

FINANCIAL STABILITY AND THE ROLE OF THE FINANCIAL POLICY COMMITTEE*

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This paper distinguishes institutional from systemic explanations for the cause of financial instability. I argue that financial crises are systemic, and as a consequence, the maintenance of financial stability requires more than simple regulation of existing institutions. The newly created Financial Policy Committee of the Bank of England, should actively manage the asset portfolio of the Treasury, with the aim of stabilizing the price to earning (PE) ratio of a broad stock market index.

1 INTRODUCTION

Since 1997, the Bank of England has been most widely known for its role in setting interest rates; a task that is the preserve of the Monetary Policy Committee. But since the inception of central banking, the Bank has had an important additional role as the guardian of financial stability. This essay focuses on the financial stability role of the Bank of England; a task that, since April of 2013, has become the preserve of the Financial Policy Committee (FPC).

Since the onset of the Great Recession, my body of work has laid a foundation from which I have advocated for the design of new institutions to promote and maintain financial stability by actively trading in the asset markets.¹ I will argue here, that the newly created FPC of the Bank of England, is an ideal body to carry out those trades.

In response to the financial crisis, Parliament introduced the Financial Services Act in 2012, a major piece of legislation that was intended to prevent financial crises from reoccurring. Among other aspects, the Act gave statutory responsibility to a newly created FPC which was to exercise its functions with a view to:

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¹Farmer (2010).

- (a) contributing to the achievement by the Bank of the Financial Stability Objective; and
- (b) subject to that, supporting the economic policy of Her Majesty's Government, including its objectives for growth and employment.²

Why do we need a committee to oversee financial stability? What tools would such a committee need in order to achieve success?

2 FINANCIAL STABILITY MATTERS

Financial stability is important because the net worth of the financial sector is a determining factor of the health of the labour market. When the asset markets drop in value, and when that drop is sustained for more than a few months, unemployment increases and output falls. We saw that during the Great Depression which lasted for more than a decade. And we see it now during the Great Recession, an event from which we have still not fully recovered.³ Figure 1 compares the experience of the USA for these two episodes.

The left panel of Fig. 1 illustrates the experience of the USA in the Depression. The solid line, measured on the left scale, is the S&P 500. The dotted line, measured on the right scale on an inverted axis, is the unemployment rate. The right panel displays the same information for the Great Recession. On both panels, the grey shaded areas represent recessions as dated by the dating committee of the National Bureau of Economic Research. These panels illustrate, that the Great Depression and the Great Recession were both preceded by large drops in the value of financial assets.

Not all market crashes are associated with recessions. The largest crash in recent history occurred in 1987 when the S&P 500 dropped by 21% in one day.⁴ That event was not followed by a depression because the Federal Reserve Bank stepped in by lowering the interest rate dramatically and injecting liquidity into the financial markets. The Great Depression and the Great Recession were different because in both cases the overnight rate was lowered to zero and could go no further. Traditional remedies were no longer available.

3 TWO EXPLANATIONS FOR FINANCIAL CRISES

Recent events have generated widespread consensus that the financial markets are not working as they should. But there is little agreement as to why. There are two broad classes of explanation.

²Letter to the Mervyn King, Governor of the Bank of England from George Osborne, Chancellor of the Exchequer, April 2013. HM Treasury (2013).

³Farmer (2012a, 2012b, 2013c).

⁴Farmer (2010).

