

4. Understanding and preventing financial instability: Post-Keynesian Institutionalism and government as employer of last resort

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INTRODUCTION

More than three years after the 2007 financial meltdown, we are still experiencing the devastating impact of the Great Recession on the world economy. After trillions of dollars of bailouts, fiscal stimulus, and money injected into the financial system by nations across the globe, policymakers are still incapable of lowering unemployment rates. Lessons learned from the Great Depression have been barely remembered by the mainstream of the economics profession.

The neglect of these lessons is not surprising. Since the rise of neo-liberal political economy in the 1980s, the concept of full employment policies has been absent from the intellectual discourse in mainstream economic circles. It has become the norm to tolerate the so-called 'natural rate of unemployment' as long as inflation remains under control. Fiscal hawks dominate the policy think tanks, the pages of the business press, and the public airwaves, using all three to express opposition to policies aimed at full employment.

The economic mainstream argues that government cannot afford to finance full employment programmes. Such policies, these economists contend, would exacerbate already unsustainably high deficits and a soaring national debt, both of which are considered inflationary. In the aftermath of the sub-prime financial crisis, however, a growing fraction of the public has begun to question mainstream economic theories and policies. In fact, there appears to be growing interest in new policy options, especially ones aimed at remedying the severe unemployment problem of the US economy.

This chapter draws on and extends an alternative intellectual tradition represented by the work of Hyman P. Minsky: Post-Keynesian Institutionalism (PKI). That tradition helps us not only unravel the underlying forces that have

caused more than 30 years of increasing financial instability, but also articulate a feasible plan of action for reducing high unemployment and preventing further instability. The chapter argues that the real cause of financial instability in the US is economic inequality, which has been fuelled by the emergence of 'money-manager' capitalism and has been accompanied by a growing household debt-to-income ratio and financial innovations that extended consumer credit to unsustainable levels. PKI provides a vital starting point for the investigation because this tradition is deeply rooted in an appreciation of the evolutionary nature of the capitalist institutional structure.

The economic analysis in this essay is inspired by Minsky's financial instability hypothesis (FIH), while the policy analysis is inspired by his work on the notion of government as 'employer of last resort' (ELR), developed in the 1960s in the context of the War on Poverty. The main question examined in the pages that follow is: how does economic inequality translate into financial crises and what can be done about it?

The chapter is organized as follows. The first section uses the lens of PKI to uncover the inner workings of inequality-driven financial instability in the US. It highlights the importance of historical analysis, fundamental uncertainty, futurity (expectations), the institution of money, economic power, and conspicuous consumption. It also applies the FIH to examine events leading up to the Great Recession. The second section suggests that achieving greater economic stability requires an aggressive job-creation programme that guarantees an employment opportunity for anyone ready, willing and able to work at a socially established living-wage; such a policy is needed to break the debt-driven consumer spending cycle. The analysis outlines a specific ELR programme for the US economy, describing the institutional details required for implementation and providing cost estimates that demonstrate its affordability and efficiency. The chapter closes with summary and concluding remarks highlighting the importance of PKI in tackling financial instability and economic inequality and in fostering sustainable jobs-driven economic growth.

AN INCREASINGLY UNSTABLE ECONOMY

Contemporary capitalism is an economic system characterized by long-lived, expensive, and illiquid capital goods as well as by short-term financing and position taking. Minsky's views on capitalism were influenced by the work of John Maynard Keynes (1883–1946) as well as Minsky's mentor, Joseph Schumpeter (1883–1950). Minsky constructed his work on financial instability and cyclical unemployment by building on Keynes and developed his views on the importance of technology and the evolutionary nature of capitalism by

drawing on Schumpeter, though elements of both influences appear in Minsky's short-term and long-term analyses.

Minsky's fundamental conclusion about the macroeconomics of modern capitalism is encapsulated in his famous phrase: 'Stability is destabilizing' (what he describes as 'stability' is what most economists think of as 'prosperity' or 'economic growth'). His FIH demonstrates that business cycles are endogenous phenomena triggered by processes inherent to the capitalist system, including evolving expectations, financial innovation, and technological change. To explain the FIH, however, we need to go back to Keynes's work on liquidity.

For Keynes (1936), the purpose of capital assets is to generate financial returns, and such assets have three characteristics: liquidity (how quickly an asset can be turned into cash without significant loss of value), appreciation or depreciation, and carrying costs. When an individual is deciding which assets to hold, each of these dimensions must be taken into account. Because the past is unchangeable and the future is unknowable, the following concepts are also important: uncertainty and futurity (expectations), both of which are cornerstones of the PKI tradition.

