

# Exchange Rate Policy and Full Employment

Warren B Mosler\*

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## Abstract

*In this presentation (to a conference in Australia, circa 2007, organized by Bill Mitchell), an understanding of monetary operations is shown to be critical for realization of a policy of full employment together with price stability in a market economy.*

## Introduction

The Post Keynesian group repeatedly distinguishes itself from the current mainstream by proposing various forms of capital controls and fixed exchange rate policies. It is argued that currency volatility, particularly that caused by speculators, is disruptive to the real economy. Notable is Paul Davidson's take off on Keynes's Bancor plan, for example, which proposes a fixed but adjustable exchange rate system.

The mainstream is generally supportive of floating exchange rates and the "free flow of capital," purporting that the further institutional structure of fixed exchange rates and other forms of capital controls interfere with market forces. Recent world financial turbulence, however, does seem to be modifying mainstream tolerance of a variety of capital controls in troubled countries, allowing them to be used as real world laboratory experiments.

This presentation will recognize that benefit of creating an institutional framework within which market forces function to achieve politically determined economic goals.

Given the goals of full employment, currency stability, and perhaps targeted economic growth, and given that this is a Bill Mitchell conference, it should come as no surprise that I hope to convince you that all this is directly achievable through a guaranteed public service job and a floating exchange rate policy. Let me add that the base public service job has nothing to do with any inalienable human right to work. The real point is this: If a government imposes a tax payable in its own currency, it is logically absurd to not give the private sector a means of obtaining the units of currency desired to both pay the tax and net save that unit of account. The BSE is a means of allowing the private sector to earn the currency units it desires above and beyond that provided by the rest of the government's spending.

The combination of BSE and floating exchange

rates directly insures sustained full employment by definition and should promote favorable terms of trade as later discussed. Furthermore, by creating this institutional framework, real political options and flexibility are dramatically increased. For example, benefits can be introduced from the 'bottom up' to address perceived inequities of income, consumption, and quality of life.

## Fixed Exchange Rates and Unemployment

In countries including Thailand, Malaysia, Indonesia, Russia, and Hong Kong output has declined suddenly and sharply, and unemployment has abruptly increased. A variety of fixed exchange rate policies, including the currency board of Hong Kong, have not kept the population fully employed. I will try to convince you that this is necessarily the case.

The problem is that monetary and fiscal policy necessary to sustain full employment will periodically result in an attack on a fixed exchange rate currency, resulting in the loss of the country's foreign exchange reserves, and forced devaluation.

And, perversely, any economic weakness resulting from restrictive fiscal policy designed to strengthen the currency can reduce local currency tax liabilities, and cause further currency weakness and loss of reserves.

A fixed exchange rate has come to imply fixing the exchange rate to the \$US, though there are a few examples of fixing to the DM. This has been to the advantage of the US, allowing the US to run a persistent trade deficit without seeing its terms of trade deteriorate, and perhaps even improve, at the expense of the nations trading with the US. Perter Bernstein recently stated:

"The dollar standard has replaced the gold standard in international finance, a role that it has served admirably in recent years. This assignment has also benefited Americans, because foreigners have been happy to accumulate the swelling numbers of dollars

\*Corresponding author: [wmosler@gmail.com](mailto:wmosler@gmail.com)

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[k.web.umkc.edu/keltons/ECON501/Mosler.htm](http://k.web.umkc.edu/keltons/ECON501/Mosler.htm)

that we have been transferring to them in return for a burgeoning supply of imported goods and services.”

The US of course is for all practical purposes blind to this advantage, and therefore has not fully taken advantage of it. Even Peter Bernstein doesn't quite seem to have a handle on it, when he goes on to state:

“... the dollar is the most over-owned asset in the world,” and cautions that it is, “an accident waiting to happen,” because if a dollar crisis occurs, “where would the money go?”

Of course, with a floating rate currency, like the \$US, location is a matter of who's account is debited and who's is credited on the 'big' \$US 'T account.'

I give him the benefit of the doubt and assume what he does imply is if the net desire to save \$US should decrease, the exchange rate of the currency would fall, and perhaps the annual terms of trade for the US would deteriorate. For example, the US terms of trade would be worse if it had to export more copies of Windows 98 for every gallon of oil it imported.

