PART ONE

INTRODUCTION AND OVERVIEW

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ONE

Understanding the Great Recession

Barry Z. Cynamon, Steven M. Fazzari, and Mark Setterfield

> I must say that I, back in 2007, would not have believed that the world would turn out to be as fundamentalist-Keynesian as it has turned out to be. I would have said that there are full-employment equilibrium-restoring forces in the labor market which we will see operating in a year or two to push the employment-to-population ratio back up. I would have said that the long-run funding dilemmas of the social insurance states would greatly restrict the amount of expansionary fiscal policy that could be run before crowding-out became a real issue.
>
> I would have been wrong.
>
> Brad DeLong blog, *Grasping Reality with Both Hands*
> (from "More Results from the British Austerity Experiment,"
> http://delong.typepad.com/sdj/2011/04/, April 27, 2011)

In December of 2007, the U.S. economy entered a recession. As economic statistics in the first part of 2008 confirmed an emerging downturn, the policy establishment acknowledged the weakness, but seemed to expect nothing more than a mild recession followed by a quick recovery. For example:

> The U.S. economy will tip into a mild recession in 2008 as the result of mutually reinforcing cycles in the housing and financial markets, before starting a modest recovery in 2009 as balance sheet problems in financial institutions are slowly resolved. (IMF World Economic Outlook, April, 2008).
>
> Our estimates are that we are slightly growing at the moment [April, 2008], but we think that there's a chance that for the first half [of 2008] as a whole, there might be a slight contraction.... Much necessary economic and financial adjustment has already taken place, and monetary and fiscal policies are in train that should support a return to growth in the second half of this year and next year. (Ben Bernanke, Testimony to the Joint Economic Committee, April 10, 2008)

We now know that these forecasts badly missed the mark. Job losses and financial instability accelerated through the summer of 2008. After the dramatic events in the wake of the collapse of Lehman Brothers (September 15, 2008) the U.S. economy went into a free fall that eerily tracked the first months of the Great Depression. Job losses in the United States and abroad were the worst in generations and in contrast to early predictions that recovery would come soon, the best that can be said about the U.S. economy as we approach *five years* from the official beginning of the recession is that collapse has been replaced by stagnation.

The dramatic crisis and extended stagnation seem to have caught most economists by surprise. Prior to the onset of the Great Recession in 2007, thinking had converged to the idea that since the mid-1980s, the United States (and other developed countries) had been experiencing a "Great Moderation" – a marked reduction in the volatility of the aggregate economy as compared with the 1970s and early 1980s (see, for example, Galí and Gambetti, 2009). Researchers posited a number of explanations for this favorable performance. Particularly prominent was the view that enlightened monetary policy pursued according to well-defined rules can effectively contain instability and quickly turn negative-growth hiccups back to a favorable long-run path of high employment and rising living standards.

In contrast, a group of macroeconomists, largely outside of the academic mainstream, repeatedly warned during the Great Moderation years that gradual, but very strong, forces were leading the U.S. economy toward a deep recession and persistent stagnation. These economists drew on an alternative perspective, rooted in Keynesian theory, that emphasizes the central roles played by aggregate demand, uncertainty about the future, and finance in determining the path of the aggregate economy through time. From this vantage point, the Great Moderation was not a permanent structural change that could be expected to deliver robust and low-variance growth indefinitely. Rather, the relatively good performance of the U.S. economy in the decades following the deep recession of the early 1980s arose from unique historical circumstances, most prominently a high rate of demand growth financed by unprecedented borrowing in the household sector.

The expansion of borrowing and lending was not just accommodated but, in some cases, actively encouraged by institutional changes in the financial sector. The experience of financial stability in the post–World War II era, assisted in large part by the extensive regulation imposed on the financial sector following the Great Depression, increased the confidence of financiers and their customers. Ironically, this relative financial stability that emerged in a policy-constrained environment validated the increased confidence in markets and induced the consequent institutional changes designed to "free up" the way they work. As the system was deregulated, the degree of sophistication of financial models, credit rating systems, and trading platforms grew, and the demand stimulus from more aggressive financial practices helped reinforce optimistic perspectives about risk and returns. The economy grew, then, by gradually undermining the institutional supports responsible for generating financial stability and aggressively funding demand growth with debt. In other words, growth resulted from the steady increase of financial fragility.

This fragility remained largely contained during the superficially successful era of the Great Moderation, but since 2007 it has become dramatically manifest, with disastrous macroeconomic consequences. Moreover, now that the consumption-led and household-debt-financed engine of aggregate demand growth has ground to a halt, there is no automatic mechanism to generate the demand necessary for recovery. Insufficient demand of this nature can create a persistent problem, one not just confined to the "short run" of mainstream "New Keynesian" models. The return to economic conditions that even approximate full employment will be a difficult and protracted process. If policy is to mitigate this sluggishness, it will require much more significant intervention to create demand growth than has been pursued in the United States over recent decades. Furthermore, conventional "stimulus" policy, both monetary and fiscal, may not be sufficient to improve economic performance so that it once again appears normal by the standards set during the Great Moderation. A true recovery may be possible only with deep structural change, particularly in the distribution of income, which induces healthy demand growth without unsustainable borrowing.

This volume collects the thinking of a group of Keynesian macroeconomists whose understanding of the Great Recession (as previously summarized) is distinct from that of most academic economists, policy makers, and journalists.[1] A number of authors represented in this volume "saw it coming" and published early warnings that not only predicted a crisis of historic magnitude but also explained in broad terms how it would unfold.[2]

[1] As the quotation from Brad De-Long at the start of this introductory chapter suggests, a number of other economists have since come around to the more fundamentally Keynesian way of thinking that informs the contributions to this volume.

[2] The title of Palley (2002), "Economic contradictions coming home to roost? Does the US economy face a long-term aggregate demand generation problem?" says it all. Setterfield

These perspectives also implied that recovery would be sluggish (at best), both because the challenge of sustaining robust aggregate demand growth is more difficult than often appreciated and because the usual policy actions that many mainstream economists trusted during the Great Moderation period would turn out to be woefully inadequate once the household debt engine of demand growth ran out of gas.

This introductory chapter surveys the landscape of the Great Recession as it has unfolded to date, and summarizes the economic thinking that lies behind the contributions in the following chapters. A fundamental objective of this project is to explore the implications of the perspective developed here for the way forward, as the U.S. economy struggles to restore growth and fully employ its resources. Each chapter addresses this issue. In addition, the concluding chapter draws the various threads from individual authors together to discuss the challenges facing the economy over the coming years. The final chapter also addresses what the body of work presented here teaches us about what policy can – and cannot – do to enhance the prospects for recovery.

