Modern Money Network, The "Money Series" 2012-2013

6. INDEPENDENCE OR MARRIAGE? INTERACTIONS BETWEEN MONETARY AND FISCAL POLICY

Moderator: Thank you everybody who has taken the time to come out in the snow as well as the people who are watching online I appreciate you making an effort on a Friday night particularly in this weather. For people who are on the East coast and without further ado, I will welcome _______, Dean Baker, and Professor Tim ______ to talk. We unfortunately were not able to get ______here with the weather. He is indisposed up in Canada but hopefully we will get him for another seminar in the future and Tim is over in California but we have managed to get him on the live stream so hopefully that will stay alive for the rest of the evening. So I will head it over to the speakers and thanks a lot.

Tim: Okay, thank you (inaudible) I am very happy to be here and I wish I could be there in person but I'm very glad to be there over the web. (inaudible) spending and lending by federal government (inaudible) fiscal policy, so appropriations made by _______ actually spends (inaudible)fiscal policy towards taxation and (inaudible) as we have heard in recent weeks in relation to the debt ceiling crisis. (Inaudible) policy (inaudible) towards the Fed as programs (inaudible). (Inaudible 2:28-2:57) monetary and fiscal policies of the 1930s and 1940s (inaudible 2:59-3:40) Having low interest rates encourage investing and borrowing and private economic activity. So I think that is probably a good description of conventional wisdom that we need to be hiking our belts as far as federal spending goes, closing those budget deficits or reducing budget deficits and I think in time the Fed ______powers to be accommodating as much as possible. Now this type of an approach I think is very reminiscent of the years immediately after the 1929 stock market crash where deficits started to rise across the board for all levels of government. State, local and federal governments were sustaining larger deficits than we ever had before. ________these kinds of deficits as hatchet deficits that those kinds of deficits ______the economy with a lot of resources that are not working. A lot of unemployed people, a lot of businesses that are going under, and those are you can take taxpayers who have been laid off and are not able to pay their taxes. You see tax receipts go down for all levels of government. Immediately following the 1929 stock market crash the ______prior to the past four years in the United States where tax revenues fell off of the cliff and had been pretty stagnant just to get it to come back slowly after recovery. Monetary policy in the early 1930s, I'm talking about the immediate response to the 1929 crash, it took the Fed a while but by the time Roosevelt took office the Federal Reserve was certainly engaging in the same kinds of quantitative _________we see today that is _______push interest rates down and to push reserves into the banking system. ______we thought up a public bank _______resolving from the Reconstruction Finance Corporation ________in 1932 when it was (inaudible 6:10) Pretty dramatically we revert to try to prop up banks and insurance companies and railroad companies. At the time Roosevelt was campaigning against Hoover when he was running for President in 1932. Roosevelt _______approach of propping up banks, having a central bank or the Reconstruction Finance Corporation purchase financial assets by the liquefying of banks to ________. We proposed that the banks would be lending to Main Street and it was a trickle down type of recovery. Roosevelt felt what was needed was a bottom up recovery. He then starts to develop shortly after Roosevelt takes office, Reconstruction Finance Corporations no longer limited to just propping up large financial institutions instead the reconstruction finance corporation ends up financing an awful lot of types of activities that would have been considered heresy up until that time, so the Reconstruction Finance Corporation makes loans directly to state and local governments and supports local school teacher salaries during the Great Depression. It finances an awful lot of new deal public works programs helping to put millions of people back to work and after the 1930s when you start getting into the 1940s, the Reconstruction Finance Corporation through its loans and grants starts to finance the creation of enormous factories, defense plants _____WWII so over about a 25-year period in which the Reconstruction Finance Corporation existed that entity made between 40-50 billion dollars in investments in the form of either grants or loans. So it was a very active use of fiscal policy you could say and that certainly is what marked the 1940s less so in the 1930s. In the 1940s of course. Let me back up and just say that it is very common these days to hear federal government is spending way too much and borrowing way too much and that it has never spent or borrowed more than it has today and that is just nonsense. In the 1940s federal spending was almost as twice as high as it is today in terms of percentage of gross domestic product and federal borrowing was three times higher than it was today and the impact of all of that of course is much of it was wartime spending during the first half of the1940s and it was reconstruction, Marshal Plan, and GI Bill in the second half of the 1940s and into the 1950s and of course the result of that was a booming economy with genuine full employment for perhaps the one and only time in American history by the end of World War II. Laying the foundations for a sustainable recovery, a mass production mass consumption economy. Those were what you could say what ______would refer to as active deficits where the federal government is helping to put resources to work, restoring the tax base and as the tax base gets restored and has sustainable economic takeoff you see the federal deficits starts to come down over the 1950s and 1960s. Economic growth allows for a much broader based tax base and the paying down of the deficit. So the 1940s really is the end of the deleveraging period. The end of stagnant tax receipts and the economy is right-side up for the first time in a generation. Now that is very different from what we are seeing today where again there are no massive public works programs like we saw in the 1930s and 1940s. In the 1930s of course the whole range of New Deal programs that are putting people to work you could say public option in the jobs market which is being financed by public option and banking. It is being financed by treasury spending, by Reconstruction Finance Corporation spending, and incidentally even by the Federal Reserve the central bank itself which is lending through its Section 13.3 powers rather aggressively during the 1930s and into the 1940s under _______who is the chairman at the time. We see really the polar opposite in today's economy where we don't have any serious public jobs program. Time and again President Obama and his former chief economist Austin Goolsby were quoted as saying that of course the public sector cannot create any jobs which is again is just nonsense. The public sector did just that in the 1930s and in the 1940s and even after the war and after the reconstruction period. You see major federal spending in not just defense but also interstate highways and space program which leads to all kinds of technological spinoffs and it crowds in private investment. It does not crowd it out. It crowds it in. So the approach that we are seeing in the past 4 years really of very tepid recovery is the polar opposite of the 1940s. We see a constrained fiscal policy. The rather significant rise in federal deficits in the past few years again the passive deficit is from tax paying resources being idle and also the legacy of the Bush tax cuts of course.