Meanwhile, the desire to net save \$US has not diminished internationally, as Central Banks continue to use the \$US as their reserve currency, and a variety of nations strive to service and repay their \$US debt. Furthermore, by allowing its national budget to go into surplus, the US has created a universal short squeeze on the \$US. This dooms any economy to deflation and contraction if its currency is pegged to the \$US, unless it immediately devalues. And, at the same time, the surplus dooms the US itself to the very sharp and severe downturn that I believe is now in progress.

Let me address some accounting fundamentals of fixed and floating foreign exchange regimes using the pre August 17, 1998 Russian ruble as an example.

The marginal holder of ANY ruble bank deposit, at any Russian bank, had a choice of three options before the close of business each day.

(I will assume all rubles are in the banking system. Actual cash is unnecessary for the point I am making in this example.)

The three choices are:

1. Hold rubles in a clearing account at the Central Bank.
2. Exchange ruble clearing balances for something else at the CB.
  - (a) Buy a Russian GKO (tsy sec), which is an interest bearing account at the CB
  - (b) Exchange rubles for \$ at the official rate at the CB.

For all practical purposes, 2a and 2b competed with each other. Russia had to offer high enough rates on its GKO's to compete with option 2b. In that

sense interest rates were endogenous. Any attempt by the Russian Central Bank to lower rates, such as open market operations, would result in an outflow of \$US reserves. The conditions for a stable ruble could not coexist. The net desire to save rubles was probably negative, the failure to enforce tax liabilities resulted in deficit spending even as the government tried to reduce spending, and the higher interest rate on GKO's increased government spending even more.

At the time GKO rates were around 150% annually, and the interest payments themselves constituted at least the entire ruble budget deficit. It seemed to me that higher rates of interest were the driving factor behind the excess ruble spending which led to the loss of \$US reserves.

With the \$ in high demand due to a variety of factors, such as domestic taxed advantaged \$US savings plans, insurance reserves, pension funds, and the like, and, exacerbating the situation, what could be called overly tight US fiscal policy, there was, for all practical purposes, no GKO interest rate that could stem the outflow of \$US reserves.

The main source of \$ reserves was, of course, \$ loans from both the international private sector and international agencies such as the IMF. The ruble was overvalued as evidenced by the fact that \$ reserves went out nearly as fast as they became available. The Russian Treasury responded by offering higher and higher rates on its GKO securities to compete with option 2b, without success. This inability to compete with option 2b is what finally leads to devaluation under a fixed exchange rate regime.

## Floating the ruble

On August 17th it was announced that option 2b, for all practical purposes, was no longer available. This meant the ruble was now a floating currency. Option 2a now competed only with option 1, so the interest rate was suddenly exogenous. It would be and could only be whatever the government determined to pay when it offered its GKO's for sale. It could, for an extreme example, decide to pay 0%, and the excess clearing balances would have no choice but to remain as excess balances and earn no interest. That would make the interbank rate 0 bid between credit worthy counterparties.

Previously, with option 2b open, the penalty for excess government spending was higher rates on GKO's and loss of \$US reserves. With a floating exchange rate the penalty for excess spending is the exchange rate of the ruble.

And I am quite certain the government has yet to understand that it can now automatically issue GKO securities at any rate it chooses. Meanwhile,

the domestic GKO market remains closed and the clearing system seems largely dysfunctional.

## Currency Boards

A currency board, as in Hong Kong, is a fixed exchange rate policy that differs from the Russian case in that all bank deposits are not convertible at the monetary authority. In fact, only those actual \$HK issued by the monetary authority are convertible. These can be held as cash or as \$HK balances at the monetary authority's designated bank.

If a holder of bank deposits wishes to convert his \$HK to \$US at the monetary authority, he must first withdraw the funds. As banks do not have sufficient reserves of 'real' \$HK for all depositors, banks can be forced to suspend withdrawals if depositors try to demand more \$HK than the bank has on hand. To get additional \$HK for depositors, the banking system must somehow obtain \$US, and exchange them for the needed \$HK with the monetary authority.

The \$HK interest rate settles at the indifference level of borrowing \$HK vs. \$US.

Again, listing the 'same' choices of the marginal \$HK:

1. Hold the \$HK as cash or a clearing balance.
2. Convert to something else at the monetary authority.
  - (a) Purchase \$HK Govt. secs.
  - (b) Convert back to \$US at the Monetary authority.

