on selected groups the ones whose votes count least.
  - Raise capital gains taxes on the wealthy.
  - Close tax loopholes like 1031 exchange
  - Selective taxes on "sinful" activities
    - Tobacco settlement as a prototype.
    - Booze, marijuana, other recreational drugs, gambling all fair game.
    - Carbon emission taxes and/or higher gasoline taxes. Already proposed and will be tried is the left is in control.
    - But all these are only marginally effective, and they risk killing GDP, thus lowering tax revenue.
  - Implement a VAT, which is basically a national sales tax. (DeSantis has proposed this). You could start very small and then experiment to maximize government revenue. But this could backfire by suppressing nominal GDP.
- The main avenue will be to attempt to inflate total spending on GDP-related activities, increasing nominal GDP, and resulting in higher tax revenue.
  - This could be done for a prolonged period.
  - o It worked to alleviate war debts in the UK, France, and the USA, which paid off large debts in inflated dollars as GDP and tax revenue grew.
  - The government would encourage (or require) the banks to lend to GDPcreating activities.
  - One way to do this would be to require the Fed and other regulators to control the direction of money creation: Example of Fed bank rules governing money creation:

# The Fed's New Climate-Change Mandate

Regulatory 'guidance' tells banks to fret about unknowable risks.

By The Editorial Board Follow
Updated Oct. 25, 2023 9:50 pm ET

https://www.wsj.com/articles/federal-reserve-climate-banks-regulation-jerome-powell-michelle-bowman-7857f0d9?mod=MorningEditorialReport&mod=djemMER h.

- Government can direct banks to lend to GDP-producing activities. To see the GDP categories: <a href="https://www.bea.gov/sites/default/files/2023-10/gdp3q23">https://www.bea.gov/sites/default/files/2023-10/gdp3q23</a> adv.pdf
  - Target the big GDP categories: (e.g., durable and nondurable goods, domestic investment, export industries, etc.)
  - Industrial policy (soft Soviet style) examples:
    - Investing to re-shore key industries (tech, chips)
    - Domestic defense contractors may get preference.
    - Infrastructure investments through directed lending by banks (recent IRA, but through the banks)
    - Charter government-sponsored industrial banks (like third world)
    - Charter local governments to own and run banks (Mark comment?)
    - Government guarantees on loans to selected industries, like green energy.
    - Sweetheart loans to labor-intensive industries jobs, jobs, jobs
    - Housing market stimulus
      - Lower mortgage rates
      - Make old mortgages assumable.
      - Subsidies to lower income homeowners
  - The main effect will be on spending activity, not necessarily real production, i.e., an inflating GDP.
  - Real growth will not stop completely: there will be some real investment opportunities, but free market efficiency will be compromised.
- Why government-directed or government-influenced lending is appealing to governments that need money:

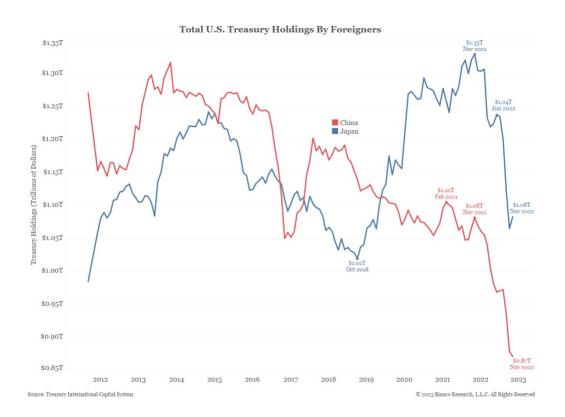
- A good way to disguise spending: let the banks create the money and spend it as the government wants, so the government doesn't have to tax or borrow in the Treasury market. No impact on budget!
- Doesn't take a lot of capital to guarantee an unproductive loan.
- Let failed banks recapitalize themselves (a la Credit Suisse and Italian banks) – no use of federal money involved. (see Werner)

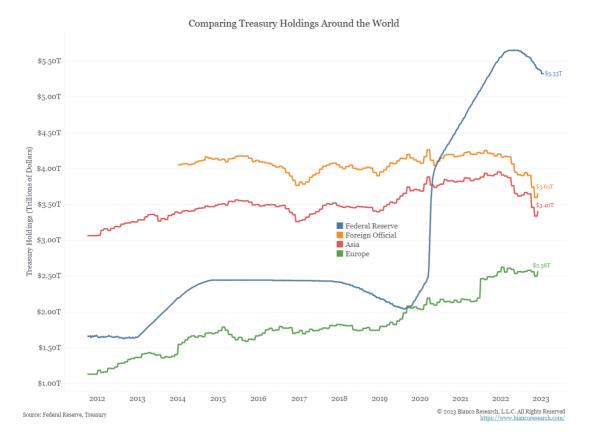
Bottom line: A growing nominal GDP will be key to raising tax revenue.