Meanwhile, the Federal Reserve is spending like a drunken sailor you could say with these QE programs. There has been a bit of talk just in today's Wall Street Journal. Another Fed governor is questioning these QE programs and worrying out loud that _____Federal Reserve spending buying financial assets could be creating a bubble in mortgage backed securities. Others have said even beyond mortgage backed securities it could be a bubble developing in treasuries. If in fact this is what ends up occurring like these are unsustainable rise in asset crises, one of the main reasons that makes it unsustainable or a bubble is that there is nothing being built underneath the rising asset crisis. There are still estimates of 10-20 million people in this country who are either officially unemployed or dropping out of the labor market and not really reported discouraged workers, part-time workers who want full-time jobs and cannot find those jobs. With that kind of slack in the economy, the Fed spending of financial markets does start looking like perhaps it could be the beginning of a bubble. I think this opens up the discussion to talking about how we can have a different mix between monetary and fiscal policy at this time.

Of course I have already indicated that the idea of public jobs programs on a major scale would do a lot to not just restore the middle class and help lower income folks but crowd in private investment, help ______spirits and confidence in the economy. Aside from that, reorientation of fiscal policy towards public jobs programs it does beg the question of what the central bank could be doing or should be doing differently at this point. What is not being discussed by Fed governors at least in any public way whereby members of the Federal open market community in a public way is the idea of the Fed going beyond these QE programs, beyond purchasing financial assets from banks and hedge funds and instead exercising its 13.3 powers to be lending directly to mainstream. There have been a number of commentators who have talked about what that kind of a QE program for Main Street might look like and I think William Drider _________is probably one of the most effective and persistent in this regard. So one can imagine a QE program where the Fed pumps money into state infrastructure banks to start allowing states to move ahead with infrastructure programs and employ hundreds of thousands of construction workers who have been idled by the slowdown through the housing bust. The

Fed could in addition, _________ talks about the Fed exercising its 13.3 powers by purchasing mortgages and mortgage backed securities from Fannie and Freddie that conform to certain specifications and those specifications would be modifications of returns of mortgage loans as one strategy to crack down on the foreclosures and defaults. The Fed could be lending directly to state and local governments. Now that kind of a program would require an amendment to the Federal Reserve Act. The other option I have already mentioned for instance the Fed pumping billions of dollars into state infrastructure banks would my understanding would not require any amendments to the Federal Reserve Act whatsoever. A few years ago Robert Shiller at Yale University modeled out that it would cost the federal government about 30 billion dollars per year to employ the million citizens in the civilian conservation corp. Thirty million dollars is really a drop in the bucket when you look at the metrics of the Fed's QE programs. QE 1 was Fed purchasing over a trillion dollars in mortgage-backed securities. QE2 was more than half a trillion dollars in treasuries and QE3 the Fed is purchasing 85 billion dollars each and every month for a combination of mortgage-backed securities and treasuries. So for a small fraction of that kind of debt spending if it was directed properly towards Main Street interest you could actually start putting millions of people back to work rebuilding the infrastructure and restoring the tax base which is most important as people start going back to work and there is much better business climate, those tax-paying resources are going to result in higher tax receipts for not just the federal government but local governments and that should have an effect of virtuous cycle so to speak of enabling governments on all levels to spend more themselves on essential public needs.

The latest news this week of what is happening with the Post Office really kind of highlights how backwards our whole orientation is at this point. The Postal Service I think is the largest employer in the country right now, the largest public employer. I think Wal-Mart is the largest private employer and of course the news was that the Post Office is going to cut back from Saturday deliver to no Saturday delivery that is to try to save money and of course it will result in no doubt a lot of write-offs. Again laying off a lot of the tax payers. It does not make sense at this point when there are already millions of idle people who are ready and willing to work to be moving more in that direction. Of course a lot of the Post Office's problems are the result of requirements that Congress has imposed on the postal system that it has not imposed on any other public or private corporation and needs specifically a requirement that the Post Office prefund its pension obligations of 75 years in advance. Really the only way to look at this type of unfair asymmetrical obligation imposed on the Post Office is this is a result of robbing from the Post Office's competitors, companies like Federal Express and United Parcel. Those companies can contribute to congressional campaigns and lobby but the Post Office can't. That certainly highlights you can say some of the political structural difficulties that we have.

