The Gold Standard Straitjacket Revisited: Stimulating the Economy by Using Public Debt as a Lever *

Erik A. Cerven*

**www.scienceandresearchdevelopmentinstitute.com*

Sept 13, 2010

Abstract

The scenario of relief from public debt (monetizing debt) is analyzed by taking into account factors on the international and domestic arenas as well as evaluating empirical findings in the history of market economics. The effects of relief from public debt are simulated in the form of strengthened consumer budgets (tax cuts) based on a quantitative formulation of the demand and supply as implemented in software. It is concluded that relief from public debt is a viable alternative to austerity measures and is more in accordance with the historical evolution of welfare societies up to present times.

Keywords: Market balance, public debt, tax cuts, monetizing debt, Great Depression, economic growth

1 Introduction

The free consumers' market economy relies on value flux in a broad segment of the population which constitutes the source of fortune creation and fuels the public sector *via* taxes. In order to consolidate the consumers' market it is desirable to broaden welfare but the common trend is towards a drain of liquidity into funds and other large units (for example private fortunes, which are a prerequisite for investment, market differentiation and successful growth competition on the international arena) and into the public sector. In many contemporary economies this trend has lead to large public and private debt burdens which threaten to hamper future growth and welfare broadening. In contrast to private debt public debt is not self-inflicted by risk-taking individuals but approved by elected officials in the belief that it serves the community. Whether for work hours or commodities public expenses accelerate the value turnover in the private sector relative to the alternative that the money had not been used at all. In market economies the private sector tends to be value-producing while the public sector tends to be value-consuming paying for public services, with raw materials constituting a common exception. It is therefore now generally accepted that money circulating in the private sector of the consumers' market promotes value growth more than if used for public expenses. However, that was not the case in the midst of the Great Depression when the consumer's market system almost collapsed. At that time public expenditures helped in reestablishing a consumption market and lead

* © August 19 - Sept 11, 2010 E. Cerwen at www.scienceandresearchdevelopmentinstitute.com, All rights reserved. This work may be copied for personal use and email attachment. Published on the Internet on Sept 13, 2010. Posting at any other website, publishing in print and mass-redistribution constitute copyright infringement. Citation: The gold standard.. Proceedings of www.scienceandresearchdevelopmentinstitute.com , Economics # 2 (2010). Email: cerven@scienceandresearchdevelopmentinstitute.com

to higher employment. In parallel, the gold standard was abandoned in one country after the other, which made possible the recovery. [1] The next round of welfare widening catalyzed by financial relief took place after the dollar had been released from the gold convertibility in 1971. Would it have been possible to achieve the current broad level of welfare if the currencies had been tied to gold? Because of the tendency of money to accumulate into fortunes and funds [2], probably not. This tendency has an anti-inflationary effect in a consumers' market oriented economy, which may ultimately lead to deflation. Deflation is known to inhibit the value flux on the markets and since the value flux is a prerequisite for welfare widening the answer must be negative. As one is now in the global economy facing a much discussed 'debt crisis' it is time to look back and learn from past experience. Should one take a step forward in broadening welfare by adjusting liquidity to demand thus furthering the consumers' market economy or would it have been better in the first place in the Medieval Ages to allow only the kings to eat by decorated tableware and let it remain that way? Suppose the answer implies the release from public debt through sovereign additional money supply in an orderly and controlled fashion, thereby especially intending domestic debt in domestic currency. The purpose of the present paper is to briefly analyze such a scenario also with the help of some quantitative *ab initio* simulations.

2 International Arena

The context of public debt in a market economy can be outlined as schematically shown in Fig. 1 in the form of interacting sovereign units composed of a private and a public sector. An unilateral relief from public debt by any country is likely to cause a weakening of the exchange rates. This might in some self-sufficient economies stimulate the markets by making domestic goods substitute for imports and by promoting export. However, countries with a negative trade balance comprising mandatory imports are likely to suffer from unilateral relief from debt. The effect on countries that have large foreign debt depends on the extent of export stimulation.

