Markets matter, Money Matters

Essays on markets, money and NGDP targeting

Lars Christensen

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**Fiscal cliff, the Sumner Critique and the Bernanke-Evans rule**

*The fiscal cliff has never been a market theme*

When I over the last couple of days have looked at my twitter account nine of ten tweets have been about the “fiscal cliff” and the financial media all over the world have been all about that horrible “cliff”. Commentators from left to right in the US have issued warnings about the horrors of the fiscal cliff. Yes, it has felt very much like we indeed have been heading for an economic meltdown. Economic slowdown in China or the euro crisis is not important – the only thing important is the fiscal cliff (blah, blah...)

Just take a look at what Google Trends is telling us. The graph below shows searches for “fiscal cliff” over the last 90 days.

![Google searches for "fiscal cliff" (Index)](image)

Since mid-November the searches for “fiscal cliff” has clearly picked up and really spiked in the last couple of weeks.
However, despite the desperate efforts of pundits and the financial media, the fiscal cliff has never really become a serious market theme. The best way to illustrate this is to look at the US stock market – and more specifically on two sets of stocks – defense stocks and “consumer discretionaries”. Both sectors should be expected to be impacted heavily in the event of a full-blown fiscal cliff event as a result of tax hikes and cuts in US defense spending. I have looked at the two sectors’ performance during 2012 relative to the overall stock market performance (S&P500).

If the market really had been worried about the fiscal cliff we should have seen defense stocks and consumer discretionaries plummet. However, as the graph below shows that has certainly not been the case.

In fact both consumer discretionaries and defence stocks have outperformed the overall US stock market since August-September. Therefore if anything the performance of these two sub-indices have been positively correlated with the fiscal cliff “worries”.

In fact I would argue that the markets have paid little substantial attention to the ongoing political noise from Washington. It is for example notable that defence stocks have continued to do well despite Obama’s reelection.

This of course do not prove that fiscal policy is not important – far from it, but other things are certainly much more important and the markets are a lot more forward-looking than it seems to be the “normal” perception in the financial media. The discussion of the fiscal cliff has not been (a market moving) surprise to the markets and neither has been the political “show” that we have
seen in recent weeks. Yes, the US political system is dysfunctional, but that is really no surprise to the markets. Nor is it likely to be a surprise to US corporations and consumers. As consequence it hard to believe that the fiscal cliff can be classified as an “shock” to the economic system.

**A the fiscal cliff as a textbook take-it-or-leave-it game**

As my good friend professor Peter Kurrild-Klitgaard has noted the negotiations about the fiscal cliff has been a complete textbook example of a *take-it-or-leave-it* game. Even though pundits on the left and the right of US politics have bashed both the GOP and the Democrats for failing in the negotiations there is really nothing surprising about how the negotiations have played out. Any student of game theory would tell you that and apparently the markets understand game theory better than pundits and the financial media reporters.

There is no reason to play the blame game here – both the GOP and the Democrats (including the President) have so far pretty much behaved rationally (in a game theoretical sense) – that of course do not mean that what they are doing is nice to look at or for that matter in the interest of the American people, but game theorists would not be surprised – neither has the markets been.

For good discussion of the game theoretical aspects of the fiscal cliff negotiation see this excellent post by John Patty on the “*The Math of Politics*” blog from December 14 2012.

**The real market mover is monetary policy**

Finally let me just repeat the Market Monetarist position (see more previous posts on the issue [here, here, here](#) and [here](#)). Monetary policy dominates fiscal policy – the Fed will be able to counteract any negative shock to aggregate demand (or nominal GDP). The performance of *consumer discretionary* stocks pretty well illustrates this. As the market started to price in QE3 in August and later was positively surprised by the implicit announcement of the Bernanke-Evans rule in September consumer discretionaries have rallied. Hence, at least judging from the stock market performance monetary policy has dominated fiscal policy worries. I am not arguing that if the there had not been a “deal” on the fiscal cliff the markets would have not seen a set-back, but I am certainly arguing that this issue has gotten far to much attention compared to have relatively unimportant the issue is.
I am normally not making predictions here, but I today predict that “fiscal cliff” searches on Google has already peaked (but no I am not a betting man). From today the fiscal cliff is so much 2012. It is time to focus on something else...also for the financial media.

PS fiscal policy always have an impact of income distribution and as far and as I can see this is the real issue in the US, but that does not really make the discussion important from a macroeconomic perspective (unless it has supply side effects).
Daniel Lin is teaching macro! Lets introduce his students to the IS/LM+ model

This semester professor Daniel Lin is teaching a class in Macro at the American University and I have a tradition to interfere with how Daniel should teach his students – so I will not let down the opportunity to do it once again.

I have already written a post on how I think Econ 101 should be taught. So I don’t want to go through that once again and I have also written about why Daniel should be happy about his earlier class on Micro.

I have for sometime been thinking about the impact on how macroeconomics is taught to economics students as I fundamentally think most “practicing economists” for example civil servants or financial sector economists think about macroeconomic issues based on what they learned by reading the first 150 pages of their first (and only?) macroeconomic textbook. Few practicing economists ever think about intertemporal optimization, rational expectations, monetary policy reactions functions etc. Yes, everybody know about New Keynesian models and most central banks will proudly show off their DSGE models, but the fact is that most central bankers, civil servants and commercial bankers alike really are just using a rudimentary paleo Keynesian model to think about macroeconomic issues.

My first macroeconomic textbook was Dornbusch and Fischer’s textbook “Macroeconomics”. It is a typical American textbook – far too many pages and far too many boxes and graphs. Nonetheless I still from time to time have a look in it – even though I read it first time in 1990. The book consists of three parts, but since we will only focus on the first 150 pages (remember that is what the practicing economists remember) so we will only get half through the first part of the book (yes, US textbooks are far too long).

On the first 150 pages we are introduced first to the simple (paleo) Keynesian model and we learn that Y=C+I+G+X-M. There are really no prices, no financial markets and no money in the model. A shocking number of practicing economists in reality think about macroeconomics based on these simple (and highly problematic) models. The more clever student gets to the next 50 pages, where
money and a very rudimentary financial sector (the bond market) is introduced. This is the IS/LM model.

_Daniel – lets try to introduce a monetary policy reaction function early on_

I am really not happy about this way of introducing future economists to macroeconomics – I would much prefer starting from a more clear micro foundation as I have described in _an earlier post_. Anyway, lets assume that we are stuck with one of the standard macroeconomic textbooks so we will have to go along with the paleo Keynesian model and the IS/LM stuff.

But lets also assume that we can do that in 140 pages – so we now have 10 pages to add something interesting. I would use the last 10 pages to introduce a monetary policy reaction function into the IS/LM model – let call this model the IS/LM+ model.

_The IS/LM+ model_

Most economic students are taught that central banks have an inflation target, but that is not really a proper target in the IS/LM model as there is no inflation in the IS/LM model as prices are pegged (actually most students and there professors don’t even notice that there are prices in the model). So lets instead imagine that the Market Monetarists’ propaganda has been successful and that nominal GDP targeting has become commonly accepted at the target that central banks should have.

Lets return to the monetary policy target below, but lets first start out with the IS and LM curves.

We start out with the two standard equations in the IS/LM model. This is from _my earlier post_ on the IS/LM model:

_The money demand function:

(1) \( m = p + y - \alpha \times r \)

Where \( m \) is the money supply/demand, \( p \) is prices and \( y \) is real GDP. \( r \) is the interest rate and \( \alpha \) is a coefficient.
Aggregate demand is defined as follows:

\[(2) \ y = g - \beta \times r\]

Aggregate demand \(y\) equals public spending and private sector demand \((\beta \times r)\), which is a function of the interest rate \(r\). \(\beta\) is a coefficient. It is assumed that private demand drops when the interest rate increases.

This is basically all you need in the textbook IS/LM model. However, we also need to define a monetary policy rule to be able to say something about the real world.

So let’s introduce the NGDP target. The central bank targets a specific growth rate for NGDP: \(p^* + y^*\) and the central bank will change the money supply to hit it’s target. That gives us the following monetary policy reaction function:

\[(3) \ m = -\lambda ((p + y) - (p^* + y^*))\]

Lets for simplicity assume that \(p^* + y^*\) is normalized at zero:

\[(3)' \ m = -\lambda (p + y)\]

Put (1) and (3)’ together and we have a LM curve:

LM: \(r = (1\lambda)/(\alpha) \times (p + y)\)

And we get the IS curve by rearranging (2):

IS: \(r = (1/\beta) \times g - (1/\beta) \times y\)

Under normal assumptions about the coefficients in the model the LM curve is upward sloping and the IS curve is downward sloping. This is as in the textbook version.

Note, however, that the slope of the LM does not only depend on the money demand’s interest rate elasticity \((\alpha)\), but also on how aggressive \((\lambda)\) the central bank will react to deviations in NGDP \((p + y)\) from the target (set at zero). This is the key difference between the IS/LM+ model and the traditional IS/LM model.
The Sumner Critique: $\lambda = \infty$

The fact that the slope of the LM curve depends on $\lambda$ is critical. Hence, if the central bank is fully committed to hitting the NGDP target and will do everything to fulfill it then $\lambda$ will equal infinity ($\infty$).

Obviously, if $\lambda = \infty$ then the LM curve is vertical – as in the “monetarist” case in the textbook version of the IS/LM model. However, contrary to the “normal” LM curve we don’t need $\alpha$ to be zero to ensure a vertical LM curve.

With $\lambda = \infty$ the budget multiplier will be zero – said in another way any increase in public spending ($g$) will just lead to an increase in the interest rate ($r$) as the central bank “automatically” will counteract the “stimulative” effects of the increase in public spending by decreasing the money supply to keep $p+y$ at the target level ($p^*+y^*$). This of course is the Sumner Critique — monetary policy dominates fiscal policy if the central bank targets NGDP even in a model with sticky prices and interest rates sensitive money demand.

Daniel lets change the thinking of future practicing economists

I think this is all we need to fundamentally change the thinking of future practicing economists – one more equation (the monetary policy reaction function) in the IS/LM model. That would make practicing economists realize that we cannot ignore the actions of the central bank. The central bank – and not government spending – determines aggregate demand (NGDP) even in a fundamentally very keynesian model.

Take if away Daniel!
The euro crisis and the role of ECB’s reaction function

The euro zone is heading for deflation

This is Daily Telegraph’s Ambrose Evans-Pritchard quoting me on the risk of deflation in the euro zone:

“Europe is heading into a deflationary scenario if they don’t do anything to boost the money supply,” said Lars Christensen... “This already looks very similar to what happened in Japan in 1996 and 1997.”

If you don’t already realise why I am talking about the risk of deflation then you just have to remember the equation of exchange – MV=PY.

We can rewrite the equation of exchange in growth rates and rearrange it. That gives us the following model for medium-term inflation:

\[(1) \ m + v = p + y\]

\[\implies\]

\[(1') \ p = m + v - y\]

If we assume that money-velocity (v) drops by 2.5% y/y (the historical average) and trend real GDP growth is 2% (also more or less the historical average) and use 3% as the present rate of M3 growth then we get the follow ‘forecast’ for euro zone inflation:

\[(1') \ p = 3\% - 2.5\% - 2\% = -1.5\%\]

So the message from the equation of exchange is clear – we are closer to 2% deflation than 2% inflation.

Yes, the world is much more complicated than this, but I believe this is a pretty good illustration of the deflationary risks in the euro zone.
We still don’t have outright deflation in the euro zone, but we are certainly getting closer – and inflation is certainly well below the ECB’s 2% inflation target. The graph below clearly shows that.

So effectively the ECB has been undershooting it’s 2% inflation target since 2008 – at least if we use the GDP deflator rather than ECB’s preferred measure of inflation (HICP). See my earlier post on why the GDP deflator is a much better indicator of monetary inflation than HICP here.

The reason for these deflationary tendencies is obvious – overly tight monetary policy.

Just have a look at this graph – it is the level M3 versus a hypothetical 6.5% growth path for M3. (If you read this blog post you will see why I use 6.5% as a benchmark)
This is why I talk about the need to “boost” money supply growth. The ECB either needs to increase velocity growth (the Fed and the BoJ is likely helping a bit on that at the moment) or money supply growth otherwise the euro zone is heading for deflation. It is pretty simple.
Friedman’s Japanese lessons for the ECB

I often ask myself what Milton Friedman would have said about the present crisis and what he would have recommended. I know what the Friedmanite model in my head is telling me, but I don’t know what Milton Friedman actually would have said had he been alive today.

I might confess that when I hear (former?) monetarists like Allan Meltzer argue that Friedman would have said that we were facing huge inflationary risks then I get some doubts about my convictions – not about whether Meltzer is right or not about the perceived inflationary risks (he is of course very wrong), but about whether Milton Friedman would have been on the side of the Market Monetarists and called for monetary easing in the euro zone and the US.

However, today I got an idea about how to “test” indirectly what Friedman would have said. My idea is that there are economies that in the past were similar to the euro zone and the US economies of today and Friedman of course had a view on these economies. Japan naturally comes to mind.

This is what Friedman said about Japan in December 1997:

“Defenders of the Bank of Japan will say, “How? The bank has already cut its discount rate to 0.5 percent. What more can it do to increase the quantity of money?”

The answer is straightforward: The Bank of Japan can buy government bonds on the open market, paying for them with either currency or deposits at the Bank of Japan, what economists call high-powered money. Most of the proceeds will end up in commercial banks, adding to their reserves and enabling them to expand their liabilities by loans and open market purchases. But whether they do so or not, the money supply will increase.

There is no limit to the extent to which the Bank of Japan can increase the money supply if it wishes to do so. Higher monetary growth will have the same effect as always. After a year or so, the economy will expand more rapidly; output will grow, and after another delay, inflation will increase moderately. A return to the conditions of the late 1980s would rejuvenate Japan and help shore up the rest of Asia.”
So Friedman was basically telling the Bank of Japan to do quantitative easing – print money to buy government bonds (not to “bail out” the government, but to increase the money base).

What were the economic conditions of Japan at that time? The graph below illustrates this. I am looking at numbers for Q3 1997 (which would have been the data available when Friedman recommended QE to BoJ) and I am looking at things the central bank can influence (or rather can determine) according to traditional monetarist thinking: nominal GDP growth, inflation and money supply growth. The blue bars are the Japanese numbers.

![Graph showing economic conditions](image)

Now compare the Japanese numbers with the similar data for the euro zone today (Q1 2012). The euro zone numbers are the red bars.

Isn’t striking how similar the numbers are? Inflation around 2-2.5%, nominal GDP growth of 1-1.5% and broad money growth around 3%. That was the story in Japan in 1997 and that is the story in the euro zone today.

Obviously there are many differences between Japan in 1997 and the euro zone today (unemployment is for example much higher in the euro zone today than it was in Japan in 1997), but judging alone from factors under the direct control of the central bank – NGDP, inflation and the money supply – Japan 1997 and the euro zone 2012 are very similar.

Therefore, I think it is pretty obvious. If Friedman had been alive today then his analysis would have been similar to his analysis of Japan in 1997 and his conclusion would have been the same:
Monetary policy in the euro zone is far too tight and the ECB needs to do QE to “rejuvenate” the European economy. Any other view would have been terribly inconsistent and I would not like to think that Friedman could be so inconsistent. Allan Meltzer could be, but not Milton Friedman.

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* Broad money is M2 for Japan and M3 for the euro zone.
Fed NGDP targeting would greatly increase global financial stability

Just when we thought that the worst was over and that the world was on the way safely out of the crisis a new shock hit. Not surprisingly it is once again a shock from the euro zone. This time the badly executed bailout (and bail-in) of Cyprus. This post, however, is not about Cyprus, but rather on importance of the US monetary policy setting on global financial stability, but the case of Cyprus provides a reminder of the present global financial fragility and what role monetary policy plays in this.

Lets look at two different hypothetical US monetary policy settings. First what we could call an ‘adaptive’ monetary policy rule and second on a strict NGDP targeting rule.

‘Adaptive’ monetary policy – a recipe for disaster

By an adaptive monetary policy I mean a policy where the central bank will allow ‘outside’ factors to determine or at least greatly influence US monetary conditions and hence the Fed would not offset shocks to money velocity.

Hence, lets for example imagine that a sovereign default in an euro zone country shocks investors, who run for cover and starts buying ‘safe assets’. Among other things that would be the US dollar. This would obviously be similarly to what happened in the Autumn of 2008 then US monetary policy became ‘adaptive’ when interest rates effectively hit zero. As a consequence the US dollar rallied strongly. The ill-timed interest rates hikes from the ECB in 2011 had exactly the same impact – a run for safe assets caused the dollar to rally.

In that sense under an ‘adaptive’ monetary policy the Fed is effective allowing external financial shocks to become a tightening of US monetary conditions. The consequence every time that this is happening is not only a negative shock to US economic activity, but also increased financial distress – as in 2008 and 2011.

As the Fed is a ‘global monetary superpower’ a tightening of US monetary conditions by default leads to a tightening of global monetary conditions due to the dollar’s role as an international
reserve currency and due to the fact that many central banks around the world are either pegging their currencies to the dollar or at least are ‘shadowing’ US monetary policy.

In that sense a negative financial shock from Europe will be ‘escalated’ as the fed conducts monetary policy in an adaptive way and fails to offset negative velocity shocks.

This also means that under an ‘adaptive’ policy regime the risk of contagion from one country’s crisis to another is greatly increased. This obviously is what we saw in 2008-9.

**NGDP targeting greatly increases global financial stability**

If the Fed on the other hand pursues a strict NGDP level targeting regime the story is very different.

Let’s again take the case of an European sovereign default. The shock again – initially – makes investors run for safe assets. That is causing the US dollar to strengthen, which is pushing down US money velocity (money demand is increasing relative to the money supply). However, as the Fed is operating a strict NGDP targeting regime it would ‘automatically’ offset the decrease in velocity by increasing the money base (and indirectly the money supply) to keep NGDP expectations ‘on track’. Under a futures based NGDP targeting regime this would be completely automatic and ‘market determined’.

Hence, a financial shock from an euro zone sovereign default would leave no major impact on US NGDP and therefore likely not on US prices and real economic activity as Fed policy automatically would counteract the shock to US money-velocity. As a consequence there would be no reason to expect any major negative impact on for example the overall performance of US stock markets. Furthermore, as a ‘global monetary policy’ the automatic increase in the US money base would curb the strengthening of the dollar and hence curb the tightening of global monetary conditions, which great would reduce the global financial fallout from the euro zone sovereign default.

Finally and most importantly the financial markets would under a system of a credible Fed NGDP target figure all this out on their own. That would mean that investors would not necessarily run for safe assets in the event of an euro zone country defaulting – or some other major financial shock happening – as investors would know that the supply of the dollar effectively would be ‘elastic’. Any increase in dollar demand would be meet by a one-to-one increase in the dollar supply (an increase
in the US money base). Hence, the likelihood of a ‘global financial panic’ (for lack of a better term) is massively reduced as investors will not be lead to fear that we will ‘run out of dollar’ – as was the case in 2008.

**The Bernanke-Evans rule improves global financial stability, but is far from enough**

We all know that the Fed is not operating an NGDP targeting regime today. However, since September last year the Fed clearly has moved closer to a rule based monetary policy in the form of the Bernanke-Evans rule. The *BE rule* effective mean that the Fed has committed itself to offset any shock that would increase US unemployment by stepping up quantitative easing. That at least partially is a commitment to offset negative shocks to money-velocity. However, the problem is that the fed policy is still unclear and there is certainly still a large element of ‘adaptive’ policy (discretionary policy) in the way the fed is conducting monetary policy. Hence, the markets cannot be sure that the Fed will actually fully offset negative velocity-shocks due to for example an euro zone sovereign default. But at least this is much better than what we had before – when Fed policy was high discretionary.

Furthermore, I think there is reason to be happy that the Bank of Japan now also have moved decisively towards a more rule based monetary policy in the form of a 2% inflation targeting (an NGDP targeting obviously would have been better). For the past 15 year the BoJ has been the ‘model’ for adaptive monetary policy, but that hopefully is now changing and as the yen also is an international reserve currency the yen tends to strengthen when investors are looking for safe assets. With a more strict inflation target the BoJ should, however, be expected to a large extent to offset the strengthening of the yen as a stronger yen is push down Japanese inflation.