Business decisions to acquire illiquid capital goods (such as industrial machinery) versus liquid financial assets (such as a certificate of deposit) have important economic consequences, not only for individual investors, but also for society as a whole. Faced with uncertainty about the future and an opportunity to take an asset position, enterprise managers and individual investors must form expectations partly on their assessment of the overall mood of other participants in the economy. Keynes described this mood – a combination of consumer, business and investor expectations – as the mass psychology of the market, which he saw as continuously driven by waves of optimism and pessimism (Keynes, 1936).

The state of consumer, business, and investor expectations shapes the demand for liquidity. An important point of Keynes's analysis is that when the demand for consumer goods increases, enterprises and investors expect that capital goods used to produce such consumer goods will generate higher returns. Thus, all else equal, the demand for these capital goods rises and investors are more likely to take a position in such assets, resulting in a higher level of employment in firms that produce them. Conversely, when the economy experiences a wave of pessimism (low consumer and business confidence), investors prefer to hold liquid assets, with cash being liquidity *par excellence*. During financial panics, 'cash is king' on Wall Street.

Money plays a crucial role in capitalist societies because of its special characteristics: negligible carrying cost, zero-elasticity of substitution, and near zero-elasticity of production (Keynes, 1936). During uncertain economic times, investors hoard money because it is the system's safest asset; money

provides a remedy for fundamental uncertainty. Yet, this also leads to unemployment. Over the course of the business cycle, when expectations shift from optimism to pessimism, investors shift their financial holdings away from job-creating illiquid assets and towards more liquid financial positions. As a result, investment in capital assets falls, resulting in a decline in employment, disposable income, and consumption – and the resulting downward spiral is then accelerated through the Keynesian multiplier. This is the essence of the liquidity analysis of business cycles, and goes a long way to explaining many downturns including the Great Recession.

Minsky's (1986) FIH builds on Keynes' analysis, bringing special attention to the constant evolution in the financial position of economic units (firms, banks, and households). That evolution shifts the economy's centre of gravity from hedge financing to speculative financing and then to Ponzi financing – each stage more fragile than the one preceding it. Prosperous economic times encourage debt-driven consumption and business expansion, resulting in greater fragility: an economy increasingly prone to cash shortfalls that prevent debt repayment. Then, as soon as debt-to-equity and debt-to-income ratios reach what the collective psychology of the market deems unsustainably high levels, the market begins to experience a 'Minsky Moment' in which over-indebted businesses attempt to sell off assets to reduce their debt-to-equity ratio and over-indebted consumers reduce spending to lower their debt-to-income ratio (Figure 4.1). Pessimism subsequently takes over the market, banks tighten their lending standards, and a credit crunch ensues. As a result, the economy enters a deleveraging phase characterized by lower levels of consumption, investment and employment (this also returns the economy to an environment dominated by the cautious practices of hedge financing). For Minsky, this is the incessant wave of optimism and pessimism that generates the inherent instability of contemporary capitalism.