We could talk about what the ideal mixture of fiscal and monetary policy is but in the real world we've got political forces allowing interest groups and factions, you are going to get a lot of push back that prevents movement in the most sensible direction on monetary and fiscal policy. Back to the Federal Reserve where you have some governors questioning the wisdom of QE1, QE2, and QE3 but you don't get, I have not seen federal reserve governors or federal reserve bank presidents publically at least talk about the importance or the possibility of the Fed exercising its 13.3 powers to lend directly to Main Street. That makes a lot of sense of course when you look at the structure of the Federal Reserve. The Federal Reserve both at the level of the open market committee and also even the board governor's level is really dominated by financial and banking interests and not Main Street interests. That opens up discussion of course of the constitutional foundations the very shaky constitutional foundations of the Fed. I don't know if we are going to have the time to discuss that in today's seminar but it is an important discussion that ________barely scratched the surface of. Dodd Frank Act tried to start reforming the way the 12 regional Federal Reserve Bank governors are selected by diluting the influence of the private banking community. What I am referring to specifically are the Class A directors of regional federal reserve banks no longer get to vote on the selection of a regional Federal Reserve Bank President but of course they do get to select the Class B directors who are supposed to represent the public interest but that is really quite a joke because they are selected by the private banking community. So where am I going with this? Essentially what I am suggesting is the captured agency nature of the Federal Reserve, the way it is dominated by private banking interests as obscuring the discussion. It changes the whole narrative of what the Fed is capable of and what the Fed should be pursuing at a time like this. A time like this of course is a time of massive unemployment. We are not in a recession technically at this point although we all saw the latest GDP numbers which showed a contraction in the fourth quarter of 2012 but this does resemble a lot the last decade of Japan, the last two decades of economic growth in Japan. It resembles a lot the 1930s, a period where there was economic growth but there is massive unemployment. There is continued deleveraging of the private sector of consumers of households. In that type of an environment we really should be having a conversation of a much more active fiscal policy in terms of public banking institutions like a modern day Reconstruction Finance Corporation, a federal infrastructure bank essentially to start putting tax-paying resources to work to rebuilding our infrastructure but it also would suggest the need for a more active monetary policy. Some would say how can you make it more active than it is today with the Fed buying trillions of dollars in financial assets? I have already indicated one strategy to make it not just more active but more effect with the Fed directing its resources not just to Wall Street but to Main Street. The problem is that this is somewhat orthodox. It is so heterodox that you are not going to get this type of an orientation coming directly at the Federal Reserve that is a captured agency but I do think that this is where the conversation needs to be going that the QE programs are very much trickle down monetary policy much like Roosevelt criticized Hoover in the early 1930s which needed his bottom-up recovery. We need to get away from this bias against an act of fiscal policy at the federal level. We need to get away from this bias that the public sector cannot create jobs and we have to start talking about this reorientation of monetary and fiscal policy towards the bottom up recovery to Main Street and to reform institutions like the Fed so that they are more responsive, more accountable, and more representative of the wide range of interests in society. So with that I give it back (inaudible).

Moderator: Okay, thanks Tim. Let me throw a few questions at you which I am not going to ask you to answer now but I just wanted you to think about them and I will let Scott talk and then we will go back and forth on this. The three questions I want to pose: First off you obviously don't think that the Fed is the most effective tool here, at least not its current key policies. So let me just pose, do you think it is effective at all? So in other words, have we benefited by virtue of the whatever up to now 2.5 to 3 trillion in key… I would just make the point that I see a lot of mortgagery financing and also in a world which differs from the 1930s where you have corporations that probably have about 60% of the US economy, account for 60% of the US output that could borrow direct lend capital markets. It would seem to me this benefits them. So that is one question.

Second one, I've heard people say this with the bubble in bonds is a common thing now among some of the Washington types. I don't know what that means. What would be the consequence?

I mean, I talked about the bubble in the stock market and housing. I can think very clearly of what the consequence. Of course we have seen what the consequences of those bursting. I'm not sure what it means of people's bond prices go down. So what? I'm not really sure what that means.

Third point, you'd raised the issue of corruption which of course is well taken but people's concerns about corruption and corruption of the political system _____come up front and center in any large scale federal lending program that went to state and local governments and possibly to private businesses if they are lending directly. Would that be front and center?

Last point, you raised about the Post Office. I just wanted to emphasize this for people who don't know. I mean it is even worse than you had suggested with the prefunding because one of the issues here is the Post Office is required exclusively to hold US government bonds. So what that means is that when they are prefunding a pension they are assuming a 3% real rate of return as opposed to what private pensions could assume somewhere in the order of 5-6% real rate of return. So you actually do of course have UPS which does still have a defined benefit pension and in so far that they prefund obviously they are not prefunding for 75 years but they could assume a much higher rate of return and they actually do get that of course because they do invest in equities, so this is another huge, huge handicap and asymmetry. If we are just going to say we want the Post Office to compete, we certainly are not putting them on a level playing field. So I will let you come back to those along with responding to Scott's comments.

Tim: I'll try to address the questions and comments in order. Has the Fed been effective at all? I would say yes. I don't think it would have been very viable for the Fed to do nothing at the end of 2008 from the beginning of 2009. While my view that the ______have not been sufficient, it is better than nothing. When you look back to early 2008 when the Fed stepped in to ____Bear Stearns by JP Morgan there was an interesting comment made in the Wall Street Journal by former Fed Chairman Paul _____ who said that the Fed was going beyond its traditional… traditionally the Fed would just intervene in the markets by buying or selling treasuries to affect interest rates but here it was favoring a particular sector of the market and I should say he mentioned this not in just in the context of Bear Stearns but in the context of the Fed beginning to lend against bad collateral of sorts; to lend against the collateral of mortgage-backed securities and he said at the time that this should raise questions about the Fed's independence because it seemed to be favoring a sector of the market, its own banking constituents. Of course the Fed through that warning sign by ______ and instead of just lending against mortgage-backed securities and starts purchasing the mortgage-backed securities.