Therefore, the recent changes of monetary policy rules in the US and Japan likely is very good news for global financial stability. However, the new regimes are still untested and is still not fully trusted by the markets. That means that investors can still not be fully convinced that a sovereign default in a minor euro zone country will not cause global financial distress.
The ECB is turning into the BoJ

This is ECB Chief Mario Draghi:

“Well, let me first just point out that I never mentioned deflation. Deflation is a generalised fall in the price level across sectors and it is self-sustaining. And so far we have not seen signs of deflation, neither at the euro area level nor at country level. We should also be very careful about not mixing up what is a normal price readjustment due to the restoration of competitiveness in some of these countries. They will necessarily have to go through a re-adjustment of prices. We should not confuse this readjustment of prices, which is actually welcome, with deflation. Basically, we see price behaviour in line with our medium-term objectives. So, we see price stability over the medium term. Also consider that monetary policy is already very accommodative, consider the very low level of interest rates and that real interest rates are negative in a large part of the euro area…”

When I read Draghi’s comments the first thing I came to think of was how much this sounds like comments from Bank of Japan officials over the last 15 years.

Maybe Mario Draghi would be interested in this graph. It show the growth of broad money in the euro zone and Japan. I have constructed the graph so the growth of money peaks more or less at the same time in the graph for Japan and the euro zone. M2 growth peaked around 1990 in Japan and 2008 in the euro zone. The graph clearly shows both the boom and the bust and for Japan a very long period – more than a decade – of very low money supply growth.
I basically hate this kind of graph but the similarity is hard to miss. If Mario Draghi thinks eurozone monetary policy is “accommodative” today then he would also have to think Japanese monetary policy was accommodative in 1994-94.

BUT worse if the ECB continues on its present path it will likely repeat the mistakes of the BoJ and then we might be in for years of deflation. I know that this is not what Draghi wants, but the ECB’s present policy is unfortunately not giving much hope that a Japanese scenario can be avoided.

By the way that is the real reason for the slump we are seeing in global stock markets these days and it likely has very little to do with Obama’s reelection and the fear of the “fiscal cliff”. It is mostly about the escalation of bad news out of Europe. I hope Draghi will soon realize that unless he shows some *Rooseveltian Resolve* then the bad news will continue for another decade.
Please keep “politics” out of the monetary reaction function

During the Great Moderation it was normal to say that the Federal Reserve and the ECB (and many other central banks for that matter) was following a relatively well-defined monetary policy reaction function. It is debatable what these central banks where actually targeting, but there where is no doubt that both the Fed and the ECB overall can be described to have conducted monetary policy to minimize some kind of loss function which included both unemployment and inflation.

In a world where the central bank follows a Taylor rule style monetary policy reaction function, targets the NGDP level, do inflation targeting or have pegged the exchange rate the markets will tend to ignore political news. The only important thing will be how the actual economic development is relative to the target and in a situation with a credible nominal target the Chuck Norris effect will ensure that the markets do most of the lifting to achieve the nominal target. The only things that could change that would be if politicians decided to take away the central bank’s independence and/or change the central bank’s target.

When I 12 years ago joined the financial sector from a job in the public sector I was hugely surprised by how little attention my colleagues in the bank was paying to political developments. I, however, soon learned that both fiscal policy and monetary policy in most developed countries had become highly rule based and therefore there was really no reason to pay too much attention to the nitty-gritty of day-to-day politics. The only thing one should pay attention to was whether or not given monetary targets where on track or not. That was the good old days of the Great Moderation. Monetary policy was rule based and therefore highly predictable and as a result market volatility was very low.

This have all changed in the brave new world of Great Recession (failed) monetary policy and these days it seems like market participants are doing nothing else than trying to forecast what will be the political changes in country X, Y and Z. The reason for that is the sharp increase in the politician of monetary policy.
In the old days – prior to the Great Moderation – market participants were used to have politicians messing up monetary policies. Central banks were rarely independent and did not target clear nominal targets. However, today the situation is different. Gone are the days of rule based monetary policy, but the today it is not the politicians interfering in the conduct of monetary policy, but rather the central bankers interfering in the conduct of other policies.

This particularly is the case in the euro zone where the ECB now openly is “sharing” the central bank’s view on all kind of policy matters – such as fiscal policy, bank regulation, “structural reforms” and even matters of closer European political integration. Furthermore, the ECB has quite openly said that it will make monetary policy decisions conditional on the “right” policies being implemented. It is for example clear that the ECB have indicated that it will not ease monetary policy (enough) unless the Greek government and the Spanish government will “deliver” on certain fiscal targets. So if Spanish fiscal policy is not “tight enough” for the liking of the ECB the ECB will not force down NGDP in the euro zone and as a result increase the funding problems of countries such as Spain. The ECB is open about this. The ECB call it to use “market forces” to convince governments to implement fiscal tightening. It of course has nothing to do with market forces. It is rather about manipulating market expectations to achieve a certain political outcome.

Said in another way the ECB has basically announced that it does not only have an inflation target, but also that certain political outcomes is part of its reaction function. This obviously mean that forward looking financial markets increasingly will act on political news as political news will have an impact of future monetary policy decisions from the ECB.

Any Market Monetarist will tell you that the expectational channel is extremely important for the monetary transmission mechanism and this is particularly important when a central bank start to include political outcomes in it’s reaction function.

Imaging a central bank say that it will triple the money supply if candidate A wins the presidential elections (due to his very sound fiscal policy ideas), but will cut in halve the money supply if candidate B wins (because he is a irresponsible bastard). This will automatically ensure that the opinion polls will determine monetary policy. If the opinion polls shows that candidate A will win then that will effectively be monetary easing as the market will start to price in future monetary policy easing. Hence, by announce that political outcomes is part of its reaction function will
politics will make monetary policy endogenous. The ECB of course is operating a less extreme version of this set-up. Hence, it is for example very clear that the ECB’s monetary policy decisions in the coming months will dependent on the outcome of the Greek elections and on the Spanish government’s fiscal policy decisions.

The problem of course is that politics is highly unpredictable and as a result monetary policy becomes highly unpredictable and financial market volatility therefore is likely to increase dramatically. This of course is what has happened over the past year in Europe.

Furthermore, the political outcome also crucially dependents on the economic outcome. It is for example pretty clear that you would not have neo-nazis and Stalinists in the Greek parliament if the economy were doing well. Hence, there is a feedback from monetary policy to politics and back to monetary policy. This makes for a highly volatile financial environment. In fact it is hard to see how you can achieve any form of financial or economic stability if central banks instead of targeting only nominal variables start to target political outcomes.

So I long for the days when politics was not market moves in the financial markets and I hope central banks around the world would soon learn that it is not part of their mandate to police the political process and punish governments (and voters!) for making the wrong decisions. Central banks should only target nominal targets and nothing else. If they diverge from that then things goes badly wrong and market volatility increases sharply.

Finally I should stress that I am not arguing in anyway that the ECB is wrong to be concerned about fiscal policy being unsustainable in a number of countries. I am deeply concerned about that state of fiscal policy in a number of countries and I think it is pretty clear to my regular readers that I do not favour easier fiscal policy to solve the euro zone crisis. I, however, is extremely sceptical about certain political results being included in the ECB’s reaction function. That is a recipe for increased market volatility.

PS this discussion is of course very similar to what happened during the Great Depression when politics kept slipping into the newspapers’ financial sector (See here and here)
It’s Frankfurt that should be your worry – not Rome

This week investors have been spooked by the election outcome in Italy, but frankly speaking is there anything new in that shady characters are doing well in an Italian election? Is there anything new in a hung parliament in Italy? Nope, judging from post-WWII Italian political history this is completely normal. Ok, Italian public finances is a mess, but again that not really news either.

So if all this is ‘business-as-usual’ why are investors suddenly so worried? My explanation would be that investors are not really worrying about what is going on in Rome, but rather about what is going on in Frankfurt.

Last year I argued that the ECB had introduced ‘political outcomes’ in its reaction function:

This particularly is the case in the euro zone where the ECB now openly is “sharing” the central bank’s view on all kind of policy matters – such as fiscal policy, bank regulation, “structural reforms” and even matters of closer European political integration. Furthermore, the ECB has quite openly said that it will make monetary policy decisions conditional on the “right” policies being implemented. It is for example clear that the ECB have indicated that it will not ease monetary policy (enough) unless the Greek government and the Spanish government will “deliver” on certain fiscal targets. So if Spanish fiscal policy is not “tight enough” for the liking of the ECB the ECB will not force down NGDP in the euro zone and as a result increase the funding problems of countries such as Spain. The ECB is open about this. The ECB call it to use “market forces” to convince governments to implement fiscal tightening. It of course has nothing to do with market forces. It is rather about manipulating market expectations to achieve a certain political outcome.

Said in another way the ECB has basically announced that it does not only have an inflation target, but also that certain political outcomes is part of its reaction function. This obviously mean that forward looking financial markets increasingly will act on political news as political news will have an impact of future monetary policy decisions from the ECB.

And this is really what concerns investors. The logic is that a ‘bad’ political outcome in Italy will lead the ECB to become more hawkish and effectively tighten monetary conditions by signaling
that the ECB is not happy about the ‘outcome’ in Italy and therefore will not ease monetary policy going forward even if economic conditions would dictate that. This is exactly what happened in 2011-12 in the euro zone, where the political ‘outcomes’ in Greece, Italy and Spain clearly caused the ECB to become more hawkish.

The problems with introducing political outcomes into the monetary reaction function are obvious – or as I wrote last year:

*Imaging a central bank say that it will triple the money supply if candidate A wins the presidential elections (due to his very sound fiscal policy ideas), but will cut in halve the money supply if candidate B wins (because he is a irresponsible bastard). This will automatically ensure that the opinion polls will determine monetary policy. If the opinion polls shows that candidate A will win then that will effectively be monetary easing as the market will start to price in future monetary policy easing. Hence, by announce that political outcomes is part of its reaction function will politics will make monetary policy endogenous. The ECB of course is operating a less extreme version of this set-up. Hence, it is for example very clear that the ECB’s monetary policy decisions in the coming months will dependent on the outcome of the Greek elections and on the Spanish government’s fiscal policy decisions.*

*The problem of course is that politics is highly unpredictable and as a result monetary policy becomes highly unpredictable and financial market volatility therefore is likely to increase dramatically. This of course is what has happened over the past year in Europe.*

*Furthermore, the political outcome also crucially dependents on the economic outcome. It is for example pretty clear that you would not have neo-nazis and Stalinists in the Greek parliament if the economy were doing well. Hence, there is a feedback from monetary policy to politics and back to monetary policy. This makes for a highly volatile financial environment. In fact it is hard to see how you can achieve any form of financial or economic stability if central banks instead of targeting only nominal variables start to target political outcomes.*

Therefore investors are likely to watch comments from the ECB on the Italian elections as closely as the daily political show in Rome. However, there might be reasons to be less worried now than
in 2011-12. The reason is not Europe, but rather what has been happening with US and Japanese monetary policy since August-September last year.

Hence, with the Fed effective operating the Bernanke-Evans rule and the Bank of Japan having introduced a 2% inflation target these two central banks effective have promised to offset any negative spill-over to aggregate demand from the euro zone to the US and the Japanese economy (this is basically the international financial version of the Sumner Critique – there is no global spill-over if the central banks have proper nominal targets).

Hence, if Italian political jitters spark financial jitters that threaten to push up US unemployment then the Fed will “automatically” step up monetary easing to offset the shock and investors should full well understand that. Hence, the Bernanke-Evans rule and the BoJ’s new inflation target are effective backstops that reduces the risk of spill-over from Italy to the global markets and the global economy.

However, investors obviously still worry about the possible reaction from the ECB. If the ECB – and European policy makers in general – uses political events in Italy to tighten monetary conditions then we are likely to see more unrest in the European markets. Hence, the ECB can end market worries over Italy today by simply stating that the ECB naturally will act to offset any spill-over from Italy to the wider European markets that threatens nominal stability in the euro zone.
Greek and French political news slipped into the financial section

The political effects of monetary strangulation never fails to show up. That was the case during the 1930s and that is the case today.

The European political news over the weekend: Socialist Francois Hollande won the second round of the French presidential elections on an anti-austerity platform and in Greece the mainstream political parties took a major beating with extremist parties doing extremely well in yesterday’s Greek parliament vote.

The radical-leftist grouping Syriza is now the second largest party in the Greek parliament with 16.7% of the vote. The effectively neo-nazi party Golden Dawn Party won 7% and will now for the first time be represented in the Greek parliament. (I dare you to have a look at Golden Dawn’s logo...scary)

It does not exactly look like the “reform-through-tight-money” policy is working...just have a look at the European markets today...

PS The outcome of the French presidential election reminded me of what happened in France during the Great Depression. If you are interested in that topic you should have a look at Clark Johnson’s classic “Gold, France and the Great Depression”.
Currency War and devaluation

The Fed’s easing is working...in Mexico

Is the “Bernanke-Evans rule” working? Hell yes! At least in Mexico!

The Mexican economy recovered fast from the shock in 2008-9 and real GDP has been growing around 5% in the last three years and now growth is getting a further boost from the Fed’s monetary easing. Just take a look at the graphs below – especially keep an eye on what have happened since September 13 when the so-called Bernanke-Evans rule effectively was announced.

The Bernanke-Evans rule boosts the Mexican stock market

Mexican consumers get a boost from Bernanke
**Mexican industrialists are falling in love with Bernanke**

**The US-Mex monetary transmission mechanism**

A traditional Keynesian interpretation of what is going on would be that Bernanke’s monetary easing is boosting US industrial production, which is leading to an increase in Mexican exports to the US. The story is obviously right, but I would suggest that it is not the most important story. Rather what is important is the monetary transmission mechanism from the US to Mexico.

Here is that story. When the Fed steps up monetary easing it leads to a weakening of the dollar against all other currencies – including the Mexican peso as funds flow out of the US and into the Mexican markets. The Mexican central bank *Banxico* now has two options. Either the central bank
de facto allows the peso to strengthen or it decides to “import” the Fed’s monetary easing by
directly intervening in the currency market – buying dollars and selling pesos – or by cutting
interest rates. No matter how this is done the result will be an increase in the Mexican money
supply (relative to what otherwise would have happened). This in my view is what is driving the
rally in the Mexican stock market and the spike in consumer and business confidence. It’s all
monetary my friend.

Obviously Banxico don’t have to import the monetary easing from the US, but so far have chosen to
do so. This has probably been well-advised, but the Mexican economy is certainly not in need of a
US scale monetary easing. What is right for the US is not necessarily right for Mexico when it
comes to monetary easing. Therefore, Banxico sooner or later have stop “importing” monetary
easing from the US.

Luckily the Banxico can choose to “decouple” from the US monetary easing by allowing the peso to
strengthen and thereby curb the increase in the money supply and reduce potential inflationary
pressures. This in fact seems to be what has been happening in recent weeks where the peso has
rallied against the dollar.

This is not the place to discuss what Banxico will do, but think the discussion of the US-Mex
monetary transmission mechanism pretty well describe what many Emerging Markets central
banks are now facing – monetary easing from the US is forcing them to choose between a stronger
currency or a monetary expansion. However, unlike what Brazilian Finance Minister Mantega
seems to think this is not such a terrible thing. Banxico and the Brazilian central bank and other
EM central banks remain fully in charge of monetary policy themselves and if the central banks are
clear about their monetary targets then the markets will do most of the lifting through the exchange
rate channel.

Imagine for example that the Mexican peso starts to strengthen dramatically. Then that likely will
push down Mexican inflation below Banxico’s inflation target pretty fast. With inflation dropping
below the inflation target the markets will start to price a counter-reaction and a stepping up of
monetary easing from Banxico and that in itself will curb the strengthening of the peso. Hence, the
credibility of the central bank’s target is key.
And it is here that the Brazilians are facing a problem. As long as the central bank has one target things are fine. However, the Brazilian authorities often try to do more than one thing with monetary policy. Imagine the Brazilian economy is growing nicely and inflation is around the central bank’s inflation target. Then a positive monetary shock from the US will lead the Brazilian real to strengthen. That is no problem in terms of the inflation target. However, it will likely also lead the Brazilian export sector facing a competitiveness problem. Trying to “fix” this problem by easing monetary policy will on the other hand lead to excessively easy monetary policy. The Brazilian authorities have often tried to solve this “problem” by trying to curb currency inflows with different forms of currency restrictions and taxes. That has hardly been a success and luckily the Mexican authorities are much less interventionist in their attitudes.

The lesson here is that the Federal Reserve is a monetary superpower and the Fed can export monetary easing to other countries, but that do not mean that the Fed is in charge of monetary policy in Brazil or Mexico. The Brazilian and Mexican central banks can also choose not to import the monetary easing by simply letting their currencies strengthen and instead focus on it’s own monetary policy targets instead of trying to solve other “problems” such as competitiveness concerns. Excessive focus on competitiveness will lead central banks to ease monetary policy too much and the result is often rising inflationary pressures and bubbles.

PS don’t think that is this a zero sum – just because the Fed’s easing is working in Mexico does not mean that it is not working in the US.

PPS Nick Rowe once told a similar story about Hong Kong...with another FX regime.
‘The Myth of Currency War’

I know that most of my readers must be sick and tired of reading about my view on ‘currency war’. Unfortunately I have more for you. My colleague Jens Pedersen and I have written an article for the Danish business daily Børsen. The piece was published in today’s edition of Børsen. It is in Danish, but you can find an English translation of the article here.

Regular readers of this blog will not be surprised by the main message in the article: The talk of a “dangerous” ‘currency war’ is just silly. It is not really a ‘currency war’, but rather global monetary easing. Global monetary easing even helps the euro zone despite the ECB’s extreme reluctance to ease monetary policy.

Jens has recently also written an extremely interesting paper on the consequence of the ‘currency war’ for the Danish economy. Jens concludes that the currency war – or rather global monetary easing – is good news for Danish exporters despite the fact that the Danish krone has been strengthening in line with the euro (remember the krone is pegged to the euro). The reason is that global monetary easing is boosting global growth and that is outweighing any negative impact on exports from the strengthening of the krone.

Take a look at Jens’ paper here.
Bring on the “Currency war”

I have been giving the issue of devaluation a bit of attention recently. In my view most people fail to understand the monetary aspects of currency moves – both within a floating exchange rate regime and with managed or pegged exchange regimes.

I have already in my post “Exchange rates and monetary policy – it’s not about competitiveness: Some Argentine lessons” argued that what we should focus on when we are talking about the effects of devaluation is the impact on the money supply and on money-velocity rather than on “competitiveness”. In my post “Mises was clueless about the effects of devaluation” I argued that Ludwig von Mises basically did not fully comprehend the monetary nature of devaluations.

The failure to understand the monetary nature of devaluation often lead to a wrongful analysis of the impact of giving up pegged exchange rates or leaving a currency union – or for that matter giving up the gold standard. It also leads to a very wrong analysis of what has been called “competitive devaluations” – a situation where different countries basically are moving to weaken their own currencies at the same time. This discussion flared up in the second half of 2010 when (the expectations of) QE2 from the Federal Reserve triggered a strengthening of especially a number of Emerging Market currencies. Many EM central banks moved to counteract the strengthening of their currencies by cutting interest rates and intervening in the FX markets – basically undertaking QE on their own. Brazilian Finance Minister Guido Mantega even talked about currency war (and he has apparently just redeclared currency war...)

However, the term “currency war” is highly misleading. In a world of depressed global NGDP and deflationary tendencies there is no problem in competitive devaluations. The critiques would argue that not all countries can devalue and that the net impact on global economic activity therefore would be zero. This, however, is far from right. As I have earlier argued devaluation is not primarily about competitiveness, but rather about the impact on monetary conditions. Hence, if countries compete to devalue they basically compete to increase the money supply and velocity. This obviously is very positive if there is a general global problem of depressed nominal spending. Hence by all means bring on the currency war! Furthermore, it should be noted that in a situation where there is financial sector problems it is likely that the transmission mechanism would work
much stronger through the FX channel than through the credit channel. See my related post on this here.

Imagine this highly unrealistic scenario. The ECB tomorrow announces a target for EUR/USD of 1.00 and announce it will buy US assets to achieve this target. The purpose would be to increase the euro zone’s nominal GDP by 15% and the ECB would only end its policy once this target is achieved. As counter-policy the Federal Reserve announces that it will do the opposite and buy European assets until EUR/USD hits 1.80 and that it will not stop this policy before US NGDP has been increased by 15%. Leave aside the political implications of this (the US congress would freak out...) what would happen? Well basically the Fed would be doing QE in Europe and ECB would be doing QE in the US. EUR/USD would probably not move much, but I am pretty sure inflation expectations would spike and global stock markets would increase strongly. But most important NGDP would increase sharply and fast hit the 15% target in both the euro zone and the US. Obviously this policy could lead to all kind of unwarranted side-effects and I would certainly not recommend it, but it is a illustration that we should not be too unhappy if we have “friendly” currency war. By “friendly” I mean that the currency war does not trigger capital restrictions and other kind of interventionist policy and that is clearly a risk. However, it is preferable to the present situation of depressed global NGDP.