[slide Line 3]

### Option Three: Finding new buyers for Treasury bonds.

- Foreign lenders are drying up (data)





These excellent charts from Bianco Research illustrate the problem. The US government's borrowing needs are skyrocketing, but who is lending, that is, who is buying Treasurys?

- From the first chart, China (red) stopped accumulating in 2014, is now shrinking its Treasury holdings.
- Japan (blue) has held fairly level for last few years but is not expanding as US debt expands.
- Foreign buyers are shrinking as US debt requirements are growing. As foreign buyers decline and the need to borrow rises, the Fed has become by far the biggest owner of Treasurys.
- From the second chart, the Fed is now totally dominating Treasury market holdings. But since mid-2022, they are temporarily not buying.
- [optional: See Luke Groman interview: <a href="https://podcasts.apple.com/us/podcast/on-the-tape/id1545205930?i=1000631985355">https://podcasts.apple.com/us/podcast/on-the-tape/id1545205930?i=1000631985355</a>] [start at 50 minutes in]
- So, the US government is finding new lenders (bond buyers)
  - The obvious long-term option is more QE! Let the Fed buy these bonds! However, to keep the CPI down, the Fed is temporarily reducing its bond portfolio. The Fed will always be the buyer of last resort; however, massive QE in the near term would ruin the Fed's credibility on inflation and would re-start all the QE-related problems: asset inflation, unjust inequality, malinvestment,

- stagnant real wages, etc. I believe you will see QE or some kind of massive debt monetization again, but perhaps not in the near-term.
- Bank regulators (Fed, Treasury, OCC) could encourage (or require) commercial banks to buy more Treasurys.
  - Banks have already increased government bond holdings by \$4 Trillion since 2014 due to relaxed leverage rules. Could be relaxed more.
     (Important: Banks create money and monetize government debt when they buy Treasury bonds! This is how the Argentine government funds itself using commercial banks to monetize government debt.)
  - Relax other accounting rules in the banks. Eliminate mark-to-market rules for Treasurys held by the banks, i.e., hold Treasurys at par value and guarantee collateral at par in the event of a bank run.
    - Mandate banks to own more Treasurys
    - Ease capital requirements, allowing more Treasurys on the balance sheet.
    - Make favorable asset risk weightings conditional on buying more Treasurys
- Money market funds (SEC changed rules in 2015, now MMFs are mostly shortterm Treasurys. Over \$5 Trillion in money market funds today, composed almost entirely of Treasurys and other government-related debt instruments.)
- Pensions (for example 2017 legislation gave pensions an incentive to buy longterm Treasurys)
- Direct borrowing from public. The public can now invest in Treasurys through https://treasurydirect.gov
  - Makes it easier to own directly and save
    - Japan's national debt is mainly held by private household savers and has been for years, despite very low interest rates. (Japan has very high debt/GDP but very low interest rates. Japan is a nation of savers more than the USA. Would a government-sponsored savings plan work here?)
  - However, interest on savings will be less than the rate of loss of purchasing power. This is financial repression.
  - Treasury savings: a mandatory benefit option for all large employers?
  - High s-t rates will encourage retail buying of Treasurys.
- o Potential mandatory ownership of Treasurys for some businesses
- o More tax incentives to own Treasurys?
- Rating agencies pressure: big financial institutions must own Treasurys to maintain high credit ratings.

### • Other ways to expand the universe of Treasury borrowers:

 Require individuals to buy USTs in private retirement or savings plans. Maybe keep a certain percentage in Treasurys if you want to keep your favorable tax treatment. Who would object to this? Would the average person even notice?

- Require financial institutions to buy Treasury bonds or pay a tax penalty.
- If we see a central bank digital currency from the Fed, they will make it easy and perhaps mandatory to "invest" your CBDC in US Treasurys.

Bottom line: Government will find additional buyers for its debt by persuasion or by force.