However, in this case, 2a does not extinguish the clearing balance from the private sector, as the HK govt does not have an account with the monetary authority, but must use a private sector account. So 1. competes with only 2b.

The question of why anyone would want to OBTAIN \$HK can be answered by citing the convertibility to \$US.

The question that then follows is why would someone want to HOLD \$HK? The answer is the higher interest rate that can be earned on \$HK versus \$US.

That leads to the third question, which is why anyone would want to borrow \$HK at a rate higher than he could borrow \$US? One reason is the risk of devaluation. With devaluation the borrower gains, and the saver loses. From this we could deduce that the reason savings are kept in \$HK is because the interest rate is higher than that of the interest rate paid for \$US deposits. And, in fact, it is observed that the \$HK interest is always higher than the \$US interest rate. Otherwise, in theory, no one would hold \$HK deposits.

Well, that explains why someone would hold \$HK bank deposits. But actual \$HK obtained from the monetary authority do not earn interest. So why would anyone want to hold them, apart for cash in circulation? The answer is bank reserve requirements

In order to borrow \$HK from the banking system, where loans create deposits, the banks must carry sufficient \$HK reserves to support the higher deposits thus created. And to get those \$HK reserves the banks must borrow \$US and exchange them for \$HK at the monetary authority. That is, the banks must go short \$US and long \$HK to support their \$HK lending activity. The \$HK interest rate the banks charge reflects this risk. It is the same type of risk that any depositor of \$HK faces.

The banks need to keep actual \$HK to meet depositors needs for the withdrawal of actual cash. Cash withdrawals actually convert bank deposit money into real \$HK for the bank's customer.

But the end of this logical chain has not quite been reached. We have explained (i) why someone would hold both actual \$HK-cash and required bank reserves, (ii) why someone would hold \$HK bank deposits — higher interest rates than \$US deposits, and (iii) why someone would borrow \$HK — as a bet on devaluation. But so far this is a non starter.

The final question is why sellers of real goods and services want \$HK, as evidenced by the fact they price their goods and services offered for sale in \$HK.

The answer of course is Government. Tax liabilities are denominated in \$HK and government expenditures, including the payroll, are paid in \$HK. If you are a business or individual that must pay taxes in \$HK you must sooner or later offer something for sale in exchange for the needed \$HK. And, as tax liabilities are ongoing, there will likely be a desire to net save the unit of account, if for nothing more than transaction purposes.

## Devaluation risk

There is no risk of the monetary authority running out of \$US reserves to present to holders of actual, convertible, \$HK. It should always have more \$US than it could ever need if for no more reason than it earns interest on its \$US reserves and pays none on its \$HK issued. That being said, should the monetary authority intervene and lower \$HK rates by making purchases with newly issued \$HK, perhaps to fight unemployment, it is now putting at risk that many more of its \$US reserves. If it issues more \$HK than it's supply of \$US reserves there is a real risk of forced devaluation.

Apart from such excess issuance, there is the risk

of devaluation implemented not to protect \$US reserves, but to stem deflation and economic collapse, particularly as tight US fiscal policy is automatically transmitted to the \$HK via the currency board mechanism. The HK economy must somehow earn \$US for the \$HK money supply to expand with economic growth. And, if it borrows \$US, it must then service the debt with interest payments of \$US. The only net supply of \$US necessary to support a growing \$HK money supply is net exports. With world \$US prices falling, HK is forced to accept lower prices for its exports, reducing wages and other \$HK input factor prices the exporters can pay. This leads to a general deflation, and the usual banking problems associated with deflation and falling asset prices. \$HK prices will continue to fall until exporting firms are again profitable. Falling \$HK prices is the method by which the real \$HK money supply adjusts. The real pain of such an adjustment could make the alternative, and perhaps less painful, adjustment of simply devaluing the \$HK politically appealing.

(read bloomberg news report on HK economy down 7% last quarter)

I have all but skipped over the question of what to fix a currency to. Gold has been historically popular. But note that if the US had been on a gold standard over the last few years, and all relative price movement had stayed the same, the move in gold from \$400/oz to \$300/oz would have been expressed as a jump in the general price level of around 35%. No doubt the Fed would be raising rates aggressively to fight this inflation, while net holders of \$US would be screaming bloody murder.

