

## MEMORANDUM FOR THE RECORD

Dr. George Cooper

Author of Origin of Financial Crises: Central Banks, Credit Bubbles and the Efficient Market Fallacy and  
Principal BlueCrest Capital Management

Date of Interview: 2010-11-9 (11-12:30 pm EST; 4-5:30 GMT for the interviewee)

FCIC Participants: Donna Norman, Adam Paul

Non-FCIC Participants: Dr. George Cooper

Location: Skype call from FCIC large conference room to Cooper's London office

MFR prepared by: Adam Paul

MFR date: 2010-11-9

Audio available at:

<https://vault.netvoyage.com/neWeb2/gold.aspx?id=4849-9196-0072&open=Y>

Summary of Interview

**The following is a summary of the conversation. It should not be taken as a transcript. All quoted statements are taken from notes taken at the time of meeting and from a review of the conversation audio.**

***All timestamps are in [...] and correspond to the audio file above. Highlighting points out quotes that seem particularly useful.***

*Paul began by getting .Cooper's consent to tape the interview, outlining the FCIC's background and purpose. Paul: We like to begin by asking people to describe their professional background.*

I worked for a number of financial institutions, Deutche, JPM. Blue crest based in London. Background in fixed income fund manager and interest rate strategist. As fixed was analyzing the action of central bank. Though CB analysis that led to the book

1. What caused this crisis?

Clear there are a number of different causes. One of the key causes that are highlighted needs to be the run up of the financial crisis. Was a massive accumulation of debt around the world, especially in US with housing. There is an economist Hyman Minsky he came up with financial institutions hypothesis. That stability creates instability. It's really what he was discussions that lead me to write the book.

Economists liked to talk about the great moderation, especially Chairman Greenspan. World but especially US economy had a very long period with only minor recession. It was a period of moderate cyclicity in the economy. At the same time, Alan Greenspan was talking about the "risk management"

paradigm of the Federal Reserve. Greenspan was using monetary policy in a pre-emptive way. He was analyzing the state of the US economy or for risk that a downturn could happen. He could use rates quite aggressively to spot.

The risk management paradigm created the great moderation. The cyclical nature was removed from the US economy. As a result of that by taking away significant recessions, the private sector became comfortable taking on more and more debt. Gradually you see the saving rate start to decrease. If you look at saving rate from 1983 onwards declines, in fact declines to a net negative rate. The mirror of that was the rising debt to GDP ratio. Central bank as faced with different shocks and crisis central banks would do that quite skillfully. In order to keep the stock of debt.

Had to deliver a lower and lower real interest rate, until eventually you reach a point where monetary policy hit the zero bound. The economy was left stuck with an enormous debt to GDP and a huge

Paul: Did we learn the wrong lessons from the tech bubble?

We learnt the wrong lessons from that. The way that I look at it fixed and inverted commerce. By masking the negative effect of that with a housing bubble, the excess accumulation of debt in the household bubble was in the handing it back to the government with stimulus.

You need to take a bigger picture view than just this. If you step back to the 70s and 80s. Japan having inflated a huge bubble, they cut interest rates to zero and have kept them there. As Japan tried to put free capital in the US, this whole system of overlapping bubble can be traced back to the Bank of Japan rather than the Fed.

[11:40] Useful analogy. To explain: How do you deal with a forest fire. If you have a forest and you consider the central bank equivalent, a firefighting organization. If you put firefighter's to work to keep all the fires from occurring they will prevent fires but there will be an accumulation of dead wood in the forest over many, many years. Makes the forest more prone to having bigger fires in the future. The more successful the US has been at stabilizing the economy the greater the accumulation of debt in the system.

*Norman: What is the proper role of central bank in the situation where we are now?*

It's a tremendously difficult situation. Another aspect of where we are now, a lot of people have paid attention to his financial instability hypotheses, is said more than just that. If the financial system was unstable in the way he suggested. One of the key things that you need to do is to run counter cyclical fiscal policy. If a government is spending more the tax take

That idea of running a balanced budget across the cycle is mostly gone. Most governments ran stimulative fiscal policy in the bubble. Fiscal policy was amplifying the bubble as the bubble was inflating. B/c fiscal was stimulative in the bubble period

"We've misread Keynes quite badly: apply stimulus once already in the recession. We have instead applied it while still in the boom.

Tells you that it's even worse now. We are taking steps now to what will eventually happen CB will monetize part of the debt load.

Differ between what will and what should happen. At the moment the Fed has announced QE2 (quantitative easing 2) I don't think that is quite monetization.

