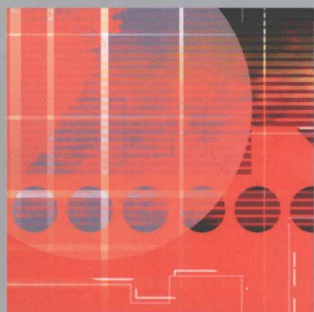


FINANCE AND CAPITAL MARKETS SERIES



THE ECONOMICS OF THE FINANCIAL CRISIS

Lessons and New Threats

Marco Annunziata





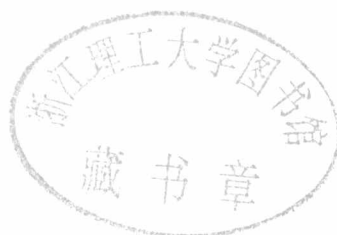
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The Economics of the Financial Crisis

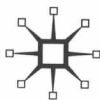
Lessons and New Threats

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First published 2011 by
PALGRAVE MACMILLAN

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Palgrave Macmillan in the US is a division of St Martin's Press LLC, 175 Fifth Avenue, New York, NY 10010.

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ISBN 978-0-230-28281-0

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources. Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

A catalogue record for this book is available from the British Library.

A catalog record for this book is available from the Library of Congress.

10 9 8 7 6 5 4 3 2 1

20 19 18 17 16 15 14 13 12 11

Printed and bound in Great Britain by
CPI Antony Rowe, Chippenham and Eastbourne

Acknowledgments

In a disturbing parallel with the topic of the book, I find myself highly indebted to a number of colleagues and friends who have been recklessly liberal in lending advice and support. I started this project while working at Unicredit, and completed it after moving to General Electric; being able to look at the crisis and its aftermath from both a financial and an industrial sector perspective has been a rare and valuable opportunity. Alessandro Profumo and Sergio Ermotti, at the time CEO and Deputy CEO of Unicredit, have been incredibly supportive. They gave me the latitude to push my analysis in multiple directions and an exceptional degree of autonomy and independence in the public debate, even when my positions were controversial and strongly argued. This happened while financial markets were under tremendous stress, uncertainty extremely high and the stakes for every bank even higher – I fully appreciate what their support and confidence meant, and I am very grateful. Dieter Rampl, Unicredit's Chairman, has often taken time to discuss with me the hectic and messy developments around us; his experience and clear insight have greatly enhanced my understanding of the European economy and financial system. My tenure at General Electric to date is relatively short, but has quickly shaped up as one of the most exciting learning experiences for an economist, and has already had a significant influence on the way I look at the postcrisis challenges for the global economy. In my new colleagues I have found a great source of intellectual stimulus, of a depth and breadth which surpassed my most optimistic expectations, and this makes me look forward to the next several years.

I owe a tremendous amount of gratitude to my old research team at Unicredit – we learned, feared and grew together through the crisis, and our joint work played a key role in shaping my views. Leaving them behind was the toughest part of changing jobs. Many of the ideas in this book have been sharpened through intense discussions with former colleagues in the trenches at Unicredit, and with a number of colleagues in other financial

institutions. I have been fortunate to engage in discussions with a number of current policymakers, especially in Europe and the US, who shall remain anonymous. I have learned a lot from Otmar Issing, who on many occasions has had the patience to discuss with me developments in Europe and beyond. I have also benefited from discussions with Leszek Balcerowicz, whose uncompromising intellectual rigor has been a lesson in itself. During the course of the crisis I have had occasional exchanges with Martin Wolf; we almost always disagreed, and every time the disagreement has provided a tough test of my degree of conviction. Extensive discussions with Ralph Atkins helped shape my view on the Eurozone – although he bears no responsibility for my often hard judgment on the common currency area. Thanks to my editor Erik Banks for encouraging me to undertake this project, and the highly professional team at Palgrave Macmillan for their excellent guidance and support.