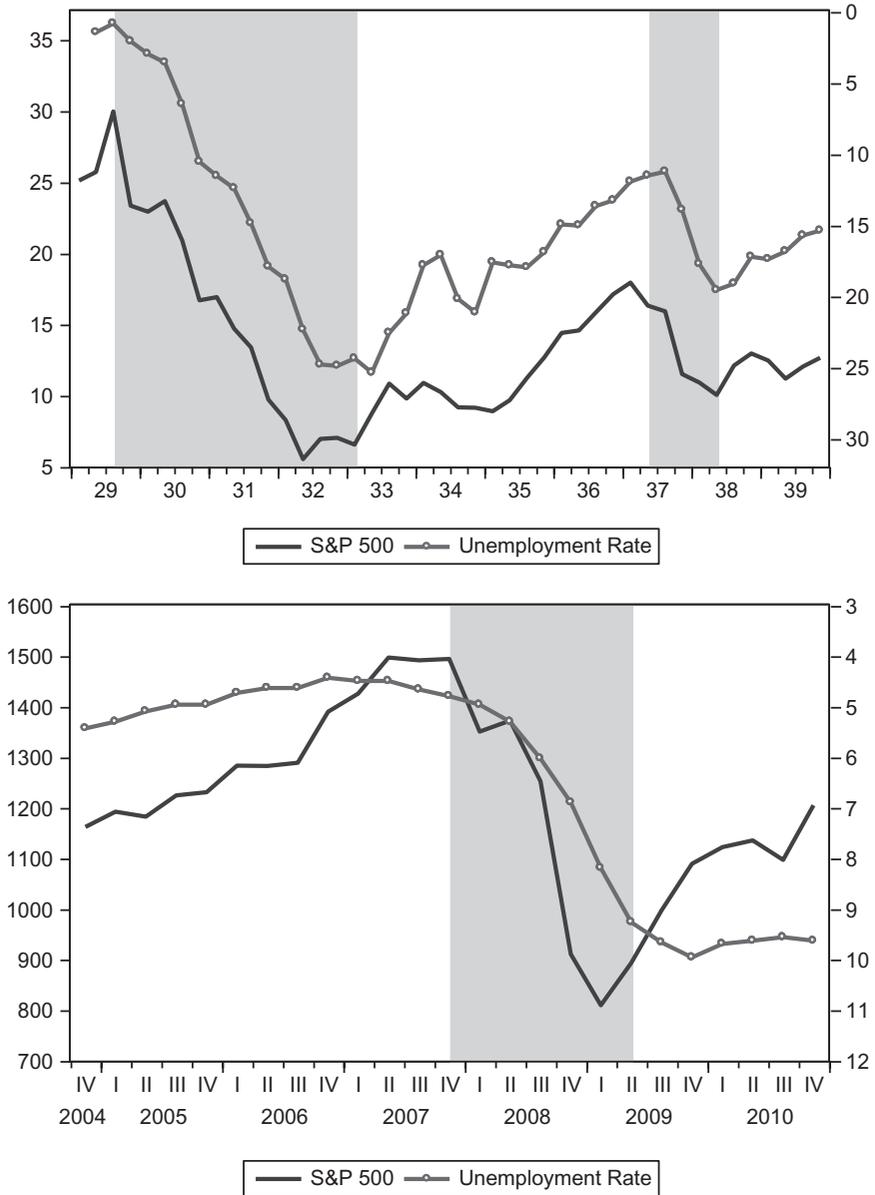


FIG. 1. The Stock Market and Unemployment

Source: Shiller (2014), online data, Bureau of Economic Analysis and author's calculations.

The first is institutional.⁵ There are market frictions that prevent banks, insurance companies and pension funds from functioning efficiently. Before the crisis, too much lending took place because greedy bankers pursued their own self-interest at the expense of their clients. After the crisis there is too little lending because those same bankers are overly cautious and unwilling to put funds where they are needed. Once bitten, twice shy.

The second is systemic.⁶ Institutions are created to implement the trades that one group of people choose to make with another. Before the crisis, there was large-scale lending because some people wanted to borrow and others wanted to lend. After the crisis, lending dried up because those same people were maxed out on their credit cards and the values of their homes and retirement accounts had dropped. It was time to retrench.

Distinguishing the institutional from the systemic explanation of financial crises is important because it affects the way we respond. If the problem is institutional we should design regulations that help overcome the financial frictions that prevent our banks, insurance companies and pension funds from performing their appropriate roles as intermediaries. If the problem is systemic, the failure of institutions is a symptom and new regulations are analogous to putting an Elastoplast on a gunshot wound.

The consensus among economists in the UK and the USA is that the 2008 financial crisis that led to the Great Recession was an institutional failure. The response has been the passage of the Financial Services Act in the UK and the Dodd-Frank Act in the USA; legislation that is designed to regulate the financial services industry. I believe that the consensus is mistaken; the problem is not institutional; it is systemic.⁷

The difference between institutional and systemic explanations matters because, if I am right, and the problem is systemic, regulating our existing institutions will not solve the problem. It will lead to the creation of new institutions, shadow-banks, shadow insurance companies and shadow pension funds; unregulated institutions that will be created to facilitate the trades that willing lenders and willing borrowers want to engage in. Dodd-Frank and the Financial Services Act cannot prevent the next financial crisis any more than King Canute could prevent the movement of the tides.