I like to think of monetary policy in three stages.

The first is conventional monetary policy— performed with interest rates. I want to encourage private sector to spend more than I lower interest rates. Eventually I get into a situation that people were unwilling to borrow. That's a liquidity trap.

2. So I try to force you to take more money and I buy your assets off of you. I force cash on to you instead. That's QE. Personally I think that it's quite a weak policy. Assets are trading in the market at a price that you think is fair.

When I take bond holdings and give you cash that's fare. Your default is to take the cash and put it in the central bank. There is a small stimulus but it is second order

3. True monetization stage. I literally print money and give it to you. A controlled amount of monetization may be the least of the options that we have here. However if we start down the route of monetization without acknowledging how we got into this position tie the first place, we could be on slippery slope to ever increasing monetization. We can only hit the reboot button as a one-off fix.

*Paul: Can you speak to the dynamics in credit markets?*

Credit creation flows into asset price creation. What was happening in the blow-off phase in the US was that as the housing market was reaching a euphoric ending. Households saw higher wealth. Credit rating agencies saw improving balance sheets so the banks were easing their credit conditions. The banks were easing credit conditions. These things tend to lead upon one another.

Simple recommendation on how to fix that is that you end up with self-reinforcing cycles in the booms and bouts. The ratings agencies have been a key part of this they tend to upgrade ratings the boom downgrade them in the bust. This encourages even more violent style and contacts more in the downturn.

[29:09] one way of addressing that cyclicity would be to require that rating agencies retain a fixed fraction debt that they may rate in each of their credit ratings at each part of the cycle.

Let's simply the system, assume just AAA, AA, or. A raking agency could not upgrade in boom and downgrade in the bust. If a rating agency wanted to upgrade a firm it would have to find a firm to downgrade. The economic distortion on their business model would be dampened, they are paid by borrowers.

[31:05]Paul: *You've spoken about liquidity v solvency problems*

No definitely a solvency issues. The distinction between the two is, well economists like a sharp distinction between the two of them. In reality, the distinction is rather less sharp. The solvency issues are manifest when asset prices fall in value. You can rapidly turn a liquidity crisis into a solvency crisis. If you could reset asset prices to their peak level well then a lot of firms become solvent.

The problem after Bear and Lehman lasted long enough that it turned a liquidity crisis into a true solvency crisis.

[33:00] Paul: *If you want to avoid the super bubbles does that mean that you have to allow for a string of smaller bubbles, a more regular cycle?*

A big part of what I want to get across is that we need to start to view economic cycles as a healthy, natural part of the economy. We should think about it like breathing. We breathe in and we breathe out. Breathing out doesn't help us to live but if we do not we cannot breathe in again. If we allow economies to cycle, go through occasional recession that reeducates people to take risk more seriously again. It exposes weak, or bad, lending practices. If we train the private sector that every time there is a macroeconomic risks that the central bank or the government will bail them out, then they are trained to be more irresponsible.

[34:40] we need to allow cyclical. This is where we run into a difficult interaction between economic and political cycle. Econ cycle is about 5 to 15 year which is not dissimilar to b/t a political cycle. There is a tendency with policy to push recession into the next term. The only way I can see to deal with this is through education.

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There is a fallacy in there: The efficient market hypothesis. If you believe these hypotheses as most economists do then you need to for a policy failure. We have fallen into the trap where we blame politicians for all recessions. Might be able to get to a more grown-up way to think of them and {be better off}

[37]

Paul: *To deal with these political and measurement problems are there restrictions like a Taylor Rule or an inflation target that would better allow to control this?*

Not a big fan of the Taylor rule. A big error has been in the measurement of inflation. Have set price stability, or depending on regime they set themselves. They have taken on the role of tracking inflation and then defined inflation just as goods and services. What has been excluded quite rigorously is asset price inflation.

If we had a situation where CB were forced to factor in funding pension fund or asset prices, if you started to imbed those really important costs, if you imbed that into the measure of inflation then you would have seen a different response function.

[39:46]

Fed learned that deflation was disastrous but only a narrow lesson. They learned that deflation goes hand in hand with depression. As a result of that when the US started to see quite a downdraft in inflation (200-2003) the central bank cut rates to fight the deflation.

Bernanke said stimulate early to fight it. Two kinds of inflation: supply shock and demand shock inflation.

[41]

That supply shock is really what happened when China, joined the world economy. Increased labor costs and the costs of goods. That's very different from the shock in demand when demand fell away both now and then aging in the 1930s. The Fed made a mistake it should have accepted that lower inflation rate and let it run.