Matthew O’Brien the associate editor at The Atlantic reaches the same conclusion in a recent comment. In “Currency Wars Are Good!” Matthew aruges along the same lines as I do:

A currency war begins, simply enough, when a country decides to push down the value of its currency. This means either printing money or just threatening to print money. A cheaper currency makes exports cheaper, and more competitive exports means more growth and happier people. Well, everybody except people in other countries who were just undersold and lost exports. That’s why economists call this kind of devaluation a “beggar-thy-neighbor” policy: Countries boost exports at the expense of others.

This sounds bad. Rather than cooperating, countries are fighting over trade. But in this case, some fighting is good, and more fighting is better. Countries that lose exports want to get them back. And the best way to do that is to devalue their own currencies too. This, of course, causes
more countries to lose exports. They also want to get their exports back, so they also push down their currencies. It’s devaluation all the way down. All thanks to economic peer pressure.

The downside of devaluation is that no country gains a real trade advantage, and weaker currencies means the prices of commodities like oil shoot. But — and here’s the really important part — devaluing means printing money. There isn’t enough money in the world. That’s the simple and true reason why the global economy fell into crisis and has been so slow to recover. It’s also the simple and true reason why the Great Depression was so devastating. We know from the 1930s that such competitive devaluation can turn things around.

War is good if it creates more of something you want. A “charity war” between friends is good because it leads to more donations. A currency war is good because it leads to more money. If war is politics by other means, a currency war is stimulus by other means.

So true, so true. So next time somebody starts to worry about “currency war” please tell them that is exactly what we want and for those countries where monetary policy is not too tight tell them to let their currencies appreciate. It will not do them harm. Is monetary policy is already too loose currency appreciation will be a welcomed tightening of monetary conditions.

PS you obviously don’t want to see competitive devaluations in a world of high inflation. That is what happened during the 1970s, but we can hardly talk of high inflation today – at least not in the US and the euro zone.
Don’t tell me the ‘currency war’ is bad for European exports – the one graph version

It is said that Europe is the biggest “victim” in what is said to be an international ‘currency war’ (it is really no war at all, but global monetary easing) as the euro has strengthened significantly on the back of the Federal Reserve and Bank of Japan having stepped up monetary easing.

However, the euro zone is no victim – to claim so is to reason from a price change as Scott Sumner would say. The price here of course is the euro exchange rate. The ‘currency war worriers’ claim that the strengthening is a disaster for European exports. What they of course forget is to ask is why the euro has strengthened.

The euro is stronger not because of monetary tightening in the euro zone, but because of monetary easing everywhere else. Easier monetary policies in the US and Japan obviously boost domestic demand in those countries and with it also imports. Higher American and Japanese import growth is certainly good news for European exports and that likely is much more important than the lose of “competitiveness” resulting from the stronger euro.

But have a look at European exporters think. The graph below is the Purchasing Managers Index (PMI) for euro zone new export orders. The graph is clear – optimism is spiking! The boost from improved Japanese and American growth prospects is clearly what is on the mind of European exporters rather than the strong euro.
The exchange rate fallacy: Currency war or a race to save the global economy?

This is from CNB.com:

Faced with a stubbornly slow and uneven global economic recovery, more countries are likely to resort to cutting the value of their currencies in order to gain a competitive edge.

Japan has set the stage for a potential global currency war, announcing plans to create money and buy bonds as the government of Prime Minister Shinzo Abe looks to stimulate the moribund growth pace...

Economists in turn are expecting others to follow that lead, setting off a battle that would benefit those that get out of the gate quickest but likely hamper the nascent global recovery and the relatively robust stock market.

This pretty much is what I would call the ‘exchange rate fallacy’ – hence the belief that monetary easing in someway is a zero sum game where monetary easing works through an “unfair” competitiveness channel and one country’s gain is another country’s lose.

Let's take the arguments one-by-one.

“...countries are likely to resort to cutting the value of their currencies in order to gain a competitive edge.”

The perception here is that monetary policy primarily works through a “competitiveness channel” where a monetary easing leads to a weakening of the currency and this improve the competitiveness of the nation by weakening the real value of the currency. The problem with this argument is first of all that this only works if there is no increase in prices and wages. It is of course reasonable to assume that that is the case in the short-run as prices and wages tend to be sticky. However, empirically such gains are minor.

I think a good illustration of this is relative performance of Danish and Swedish exports in 2008-9. When crisis hit in 2008 the Swedish krona weakened sharply as the Riksbank moved to cut interest
rates aggressive and loudly welcomed the weakening of the krona. On the other hand Denmark continued to operate it’s pegged exchange rate regime vis-a-vis the euro. In other words Sweden initially got a massive boost to it’s competitiveness position versus Denmark.

However, take a look at the export performance of the two countries in the graph below.

Starting in Q3 2008 both Danish and Swedish exports plummeted. Yes, Swedish dropped slightly less than Danish exports but one can hardly talk about a large difference when it is taken into account how much the Swedish krona weakened compared to the Danish krone.

And it is also obvious that such competitiveness advantage is likely to be fairly short-lived as inflation and wage growth sooner or later will pick up and erode any short-term gains from a weakening of the currency.

The important difference between Denmark and Sweden in 2008-9 was hence not the performance of exports.

The important difference on the other hand the performance of domestic demand. Just have a look at private consumption in Sweden and Denmark in the same period.
It is very clear that Swedish private consumption took a much smaller hit than Danish private consumption in 2008-9 and consistently has grown stronger in the following years.

The same picture emerges if we look at investment growth – here the difference it just much bigger.

The difference between the performance of the Danish economy and the Swedish economy during the Great Recession hence have very little to do with export performance and everything to do with domestic demand.
Yes, initially Sweden gained a competitive advantage over Denmark, but the major difference was that Riksbanken was not constrained in it ability to ease monetary policy by a pegged exchange rate in the same way as the Danish central bank (Nationalbanken) was.

(For more on Denmark and Sweden see my earlier post *The luck of the ‘Scandies’*)

Hence, we should not see the exchange rate as a measure of competitiveness, but rather as an indicator of monetary policy “tightness”. When the central bank moves to ease monetary policy the country’s currency will tend to ease, but the major impact on aggregate demand will not be stronger export performance, but rather stronger growth in domestic demand. There are of course numerous examples of this in monetary history. I have earlier discussed the case of the Argentine devaluation in 2001 that boosted domestic demand rather exports. The same happened in the US when FDR gave up the gold standard in 1931. Therefore, when journalists and commentators focus on the relationship between monetary easing, exchange rates and “competitiveness” they are totally missing the point.

*The ‘foolproof’ way out of deflation*

That does not mean that the exchange rate is not important, but we should not think of the exchange rate in any other way than other monetary policy instruments like interest rates. Both can lead to a change in the money base (the core monetary policy instrument) and give guidance about future changes in the money base.

With interest rates effectively stuck at zero in many developed economies central banks needs to use other instruments to escape deflation. So far the major central banks of the world has focused on “quantitative easing” – increasing in the money base by buying (domestic) financial assets such as government bonds. However, another way to increase the money base is obviously to buy foreign assets – such as foreign currency or foreign bonds. Hence, there is fundamentally no difference between the Bank of Japan buying Japanese government bonds and buying foreign bonds (or currency). It is both channels for increasing the money base to get out of deflation.

In fact on could argue that the exchange rate channel is a lot more “effective” channel of monetary expansion than “regular” QE as exchange rate intervention is a more transparent and direct way for
the central bank to signal it’s intentions to ease monetary policy, but fundamentally it is just another way of monetary easing.

It therefore is somewhat odd that many commentators and particularly financial journalists don’t seem to realise that FX intervention is just another form of monetary easing and that it is no less “hostile” than other forms of monetary easing. If the Federal Reserve buys US government treasuries it will lead to a weakening of dollar in the same way it would do if the Fed had been buying Spanish government bonds. There is no difference between the two. Both will lead to an expansion of the money base and to a weaker dollar.

“Economists in turn are expecting others to follow that lead, setting off a battle that would benefit those that get out of the gate quickest but likely hamper the nascent global recovery and the relatively robust stock market”

This quote is typical of the stories about “currency war”. Monetary easing is seen as a zero sum game and only the first to move will gain, but it will be on the expense of other countries. This argument completely misses the point. Monetary easing is not a zero sum game – in fact in an quasi-deflationary world with below trend-growth a currency war is in fact a race to save the world.

Just take a look at Europe. Since September both the Federal Reserve and the Bank of Japan have moved towards a dramatically more easy monetary stance, while the ECB has continue to drag its feet. In that sense one can say that that the US and Japan have started a “currency war” against Europe and the result has been that both the yen and the dollar have been weakened against the euro. However, the question is whether Europe is better off today than prior to the “currency war”. Anybody in the financial markets would tell you that Europe is doing better today than half a year ago and European can thank the Bank of Japan and the Fed for that.

So how did monetary easing in the US and Japan help the euro zone? Well, it is really pretty simple. Monetary easing (and the expectation of further monetary easing) in Japan and the US as push global investors to look for higher returns outside of the US and Japan. They have found the higher returns in for example the Spanish and Irish bond markets. As a result funding costs for the Spanish and Irish governments have dropped significantly and as a result greatly eased the
tensions in the European financial markets. This likely is pushing up *money velocity* in the euro zone, which effectively is monetary easing (remember MV=PY) – this of course is paradoxically what is now making the ECB think that it should (prematurely!) “redraw accommodation”.

The ECB and European policy makers should therefore welcome the monetary easing from the Fed and the BoJ. It is not an hostile act. In fact it is very helpful in easing the European crisis.

If the more easy monetary stance in Japan and US was an hostile act then one should have expected to see the European markets take a beating. That have, however, not happened. In fact both the European fixed income and equity markets have rallied strongly on particularly the new Japanese government’s announcement that it want the Bank of Japan to step up monetary easing.

So it might be that some financial journalists and policy makers are scare about the prospects for currency war, but investors on the other hand are jubilant.

*If you don’t need monetary easing – don’t import it*

Concluding, I strongly believe that a global “currency war” is very good news given the quasi-deflationary state of the European economy and so far Prime Minister Abe and Fed governor Bernanke have done a lot more to get the euro zone out of the crisis than any European central banker has done and if European policy makers don’t like the strengthening of the euro the ECB can just introduce quantitative easing. That would curb the strengthening of the euro, but more importantly it would finally pull the euro zone out of the crisis.

Hence, at the moment Europe is importing monetary easing from the US and Japan despite the euro has been strengthening. That is good news for the European economy as monetary easing is badly needed. However, other countries might not need monetary easing.

As I discussed in my recent post on Mexico a country can decide to import or not to import monetary easing by allowing the currency to strengthen or not. If the Mexican central bank don’t want to import monetary easing from the US then it can simply allow the peso strengthen in response to the Fed’s monetary easing.
Currency war is not a threat to the global economy, but rather it is what could finally pull the global economy out of this crisis – now we just need the ECB to join the war.
Is monetary easing (devaluation) a hostile act?

One of the great things about blogging is that people comment on your posts and thereby challenge your views and at the same time create new ideas for blog posts. Therefore I want to thank commentator Max for the following response to my previous post:

“I don’t think exchange rate intervention is a good idea for a large country. For one thing, it’s a hostile act given that other countries have exactly the same issue. And it can’t work without their cooperation, since they have the power to undo the intervention.”

Let me start out by saying that Max is wrong on both accounts, but I would also acknowledge that both views are more or less the “consensus” view of devaluations and my view – which is based on the monetary approach to balance of payments and exchange rates – is the minority view. Let me address the two issues separately.

Is monetary easing a hostile act?

In his comment Max describes a devaluation as a hostile act towards other countries. This is a very common view and it is often said that it is a reflection of a beggar-thy-neighbour policy for a country to devalue its currency. I have two comments on that.

First, if a devaluation is a hostile act then all forms of monetary easing are hostile acts as any form of monetary easing is likely to lead to a weakening of the currency. Let’s for example assume that the Federal Reserve tomorrow announced that it would buy unlimited amounts of US equities and it would continue to do so until US nominal GDP had increased 15%. I am pretty sure that would lead to a massive weakening of the US dollar. In fact we can basically define monetary easing as a situation where the supply of the currency is increased relative to the demand for the currency. Said, in another way if the currency weakens it is a pretty good indication that monetary conditions are getting easier.

Second, I have often argued that the impact of a devaluation does not primarily work through an improvement in the country’s competitiveness. In fact the purpose of the devaluation should be to increase prices (and wages) and hence nominal GDP. An increase in prices and wages can hardly be said to be an improvement of competitiveness. It is correct that if prices and wages are sticky then
you might get an initial real depreciation of the currency, however that impact is not really important compared to the monetary impact. Hence, a devaluation will lead to an increase in the money supply (that is how you engineer the devaluation) and likely also to an increase in money-velocity as inflation expectations increase. Empirically that is much more important than any possible competitiveness effect.

A good example of how the monetary effect dominates the competitiveness effect: the Argentine devaluation in 2002 actually led to a deterioration of the Argentine trade balance and what really was the driver of the recovery was the sharp pickup in domestic demand due to an increase in the money supply and money-velocity rather than an improvement in exports. See my previous comment on the episode here. When the US gave up the gold standard in 1933 the story was the same – the monetary effect strongly dominated the competitiveness effect.

Yet another example of the monetary effect of a devaluation dominating the competitiveness effect is Denmark and Sweden in 2008-9. It is a common misunderstanding that Sweden grew stronger than Denmark in 2008-9 because a sharp depreciation of the Swedish krona led to a massive improvement in competitiveness. It is correct that Swedish competitiveness was improved due to the weakening of the krona, but this was not the main reason for Sweden’s relatively fast recovery from the crisis. The real reason was that Sweden did not see any substantial decline in money-velocity and the Swedish money supply grew relatively steadily through the crisis.

Looking at Swedish exports in 2008-9 it is very hard to spot any advantage from the depreciation of the krona. In fact Swedish exports did more or less as badly as Danish exports in 2008-9 despite the fact that the Danish krone did not depreciate due to Denmark’s fixed exchange rate regime. However, looking at domestic demand there was a much sharper contraction in Danish private consumption and investment than was the case in Sweden. This difference can easily be explained by the sharp monetary contraction in Denmark in 2008-9 (both a drop in M and V).

Furthermore, let’s assume that the Federal Reserve announced massive intervention in the FX market to weaken the US dollar and the result was a sharp increase in US nominal GDP. Would the rest of the world be worse off? I doubt it. Yes, the likely impact would be that for example German exports would get under pressure as the euro would strengthen dramatically against the dollar. However, nothing would stop the ECB from also undertaking monetary easing to counteract the
strengthening of the euro. This is what somebody calls “competitive devaluations” or even “currency war”. However, in a deflationary environment such “currency war” should be welcomed as it basically would be a competition to print money. Hence, the “net result” of currency war would not be any change in competitiveness, but an increase in the global money supply (and global money-velocity) and hence in global nominal GDP. Who would be against that and in a situation where the global economy continues to contract and as such a currency war like that would be very welcomed news. In fact we can not really talk about a “war” as it would be mutually beneficial. So I say please bring on the currency war!

_Is global monetary cooperation needed? No, but..._

This brings us to Max’s second argument: “And it can’t work without their cooperation, since they have the power to undo the intervention.“

This is obviously related to the discussion above. Max seems to think a devaluation will not work if it is met by “competitive devaluations” from all other countries. As I have argued above this is completely wrong. It would work as the devaluation will increase the money supply and money-velocity even if the devaluation has no impact on competitiveness at all. As a result there is no need for international monetary cooperation. In fact healthy competition among currencies is exactly what we need. In fact every time the major nations of the world have gotten together to agree on realigning exchange rates it has had major negative consequences.

However, there is one argument for international coordination that I think is extremely important and that is the need for cooperation to avoid “competitive protectionism”. The problem is that most global policy makers perceive devaluations in the same way as Max. They see devaluations as hostile acts and therefore these policy makers might react to devaluations by introducing trade tariffs and other protectionist measures. This is what happened in the 1930s where especially the (foolish) countries which maintained the gold standard reacted by introducing trade tariffs against for example the UK and the Scandinavian countries, which early on gave up the gold standard.

_Unfortunately Mitt Romney seems to think as Max_

Republican presidential hopeful Mitt Romney has said that his first act as US president would be to slap tariffs on China for being a “currency manipulator”. Here is what Romney recently said:
“If I’m president, I will label China a currency manipulator and apply tariffs” wherever needed “to stop them from unfair trade practices”

The discussion above should show clearly that Romney’s comments on China’s currency policy is economically meaningless – or rather extremely dangerous. Imagine what would be the impact on the US economy if China tomorrow announced a 40% (just to pick a number) revaluation of the yuan. To engineer this the People’s Bank of China would have to cause a sharp contraction in the Chinese money supply and money-velocity. The result would undoubtedly throw China into a massive recession – or more likely a depression. You can only wonder what that would do to US exports to China and to US employment. Obviously this would be massively negative for the US economy.

Furthermore, a sharp appreciation of the yuan would effectively be a massive negative supply shock to the US economy as US import prices would skyrocket. Given the present (wrongful) thinking of the Federal Reserve, that might even trigger monetary tightening as US inflation would pick up. In other words the US might face stagflation and I am pretty sure that Romney would have no friends left on Wall Street if that where to happen and he would certainly not be reelected in four years.

I hope that Romney has some economic advisors that realize the insanity of forcing China to a massive appreciation of the yuan. Unfortunately I do not have high hope that there is an understanding of these issues in today’s Republican Party – as it was the case in 1930 when two Republican lawmakers Senator Reed Smoot and Representative Willis C. Hawley sponsored the draconian and very damaging Smoot-Hawley tariff act.

Finally, thanks to Max for your comments. I hope you appreciate that I do not think that you would like the same kind of protectionist policies as Mitt Romney; but I do think that when we get it wrong on the monetary impact of devaluations we might end up with the kind of policy response that Mitt Romney is suggesting. And no, this is no endorsement of President Obama – I think my readers fully understand that. Furthermore to Max, I do appreciate your comments even though I disagree on this exact topic.
PS if you want to learn more about the policy dynamics that led to Smoot-Hawley you should have a look at Doug Irwin’s great little book “Peddling Protectionism: Smoot-Hawley and the Great Depression”.

Update: Scott Sumner has a similar discussion of the effects of devaluation.
The luck of the ‘Scandies’

This week we are celebrating Milton Friedman’s centennial. Milton Friedman was known for a lot of things and one of them was his generally skeptical view of pegged exchange rates. In his famous article “The Case for Flexible Exchange Rates” he argued strongly against pegged exchange rates and for flexible exchange rates.

Any reader of this blog would know that I share Friedman’s sceptical view of fixed exchange rates. However, I will also have to say that my view on exchange rates policy has become more pragmatic over the years. In fact one can say that I also in this area have become more of a Friedmanite. This could seem as a paradox given Friedman’s passionate defence of floating exchange rates. However, Friedman was not dogmatic on this issue. Rather Friedman saw exchange rate policy as a way to control the money supply and he often argued that small countries might not have the proper instruments and “infrastructure” to properly control the money supply. Hence it would be an advantage for certain countries to “outsource” monetary policy by pegging the currency to for example the US dollar. Hong Kong’s currency board and its peg to the dollar was his favourite example. I am less inclined to think that Hong Kong could not do better than the currency board, but I nonetheless think Friedman was right in the sense that there fundamentally is no difference between using for example interest rates to control the money supply and using the exchange rate.

In his highly recommendable book Money Mischief Milton Friedman discusses the experience with fixed exchange rates in Chile and Israel. Friedman documents Chile’s horrible experience with fixed exchange rates and Israel’s equally successful experience with fixed exchange rates. It is in relation to these examples Friedman states that one never should underestimate the importance of luck of nations. That credo has been a big inspiration in my own thinking and has certainly helped me understand the difference in performance of different economies during the present crisis. It is not only about policy. With the right policies this crisis could have been avoid, but on the other hand despite of less than stellar conduct of monetary policy some countries have come through this crisis very well. Luck certainly is important.

The Scandinavian economies provide an excellent example of this. Denmark and Sweden are in many ways very similar countries – small open economies with high levels of GDP/capita, strong public finances, an overblown welfare state, but nonetheless quite flexible product and labour
markets and a quite high level of social and economic cohesion. However, Denmark and Sweden differ in one crucial fashion – the monetary policy regime.

Denmark has a fixed exchange rate (against the euro), while Sweden has a floating exchange rate and an inflation targeting regime. The different monetary policy regimes have had a significant impact on the performance of the Danish and the Swedish economies during the present crisis.

2008-9: Sweden’s luck, Denmark’s misery

When crisis hit in 2008 both Denmark and Sweden got hit, but Denmark suffered much more than Sweden – not only economically but also in terms of financial sector distress. The key reason for this is that while monetary conditions contracted significantly Sweden did not see any major monetary contraction. What happened was that as investors scrambled for US dollars in the second of 2008 they were selling all other currencies – also the Swedish krona and the Danish krone.

