# GROWTH AND DEBT: IS THERE A TRADE-OFF? 

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## The Big Fix

The Obama administration apparently believes in a trade-off between growth and debt. It wants to stimulate fast growth and is willing to pay for it in the form of unprecedented increases in government debt, because it fully expects the growth to rake in tax revenues with which the debt can be retired. It invokes the experience with debt retirement after World War II. When the war ended, government debt stood at 120 percent of the gross national product, twice what it is now. The rapid economic growth during the 1950's and 1960's quickly reduced the debt. This is offered as a justification for the $\$ 800$ billion stimulus package that is being railroaded through Congress, with more to follow later.

David Leonhardt writes in the February 1 issue of The New York Times Magazine that governments tend to err in making stimulus packages 'too stingy'. This explains the chorus of cheerleaders shouting "Not enough! Still more!" Leonhardt says that governments fail to use the 'enormous resources' at their disposal to shock the economy back to life. Japan announced stimulus measures even as it was cutting other government spending. F.D. Roosevelt flirted with fiscal discipline midway through the New Deal, and the country slipped back into decline. The prescription of John Maynard Keynes works only if administered boldly, without fear or hesitation. We have the word of Treasury Secretary Geithner, as quoted by Leonhardt, that his Big Fix won't make the same mistake that Roosevelt's has. "We are not going to do that", he said, "and we'll keep at it until it's done, whatever it takes."

## Perpetual debt

In this article I shall argue that there is no trade-off between growth and debt under the regime of the irredeemable dollar lacking, as it does, an ultimate extinguisher of debt. Once new debt is piled on the top of the old, total debt is increased that will never be reduced, and will become perpetual debt. As protagonists of the stimulus package well know, retirement of the debt of the federal government is tantamount to deliberate deflation, that is, contraction in the money supply, by reducing the pool of bonds available for monetization.

After World War II it was possible to reduce the government debt and expand the money supply at the same time because of the presence of gold in the monetary system, which was the ultimate extinguisher of debt, until exiled by the Keynesians and Friedmanites. To recover the ability to reduce government debt and increase the money supply simultaneously, gold would have to be made part of the monetary system once more, an anathema to the Big Fix cowboys.

## Liquidation value

Perpetual debt is more than toxic. It behaves like nuclear fuel: once the threshold is reached and exceeded, chain reaction sets in and the monetary system explodes. To understand the dynamics, we need to refer to the liquidation value of perpetual debt. This is a concept that, for obvious reasons, is not recognized by mainstream economists. If it were, they would be far more careful with their recommendation of unlimited government spending as panacea for all economic ills. Recognized or not, the liquidation value of debt acts as a trigger to a cataclysmic destruction of the economy looming large on the horizon, of which we have had a foretaste in the recent past. The tragedy is that the Big Fix cowboys want to use the same remedy that has landed the country in the present predicament in the first place. Home owners with a mortgage, car owners with a loan, credit card holders, students, state and municipal governments, and yes, the federal government, are drowning in debt already.

## Burden of debt

The liquidation value of debt is the amount that would liquidate it here and now. It obviously depends on the rate of interest. The liquidation value of total debt is inversely proportional to the prevailing rate of interest. In particular, halving the rate of interest by the central bank is equivalent to doubling the liquidation value of total debt.

I have been writing about this Iron Law of the Burden of the Debt for many a year and have met with an almost total lack of understanding, judging by the feedback from readers. The lack is due to the reluctance of the mind to admit that cutting interest rates increases the burden of debt contracted in the past, because it contradicts one's intuitive expectation that it should decrease the burden of debt to be contracted in the future. To be sure, cutting interest rates does increase the burden of debt contracted in the past because liquidation value is calculated by capitalizing the stream of future interest payments. Since at the lower rate the present value of that stream is smaller, a shortfall is created that has to be amortized upon liquidation.

## Perpetual debentures

In order to understand the Iron Law let us consider the market value of perpetual debentures (or perpetuals for short; consols in British parlance). They are marketable securities that never mature: they convert a lump sum into a stream of annual payments in perpetuity. For example, a $\$ 1000,4 \%$ perpetual pays $\$ 40$ per annum to its holder, who can sell it in the secondary market at any time. The catch is that he may recover only part of his original investment if the interest rate has fallen in the meantime.