*[43:00] Norman: Where do you put MP in regards to other causes? Plus Fed regulatory policy*

I would put monetary policy near the top of the list. The reasons that I see that is that regulatory policy is always behind the rates in other markets. If you allow the economy to learn from its own mistake more you will teach private sector manage its own risk. There was a very substantial failure of regulatory policy. There were very silly lending decisions being made in the financial system. To have a no recourse mortgage with no documentation is a recipe for disaster. I think that a lot of that would not have happened had the Fed not seen this coming. A big part of rational between having a light regulator approach to the efficient markets hypothesis

*Norman: Regulation and TBTF? Bear and Northern Rock?*

[47] With respect to Northern rock, Lehman, and Bear, I'd take it in two phases. There is a patient having a heart attack b/c of an unhealthy lifestyle beforehand. The time to lecture them is not when they are having a heart attack. I thought that way that they handled them well.

*Norman:*

After Lehman they flooded the system to prevent a cascade. It would have been healthier to allow Bear to fail to send a message to allow it to break down. To provide liquidity to prevent a cascade of mistakes. What would have been healthier in retrospect would have been to allow Bear Stearns to fail and send a message to others.

The provision of liquidity once you are in that state is necessary. The phrase I've sometimes used I-- In this crisis, the central bank has played two roles. **It was an Attendant paramedic to the system and it's done that very well. Unfortunately while it's the attendant parametric to the crash, it was also the drunk**

driver. It helped fuel the credit bubble. It then came to deal with the problem quite quickly and quite skillfully.

[49:50 This is perhaps why we so rarely learn the lessons properly. When you are in the crisis you really need the central bank. You don't criticize the paramedic while doing his work.

I have some criticism of Lehman. Because of the swap agreements rest of fin system was left with other risks and unknown of where it is. Would have been better if Lehman was allowed to wind down.

Another important reform that is necessary. Each institution is facing another institution in interrelated risks. Hub and spoke with central clearing house.

*Norman: Moral Hazard from Bear?*

**[53]**

The entity that should have been allowed to fail was LTCM. A bail out was organized for that fund by the Fed. If we'd had a situation where the failure had given much bigger pain, then we might have had much better discipline. By organizing bailout that way it sent a message that authorities were ready to look after these problems.

*Paul Does private sector police itself? Did financial players understand the risks or did they think that products*

The CDS market, remember that this is a zero sum game market.

*Paul did individual firms believe they were protected?*

[56:05] Firms believed that they were diversifying their credit risk better. When I say it's a zero sum market, these instruments cannot reduce the total credit risk in the system. So they didn't need to worry about . They were not worried about the macro economic/ cyclical risks because they were trained that the Fed was always there for them on this. It's important to make exchange traded if possible. The CDS market is not the root. Its' the aggregate amount of risk that is.

***Norman: Naked CDS trades did those increase risk?***

I would recommend focus on securitization markets. One of the logical consequences of securitization is that bank can make loan and sell it on.

Securitization and another strategy are to manage money against indices. If you think about the credit creation change in the total. Bank would be incentivized to do a great deal of due diligence on that loan. Now the bank securitizes it into the bond market.

The whole due diligence in the rating agency. And as we know the rating agencies have a lot of problems in their models. It breaks the due diligence in the lending system.

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**Norman: Rating agencies or the Capital rules?**

Rating agencies are a big part of the story. Another part is the unwinding of glass-Steagall. Prior to GS if you have a bank that lends out money and then takes in money. It has this duty of due diligence. This system is correctly incentivized

If the money is able to buy very expensive assets. It either has to reduce credit costs or reduce lending. If we combine credit and securitization. Then we create a problem. Securitizer has incentive to increase price but if it's also funding the credit then it can make a fee today (on over valued assets) but the costs of fee is that you might default in the future. I book the profit now and worry about the defaults now.

If you break the institutions apart then you realign the incentives better.

**AP: US policy aboard:**

In a free flow of capital, if unilaterally one regime were to apply very stringent rules and other regimes would get the less responsible jurisdiction winning at least for some time.

It's another version of the problem which is inherent in the fin system where less responsible lending practice can drive out responsible practices.

Northern Rock was able to attract lots of deposit because it gave higher interest rates and because it gave more risky loans. The depositor was always assured that it was going to get funding back from deposit insurance.

In the US, Fannie Mae and Freddie Mac played an interesting role in the US and in this crisis. Genesis of this crisis was a shortage of credit but remained in place while there was not lack of credit. If we are going to put in place credit subsidies as a result of this crisis. Then we need a way that they are automatically removed.

