Explain and discuss the Testimony of Chairman Ben S. Bernanke, Semiannual Monetary Policy Report to the Congress, before the Committee on Financial Services, U.S. House of Representatives, 24 February 2009

Introduction

The US entered recession in late 2007. US real GDP started to decline in the third quarter of 2008, declining more steeply in the fourth quarter and first quarter of 2009. Hence both the US and world economies were suffering when the testimony was written. Bernanke, the chair of the Federal Reserve Board, recognised this in his brief overview of the recession, but also painted a hopeful picture, saying:

> "the measures taken by the Federal Reserve, other U.S. government entities, and foreign governments since September have helped to restore a degree of stability to some financial markets."[1]

He maintained this view by implying that Government actions would increase stability through various channels of monetary transmission. In part, he continues Greenspan's use of ambiguous messages, using phrases like planning "a range of measures to help prevent unnecessary foreclosures."[2] However, careful analysis shows that he holds confidence, transparency and above all the flow of credit to be most important in bringing about economic stability. Most of the testimony addresses consumer demands, investment demand or monetary policy so the essay is split along these lines.

Consumer Demand

Bernanke stated that he held losses of housing equity to be significant in causing the decline in aggregate consumer demand, which was one of the key weaknesses in the US economy.

> "The immediate trigger of the crisis was the end of housing booms in the United States and other countries and the associated problems in mortgage markets."[3]

The housing market saw a boom in the early noughties, but it grew into a bubble, faster than other markets. In 2006 housing prices started to decline and increased foreclosure rates in 2006-2007 led to a crisis in more than just the subprime mortgage markets. The housing market and mortgage market crash caused a decline in household wealth, a key determinant of consumer demand.

Bernanke also stated that rising unemployment rates (7.6% in February 2009) and tight lending conditions were contributing to lower consumer demand. However only the lending conditions hold key importance in Bernanke's testimony because he believes it was the collapse of the global credit boom that caused declining consumer confidence.[4] His view is backed by the fact that aggregate consumer demand alone determines 70% of US aggregate demand. Hence a decline in consumer demand is very likely to have a large impact upon the economy.

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[1] Bernanke, Ben S; *Semiannual Monetary Policy Report to the Congress*; February 24th 2009; P9
[2] Bernanke, Ben S; *Semiannual Monetary Policy Report to the Congress*; February 24th 2009; P9
[3] Bernanke, Ben S; *Semiannual Monetary Policy Report to the Congress*; February 24th 2009; P7
[4] Bernanke, Ben S; *Semiannual Monetary Policy Report to the Congress*; February 24th 2009; P7

Despite Bernanke's many differences to Greenspan (Chairman of the US Federal Reserve Board 1987 – 2006) he shares the opinion that transparency is of utmost importance. He outlined two initiatives aiming to increase accessibility of information and public interest.

> "Increased clarity about the FOMC's views regarding longer run inflation should help to better stabilize the public's inflation expectations, thus contributing to keeping actual inflation from rising too high or falling too low."[5]

This quote indicates that he deems transparency important as an aid to controlling inflation.

Data backs Bernanke's proposition that consumer demand impacts upon output (a widely accepted Keynesian theory) and that low availability of credit, declining housing wealth and desire for more transparency brought aggregate consumer demand down. Aggregate consumer demand is by far the largest component of GDP demand, and also less volatile than other investment. However Bernanke's testimony does not explain why consumption is not as volatile as GDP fluctuations according to IMF statistics.[6] This is in part due to the lack of supporting data provided by Bernanke.

The basic Keynesian Model assumes that any changes in consumption, saving and/or income would immediately affect the other two. This is discredited by the fact that consumption does not exactly follow GDP fluctuations. However the Permanent Income and Life Cycle Income models account for this by saying that people tend to smooth out their consumption and spending over long periods of time. The Permanent Income Model says that consumers estimate their long term trend of income in order to smooth out their consumption i.e. when current income temporarily deviates positively from this trend it is saved. The Life Cycle Income Model says that income follows a predictable pattern over a life cycle i.e. when people are of a working age they save but when they are too old or young to work they consume their savings. Both models state that a permanent rise in income creates a permanent rise in consumption.

The reliability of these models discredits Bernanke's under-emphasis of the weakened labour markets. Unlike Greenspan, Bernanke believes that the Chair of the Federal Reserve Board should not intervene in fiscal policy, despite the fact that it influences monetary policy. However unemployment has a huge impact upon household income and should have been given greater attention purely for its causal role. Common sense dictates that rapidly rising unemployment will impact upon consumption. If these models are correct then a continually increasing rate of unemployment will continue to contribute to keeping consumer aggregate demand low for some time. However if Bernanke is correct then consumer demand will pick up as the lending markets regain liquidity and the housing market recovers.