My wife, Sonal Desai, has had by far the greatest influence on me. She is my intellectual sparring partner, my inspiration, my greatest source of encouragement and support, and my toughest and most clear-sighted critic. She is also the one who pushed me to write about the crisis in the first place. My parents, Norberto and Annamaria, have unconditionally dispensed encouragement and support, as well as healthy criticism, for over 40 years – anything good I have achieved can ultimately be traced back to them. Being my parents, they know well not to take me too seriously. The same goes for my favorite brother Andrea. A special thanks to my friend Matt. And last but not least, to Manuel. My debt to all of them goes far beyond what I can acknowledge in this context.

While I argue in this book that “we were all in it together”, I am painfully aware that all its shortcomings begin and end with me.

Preface

The financial crisis which started in the summer of 2007 is still sending reverberations and aftershocks through the global economy. It has changed the world around us, and it has changed our lives – most importantly, and most painfully, for the millions of workers who lost their jobs and are still struggling to re-enter the labor market. For those who worked in the financial sector, and for policymakers, it has been a deeply traumatic experience. Brutally shaken out of our complacency, we have been suddenly faced with the economic and financial equivalent of a natural disaster, a force which we struggled to comprehend, let alone control.

It has been such a deep shock for individuals and for entire societies that the reaction has often been extremely emotional. This is natural, but hardly conducive to understanding the causes of the crisis and to designing preventive measures that can reduce the risk of a relapse. Indeed, less than three years after the peak of the crisis, the danger of a relapse has already increased to a surprising extent.

In this book, I outline what I think are the right and wrong lessons from the crisis, using the tools of economics. This might seem counterintuitive. Many have argued that the entire edifice of economic theory has been undermined by the crisis; that the financial turmoil has demonstrated once and for all that the underlying assumptions of mainstream economic theory, starting with the “efficient markets hypothesis”, are fundamentally flawed; that economists not only were unable to foresee the crisis, but have in fact played a key role in aiding and abetting it. Yet this line of argument is in many ways simplistic, misleading and disingenuous. Economics is an imperfect science, and some of its weaknesses have been shown in an unflatteringly harsh light by the crisis. For example, the fact that most econometric models did a poor job of capturing the interaction between the financial sector and the real economy tricked some analysts and policymakers into initially underestimating the disruptive impact of the financial crisis.

Yet economics still offers the best toolkit to analyze both the crisis and its aftermath. Most importantly, economics imposes a healthy degree of logical rigor on the discussion, providing a useful bulwark against arguments which can otherwise turn dogmatic, emotional and inconsistent. In fact, some simple and basic lessons of economics were ringing alarm bells during the build-up to the crisis. The idea that it was possible consistently to obtain higher financial returns without taking on a commensurately higher risk went against the grain of economic theory, and so did the delusion that real estate prices could keep rising forever. But the best proof that economics is not dead is that demand for economic analysis has actually increased during and after the crisis. As the bubble inflated, the conceited delusion of the so-called Great Moderation, the idea that volatility in output growth and inflation had been tamed, flattered economists and at the same time made them irrelevant. In the financial sector, the conviction that economic growth had become stable at high rates, that volatility had abated in a durable manner and that risk spreads could only narrow further drove attention away from macroeconomic fundamentals and focused it squarely on financial engineering. As the crisis struck and volatility came back with a vengeance, everyone suddenly rediscovered the need to understand economic fundamentals. And today, as we navigate a post-crisis world marked by higher uncertainty, that need is ever more evident. I am well aware that coming from an economist this argument will sound self-serving. But if we want to put the global economic and financial system on a stronger footing, we need to make good use of the best tools we have. Medical science sometimes fails us, and its progress can feel frustratingly slow – but when illness strikes, it is still better to turn to a doctor than to a witch-doctor.