**Norman: Shadow banking system?**

I would lump this together with the securitization. In some cases, the securitization has been challenged legally. The banks did not have enough capital in our system. I wouldn't want to put in a blanket ban but it would

**Norman: I banks and hedge funds, non-bank sector. Can CB be effective w/o being here?**

This is where I think that shadow banking is important I would like to see some large institutions lend to more fragment lending institutions. Those involved in failure will lose business but not a big enough failure to bring the system down.

It's perhaps unfortunate that organizations were organized as partnerships. It might have been healthier to have more massive institutions.

## **AP Did firms ever question the assumptions that they would get help**

Part of the reasons we were in the crisis. In immediate crisis there were liquidity problems, trade finance became difficult. Now some years after the ever people are starting to question QE2. This result damages the confidence.

[1:16:15] To put it a different way, arguably the best central banker is one that is competent but the private sector doubts his competence. So in the boom time, the private sector is always nervous that if something goes wrong the central bank will not be able to help them out so they always lend more cautiously. But if you do get into a crisis he really does know what he's doing and comes into help. We collectively fell in love with Greenspan, Bernanke and other central bankers and became convinced that they could always solve our problems and were not questioning them.

*Norman: Money market funds.*

They are like banks with no lending at all. They did take money out of the banks. Not a key element of the crisis but it may be better to take money in 2A-7 funds might be more stable if it were back in bank deposits.

*Norman: No view on MMF as regulatory failure, or a random victim?*

Not a regulatory failure but not a mention of ...Perhaps that since they had gone so long w/o breaking the buck. We try to work out ways of making the system safer. It might be better and healthier to go the other direction. Instead of increasing deposit guarantee, say that deposit guarantees that deposit guarantee can only honor 95% of deposits. You would question the returns (say 8% v 4%) you would try to put more

*Paul: Overconfidence seems to be a theme for you. Could you talk about that?*

Control system theory. It's quite an important element to understanding unstable systems. If you have a system that naturally suffers from self-reinforcing cycles in the credit markets. If we attempt to over-stabilize an unstable. If you go back to interest rate cycles, you see them growing in amplitude. That process can only go so far until you hit the zero rate bound. If you are going to fix the over confidence problem you need to let people learn from their mistakes; you need to allow the recessions.

**Norman: Next crisis?**

I think the next crisis is already on the horizon. With major CB already running zero rates. There is a flood of liquidity. Emerging markets are trying to defend themselves with capital control instruments.

Brazil has declared rules about inflows of Brazilian bonds by foreigners.

**International side**



The exchange rate policies of US international trading partners. It has led to a situation where it has become very difficult to reprice the cost of American market work vs. the cost of a developing market worker.

The dollar should be depreciation against the developing market currencies. The US is at a permanent disadvantage due to exchange rate pegs. Two different circuits' between US and pegged economies, if you like US and China. There is a capital circuit. US sends \$ to buy goods. China sends back \$ to buy Treasury funds or else it would have to inflate its currency. In the real economy, there is a flow of cheap goods coming out of china, and a flow of American factories going into China.

This is a piece of evidence to mitigate against the Fed. It's because of those pegged exchange rates that the wages in the US have grown so slowly.

To compensate for those effects the Fed has had to run a looser monetary policy.

I would put monetary policy very close, perhaps at top. I'd put fiscal policy near the top. Right up with those two you need to have the pegged exchange rates. You cannot have free capital flows w/o free exchange rates as well.

**Norman: Was crisis inevitable w/o housing bubble would it have been something else.**

Yes, if it hadn't appeared in housing it would have been somewhere else. We wouldn't look at this as the housing problem, this series of growing bubbles.

It's rippling around the world. This process has been going along for at least four decades or so.

**Norman: Do you in your role, do private institutions peg the risk of bailout, not bailout in their internal thinking?**

I don't think they really do that explicitly. I think it's much more subconscious. It's a little bit more like Pavlov's Dog; we've all been trained to think a certain way. [1:34:00]

**Norman: a must read on the crisis?**

Lords of Finance—crisis morph into trade protectionism

Documentary called The Flaw, which I worked upon, will be coming out soon.

[1:28:00]

**Parting thoughts**

Something entirely unrelated to this: demographics. What we have in a lot of the developed world. Is a rising ratio of retirees to work. If we think about a pre-funding pension system. If we are in world where ratio keeps increasing the workers have to save more. As they bid up and yields fall, the duration

extends, and they become more subjective to yield. This makes the system more and more unstable under time. Suggestive of the Japanese system. Another reform that I think politicians Need to get away from concept of