There is also the possibility of a well planned concerted relief from public debt over several years by several countries jointly, politically motivated by a desire to widen domestic welfare and competitiveness on the international markets. Such a development might be desirable in times of financial restraint limiting the extent of realizable growth. The orderly release of liquidity under such circumstances might promote welfare widening and growth by accelerating the already existent market fluxes and rescuing those sectors of the economy that are in danger of financial drought. A consensus on joint domestic public debt relief by debt-ridden countries might provide a brighter perspective for them than awaiting one by one the default. On the other hand, countries that do not suffer from public debt might at the same time choose to boost the public sector in a similar manner and create funds for various public projects, or may prefer to await the exchange rate corrections. Cruising between the two alternatives domestic inflation and currency appreciation would be a challenging task for these strong and healthy economies if debt-ridden countries were to join forces to eliminate domestic debt. If domestic inflation in the wake of liquidity increase in such healthy economies could be curbed by, for example, labor migration, substantial growth in both recipient and donor countries might be possible to achieve. Several empirical examples of such symbiotic economies are known, including scenarios of

[1] As currently claimed at www.wikipedia.org under the heading 'gold standard' the speed of recovery from the Great Depression in various countries in Europe correlated with an early abandonment of the gold standard. The current 'crisis' debate is perhaps over-focussed on public spending as a means of recovery while the importance of access to money is being forgotten. As long as the wheels of the economy are spinning and the bulk population participates in the economy it may be premature to boost public spending.

[2] As claimed in an article in The Nation, currently free public access at the URL http://www.thenation.com/article/36893/unjust-spoils , a similar skew income distribution precedes the major economic crises

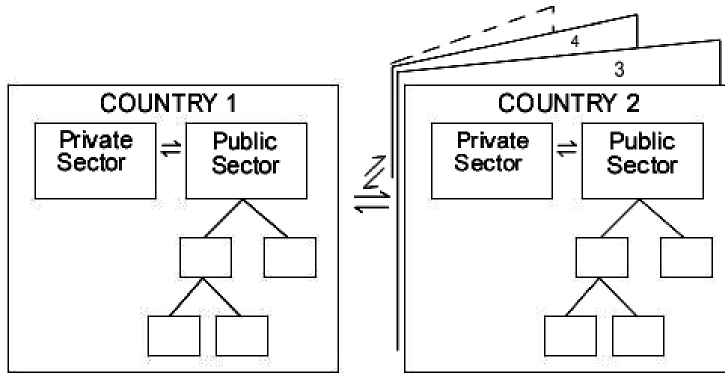

Figure 1: Schematic overview of the context of relief from public debt as discussed in this paper. Arrows indicate trade or other interactions.

inflation. The longer a country had been on tenterhooks by financial restraint the more deflation it would have suffered and the more psychological stretch margins would be available to buffer inflation in the event of sudden access to easy money. Harmful effects on the more dynamic economies like speculative bubbles, excessive lending and overheating should be possible to prevent by choosing a suitable time-horizon for the stimulus.

The liquidity injection and its time course should be possible to determine based on the amount of debt such as to neutralize any effects on the exchange rates between countries participating in the debt overhaul. Detailed agreements on the means of ameliorating the public budget balance in each case, other financial contracts and cross-currency bonds constitute possible means of preventing rough impact on the exchange rates. The effects on the domestic market of relief from public debt can then be analyzed against the background that international monetary consequences are at least manageable.

3 Domestic Arena

Because of the fear of future inflation an immediate psychological effect of a general policy discussion about relief from public debt, manifested by international consensus, would be to mobilize liquidity into the markets. Creditors and banks involved in public debt would become more willing to lend to private enterprises knowing that the public debt would be repaid without further clogging the money flux between the financial institutions.

Once the details of the relief has been worked out the public budget keepers will administer substantial margins at the tolerated level of taxation. An advantage of using these margins for tax cuts compared to public budget (infrastructure, education, etc.) is the potential that the money immediately promotes the existing market fluxes and strengthens the domestic economy based on its already existent foundation. In contrast, infrastructure budget, for intance, may require a time lag before it promotes housing and promises only a temporary boost of employment in the favored branches disconnected from the bulk economy. The time lag before public budget in education pays off in the form of innovation and new industries is even longer. As is known empirically, tax incentives in specific branches may promote growth without any time lag. However, interfering in the free markets by branch-directed incentives may cause unwanted cyclical effects. A general tax cut will leave the decision to the consumer where to invest the money, which is likely to promote the market diversity compared to actively channeling the money. A diversified economy is more apt to survive in its envi-

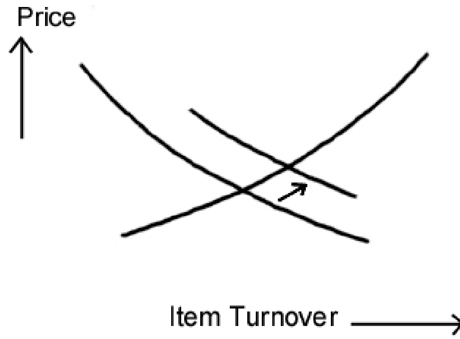

Figure 2: Illustration of shift of market balance as a result of strengthened consumer budgets.

ronment than a less diversified one, which can be amply exemplified in the history of market economics. Therefore, the consequences of a general tax cut strengthening consumer budgets will be examined more closely here.