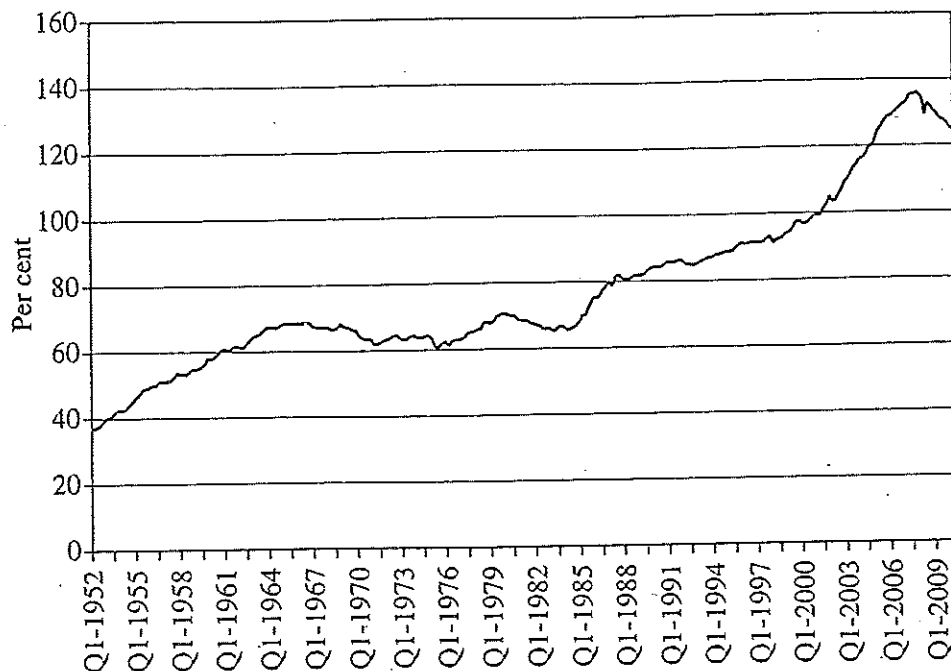
The Great Recession was not fundamentally different from the scenarios described by Minsky and Keynes, but there is a new element that must also be highlighted: the rise in US income inequality, due in part to the stagnation of the real incomes of lower- and middle-income groups since the 1980s. US Census (2010) data reveal a Gini coefficient of around 0.46 since the turn of the twenty-first century, compared with 0.42 in the 1980s. The Census Bureau recently reported that 43.6 million people – about one in seven Americans – lived below the poverty level of \$22 000 for a family of four in 2009, up four million since 2008. These numbers pushed the national poverty rate to a 15-year high of 14.3 per cent. The situation is even more alarming when one considers that the number of people with incomes less than half the poverty line has hit a record high of nearly 20 million – 6.3 per cent of the population. The Census Bureau also reports that one in three African American children lived in poverty in 2009, compared with one in five for all US children.

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Figure 4.1 Household debt as a percentage of disposable income

Widespread income stagnation and rising inequality has resulted in a less secure and more docile workforce. While real wages have stagnated since the 1980s, worker productivity has increased by 68 per cent (United for a Fair Economy, 2006: 12). This phenomenon is in part the result of a strategy to break unions since the 1970s, leading to a steady decline in the US unionization rate from about 27 per cent in the early 1970s to roughly 12 per cent when the Great Recession began in 2007. More recently, the source of wage stagnation and worker insecurity has been job offshoring (Bluestone, 1996; Galbraith, 1998; Zalewski, 2004; Toruño, 2004; Whalen, 2005; Blinder, 2007; Freeman, 2007).

US economic growth is primarily driven by consumer spending; the puzzle for the American growth model, therefore, is how can economic growth continue to be fuelled by consumerism when the vast majority of consumers have been experiencing stagnation in the growth rate of their real income since the 1980s?¹ The answer can be found in Figure 4.1: growth has been sustained by ever-greater extensions of credit to finance consumer spending (Scott, 2007; Brown, 2008). At the peak of the sub-prime euphoria, the US consumer debt-to-income ratio reached nearly 140 per cent. This ratio exceeded 260 per cent for the poorest 20 per cent of US households in 2007, while the richest 10

per cent managed to keep their debt to income ratio stable at around 80 per cent since the late 1980s. For the nation as a whole, the fraction of after-tax income that a household devotes to debt payments represented 10.5 per cent of disposable personal income in the early 1980s and then reached a record-high of 14 per cent in 2006.

The unsustainable nature of these ratios creates the trigger for a Minskian credit cycle of the kind experienced during the Great Recession. Given that a fall in consumption means a recession, the financial industry has worked hard to create a plethora of financial products (credit cards, home equity loans, reverse mortgages, NINJA loans, sub-prime loans, death bonds, and so on) that allow working families to consume in the manner the system needs to sustain its growth path. In this way, inequality has fuelled financialization (Brown, 2008).

Yet financialization – the rise of what Minsky called ‘money-manager capitalism’ – is also at the root of the fight against unions, the spread of wage stagnation, and the rise of inequality (see, for example, Minsky and Whalen, 1996; Palley, 2007; and Whalen and Zalewski, 2010). Financialization and inequality are mutually reinforcing. Money-manager capitalism and worker insecurity are flip sides of the same coin (Whalen, 2010a: 253; Greenhouse, 2008).

Working families must contend with marketers as well as money managers. These marketers target the human tendencies towards what Thorstein Veblen (1899) called ‘pecuniary emulation’ and ‘invidious distinction’. Workers and their families are surrounded by sophisticated marketing techniques and powerful sociocultural messages that promote conspicuous consumption and that institutionalize habits of thought and routines of behaviour necessary for sustaining consumption-driven growth. In fact, promotion of consumption occurs even at the risk of generating unsustainable debt-to-income ratios. Under money-manager capitalism, the captains of finance and their supporting cadre of marketers boost profits by increasing both employment insecurity and household indebtedness.