I'm not endorsing the scale of the what the Fed did but certainly there has been some benefit to the banks. It has gotten the banks in a stronger position. We are not seeing the kind of mass insolvencies that we were looking at during the very end of 2008, so in answering your question I think the QEs are better than nothing which is not sufficient. The Fed might be creating a bubble in the bond….I think the real danger would be a bubble in the mortgage-backed security market again. Say the feds who unwind its position in mortgage-backed securities or treasuries for that matter not any time in the foreseeable future. If the Fed were to actually start selling its holdings of mortgage-backed securities I imagine that could have a very damaging effect on that market and it would start looking like an inflating bubble pretty quickly. I am one who does not think that there is all that much to be concerned about; a decline in the bond markets or the value of the dollar. I think the Fed has the capability to continue to support those markets and in this day and age I think the dollar nudges the reserve currency of the world, the transactional currency to safe haven. If the dollar ever collapses and the US bond market collapses at that point all bets are off but I don't see that as the next bubble. I think the next bubble would perhaps be mortgage-backed securities.

Corruption in the political system. It is a very astute comment to relate it to the possibility of the Fed engaging in a lending program for Main Street. I think there are lessons to be made _____the 1930s and 1940s when the Fed last really exercised its 13.3 powers aggressively to lend to Main Street. The Federal Reserve created ______and it was those members of those industrial loan committees that were really responsible for reviewing the application of both private and public sectors to decide whether the Fed should be making these kinds of loans. Certainly some kind of system would have to be put into place as lending to Main Street was not just rife with favoritism.

Finally your point about the Post Office is a very good point as well. I just focused on the prefunding obligations but it is a very good point that they are locked into US bonds and not higher returns elsewhere.

Moderator: Okay thanks Tim, now you ready to go Steve?

Steve: So I don't know if Tim can hear me but I thought his presentation was fantastic and there are a number of things I am going to say that are along the same lines as some of the points he made. So as you can see my presentation is called "Five Bucker Stocks For Macroeconomic Policy". The point here is to look a bit differently at the macroeconomic policy mix from the perspective obviously of what I am going to call buffer stocks. Some of these are generally known but I think again it is a bit different than the traditional view we have of looking at fiscal policy and monetary policy and the relative domains. Disclaimer right off the bat, I am not talking about the entire scope of macroeconomic policy for sure and there are more buffer stocks we can talk about than this so, I'm just kind of hitting a few parts of it I think are important.

Okay, for starters what is a buffer stock? In financial markets in particular we have buffer stocks all over the place because we have dealer markets where dealers hold a bit of an inventory of whatever it is; perhaps it is treasuries as in primary dealers and they set a price they are going to sell that and they allow the quantity to fluctuate. In case of dealers they will move the price up and down based on how their inventory is moving. The way I am using buffer stock here is a situation where there is a price set. In most cases there is a price being set and the quantity is being allowed to float, fluctuate. That's the basic point I am raising here.

So our first buffer stock- currency. So prior to early in the 20th century we would have frequent financial disruptions in our system and they would carry over into larger crises in part because of the scarcity of currency that people would go to the bank to pull out the currency and eventually banks would not have the currency to give them and so what we would see is the banks get together in their private clearinghouses and offer clearinghouse certificates that people could then use after the crisis to come and get their money out of the bank and then they would end up….the certificates would end up circulating a bit as money but it generally would not clear at par. This would tend to put a floor into the crisis but it did not stop the crisis from happening in the first place. So when we get to Federal Reserve one of the things the Fed is charged with right off the bat is providing an elastic supply of currency, basically allowing the quantity of currency to float based on the needs of the economy…of the private sector. So they set a price; the price is par value so if you take your currency to a bank you can have deposits for 1.00 of currency for 1.00 of deposits and vice versa. A bank that wants to get rid of some its vault cash, it has too much can sell that to the Fed and get reserve balances one dollar for one dollar and vice versa. If they want currency they can buy that with reserve balances one dollar for one dollar.

So this works so well that we don't even think about it. That the currency growth fluctuates considerably; it generally trends upward but there are points in time where it goes up considerably. And again it is working so well that we don't even think about the significance of it. You can see their Y2K period the growth was over 30% and then after Y2K calmed down the currency growth went negative for a considerable time where it has people who were getting rid of the currency as the scare sort of went away. Currency growth has a seasonal fluctuation. It has an annual fluctuation. It has a monthly fluctuation and again this process goes off without a hitch. So one of the problems we have that because it works so well we forget about how it actually works that it is a buffer stock. We have a number of economists that think currency could be a hot potato in our economy…we could have a hot potato effect; that we could end up having too much currency and we would get the economy over stimulated and the excess money balance story and so forth.

So in fact if we did have too much currency and that is sort of signified by the guy down there on the right holding a hot potato, we would go to the bank and we would get deposits dollar for dollar. The bank would if it decided it had too much currency it would go to the Fed and take its currency back and get reserve balances. If we had too many reserve balances that is going to be my next buffer stock so that the federal funds rate falls, the Fed would buy back the reserves by selling the treasury. So the hot potato effect stops rather quickly. There is no hot potato effect in currency. It is a buffer stock.

Okay. So the first two are things that are already working fairly well but we often don't understand them. Second one is settlement balances. So in our economy when people send payments to each other frequently the bank for the sender and the bank for the one receiving payment settle the transaction through their reserve accounts at the Federal Reserve. This is a process that as I will show in the next slide is very significant in dollar terms so you look at just payments being settled by Fed wire which is the Fed's main settlement service using these reserve balances. In 2011 it averaged 2.6 trillion dollars per day, so if you look at annual GDP in the US being about 15 trillion in about 6 business days you have enough payments being settled in dollar value for a year's worth of GDP. So again the Fed was charged one of the main things it was charged with is making sure that the payment system operates smoothly because you can see there if you have about 17% of GDP being settled each day with settlement balances, you have to make sure that process works smoothly. A lot of those payments that are being settled with that 2.6 trillion or make up that 2.6 trillion are the netted values of an even larger amount of dollar value of payments that were cleared on private clearinghouses.