In hindsight we can see that the forecasts made by Bernanke seem to have been largely correct. The borrowing costs of many households and businesses did decline with the decline of Libor and conforming fixed mortgage rates for households. The 'London interbank offered rate' is an interest rate at which banks can borrow from

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[5] Bernanke, Ben S; *Semi-annual Monetary Policy Report to the Congress*; February 24th 2009; P11

[6] Miles, David % Scott, Andrew; Figure 12.1; *Macroeconomics Understanding the Wealth of Nations*; John Wiley & Sons; 2005; P292.

other banks in the London interbank market. It is the most used benchmark for short term interest rates and the US relies on it for a reference rate. Aggregate consumer demand did pick up slightly as flexibility returned to the lending markets, and the US pulled out of recession after 4 successive quarters in the third quarter of 2009. However his general optimism may have been slightly too well placed. For just as the permanent income/life cycle models predicted, high levels of unemployment (now standing at 10.2%) have kept consumer demand low.[7]

Investment Demand

Although consumer demand is the largest part of aggregate demand, foreign demand (which had previously been strong) was also hit as countries around the world entered recession. A strong dollar relative to the Chinese Renminbi (which has been fixed at this rate against the dollar) also meant that more countries have been looking towards China as a cheaper alternative. Yet falling business investment held greater importance in Bernanke's testimony. Hence consumer demand, net foreign demand and investment demand were all lower than potential output, creating an output gap.

Bernanke holds consumer spending and business investment to be intricately linked. He said that one of the main reasons for cutbacks in capital outlays was the decline in sales.[8] Declining sales meant less investment, for demand did not equal potential output. For example housing and mortgage market conditions caused a decline in residential construction and related industries. Yet as he thought credit problems contributed to declining sales this was indirectly a credit problem too to Bernanke.

Bernanke also attributed a direct causal role for declining investment demand to the availability of credit. "The principle cause of the economic slowdown was the collapse of the global credit boom and the ensuing financial crisis."[9] The 'Credit Crunch' meant firms couldn't borrow new or replacement funds as the market was becoming increasingly rigid i.e. banks and firms were becoming more wary about risky transactions, hence borrowing costs grew and credit availability tightened. Also, banks reassessed risks. What had seemed a profitable project became a risky one. He said that due to difficulties in obtaining credit, companies cut back on capital investment. Losses sustained by the big financial institutions like Lehman Brothers, Fannie Mae and Freddie Mac caused the credit difficulties, and had a cyclical effect, causing further problems. It caused declining confidence and hence large withdrawals of funds and lower stability in short term funding markets, particularly the commercial paper market.

The Hierarchy Financing approach to investment discredits Bernanke's emphasis on the availability of credit. It says that firms prefer to use internal funds for investment. Data indicates that businesses in developed countries finance over 70% of their investment from internal funds. [10] If this is true then increasing the availability of credit will only have a limited effect. It is likely Bernanke's belief that if the external

[7] United States Department of Labor, Bureau of Labor Statistics; Economic News Release; Available on internet at: http://www.bls.gov/news.release/empsit.toc.htm; Last revised November 6th, 2009
[8] Bernanke, Ben S; *Semi-annual Monetary Policy Report to the Congress*; February 24th 2009; P7
[9] Bernanke, Ben S; *Semiannual Monetary Policy Report to the Congress*; February 24th 2009; P7
[10] Miles, David & Scott, Andrew; *Macroeconomics Understanding the Wealth of Nations*; John Wiley & Sons; 2005; P326.

finance premium (the difference between the cost of externally raised funds and internally raised funds) is low enough and the costs of external finance do not exceed the opportunity costs of using internal funds, then firms will begin to lend and spend again. The multiplier effect ($1 can be spent more than once by different firms and therefore have more than $1 impact on GDP) would then ensure that this money kick-starts the economy. It is also possible that the recession had already reduced internal funds enough so that external funds were the only option. However he does not explain this in the testimony.