The attacks against economics are just one manifestation of the widespread recourse to scapegoating which has characterized the reaction to the financial crisis. We blamed economists for paving the way to the crisis; we blamed greedy bankers for building up imbalances and bubbles to pay themselves obscene bonuses; and when Greece suddenly disclosed an unsustainable deterioration in its fiscal accounts, we blamed speculators for the prompt rise in its cost of funding. Blaming it all on someone else's incompetence or dark motives may be satisfying, but it will not lead us anywhere. The truth is, we were all in it together, to a greater or lesser extent: the bankers who developed and proliferated the "financial weapons of mass destruction" (as George Soros colorfully put it); the brokers who extended generous mortgages to borrowers who would never be able to repay; all those who thought they could get rich by just climbing the property ladder all the way to heaven; the rating agencies who became addicted to the fees generated by complex structured products; the regulators who turned a blind eye; the policymakers and politicians who should have pulled the plug but chose to enjoy the political dividends of rising incomes and broader

homeownership. This is not to say that since we were all guilty, nobody is guilty. The point is not to assign blame. The point is to understand where we failed and why.

The book is structured into four parts. Part I is an analytical history of the financial crisis. Chapter 1 provides a brief introduction to highlight the main themes of the analysis. Chapter 2 then discusses the steady build-up of unsustainable imbalances during the years preceding the crisis, pointing out the key factors at both the macroeconomic and microeconomic levels, including the role of financial engineering. Chapter 3 takes us step by step through the financial crisis. Since hindsight is always twenty-twenty, in this chapter I have tried to recapture what we felt, knew and believed as we went through the different stages; this should give us a better understanding of how events unfolded, and why certain steps were taken, and hopefully it will leave us better prepared to understand how we might react when faced again with similar circumstances.

In Part II of the book I focus on globalization. Chapter 4 discusses the role of Asia, a source of both hopes and fears during and after the crisis. Chapter 5 assesses the degree of international policy coordination in the response to the crisis. Its conclusion is that coordination has been more apparent than real: policymakers responded in similar ways to similar challenges, but do not seem to have fully understood the need for a coordinated approach to volatility and shocks in a more closely interconnected world. Chapter 6 is devoted to Europe, where I lived through the worst of the financial turmoil. I found it striking at the time how Europe's initial reaction was one of denial, a firm belief that the crisis was and would remain a US problem. As this book goes to press, the ongoing sovereign debt crisis in the Eurozone is one of the greatest outstanding threats to global financial stability – underscoring the fact that blaming others is never a productive strategy.

Part III tries to separate the sheep from the goats, identifying the right lessons to be drawn from the crisis and debunking the wrong ones. Chapter 7 tackles some technical issues which are key to the debate on deflation, inflation and the monetary policy response; they are very much relevant today as we watch with bated breath policymakers get ready to remove an unprecedented and massive monetary stimulus. Chapter 8 discusses whether capitalism as we know it has failed. Chapter 9 is devoted to what I see as the two most misleading reactions to the crisis: scapegoating, and an attempt to depict the crisis as a lapse of ethics, which then leads to seeking solutions in morality or religion rather than in setting the right incentives.

Part IV builds on the analysis to look at the new challenges and risks facing us – first and foremost, the existential challenge faced by the Eurozone, in Chapter 10; then the arduous and risky task of normalizing the fiscal and monetary policy stance while completing the deleveraging process, in the ominously numbered Chapter 11. Chapter 12 concludes.

I hope you will find the book useful, but also entertaining. Economics is a science, but the events analyzed in this book have unfolded like the plot of a high-suspense movie, and I have tried to recapture that suspense as we first went through it. The main lesson of the crisis, for me, is that we need to be both ambitious and humble. The global economy still faces daunting challenges: advanced economies need to complete their deleveraging process, in particular by setting public debts on a sustainable declining path; meanwhile unemployment in the US and elsewhere remains painfully high; the withdrawal of the unprecedented monetary stimulus poses risks that we do not fully understand; and while emerging markets have been the success story so far, there are increasing signs that new imbalances are building up. We need to be confident that creativity and innovation, together with prudent policymaking, can bring the global economy back to strong growth and high employment; we need to be aware that closer international cooperation is essential to ensure that the benefits of growth are widely shared by minimizing tensions and imbalances; and we need to be humble enough to realize that we do not understand enough, especially in a global economy which has been reshaped by unprecedented shocks. This book is aimed at helping us find the right balance between humility and ambition.