So one of my favorite speeches by Fed President here Jeffery Lacquer of the Federal Reserve Bank of Richmond back in 2006, he writes there in yellow, "If the fundamental core of central banking consists of interbank deposit services then the fundamental core of central bank policy consist of all the terms and conditions under which those deposit services are offered." So that is interesting, the fundamental core of central banking is managing the interbank payment system, right? So they have to protect the payment system because it is crucial to the day-to-day functioning of the economy. So then he goes in and starts talking about the pricing terms because it has to be a buffer stock. You have to have a quantity of settlement balances as a buffer stock for this system to function.

Okay, so one of the things the Fed does is they allow banks to take overdrafts basically loans within the day and this has changed a bit in the last few years as the quantity reserve balances have increased significantly as we were talking about with Tim but you can see there by 2008 there was a point in the day where on average the Fed would be offering about 180 billion dollars in credit to banks and the banks would generally settle this debt by the end of the day. The Fed tries to tell the banks to get all of this off its balance sheet by the end of the day. We will talk about that in a second. Every minute of the day on average the Fed is providing about 70 billion dollars in overdrafts to banks. So what we have here is a situation where banks have a certain about of payments to settle so they have a very what we call inelastic demand for these reserve balances at the quantity they need to sell them. Now again the Fed tells the banks to get all of this off its balance sheet so what you see is the quantity of reserve balances that banks want to hold by the end of the day overnight which is largely a measure of their uncertainty of being able to settle their overdrafts with the Fed.

It would have a fairly stable over time although it fluctuates from day to day. It is a fairly stable quantity somewhere in the neighborhood of 15 billion dollars to 20 billion dollars and the Fed came to understand that if they didn't get the quantity out there that banks wanted on that day, there could be significant fluctuations in the federal funds rate and that would carry over into money markets and so forth. So here's a nice example to the September 11, 2001 attacks. You can see there September 10th, September 11th banks are holding about 13 billion dollars and then as the attacks hit sort of the core of the payment system you can see that overnight banks now wanted all of the sudden 44, 104, 121 billion dollars and then after a few days it tapered off. So we have a system where is a buffer stock where the Fed says here's the price if you want to borrow and then make sure it puts them enough out there for overnight purposes as well at the price it is setting namely the federal funds rate target. Again it allows the quantity to fluctuate so you can have an increase from 13 to 131 billion dollars very quickly. In fact, the increase we had after the Lehman Brother's failure was from about 13, 15, 20, to 800 billion within a little bit of time, so.

Okay, so a lot of central banks do it this way and the Fed does it this way now too where in fact it is easier to hit the target if you have again a rate that they will pay interest and a rate that they will charge interest and they just try to hit in between those two. Okay the Fed was not doing that up until about 2008. They have done that since so it is a little quirky the way they do things now. But at any rate you see a number of central banks around the world running a system like this. If you add reserve requirements you don't change anything except you flatten that demand curve at the quantity the banks are willing to hold because now banks are willing to how do I say this, now banks have about 2 weeks to meet their reserve requirement so on any given day they are not as concerned about how much they are holding if they are not holding the exact right amount because they can offset that at a later date. Although by the end of the two week maintenance period where they have to meet their reserve requirements this quantity again that flat region shrinks to virtually zero again. So there is not much difference. It was pretty well recognized that the point of reserve requirements in the system was to make it easier for the Fed to hit the target. It is much easier to hit a flat demand curve than it is to hit a vertical demand curve.

Okay, so here we have a couple of New York Fed economists that did an interesting paper a few years back. They say the costs of reserves both intraday and overnight are policy variables consequently a market for reserves does not serve the traditional role of information aggregation and price discovery. It is a buffer stock and they are setting a price. So implications settlement balances, settle payments. We have this story in our economics 101 textbook where reserve balances finance lending. Well it does not finance lending. Loans create deposits and then banks settle payments with the reserve balances but the Fed sets the price of those reserve balances unless the quantity float so you can't have a money multiplier model because you have in the real world a buffer stock, a reserve balance that is being supplied at the target rate. So since currency is also a buffer our buffer stock number one. Central bank generally cannot control the monetary base because both cannot directly control the monetary base. If you are going to have the money multiplier work it is going to have to be indirectly where the Fed sets an interest rate and that affects banks' lending and thus their demand for reserve balances. So again I mentioned what had happened after Lehman Brothers so the quantity as I said moved up to 800 billion rather quickly there because the Fed took a lot of the money markets onto its balance sheet and so the quantity increased because there wasn't any way for it to drain that much. It did not have enough assets on its balance sheet to be selling to drain those. Then we can see the various rounds of quantitative easing pushed us up to 1.6 trillion, it might be larger than that now.

So what does the Fed do there? Well again if it is a buffer stock, if you put out too much for the system beyond the demand curve then what you do is either go to zero or you hit the bottom rate you set. In this case the remuneration rate or the rate the Fed will pay in reserve balances. There are some quirks in the way the Fed does this that make the rate actually go a little bit below this but the Fed has set this rate at 0.25. It is equal to its target rate now and so you have a quantitative reserve balance that is now that is weighed out somewhere around RBA. Actually it would be somewhere in the other room over there if I was going to draw this to scale.