Inflation and Monetary Policy

Bernanke focussed a large amount of his testimony on what he thought were the problems that monetary policy could address, and how it would do so. There is significant debate over how monetary policy transmits growth and stability into the markets. In 1995 Bernanke and Gertler argued that it was

> "difficult to explain the magnitude, timing and composition of the economy's response to monetary policy shocks solely in terms of conventional interest-rate (neoclassical cost-of-capital) effects."[11]

They thought that the conventional analysis of monetary policy transmission presented several problems. As a solution they said:

> "the mechanisms collectively known as the credit channel help to fill in the gaps in the traditional story."[12]

The credit channel of monetary transmission stresses that the actions of the Central Bank affect output through altering the quantity of credit (internal finance and bank credit) available to firms, and that monetary policy effects are amplified by changes in the external finance premium. Congress, the Federal Deposit Insurance Corporation, the Treasury and the Federal Reserve each enacted measures to increase the amount of credit available to firms. They did this through economic stimulus, guaranteeing the security of deposits and unsecured debts, and supporting banks with loans and guarantees.

There are two mechanisms linking the monetary policy and the external finance premium: the balance sheet channel and the bank lending channel. The balance sheet channel states that the greater the borrower's net worth, the lower the external finance premium. The bank lending channel states that as the supply of bank credit increases relative to other sources of credit, the external finance premium will decline and increase real activity. Hence on the whole Bernanke seems to have favoured increasing the quantity of money via the bank lending channel and credit channel.

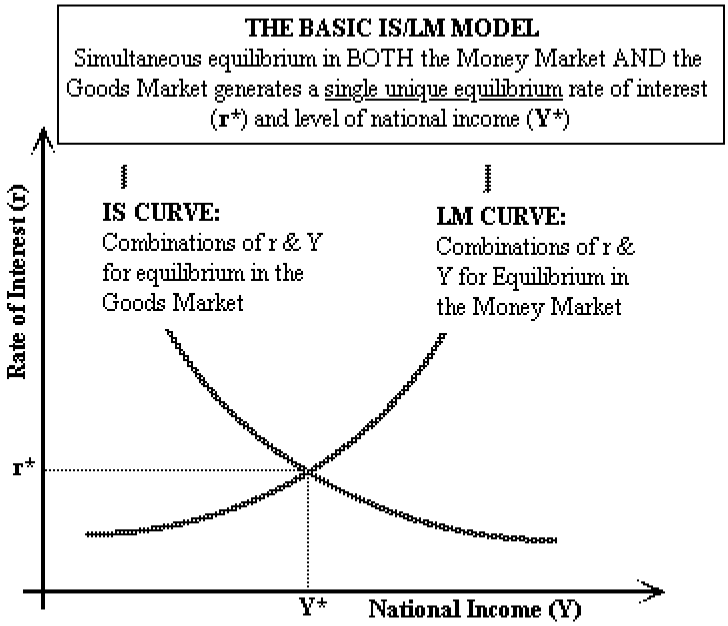
Yet in reality policymakers don't stick so rigidly to individual theories. Although Bernanke believed the collapse of the credit boom had a direct impact on removing finances for investment he also believed it caused falling asset values and lowered confidence. Indeed solely analysing the Federal Reserve's actions in lowering the Federal Funds Rate suggests that the Government followed a 'Cost of Capital' approach; a belief that the price of finance is dominant in determining the capital budgeting decisions. Bernanke was actually arguing that the quantity of money is

[11] Bernanke, Ben.S & Gertler, Mark; *Inside the Black Box: The Credit Channel of Monetary Policy Transmission*; Journal of Economic Perspectives – Volume 9, Number 4-Fall 1995; P34

[12] Ibid, P34

most important in gaining stability, yet the price of finance is crucial in increasing quantity of finance.

As the crisis deepened expectations pushed the IS and LM curve to the left. To use Keynes' term, liquidity preference increases – people try to hoard money – and this shifts the LM curve leftward. As businesses and consumers become more pessimistic about their prospects they cut consumption and investment. Bernanke wanted to push the curve back to the right. Lowering interest rates creates a substitution effect, altering the price of finance and making it more affordable for firms to borrow from financial institutions. Although the LM curve stipulates that lowering interest rates lowers income (through interest returns on savings and investments and the associated benefits) the IS curve stipulates that demand in goods will rise, and the increase in money supply encouraged by lower interest rates shifts the LM curve rightwards, meaning higher output. Bernanke hopes that the increased demand predicted by the IS curve will translate into increased demand for bank credit as firms seek additional funds to fuel investment. Where the LM Curve and IS Curve cross there is simultaneous equilibrium for the goods and money markets as exemplified below[13]:



One of the major problems with attributing such importance to the quantity of finance is that lowering the interest rates, incentivising increased lending, and pumping financial stimulus into the economy all create inflation. In 1997 Bernanke and Mishkin argued that inflation targeting is helpful if the 'constrained discretion' approach is followed rather than using inflation targets as "an ironclad policy rule."[14] This approach stipulates that inflation targeting should act as a flexible policy framework. Bernanke seemed fearful of inflation, mentioning the word 17 times