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PART I

A Brief History of Portentous Times

Introduction: From Hubris to Humble Pie

1.1 HUBRIS

In 2007 global financial markets began to suffer an unprecedented succession of disruptions, breakdowns and conflagrations that nearly broke the back of the world economy. The damage was so deep and so severe that the crisis mutated like a virus as it infected different parts of the global financial system. While at this writing its intensity has gradually diminished, periodic flare-ups have served as stark warnings that its harmful potential is not yet fully under control. In fact, the crisis has morphed so often that it has proved impossible to identify it by a single moniker, as was the case for the “dot-com” crash or the Long-Term Capital Management (LTCM) crisis. The definition of “subprime” crisis, which seemed to fit perfectly at first, now sounds misleadingly diminutive as disruptions have spread like wildfire to a much wider range of asset markets, including sovereign bond markets in the Eurozone. And it is not over yet.

The crisis caught us by surprise, unprepared; it has put in question the usefulness of the current state of the art in economics and, more importantly, has undermined confidence in the free market system; it has sparked behavioral and regulatory changes that will have a profound impact for decades to come; it has altered the balance of power in the world economy and raised new challenges for policymakers in advanced economies and emerging markets.

It has become almost accepted wisdom that “nobody saw it coming.” That is simply not true, as I will argue. But, certainly, nobody did anything to stop it until it was too late. It is essential, therefore, to try to understand how and why the crisis occurred, to understand the long-term implications of the profound structural changes that are now under way, to be more willing to sound the alarm the next time we see unsustainable imbalances

building (the next opportunity is already at hand) and to be more prepared to face the next shock that will inevitably come, sooner or later.

The triggers of the crisis were many, but perhaps the single most important one was hubris. One must be careful here. Hubris is a term charged with ethical connotations, and attempts to depict this financial crisis as a moral parable have been the most misguided and counterproductive reactions we have seen over the past few years. Here I am speaking of hubris in an intellectual sense: as the arrogant conviction that we understand much more than we really do, that we have acquired a much greater degree of control on our environment than we really do. This kind of blind and excessive self-confidence has been a constant characteristic of financial crises through the ages, and professors Reinhart and Rogoff have aptly captured it in the ironic title of their book *This Time Is Different*, a brilliant and thorough study of eighty years of financial crises across the world. Bubbles build up exactly because more and more people become persuaded that a seemingly unsustainable trend can continue ad infinitum, and even though previous episodes of exponential growth in the prices of some assets have ended in tears, “this time it’s different.” Typically, a structural change is invoked to argue that the world has really changed: The price of tulips had collapsed in the end, but the stock prices of dot-com companies will keep on rising because the Internet revolution has brought a structural change. The price of dot-com companies eventually collapsed, but real estate prices will keep on rising because demographics and financial innovation have brought a structural change. Real estate prices collapsed, but commodity prices will keep on rising because faster emerging markets growth has brought a structural change. It is all too easy to laugh ex post facto at these arguments. Hindsight is 20–20, but at the time there is always an ample margin of uncertainty to give these explanations sufficient plausibility; and the longer the unsustainable trend continues, the more its very persistence is taken as evidence that a structural change really has taken place. Every bubble starts with a plausible narrative based on genuinely strong fundamentals, which is exactly what makes it so hard to spot it ex ante – a lesson we would do well to keep in mind.

There are true examples of structural transformations that have brought a sudden change in behaviors or dynamics: the unexpected acceleration in the popularity of personal computers and later of mobile phones, or the astoundingly rapid success of web-based social networking. These are usually driven by scientific discovery and technological innovation, and/or by major shifts in culture and behavior. However, even these phenomena virtually never create opportunities to earn free money on a continuous basis. Sadly, one of the most solid assumptions of economic theory is that there is no free lunch.

Hubris is a recurrent factor in human history and an inescapable factor in most financial bubbles: One could argue that the fear and greed, which

famously alternate in driving investor behavior, are just specific manifestations of the superstition and hubris that alternate in driving general human behavior. However, over time it has become easier for humanity to fall prey to hubris, as scientific advancement has allowed us to take greater control over our environment.