This applies to any fixed versus floating exchange rate policy in exactly the same way. For example, in local currency terms, those currencies pegged to the \$US have experienced deflation, while those with floating currencies inflation.

Over time, I suspect the nominal wage for unskilled labor is probably the most stable price in any economy, which supports the contention that BSE maximizes nominal price stability in a market economy.

## Employment and Exchange rate policy

Russia has a massive unemployment and underemployment problem. With its fixed fx rate regime, traditional demand management policy, such as increasing ruble deficit spending, simply resulted in an immediate loss of fx reserves. Nor could interest rates be lowered by additional purchases of assets by the Central Bank, as any added rubles were immediately

converted to \$US at the CB. (Perhaps my suggestion of lowering the interest the Treasury would offer to pay on GKO's would have sufficiently cut ruble spending, but that was not a consideration). The only way the peg could be sustained was through increased \$US contributions from foreign entities. In theory stability could be reached when the US donated enough \$US obtained by US deficit spending to inflate the \$US at a rate equal to ruble inflation. Needless to say, that was not to happen.

Today, with a floating ruble, Russia does have the ability to engage in traditional demand management policy. It could increase spending by paying market prices for goods and services. However, that has been tried and seems to lead to levels of inflation well beyond 100% annually. The price elasticity of items offered for sale seems to be very high, with what seem like small purchases driving up prices rapidly. Perhaps this is due to a truly limited capacity to expand output in the short run. And, additionally, the limited capacity to enforce tax liabilities.

Bill Mitchell's or Randy Wray's BSE policy is, however, qualitatively very different from traditional demand management policy. With its unique form of full employment and price stability, it could very well instantly transform the Russian economy into something 'less miserable'. Yes, corruption, waste, lack of legal structure, etc., would still be there. But, nonetheless, life would likely be less miserable for much of the population.

The important difference is that with the BSE program, a public service job is offered at an exogenously determined wage. Simply offering the BSE job at the prescribed wage accomplishes the mission, regardless of the number of takers or the quantity of rubles spent. There is a very real distinction between, on the one hand, paying a market driven wage high enough to hire a given number of people by spending a given amount of rubles, and, on the other hand, simply offering the BSE wage and accepting whoever comes your way. The first can be highly inflationary, while the latter can never be inflationary beyond a one time adjustment. Yes, this one time adjustment could sharply lower the real BSE wage, as determined by some index. However, that would represent the current market value of BSE labor sold to the government. The BSE wage could then be raised. However it should be recognized that this would likely further devalue the currency with another one time adjustment.

With any tax driven currency, the price level is a function of the prices paid by the government when it spends, and the collateral demanded when it lends. In other words, the price level is a function of what the government makes the taxpayers do to get the

needed units of that currency. Note that Argentina, along with its currency board type of monetary rule, has outlawed public sector indexation. Inflation fell quickly and the peg was able to be held politically. The electorate seemed to recognize that changing the nominal wage would not change the real wage. Unfortunately they didn't realize ending indexation was sufficient and they further added the currency board policy.

I suggest economic performance suffered in Argentina because of the addition of the currency board after ending indexation, and suffered in Russia because of a failure to recognize the interest rate mechanism associated with a floating rate currency.

In any case, should Russia select a combination of its current floating exchange rate regime and a BSE full employment policy, at least there would be a semblance of full employment with the potential of real gains in needed output by the new public employees. And there would be at least the possibility of the emergence of the private sector as a functioning currency is reinstated. This should prove a major step forward from current policy even without further institutional adjustment, though no doubt that would also be helpful. Particularly tax reform and general legal structure. And it is entirely a local currency solution. No foreign involvement is required.

### **Recap: Fixed rate fx policy**

If a government chooses a fixed exchange rate policy, and simultaneously attempts to achieve full employment, it could very well lose its foreign exchange reserves. Interest rates would be rising, as expressed by the forward price of the currency falling while the spot price is being supported by a diminishing pool of fx reserves. This could happen with either a BSE program, or a more traditional spending increase.

In any case the higher interest rates may accelerate the loss of fx reserves in two ways. First, higher rates could reduce business profits and consumer spending, slowing the economy and reducing tax liabilities. Second, the higher rate of interest the government must pay to borrow itself puts more of that currency into private sector hands in the form of interest income.