1. The Great Recession: A Brief History

The Great Recession created the most severe disruption in U.S. economic activity since the 1930s. Figure 1.1 shows the profile of employment for all U.S. recessions since 1974–75, itself a watershed event that ended the post–World War II period of relatively good macroeconomic performance. The figure indexes employment to 100 at the beginning of each recession and tracks the number of jobs through their decline and recovery until employment again reaches its pre-recession level.[3] The decline in employment at the trough of the Great Recession was roughly three times more severe than the average decline in the four other comparison events. The persistence of

(2006, p.59) warns that the U.S. "incomes policy based on fear" during the Great Moderation may be undermining the demand-generating capacity of the U.S. economy. In an op-ed in the *St. Louis Post Dispatch* (October 3, 2007, page B9) Cynamon and Fazzari warn that "the current financial instability in the mortgage markets is merely the initial rumbling of a much bigger economic storm on the horizon." Wray (2007, p.44) fears the emergence of "a huge demand gap that is unlikely to be fully restored by exploding budget deficits or by exports." Also see Godley and Izurieta (2002).

[3] The 1980–83 period is treated as a single event in this figure even though it includes two separate recessions according to National Bureau of Economic Research (NBER) dating. Employment briefly rose modestly above its pre-recession level in 1981 only to decline significantly a few months later. None of the following interpretations change if this event is treated as two separate recessions.

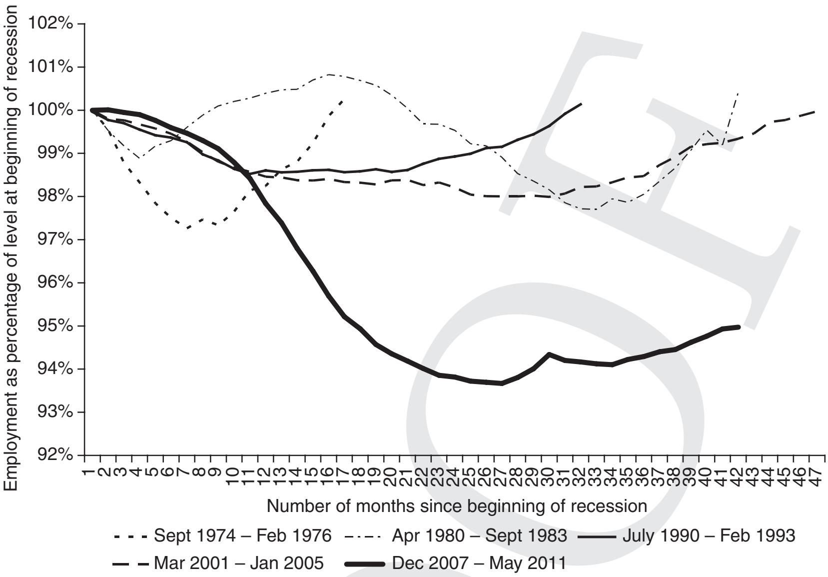

Figure 1.1. Employment profile of recent U.S. recessions.
Source: Total non-farm employees from U.S. Bureau of Labor Statistics' establishment survey. Initial employment indexed to 100 for each recession.

the job losses is also remarkable. Although modest job growth began after twenty-five months of decline, this growth only managed to recover about a quarter of the job losses in the subsequent year and a half. If this rate of growth continues, it will take about eight years from the beginning of the recession for employment to recover to its pre-recession level – a period approximately double that of the worst previous recession since the 1930s. Something fundamentally different is going on compared to more than sixty years of previous history.

The disruptions beginning in 2007 also caused the first serious drop in U.S. consumption since the early 1980s. After two decades of almost continuous increases, the ratio of consumption to disposable income tumbled about four percentage points in 2008 alone. Although this statistic fell by similar amounts during the severe 1974 and 1980 recessions, consumption bounced back quickly as robust recoveries took hold. From 2009 through mid-2011, however, the consumption-income ratio has remained about four percentage points below its 2007 levels.

Residential construction has been an unmitigated disaster. It rose substantially from 2002 to 2006 as a share of GDP, but despite common descriptions of excessive home building as a massive misallocation of resources during these years, the "boom" period was largely in line with historical fluctuations. What was unparalleled in recent history, however, was the decline in home construction beginning in 2006. By 2011, residential investment was much less than half of the value it attained at the 2005 peak, and about half of the fairly stable value for the decade prior to the pre-crisis boom.[4] A look at historical residential construction statistics shows that every U.S. recovery since (at least) 1975–76 has been driven in large part by a housing boom. In the bleak conditions for housing evident four years since the onset of the Great Recession, there is no prospect for anything like a return to normal, much less a boom. These declines in consumer spending and home building represent massive declines in aggregate demand, and from the Keynesian perspective, they are the proximate cause of the Great Recession.

Of course, the obvious candidate for the trigger that forced both consumption and residential construction to plummet was overextended mortgage debt and the dramatic financial crisis this debt created. Not since the early 1930s has the U.S. economy gotten close to the kind of financial collapse that followed the failure of Lehmann Brothers investment bank in the fall of 2008. The crisis largely shut down the extension of consumer credit, choking off what had become the fuel for demand expansion during the previous two decades.

Policy actions have also been dramatic during the past few years. The Federal Reserve and the U.S. Treasury pursued a wide variety of refinancing – that is, "bailout" – policies, starting in the late summer of 2007, even before the official recession began. The Fed's balance sheet expanded dramatically as it bought mortgage-backed securities and, later, long-term Treasury bonds for trillions of dollars. Fiscal stimulus took a variety of forms. The nearly $800 billion American Reinvestment and Recovery Act passed early in the Obama administration was the most prominent among "stimulus" measures. However, automatic stabilizers (rising entitlement spending and falling tax revenues) were quantitatively more important. The federal deficit rose to about 10 percent of GDP in 2010, about double the previous post–World War II record set in the early Reagan years.

Prior to the Great Recession, virtually no analyst of U.S. policy would have predicted such aggressive policy responses. Yet, the sluggish recovery and continued deep uncertainty about the economy's future several years

[4] Residential construction averaged a remarkably stable 5.2% of GDP from 1993 through 2002. In 2005, it peaked at almost 6.2% of GDP, similar to its peak in the mid-1980s (earlier peaks were even higher). As of 2011, construction was about 2.5% of GDP.

after the events that triggered the Great Recession suggest, if anything, that the policy responses were too timid.

2. Mainstream Macroeconomics and the Great Recession

The essential feature of the perspective that connects the contributions to this volume is that the interplay of three central features of capitalism – aggregate demand, uncertainty, and finance – explains much of the boom of the Great Moderation period and the bust that culminated in the Great Recession.[5] Increased confidence and "animal spirits" fed into an unprecedented increase in household indebtedness that fueled the expansion of aggregate demand, until financial fragility finally cracked (initially in the subprime mortgage market), rupturing confidence and dousing animal spirits. This set up a sudden and precipitous decline in aggregate demand, as credit contraction, wealth destruction, and decreasing aggregate expenditures interacted in a vicious spiral that was only arrested by massive policy interventions.