4 INFORMATIONAL EFFICIENCY AND PARETO EFFICIENCY

In 2013, Robert Shiller, Lars Hansen and Gene Fama shared the Nobel Prize in economics for their empirical analyses of asset prices. Lars Hansen worked

⁵Gertler and Kiyotaki (2010) provide a model where financial crises are institutional.

⁶Farmer (2014) provides a model where financial crises are systemic.

⁷Farmer (2013e) elaborates on this argument.

on technical aspects of the problem and although his work is important, it does not shed light on financial regulation.⁸ Not so, the work of Fama and Shiller.

Fama won the Nobel Prize for showing that financial markets, in the short run, are efficient. It is not possible to make money by trading financial assets because markets already incorporate all available information.⁹

Shiller won the Nobel Prize for showing that financial markets, in the long run, are inefficient.¹⁰ The ratio of the price of a stock to the dividends it earns tends to return to a long-run average value; hence, an investor can profit by holding undervalued stocks for very long periods. These two apparently contradictory results are consistent because Shiller and Fama are referring to different concepts of efficiency.

When Fama says that financial markets are efficient, he means that you cannot make money by buying and selling assets unless you have inside information. He calls this informational efficiency. There is a second concept that economists call Pareto efficiency. This concept means that there is no possible intervention by government that can improve the welfare of one person without making someone else worse off. The failure of Pareto efficiency explains Shiller's finding that stock returns are predictable.

5 WHY FINANCIAL CRISES OCCUR

My own research shows that financial markets are Pareto inefficient because some people cannot trade in those markets. Economists call that *incomplete participation*. I have worked on the incomplete participation problem in two papers that I wrote in 2002 (Farmer, 2002a, 2002b) in a joint paper with two coauthors (Farmer *et al.*, 2012) and in a recent working paper in 2014 (Farmer, 2014).

I have also shown that financial crises cause large persistent increases in the unemployment rate (Farmer, 2012b, 2013d) and I have explained why unemployment is an additional source of Pareto inefficiency (Farmer, 2013a, 2013c). These ideas are important because the fact that crises in the financial markets lead to Pareto inefficient levels of unemployment explains why government can and should act to preserve financial stability as a means of maintaining a high and stable level of employment.

Financial markets are like insurance markets. If you own a house you will insure the house against fire. And since not all houses burn down at the same time, the premiums we all pay for fire insurance can be used to compensate the unlucky few who suffer from a loss in any given year. But to benefit from insurance, you must purchase the insurance *before* your house burns down.

⁸Hansen (2008).

⁹Fama (1970) provides a survey of the Efficient Markets Hypothesis.

¹⁰Shiller's (2012) book summarizes his contribution.

For those of us unlucky enough to enter the labour market in a depression, our lifetime earnings will be as much as 15 per cent lower than those of us whose first job occurs in a boom.¹¹ For those of us unlucky enough to enter the housing market during a boom, the cost of our dream home will be as much as 50 per cent higher than for those of us who bought a house just a few years earlier.¹²

Given the opportunity, we would all choose to purchase insurance over the state of the world into which we are born, for the same reason that we buy fire insurance on our house. I call our inability to purchase this insurance, the *absence of prenatal financial markets*.¹³ It is the inability of the young to trade in prenatal financial markets that explains *why* those markets are not Pareto Optimal.¹⁴

6 BOOM AND BUST

Financial markets experience repeated cycles of boom and bust. A credit boom occurs when borrowers and lenders both anticipate that asset prices will increase. Investors borrow and use the funds to build factories and machines. Newly created companies hire workers, jobs are created and the economy experiences an expansion. Times are good.

But every period of remarkable expansion is eventually followed by a crash. There comes a point when the psychology of the market turns around. At that point, financial assets fall in value. Companies go bankrupt. Workers lose their jobs and home owners lose their houses. Times are hard.

The fact that every boom is followed by a bust is not a surprise. Although each crash is inevitable; its timing is not. And for that reason, it does not pay to bet against the market. As Keynes famously quipped, ‘markets can remain irrational for longer than you can remain solvent’.