Furthermore, if the government attempts to tighten fiscal policy it may slow down the economy and thereby reduce tax liabilities, weaken the currency and lose fx reserves.

That being said, if the tax liabilities happened to grow faster than government spending due to the nature of the tax structure and the institutional lending structure, such growth could be associated with currency strength. This is the recent US model. Growth has been propelled by an accelerating advance of pri-

vate sector credit growth, so much so that the savings rate has gone negative for perhaps the first time ever. However, though this credit expansion has sustained GDP growth and total employment, it has not been sufficient to sustain corporate profit growth. And, an economy thus propelled may end very badly, as credit expansion without income expansion is case of increasing financial leverage. The mother of all Minsky bubbles is upon us.

### **Floating rate fx policy**

With a floating rate currency, interest rates are set exogenously and fx reserves are not at risk. Therefore full employment policy can achieve full employment with no risk of loss of fx reserves. However, the currency could depreciate, and this will now be examined.

The argument can be made that full employment policy could result in the depreciation of the fx value of the currency. However, one must look at the effect on imports and exports to determine the policy implications. If total imports remain the same, and only the distribution of imports changes, the macro effect is only the redistribution of the consumption of the imports. If imports increase, at the macro level the welfare of the population is enhanced. The only reason to trade at all is to import. So only if total unit volume of imports falls could the case be made that welfare has been diminished.

Likewise, exports are the macro cost of imports. The combination is called the terms of trade. Maximizing unit volume of imports relative to exports is how a population maximizes its terms of trade. For example, if unit volume of imports increases more than exports due to currency appreciation, the country is better off.

I have yet to see anyone make the case that full employment policy decreases the terms of trade through currency depreciation, induced by any additional national income due to increased net government expenditures.

Furthermore, without full employment, the concept of comparative advantage does not exist, and trade often simply serves to facilitate a race to the bottom. Business and production flows to areas with the most unemployment and the lowest labor costs. So to attract foreign enterprise a nation must maintain high levels of unemployment as well as offer high profit potential. Neither is good for the domestic population. This pitiful yet near universal policy is being further perpetuated by a fundamental and costly misunderstanding of how currencies operate.

Bill Mitchell's BSE and Randy Wray's ELR by implication reintroduce comparative advantage as the

driving force behind foreign trade. They provide the structural framework that sets in motion the kinds of market forces and incentives that I suggest are much more desirable to the general population than those in place today.

## **Taxation**

The source of tax liabilities does make a difference. Transactions taxes, such as income taxes and sales taxes, rise and fall sharply with economic activity. This of course is a countercyclical force, and provides a degree of freedom, in addition to the fx rate, when considering the ramifications of fiscal policy.

Asset taxes, on the other hand, generally generate highly stable and predictable tax liabilities, and therefore do not provide a significant degree of freedom when working currency equations.

With two degrees of freedom — a transaction tax and a floating fx rate — changes in fiscal policy are less determinate than with only one.

For example, tightening fiscal policy can lead to a reduction of tax liabilities in the ensuing economic slowdown, and therefore fail to strengthen the currency.

Little consideration has been given to this aspect of currency stability and control. I suggest that primary tax liabilities based on assets, such as real estate, should add an element of control and stability to a floating rate currency and a BSE program.

## **National Policy and Politics**

With full employment as a national goal, I think a floating rate currency is the only hope of sustaining success.

Given a floating exchange rate, traditional demand management can perhaps sustain full employment, but only through policy that maintains tight labor markets and perhaps bouts of inflation that may prove sufficiently frightening to bring an end to the full employment policy.

BSE, on the other hand, allows for discretionary macro policy that targets labor markets sufficiently loose for a desired level of price stability.

## **Additional points regarding BSE**

Those on BSE jobs will never appear to be overpaid or a waste of \$AUD via ordinary market forces.

Strong labor requires strong business. In today's competitive market business is not strong, and therefore labor has little power. In fact, a world wide race to the bottom prevails, as far as business and labor is concerned. BSE is the one vehicle that can

introduce additional benefits for labor, though this time from the bottom up, rather than from the top down. All business must ultimately compete with the compensation offered the BSE employee. Therefore, a political constituency of scattered workers could be expected to develop and support politicians who introduce real benefits to the BSE pool. These could include health care, vacations, educational support, child care, etc.

Presumption of public service motive is diminished by the government paying market prices.