However, this account is quite at odds with the perspective of most mainstream macroeconomics, ~~however,~~ especially as practiced prior to the dramatic events of the fall of 2008. Much mainstream theory was, and remains, committed to an avowedly supply-side view of the economy, according to which variations in aggregate demand have no direct role to play in determining "real" macroeconomic outcomes (such as unemployment), even in the short run. From this point of view, the essential cause of the Great Recession was a supply-side shock – a sudden increase in labor market frictions, or a shock to labor supply or financial intermediation, for example – causing dislocations in the economy that are most likely temporary.[6] Even if these shocks represent more persistent structural problems, the solution to them has nothing to do with replacing the aggregate demand growth that was lost with the end of the housing-debt-financed consumption boom.[7]

[5] Some parts of sections 2 and 3 are extensively revised from Cynamon and Fazzari (2010).

[6] For example, according to Feldstein (2010), we can look forward to a period of *faster* growth over the next ten years, as a sharp rebound from the Great Recession itself puts the United States back on the trend set by an uninterrupted natural rate of growth.

[7] For example, in mid-2010, the president of the Federal Reserve Bank of Minneapolis, Narayana Kocherlakota proposed that much of the unemployment problem is the result of mismatched skills and geographic preferences: workers are not in the places or industries where the jobs are. If this is the case, it follows that "[m]ost of the existing unemployment represents mismatch that is not readily amenable to monetary policy" (speech at Northern Michigan University, August 17, 2010).

Yet it is hard to escape the seemingly central role of finance in bringing about the Great Recession (despite the proclivity of some supply-side accounts of recent events to do just this by focusing instead on, for example, the workings of the labor market – see Ohanian, 2010). And although some supply-siders do see a role for finance in causing the Great Recession (a shock to the technology of financial intermediation, for example), their models do not, in our view, provide the best foundation for such an account.[8] As Edmund Phelps (2010, p. 2, emphasis in original) has recently remarked:

> [Supply-siders are] not in a position to argue that the excessive vulnerability of banks (and counterparties) to loans gone sour and resulting stoppage of loans to businesses, which has been recurrent in the past two centuries, can be viewed as just an unusually large value in some disturbance term in this school's models. After all, the precepts of this school imply that episodes of excessive leverage and credit stoppages *do not occur*: Markets are perfectly efficient to a decent approximation.… The school that laid the ground for the belief in "the magic of the market" cannot pretend that its models succeed in encompassing gross mispricing of risk and pathological values put on familiar assets.

Despite the search for an exclusively supply-side explanation for the Great Recession among some academics, the events of the past four years have created a remarkable shift toward Keynesian thinking among many mainstream economic analysts, including journalists and policy makers.[9] Consider first how we understand the sources of the Great Recession. As noted earlier, the role of finance is virtually inescapable, and so it is not surprising to find that almost all explanations begin with problems in the U.S. mortgage market and emphasize a channel that goes from credit to demand. The bursting of the housing bubble created a clear and direct "demand shock." Residential construction collapsed and the American consumer juggernaut crashed for the first time in more than two decades. A broad swath of the economics

[8] This likely explains why many supply-siders were quite sanguine about the prospects for the U.S. economy, even as it entered the teeth of the financial crisis in fall 2008. For example, in the aftermath of the failure of Lehman Brothers in the fall of 2008, University of Chicago Professor Casey Mulligan opined that "[e]conomic research has repeatedly demonstrated that financial-sector gyrations like these are hardly connected to non-financial sector performance … So, if you are not employed by the financial industry (94 percent of you are not), don't worry. The current unemployment rate of 6.1 percent is not alarming, and we should reconsider whether it is worth it to spend $700 billion to bring it down to 5.9 percent" (Mulligan, 2008).

[9] As will become clear, this remains true despite current obsessions in the political sphere with "excessive" public deficits and debt and the "need" for austerity measures. We return to discussion of these themes later in this chapter.

profession and virtually all forecasters recognize the need for renewed spending, private or public, as critical for any kind of meaningful recovery. For example, Christina Romer, who had a front-row seat to the crisis in her role as chair of President Obama's Council of Economic Advisors, stated in an April 12, 2011 speech at Washington University in St. Louis, "I believe that when scholars finish analyzing both the U.S. and international evidence, the bottom line will be that fiscal stimulus is, and was in this past recession, a key tool to fight cyclical unemployment."

Macroeconomic policy has also been explicitly Keynesian, perhaps more than at any time for at least a quarter century. In the aftermath of the fall 2008 crash, fiscal stimulus packages emerged around the world with the explicit objective of boosting spending. This is a major change. Since the Reagan-Thatcher years, fiscal responses to recessions ~~were often~~ justified with supply-side arguments, even if it turned out that the most important effect of the resulting tax cuts was to stimulate demand rather than supply. However, discussions of recent stimulus measures in the immediate response to the most severe period of the recession largely jettisoned supply-side rationales and focused on the importance of creating spending, and doing so quickly.

Recent events have also transformed monetary policy, both its execution and how it is perceived by mainstream economists. The Bernanke Fed has cut short-term interest rates to zero for an extended period and pursued aggressive lender-of-last-resort interventions. Whereas there are clear grounds to criticize the way policy makers implemented the Troubled Asset Relief Program (TARP), the Term Asset-Backed Securities Loan Facility (TALF), bailouts of Fannie Mae, Freddie Mac, and AIG, and other such initiatives (particularly the distributional consequences of propping up massive institutions and their outrageously compensated management), the basic logic that motivates the systemic ambitions of these remarkable actions comes from Keynesian theory, broadly conceived to include Hyman Minsky's perspective on financial instability.

In addition, mainstream macroeconomic thinking may be shifting in another important but less obvious way. As economists digest the dramatic events of recent years, the relevance of the so-called new consensus approach to macroeconomics seems to be fading. These models adopt the microfoundations methods of new classical research, but price stickiness leads to short-run monetary non-neutrality. They admit short-run Keynesian features, but also posit competent monetary engineers, their tool belts equipped with Taylor rules and inflation targets, who keep the real effects of demand shocks well in check. One corollary of this thinking is that the makers of fiscal policy need not worry about Keynesian problems; they should focus instead on the classical long run, in which output converges to potential. Indeed, new consensus models are often interpreted to imply that it is best to keep fiscal policy out of macroeconomic stabilization in a slump because in the long run, government activity crowds out the private sector.