During a boom, the owners of capital earn a return that exceeds the interest rate on government bonds. That premium is the reward for accepting risk. And because the typical expansion is prolonged, the bust, when it occurs, is deep.

7 FINANCIAL POLICY

We all agree that financial crises occur. We disagree as to their cause. Some economists argue that markets are not only informationally efficient; they are

¹¹Oreopoulos *et al.* (2012).

¹²Farmer (2013e).

¹³I first coined the term, *prenatal financial markets* in Farmer (2013f).

¹⁴Cass and Shell (1983) showed that financial markets may be Pareto Inefficient if people cannot trade in financial markets that open before they are born. My joint paper (Farmer *et al.*, 2012) extends the Cass-Shell paper to a calibrated model with long lived agents.

also Pareto efficient. The boom and the bust are a consequence of the natural flow of knowledge acquisition in a capitalist economy. They are the price of progress. *I disagree.*

If booms and busts were the consequence of waves of innovation, we would expect to see large fluctuations in the earnings of companies. A wave of innovation would generate a wave of profits. But we would also expect to see those earnings capitalized into the market price of companies. The price earnings ratio of the market as a whole should remain approximately constant. That is not what we see and the Price Earnings ratio, in data, has swung between a low of 5 in 1919 and a high of 44 in 1998.¹⁵

Large fluctuations in price to earning (PE) ratios are prima fascia evidence that financial markets are inefficient. Those inefficiencies arise as a direct consequence of the absence of prenatal financial markets and they have huge consequences for human welfare. We need not and should not accept unemployment rates of 8% as normal. We can, and should, act to prevent the consequences of financial crashes before they occur.

8 STABILIZING FINANCIAL MARKETS

In the wake of the 2008 crisis, central banks throughout the world engaged in new unconventional monetary policies. One component of these policies was an expansion in the size of central bank balance sheets. A second component was a change in the composition of central bank balance sheets. Following Buiter (2008), I will refer to an expansion of the balance sheet as *Quantitative Easing* and to a change in its composition as *Qualitative Easing*.

Qualitative easing is the policy of purchasing long-term assets and risky assets in order to manage long-term interest rates. It directly combats boom bust cycles by stabilizing the value of financial assets as governments absorb the risks that private agents are unwilling to bear. In both the UK and the USA, qualitative easing reduced the real expected return on long-term government bonds, which in turn nurtured a recovery in the stock market.¹⁶

In my view, the policy of qualitative easing should be retained and expanded as a permanent component of financial stabilization policy. Just as the Monetary Policy Committee sets interest rates, so the FPC should set bounds on fluctuations in the price earnings ratio of a broad stock market index.

Policy makers talk about financial stability. But the FPC, and the Parliamentary Committee that gave it birth, do not appear to understand the depth of the problem we face. There is a role for tightened capital requirements, particularly for institutions like banks that enjoy government guarantees. But that is not enough. We can and should do much more.

¹⁵Farmer (2013e).

¹⁶Farmer (2013e).

Financial market fluctuations occur because financial market participation is incomplete. The unborn suffer from financial disasters; but they are not present to insure against them. The FPC can, and should, act on their behalf. Government is in a unique position to smooth financial crises because it has the power to tax and transfer from the individuals who suffer most when the house burns down.

If the unborn could trade in the markets, they would short stocks that are overvalued, and buy those that are undervalued. Markets can remain irrational longer than you or I can remain solvent. They can remain irrational for longer than George Soros can remain solvent. They cannot remain irrational for longer than the Treasury can remain solvent. The Bank of England, backed by the Treasury, has an advantage precisely because it has the power to tax and transfer not just from you and I, not just from our children and our grandchildren, but from our children's grandchildren.