The reaction from the Danish and the Swedish central banks was, however, very different. As the Danish krone came under selling pressures the Danish central bank acted according to the fixed exchange policy by buying kroner. As a result Denmark saw a sharp contraction in the money supply – a contraction that continued in 2009 and 2010, but the peg survived. The central bank had “won” and defended the peg, but at a high cost. The monetary contraction undoubtedly did a lot to worsen the Danish financial sector crisis and four years later Danish property prices continue to decline. On the other hand when the demand for Swedish krona plunged in 2008-9 the Swedish central bank allowed this to happen and the krona weakened sharply. Said in another way the Swedish money demand dropped relative to the money supply. Swedish monetary conditions eased, while Danish monetary conditions tightened.

It is often said, that Sweden’s stronger economic performance relative to Denmark in 2008-9 (and 2010-11 for that matter) is a result of the relative improvement in Swedish competitiveness as a result of the sharp depreciation of the Swedish krona. However, this is a wrong analysis of the situation. In fact the major difference between the Swedish economy and the Danish economy has very little to do with the relative export performance. In fact both countries saw a more or less equal drop in exports in 2008-9. The big difference was the performance in domestic demand. While Danish domestic demand collapsed and property prices were in a free fall, domestic demand
in Sweden performed strongly and Swedish property prices continued to rise after the crisis hit. The difference obviously is a result of the different monetary policy reactions in the two countries.

This is basically luck – the Danish monetary regime led to tightening of monetary conditions in reaction to the external shock, while the Swedish central bank to a large extent counteracted the shock with an easing of monetary conditions.

**2012: The useful Danish peg and the failures of Riksbanken**

Today the Danish economy continues to do worse than the Swedish economy, but the luck is changing. And again this has to do with money demand. While the demand for Swedish krona and Danish kroner collapsed in 2008-9 the opposite is the case today. Today investors as a reaction to the euro crisis are running scared away from the euro and buying everything else (more or less). As a result money is floating into both Denmark and Sweden and the demand for both currencies (and Swedish and Danish assets in general) has escalated sharply. So contrary to 2008-9 the demand for (local) money is now rising sharply. This for obvious reasons is leading to appreciation pressures on the Scandinavian currencies.

Today, however, the Danes are lucky to have the peg. Hence, as the Danish krone has tended to appreciate the Danish central bank has stepped in and defended the peg by expanding the money base and for the first time in four years the Danish money supply (M2) is now showing real signs of recovering. This of course is also why Danish short-term bond yields and money market rates have turned negative. The money markets are being flooded with liquidity to keep the krone from strengthening. Hence, the Danish euro peg is doing a great job in avoiding a negative velocity shock. For the first time in four years Danes could be true happy about the peg.

On the other hand for the first time in four years the Swedish monetary policy regime is not work as well as one could have hoped. As the demand for Swedish krona has escalated Swedish monetary conditions are getting tighter and tighter day by day and the signs are pretty clear that Swedish money-velocity is contracting. This is hardly good news for the Swedish economy.

Obviously there is nothing stopping the Swedish central bank from counteracting the drop in velocity (the increased money demand) by expanding the money base and legendary Swedish deputy central bank governor Lars E. O. Svensson has been calling for monetary easing for a while,
but the majority of board members in the Swedish central bank seem reluctant to step up and ease monetary policy even though it day by day is becoming evident that monetary easing is needed.

**Good policies are the best substitute for good luck**

Obviously neither the Danish nor the Swedish monetary policy regime is optimal under all circumstances and this is exactly what I have tried to demonstrate above. The difference between 2008-9 and 2011-12 is the impact on demand for the Danish and Swedish currency and these differences have been driven mostly by external factors.

Obviously one could (and should!) argue that Sweden’s problem today is not the floating exchange rate, but rather the inflation targeting regime. If Sweden instead had been targeting the (future) nominal GDP level then Riksbanken would already had eased monetary policy much more aggressively than has been the case to counteract the contraction in money-velocity.

Finally, it is clear that luck played a major role in how the crisis has played out in the Scandinavian crisis. However, with the right monetary policies – for example NGDP targeting – you are much more likely to have luck on your side when crisis hit.
Exchange rates and monetary policy – it’s not about competitiveness: Some Argentine lessons

I think Rob who is one my readers hit the nail on the head when he in a recent comment commented that one of the things that is clearly differentiating Market Monetarism from other schools is our view of the monetary transmission mechanism. In my reply to his comment I promised Rob to write more on the MM view of the monetary transmission mechanism. I hope this post will do exactly that.

It is well known that Market Monetarists see a significantly less central role for interest rates in the monetary transmission mechanism than New Keynesians (and traditional Keynesians) and Austrians. As traditional monetarists we believe that monetary policy works through numerous channels and that the interest rate channel is just one such channel (See here for a overview of some of these channels here).

A channel by which monetary policy also works is the exchange rate channel. It is well recognised by most economists that a weakening of a country’s currency can boost the country’s nominal GDP (NGDP) – even though most economists would focus on real GDP and inflation rather than at NGDP. However, in my view the general perception about how a weakening the currency impacts the economy is often extremely simplified.

The “normal” story about the exchange rate-transmission mechanism is that a weakening of the currency will lead to an improvement of the country’s competitiveness (as it – rightly – is assumed that prices and wages are sticky) and that will lead to an increase in exports and a decrease in imports and hence increase net exports and in traditional keynesian fashion this will in real GDP (and NGDP). I do not disagree that this is one way that an exchange rate depreciation (or devaluation) can impact RGDP and NGDP. However, in my view the competitiveness channel is far from the most important channel.

I would point to two key effects of a devaluation of a currency. One channel impacts the money supply (M) and the other the velocity of money (V). As we know MV=PY=NGDP this should also make it clear that exchange rates changes can impact NGDP via M or V.
Lets start out in a economy where NGDP is depressed and expectations about the future growth of NGDP is subdued. This could be Japan in the late 1990s or Argentina in 2001 – or Greece today for that matter.

If the central bank today announces that it has devalued the country’s currency by 50% then that would have numerous impacts on expectations. First of all, inflation expectations would increase dramatically (if the announcement is unexpected) as higher import prices likely will be push up inflation, but also because – and more important – the expectation to the future path of NGDP would change and the expectations for money supply growth would change. Take Argentina in 2001. In 2001 the Argentinian central bank was dramatically tightening monetary conditions to maintain the pegged peso rate against the US dollar. This send a clear signal that the authorities was willing to accept a collapse in NGDP to maintain the currency board. Naturally that lead consumers and investors to expect a further collapse in NGDP – expectations basically became deflationary. However, once the the peg was given up inflation and NGDP expectations spiked. With the peso collapsing the demand for (peso) cash dropped dramatically – hence money demand dropped, which of course in the equation of exchange is the same as an increase in money-velocity. With V spiking and assuming (to begin with) that the money supply is unchanged NGDP should by definition increase as much as the increase in V. This is the velocity-effect of a devaluation. In the case of Argentina it should of course be noted that the devaluation was not unexpected so velocity started to increase prior to the devaluation and the expectations of a devaluation grew.

Second, in the case of Argentina where the authorities basically “outsourced” the money policy to the Federal Reserve by pegging the peso the dollar. Hence, the Argentine central bank could not independently increase the money supply without giving up the peg. In fact in 2001 there was a massive currency outflow, which naturally lead to a sharp drop in the Argentine FX reserve. In a fixed exchange rate regime it follows that any drop in the foreign currency reserve must lead to an equal drop in the money base. This is exactly what happened in Argentina. However, once the peg was given up the central bank was free to increase the money base. With M increasing (and V increasing as argued above) NGDP would increase further. This is the money supply-effect of a devaluation.

The very strong correlation between Argentine M2 and NGDP can be seen in the graph below (log-scale Index).
I believe that the combined impact of velocity and money supply effects empirically are much stronger than the competitiveness effect devaluation – especially for countries in a deflationary or quasi-deflationary situation like Argentina was in in 2001. This is also strongly confirmed by what happened in Argentina from 2002 and until 2005-7.

This is from Mark Weisbrot’s and Luis Sandoval’s 2007-paper on “Argentina’s economic recovery”:

“However, relatively little of Argentina’s growth over the last five years (2002-2007) is a result of exports or of the favorable prices of Argentina’s exports on world markets. This must be emphasized because the contrary is widely believed, and this mistaken assumption has often been used to dismiss the success or importance of the recovery, or to cast it as an unsustainable “commodity export boom...”

During this period (The first six months following the devaluation in 2002) exports grew at a 6.7 percent annual rate and accounted for 71.3 percent of GDP growth. Imports dropped by more than 28 percent and therefore accounted for 167.8 percent of GDP growth during this period. Thus net exports (exports minus imports) accounted for 239.1 percent of GDP growth during the first six months of the recovery. This was countered mainly by declining consumption, with private consumption falling at a 5.0 percent annual rate.

**But exports did not play a major role in the rest of the recovery after the first six months.** The next phase of the recovery, from the third quarter of 2002 to the second quarter of
2004, was driven by private consumption and investment, with investment growing at a 41.1 percent annual rate during this period. Growth during the third phase of the recovery – the three years ending with the second half of this year – was also driven mainly by private consumption and investment... However, in this phase exports did contribute more than in the previous period, accounting for about 16.2 percent of growth; although imports grew faster, resulting in a negative contribution for net exports. Over the entire recovery through the first half of this year, exports accounted for about 13.6 percent of economic growth, and net exports (exports minus imports) contributed a negative 10.9 percent.

The economy reached its pre-recession level of real GDP in the first quarter of 2005. As of the second quarter this year, GDP was 20.8 percent higher than this previous peak. Since the beginning of the recovery, real (inflation-adjusted) GDP has grown by 50.9 percent, averaging 8.2 percent annually. All this is worth noting partly because Argentina’s rapid expansion is still sometimes dismissed as little more than a rebound from a deep recession.

...the fastest growing sectors of the economy were construction, which increased by 162.7 percent during the recovery; transport, storage and communications (73.4 percent); manufacturing (64.4 percent); and wholesale and retail trade and repair services (62.7 percent).

The impact of this rapid and sustained growth can be seen in the labor market and in household poverty rates... Unemployment fell from 21.5 percent in the first half of 2002 to 9.6 percent for the first half of 2007. The employment-to-population ratio rose from 32.8 percent to 43.4 percent during the same period. And the household poverty rate fell from 41.4 percent in the first half of 2002 to 16.3 percent in the first half of 2007. These are very large changes in unemployment, employment, and poverty rates.”

Hence, the Argentine example clearly confirms the significant importance of monetary effects in the transmission of a devaluation to NGDP (and RGDP for that matter) and at the same time shows that the competitiveness effect is rather unimportant in the big picture.

There are other example out there (there are in fact many...). The US recovery after Roosevelt went of the gold standard in 1933 is exactly the same story. It was not an explosion in exports that sparked the sharp recovery in the US economy in the summer of 1933, but rather the massive
monetary easing that resulted from the increase in M and V. This lesson obviously is important when we today are debate whether for example Greece would benefit from leaving the euro area or whether one or another country should maintain a pegged exchange rate regime.

**A bit on Danish 1970s FX policy**

In my home country of Denmark it is often noted that the numerous devaluations of the Danish krone in the 1970s completely failed to do anything good for the Danish economy and that that proves that devaluations are bad under all circumstances. The Danish example, however, exactly illustrate the problem with the “traditional” perspective on devaluations. Had Danish policy makers instead had an monetary approach to exchange rate policy in 1970s then the policies that would have been implemented would have been completely different.

Denmark – as many other European countries – was struggling with stagflation in the 1970s – both inflation and unemployment was high. Any monetarist would tell you (as Friedman did) that this was a result of a negative supply shock (and general structural problems) combined with overly loose monetary policy. The Danish government by devaluing the krone (again and again…) tried to improve competitiveness and thereby bring down unemployment. However, the high level of unemployment was not due to lack of demand, but rather due to supply side problems. The Danish economy was not in a deflationary trap, but rather in a stagflationary trap. That is the reason the devaluations did not “work” – well it worked perfectly well in terms of increasing inflation, but it did not bring down unemployment as the problem was not lack of demand (contrary to what is the case most places in Europea and the US today).

**Conclusion – it’s not about competitiveness**

So to conclude, the most important channels of exchange rate policy is monetary – the velocity effect and the money supply – the competitiveness effect is nearly as irrelevant as interest rates is. Countries that suffer from too tight monetary policy can ease monetary policy by announcing a credible devaluation or by letting the currency float. Argentina is a clear example of that. Countries that suffer from supply side problems – like Denmark in 1970s – can not solve the fundamental problems by devaluation.
PS the discussion above is not an endorsement of general economic policy in Argentina after 2001, but only meant as an illustration of the exchange rate channel for monetary policy. Neither is it an recommendation concerning what country XYZ should do in terms of monetary and exchange rate policy today.

PPS Obviously Scott would remind us that the above discussion is just a variation of what Lars E. O. Svensson is telling us about the fool proof way out of a liquidity trap...
The end of Japan’s Long Deflation

Don’t ever tell me again that monetary policy does not work! Chuck Norris visits Japan

I continue to be completely puzzled that somebody would think that central banks somehow have run out of ammunition and that monetary policy is impotent. The developments in the global financial markets since August-September last year clearly tell you that monetary policy is extremely potent – also when interest rates are at the Zero Lower Bound.

Just take a look at this story from Japan today:

Japanese shares rose, with the Nikkei 225 Stock Average heading for the highest close since September 2008, as the yen fell after Bank of Japan Governor Masaaki Shirakawa said he will step down ahead of schedule.

...The Nikkei 225 gained 3 percent to 11,377.53 as of 12:38 p.m. in Tokyo, heading for the highest close since Sept. 29, 2008, two weeks after the collapse of Lehman Brothers Holdings Inc. Volume today was 48 percent above the 30-day average. The broader Topix Index advanced 2.8 percent to 966.03, with eight stocks rising for each that fell.

...The Topix has surged 34 percent since elections were announced on Nov. 14 on optimism a new government will push for aggressive stimulus. The gauge is trading at 1.14 times book value, compared with 2.1 for the Standard & Poor’s 500 Index and 1.45 for the Stoxx Europe 600 Index.

(Update: Nikkei is actually up 4%!)

And from another story:

The yen slid to its weakest level in almost three years against the dollar and euro on speculation Japan’s government will hasten the selection of a new central bank chief to take further steps to end deflation.
Japan’s currency added to yesterday’s biggest drop versus the euro in more than a week after Bank of Japan Governor Masaaki Shirakawa said he will step down on March 19, almost three weeks before his term is due to end. Demand for the 17-nation euro was supported on prospects the European Central Bank will refrain from easing monetary policy tomorrow. The Australian dollar slid after data showed the nation’s retail sales unexpectedly fell in December.

Financial markets are the best indicators of the monetary policy stance we have – a surging Japanese stock market and much weaker yen is a very strong indication that Japanese monetary conditions are getting decisively easier. Easier monetary conditions mean higher Japanese nominal GDP – just wait and see.

The market action in the Japanese markets this morning is yet another extremely clear demonstration of the Chuck Norris effect – that monetary policy does not only work through “printing money”, but also through expectations. As Scott Sumner likes to say – monetary policy works with long and variable leads. Said in another way a new Bank of Japan governor has not even been appointed but he is already easing monetary conditions in Japan as Mark Carney is in the UK.

And to all you Keynesian fiscalists out there I challenge you to find me one single example of “optimism” about “fiscal stimulus” having moved any major stock market by 4% in a day!

What we are seeing now in the US, Japan and likely soon in the UK is the kind of Rooseveltian Resolve that brought the US economy out of the Great Depression in 1933 after Roosevelt went off the gold standard and trust me – monetary policy does work! In the 1930s the “gold bloc” countries failed to understand that – today it is the ECB – but luckily for Europeans the US and Japan are leading the charge and is pulling us out of this crisis. That is what the global stock markets have been celebrating since August-September. It is really simple.
Japan’s deflation story is not really a horror story

Many economists – including some Market Monetarists – tell the story about Japan’s economy as a true horror story and there is no doubt that Japan’s growth story for more than 15 years has not been too impressive – and it has certainly not been great to have been invested in Japanese stocks over last decade.

Some Market Monetarists are explaining Japan’s apparent weak economic performance with overly tight Japanese monetary policy, while others blame “zombie banks” and continued deleveraging after the bubble in to 1990s. I, however, increasingly think that these explanations are wrong for Japan.

Obviously, Japan has deflation because money demand growth consistently outpaces money supply growth. That’s pretty simple. That, however, does not necessarily have to be a problem in the long run if expectations have adjusted accordingly. The best indication that this has happened is that Japanese unemployment in fact is relatively low. So maybe what we are seeing in Japan is a version of George Selgin’s “productivity norm”. I am not saying Japanese monetary policy is fantastic, but it might not be worse than what we are seeing in the US and Europe.

The main reason Japan has low growth is demographics. If you adjust GDP growth for the growth (or rather the decline) in the labour force then one will see that the Japanese growth record really is not bad at all – especially taking into accord that Japan after all is a very high-income country.

Daniel Gros, whom I seldom agrees with (but do in this case), has done the math. He has looked Japanese growth over the last decade and compared to other industrialized countries. Here is Gros:

“Policymaking is often dominated by simple “lessons learned” from economic history. But the lesson learned from the case of Japan is largely a myth. The basis for the scare story about Japan is that its GDP has grown over the last decade at an average annual rate of only 0.6% compared to 1.7% for the US. The difference is actually much smaller than often assumed, but at first sight a growth rate of 0.6 % qualifies as a lost decade...According to that standard, one could argue that a good part of Europe also “lost” the last decade, since Germany achieved about the same growth rates as Japan (0.6%) and Italy did even worse (0.2 %); only France and Spain performed
somewhat better...But this picture of stagnation in many countries is misleading, because it leaves out an important factor, namely demography...How should one compare growth records among a group of similar, developed countries? The best measure is not overall GDP growth, but the growth of income per head of the working-age population (not per capita). This last element is important because only the working-age population represents an economy’s productive potential. If two countries achieve the same growth in average WAP income, one should conclude that both have been equally efficient in using their potential, even if their overall GDP growth rates differ...When one looks at GDP/WAP (defined as population aged 20-60), one gets a surprising result: Japan has actually done better than the US or most European countries over the last decade. The reason is simple: Japan’s overall growth rates have been quite low, but growth was achieved despite a rapidly shrinking working-age population...The difference between Japan and the US is instructive here: in terms of overall GDP growth, it was about one percentage point, but larger in terms of the annual WAP growth rates – more than 1.5 percentage points, given that the US working-age population grew by 0.8%, whereas Japan’s has been shrinking at about the same rate.”

So it is correct that Japanese monetary policy was overly tight after the Japanese bubble bursted in the mid-90ties, but that is primarily a story of the 90s, while the story over the last decade is primarily a story of bad demographics.

We can learn a lot from Japan, but I think Japan is often used as an example of all kind of illnesses, but few of those people who pull “the Japan-card” really have studied Japan. Similar for me – I am not expert on the Japanese economy – but both the monetary and the deleveraging explanations for Japan’s low growth during the past decade (not the 90ties) I believe to be wrong.

The Great Depression as well as the Great Recession are terrible examples of the disasters that the wrong monetary policy can bring and so is the Japan crisis in the mid-90s, but we need to make the right arguments for the right policies based on fact and not myth.

PS in Daniel Gros’ comment on Japan he makes some comments on the effectiveness of monetary policy. He seems to think that monetary policy is impotent in the present situation. I strongly disagree with that as I believe that monetary policy is in fact very effective in increasing nominal
income growth as well as inflation. The liquidity trap is a myth in the same way the Japan growth story is a myth.
Bank of England, Mark Carney and NGDP targeting

Mr. Farage made me happy and then worried. UKIP should support NGDP level targeting

If there is anything that the governing Tory party in the UK is fearing then it is the UKIP. The anti-EU UKIP wants to take the UK out of the EU, but it also wants something less – monetary reform!

This is UKIP leader Nigel Farage in the City AM:

“WHEN Mark Carney takes over as our new governor of the Bank of England, at this time of “exceptional” economic crisis – his words not mine – he must be fully armed and working to a clear political direction from the start. Carney’s first day on the job should be an economic D-Day for the UK.

That is why I want to be the first UK political leader to commit my party to changing the Bank of England’s mandate. It’s time to put the Bank, with its increasing powers and broadening economic reach, on the side – incontrovertibly – of the struggling people of Britain.