The new consensus emerged during the Great Moderation years. On the verge of the Great Recession, the new consensus models had convinced top mainstream economists such as Blanchard (2009) and Woodford (2009) that macroeconomic thinking was in good health, having survived the theoretical battles of earlier generations and arrived at a single, consistent vision of how macroeconomics should be done, what the long run looked like, and even a fairly common conception of what caused aggregate fluctuations in the short term. To be sure, some differences of opinion remained. Hence, whereas supply-siders persisted in the belief that the primary source of aggregate disturbances were technology shocks emanating from the real economy (possibly broadly defined to include labor search or financial intermediation "technologies"), "New Keynesians" emphasized monetary disturbances as a source of variations in output and employment. Nevertheless, even these differences could be boiled down to a single debate about the importance of nominal rigidities in an otherwise common methodological and theoretical framework.[10]

However, this "consensus" has suffered a bad few years. New Keynesian research had not completely ignored the uncomfortable possibility that the inability to push nominal interest rates below zero could prevent conventional monetary policy from fulfilling the stabilizing role ascribed to it in the new consensus research, with references especially to the troubles of Japan and its ever-expanding "lost decade." Yet, the full force of this modern version of the liquidity trap was not evident until recently. The nuances of the New Keynesian literature on optimal monetary policy seem of little relevance to the current crisis when the policy rate is effectively zero, banks sit on mountains of excess reserves, and there is great skepticism that two successive bouts of quantitative easing will be nearly enough to initiate a robust recovery. Indeed, despite the efforts of U.S. authorities to continue pushing on the proverbial string of monetary policy, many mainstream economists, in sharp contrast to the new consensus thinking of just a few years ago, have come to support aggressive fiscal policy, and government deficits of

[10] In academic circles, this common framework is usually referred to as dynamic-stochastic general equilibrium (DSGE) theory.

a size and persistence that was unimaginable just a few years ago, as an appropriate response to a crisis of this magnitude.

3. The Case for Keynesian Insights: Outside the Mainstream

Whereas much practical economic analysis of the Great Recession and the associated discussion of policy have clear Keynesian characteristics, other important aspects of Keynesian macroeconomics have not been adequately recognized in typical accounts of recent events. The points summarized in this section, and explored in detail in the chapters to come, show how our understanding of demand, finance, and uncertainty needs to expand beyond what typically appears in mainstream analysis to account for what has happened, to offer a realistic assessment of the challenges that may stand in the way of a healthy recovery, and to provide a foundation for policy advice.

Finance and the Limits of Monetary Policy: Beyond the Zero Bound

The zero bound notwithstanding, current mainstream understanding suggests that the Great Recession is a rare event, and that enlightened monetary policy should be capable of stabilizing economic activity in normal times. Central to this perspective is the idea that substantial interest elasticities of spending are robust structural features of the economy, so that the central bank can effectively control spending by manipulating interest rates. The transmission mechanism from monetary policy to aggregate spending in most new consensus models relies on the interest sensitivity of consumption. It is difficult, however, to find empirical evidence that households do indeed raise or lower consumption by a significant amount when interest rates change. Some authors have generalized the link between interest rates and spending in new consensus models to include business investment (see Fazzari, Ferri, and Greenberg 2010 and the references provided therein), but a robust interest elasticity of investment has also been difficult to demonstrate empirically (Fazzari 1994–95). If spending is not very sensitive to the interest rate set by monetary policy, very large reductions in the interest rate are necessary to offset the effects of even modest negative-demand shocks. Thus, the zero-bound constraint may not be the once-in-a-lifetime issue suggested by much current discussion, but rather a common and persistent problem (see also Palacio-Vera 2010).

If this perspective is correct, one might ask why most new consensus research largely views the zero-bound problem as exceptional. Recent history provides part of the explanation. Thirty years ago, nominal interest rates in the U.S. economy stood at record highs as the Fed aggressively fought inflation.[11] Although monetary policy was not always stimulative in the interim, the general trend of interest rates since the end of the U.S. Great Inflation in the early 1980s has been downward. Put simply, when demand lagged, central banks always had room to cut rates. This "room for maneuver" – the product of a particular historical episode of monetary policy – has now disappeared.

However, part of the explanation is theoretical. We propose that, for the past quarter century, monetary policy has worked through channels other than those emphasized in the new consensus models. Specifically, expansionary monetary policy and the consequent decline in interest rates have stimulated demand by magnifying the general financial trends identified earlier that encouraged the unprecedented accumulation of household debt. In addition, falling interest rates created refinancing opportunities, and also increased asset prices, thereby contributing (along with a variety of other factors) to major asset-price bubbles in technology stocks and real estate. These bubbles induced wealth effects and stoked optimistic animal spirits that further boosted spending.

The point is that monetary policy has stimulated aggregate demand in recent decades, but not through sustainable channels (such as shifts in consumption from the future to the present) in which finance simply "oils the wheels" of optimal long-term spending plans. Instead, falling interest rates contributed to debt accumulation and asset price inflation that was largely predicated on increasingly buoyant animal spirits. This created the appearance of robust and relatively stable macroeconomic performance (the Great Moderation) that, in turn, largely concealed (at least to most mainstream analysts) the threat of rising financial fragility. Concealed, that is, until the financial fragility was made obvious by events from 2006 to 2008 that triggered reductions in lending, confidence, and animal spirits, causing the whole house of cards to come crashing down.

We have now seen that conventional interest rate policy, and even some less conventional monetary policies such as quantitative easing, can neither prevent nor remediate a severe recession. For this reason, we argue that a full understanding of the Great Recession, and the prospects for a robust recovery going forward, must move beyond new consensus models of monetary policy.

[11] The federal funds rate reached a post-1955 peak of 19% in the early 1980s.

Uncertainty and Financial Instability

At least since Keynes wrote chapter 12 of the *General Theory*, Keynesian economists have emphasized the key role of uncertainty in explaining the evolution of the economy.[12] The events leading up to the Great Recession are no exception. In the aftermath of the crash of 2008 and 2009, it has become commonplace to scold both borrowers and lenders for "irresponsible" levels of debt. Although it is not difficult to find examples of irresponsible behavior, given what we now know, we argue that the more important reason that participants in all parts of the financial debacle got into trouble was reliance on heuristics and models that helped agents make decisions in the face of uncertainty, but provided no guarantee that the resulting decisions were optimal.

The financial practices that sowed the seeds of the Great Recession evolved over nearly a quarter century of relatively good economic performance. Households enjoyed higher consumption and better housing and the financial industry reaped fantastic profits. Academic work reinforced a sense that the new practices were desirable by praising the efficiency of financial markets and arguing that complex securities and other evolving financial arrangements effectively diversified risk and therefore justified more borrowing and lending relative to income or assets. The path of the economy in the years leading up to the recession appears unsustainable to many analysts, after the fact. However, people did not broadly perceive the inevitability of a collapse because, for decades, the system appeared to work quite well.

Keynes argues that when people have no objective basis on which to forecast events that arise from a complex system, they will assume that the future will look, more or less, like the recent past. The recent past for much of the period from the middle 1980s to 2007 supported the idea that rising debt and riskier financial positions could support higher standards of living and lucrative financial returns. Crotty (1994) writes about how agents following conventional forecasts create "conditional stability" in the outcome. During the Great Moderation period, people came to trust the ascendency of institutions that claimed to deliver a reasonably benign macroeconomic environment, most notably wise central banks. It was therefore neither irrational nor really irresponsible, in the context of the times, for them to engage in what (after the fact) seems clearly unsustainable. As Crotty (1994, page

[12] See, in particular, the extensive work along these lines by Paul Davidson, most recently Davidson (2007).