The rise of institutional investors and other money managers and a climate of financial deregulation created fertile ground for speculative bubbles and unchecked financial innovation that enabled those bubbles to keep expanding. The explosion of the credit default swaps (CDS) market (Figure 4.2) is a case in point. In the wake of the Commodity Futures Modernization Act of 2000, the CDS market grew exponentially – from just a few billion dollars in 2001 to a phenomenal \$62 trillion market in 2007 (after two years of write-downs, it is now about a \$30 trillion market (ISDA, 2010)). This market was crucial during the sub-prime securitization mania because it created the illusion of an ‘insurance policy’ against default risk, which encouraged credit rating agencies to rate mortgage-backed securities favourably and enticed investors to purchase those securities. The fact that the issuance of CDS was not backed by prudential reserves was ignored by regulators.

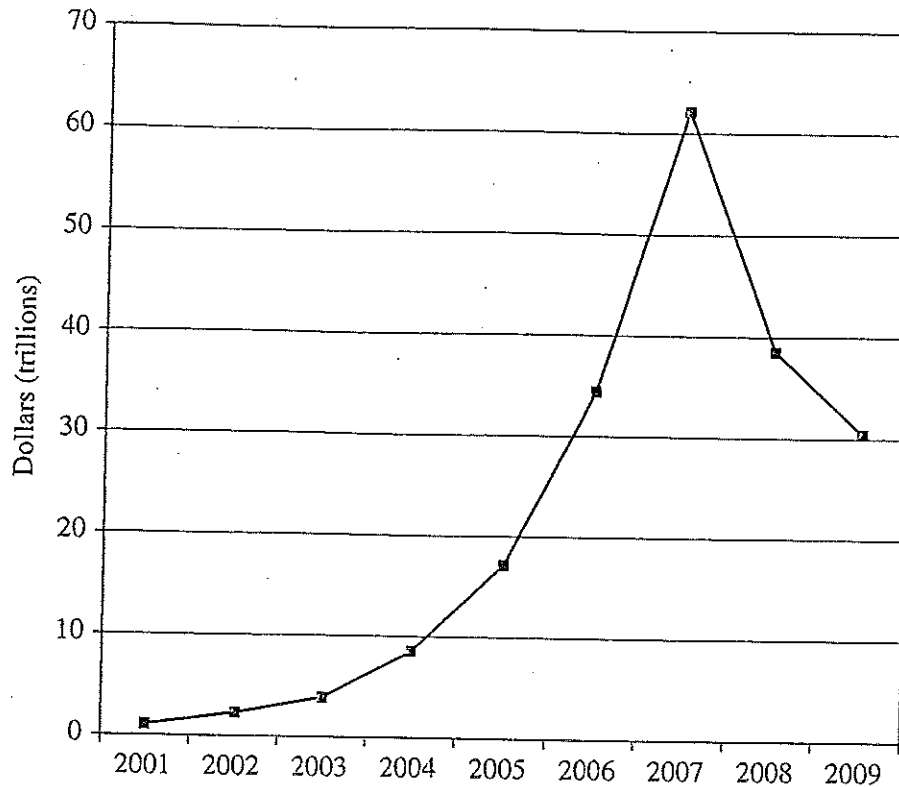
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Source: International Swaps and Derivatives Association (2010).

Figure 4.2 Credit default swaps (trillions of dollars)

Despite the best efforts of enterprise leaders and financial innovators, such expansions cannot be sustained indefinitely. Indeed, the spread of money-manager capitalism has been accompanied not only by a squeeze on working families and an explosion of financial innovation, but also by increasing financial instability (Wray, 2009; Whalen, 2010b). The stream of financial innovations has been endless; the processes generating financialization and inequality have shifted their focus from one market to another over time (information technology, housing, commodities, and so on); and policymakers have been able to stave off a worldwide depression. In recent decades, however, financial crises have appeared in the US and the global economy with alarming frequency, culminating, of course, in the recent (and, for many working families, still ongoing) Great Recession.

The socio-economic consequences of that recession have been devastating: the official US unemployment rate has been stuck at just under 10 per cent, while long-term unemployment, underemployment and mortgage foreclosures are just a few of the indicators of hardship that have recently reached record levels. Meanwhile, the response of policymakers has often been slow and

weak. The so-called 'quantitative easing' and other initiatives of the Federal Reserve, for example, have been effective in bailing out banks and other financial institutions, but largely ineffective in their goal of restarting the lending-spending cycle. Fiscal stimulus has also suffered from limitations: it has been too small and too indirect to be effective in restoring consumer and business confidence. Fiscal policy is least effective during a recession when it relies heavily on market mechanisms such as tax cuts and tax incentives to stimulate the economy, yet this, to a large extent, has been the approach pursued in the US over the past few years.