Okay, so implications. So direct control over _____balances is possible only with interest on reserves at the target rate or zero percent target rate. In that case you still have to supply more than banks need for settling payments. So excess balances without interest on reserve is not operationally possible which is interesting because what we hear from neoclassical economists is that interest on reserves stops the excess balance story but if you pay interest on reserves then the reserves become perfect substitutes for treasury bills and so forth. So money and bills become perfect substitutes so you don't have the excess money balance story of the _______where you get hyperinflation but if you understand operationally how the buffer stock works you understand you cannot have excess money balances without interest on reserves in the first place.

Okay number three, treasuries. So the quantity of treasuries is not currently a buffer stock. The quantity of treasuries prior to 2008 it was basically the national debt minus currency in circulation because when banks would buy currency and then provide that to the customers they would pay for that with reserve balances and then the Fed would add the reserve balances back by buying the treasury because ______balances needed to be in there to hit the appropriate buffer stock number two and then reserve requirements as well which caused a drain in the Fed to buy treasuries up to ensure there were enough reserve balances for banks to meet their reserve requirements. So again prior to 2008 this was not a buffer stock. It is still not a buffer stock because in fact what the Fed has been doing is buying up more and more of these from quantitative easing. So in our financial system treasuries play a key role as collateral. They enable a lot of lending to occur and a lot of financing to occur and so forth. I don't think I did this but if there are not enough treasuries available as collateral you start to have some problems occurring in the money markets which are often called settlement fails and so often they congregate around financial crises but they don't have to. I did not put the data up here for 2008 but it was over 500 billion a few times during that period. So that makes it difficult for you to have business as usual in the money markets. So this paper was by a couple of federal reserve

New York economists that were looking into the treasury which was itself looking into becoming "a lender of last resort for treasury securities" to make sure there was enough collateral out there which would essentially mean that the treasury would be borrowing at a short-term interest rate and just like in a repurchasing agreement market.

Another one my friend Warren Mosler suggested a number of years ago that there were again some problems with counterparty risk and so forth in the financial system that could be fixed if you had a buffer stock basically of treasury collateral out there in the system. The other thing is that switching tears a bit because we have the deposit insurance limits and because we don't have a buffer stock of treasuries one of the things people would do was put their money into money market mutual funds. They are short-term investments. We also know that this was one of the key things financing the rise in shadow banking system. Some of the issues with the rise in the shadow banking system and I'm not going to suggest all of them by any means might have been avoided if there had been a buffer stock of treasuries.

Here's an alternative approach. First off and this one looks pretty messy but bear with me. On the right-hand side we have basically the public and we also have dealers and so on the top there we have the public basically being about to on demand buy treasuries. Now they can do this to some degree already through treasury direct and so forth but it is not done at the scale that we are talking about here. Then we could on the bottom there have the buffer stock of collateral as well the dealers then could get their hands on by basically lending at low rates to the treasury. So you could have that and then if there were additional needs for the treasury to issue debt because it is running a deficit that is still larger than the quantity that is being purchased in the buffer stock then they could issue 3-month T-bills if we don't want to give the treasury overdrafts which politically that is a tough one. If we give the treasury overdrafts you would just have what was left of the deficit causing excess balances. I will talk about the implications here in a second. The result would be unlimited risk-free investments at desired maturities including overnight for the public and unlimited risk-free collateral at desired maturities at a small penalty rate compared to the market rate.

Implications, so we would have a true buffer stock of risk-free securities that was consistent with the needs of the private sector but here's one of the really significant points. It would be obvious that the interest rate on the national debt is a policy variable. We hear all the time about the bond vigilantes the US can become _____etc. Some people are starting to figure out that that cannot happen. I've been writing about that for about 10 years explaining why that could not happen but it would be obvious now that interest rate on the national debt is a policy variable because providing a buffer stock of treasuries you would simply set the price and allow the quantity to flow once again. Separates Feds operations for payments from the buffer of securities whereas right now they are interlinked and that is one of the reasons why we don't have a buffer stock of treasuries.

Okay number four, net financial assets. So Tim talked about this a bit. The current mainstream view is for monetary policy to manage the economy through the interest rate. We are apparently told that the interest rate, the federal funds rate, basically the short-term interest rate can control everything and expectations. Fiscal policy gets out of the way balances its budget at least over the longer run balances its budget. So some of us like to take a bit different perspective on what fiscal policy should be doing and what we do is we talk about how financial flows in the economy are closed system. That one person's deficit is somebody else's surplus necessarily. So if the government is running a deficit we think of that as bad but we forget to recognize that somebody else has a surplus. Particularly in a time like this as Tim said when you've got a private sector that is attempting to deleverage. So we have to recognize that the balances of these sectors because it is a closed system have to sum to zero. If I rearrange that equation a little bit I have a private sector balance which is basically the net saving of the entire sector. It is not thing as saving, we have to be careful in trying to equate with saving or the traditional measure of saving. It is net savings so it is the spending relative to income for the sector. So it is largely a measure of financial fragility or stability in the private sector rather than a measure of saving and capital accumulation which is what we normally think of with saving. Those are important as well but we are focusing here on the financial fragility issue.

So we can take the government deficit minus the capital account there. So if we wanted to graph what was going on here, this is the one if you followed our work at all you've seen this one millions of times. The change in buffered net financial assets again is basically the federal government's deficit because the federal government when it runs a deficit somebody else ends up holding the treasury and that is an asset. It is net financial asset because there is no liability anywhere in the private sector, there is only an asset as a result of the government deficit. Okay the government ends up being the one with the liability. So the significance here is this quantity is changing. You can see it changing from here to here and it moves very closely with the private sector balance there. That is the main thing it is moving with. Mirror image of course. The private sector wants to net save more. The government runs a bigger deficit. As it turns out the spikes where this widens tend to be recessions. That is the recession. The private sector decides to save more of its income instead of spending. That is the recession. Then the government sector frequently automatic stabilizers, tax revenues fall and so forth runs a bigger deficit.