120) writes, "history demonstrates that capitalist economies move through time with a substantial degree of order and continuity that is disrupted only on occasion by bursts of disorderly and discontinuous change." For about two decades, experience appeared to confirm that household finance – and the economy as a whole – was in reasonably good shape.

There was also a tendency for evolving institutions to select ever-riskier financial behavior prior to the recession. As the debt-financed boom generated strong growth and validated risky behavior, those who warned of looming financial excesses lost credibility. Consider this statement attributed to Boykin Curry, managing director of the financial firm Eagle Capital (quoted by Fareed Zakaria "There is a Silver Lining," *Newsweek*, October 12, 2008):

> For 20 years, the DNA of nearly every financial institution had morphed dangerously. Each time someone at the table pressed for more leverage and more risk, the next few years proved them "right." These people were emboldened, they were promoted and they gained control of ever more capital. Meanwhile, anyone in power who hesitated, who argued for caution, was proved "wrong." The cautious types were increasingly intimidated, passed over for promotion. They lost their hold on capital. This happened every day in almost every financial institution over and over, until we ended up with a very specific kind of person running things.

In retrospect, these risky behaviors look irresponsible. However, for many years the favorable conditions rewarded more aggressive financial behaviors and the systemic effects that would ultimately lead to collapse were far from obvious in the uncertain context of the times. Curry's quote refers to the control of capital in the financial sector, but similar dynamics played out among households. More risky borrowing against one's home was validated by rising housing prices. Risky mortgage terms did not typically hurt homeowners who could subsequently refinance into markets with downward-trending interest rates and ever more lenient credit standards.

It all worked well, for many years. This conditional stability encouraged ever more confidence, more aggressive financial positions, and rising financial fragility, until eventually the stress on the system was too great and it broke down.

What is the Source of Demand Growth in the Long Run?

The failure of Say's Law defines Keynesian economics: no automatic economic mechanism exists to assure demand adequate to purchase full-employment output. Most mainstream Keynesians, however, believe that problems of insufficient demand are confined to the short run. Beyond a year or two, nominal wage and price adjustment should restore demand to a level sufficient to buy whatever output the supply side can generate. From this vantage point, a perspective called the "neoclassical synthesis" by the late Paul Samuelson, Keynesian policies need focus only on the short run, to nudge along the endogenous effects of nominal adjustment. Economic growth beyond a few years should be understood as a purely supply-side phenomenon, driven by advances in technology and the availability of productive resources, with no role for aggregate demand.

Although the neoclassical synthesis is a clean, even elegant, solution to the classical-Keynesian debate, there was never much theoretical or empirical support for its assertion that declining wages and prices would endogenously boost demand, eliminate unemployment, and restore the economy to a supply-determined growth path. Keynesian economists have written for decades about how deflation (or disinflation) might actually *reduce* demand. Falling wages make it more difficult for households to pay off debts contracted in nominal terms, causing them to tighten their belts and reduce spending. Similarly, because deflation raises the real value of nominal debts, it redistributes wealth from borrowers to lenders – that is, from high spenders to low spenders. – This redistribution will ~~also~~ depress demand. Finally, if deflation leads to expectations of further price declines, agents will have an incentive to defer spending. All these channels imply that the price-adjustment mechanism could, perversely, *reduce* demand when output is below potential.[13]

Indeed, despite the persistent textbook interpretation of Keynesian theory as showing what happens when wages and prices are slow to adjust downward after a decline in aggregate demand, practical economists in recent years seem to have put their faith in monetary policy, rather than nominal adjustment, as the primary engine of macro stabilization. We have already discussed how the Great Recession has revealed the limitations of monetary policy. However, if we can rely on neither wage and price adjustment to restore demand endogenously and automatically, nor monetary policy to fine-tune demand through explicit policy action, what is the source of demand that keeps the economy growing over both short and long horizons? We propose that there is no single answer to this question and that

[13] Although this statement undermines the theoretical foundations of the neoclassical synthesis that dominated decades of macro textbooks, it is hardly a surprise. Keynes made these arguments and they have been explored widely in post-Keynesian research. For further references, see Fazzari, Ferri, and Greenberg (1998) and Palley (2008).

Keynesian macroeconomists and economic historians need to look at the variety of different ways that economies have (or have not) succeeded in generating sources of demand growth across time.[14]

To demonstrate how demand growth sufficient to match potential output growth in the medium and longterm is hardly automatic, it is instructive to sketch the somewhat idiosyncratic ways that the challenge of creating demand has been addressed in the United States over the past century. The Roaring 1920s were fueled by a debt-financed consumption boom and strong asset price growth. Of course, this particular model for demand growth ended spectacularly with the Great Depression. The original New Deal seemed to turn things around in the middle 1930s, until fiscal policy tightened in 1937, but it ultimately took massive demand from the government in World War II to get the economy back to its pre-Depression trend. The war provided not just a direct source of demand but, through its financing, it also led to unusually liquid household and corporate balance sheets. These financial conditions along with the Marshall Plan that created an international market for U.S. exports, the Cold War military-industrial complex, hot wars in Korea and Vietnam, and another wave of consumerism in the baby-boom years, generated strong demand growth through the 1960s. Consumer spending growth in the mid-twentieth century was also supported by rising real wages that allowed the middle class to spend more without borrowing – in contrast to more recent experience. High oil prices and a wage-price spiral created trouble in the 1970s as demand growth faltered and then was deliberately suppressed by policy to rein in inflation during the monetarist experiment of the early 1980s.

The massive U.S. tax cuts during the early Reagan years were sold politically as supply-side policy designed to raise saving rates, but the result was exactly the opposite. Indeed, the share of U.S. disposable income devoted to consumption rose almost without pause through 2007, along with household debt. The rise in debt and consumer spending followed the script of a self-reinforcing boom phase of a Minsky financial "cycle," but it was not a phase of a typical business cycle. Rather, it was an extended period that contained a number of shorter cycles and lasted nearly a quarter century. In the aggregate, this particular method for generating demand growth worked well, as long as it could be sustained by falling interest rates and

[14] Of course, historically specific sources of demand growth alone are necessary but not sufficient for long-term economic growth. Developed economies obviously could not have expanded so much without supply-side growth. However, we part company with the common assertion that supply-side forces by themselves are *sufficient* to explain growth over decade-plus horizons.

expanding household access to credit. The Fed, with support from the academic establishment, drove interest rates lower. Financial engineers exploited new technologies – electronic credit scoring, for example – and pursued financial innovation that supposedly made risk sharing more efficient. The result was unprecedented debt pumped into the household sector. The consumption boom became a major engine of U.S. GDP growth. Unemployment fell to half-century lows. The end of this period of demand generation marked the beginning of the Great Recession.