The status quo is not an option. British voters have made it clear in three by-elections, each time with rising force, their feeling of intense anger at the Westminster and Brussels elite. Ukip carries the flag for these voters. I’m proud that I can give voice to their anger, while offering them something positive to do with their vote. But Ukip offers more. We offer a future in which Britain is free to govern itself, to enforce its own laws, to control its borders, and to make its successful way economically – trading at a profit and able to honour promises to its citizens. A first and crucial step is that we take back the commanding height of our economy – the Bank – and put it to work driving employment, growth and confidence.

I expect George Osborne to use this Budget – three years late – to open the debate on the objectives of the Bank, and to lay out the options for change. But I call on him to go further. He must put some red British meat into the dish. He should announce which option he prefers, and
set a fixed timetable for the consultation and the decision. He must guarantee that, by Carney’s first day, the new framework is in place.

Why do I put this pressure on him? Because one of the many failures of this government has been its inability to take the decisions needed to put growth and confidence first. The list of its jellied failures to decide is long – on energy, aviation, housing, roads, and infrastructure investment. Neither the public nor businesses know whether to be confident and spend, invest, or hire.”

When I saw Mr. Farage’s comments today my response was wauw! This is pretty incredible – the Tories are coming under attack from the right to change the mandate of the Bank of England in a more pro-growth oriented direction.

So what is the Market Monetarist response? Well, it is easy. Yes Mr. Farage is completely right – the BoE’s inflation target is terrible and should be changed. He is also right that the UK economy needs monetary “stimulus” in the sense that nominal GDP has fallen well-below the pre-crisis trend level.

However, I must say that Mr. Farage’s comments also come across as being advocating a significant level of monetary activism which I find very problematic. In fact it seems like Farage is just calling for monetary stimulus – yes that might be needed at the moment, but it is terribly dangerous if the institutional framework is not correct. We don’t want a return to the inflationary 1970s. We want a monetary constitution for Britain. Not a hawkish or a dovish monetary policy, but a neutral monetary policy. UK monetary policy has been overly tight so monetary easing should be welcomed, but I much prefer this to happen within the framework of a proper NGDP level targeting regime.

Therefore, Mr. Farage you are right to be outraged by the UK government’s lack of action on changing the Bank of England’s mandate, but you should be more clear on the mandate you want. Ask for an NGDP level target for Britain. It is in the country’s best interest!
The ’Export Price Norm’ - monetary policy in commodity exporting countries

Should small open economies peg the currency to export prices?

Nominal GDP targeting makes a lot of sense for large currency areas like the US or the euro zone and it make sense that the central bank can implement a NGDP target through open market operations or as with the use of NGDP futures. However, operationally it might be much harder to implement a NGDP target in small open economies and particularly in Emerging Markets countries where there might be much more uncertainty regarding the measurement of NGDP and it will be hard to introduce NGDP futures in relatively underdeveloped and illiquid financial markets in Emerging Markets countries.

I have earlier (see here and here) suggested that a NGDP could be implemented through managing the FX rate – for example through a managed float against a basket of currencies – similar to the praxis of the Singaporean monetary authorities. However, for some time I have been intrigued by a proposal made by Jeffrey Frankel. What Frankel has suggested in a number of papers over the last decade is basically that small open economies and Emerging Markets – especially commodity exporters – could peg their currency to the price of the country’s main export commodity. Hence, for example Russia should peg the ruble to the price of oil – so a X% increase in oil prices would automatically lead to a X% appreciation of the ruble against the US dollar.

Frankel has termed this proposal PEP – Peg the Export Price. Any proponent of NGDP level target should realise that PEP has some attractive qualities.

I would especially from a Market Monetarist highlight two positive features that PEP has in common in (futures based) NGDP targeting. First, PEP would ensure a strict nominal anchor in the form of a FX peg. This would in reality remove any discretion in monetary policy – surely an attractive feature. Second, contrary to for example inflation targeting or price level targeting PEP does not react to supply shocks.
Lets have a closer look at the second feature – PEP and supply shocks. A key feature of NGDP targeting (and what George Selgin as termed the productivity norm) is that it does not distort relative market prices – hence, an negative supply shock will lead to higher prices (and temporary higher inflation) and similarly positive supply shocks will lead to lower prices (and benign deflation). As David Eagle teaches us – this ensures Pareto optimality and is not distorting relative prices. Contrary to this a negative supply shock will lead to a tightening of monetary policy under a inflation targeting regime. Under PEP the monetary authorities will not react to supply shock.

Hence, if the currency is peg to export prices and the economy is hit by an increase in import prices (for example higher oil prices – a negative supply shock for oil importers) then the outcome will be that prices (and inflation) will increase. However, this is not monetary inflation. Hence, what I inspired by David Eagle has termed Quasi-Real Prices (QRPI) have not increased and hence monetary policy under PEP is not distorting relative prices. Any Market Monetarist would tell you that that is a very positive feature of a monetary policy rule.

Therefore as I see it in terms of supply shocks PEP is basically a variation of NGDP targeting implemented through an exchange rate policy. The advantage of PEP over a NGDP target is that it operationally is much less complicated to implement. Take for example Russia – anybody who have done research on the Russian economy (I have done a lot...) would know that Russian economic data is notoriously unreliable. As a consequence, it would probably make much more sense for the Russian central bank simply to peg the ruble to oil prices rather than trying to implement a NGDP target (at the moment the Russian central bank is managing the ruble a basket of euros and dollars).

PEP seems especially to make sense for Emerging Markets commodity exporters like Russia or Latin American countries like Brazil or Chile. Obviously PEP would also make a lot for sense for African commodity exporters like Zambia. Zambia’s main export is copper and it would therefore make sense to peg the Zambian kwacha against the price of copper.

Jeffrey Frankel has written numerous papers on PEP and variations of PEP. Interestingly enough Frankel was also an early proponent of NGDP targeting. Unfortunately, however, he does not discuss the similarities and differences between NGDP targeting and PEP in any of his papers.
However, as far as I read his research it seems like PEP would lead to stabilisation of NGDP – at least much more so than a normal fixed exchange regime or inflation targeting.

One aspect I would especially find interesting is a discussion of shocks to money demand (velocity shocks) under PEP. Unfortunately Frankel does not discuss this issue in any of his papers. This is not entirely surprising as his focus is on commodity exporters. However, the Great Recession experience shows that any monetary policy rule that is not able in someway to react to velocity shocks are likely to be problematic in one way or another.

I hope to return to PEP and hope especially to return to the impact of velocity-shocks under PEP.
2008 was a large negative demand shock – also in Canada

Scott Sumner has a follow-up post on Nick Rowe’s post about whether a supply shock or a demand shock caused the Canadian recession in 2008-9. Both Nick and Scott seem to think that the recession in some way was caused by a supply shock.

I must admit that I really don’t understand what Scott and Nick are saying. It is pretty clear to me that the shock in 2008-9 was negative aggregate demand shock.

Let’s start with the textbook version of a negative aggregate demand (AD) shock. Here is how a negative demand shock looks in AS/AD model (the growth rate version):

So what happened in Canada? Here is a look at inflation measured by headline CPI and by the price deflator for final domestic sales.
Both measures of inflation were running higher than the Bank of Canada’s official 2% inflation target when the crisis hit in the autumn of 2008.

However, it is pretty clear that inflation slowed sharply and dropped well-below the 2% inflation target in 2009 as the Canadian economy went into recession (real GDP contracted). It is hard to say that this is anything other than a rather large negative AD shock.

Obviously inflation increased above 2% in 2011, but we all know that a major negative supply shock hit in 2011 as global oil prices spiked. In the case of Canada this in fact is both a negative supply shock and a positive demand shock (remember Canada is an oil exporter). That said, the rise in inflation was certainly not dramatic and since 2012 inflation has once again dropped well-below 2% indicating that monetary policy in Canada has become overly tight given the BoC’s 2% inflation target.

I might add that different measures of inflation expectations (both survey and market data) are telling the exact same story. Inflation and inflation expectations eased significantly in 2008-9 and once again in 2012.

And we can tell the same story if we look at the price level. The graph below compares the two measures of prices (CPI and the final domestic demand deflator) with an 2% price path starting in Q3 2008.
Again the picture is clear. The price level – for both measures – are lower than a hypothetical 2% price level path – indicating that Mark Carney and his colleagues in the Bank of Canada have kept monetary conditions too tight over the past 4-5 years – maybe because of a preoccupation with the risk of “bubbles”. Mark Carney might be talking about NGDP level targeting, but he is certainly also speaking quite a bit about “macroprudential indicators” (modern central bank lingo for bubble risk).

Concluding, it is very clear that the Canadian economy was hit by a large negative demand shock in 2008 and initially the BoC has kept monetary policy overly tight and the recent tightening of monetary conditions certainly also looks problematic.

Once again it is monetary policy failure and it is certainly not a negative supply shock, which is to blame for the Canadian recession and sub-trend growth since 2008. Needless to say NGDP tells the exact same story. I should add that the size of this “monetary policy failure” is fairly small compared to for example for example what we have seen in the euro zone.

**Reminding Scott about the Sumner Critique**

Given the very clear evidence of a negative demand shock I find this comment from Scott somewhat puzzling:
Let’s suppose that the BOC had been targeting NGDP in 2008, when global trade fell off a cliff. How would the Canadian economy have been affected? Many would see the drop in global trade as a demand shock hitting Canada, as there would have been less demand for Canadian exports. In fact, it would be an adverse supply shock. Even if the BOC had been targeting NGDP, output would have probably fallen. Factories in Ontario making transmissions for cars assembled in Ohio would have seen a drop in orders for transmissions. That’s a real shock. No (plausible) amount of price flexibility would move those transmissions during a recession. If the assembly plant in Ohio stopped building cars, then they don’t want Canadian transmissions. If the US stops building houses, then we don’t want Canadian lumber. That’s a real shock to Canada, i.e. an AS shock.

I simply don’t understand Scott’s argument. A negative shock to exports obviously is a negative demand shock. From the perspective of nominal spending a negative shock to exports is a negative shock to money-velocity in the exact same way as a tightening of fiscal policy. Therefore, if the BoC had been targeting NGDP (it actually also goes for inflation targeting) the Sumner Critique would apply - the BoC would offset any negative shock to exports by easing monetary policy (increasing M to offset the drop in V). As a consequence domestic demand would rise and offset the drop in exports. And this obviously applies even if prices are sticky. Yes, the production of transmissions in Ontario drops, but that is offset by an increase in construction of apartments in Vancouver.

However, the point is that the BoC failed to offset the shock to exports and as a consequence prices have been growing slower than implied by BoC’s official inflation target.

There is absolutely nothing special about Canada – its monetary policy failure – the failure is just (a lot) smaller than in the euro zone or the US.

PS I could also have used the GDP deflator as well in my examples above. The story is the same. In fact it is worse! The GDP deflator dropped by more than 4% during 2009. The primary reason for the massive drop in the GDP deflator is that the price of oil measured in Canadian dollars dropped sharply in 2008-9. As drop in the oil price obviously is a negative demand shock as Canada is a oil exporter. The story in that sense is completely the same as what happened to the Russian economy in 2008-9. Had the BoC had followed a variation of an “Export Price Norm” as the Reserve Bank of Australia is doing then the negative shock would likely have been much smaller as was the case in Australia.
**PEP, NGDPLT and (how to avoid) Russian monetary policy failure**

I am sitting in Riga airport and writing this. I have an early (too early!) flight to Stockholm. I must admit it makes it slightly more fun to sit in an airport when you can do a bit of blogging.

Anyway, I have been giving quite a bit of thought to the Jeff Frankel’s idea about “Peg to the Export Price” (PEP). What Frankel’s is suggesting is that commodity exporters like Russia should peg their currencies to the price of the main commodity they export – in the case of Russia that would of course be the oil price.

This have made me think about the monetary transmission mechanism in an Emerging Market commodity exporter like Russia and how very few people really understand how monetary policy works in an economy like the Russian. I have, however, for more than a decade as part of my day-job spend quite a lot of time analysing the Russian economy so in this post I will try to spell out how I see the last couple of years economic development in Russia from a monetary perspective.

**The oil-money nexus and why a higher oil price is a demand shock in Russia**

Since the end of communism the Russian central bank has primarily conducted monetary policy by intervening in the currency market and currency intervention remains the Russian central bank’s (CBR) most important policy instrument. (Yes, I know this is a simplification, but bear with me...)

In the present Russian monetary set-up the CBR manages the ruble within a fluctuation band against a basket of euros (45%) and dollars (55%). The composition of the basket has changed over time and the CBR has gradually widened the fluctuation band so one can say that we today has moved closer to a managed or dirty float rather than a purely fixed currency. However, despite of for years having had the official intention of moving to a free float it is very clear that the CBR has a quite distinct “fear of floating”. The CBR is not alone in this – many central banks around the world suffer from this rather irrational fear. This is also the case for countries in which the central banks officially pursue a floating exchange rate policy. How often have you not heard central bankers complain that the currency is too strong or too weak?
With the ruble being quasi-fixed changes in the money supply is basically determined by currency inflows and outflows and as oil and gas is Russia’s main exports (around 80% of total exports) changes in the oil prices determines these flows and hence the money supply.

Let's say that the global demand for oil increases and as a consequence oil prices increase by 10%. This will more or less lead to an 10% increase in the currency inflow into Russia. With inflows increasing the ruble will tend to strengthen. However, historically the CBR has not been happy to see such inflow translate into a strengthening of the ruble and as a consequence it has intervened in the FX market to curb the strengthening of the ruble. This basically means that that CBR is printing ruble and buying foreign currency. The logic consequence of this is the CBR rather than allowing the ruble to strengthen instead is accumulating ever-larger foreign currency reserves as the oil price is increasing. This basically has been the trend for the last decade or so.

So due to the CBR’s FX policy there is a more or less direct link from rising oil prices to an expansion of the Russian money supply. As we all know MV=PY so with unchanged money-velocity (V) an increase in M will lead to an increase in PY (nominal GDP).

This illustrates a very important point. Normally we tend to associate increases in oil prices with a supply shock. However, in the case of Russia and other oil exporting countries with pegged or quasi-pegged exchange rates an increase in the oil price will be a positive demand shock. Said in another other higher oil prices will push the AD curve to the right. This is also why higher oil prices have not always lead to a higher current account surplus in Russia – higher oil prices will boost private consumption growth and investments growth through an increase in the money supply. This is not exactly good news for the current account.

The point that an increase in oil prices is a demand shock in Russia is illustrated in the graph below. Over the past decade there has been a rather strong positive correlation changes in the price of oil (measured in ruble) and the growth of nominal GDP.
This correlation, however, can only exist as long as the CBR intervenes in the FX market to curb the strengthening of the ruble and if the CBR finally moved to a free floating ruble then the this correlation most likely would break down. Hence, with a freely floating ruble the money supply and hence NGDP would be unaffected by higher or lower oil prices.

**PEP would effective have been a ‘productivity norm’ in Russia**

So by allowing the ruble to appreciate when oil prices are increase it will effective stabilise the development the money supply and therefore in NGDP. Another way to achieve this disconnect between NGDP and oil prices would be to directly peg the ruble to the oil price. So an increase in the oil price of 10% would directly lead to an appreciation of the ruble of 10% (against the dollar).

As the graph above shows there has been a very close correlation between changes in the oil prices (measured in ruble) and NGDP. Furthermore, over the past decade oil prices has increased around 20% yearly versus the ruble and the yearly average growth of nominal GDP has been the exactly the same. As a consequence had the CBR pegged pegged the ruble a decade ago then the growth of NGDP would likely have averaged 0% per year.

With NGDP growth “pegged” by PEP to 0% we would effectively have had what George Selgin has termed a “productivity norm” in Russia where higher real GDP growth (higher productivity growth) would lead to lower prices. Remember again – if MV=PY and MV is fixed through PEP then any increase in Y will have to lead to lower P. However, as oil prices measured in ruble are fixed it would only be the prices of non-tradable goods (locally produced and consumed goods),
which would drop. This undoubtedly would have been a much better policy than the one the CBR has pursued for the last decade – and a boom and bust would have been avoid from 2005 to 2009. (And yes, I assume that nominal rigidities would not have created too large problems).

**Russia boom-bust and how tight money cause the 2008-9 crisis in Russia**

Anybody who visits Moscow will hear stories of insanely high property prices and especially during the boom years from 2006 to when crisis hit in 2008 property prices exploded in Russia’s big cities such St. Petersburg and Moscow. There is not doubt in my mind that this property market boom was caused my the very steep increase in the Russian money supply which was a direct consequence of the CBR’s fear of floating the ruble. As oil prices where increasing and currency inflows accelerated in 2006-7 the CBR intervened to curb the strengthening of the ruble.

However, the boom came to a sudden halt in 2008, however, unlike what is the common perception the crisis that hit hard in 2008 was not a consequence of the drop in oil prices, but rather as a result of **too tight monetary policy**. Yes, my friends recessions are always and everywhere a monetary phenomenon and that is also the case in Russia!

Global oil prices started to drop in July 2008 and initially the Russian central bank allowed the ruble to weaken. However, as the sell-off in global oil prices escalated in Q3 2008 the CBR clearly started to worry about the impact it would have on ruble. As a consequence the CBR started intervening very heavily in the FX markets to halt the sell-off in the ruble. Obviously to do this the CBR had to buy ruble and sell foreign currency, which naturally lead to drop in the Russian foreign currency reserves of around 200bn dollars in Q3 2008 and a very sharp contraction in the Russian money supply (M2 dropped around 20%!). This misguided intervention in the currency market and the monetary contraction that followed lead to a collapse in Russian property prices and sparked a major banking crisis in Russia – luckily the largest Russian banks was not too badly affected by this a number medium sized banks collapsed in late 2008 and early 2009. As a consequence money velocity also contracted, which further worsened the economic crisis. In fact the drop in real GDP was the latest among the G20 in 2008-9.

...and how monetary expansion brought Russia out of the crisis
As the Russian FX reserve was dwindling in the Autumn 2008 the Russian central bank (probably) realised that either it would cease intervening in the FX or be faced with a situation where the FX reserve would vanish. Therefore by December 2008 the CBR stepped back from the FX market and allowed for a steeper decline in the value of the ruble. As consequence the contraction in the Russian money supply came to an end. Furthermore, as the Federal Reserve finally started to ease US monetary policy in early 2009 global oil prices started to recover and as CBR now did not allow the rub to strengthen at the same pace of rising oil prices the price of oil measured in ruble increase quite a bit in the first half of 2009.

The monetary expansion has continued until today and as a consequence the Russian economy has continued to recover. In fact contrary to the situation in the US and the eu zone one could easily argue that monetary tightening is warranted it in Russia.

**Oil prices should be included in the RUB basket**

I hope that my arguments above illustrate how the Russian crisis of 2008-9 can be explained by what the great Bob Hetzel calls the *monetary disorder view*. I have no doubt that if the Russian central bank had allowed for a freely floating ruble then the boom (and misallocation) in 2006-7 would have been reduced significantly and had the ruble been allowed to drop more sharply in line with oil prices in the Autumn of 2008 then the crisis would have been much smaller and banking crisis would likely have been avoided.

Therefore, the policy recommendation must be that the CBR should move to a free float of ruble and I certainly think it would make sense for Russia also to introduce a NGDP level target. However, the Russian central bank despite the promises that the ruble soon will be floated (at the moment the CBR say it will happen in 2013) clearly seems to maintain a fear of floating. Furthermore, I would caution that the quality of economic data in Russia in general is rather pure, which would make a regular NGDP level targeting regime more challenging. At the same time with a relatively underdeveloped financial sector and a generally low level of liquidity in the Russian financial markets it might be challenging to conduct monetary policy in Russian through open market operations and interest rate changes.
As a consequence it might be an idea for Russia to move towards implementing PEP – or rather a variation of PEP. Today the CBR manages the ruble against a basket of euros and dollars and in my view it would make a lot of sense to expand this basket with oil prices. To begin with oil prices could be introduced into the basket with a 20% weight and then a 40% weight for both euros and dollars. This is far from perfect and the goal certainly should still be to move to a free floating ruble, but under the present circumstances it would be much preferable to the present monetary set-up and would strongly reduce the risk of renewed bubbles in the Russian economy and as well as insuring against a monetary contraction in the event of a new sharp sell-off in oil prices.

...as I am finishing this post my taxi is parking in front of my hotel in Stockholm so now you know what you will be able to write going from Latvia to Sweden on an early Wednesday morning. Later today I will be doing a presentation for Danske Bank’s clients in Stockholm. The topics are Emerging Markets and wine economics! (Yes, wine economics...after all I am a proud member for the American Association of Wine Economists).
The “Export Price Norm” saved Australia from the Great Recession

Milton Friedman once said never to underestimate the importance of luck of nations. I believe that is very true and I think the same goes for central banks. Some nations came through the shock in 2008-9 much better than other nations and obviously better policy and particularly better monetary policy played a key role. However, luck certainly also played a role.