It could be a more activist approach with government stimulus so either one of those would show up here. One of the significant things is you can look there and you can see that the private sector on average likes to run virtually permanent private sector surpluses. The two times that it didn't were the stock market bubble in the late 90s and the housing bubble in the 2000s and people like Dean recognized those problems going on. From this analysis we saw this coming on as well that something was very wrong there if the private sector all of the sudden was happy just saving because that is completely at odds with their historical behavior and so that lead us to believe there was some financial fragility increasing in the private sector.

So let's look a little bit of what fiscal policy does and look at how this understanding of net financial assets helps us understand fiscal policy and monetary policy. So fiscal policy when we run a government deficit basically what we end up with is the household sector ends up with a net asset. In this case I am thinking of government spending but you can do tax cuts and so forth. Let's assume it is government spending sending a check to the household sector. So the household sector would get net deposits there and that is an increase in net financial assets because they have a deposit but it raised their capital, it raised their equity. There is nobody there holding a liability. If we require the treasury to issue securities in exchange then it looks like this but this is not a change in net financial assets. This is an asset swap where the dealers which is represented by those guys up there in the top right buy the treasury securities. So each one of those has something coming to it and going away from it so there is no net increase in the position for anybody in that sector.

So when we have a treasury sale there is no change in financial assets and from _____there is no change in the ability to create credit and deposits because reserves are a buffer. So we are told to think that when the treasury issues securities instead of "printing money" it will be less stimulative to the economy but when they issue a treasury the banks still have as much ability to create loans as they did before even if you are draining the reserves. From buffer stock three the treasury collateral actually ends up financing more credit in the financial system. It does not slow anything down. There has never been anybody who is unable to spend because they are holding a treasury. In fact we have 20+ dealers out there that are willing to buy that treasury from you in any moment. So the point I was going to make here between these two was that there is not much difference if we give the treasury an overdraft and pay interest on reserves or the treasury sells a security when it runs a deficit. The most important thing here is that it is increasing the net financial position of the private sector as I've got there.

When we look at fiscal policy there are a couple of things. First off we affect the price of credit which ends up if we do it right we end up with more credit creation to try and stimulate the economy and as Dean pointed out that can be very useful in the sense you have refinancing and so forth but what you are attempting to do and we don't often think about this is something very different from fiscal policy with monetary policy. With fiscal policy you are attempting to get the private sector to spend more out of an increase in income. With monetary policy you are attempting to get the private sector to spend more out of existing income and we don't talk about that because in fact we confuse the terms of money and income and so when the Fed creates money by doing what I have there on the bottom which is buying a treasury or mortgage-backed security and raising reserve balances and deposits, then we think that has added jet fuel to the economy the same way as if it were income but it is an asset swap. The dealer had ever ability to expand its own balance sheet before it got the deposits.

So fiscal policy creates…this is the distinction I would make between fiscal and monetary policy. It creates and destroys net financial assets through its deficits and surpluses. If you are trying to stimulate the economy with fiscal policy you are trying to create more spending out of more income. Monetary policy does not change net financial assets. What it attempts to do is create more spending out of existing income either by reducing interest rates or pushing everybody into lower yielding deposits from their treasuries or from their mortgage-backed securities. Or by doing QE to try to reduce interest rates which is doing both of them. So we like to talk about something and you have to be careful with this because this is not intended to be an actual equation but for those of you who took economics 101 and you learned MV=PY or it's the money supply times the velocity or the turnover of money equals nominal GDP. Quantity theory of money we like to talk about the quantity theory of net financial assets which is basically as Warren Moser likes to say the monitors are right they just have the wrong money. So the money we like to talk about is the net financial assets that are accruing to the private sector and again in a buffered stock manner because the private sector wants more or less of them based on the state of the economy but they tend to want an increasing amount of them each year. The velocity would be some function of desired private spending out of private sector income.

So when we think of monetary policy it is attempting to increase "V" and fiscal policy is attempting to increase "M". That is for us a useful way to distinguish between what fiscal and monetary policies are doing. So what are some implications here? What does excess money mean? Excess money here would mean and we are talking about excess money from the traditional monitor's perspective where you have too much money chasing too few goods and you get inflation. It would mean a buffer of net financial assets that is too large given desired private spending relative to income. So the government's deficit would then be too large relative to what the private sector wants to do but what we noted before was that the quantity of net financial assets or the growth of net financial assets tends to be positive but there is a desire to have about 2% government deficit on average 2-3% government deficit on average all of the time although it is a fluctuating amount. This is different from the way we think of fiscal policy in our traditional new consensus model which is again fiscal policy get out of the way. _________fact we need net financial assets as a buffer stock for a sustainable private sector spending relative to income over the longer term so it implies net financial assets as a buffer and that this should become part of the monetary policy reaction function which is again different from the received view which is that fiscal policy get out of the way and let monetary policy be independent.

Given that financial assets buffer in the reaction function debt service is a policy variable must also be in the reaction function. Okay what am I talking about there? Well if the government is going to run permanent deficits in a fluctuating amount but generally permanent deficits to enable to private sector to net save then you are going to have the issue of government debt service. The debt service is going to be affected by the interest rate that the central bank is setting in its monetary reaction function. So you have some potentially _____affects. If you look down below there if you have a government with a high debt to GDP ratio and you start to increase interest rates to slow the economy down you are going to get more government spending on debt service. So you can speed up the economy when you wanted to slow it down. So this has some significant implications and we are running to that now and Japan is running into that which is the deficits that have been run to offset the private sector's desire to save the last 4-5 years and the last 20 years in Japan have led to large increases in national debts. At some point raising interest rates, the central bank raising interest rates is going to come up against the fact that this could in fact create an increase in government spending that might offset the slowing down effect you would expect from raising interest rates in the private sector. It is going to require a coordination of some sort between fiscal and monetary policy that recognizes this permanent need for a buffer stock given those financial assets.