The point of this brief historical summary is to make clear that rising demand is far from automatic. The fundamental Keynesian problem of demand-deficiency has been solved at different times by different and historically specific forces. When demand growth faltered, as in the 1970s or, more dramatically, the 1930s, the economy sputtered, and not just for a year or two. Even as mainstream forecasters are anxious to declare a more robust recovery from the Great Recession to be just around the corner, the source of the aggregate demand necessary to initiate significant growth remains a mystery. Simple faith in the mainstream mechanisms of wage and price adjustment and standard monetary policy is unjustified.

4. Where Do We Go from Here?

To explore the prospects for the U.S. economy in the aftermath of the Great Recession, we return to our organizing themes of demand, finance, and uncertainty.

By the summer of 2011, the economy had supposedly been in recovery for two years, Despite this, job growth remained minimal and the gap between actual output and sensible estimates of potential output had hardly declined. The proximate problem seemed to be a lack of adequate demand growth.[15] In the United States, consumption is 70 percent of demand. If consumption stagnates, other demand components must grow at unusually

[15] When output or employment fall below the long-term trend for an extended period, it is typical to hear from analysts who argue that the potential output trend must have declined, or the closely related concept of the "natural" rate of unemployment must have increased. This kind of thinking is based on the idea that demand constraints *must* disappear over a reasonably short period of time, so if the economy has fallen away from its earlier trend for a long time, the supply-driven trend itself must have changed. We reject this reasoning. As discussed earlier in this chapter, demand can constrain the economy over long periods. In the context of the Great Recession, assertions that the supply-driven trend has declined seem especially problematic because of the striking *rise* in labor productivity during this period. There is no evidence that the productivity of the U.S. economy or its workers is below the trend established through 2007.

high rates for total demand to expand at typical long-term rates of roughly 3 percent per year. In principle, consumption growth could be stimulated by another round of the lend-and-spend process, perhaps supported by yet another asset bubble, but this outcome seems both unlikely and undesirable, for obvious reasons.

The mainstream approach to the challenge of finding a source of demand growth to replace the consumption boom of recent decades would be to offset the reduction of private consumption as a share of demand with an increase in private capital investment as a share of demand. However, where should this investment come from? According to the new consensus models, the interest rate is the "magic variable" that controls the consumption-investment shares in the economy, but even with remarkably low interest rates, business investment remains depressed. If a robust recovery occurs, investment will likely follow its historical pro-cyclical pattern and rise strongly, but such a process propagates demand growth *after* a strong recovery begins; it does not initiate the recovery.[16] What about higher exports and lower imports as demand stimulus? The U.S. trade deficit did decline substantially in the teeth of the recession, greatly mitigating the collapse in demand for domestic business as a large proportion of reduced consumption and investment spending came at the expense of imports (the gap between imports and exports shrank from about 6 percent of GDP to less than 3 percent). Nevertheless, the trade gap has risen again with even the anemic recovery through 2011. Further significant declines in the trade deficit over the next few years are unlikely unless imports are once again hammered by dismal economic performance – hardly a desirable outcome.[17] For these reasons, it can be expected that stagnant private demand growth will continue to constrain the U.S. economy, a situation that will likely continue to pose a significant challenge to recovery in coming years.

Can government policies help create demand? Undoubtedly, monetary and fiscal actions by the U.S. government helped meet the immediate challenge of containing the free fall in aggregate demand of late 2008 and early 2009. Whether government actions can replace debt-led consumption as

[16] In 2010, business investment as share of GDP bounced back from historic lows, most likely as businesses retreated from the panic of the worst days of the recession. However, in 2011, nominal business investment remained a much smaller share of nominal GDP than it had been for almost all of the past half century.

[17] Over a longer horizon, changes in the structure of global demand may help generate U.S. demand growth. There have been some indications that China is pursuing policies that encourage domestic consumption, in part because the Great Recession demonstrated the danger of relying on exports to the United States as an engine of demand. This kind of change, however, is likely to proceed slowly.

an engine of demand *growth* in coming years, however, is less clear. At the least, government intervention would have to extend beyond the typical stabilization goals of textbook macroeconomic policy. The potential for policy to contribute to robust demand growth over a longer horizon is an important theme of the chapters to follow.

No doubt, finance will play a critical role in determining economic performance in the aftermath of the Great Recession. Looking ahead, however, the part played by finance is likely to be quite different than it was during the years prior to the collapse. From the mid-1980s through 2007, expanding credit – and in particular, expanding consumer credit – energized demand growth and asset prices, but in the sluggish initial phase of recovery, consumer credit is shrinking. In addition, what progress has been made in repairing the aggregate household balance sheet has occurred largely through loan default and not because U.S. consumers have committed to paying down their debts. On the one hand, less household borrowing is welcome. As previously intimated, we have been down the path of ever-increasing household leverage, we have seen where it leads, and we do not want to simply windup the clock springs of another unsustainable, debt-financed growth episode that serves only to leave us wondering when the next crisis will occur. On the other hand, to the extent that the U.S. economy had come to rely on rising household debt to generate demand growth, tighter limits on consumer loans or unwillingness on the part of households to borrow will constrain the recovery. In particular, recall that the recovery from every U.S. recession since (at least) 1974–75 has been led in large part by a boom in residential construction. A residential construction boom is highly unlikely to occur for some years to come.

Uncertainty looms large over any consideration of the way forward for the U.S. economy in the aftermath of the Great Recession. Although the dynamics of recessions have changed somewhat in past decades (consider, for example, the disappointment of "jobless recoveries" after the recessions of 1990–91 and 2001), the conditions that have prevailed since the National Bureau of Economic Research (NBER) declared the official end of the Great Recession in 2009 truly do seem different from anything the U.S. economy has previously experienced, at least since the Great Depression (again, refer to the employment profile in Figure 1.1). We were not supposed to have deep recessions anymore; we were in an era called the "Great Moderation!" In addition, conventional wisdom prior to the crisis implied that if the economy did face a deep recession, the recovery would be that much brisker as a result. However, there is no evidence that such a favorable outcome will occur this time. As previously discussed, monetary policy seems particularly impotent in its ability to engineer a robust recovery, even though it has been touted in mainstream thinking as the first, if not only, line of defense against the wasted resources of downturns in the business cycle. The modest effects of the Fed's experiments with various forms of "quantitative easing" and the absence of any further creative policy initiative emanating from the central bank following the "QE2" that ended on June 30, 2011 suggest a sense of helplessness in the face of adversity.

With monetary policy adrift, uncertainty about the effects of fiscal policy risks sinking the economic ship entirely. The Obama administration responded to the early stages of the Great Recession with a historically large fiscal stimulus package. However, debates rage about whether these policies made the economy better or worse. In our view, there is no doubt that the fiscal response to the onset of the Great Recession was essential to prevent a full-blown depression. As we have already noted, a still more ambitious fiscal response is likely necessary if anything is to come of the current weak recovery. The political response to the recent stagnation of the U.S. economy, however, has been distinctly anti-Keynesian, with even President Obama (the chief architect of the stimulus package) telling U.S. citizens that since they have been forced to tighten their collective belts, their government must do so as well. Fiscal contraction despite massive unemployment had begun in earnest in Europe by 2011, and much of the political momentum in the U.S. suggests that its fiscal policy will follow the European lead toward austerity.