GREATER ECONOMIC STABILITY THROUGH FULL EMPLOYMENT

Responding to the Great Recession requires a two-pronged strategy: recovery and reform. Quantitative easing, the Troubled Asset Relief Program, the American Recovery and Reinvestment Act, and the 2010 Tax Relief Act were all aimed at recovery. The Dodd-Frank Wall Street Reform and Consumer Protection Act offers financial reform and is a small step in the right direction (for a further discussion of financial reform from the perspective of PKI, see Chapter 6). However, as Minsky (1986) indicated in his *Stabilizing an Unstable Economy*, financial reform is necessary, but not sufficient to foster greater economic stability over an extended period. Inequality must be addressed head-on to prevent further financial instability, and the most effective way to reduce the consumer debt-to-income ratio is to guarantee income stability through full employment at a living wage.

PKI underscores the ability of a targeted job creation programme to attenuate financial crises, and that is what the notion of government as ELR (employer of last resort) offers. A job guarantee contains inequality by providing working families with a productive and financially stable alternative to a debt-financed livelihood. An ELR job guarantee not only secures a decent income for workers, which helps stabilize aggregate demand in recessions, but it also stabilizes expectations of workers, employers, and financiers regarding future income streams. In short, ELR acts as an automatic stabilizer for expectations, employment, and economic growth.

It is natural to observe more prudent spending among consumers and enterprises during uncertain times. Therefore, it is unreasonable to assume that private-sector spending will lead the US economy to a quick recovery from a deep recession, especially in the wake of serious financial-market troubles of the sort experienced recently. What is more likely is that Wall Street will be reluctant to extend credit to Main Street until it is clear that confidence is rebounding and becoming widespread.

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The public sector, in contrast, has the capacity to stimulate the economy without relying on consumer and business confidence. Thus, a well-designed job creation programme financed by the federal government has the capacity to produce full employment without inflation. The notion of a job guarantee is often associated with President Franklin D. Roosevelt's (1941; 1944) 'Four Freedoms' speech and his 'Second Bill of Rights', as well as with full employment bills drafted at the end of World War Two, but the idea reappears throughout the literature of Institutional economics and can be traced back to at least the end of the nineteenth century, when *The Arena* published an article by John R. Commons (1899), entitled 'The right to work'. John Dewey ([1919]1939: 420–21), whose pragmatism is an inspiration for many Institutionalists, also wrote in favour of the ELR, describing a guaranteed right to work as 'the first great demand of a better social order'. In the mid-1960s, Minsky (1965, 1966, and 1986) was one of a handful of economists who revived the ELR idea, and he continued to promote it for the next three decades.²

Minsky (1986: 308) describes ELR as follows. 'The main instrument of such a policy is the creation of an infinitely elastic demand for labor at a floor or minimum wage that does not depend upon long- and short-run profit expectations of business. Since only government can divorce the offering of employment from the profitability of hiring workers, the infinitely elastic demand for labor must be created by government'.

The ELR programme would be federally funded, but locally managed. The aim would be to provide employment that neither competes with nor replaces existing jobs; ELR jobs would be designed as a net addition to the total employment pool. Under the ELR programme, the federal government would offer to hire anyone of working age who is ready, willing and able to work at a living wage plus benefits. State/local governments and non-profit organizations would select projects based on the needs of local communities. The hiring and supervision of workers and projects would occur at the local level.

ELR would accept the unemployed as they are and design jobs to fit their capabilities; local programme administrators – the ELR authority (ELRA) – would strive to select projects appropriate for the skills and capabilities of the local unemployment pool. In addition, the ELRA would address local skill shortages by enabling job seekers to acquire education and training. The opportunity to further improve one's skills would be an add-on benefit.

The ELR would increase during recessions, to absorb workers displaced from the private sector, and decrease during economic expansions when ELR workers find employment in the private sector. Hence, ELR is conceived as a buffer stock employment programme; the ELR wage(s) would be fixed while the quantity of labour in the buffer stock fluctuates. (The ELR wage

does not necessarily need to be a single wage level. One could think of a multi-step scale of wages based on skills and experience.) At any time, private-sector employers can hire workers at a mark-up over the ELR fixed wage; meanwhile, the unemployed would not be required to participate in the ELR.