I think a decisive factor was the level of key policy interest rate at the start of the crisis. If interest rates already were low at the start of the crisis central banks were – mentally – unable to ease monetary policy enough to counteract the shock as most central banks did operationally conduct monetary policy within an interest rate targeting regime where a short-term interest rate was the key policy instrument. Obviously there is no limits to the amount of monetary easing a central bank can do – the money base after all can be expanded as much as you would like – but if the central bank is only using interest rates then they will have a problem as interest rates get close to zero. Furthermore, it played a key role whether demand for a country’s currency increased or decreased in response to the crisis. For example the demand for US dollars exploded in 2008 leading to a “passive tightening” of monetary policy in the US, while the demand for for example Turkish lira, Swedish krona or Polish zloty collapsed.

As said, for the US we got monetary tightening, but for Turkey, Sweden and Poland the drop in money was automatic monetary easing. That was luck and nothing else. The three mentioned countries in fact should give reason to be careful about cheering too much about the “good” central banks – The Turkish central bank has done a miserable job on communication, the Polish central bank might have engineered a recession by hiking interest rates earlier this year and the Swedish central bank now seems to be preoccupied with “financial stability” and household debt rather than focusing on it’s own stated inflation target.

In a recent post our friend and prolific writer Lorenzo wrote an interesting piece on Australia and how it has been possible for the country to avoid recession for 21 years. Lorenzo put a lot of emphasis on monetary policy. I agree with that – as recessions are always and everywhere a monetary phenomena – the key reason has to be monetary policy. However, I don’t want to give the Reserve Bank of Australia (RBA) too much credit. After all you could point to a number of
monetary policy blunders in Australia over the last two decades that potentially could have ended in disaster (see below for an example).

I think fundamentally two things have saved the Australian economy from recession for the last 21 years.

First of all luck. Australia is a commodity exporter and commodity prices have been going up for more than a decade and when the crisis hit in 2008 the demand for Aussie dollars dropped rather than increased and Australia’s key policy rate was relatively high so the RBA could ease monetary policy aggressively without thinking about using other instruments than interest rates. The RBA was no more prepared for conducting monetary policy at the lower zero bound than the fed, the ECB or the Bank of England, but it didn’t need to be as prepared as interest rates were much higher in Australia to begin with – and the sharp weakening of the Aussie dollar obviously also did the RBA’s job easier. In fact I think the RBA is still completely unprepared for conducting monetary policy in a zero interest rate environment. I am not saying that the RBA is a bad central bank – far from it – but it is not necessarily the example of a “super central bank”. It is a central bank, which has done something right, but certainly also has been more lucky than for example the fed or the Bank of England.

Second – and this is here the RBA deserves a lot of credit – the RBA has been conducting it’s inflation targeting regime in a rather flexible fashion so it has allowed occasional overshooting and undershooting of the inflation target by being forward looking and that was certainly the case in 2008–9 where it did not panic as inflation was running too high compared to the inflation target.

One of the reasons why I think the RBA has been relatively successful is that it effectively has shadowed a policy of what Jeff Frankel calls PEP (Peg the currency to the Export Price) and what I (now) think should be called an “Export Price Norm” (EPN). EPN is basically the open economy version of NGDP level targeting.

If the primary factor in nominal demand changes in the economy is exports – as it tend to be in small open economies and in commodity exporting economies – then if the central bank pegs the price of the currency to the price of the primary exports then that effectively could stabilize aggregate demand or NGDP growth. This is in fact what I believe the RBA – probably unknowingly
– has done over the last couple of decades and particularly since 2008. As a result the RBA has stabilized NGDP growth and therefore avoided monetary shocks to the economy.

Under a pure EPN regime the central bank would peg the exchange rate to the export price. This is obviously not what the RBA has done. However, by it’s communication it has signalled that it would not mind the Aussie dollar to weaken and strengthen in response to swings in commodity prices – and hence in swings in Australian export prices. Hence, if one looks at commodity prices measured by the so-called CRB index and the Australian dollar against the US dollar over the last couple of decades one would see that there basically has been a 1-1 relationship between the two as if the Aussie dollar had been pegged to the CRB index. That in my view is the key reason for the stability of NGDP growth over the past two decade. The period from 2004/5 until 2008 is an exception. In this period the Aussie dollar strengthened “too little” compared to the increase in commodity prices – effectively leading to an excessive easing of monetary conditions – and if you want to look for a reason for the Australian property market boom (bubble?) then that is it.

This is how close the relationship is between the CRB index and the Aussie dollar (indexed at 100 in 2008):

![Graph showing the relationship between the CRB index and the Aussie dollar](image)

However, when the Great Recession hit and global commodity prices plummet the RBA got it nearly perfectly right. The RBA could have panicked and hike interest rates to curb the rise in headline consumer price inflation (CPI inflation rose to around 5% y/y) caused by the weakening of the Aussie dollar. It did not do so, but rather allowed the Aussie dollar to weaken significantly. In
fact the drop in commodity prices and in the Aussie dollar in 2008-9 was more or less the same. This is in my view is the key reason why Australia avoided recession – measured as two consecutive quarters of negative growth – in 2008-9.

**But the RBA could have done a lot better**

So yes, there is reason to praise the RBA, but I think Lorenzo goes too far in his praise. A reason why I am sceptical is that the RBA is much too focused on consumer price inflation (CPI) and as I have argued so often before if a central bank really wants to focus on inflation then at least the central bank should be focusing on the GDP deflator rather on CPI.

In my view Australia saw what Hayekian economists call “relative inflation” in the years prior to 2008. Yes, inflation measured by CPI was relatively well-behaved, but looking at the GDP deflator inflationary pressures were clearly building and because the RBA was overly focused on CPI – rather than aggregate demand/NGDP growth or the GDP deflator – monetary policy became excessively easy and the had the RBA not had the luck (and skills?) it had in 2008-9 then the monetary induced boom could have turned into a nasty bust. The same story is visible from studying nominal GDP growth – while NGDP grew pretty steadily around 6% y/y from 1992 to 2002, but from 2002 to 2008 NGDP growth escalated year-by-year and NGDP grew more than 10% in 2008. That in my view was a sign that monetary policy was becoming excessive easy in Australia. In that regard it should be noted that despite the negative shock in 2008-9 and a recent fairly marked slowdown in NGDP growth the actual level of NGDP is still somewhat above the 1992-2002 trend level.

George Selgin has forcefully argued that there is good and bad deflation. Bad deflation is driven by negative demand shocks and good deflation is driven by positive supply shocks. George as consequence of this has argued in favour of what he has called a “productivity norm” – effectively an NGDP target.

I believe that we can make a similar argument for commodity exporters. However, here it is not a productivity shock, but a “wealth shock”. Higher global commodity prices is a positive “wealth shock” for commodity exporters (Friedman would say higher permanent income). This is similar to a positive productivity shock. The way to ensure such “wealth shock” is transferred to the
consumers in the economy is through benign consumer price deflation (disinflation) and you get
that through a stronger currency, which reduces import prices. However, a drop in global
commodity prices is a negative demand shock for a commodity exporting country and that you
want to avoid. The way to do that is to allow the currency to weaken as commodity prices drop.
This is why the Export Price Norm makes so much sense for commodity exporters.

The RBA effective acted as if it had an (variation of the) Export Price Norm in 2008–9, but certainly
failed to do so in the boom years prior to the crisis. In those pre-crisis years the RBA should have
tightened monetary policy conditions much more than it did and effectively allowed the Aussie
dollar to strengthen more than it did. That would likely have pushed CPI inflation well-below the
RBA’s official inflation (CPI) target of 2–3%. That, however, would have been just fine – there is no
harm done in consumer price deflation generated by positive productivity shocks or positive wealth
shocks. When you become wealthier it should show up in low consumer prices – or at least a slower
growth of consumer price inflation.

**So what should the RBA do now?**

The RBA managed the crisis well, but as I have argued above the RBA was also fairly lucky and
there is certainly no reason to be overly confident that the next shock will be handled equally well. I
therefore think there are two main areas where the RBA could improve on it operational
framework – other than the obvious one of introducing an NGDP level targeting regime.

First, the RBA should make it completely clear to investors and other agents in the economy what
operational framework the RBA will be using if the key policy rate where to hit zero.

Second, the RBA should be more clear in it communication about the link between changes in
commodity prices (measured in Aussie dollars) and aggregate demand/NGDP and that it consider
the commodity-currency link as key element in the Australian monetary transmission mechanism
– explicitly acknowledging the importance of the Export Price Norm.

The two points above could of course easily be combined. The RBA could simply announce that it
will continue it’s present operational framework, but if interest rates where to drop below for
example 1% it would automatically peg the Aussie dollar to the CRB index and then thereafter
announce monetary policy changes in terms of the changes to the Aussie dollar-CRB “parity”.

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Australian NGDP still remains somewhat above the old trend and as such monetary policy is too loose. However, given the fact that we have been off-trend for a decade it probably would make very little sense to force NGDP back down to the old trend. Rather the RBA should announce that monetary policy is now “neutral” and that it in the future will keep NGDP growth around a 5% or 6% trend (level targeting). Using the trend level starting in for example 2007 in my view would be a useful benchmark.

It is pretty clear that Australian monetary conditions are tightening at the moment, which is visible in both weak NGDP growth and the fact that commodity prices measured in Australian dollars are declining. Furthermore, it should be noted that GDP deflator growth (y/y) turned negative earlier in the year – also indicating sharply tighter monetary conditions. Furthermore, NGDP has now dropped below the – somewhat arbitrary – 2007-12 NGDP trend level. All that could seem to indicate that moderate monetary easing is warranted.

Concluding, the RBA did a fairly good job over the past two decades, but luck certainly played a major role in why Australia has avoided recession and if the RBA wants to preserve it’s good reputation in the future then it needs to look at a few details (some major) in the how it conducts its monetary policy.

PS I could obviously tell the same story for other commodity exporters such as Norway, Canada, Russia, Brazil or Angola for that matter and these countries actually needs the lesson a lot more than the RBA (maybe with the exception of Canada).

PPS Sometimes Market Monetarist bloggers – including myself – probably sound like “if we where only running things then everything would be better”. I would stress that I don’t think so. I am fully aware of the institutional and political constrains that every central banker in the world faces. Furthermore, one could easily argue that central banks by construction will never be able to do a good job and will always be doomed to fail (just ask Pete Boettke or Larry White). As everybody knows I have a lot of sympathy for that view. However, we need to have a debate about monetary policy and how we can improve it – at least as long as we maintain central banks. And I don’t think the answer is better central bankers, but rather I want better institutions. It is correct it makes a difference who runs the central banks, but the institutional framework is much more important
and a discussion about past and present failures of central banks will hopefully help shape the ideas to secure more sound monetary systems in the future.

PPPS I should say this post was inspired not only by Lorenzo’s post and my long time thinking the that the RBA had been lucky, but also by Saturos’ comments to my earlier post on Malaysia. Saturos pointed out the difference between the GDP deflator and CPI in Australia to me. That was an important import to this post.
Fear-of-floating, misallocation and the law of comparative advantages

The first commandment of central banking should be *thou shall not distort relative prices*. However, central bankers often tend to forget this – knowingly or unknowingly. How often have we not heard stern warnings from central bankers that property prices are too high or too low – or that a currency is overvalued or undervalued. And in the last couple of years central bankers have even tried to manipulate the shape of the bond yield curve – just think of the Fed’s “operation twist”.

Central bankers are distorting relative prices in many ways – by for example by trying to prick bubbles (or what they think are bubbles). Sometimes the distortion of relative prices is done unknowingly. The best example of this is when central banks operate an inflation target. Both George Selgin and David Eagle teach us that inflation targeting means that central banks react to supply shocks and thereby distort relative prices. In an open economy this will lead to a distortion of the relative prices between trade goods and non-traded goods.

As I will show below central bankers’ eagerness to distort relative prices is as harmful as other distortions of relative prices for example as a result of protectionism and will often lead to numerous negative side-effects.

The fear-of-floating – the violation of the Law of comparative advantages

I have recently given a bit of attention to the concept of fear-of-floating. Despite being officially committed to floating exchange rates many central banks from time to time intervene in the FX markets to “manage” the currency. As I have earlier noted a good example is the Norwegian central bank (Norges Bank), which often has intervened either directly or verbally in the currency market or verbally to try to curb the strengthening of the Norwegian krone. In March for example Norges Bank surprisingly cut interest rates to curb the strengthening of the krone – despite the general macroeconomic situation really warranted a tightening of monetary conditions.

So why is Norge Bank so fearful of a truly free floating krone? The best explanation in the case of Norway is that the central bank’s fears that when oil prices rise then the Norwegian krone will strengthen and hence make the non-oil sectors in the economy less competitive. This is what
happened in 2003 when a sharp appreciation of the krone cause an “exodus” of non-oil sector companies from Norway. Hence, there is no doubt that it is a sub-target of Norwegian monetary policy to ensure a “diversified” Norwegian economy. This policy is strongly supported by the Norwegian government’s other policies – for example massive government support for the agricultural sector. Norway is not a EU member – and believe it or not government subsidies for the agricultural sector is larger than in the EU!

However, in the same way as government subsidies for the agricultural sector distort economic allocation so do intervention in the currency market. However, while most economists agree that government subsidies for ailing industries is violating the law of comparative advantages and lead to a general economic lose in the form of lower productivity and less innovation few economists seem to be aware that the fear-of-floating (including indirect fear-of-floating via inflation targeting) have the same impact.

Let’s look at an example. Let say that oil prices increase by 30% and that tend to strengthen the Norwegian krone. This is the same as to say that the demand curve in the oil sector has shifted to the right. This will increase the demand for labour and capital in the oil sector. In a freely mobile labour market this will push up salaries both in the oil sector and in the none-oil sector. Hence, the none-oil sector will become less competitive – both as a result of higher labour and capital costs, but also because of a stronger krone. As a consequence labour and capital will move from the non-oil sector to the oil sector. Most economists would agree that this is a natural market process that ensures the most productive and profitable use of economic resources. As David Ricardo taught us long ago – countries should produce the goods in which the country has a comparative advantage. The unhampered market mechanism ensures this.

However, if the central bank suffers from fear-of-floating then the central bank will intervene to curb the strengthening of the krone. This has two consequences. First, the increase in profitability in the oil sector will be smaller than it would have been had the krone been allowed to strengthen. This would also mean that the increase in demand for capital and labour in the oil sector would be smaller than it would have been if the krone had been allowed to float completely freely (or had been pegged to the oil price). Second, this would mean that the “scaling down” of the non-oil sector will be smaller than otherwise would have been the case – and as a result this sector will demand too much labour and capital relative to what is economically optimal. This is exactly what the
central bank would like to see. However, I think the example pretty clearly shows that such as policy is violating the law of comparative advantages. Relative prices are distorted and as a result the total economic output and welfare will be smaller than would have been the case under a freely floating currency.

It is often argued that if the oil price is very volatile and the krone (or another oil-exporting country’s currency) therefore would be more volatile and as a consequence the non-oil sector will see large swings in economic activity and it would be in the interest of the central bank to reduce this volatility and thereby stabilise the development in the non-oil sector. However, this completely misses the point with free markets. Prices should be allowed to adjust to ensure an efficient allocation of capital and labour. If you intervene in the market process allocation of resources will be less efficient.

Furthermore, the central bank cannot permanently distort relative prices. If the currency is kept artificially weak by easier monetary policy it will just inflated the entire economy – and as a result capital and labour cost will increase – as will inflation – and sooner or later the competitive advantage created by an artificially weak currency will be gradually eaten by higher prices and wages. In an economy where wages and prices are downward rigid – as surely is the case in the Norwegian economy – this will created major adjustment problems if oil prices drops sharply especially if the central bank also try to curb the weakening of the currency (as the Russian central bank did in 2008). Hence, by trying to dampen the swings in the FX rates the central bank will actually move the adjustment process from the FX markets (which is highly flexible) to the much less flexible labour and good markets. So even though the central bank might want to curb the volatility in economic activity in the non-oil sector it will actually rather increase the general level of volatility in the economy. In an economy with fully flexible prices and wages the manipulation of the FX rate would not be a problem. However, if for example wages are downward rigid because interventionist labour market policy as it is the case in Norway then a policy of curbing the volatility in the FX rate quite obviously (to me at least) leads to lower productivity and higher volatility in both nominal and rate variables.

I have used the Norwegian economy as an example. I should stress that I might as well have used for example Brazil or Russia – as the central banks in these countries to a much larger degree than
Norges Bank suffers from a fear-of-floating. I could in fact also have used the ECB as the ECB indirectly suffers from a fear-of-floating as the ECB is targeting inflation.

I am not aware of any research on the consequences for productivity of fear-of-floating, but I am sure it could be an interesting area of research – I wonder if Norge Banks is aware how big the productive lose in the Norwegian economy has been due to it’s policy of curbing oil price driven swings in the krone. I am pretty sure that the Russian central bank and the Brazilian central bank have not given this much thought at all. Neither has most other Emerging Market central banks that frequently intervenes in the FX markets.

PS do I need to say how to avoid these problems? Yes you guessed right – NGDP level targeting or by pegging the currency to the oil price. If you want to stay with in a inflation targeting framework then central bank central bank should at least target domestic demand inflation or what I earlier inspired by David Eagle has termed Quasi-Real inflation (QRPI).

PS Today I am spending my day in London – I wrote this on the flight. I bet a certain German central banker will be high on the agenda in my meetings with clients...
Markets, money and the transmission mechanism

Gideon Gono, a time machine and the liquidity trap

Here is a quote from a random article from the financial media in 2008:

“Central banks around the world are rapidly depleting their ammunition as interest rates head to unparalleled lows”

It is quite common that it is claimed that central banks around the world are out of ammunition because interest rates are close to zero and that there therefore are no more options for monetary stimulus. Market Monetarist obviously disagrees strongly with that assessment, but we are up against a long running tradition.

Let’s jump into a time machine and fastback to 1935. This is US congressman T. Alan Goldsborough supporting Federal Reserve chairman Marriner Eccles in Congressional hearings on the Banking Act of 1935:

Governor Eccles: Under present circumstances, there is very little, if any, that can be done.

Congressman Goldsborough: You mean you cannot push on a string.

Governor Eccles: That is a very good way to put it, one cannot push on a string. We are in the depths of a depression and... beyond creating an easy money situation through reduction of discount rates, there is very little, if anything, that the reserve organization can do to bring about recovery

There is now doubt that even in 1935 the situation was quite desperate, but not as desperate as it was before the US went off gold in 1933.

So further back to 1932.
In 1932 the US economy is deep in depression, unemployment is massively high and deflation has never been stronger.

The situation is desperate for president Hoover. No matter what ideas he comes up with nothing works and he stands no chance of winning the upcoming presidential elections.

The chairman of the Federal Reserve Eugene Meyer is telling Hoover that he should use fiscal policy to boost the economy, but that monetary policy loosening is no option.

But then it all becomes very sci-fi – Meyer is beamed up by Scotty (Sumner) and replaced by Zimbabwean central bank governor Gideon Gono.

We need a little be more sci-fi: Everybody in 1932 knows the reputation of Gideon Gono as a money printing psycho central banker.

So what happened when Gono is beamed back to 1932? Well, everybody knows that he doesn’t care about any strings on money policy – he just print money like a mad man and everybody knows that he created hyperinflation in his previous job. So what would you expect? They would of course expect inflation! And they would expect the US to give up the gold standard very fast – after all Gideon Gono is not exactly Bob Murphy. And he probably would so with in minutes of arriving back in 1932.

What happens now? Everybody realise that the value of cash will not continue to increase so there will be no reason to hoard cash. Rather suddenly the dollars are burning holes in people pockets. And the same goes for banks and corporations: We don’t want dollar anymore. This is the hot potato effect in monetary theory. Money demand collapse relative to the money supply. That is monetary loosening!

So monetary policy works with long and variable LEADS – in fact with time warping leads.

Fast forward to 2011. The global economy is on the verge of a new depression – the talk of a debt-deflation continues nearly four years into the Great Recession. An economics professor Scotty starts blogging about monetary policy. His big hero is Gideon Gono – the Fed chairman who in
1933 pulled out the US from the Great Depression and with it the rest of the world. Nobody would remember Hitler and we would still be talking about the “Great War” rather than World War 1.

And no Gideon Gono was never a good central bank and he would probably have stolen the US gold reserve once he landed back in 1932. This is not an endorsement of inflationist policies or insane central bankers, but an illustration of the importance of what expectations mean for monetary policy effectiveness.

PS after Gideon Gono became Fed chairman Hoover won the presidential campaign and became the longest serving US president ever and became a much loved president in the Republican party. They call him: “The president who understood monetary policy”. And the Republican party is forever grateful to Hoover for never having introduced Social Security. And most important Paul Krugman would look pretty stupid when he went on and on about the liquidity trap.