Okay, the last one labor and here's where Tim and I have a significant convergence I think. So your traditional economics 101 textbook is your traditional production possibilities curve shows that unemployment means you are at a point like "D" where you are wasting scarce resources and the economy is not producing up to his full potential. There are other things going on there. I thought this was kind of interesting that the cost to taxpayers of each unemployed person is rising significantly. It is also rising in the US as well. Beyond economic costs we have well-documented social costs. Virtually every social problem out there has a statistically significant correlation with involuntary unemployment. This was an interesting graph someone put out which shows how unemployment rates and male suicide in Japan move very closely together. So interestingly we have all these costs from unemployment but we have a policy and this is from the Fed in 1999 but it is still the general view where they are saying despite tentative evidence of a slowing in certain interest-sensitive sectors of the economy accelerating productivity the expansion of activity continues in excess of the economy's growth potential. As a consequence, the pool of available workers willing to take jobs has been drawn down further in recent months. This is a trend that must eventually be contained if inflationary balances are to remain in check and economic expansion can continue. So we have a policy view to keep a certain amount of people unemployed. Millions of people unemployed; that is a policy goal actually. The intent is to keep inflation in check, that we keep a buffer stock of unemployed of 10 million or 15 million people in order to stabilize inflation. So interesting when we have these debates about should we spend on unemployment benefits and so forth and why can't all these people get jobs, when at the same time there is a distinct policy goal of keeping 10-20 million people unemployed at all times. The Fed actually said that. So we don't generally think of labor as a buffer stock but if we did we might recognize we have two choices; we have the choice of an unemployed buffer stock which is what we generally do or an employed buffer stock. So since there are only two choices you have to be in favor of one or the other and pretending you just don't like the employed buffer stock means you are in favor of the unemployed buffer stock and all of the social and economic costs that come with it.

Again Tim was talking about employment programs and so forth. This is one that some of my colleagues in Modern Money Theory have come up with. Most everybody that has followed us has seen this many times but basically the idea is for government to offer a job at some fixed wage set politically and the point of the fixed wage is again it is a buffer stock and so you don't want market forces to drive the price up or down because that would be more stabilizing of prices. The argument is going to be that this would be at least as good as stabilizing prices as an unemployed buffer stock. I simulated this in a 1500 equation model of the economy and I don't pretend that this is the definitive word on what would happen with what we call a job guarantee program. It was more to get at the logic of how the program would work. It is a buffer stock so it should be coming down on expansion and rising during a recession so that is what we were attempting to show there. The interesting point of this is the cost of the program and I just assumed that a quandary of people equal to the number of unemployed would be in the program. It does not mean they are the same people but I wanted a buffer stock that worked just to see how that would work. So we end up with maximum spending at least in my simulations about 1.4% of GDP. On average the program costs the black horizontal line about 0.95% of GDP was the average so it is not an overly large program in terms of spending as a percentage of GDP but if you do that what you get is some stabilizing effect on prices; not hugely stabilizing but the program is noninflationary. The program has some permanent increase in the price level so a temporary increase in inflation when you start it up but then as the economy expands and you get later in the expansion when the economy normally would be building up inflationary pressures this program is reducing inflationary pressures in the economy; very modestly but doing it nonetheless.

Again this is just a little bit on the logic of the program. It is not a jobs program in the sense of just to create jobs it is a jobs program to become a buffer stock that will replace the unemployed buffer stock or at least offer a different option to people. What's the opportunity cost of an employed buffer stock ______. So this is really something that is difficult for people to swallow politically is that the government is going to employ millions and millions of people and so forth. A lot of people don't like that but if you don't like that what you are saying implicitly is that you do like all the social costs of unemployment. You do like all the unemployment benefits that we have to pay. You like all the crime we have to pay to prevent and prisons we have to pay to build and the additional Medicaid spending we need and that your health insurance rates go up and that state and local government budgets worsen when the unemployed buffer stock increases.

If you don't like an unemployed buffer stock of labor then what you are saying is that those things don't bother you as much as the government offering to employ people and create a buffer stock of employed labor. The other thing we hear often and this comes from economists quite a bit is well the workers won't be very productive. But they kind of miss the point which is they are comparing the productivity of people in these programs to people who are working in the private sector when the real comparison is actually how productive the involuntarily unemployed are because that is the opportunity cost. That is what you get. You get an unemployed buffer stock of labor if you don't have an employed buffer stock of labor. A lot more could be said on that and probably would get some questions on that maybe because Tim and I were both talking in different ways about this. Again a good deal of literature on that from a number of us so going a bit quickly through that right now. Just to conclude and wrap up, five buffer stocks for macroeconomic policy. The first two we already have a currency buffer and settlement balances buffer, we just don't often understand that we have one and so we have a lot of economists misdiagnosing what is going wrong and making suggestions for things that are frequently inconsistent with actual operations. A treasury lending facility that would both make treasuries into a buffer stock but would also make it clear that interest rates on the national debt are policy variable which they already are for all intents and purposes but now it would be obvious and we would not be able to get away with saying things like the US can become Greece.

Transcribed by Bryce Christopherson and Ataullah Khan