## Present value

In calculating the present value $B$ of a perpetual with face value $A$, paying interest at $a$ percent per annum, we have to discount the annual interest payments at the prevailing rate of interest $b$. Since the annual interest payment is $A a$, the discounted value of the $n^{\text {th }}$ interest payment is Aar ${ }^{n}$, where $r=1-b$ is the discount factor. We have $0<r<1$, hence $r^{n}$ approaches zero as $n$ gets arbitrarily large. The discounted value of the string of interest payments is:

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B=A a\left(1+r+r^{2}+r^{3}+\ldots+r^{n}+\ldots\right)=\frac{A a}{1-r}=\frac{A a}{1-(1-b)}=\frac{A a}{b}
$$

We conclude that $A a=B b$. For example, the $4 \%$ perpetual with face value $\$ 1000$, yielding $\$ 40$ per annum, can be traded in the secondary market for $\$ 1000$ as long as the market rate of
interest $b$ is $4 \%$. However, if it is halved to $2 \%$, the same perpetual can be sold for $\$ 2000$, because at the lower rate it would take two debentures to generate the same income stream.

According to this pleasantly simple formula $A a=B b$, if the rate of interest $b$ is halved to $1 / 2 b$, then the liquidation value of the perpetual is doubled. In case of a serial halving of the rate of interest from 4 to 2 , from 2 to 1 , from 1 to $1 / 2$, from $1 / 2$ to $1 / 4$ percent, etc., the liquidation value will be multiplied 2 -fold, 4 -fold, 8 -fold, 16 -fold, 32 -fold, etc.

## Story of the British consols

This is no idle theorizing. Britain actually issued consols in the $19^{\text {th }}$ century up to 1914. They were marketable instruments that traded at values determined by this very same formula. Clearly, issuing consols would be sheer madness under the regime of irredeemable currency. But in the halcyon days of the gold standard interest rates were stable. Cutting interest rates into half, or doubling them, were as unheard of as they were unthinkable. In the $20^{\text {th }}$ century Britain stopped all payments in gold, and consols were discarded along with the gold standard. Nevertheless the formula survives and can be used to calculate the liquidation value of total debt since, under the regime of irredeemable dollar, total debt is perpetual debt.

## Serial halving of the rate of interest

In this new interpretation of our formula $A a=B b, A$ is the total debt contracted at an average rate of interest $a, b$ is the current market rate, and $B$ is the liquidation value of total debt. We see that $B$ is inversely proportional with $b$. In particular, every time the rate of interest is halved, the liquidation value of the total debt is doubled. If the interest rate is halved serially by the Fed (which has happened in the past, and may happen again, as interest rates can be halved any number of times without hitting zero or going negative) then, for example, upon a ten-fold serial halving, the liquidation value of the total debt is increased more than a thousand-fold $\left(2^{10}=1024\right)$. This means that trillion is promoted to quadrillion, quadrillion is promoted to quintillion, and so on, in direct consequence of the serial 10 -fold halving.

Those who argue that these frightening numbers are merely 'notional' and, as such, they have no relevance to the real economy, do not know what they are talking about. The size of the derivatives market is fast approaching the quadrillion dollar mark (if it hasn't already surpassed it by the time this article is published). It has been talked down by mainstream economists and the financial media saying that "there is nothing to worry about, it is notional value anyhow". Yet that notional value was able to break the back of the mighty American banking system (along with that of the British). This is so because the total notional value of derivatives represents the liquidation value of insured bonded debt.

We can expect much greater increases in the debt of the federal government, in the trillions of dollars, but the really frightening numbers are not so much the actual increases in the outstanding debt but, rather, the increases in the liquidation value of the total debt caused by the serial halving that the monetization of the increased federal debt will necessitate.

## Capacity to expand Treasury debt

Peter Orszag, the new budget director in the Obama administration has declared, as quoted by Leonhardt, that "one of the blessings of the current environment is that we have a significant capacity to expand and sell Treasury debt. If we didn't have that, if the financial markets didn't have confidence that we would repay that debt, we would be in even more dire straights than we are."