Extending the maritime metaphor of the previous paragraph, this book is an attempt to right the ship that is the modern U.S. economy, and to put it once again on a course toward prosperity. To understand what we should do, we must first understand why the crisis occurred. The chapters that follow explore the sources of the Great Recession from a Keynesian perspective that predicted the broad outlines of what would happen years ahead of the actual emergence of recession. This perspective stands in contrast to most mainstream economic analyses, including Keynesian variants of the new consensus. Mainstream macroeconomics had been mostly lulled into the benign thinking that accompanied the Great Moderation. This approach greatly underestimated the challenge of demand generation over longer horizons, viewing demand growth as more or less automatic, aside from the need for temporary tweaks from the central bank. Mainstream thinking similarly underestimated the potential destabilizing forces of finance and largely ignored uncertainty all together. The alternative view developed here offers a deeper understanding of what has happened in the last few turbulent years. Nevertheless, understanding what went wrong is just the first step. The following chapters also apply the Keynesian perspective to consider how policy and institutional reform can reconstitute an aggregate demand-generating process to deliver recovery and growth, along with the financial activities that support it. In this sense, we hope that this volume helps illuminate the way forward for the U.S. economy from its most challenging times in more than seventy years.

5. Outline of the Chapters that Follow

The individual chapters in this book examine in greater detail the interplay between aggregate demand, uncertainty, and finance that has been sketched in this chapter. As previously mentioned, in each chapter, emphasis is placed on both the causes of the Great Recession *and* what needs to be done to put the economy on a stronger footing that will eventually yield a sustainable recovery.

Chapter 2, written by Thomas Palley, puts forward a broad vision of the Great Recession that links its genesis to the failings of the neoliberal policy program that took hold in the United States around 1980. Neoliberalism is identified as a faulty macroeconomic paradigm for two reasons: it relies on debt accumulation and asset price inflation, rather than wage growth, to drive demand; and it involves a model of U.S. engagement with the global economy that encourages spending on imports, manufacturing job losses, and off-shoring of investment. Palley argues that the neoliberal model slowly cannibalized itself by simultaneously undermining the distribution of income and accumulating debt. As this process unfolded, augmented by financial deregulation and growing debt, the economy needed ever-larger speculative bubbles in order to grow. In the final stages of this process, the flawed model of global engagement accelerated these dynamics, creating the need for a huge bubble that only housing could provide. When that bubble burst, the Great Recession began.

According to Palley, we have reached a juncture at which the old, post–World War II growth model based on rising middle-class incomes has been dismantled, whereas the new, neoliberal growth model has imploded. The United States therefore needs a new macroeconomic paradigm. This is the foremost challenge confronting economists and policy makers who seek to construct a sustainable path to prosperity in the aftermath of the Great Recession.

The next three chapters discuss the role of finance in the events that led up to the Great Recession, and the sort of reforms needed to reshape the financial sector going forward. In Chapter 3 by L. Randall Wray, the Great Recession is characterized as a systemic crisis of what Hyman Minsky called "money manager capitalism." Following Minsky, Wray shows how the New Deal and big government created a paternalistic capitalism after World War II that favored high consumption, high employment, declining economic inequality, and financial stability. However, this stability was ultimately destabilizing. As memories of the Depression faded and confidence grew in the robustness of the financial system, financial innovation and deregulation gradually chipped away at the very sources of this robustness. The result has been increasing financial fragility, which generated increasingly frequent and severe financial crises, culminating in the events of the Great Recession.

Wray examines in detail the various specific factors that contributed to the crisis, including the real estate boom and bust, the rise of risky financial instruments (such as securitized debts and credit default swaps), and the commodities market bubble. The chapter ends with reflections on the possible consequences of the failure of money manager capitalism, and policy proposals designed to promote more robust financial structures capable of sustaining rising standards of living.

Chapter 4, by Jan Kregel, focuses on the banking sector, but once again draws on Minsky's financial instability hypothesis to explain the ways in which surreptitious financial deregulation contributed to rising financial fragility in the run-up to the Great Recession. Like Wray in Chapter 3, Chapter 4 follows Minsky. Kregel argues that the banking sector serves "two masters": it helps finance real economic expansion; and it provides a stable and secure payments system. According to Kregel, deregulation upset the balance between these functions and created increasing financial instability in the decades that preceded the Great Recession. He argues, for example, that deregulation fueled the transformation of the traditional "lend and hold" business model for banking, that emphasized credit assessment for loans that would remain on the lender's balance sheet, into the "originate and distribute" model that is predicated on increasing lending volumes with the explicit objective of selling off the loans to get them off the original lender's balance sheet as quickly as possible. The 1999 Financial Services Modernization Act, meanwhile, pushed investment banks further into trading for their own account in place of their traditional roles as market-making dealers and securities underwriters. The result was a system that was less effective at financing business investment and that drastically increased risk.

Informed by the need for the banking sector to successfully balance its service to "two masters," Kregel discusses the limits on existing and traditional methods of regulation to provide stability to the financial system.

The focus of Chapter 5, by James Crotty, is the internal structure of modern financial services corporations and, in particular, the bonus-driven compensation schemes employed in important financial institutions such as investment banks. According to Crotty, these compensation schemes provided the incentive for key decision makers (so-called "rainmakers") to take the excessive risk and employ the excessive leverage that helped make the financial crisis and Great Recession so severe. The chapter assesses evidence on compensation practices in investment banks that show that rainmaker compensation has been rising rapidly, is very large, and induces reckless risk-taking. For example, boom-period bonuses do not have to be returned if rainmaker decisions eventually lead to losses for their firms, and large bonuses continue to be paid even when firms, in fact, suffer large losses. Crotty also shows that rainmaker bonuses are not appropriate returns to human capital – they are simply economic rents. Finally, Crotty discusses answers to the challenging questions: what is the source of rainmaker rents and how are they sustained over time? Answers to these questions are essential to debates over the appropriate future regulation of financial markets and, in particular, executive compensation.

Having examined various aspects of the contribution of the financial sector to the Great Recession, Chapters 6 and 7 turn attention to the household sector, and to debt-financed household spending as source of both growth and accumulating financial fragility. In Chapter 6, Barry Cynamon and Steven Fazzari analyze rising consumer spending and the associated explosion of household debt in the U.S. economy. They show that consumption, financed in large part by rising debt, was the engine of U.S. demand growth for an extended period of time. This "consumer age" largely coincided with the Great Moderation period from the mid-1980s through 2007, and the authors propose that strong consumption demand contributed to the relatively stable macroeconomic performance of the United States over these years. Cynamon and Fazzari also explore the underlying source of consumption and debt decisions, arguing that they are made in a social context. Psychological characteristics of individual choice and the influence of social reference groups contributed to what ultimately was revealed to be an unsustainable path for household finance. High consumption growth was accompanied by the accumulation of financial fragility, as discussed by Hyman Minsky. The eventual collapse of this process was the proximate source of the Great Recession.