PPS luckily Gideon Gono was not beamed back to 1979.

PPPS If you want to read a truly insane book on monetary policy have a look at Gideon Gono’s “masterpiece”: Zimbabwe’s Casino Economy: Extraordinary Measures for Extraordinary Challenges.
“Ben Volcker” and the monetary transmission mechanism

I am increasingly realising that a key problem in the Market Monetarist arguments for NGDP level targeting is that we have not been very clear in our arguments concerning how it would actually work.

We argue that we should target a certain level for NGDP and then it seems like we just expect it to happen more or less by itself. Yes, we argue that the central bank should control the money base to achieve this target and this could done with the use of NGDP futures. However, I still think that we need to be even clearer on this point.

Therefore, we really need a Market Monetarist theory of the monetary transmission mechanism. In this post I will try to sketch such a theory.

Combining “old monetarist” insights with rational expectations

The historical debate between “old” keynesians and “old” monetarists played out in the late 1960s and the 1970s basically was centre around the IS/LM model.

The debate about the IS/LM model was both empirical and theoretical. On the hand keynesians and monetarists where debating the how large the interest rate elasticity was of money and investments respectively. Hence, it was more or less a debate about the slope of the IS and LM curves. In much of especially Milton Friedman writings he seems to accept the overall IS/LM framework. This is something that really frustrates me with much of Friedman’s work on the transmission mechanism and other monetarists also criticized Friedman for this. Particularly Karl Brunner and Allan Meltzer were critical of “Friedman’s monetary framework” and for his “compromises” with the keynesians on the IS/LM model.

Brunner and Meltzer instead suggested an alternative to the IS/LM model. In my view Brunner and Meltzer provides numerous important insights to the monetary transmission mechanism, but it often becomes unduly complicated in my view as their points really are relatively simple and straight forward.
At the core of the Brunner-Meltzer critique of the IS/LM model is that there only are two assets in the IS/LM model – basically money and bonds and if more assets are included in the model such as equities and real estate then the conclusions drawn from the model will be drastically different from the standard IS/LM model. It is especially notable that the “liquidity trap” argument breaks down totally when more than two assets are included in the model. This obviously also is key to the Market Monetarist arguments against the existence of the liquidity trap.

This mean that monetary policy not only works via the bond market (in fact the money market). In fact we could easily imagine a theoretical world where interest rates did not exist and monetary policy would work perfectly well. Imagining a IS/LM model where we have two assets. Money and equities. In such a world an increase in the money supply would push up the prices of equities. This would reduce the funding costs of companies and hence increase investments. At the same time it would increase holdholds wealth (if they hold equities in their portfolio) and this would increase private consumption. In this world monetary policy works perfectly well and the there is no problem with a “zero lower bound” on interest rates. Throw in the real estate market and a foreign exchange markets and then you have two more “channels” by which monetary policy works.

Hence, the Market Monetarist perspective on monetary policy the following dictum holds:

“Monetary policy works through many channels”

**Keynesians are still obsessed about interest rates**

Fast forward to the debate today. New Keynesians have mostly accepted that there are ways out of the liquidity trap and the work of for example Lars E. O. Svensson is key. However, when one reads New Keynesian research today one will realise that New Keynesians are as obsessed with interest rates as the key channel for the transmission of monetary policy as the old keynesians were. What has changed is that New Keynesians believe that we can get around the liquidity trap by playing around with expectations. Old Keynesians assumed that economic agents had backward looking or static expectations while New Keynesians assume rational expectations – hence, forward-looking expectations.

Hence, New Keynesians still see interest rates at being at the core of monetary policy making. This is as problematic as it was 30 years ago. Yes, it is fine that New Keynesian acknowledges that
agents are forward-looking but it is highly problematic that they maintain the narrow focus on interest rates.

In the New Keynesian model monetary policy works by increasing inflation expectation that pushes down real interest rates, which spurs private consumption and investments. Market Monetarists certainly do think this is one of many channels by which monetary policy work, but it is clearly not the most important channel.

**Rules are at the centre of the transmission mechanism**

Market Monetarist stresses the importance of monetary policy rules and how that impacts agents expectations and hence the monetary transmission mechanism. Hence, we are more focused on the forward-looking nature or monetary policy than the “old” monetarists were. In that regard we are similar to the New Keynesians.

It exactly because of our acceptance of rational expectations that we are so obsessed about NGDP level targeting. Therefore when we discuss the monetary policy transmission mechanism it is key whether we are in world with no credible rule in place or whether we are in a world of a credible monetary policy rule. Below I will discussion both.

**From no credibility to a credible NGDP level target**

Lets assume that the economy is in “bad equilibrium”. For some reason money velocity has collapsed, which continues to put downward pressures on inflation and growth and therefore on NGDP. Then enters a new credible central bank governor and he announces the following:

“I will ensure that a “good equilibrium” is re-established. That means that I will ‘print’ whatever amount of money is needed so to make up for the drop in velocity we have seen. I will not stop the expansion of the money base before market participants again forecasts nominal GDP to have returned to it’s old trend path. Thereafter I will conduct monetary policy in such a fashion so NGDP is maintained on a 5% growth path.”

Lets assume that this new central bank governor is credible and market participants believe him. Lets call him Ben Volcker.
By issuing this statement the credible Ben Volcker will likely set in motion the following process:

1) Consumers who have been hoarding cash because they where expecting no and very slow growth in the nominal income will immediately reduce there holding of cash and increase private consumption.
2) Companies that have been hoarding cash will start investing – there is no reason to hoard cash when the economy will be growing again.
3) Banks will realise that there is no reason to continue aggressive deleveraging and they will expect much better returns on lending out money to companies and households. It certainly no longer will be paying off to put money into reserves with the central bank. Lending growth will accelerate as the “money multiplier” increases sharply.
4) Investors in the stock market knows that in the long run stock prices track nominal GDP so a promise of a sharp increase in NGDP will make stocks much more attractive. Furthermore, with a 5% path growth rule for NGDP investors will expect a much less volatile earnings and dividend flow from companies. That will reduce the “risk premium” on equities, which further will push up stock prices. With higher stock prices companies will invest more and consumers will consume more.
5) The promise of loser monetary policy also means that the supply of money will increase relative to the demand for money. This effectively will lead to a sharp sell-off in the country’s currency. This obviously will improve the competitiveness of the country and spark export growth.

These are five channels and I did not mention interest rates yet...and there is a reason for that. Interest rates will INCREASE and so will bond yields as market participant start to price in higher inflation in the transition period in which we go from a “bad equilibrium” to a “good equilibrium”.

Hence, there is no reason for the New Keynesian interest rate “fetish” – we got at least five other more powerful channels by which monetary policy works.

**Monetary transmission mechanism with a credible NGDP level target**

Ben Volcker has now with his announcement brought back the economy to a “good equilibrium”. In the process he might have needed initially to increase the money base to convince economic agents that he meant business. However, once credibility is established concerning the new NGDP level
target rule Ben Volcker just needs to look serious and credible and then expectations and the market will take care of the rest.

Imagine the following situation. A positive shock increase the velocity of money and with a fixed money supply this pushed NGDP above it target path. What happens?

1) Consumers realise that Ben Volcker will tighten monetary policy and slow NGDP growth. With the expectation of lower income growth consumers tighten their belts and private consumption growth slows.

2) Investors also see NGDP growth slowing so they scale back investments.

3) With the outlook for slower growth in NGDP banks scale back their lending and increase their reserves.

4) Stock prices start to drop as expectations for earnings growth is scaled back (remember NGDP growth and earnings growth is strongly correlated). This slows private consumption growth and investment growth.

5) With expectations of a tightening of monetary conditions players in the currency market send the currency strong. This led to a worsening of the country’s competitiveness and to weaker export growth.

6) Interest rates and bond yields DROP on the expectations of tighter monetary policy.

All this happens without Ben Volcker doing anything with the money base. He is just sitting around repeating his dogma: “The central bank will control the money base in such a fashion that economic agents away expect NGDP to grow along the 5% path we already have announced.” By now he might as well been replaced by a computer...
The ultimate sign of recovery – no reason to freak out about higher bond yields

This is from CNBC.com:

U.S. Treasurys prices eased for a second day after jobless claims data suggested solid improvement in the labor market, while stocks’ gains undermined the appeal of lower-risk government debt.

The Treasury Department auctioned $13 billion of reopened 30-year bonds on Thursday at a high yield of 3.248 percent. The bid-to-cover ratio, an indicator of demand, was 2.43, the lowest level since August.

In the when-issued market, considered a proxy for where the bonds will price at auction, 30-year bonds were yielding about 3.24 percent. The auction followed solid demand in the sales of $21 billion of reopened 10-year notes on Wednesday and $32 billion of three-year notes on Tuesday.

US bond yields continue to inch higher. To me that is the ultimate sign that easier monetary conditions is pushing up nominal GDP (and very likely also real GDP).

But I am afraid that we will soon hear somebody warn us that higher bond yields will kill the recovery. But we of course know that when bond yields and equity prices are rising in parallel then it is normally a very good sign of higher aggregate demand and that is of course exactly what we need.

So if we avoid the biggest fallacy in economics and ask why bond yields are rising then we should find a lot of comfort in the fact that US stock prices are rising as well.

And finally there is some Keynesians out there that can explain to me why global stock prices continue to inch up, bond yields are rising and the US consumer seems completely unaffected despite of the fiscal cliff (I told you so!) and the sequester. Market Monetarists of course have an answer – it is monetary policy dominance – monetary policy can always offset any impact on aggregate demand from a fiscal shock. It is very simple – and is the positive spin on the Sumner Critique. (Here is a model textbook Keynesian should be able to understand).
PS yes you got it right – I am very optimistic both on the markets and on the recovery at least in the US (I have been optimistic for a while – see here and here). My only two fears are that the ECB once again will do something stupid or that we will have a repeat of the mistakes of 1936–37 – premature monetary tightening from the fed. Italian politics is, however, not keeping me awake at night.

Update: I wrote above my worry was the ECB. I should have said the EU/IMF. The terms for the EU/IMF bail out of Cyprus scare me quite a bit. So much for the rule of law...
Tight money = low yields – also during the Great Recession

Anybody who ever read anything Milton Friedman said about monetary policy should know that low interest rates and bond yields mean that monetary policy is tight rather than easy. And when bond yields drop it is normally a sign that monetary policy is becoming tighter rather than easier.

Here is Friedman on what he called the interest rate fallacy in 1997:

“After the U.S. experience during the Great Depression, and after inflation and rising interest rates in the 1970s and disinflation and falling interest rates in the 1980s, I thought the fallacy of identifying tight money with high interest rates and easy money with low interest rates was dead. Apparently, old fallacies never die.”

Unfortunately the old fallacy is still not dead and it is still very common to associate low interest rates and low bond yields with easy monetary policy. Just think of the ECB’s insistence that it’s monetary policy stance is “easy”.

In my previous post I demonstrated that all the major changes in the S&P500 over the past four years can be explained by changes in monetary policy stance from either the ECB or the Federal Reserve (and to some extent also PBoC). Hence, it is not animal spirits, but rather monetary policy failure that can explain the volatility in the markets over the past four years.

What holds true for the stock market holds equally true for the bond market and the development in the US fixed income markets over the past four years completely confirms Milton Friedman’s view that tighter monetary policy is associated with lower bond yields. See the graph below. Green circles are monetary easing. Red circles are monetary tightening. (See more on each “event” in my previous blog post)
I think the graph very clearly shows that Friedman was right. Every time either the ECB or the Federal Reserve have moved to tighten monetary policy long-term US bonds yields have dropped and when the same central banks have moved to ease monetary policy yields have increased.

Judging from the level of US bond yields – and German bond yields for that matter – monetary policy in the US (and the euro zone) can hardly be said to be easy. In fact it is very clear that monetary policy remains excessively tight in both the US and the euro zone. Unfortunately neither the Fed nor the ECB seem to acknowledge as they still seem to be of the impression that as long interest rates are low monetary policy is easy. I wonder what Friedman would have said? Well, I fact I am pretty convinced that he would have been very clear and would have been arguing with the Market Monetarists that monetary disorder is to blame for this crisis and we only will move out of the crisis once the Fed and the ECB move to fundamentally ease monetary conditions and adopt a rule based monetary policy rather than the present zig-zagging.

PS See also my early post on the connection between monetary policy and the bond market: Understanding financial markets with MV=PY – a look at the bond market

Update: Scott Sumner just made me aware of one of his post addressing the same topic. See here.

Update 2: Jason Rave has kindly reminded me of this Milton Friedman article, which also deals with the interest rate fallacy.
Monetary disorder – not animal spirits – caused the Great Recession

If one follows the financial media on a daily basis as I do there is ample room to get both depressed and frustrated over the coverage of the financial markets. Often market movements are described as being very irrational and the description of what is happening in the markets is often based on an “understanding” of economic agents as somebody who have huge mood swings due to what Keynes termed animal spirits.

Swings in the financial markets created by these animal spirits then apparently impact the macroeconomy through the impact on investment and private consumption. In this understanding markets move up and down based on rather irrational mood swings among investors. This is what Robert Hetzel has called the “market disorder”-view. It is market imperfections and particularly the animal spirits of investors which created swings not only in the markets, but also in the financial markets. Bob obviously in his new book convincingly demonstrates that this “theory” is grossly flawed and that animal spirits is not the cause of neither the volatility in the markets nor did animal spirits cause the present crisis.

The Great Recession is a result of numerous monetary policy mistakes – this is the “monetary disorder”-view – rather than a result of irrational investors behaving as drunken fools. This is very easy to illustrate. Just have a look first at S&P500 during the Great Recession.
The 6-7 phases of the Great Recession – so far

We can basically spot six or seven overall phases in S&P500 since the onset of the crisis. In my view all of these phases or shifts in “market sentiment” can easy be shown to coincide with monetary policy changes from either the Federal Reserve or the ECB (or to some extent also the PBoC).

We can start out with the very unfortunate decision by the ECB to hike interest rates in July 2008. Shortly after the ECB hike the S&P500 plummeted (and yes, yes Lehman Brother collapses in the process). The free fall in S&P500 was to some extent curbed by relatively steep interest rate reductions in the Autumn of 2008 from all of the major central banks in the world. However, the drop in the US stock markets did not come to an end before March 2009.

March-April 2009: TAF and dollar swap lines

However, from March-April 2009 the US stock markets recovered strongly and the recovery continued all through 2009. So what happened in March-April 2009? Did all investors suddenly out of the blue become optimists? Nope. From early March the Federal Reserve stepped up its efforts to improve its role as lender-of-last resort. The de facto collapse of the Fed primary dealer system in the Autumn of 2008 had effective made it very hard for the Fed to function as a lender-
of-last-resort and effectively the Fed could not provide sufficient dollar liquidity to the market. See more on this topic in George Selgin’s excellent paper “L Street: Bagehotian Prescriptions for a 21st-Century Money Market”.

Here especially the two things are important. First, the so-called Term Auction Facility (TAF). TAF was first introduced in 2007, but was expanded considerably on March 9 2009. This is also the day the S&P500 bottomed out! That is certainly no coincidence.

Second, on April 9 when the Fed announced that it had opened dollar swap lines with a number of central banks around the world. Both measures significantly reduced the lack of dollar liquidity. As a result the supply of dollars effectively was increased sharply relatively to the demand for dollars. This effectively ended the first monetary contraction during the early stage of the Great Recession and the results are very visible in S&P500.

This as it very clear from the graph above the Fed’s effects to increase the supply of dollar liquidity in March-April 2009 completely coincides with the beginning of the up-leg in the S&P500. It was not animal spirits that triggered the recovery in S&P500, but rather easier monetary conditions.

**January-April 2010: Swap lines expiry, Chinese monetary tightening and Fed raises discount rate**

The dollar swap lines expired February 1 2010. That could hardly be a surprise to the markets, but nonetheless this seem to have coincided with the S&P500 beginning to loose steam in the early part of 2010. However, it was probably more important that speculation grew in the markets that global central banks could move to tighten monetary conditions in respond to the continued recovery in the global economy at that time.

On January 12 2010 the People’s Bank of China increased reserve requirements for the Chinese banks. In the following months the PBoC moved to tighten monetary conditions further. Other central banks also started to signal future monetary tightening.

Even the Federal Reserve signaled that it might be reversing it’s monetary stance. Hence, on February 18 2010 the Fed increased the discount rate by 25bp. The Fed insisted that it was not
monetary tightening, but judging from the market reaction it could hardly be seen by investors as anything else.

Overall the impression investors most have got from the actions from PBoC, the Fed and other central banks in early 2010 was that the central banks now was moving closer to initiating monetary tightening. Not surprisingly this coincides with the S&P500 starting to move sideways in the first half of 2010. This also coincides with the “Greek crisis” becoming a market theme for the first time.

August 27 2010: Ben Bernanke announces QE2 and stock market takes off again

By mid-2010 it had become very clear that talk of monetary tightening had been premature and the Federal Reserve started to signal that a new round of monetary easing might be forthcoming and on August 27 at his now famous Jackson Hole speech Ben Bernanke basically announced a new round quantitative easing – the so-called QE2. The actual policy was not implemented before November, but as any Market Monetarist would tell you – it is the Chuck Norris effect of monetary policy: Monetary policy mainly works through expectations.

The quasi-announcement of QE2 on August 27 is pretty closely connected with another up-leg in S&P500 starting in August 2010. The actual upturn in the market, however, started slightly before Bernanke’s speech. This is probably a reflection that the markets started to anticipate that Bernanke was inching closer to introducing QE2. See for example this news article from early August 2010. This obviously is an example of Scott Sumner’s point that monetary policy works with long and variable leads. Hence, monetary policy might be working before it is actually announced if the market start to price in the action beforehand.

April and July 2011: The ECB’s catastrophic rate hikes

The upturn in the S&P500 lasted the reminder of 2010 and continued into 2011, but commodity prices also inched up and when two major negative supply shocks (revolutions in Northern Africa and the Japanese Tsunami) hit in early 2011 headline inflation increased in the euro zone. This triggered the ECB to take the near catastrophic decision to increase interest rates twice – once in April and then again in July. At the same time the ECB also started to scale back liquidity programs.
The market movements in the S&P500 to a very large extent coincide with the ECB’s rate hikes. The ECB hiked the first time on April 7. Shortly there after – on April 29 – the S&P500 reached it’s 2011 peak. The **ECB hiked** for the second time on July 7 and even signaled more rate hikes! Shortly thereafter S&P500 slumped. This obviously also coincided with the “**euro crisis**” flaring up once again.

**September-December 2011: “Low for longer”, Operation twist and LTRO – cleaning up your own mess**

The re-escalation of the European crisis got the Federal Reserve into action. On **September 9 2011** the FOMC announced that it would keep interest rates low at least until 2013. Not exactly a policy that is in the spirit of Market Monetarism, but nonetheless a signal that the Fed acknowledged the need for monetary easing. Interestingly enough September 9 2011 was also the date where the **three-month centered moving average of S&P500** bottomed out.

On September 21 2011 the Federal Reserve **launched** what has come to be known as **Operation Twist**. Once again this is certainly not a kind of monetary operation which is loved by Market Monetarists, but again at least it was an signal that the Fed acknowledged the need for monetary easing.

The Fed’s actions in September pretty much coincided with S&P500 starting a new up-leg. The recovery in S&P500 got further imputes after the ECB finally acknowledged a responsibility for cleaning up the mess after the two rate hikes earlier in 2011 and on December 8 the ECB introduced the so-called 3-year longer-term refinancing operations (**LTRO**).

The rally in S&P500 hence got more momentum after the introduction of the 3-year LTRO in December 2011 and the rally lasted until March-April 2012.

**The present downturn: Have a look at ECB’s new collateral rules**

We are presently in the midst of a new crisis and the media attention is on the Greek political situation and while the need for monetary policy easing in the euro zone finally seem to be moving up on the agenda there is still very little acknowledgement in the general debate about the
monetary causes of this crisis. But again we can explain the last downturn in S&P500 by looking at monetary policy.

On March 23 the ECB moved to tighten the rules for banks’ use of assets as collateral. This basically coincided with the S&P500 reaching its peak for the year so far on March 19 and in the period that has followed numerous European central bankers have ruled out that there is a need for monetary easing (who are they kidding?)

**Conclusion: its monetary disorder and not animal spirits**

Above I have tried to show that the major ups and downs in the US stock markets since 2008 can be explained by changes monetary policy by the major central banks in the world. Hence, the volatility in the markets is a direct consequence of monetary policy failure rather than irrational investor behavior. Therefore, the best way to ensure stability in the financial markets is to ensure nominal stability through a rule based monetary policy. It is time for central banks to do some soul searching rather than blaming animal spirits.