Similarly, perhaps the most interesting and instructive feature of the years leading up to the crisis was the widespread conviction that the economic cycle had been tamed, macroeconomic volatility eliminated. In academic and policy circles, this thesis was dubbed the “Great Moderation.” Starting in the 1980s, most developed economies (with the notable exception of Japan) experienced a substantial decline in the volatility of both output growth and inflation; in addition, taken over a long horizon the frequency of recessions had declined, and the absolute level of inflation had dropped significantly.

The economic cycle is one of the clearest empirical regularities in individual countries and the world economy as a whole: economies tend to experience periods of fast economic growth followed by sudden deceleration or contraction, an alternation of economic booms and busts. And while the booms are extremely enjoyable, the busts inflict a painful cost in terms of rising unemployment and declining living standards. Governments and central banks have struggled to smooth out the cycle, trying to cool the economy down when growth seems too fast and to cushion the fall when a recession hits. Understandably, the feeling that perhaps the economic cycle had finally been tamed generated substantial enthusiasm, all the more so in the few years immediately preceding the financial crisis, when global GDP growth was running consistently at high levels: It really seemed that we could get the best of all worlds, the benefits of strong and sustained economic growth without the painful periodic adjustments.

1.2 “ALL IN IT TOGETHER”: THE GREAT IMMODERATION

Academic economists invested a considerable amount of energy investigating this pleasantly surprising phenomenon. As Federal Reserve governor Ben Bernanke pointed out in a February 2004 speech¹ the potential explanations advanced in the literature could be grouped in three broad categories: (a) structural changes (of course) including better management of inventories in industry (which smoothed the downturns and upswings in activity), greater depth, sophistication and integration of financial markets, and globalization; (b) better macroeconomic policies, in particular monetary policy, and (c) sheer luck, in the form of a decline in both the magnitude and frequency of shocks; this was obviously the least attractive and reassuring explanation,

as luck could easily change, bringing back greater volatility.² Most of all, the Great Moderation was seen – and claimed by central bankers – as the crowning achievement of wiser and more adept policymaking. It was the illusion that we had acquired a much greater degree of control over the global economy – a considerably more flattering conclusion than even giving credit to improved business practices, and certainly than sheer good luck. There was a strong logic to claims that better monetary policy had brought about the Great Moderation, as the most remarkable and widespread macroeconomic achievement in those two or three decades had been the taming of inflation. Most industrialized countries experienced a “Great Inflation” period beginning in 1969–70, followed by a “Great Disinflation” period triggered by tighter monetary policy starting in 1983–86. These sharp and simultaneous swings in inflation rates then gave way to a long period of low and stable inflation, with the disinflation trend spreading gradually from advanced to emerging economies starting in the 1990s.

In the case of inflation, it was much easier for central bankers to take credit. After all, most explanations of the Great Inflation in the academic literature had pinned the blame on policy mistakes: attempts to exploit an unstable Phillips curve (the relationship between inflation and unemployment, whereby higher (unexpected) inflation should go hand in hand with lower unemployment), misestimations of the NAIRU (the Non-Accelerating Inflation Rate of Unemployment, the “natural” rate of unemployment such that if actual unemployment falls below it, inflation will tend to accelerate as employers compete for a shrunken pool of available workers by offering higher wages), misplaced faith in price and wage controls, and overestimation of the costs of reducing inflation. In a nutshell, central bankers stood accused of having kept monetary policy excessively loose in a vain attempt to stimulate economic growth. Interestingly, most analyses tended to downplay the role of cost-push factors such as oil or other commodity price shocks. Conversely, the Great Disinflation seemed to coincide with the adoption of more determined and sustained anti-inflationary policies, beginning with the arrival of Paul Volcker at the helm of the Fed.

But if monetary policy was responsible for the Great Disinflation, then it could also reasonably lay claim to the broader Great Moderation, as economic theory suggests that low and stable inflation is conducive to stronger and more stable economic growth.

Meanwhile, the apparent decline in volatility for the main macroeconomic indicators – GDP growth and inflation – was accompanied by a similar decline in market volatility. This is evident in Figure 1.1, which shows the VIX, the index capturing the implied volatility in equity markets via index options on the S&P 500.

As measures of market volatility declined, risk spreads on a wide range of financial assets kept narrowing to ever-lower levels; this was evident in