When the next financial crisis occurs, *and it will occur*, do not blame the members of the FPC. They are guard dogs without teeth. It's time to move beyond empty rhetoric by giving to the FPC, the tools that will enable it to deliver what is requested of it. If we truly want financial stability; we must act to stabilize markets.¹⁷

REFERENCES

- Buiter, W. H. (2008). 'Quantitative Easing and Qualitative Easing: a Terminological and Taxonomic Proposal', *Financial Times*, Willem Buiter's mavercon blog.
- Cass, D. and Shell, K. (1983). 'Do Sunspots Matter?', *The Journal of Political Economy*, Vol. 91, pp. 193–227.
- Fama, E. F. (1970). 'Efficient Capital Markets: a Review of Theory and Empirical Work', *Journal of Finance*, Vol. 25, pp. 383–417.
- Farmer, R. E. A. (2002a). 'Fiscal Policy, Equity Premia and Heterogeneous Agents', UCLA mimeo, Paper presented to the conference 'New Developments in Fiscal Policy Analysis' at Universitat Pompeu Fabra, Barcelona, May 2002.
- Farmer, R. E. A. (2002b). 'Business Cycles with Heterogeneous Agents', UCLA mimeo, Paper prepared for a conference at GREQAM on 'New Perspectives of (In)Stability, the Role of Heterogeneity', Marseilles, June 2001.
- Farmer, R. E. A. (2010), *How the Economy Works: Confidence Crashes and Self-Fulfilling Prophecies*, Oxford, Oxford University Press.
- Farmer, R. E. A. (2012a). 'Confidence, Crashes and Animal Spirits', *Economic Journal*, Vol. 122, No. 559, pp. 155–172.
- Farmer, R. E. A. (2012b). 'The Stock Market Crash of 2008 Caused the Great Recession: Theory and Evidence', *Journal of Economic Dynamics and Control*, Vol. 36, No. 5, pp. 696–707.
- Farmer, R. E. A. (2013a). 'Animal Spirits, Financial Crises and Persistent Unemployment', *Economic Journal*, Vol. 123, No. 568, pp. 317–340.
- Farmer, R. E. A. (2013b). 'Quantitative Easing', Evidence submitted to the UK Treasury Committee, <http://www.publications.parliament.uk/pa/cm201213/cmselect/cmtreasy/writev/qe/m20.htm>

¹⁷I have argued this case before the Treasury Committee (Farmer, 2013b).

- Farmer, R. E. A. (2013c). 'Animal Spirits, Financial Crises and Persistent Unemployment', *Economic Journal*, Vol. 123, No. 568, pp. 317–340.
- Farmer, R. E. A. (2013d). 'The Stock Market Crash Really Did Cause the Great Recession', *NBER Working Paper 19391*.
- Farmer, R. E. A. (2013e). 'Qualitative Easing; a New Tool for the Stabilization of Financial Markets', *Bank of England Quarterly Bulletin*, Q4, pp. 405–413.
- Farmer, R. E. A. (2013f). 'Why Financial Markets are Inefficient', *VoxEU*, 22 January.
- Farmer, R. E. A. (2014). 'Asset Pricing in a Lifecycle Economy', *NBER Working Paper 19958*.
- Farmer, R. E. A., Nourry, C. and Venditti, A. (2012). 'The Inefficient Markets Hypothesis: Why Financial Markets do Not Work Well in the Real World', *CEPR Discussion Paper 9283* and *NBER Working Paper 18647*.
- Gertler, M. and Kiyotaki, N. (2010). 'Financial Intermediation and Credit Policy in Business Cycle Analysis', in B. M. Friedman and M. Woodford (eds), *Handbook of Monetary Economics*, Vol. 3, No. 3, Amsterdam, Elsevier.
- Hansen, L. P. (2008). 'Generalized Method of Moments Estimation', in S. N. Durlauf and S. E. Blume (eds), *The New Palgrave Dictionary of Economics*, 2nd edn, London, McMillan.
- HM Treasury (2013). 'Remit and Recommendations for the Financial Policy Committee', Letter from the Chancellor, George Osborne to the Governor of the Bank of England, Mervyn King, April 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207473/remit_fpc_290413.pdf
- Oreopoulos, P., Van-Wachter, T. and Heisz, A. (2012). 'The Short- and Long-term Career Effects of Graduating in a Recession: Hysteresis and Heterogeneity in the Market for College Graduates', *American Journal: Applied Economics*, Vol. 4, No. 1, pp. 1–29.
- Shiller, J. R. (2012) *Irrational Exuberance*, Princeton, NJ, Princeton University Press.
- Shiller, J. R. (2014). Online data, <http://www.econ.yale.edu/~shiller/data.htm>