This in no way is a full account of the causes of the Great Recession, but rather meant to show that changes in monetary policy – rather than animal spirits – are at the centre of market movements over the past four years. I have used the S&P500 to illustrate this, but a similar picture would emerge if the story was told with US or German bond yields, inflation expectations, commodity prices or exchange rates.

**Appendix: Some Key monetary changes during the Great Recession**

July 2008: ECB hikes interest rates

March-April 2009: Fed expand TAF and introduces dollar swap lines

January-April 2010: Swap lines expiry, Chinese monetary tightening and Fed raises discount rate

August 27 2010: Bernanke announces QE2

April and July 2011: The ECB hike interest rates twice
September-December 2011: Fed announces policy to keep rate very low until the end of 2013 and introduces “operation twist”. The ECB introduces the 3-year LTRO

March 2012: ECB tightens collateral rules
**The root of most fallacies in economics: Forgetting to ask WHY prices change**

Even though I am a Dane and work for a Danish bank I tend to not follow the Danish media too much – after all my field of work is international economics. But I can’t completely avoid reading Danish newspapers. My greatest frustration when I read the financial section of Danish newspapers undoubtedly is the tendency to reason from different price changes – for example changes in the price of oil or changes in bond yields – without discussing the courses of the price change.

The best example undoubtedly is changes in (mortgage) bond yields. Denmark has been a “safe haven” in the financial markets so when the euro crisis escalated in 2011 Danish bond yields dropped dramatically and short-term government bond yields even turned negative. That typically triggered the following type of headline in Danish newspapers: “Danish homeowners benefit from the euro crisis” or “The euro crisis is good news for the Danish economy”.

However, I doubt that any Danish homeowner felt especially happy about the euro crisis. Yes, bond yields did drop and that cut the interest rate payments for homeowners with floating rate mortgages. However, bond yields dropped for a reason – a sharp deterioration of the growth outlook in the euro zone due to the ECB’s two unwarranted interest rate hikes in 2011. As Denmark has a pegged exchange rate to the euro Denmark “imported” the ECB’s monetary tightening and with it also the prospects for lower growth. For the homeowner that means a higher probability of becoming unemployed and a prospect of seeing his or her property value go down as the Danish economy contracted. In that environment lower bond yields are of little consolation.

Hence, the Danish financial journalists failed to ask the crucial question *why* bond yields dropped. Or said in another way they failed to listen to the advice of Scott Sumner who always tells us *not to reason from a price change*.

This is what Scott has to say on the issue:

*My suggestion is that people should never reason from a price change, but always start one step earlier—what caused the price to change. If oil prices fall because Saudi Arabia increases*
production, then that is bullish news. If oil prices fall because of falling AD in Europe, that might be expansionary for the US. But if oil prices are falling because the euro crisis is increasing the demand for dollars and lowering AD worldwide; confirmed by falls in commodity prices, US equity prices, and TIPS spreads, then that is bearish news.

I totally agree. When we see a price change – for example oil prices or bond yields – we should ask ourselves why prices are changing if we want to know what macroeconomic impact the price change will have. It is really about figuring out whether the price change is caused by demand or supply shocks.

*The euro strength is not necessarily bad news – more on the currency war that is not a war*

A very good example of this general fallacy of forgetting to ask why prices are changing is the ongoing discussion of the “currency war”. From the perspective of some European policy makers – for example the French president Hollande – the Bank of Japan’s recent significant stepping up of monetary easing is bad news for the euro zone as it has led to a strengthening of the euro against most other major currencies in the world. The reasoning is that a stronger euro is hurting European “competitiveness” and hence will hurt European exports and therefore lower European growth.

This of course is a complete fallacy. Even ignoring the fact that the ECB can counteract any negative impact on European aggregate demand (the Sumner critique also applies for exports) we can see that this is a fallacy. What the “currency war worriers” fail to do is to ask why the euro is strengthening.

The euro is of course strengthening not because the ECB has tightened monetary policy but because the Bank of Japan and the Federal Reserve have stepped up monetary easing.

With the Fed and the BoJ significantly stepping up monetary easing the growth prospects for the largest and the third largest economies in the world have greatly improved. That surely is good news for European exporters. Yes, European exporters might have seen a slight erosion of their competitiveness, but I am pretty sure that they happily will accept that if they are told that Japanese and US aggregate demand – and hence imports – will accelerate strongly.
Instead of just looking at the euro rate European policy makers should consult more than one price (the euro rate) and look at other financial market prices – for example European stock prices. European stock prices have in fact increased significantly since August-September when the markets started to price in more aggressive monetary easing from the Fed and the BoJ. Or look at bond yields in the so-called PIIGS countries – they have dropped significantly. Both stock prices and bond yields in Europe hence are indicating that the outlook for the European economy is improving rather than deteriorating.

*The oil price fallacy – growth is not bad news, but war in the Middle East is*

A very common fallacy is to cry wolf when oil prices are rising – particularly in the US. The worst version of this fallacy is claiming that Federal Reserve monetary easing will be undermined by rising oil prices.

This of course is complete rubbish. If the Fed is easing monetary policy it will increase aggregate demand/NGDP and likely also NGDP in a lot of other countries in the world that directly or indirectly is shadowing Fed policy. Hence, with global NGDP rising the demand for commodities is rising – the global AD curve is shifting to the right. That is good news for growth – not bad news.

Said another way when the AD curve is shifting to the right – we are moving along the AS curve rather than moving the AS curve. That should never be a concern from a growth perspective. However, if oil prices are rising not because of the Fed or the actions of other central banks – for example because of fears of war in the Middle East then we have to be concerned from a growth perspective. This kind of thing of course is what happened in 2011 where the two major supply shocks – the Japanese tsunami and the revolutions in Northern Africa – pushed up oil prices.

At the time the ECB of course committed a fallacy by reasoning from one price change – the rise in European HICP inflation. The ECB unfortunately concluded that monetary policy was too easy as HICP inflation increased. Had the ECB instead asked why inflation was increasing then we would likely have avoided the rate hikes – and hence the escalation of the euro crisis. The AD curve (which the ECB effectively controls) had not shifted to the right in the euro area. Instead it was the AS curve that had shifted to the left. The ECB’s failure to ask why prices were rising nearly caused the collapse of the euro.
**The money supply fallacy – the fallacy committed by traditional monetarists**

Traditional monetarists saw the money supply as the best and most reliable indicator of the development in prices (P) and nominal spending (PY). Market Monetarists do not disagree that there is a crucial link between money and prices/nominal spending. However, traditional monetarists tend(ed) to always see the quantity of money as being determined by the supply of money and often disregarded changes in the demand for money. That made perfectly good sense for example in the 1970s where the easy monetary policies were the main driver of the money supply in most industrialized countries, but that was not the case during the Great Moderation, where the money supply became “endogenous” due to a rule-based monetary policies or during the Great Recession where money demand spiked in particularly the US.

Hence, where traditional monetarists often fail – Allan Meltzer is probably the best example today – is that they forget to ask *why* the quantity of money is changing. Yes, the US money base exploded in 2008 – something that worried Meltzer a great deal – but so did the demand for base money. In fact the supply of base money failed to increase enough to counteract the explosion in demand for US money base, which effectively was a massive tightening of US monetary conditions.

So while Market Monetarists like myself certainly think money is extremely important we are skeptical about using the money supply as a singular indicator of the stance of monetary policy. Therefore, if we analyse money supply data we should constantly ask ourselves why the money supply is changing – is it really the supply of money increasing or is it the demand for money that is increasing? The best way to do that is to look at market data. If market expectations for inflation are going up, stock markets are rallying, the yield curve is steepening and global commodity prices are increasing then it is pretty reasonable to assume global monetary conditions are getting easier – whether or not the money supply is increasing or decreasing.

Finally I should say that my friends Bob Hetzel and David Laidler would object to this characterization of traditional monetarism. They would say that of course one should look at the balance between money demand and money supply to assess whether monetary conditions are easy or tight. And I would agree – traditional monetarists knew that very well, however, I would also argue that even Milton Friedman from time to time forgot it and became overly focused on money supply growth.
And finally I happily will admit committing that fallacy very often and I still remain committed to studying money supply data – after all being a Market Monetarist means that you still are 95% old-school traditional monetarist at least in my book.

PS maybe the root of all bad econometrics is the also forgetting to ask WHY prices change.
Monetary history – lessons for today

Denmark and Norway were the PIIGS of the Scandinavian Currency Union

As the euro crisis continues speculation of an eventual break-up of the euro also continues. There are numerous examples in monetary history of currency unions breaking up. One is the breakup of the Scandinavian Currency Union in 1924.

I have found an interesting paper on this important event in Scandinavian monetary history. In his 2004-paper “The Decline and Fall of the Scandinavian Currency Union 1914 – 1924: Events in the Aftermath of World War I” Krim Talia discusses the reason for the collapse of the Scandinavian Currency Union.

Here is the abstract:

In 1873, Denmark, Norway and Sweden formed the Scandinavian Currency Union (SCU) and adopted the gold standard. The Union worked fairly smoothly during the next thirty years and was partly extended until 1914. The outbreak of World War I triggered a series of events that eventually would lead to the formal cancellation of the union in 1924. The suspension of convertibility and the export prohibition on gold in 1914, opened exchange rate tensions within the union, and acted as a first nail in the SCU’s coffin. Although the countries de facto had their currencies valued at different rates externally, the treaty of 1873 made them tradable at par within the union. This conflict, between de facto situation and de jure regulation, opened arbitrage opportunities for the public; but also resulted in opportunistic behaviour in the relation between the Scandinavian Central Banks. This study of the break-up of the SCU finds that the gold standard functioned as a unifying straitjacket on monetary policy and was an important prerequisite for a monetary union without a common central bank. It also challenges earlier work on the break-up of the SCU, by suggesting that the most important factor behind the centrifugal tensions within the Currency Union was the improved Swedish balance of trade following the outbreak of Word War I. The fact that wartime trade performance differed between the three countries made the currency area face
an asymmetric external shock that required an exchange-rate adjustment – causing the fall of the union.

What is the implication for the euro zone? Well, I am not sure, but it might be interesting to have a closer look at the internal trade imbalance in the Scandinavian currency union and compare that to the imbalances that we have seen build in the euro zone during the boom-year prior to 2008. Both Denmark and Norway saw booms (and bubbles) during the first World War years and the early 1920s. In that sense Denmark and Norway looked like today’s PIIGS, while Sweden with it’s increasing trade surplus was the Germany of the Scandinavian currency union. In my previous post I described how insane monetary tightening in Norway and Denmark after 1924 lead to depression, while Sweden avoided depression.
“The Bacon Standard” (the PIG PEG) would have saved Denmark from the Great Depression

Even though I am a Danish economist I am certainly no expert on the Danish economy and I have certainly not spend much time blogging about the Danish economy and I have no plans to change that in the future. However, for some reason I today came to think about what would have been the impact on the Danish economy if the Danish krone had been pegged to the price of bacon rather than to gold at the onset of the Great Depression in 1929. Lets call it the Bacon Standard – or a the PIG PEG (thanks to Mikael Bonde Nielsen for that suggestion).

Today less than 10% of Danish export revenues comes from bacon export – back during in the 1920s it was much more sizable and agricultural products dominated export revenues and Denmark’s main trading partner was Great Britain. Since bacon prices and other agricultural product were highly correlated (and still are) the bacon price probably would have been a very good proxy for Danish export prices. Hence, a the PIG PEG would basically have been similar to Jeff Frankel’s Peg the Export Price (PEP) proposal (see my earlier posts on this idea here and here).

When the global crisis hit in 1929 it put significant downward pressure on global agricultural prices and in two years most agricultural prices had been halved. As a consequence of the massive drop in agricultural prices – including bacon prices – the crisis put a serious negative pressures on the Danish krone peg against gold. Denmark had relatively successfully reintroduced the gold standard in 1927, but when the crisis hit things changed dramatically.

Initially the Danish central bank (Danmarks Nationalbank) defended the gold standard and as a result the Danish economy was hit by a sharp monetary contraction. As I argued in my post on Russian monetary policy a negative shock to export prices is not a supply shock, but rather a negative demand shock under a fixed exchange rate regime – like the gold standard. Said in another way the Danish AD curve shifted sharply to the left.

The shock had serious consequences. Hence, Danish economic activity collapsed as most places in the world, unemployment spiked dramatically and strong deflationary pressures hit the economy.
Things got even worse when the British government in 1931 decided to give up the gold standard and eventually the Danish government decided to follow the lead from the British government and also give up the gold standard. However, unlike Sweden the Danish authorities felt very uncomfortable to go it’s own ways (like today...) and it was announced that the krone would be re-pegged against sterling. That strongly limited the expansionary impact of the decision to give up the gold standard. Therefore, it is certainly no coincidence that Swedish economy performed much better than the Danish economy during the 1930s.

The Danish economy, however, started to recovery in 1933. Two events spurred the recovery. First, FDR’s decision to give the gold standard helped the US economy to begin pulling out of the recovery and that helped global commodity prices which certainly helped Danish agricultural exports. Second, the so-called Kölsbergade Agreement – a political agreement named after the home address of then Prime Minister Thorvald Stauning in the street Kölsbergade in Copenhagen – lead to a devaluation of the Danish krone. Both events effectively were monetary easing.

What would the Bacon standard have done for the Danish economy?

While monetary easing eventually started to pull Denmark out of the Great Depression it didn’t happen before four year into the crisis and the recovery never became as impressive as the development in Sweden. Had Denmark instead had a Bacon Standard then things would likely have played out in a significantly more positive way. Hence, had the Danish krone been pegged to the price of bacon then it would have been “automatically” devalued already in 1929 and the gradual devaluation would have continued until 1933 after, which rising commodity prices (and bacon prices) gradually would have lead to a tightening of monetary conditions.

In my view had Denmark had the PIG PEG in 1929 the crisis would been much more short-lived and the economy would fast have recovered from the crisis. Unfortunately that was not the case and four years was wasted defending an insanely tight monetary policy.

Monetary disequilibrium leads to interventionism

The Danish authorities’ decision to maintain the gold standard and then to re-peg to sterling had significant economic and social consequences. As a consequence the public support for interventionist policies grew dramatically and effectively lay the foundation for what came to be
known as the danish “Welfare State”. Hence, the *Kanslergade Agreement* not only lead to a
devaluation of the krone, but also to a significant expansion of the role of government in the Danish
economy. In that sense the Kanslergade Agreement has parallels to FDR’s policies during the Great
Depression – monetary easing, but also more interventionist policies.

Hence, the Danish experience is an example of Milton Friedman’s *argument* that monetary
disequilibrium caused by a fixed exchange rate policy is likely to increase interventionist
tendencies.

Bon appetit - or as we say in Danish *velbekomme*...
Remember the mistakes of 1937? A lesson for today’s policy makers

Since the ECB introduced its 3-year LTRO on December 8 the signs that we are emerging from the crisis have grown stronger. This has been visible with stock prices rebounding strongly, long US bond yields have started to inch up and commodity prices have increased. This is all signs of easier monetary conditions globally.

We are now a couple of months into the market recovery and especially the recovery in commodity prices should soon be visible in US and European headline inflation and will likely soon begin to enter into the communication of central bankers around the world. This has reminded me of the “recession in the depression” in 1937. After FDR gave up the gold standard in 1933 the global economy started to recover and by 1937 US industrial production had basically returned to the 1929-level. The easing of global monetary conditions and the following recovery had spurred global commodity prices and by 1937 policy makers in the US started to worry about inflationary pressures.

However, in the second half of 1936 US economic activity and the US stock market went into a free fall and inflationary concerns soon disappeared.

There are a number of competing theories about what triggered the 1937 recession. I will especially like to highlight three monetary explanations:

1) Milton Friedman and Anna Schwartz in their famous Monetary History highlighted the fact that the Federal Reserve’s decision to increase reserve requirements starting in July 1936 was what caused the recession of 1937.

2) Douglas Irwin has – in an excellent working paper from last year – claimed that it was not the Fed, but rather the US Treasury that caused the recession as the Treasury moved aggressively to sterilize gold inflows into the US and thereby caused the US money supply to drop.

3) While 1) and 2) regard direct monetary actions the third explanation regards the change in the communication of US policy makers. Hence, Gauti B. Eggertsson and Benjamin Pugsley in an extremely interesting paper from 2006 argue that it was the communication about monetary and
exchange rate policy that caused the recession of 1937. As Scott Sumner argues monetary policy works with long and variables leads. Eggertson and Pugsley argue exactly the same.

In my view all three explanations clearly are valid. However, I would probably question Friedman’s and Schwartz’s explanation on its own as being enough to explain the recession of 1937. I have three reasons to be slightly skeptical about the Friedman-Schwartz explanation. First, if indeed the tightening of reserve requirements caused the recession then it is somewhat odd that the market reaction to the announcement of the tightening of reserve requirements was so slow to impact the stock markets and the commodity prices. In fact the announcement of the increase in reserve requirements in July 1936 did not have any visible impact on stock prices when they were introduced. Second, it is also notable that there seems to have been little reference to the increased reserve requirement in the US financial media when the collapse started in the second half of 1937 – a year after the initial increase in reserve requirements. Third, Calomiris, Mason and Wheelock in paper from 2011 have demonstrated that banks already where holding large excess reserves and the increase in reserve requirements really was not very binding for many banks. That said, even if the increase in reserve requirement might not have been all that binding it nonetheless sent a clear signal about the Fed’s inflation worries and therefore probably was not irrelevant. More on that below.

Doug Irwin’s explanation that it was actually the US Treasury that caused the trouble through gold sterilization rather than the Fed through higher reserve requirements in my view has a lot of merit and I strongly recommend to everybody to read Doug’s paper on Gold Sterilization and the Recession 1937-38 in which he presents quite strong evidence that the gold sterilization caused the US money supply to drop sharply in 1937. That being said, that explanation does not fit perfectly well with the price action in the stock market and commodity prices either.

Hence, I believe we need to take into account the combined actions of the of the US Treasury (including comments from President Roosevelt) and the Federal Reserve caused a marked shift in expectations in a strongly deflationary direction. In their 2006 paper Eggertsson and Pugsley “The Mistake of 1937: A General Equilibrium Analysis” make this point forcefully (even though I have some reservations about their discussion of the monetary transmission mechanism). In my view it is very clear that both the Roosevelt administration and the Fed were quite worried about the
inflationary risks and as a consequence increasing signaled that more monetary tightening would be forthcoming.

In that sense the 1937 recession is a depressing reminder of the strength of the of the Chuck Norris effect – here in the reserve form. The fact that investors, consumers etc were led to believe that monetary conditions would be tightened caused an increase in money demand and led to an passive tightening of monetary conditions in the second half of 1937 – and things obviously were not made better by the Fed and US Treasury actually then also actively tightened monetary conditions.

The risk of repeating the mistakes of 1937 – we did that in 2011! Will we do it again in 2012 or 2013?

So why is all this important? Because we risk repeating the mistakes of 1937. In 1937 US policy makers reacted to rising commodity prices and inflation fears by tightening monetary policy and even more important created uncertainty about the outlook for monetary policy. At the time the Federal Reserve failed to clearly state what nominal policy rule it wanted to implemented and as a result caused a spike in money demand.

So where are we today? Well, we might be on the way out of the crisis after the Federal Reserve and particularly the ECB finally came to acknowledged that a easing of monetary conditions was needed. However, we are already hearing voices arguing that rising commodity prices are posing an inflationary risk so monetary policy needs to be tighten and as neither the Fed nor the ECB has a very clearly defined nominal target we are doomed to see continued uncertainty about when and if the ECB and the Fed will tighten monetary policy. In fact this is exactly what happened in 2011. As the Fed’s QE2 pushed up commodity prices and the ECB moved to prematurely tighten monetary policy. To make matters worse extremely unclear signals about monetary policy from European central bankers caused market participants fear that the ECB was scaling back monetary easing.

Therefore we can only hope that this time around policy makers will have learned the lesson from 1937 and not prematurely tighten monetary policy and even more important we can only hope that central banks will become much more clear regarding their nominal targets. Any market monetarist will of course tell you that central bankers should not fear overdoing their monetary
easing if they clearly define their nominal targets (preferably a NGDP level target) – that would ensure that monetary policy is not tightened prematurely and a well-timed exist from monetary easing is ensured.

PS I have an (very unclear!) idea that the so-called *Tripartite Agreement* from September 1936 by the US, Great Britain and France to stabilize their nations’ currencies both at home and in the international FX markets might have played a role in causing a change in expectations as it basically told market participants that the days of “currency war” and competitive devaluations had come to an end. Might this have been seen as a signal to market participants that central banks would *not* compete to increase the money supply? This is just a hypothesis and I have done absolutely no work on it, but maybe some young scholar would like to pick you this idea?