4 Effects of Relief from Public Debt on the Domestic Market

Simulations of the relief from public debt should be made based on an econometric foundation but it is also possible to make estimations based on *ab initio* computations. Especially, the market plasticity is not amenable to econometrics and therefore requires a theoretical foundation of some sort. The present paper will be based on a quantitative theoretical formulation of the market balance at the intersection of the demand and supply functions as previously put forward [1, 2, 3] and now also implemented in software [4]. This prior work allows quantitative simulations of the market balance yielding the time course of item turnover, price, and total value turnover relative to a chosen standard calibrated by reference to some econometric foundation. Estimations of market effects in the following are all based on such quantitative simulations using the software.

Because of the imposed taxes that pay for interest on loans, installments, and current expenditures, value turnover in the public sector reduces that in the private sector by an amount measurable in the form of tightened consumers' budgets (VAT, value added tax, will be discussed separately). The damage incurred by loan interest and installments on the value turnover in the private sector can be estimated by adding or subtracting that much consumer budget to the demand function and calculating the shift of the market balance point in terms of item turnover and related employment. As shown in Fig. 2 the item turnover in the private sector increases by an amount Δn following a strengthening of the consumer budget which when uncompensated transforms into an increased employment Δh by the factor w, workhours/item. The total value turnover (number of items times price) also increases, as does the price/item. The additional employment effectuated can be resolved into domestic production and import-related services depending on the consumer's preference where to put the money. There are also secondary increases of n and h in branches of the economy indirectly fuelled by the primary value turnover brought about by increased consumer budgets. The division into primary and secondary contributions to n and h should be possible to make by econometric methods.

The steepness of the demand and supply curves modifies the effect of tax relief on item turnover and employment. In a market characterized by speculative price volatility (steep curves, as may be the case for fear of inflation) there may be less effect on item turnover whereas in a deflated and 'sluggish'

market (flat curves) inclined towards plain rent, an increased consumer budget may lead to substantially higher item turnover and employment. A more diversified market with more competition in the same and other niches discourages the supplier from setting higher price tags in response to higher consumer budgets whereas a less diversified market may require concomitant price regulations in order to preserve the positive effect on item turnover and employment. The extent of market compensation of a tightened consumer budget at the time the tax cuts are made also influences the effects on item turnover and employment. One possibility is that the lower price level results in a lower propensity to sell. This restores the prices but dampens the market turnover even more. The same applies to profit or VAT added to the supply curve. More profit per item may be necessary to compensate for production efficiency and overhead costs in times of sluggish turnover. Alternatively, more expensive products in the same or other niches appeal to wealthier consumers to cause the same effect on item turnover and prices. A market with tightened consumer budgets that has been compensated in any of these ways restores item turnover more slowly in response to tax cuts because of the supplier's adaptation. Therefore, the tax cuts to the consumer should be combined with policy measures in the form of incentives to the supplier under such circumstances. Such compensations on the supply curve are associated with price decreases (comparatively less item turnover) in a more diversified consumer market and with price increases (comparatively more item turnover) in a less diversified one. In general, a more retarded market will grow more rapidly following consumer budget increases than a diversified one.

These idealized cause-effect relationships on a market in balance are not necessarily realizable in practice. For example, 1) the injected money may go to imports in which case there is no boost of primary value turnover, just secondary effects *via* the retail sector, 2) the tax cut surpluses may be deposited or used for repayment of private debt and then channeled into international investment opportunities by the financial institutions, 3) the suppliers adjust to the liquidity injection by setting higher price tags, 4) the payroll openings don't appear because there is no incitement for profit or else, there is an expectation of market deflation and a worsening economy ahead that causes hoarding of money. In some instances auxiliary hiring expenses and labor market regulations may prevent new employment.

Even if these factors may not be fully controllable by policy measures a first rough quantitative estimate of the effects of tax cuts in the form of increased consumer budget can still be based on the idealized market balance. For example, if the public debt is 30% of GDP a tax relief corresponding to repayment over a 10 year period (with zero per cent interest rate) increases the primary item turnover and the employment linked to it by 3% per year. To this comes the secondary value fluxes, perhaps in the range of 50-100% of the primary fluxes, which means a substantial boost of the economy and a considerable buffer capacity against the aforementioned risk factors.