The chapter then considers the prospects for American consumption and its macroeconomic effects over the next several years. Cynamon and Fazzari question the conventional wisdom that modestly improved economic indicators since the official end of the Great Recession signal the initial stages of a sustainable recovery. Without the U.S. consumers' willingness and ability to further leverage their collective balance sheets, they argue, the source of demand growth for a meaningful recovery remains a mystery.

Mark Setterfield argues in Chapter 7 that, whereas much attention has rightly been paid to developments in the financial sector as causes of the Great Recession, long-term trends in the real economy made vitally important contributions to the genesis of the crisis. Specifically, Setterfield identifies the tendency for real wages to grow slower than productivity since the 1970s. This trend has not only increased income inequality, but has also led to a structural flaw in the process that creates the demand necessary for high employment and rising living standards in the United States. Although household debt accumulation postponed the "day of reckoning" associated with this structural flaw, Setterfield predicts that the effect of sluggish real-wage growth on the incomes of working households now has the potential to create a future of secular stagnation, not just for U.S. workers, but for the country's economy as a whole. The chapter ends with a discussion of the sort of policy measures that would be required to avert this grim prognosis.

In Chapter 8, Robert Blecker explores global dimensions of the crisis and, in particular, the fabled "global imbalances" – large U.S. trade deficits accompanied by the large surpluses of several of the its key trading partners – that were the focus of much discussion prior to the Great Recession. Blecker argues that, contrary to conventional explanations that emphasize increased budget deficits under President Bush, a "global saving glut," or a persistently overvalued U.S. dollar, these imbalances are best seen as the outgrowth of different national solutions to a common problem: the sluggish growth of working- and middle-class household incomes, and the corresponding drag on aggregate demand growth. Nonetheless, Blecker argues that global imbalances were an important enabling factor in the growth of debt-financed consumption spending by U.S. households and in this way, contributed to the crisis. Moreover, despite their recent abatement, Blecker argues that global imbalances will reemerge during the postcrisis period, their size varying directly with the strength of the recovery. To this end, he discusses various policy measures that would redress future global imbalances without undermining the economic growth of which they would be a symptom.

The next four chapters focus specifically on policy lessons that can be learned from the experience of the financial crisis and Great Recession. Chapter 9, written by Gerald Epstein, argues that we have reached what he terms a "Kindleberger Moment," where, as Charles Kindleberger described in his *World In Depression, 1929–1939*, the government initially fails to act with sufficient force to expand fiscal policy and restrain the power of finance. This failure leads to such severe economic deterioration and political conflict that, even when governments know how they should act, they no longer have the political power to do so. The current revival of the "austerity buzzards" in the United Kingdom, Europe, and the United States and the inability to pass significant financial reform both presage the broader social forces that cripple the political ability to act in the United States and elsewhere.

Epstein argues that ending this paralysis requires bold new policy initiatives that effect systemic reform. His particular focus is on the restructuring of the financial sector, including monetary, financial, and regulatory policy. Epstein recommends the deployment of a broader array of credit tools to direct credit to productive and transformational end uses, and greater public involvement in financial institutions designed to create "finance without financiers." He argues that the Federal Reserve should support fiscal expansion and public financial institutions should fund key investment projects. These policies are more direct than using incentives on the credit-supply side to promote investment and employment. Direct policies are likely to be more effective in the current environment, since the lack of aggregate demand and the high risks associated with borrowing would likely limit the effectiveness of more traditional incentives to expand credit.

In Chapter 10, Dean Baker changes the focus from monetary and financial policy to fiscal policy. He critically investigates the rationale for deficit reduction as a growth strategy, and discusses the reasons why deficit reduction may not be a successful mechanism for increasing investment and net exports (the "investment" components of GDP). Baker then examines the path of the deficit, investment, and net exports under the Clinton and Bush administrations. Despite the very large shift from deficits to surpluses during the Clinton years, and from surpluses back to deficits under the Bush administration, Baker shows that the federal fiscal gyrations during the 1990s and 2000s had little meaningful impact on the investment components of GDP. The chapter ends by outlining an alternative, growth-oriented fiscal policy that focuses on public investment designed to promote productivity growth. In sharp contrast to dominant political positions on fiscal policy discussed in 2010 and 2011, Baker argues that a substantial commitment to public investment, financed by deficits, is far more likely to succeed in promoting growth than balancing budgets or running surpluses in the vain pursuit of private investment and net export promotion.

Barry Cynamon and Steven Fazzari continue the discussion of fiscal policy in Chapter 11 and argue that expansionary fiscal policy is a critical part of the policy mix needed in the United States going forward, again in sharp contrast to views that dominate current political discussion. The chapter takes on widely shared concerns that further fiscal expansion is undesirable, even infeasible, because of the size of federal government debt and deficits. For example, worries that fiscal deficits raise interest rates and "crowd out" capital investment are shown to be misplaced when an economy has under-utilized resources. In addition, the authors assess the size of payments to bondholders, domestic and foreign, that would arise from an aggressive fiscal policy, concluding that the costs to taxpayers and the "burden of deficits on our children and grandchildren" are often fundamentally misunderstood and exaggerated in political commentary that labels the U.S. fiscal circumstances in 2011 as "unsustainable" without really defining what the term means. The chapter concludes with a discussion of how fiscal policy, through both public spending and the tax system, can contribute to a robust and sustainable economic recovery.

In Chapter 12, Pavlina Tcherneva turns the discussion away from the instruments of macroeconomic policy and toward its ultimate objectives and, in particular, the traditional Keynesian goal of full employment. Tcherneva argues that the structure of the economy often renders "pump-priming" exercises largely ineffective as a means for achieving and maintaining full employment, and that fiscal policy must instead be wedded to direct job creation that targets not only general unemployment, but also particularly distressed industries and regions. In other words, policy makers cannot rely on market forces alone to allocate a general aggregate demand stimulus; they must instead strive to design and implement large-scale, permanent public-sector projects to address both the needs of the unemployed and those of society as a whole. The chapter assesses the merits of direct job creation in relation to more conventional macroeconomic policies designed to stimulate employment, and rebuts some of the more common objections to greater public sector involvement in the allocation (as well as aggregate utilization) of labor resources.

The volume is brought to a close by Barry Cynamon, Steven Fazzari, and Mark Setterfield with Chapter 13 that summarizes and integrates the ideas collected in the volume, and develops their implications for the future course of the U.S. economy. This concluding chapter focuses in particular on policy recommendations and on the importance of "getting policy right" if we are to successfully escape the lingering grip of the Great Recession. It reflects the general awareness evident in each of the preceding contributions to the volume that although the challenges facing the U.S. economy are formidable, a Keynesian perspective on the economy rooted in the importance of demand, uncertainty, and finance can help us understand the causes of the Great Recession, where we now stand, and what needs to happen next if we are to restore the economy to a path of sustainable growth and shared prosperity.

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