[13] The Macroeconomy Part 2; Available on the Internet at: http://www.staff.ncl.ac.uk/david.harvey/AEF873/Macro/Macro2.html; Last accessed 30th November 2009

[14] Bernanke, Ben.S & Mishkin, Frederic S.; *Inflation Targeting: A New Framework for Monetary Policy?;* Journal of Economic Perspectives – Volume 11, Number 2 – Spring 1997; P106

throughout the testimony, trying to reassure listeners/readers with evidence of "lessening of inflationary pressures."[15] However declining energy and commodity prices combined with a "growing margin of economic slack"[16] in fact risked deflationary pressures that Bernanke refused to comment upon. He pinned his hopes on the beginning of a recovery in 2009, which would limit the danger of a downward price spiral.

The target Federal Funds Rate was lowered to a range between 0 to 0.25% in December 2008. The Federal Open Market Committee suggested that the rate would have to remain low for some time[17]. Yet the aim of monetary policy is usually to hold the rate of inflation at 1-3% due to natural price increases related to improved quality goods. Holding the interest rate so low may also hold inflation down to similar levels, creating nominal price stagnancy and real price decline as improved goods are sold at the same price as old ones. Indeed according to the CPI-U (the most commonly used US CPI index) the US has suffered deflation[18]. Deflation has not been recorded since 1955, and is again at odds with FOMC predictions listed in Bernanke's testimony.

<u>Conclusion</u>

Bernanke's economic assessment was that because the adverse feedback loop was not yet broken and due to the global nature of the recession, recession would most likely continue into 2010. Increasing consumer and investor confidence, increasing transparency and fostering credit flows were his primary answers to create economic stability, which he predicted would gradually resume from the second half of 2009.

Bernanke's message could easily be interpreted as being more optimistic than it actually was. He admitted the FOMC's quarterly projections were unlikely, but made other debatably more confident assertions without the backing of any figures. In fact the wording used in his later July report to Congress verifies this:

> "At the time of our February report, financial markets at home and abroad were under immense strains, with equity prices at multiyear lows, risk spreads for private borrowers at very elevated levels, and some important financial markets essentially shut."[19]

This compares to hopeful news presented in February such as easing strain in the short term funding markets, and even growth in areas such as the issuance of corporate bonds. The report is carefully worded to protect investor confidence. It was "monetary policy makers"[20], not Bernanke who admitted forecasts for real GDP growth had to be marked down; and the "view of policymakers"[21] about how long a full recovery would take.

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[15] Bernanke, Ben S; *Semi-annual Monetary Policy Report to the Congress*; February 24th 2009; P7
[16] Bernanke, Ben S; *Semi-annual Monetary Policy Report to the Congress*; February 24th 2009; P7
[17] Bernanke, Ben S; *Semi-annual Monetary Policy Report to the Congress*; February 24th 2009; P8
[18] United States Department of Labor, Bureau of Labor Statistics; Consumer Price Index Summary; Available on the Internet at: http://www.bls.gov/news.release/cpi.nr0.htm; Last revised November 18th, 2009
[19]Bernanke, Ben S; *Semiannual Monetary Policy Report to the Congress*; Available on the internet at: http://www.federalreserve.gov/newsevents/testimony/bernanke20090721a.htm; July 21st 2009
[20] Bernanke, Ben S; *Semiannual Monetary Policy Report to the Congress*; February 24th 2009; P10
[21] Bernanke, Ben S; *Semiannual Monetary Policy Report to the Congress*; February 24th 2009; P11

Bernanke spoke of monetary policies that would transmit credit through the credit channel, bank lending channel and balance sheet channel of monetary transmission. However he gave most significance to the quantity of finance. His testimony is at odds with the permanent income/life cycle models of personal consumption and in part with the hierarchy financing approach of investment. Yet the biggest weakness of the testimony was what it left out. Although Bernanke may be able to justify his decision not to talk about the impact that financial institutions had in over leveraging and derivatives, he also paid little attention to the labour markets (which as of October 2009 suffer an unemployment rate of 10.2%[22], compared with Bernanke's projections of 8.5-8.75%), the exchange rates, price stability, or the possible negative effects that government actions might have.

[22] United States Department of Labor, Bureau of Labor Statistics; Economic News Release; Available on internet at: http://www.bls.gov/news.release/empsit.toc.htm; Last revised November 6th, 2009

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9. United States Department of Labor, Bureau of Labor Statistics; Consumer Price Index Summary; Available on the Internet at: http://www.bls.gov/news.release/cpi.nr0.htm; Last revised November 18th, 2009; [Accessed 30/11/2009].