It is also possible to use public margins for VAT cuts instead of strengthening consumer budgets. This also, theoretically, increases the item turnover and, contrary to budget strengthening, decreases the prices. There are, however, some precautionary considerations that must be made before opting for VAT instead of budgets as a form of tax relief. VAT cuts would only be marginal relative to the item price *per se* and could easily be eaten up by price increases. General VAT cuts might increase the turnover at a price level that is already manageable for the consumer, such as daily retail purchases of food, etc. However, at higher price levels more money in the pocket is more helpful to the consumer and more beneficial for the sectors of the economy that suffer from financial restraint. In a free market economy the consumer makes his own choices where to put the money and the general outcome reflects statistical preferences in the pluralistic society. VAT cuts are more suitable as incentives in specific branches and for targeted economic policy. VAT cuts on services, for example, would obviously make it affordable to hire and thus increase the employment. Even so, the market demand for the services

produced may still have to be strengthened by direct tax cuts.

5 Discussion

The idea that future generations should pay for value that has already been added in the form of public assets and past services by their parents and grandparents is of course absurd, even if these values were created with the help of borrowed money. Besides touching that our sense of justice, domestic loans for adding value in the public sector have already once deprived the private sector. Should the private sector be punished twice, first by deprivation of liquidity and then by taxes paying for the loans? There is currently a trend towards such a development in the sovereign economies (e.g. Iceland, Argentina and Greece). While much money has been taken out of the stock markets (which is harmful for the government-approved pension funds which were conjectured to partially relieve the public sector from pension burden) in anticipation of other opportunities, a pearl necklace of sovereign debt goodies is made available at liquidation prices by the piece and more is being promised to come. Such a development caused by the past failed judgments of individuals in key positions in the public sector (and by the current financial 'crisis') might be questionable from the point of view of international law. Furthermore, the long term effects of sudden austerity in public finances as required for repayment of public debt are not known. It is likely that the market fluxes will slow down even more and the employment level will sink until private investors are willing to focus on the crisis economies one at a time. Because of the market forces and other investment opportunities there is no guarantee that they will continue to do so. The relief from public debt by recognizing the existence of the debt-burdened value added in its monetary equivalents constitutes an alternative to such an uncertain path of austerity. If made in an orderly consensus fashion over a sufficiently long period of time it might not cause any significant inflation. Printing money that is equivalent of more value does not generate inflation.

Similar worries that inflation has taken place after the abandonment of the gold standard and the convertibility of the dollar may be exaggerated. Even if prices, for example on real estate have increased so has the demand, which *per se* leads to higher prices. Furthermore, many products did not exist or have been vastly technically improved during the years that inflation has been recorded. Such products would have been quite expensive in the past perhaps even contributing to a deflationary trend (compare price tags of a computer in the 50:ies and today). As the market differentiates and more consumers join to contribute to the value flux, an orderly liquidity injection into the market is a natural development that prevents deflation, lubricates economic growth and furthers the widening of welfare. For example, suppose current inflation indicators show that the value of the currency has diminished to 3% of its original value during a 100 year period. If, during that period 1/3 of the population has been lifted to a level of welfare that only 1% of the population enjoyed before, then there is no absolute inflation. The money just lubricates a higher standard of living and equates to more value added in the economy. Empirical success stories in support of broadening the monetary base may be found in Europe while the gold standard was abandoned during the Great Depression, in the United States following the abandonment of the convertibility and in China today where likely the public sector contributes to liquidity injection. If a global consensus is reached once again to relieve financing to keep it at pace with the global widening of welfare instead of trying to boost the value of money by austerity means several factors must be taken into account in order to make a just transition. On the domestic scale measures must be taken to prevent a recurrence of the debt-burden and a fair distribution of liquidity as a reward to those locals that have accomplished a balanced budget must be made. On the international scale there is the delicate problem of how to handle loans backed up by sovereign debt. On the global scale, measures must be taken to prevent inflation by stretching the

relief over a sufficiently long period of time. Notwithstanding, inflation may provide relief from private debt, another serious problem in contemporary market economies.

References

[1] Cerven, E. (1990) Derivation of the demand and supply curves from the propensities to consume and sell. AAAS Pacific Div. Symp. Abstr. Biological Sciences, Psychology, and Interdisciplinary Poster Session, Davis, Ca.

[2] Cerven, E. (1996) Forecasting based on the Keynesian market balance. XVI:th International Symposium on Forecasting. P. 133 (Istanbul)

[3] Cerven, E. (2010) Predicting price, turnover and employment at market balance. Proceedings of www.scienceandresearchdevelopmentinstitute.com , Economics # 1

[4] Cerven, E. (2008) Market forecasting Ver. 3.1. Software (available from the author, occasionally at ebay.com, briefly described in ref. 3) This paper might be supplemented in the future with an appendix containing simulations of the time course of economic stimulus in the form of tax-cuts. If interested, please visit the website in the future to see if this paper has been appended!