[slide: Line 4]

### Option Four: How can the government reduce its interest costs?

Yield curve control by the Fed (Japan as example)
 https://www.zerohedge.com/news/2023-09-20/ycc-coming-and-along-it-financial-repression

## YCC is Coming and Along With it Financial Repression



BY VBL

FRIDAY, SEP 22, 2023 - 3:21

A note on the coming Financial Repression

Authored by GoldFix ZH Edit

For the last 10 to 12 years, the Bank of Japan has controlled the market for Japanese government bonds (JGBs) by purchasing so much of the bonds' specific maturities that it controls interest rates. Specifically, the BOJ purchases the 10-year JGB to keep its yield at or below one percent. (This target rate was recently raised from 0.5% to a max of 1%). To do this, they have bought most of the outstanding 10-year bonds. There are some days when the 10-year bond does not trade at all. Note, that the 10-year bond is a major savings vehicle. In the meantime, CPI inflation is now near 4% in Japan. So, in Japan, the cost of living is rising much faster than Mrs. Watanabe's ability to grow her savings nest egg. This is real financial repression.

The practice of controlling interest rates in this way is called Yield Curve Control, or YCC. The "yield curve" refers to the array of interest rates from short maturities out to very long maturities. YCC is usually implemented to suppress long-term interest rates below the rate the market would find. In other words, the market would price bonds to give you a yield above the rate of CPI inflation. Suppressing yields below this rate is the very definition of financial repression.

It's an idea the Fed is likely to try if Treasury buyers go on strike, bond yields rise, and governments feel compelled to suppress these yields.

Other ways to control interest rates:

- Direct, legally mandated caps on various interest rates, like retail bond buyers.
- Suppressing interest rates would cause capital flight in search of higher rates abroad, so the authorities might implement capital controls to keep the money in the USA.

Suppressed interest rates most impact the prosperous middle class, the conventional savers, the bedrock suppliers of investment capital, who are prohibited from earning a rate above the rate of inflation. How will they react to suppressed interest rates?

- They will work longer and pay taxes longer.
- They will work extra jobs, earn more, and pay more in taxes
- Rising nominal income will put them in a higher tax bracket, causing them to pay more tax due to "bracket creep."
- Low real interest rates will prevent them from replacing lost purchasing power with savings, i.e., accumulating real savings will be a problem.
- The purchasing power of the repressed is transferred to the government which can then pay its bills.

Summary: A good way to understand financial repression is to follow these steps:

- Nominal income will grow due to money creation in the banks.
- Expect moderate to high CPI inflation which is necessary for an expanding nominal GDP.
- Government revenue will grow due to the inflating tax base (the inflating GDP).
- The government will forcibly hold down its interest costs below the rate of CPI inflation.
- Therefore, the government's cost to service its debt will grow slower than its tax revenue.
- Government will thus reduce its interest-to-income ratio (the insolvency ratio) allowing it to continue borrowing in the Treasury market.

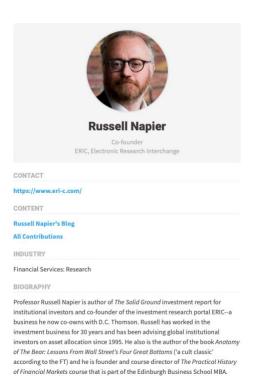
Here is a parable illustrating how inflation and financial repression transfer wealth from the generators of wealth to the consumers of wealth.

Imagine you have a small dairy farm. You store your milk awaiting sale in a large, refrigerated tank, and people come and purchase it by volume. Unknown to you, a government official decides to tax you without you knowing it. So, he comes to your farm at night and siphons off milk to use for himself or to give away to his cronies. He replaces the milk he takes with water. The diluted milk looks the same, so it's nearly impossible to detect the theft. You continue selling your watered-down milk, unaware of the diminished value of your product. The milk looks the same, but eventually, your customers begin to complain. The diluted milk doesn't taste as good as it used to, products like butter and cheese made with your milk are not as good as they were, and your customers' children are losing weight because the diluted milk is less nutritious.

You are working just as hard. Your cows and hired farmhands are working just as hard. But the value you generate by your work is literally being siphoned away. Unless you discover the theft, you don't understand what is happening to your livelihood.

This is what happens under financial repression. It is inflation which is hard to detect and for which there is no obvious remedy.

In closing, financial repression is already underway. The Edinburgh-based monetary economist, Russell Napier, is one of the sharpest analysts of this rising phenomenon. He is a brilliant scholar of financial history among other talents. He has written several good books on financial history. His fortnightly newsletter is expensive (GBP 1500/year) but worth it if you want to delve deeply into the subject. Non-professionals may find this publication too expensive, but you can be on the lookout for his occasional public interviews for insight.



### https://russellnapier.co.uk

Next lesson, we will explore how to mitigate the effects of financial repression on your personal financial condition.

### **END OF MAIN LESSON MANUSCRIPT**