The budget director is dreaming. The financial markets don't have a shred of confidence that the U.S. government will ever repay its debt, certainly not in dollars of the same purchasing power. The Treasury paper is not being purchased by investors; it is bought by bond speculators pursuing risk-free profits. The Big Fix cowboys create unlimited demand for the bonds by holding out the carrot of risk free profits. Speculators plan to dump the paper in the lap of the Fed at the first given opportunity. They know full well that the Fed has to monetize the Treasury debt to provide the wherewithal to pay for the bailouts and stimulus packages. Without the promise of serial cuts in interest rates the U.S. Treasury paper is unsaleable.

Real investors, foreign governments and central banks, are already sitting on mountains of paper losses due to the loss of purchasing power of the dollar in their own currency. For them, U.S. Treasury debt is a toxic asset which has no real market value because there is no real market for it. Any sizeable offer to sell will result in a swift withdrawal of all bids. U.S. government debt has grown out of proportion to economic activity. It will never be repaid, except in the dreams of the budget director.

## The Obama White House has been hijacked

The outlook is very bleak. The Obama White House has been hijacked by a reactionary clique of Keynesians and Friedmanites before the new president even had a chance to take stock. They are doctrinaires who would never admit that they have made a fatal mistake when they promised permanent prosperity, a world free of bank runs, panics, domino-style bankruptcies, mass unemployment and depressions, provided that they were allowed to quarantine gold and manage synthetic credit as they see fit. They now open all spigots and let all the genies out of their bottles, in particular, the genie from the monetary bottle and the genie from the fiscal bottle, to roam freely over the land and visit great disaster and suffering upon millions of innocent people.

It is the same clique that has landed the country and the world in this economic disaster that now arrogates to itself the right 'to fix things' according to its own failed blueprint. The Big Fix cowboys' ideas of debt and its relation to production is a recipe for total economic ruination.

## Latter-day Moloch

The result of the bailouts and stimulus packages will be a vast expansion of government debt, and a serial halving of the rate of interest to accommodate it, followed by the escalation of the liquidation value of total debt to the quadrillion and quintillion dollar range and beyond. Deflation will sweep through the land making prices and wages fall. The depression will surpass in severity any previously experienced. Industrial capital will continue to be destroyed along with finance capital. Pension funds will go up in smoke, unemployment will grow. Meanwhile the threat of hyper-inflation will not be removed and will continue to threaten all countries, a 'first' in world history. When the liquidation value of government debt reaches a certain height where Federal Reserve notes in existence will no longer be sufficient to supply the bond market with gambling chips the Fed will, Zimbabwe-style, start adding serials of zeros to the face value of its notes. You don't have to be a rocket scientist to be able to calculate the purchasing power of Federal Reserve notes denominated in the millions. You just make a field-trip to Harare.

There is no trade-off between growth and debt. Under the regime of irredeemable currency, debt is no longer a servant. It is a Moloch, devouring its children.

## Reference

By the same author:
How to stop the depression, www.professorfekete.com , February 2, 2009.

## Calendar of events

Szombathely, Martineum Academy, Hungary, March 27-29, 2009
Encore Session of Gold Standard University Live.
Topics: When Will the Gold Standard Be Released from Quarantine?
The Vaporization of the Derivatives Tower
Labor and the Unfolding Great Depression
Gold and Silver in Backwardation: What Does It All Mean?
Further details at: GSUL@t-online.hu
Instituto Juan de Mariana, Madrid, Spain, June 18, 2009
Gold and Silver, Madrid 2009
gcalzada@juandemariana.org
San Francisco School of Economics, July-August, 2009
Money and Banking, a ten-week course based on the work of Professor Fekete.
The Syllabus for this course is can be seen on the website:
www.professorfekete.com
University House, Australian National University, Canberra, first week of November 2009
Peace and Progress through Prosperity: Gold Standard in the $21{ }^{\text {st }}$ Century
This is the first conference organized by the newly formed Gold Standard Institute.
E-mail feketeaustralia@gmail.com
February 13, 2000