ELR jobs would be designed to provide employment that addresses unmet local needs. Thus, ELR would reduce the depreciation of skills caused by unemployment, and its training component would enhance worker preparedness for private-sector work. Following the example of past public-service employment (such as that offered by the Comprehensive Employment and Training Act of 1973), ELR would offer employment as companions to the elderly, public school classroom assistants, community safety monitors, low-income housing restoration technicians, park restoration aides, environmental safety monitors, environmental clean-up technicians, daycare assistants for ELR workers, community and cultural historians, and ELR artists.

Estimates for the US, UK and Australia suggest that the cost of financing an ELR programme ranges between less than 1 per cent of GDP for the US to about 3.5 per cent of GDP in Australia (Majewski, 2004; Mitchell and Watts, 1997; Gordon, 1997; Kitson *et al.*, 1997). These estimates actually overstate the real cost of financing the programme because they ignore the multiplier effect of the new income earned by ELR workers. An ELR programme also helps to pay for itself by reducing the public spending (such as unemployment insurance) and social costs associated with unemployment.

The Great Recession resulted in federal spending of nearly three trillion dollars in bailouts and stimulus initiatives without putting much of a dent in the unemployment rate. An ELR would have tackled the joblessness problem with money to spare; full employment would not 'bankrupt' the federal government.³ Indeed, this author estimates a generous ELR programme could employ 30 million workers – twice the number of people counted as unemployed in the US at the end of 2010 – for about \$727 billion per year, or less than 5 per cent of GDP.⁴

ELR critics claim that the programme would increase labour bargaining power, because it eliminates the threat of unemployment, thus fuelling wage-generated inflation (see, for example, Rochon and Vernengo, 2003). Yet, labour actually has less power when ELR workers are capable of being hired by private employers at any time, as compared with when large numbers of workers are idle and have been without work for an extended period. Thus, one should not expect runaway wage-push inflation to develop under the ELR programme (Wray, 1998). Indeed, the threat of such inflation is particularly limited in the current era of global labour markets and job offshoring across a wide range of occupations.

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ELR critics have also expressed a concern about the ability of such a programme to deal with structural unemployment (Sawyer, 2003 and 2005; Kadmos and O'Hara, 2000). Structural and technological change is a constant feature of capitalist economies. Currently, however, governments do not have any systematic way of dealing with it. As a result, they react to such change after it has happened and after workers have been displaced. ELR would have a structural and technological change research division that works closely with representatives of business and labour and that constantly monitors, assesses and forecasts structural and technological change. This would enable the ELR programme to provide technical training for displaced workers. Structural and technological change is an inherent part of a dynamic economy and it is an institutional problem; therefore the solution for it must be institutionalized as well (Kaboub, 2007).

ELR critics have also questioned the ability of ELR to provide jobs to displaced workers in a timely manner (Sawyer, 2003 and 2005). To be sure, this requires considerable preparation, but it can be done. ELR authorities must create a reserve shelf of ELR projects (see Copeland, 1967). ELR administrators will have to be proactive, anticipating business downturns to avoid delays in the initiation of ELR projects; they will also need to avoid cancelling projects prematurely in response to an improvement in private sector activity.

Introduction of ELR cannot be done overnight; ELR must be phased in gradually to allow for institutional adjustment. The PKI approach to full employment is inspired by J. Fagg Foster's (1981) theory of institutional adjustment, which stresses it is important to give close attention to policy implementation. Once ELR is up and running, however, it will help tame swings in the business cycle through its stabilizing effect on investment, consumption and economic growth.

A successful ELR requires cultivation of a positive and dynamic programme culture. This would need to be pervasive – exhibited not only by those at the top levels of ELR management and by ELR staff, but also by its participants, who would often work in public settings. Thus, ELR employment would begin with an orientation period stressing motivation, a positive attitude, recognition of the usefulness of services provided, self-respect, and pride in being an ELR worker.

ELR workers would be expected to be as serious and productive on the job as workers in private sector employment. Workers could be fired from an ELR job for failing to meet the programme's standards of service and integrity (employee assistance and counselling programmes would be available for workers failing to meet ELR standards). Satisfactory workers could also stay on the job indefinitely. An ELR programme is not means tested, does not impose any time limits, and does not restrict the number of people who can be hired. It is a true – and affordable – full employment programme.

SUMMARY AND CONCLUSIONS: STABILIZING THE UNSTABLE ECONOMY

Building on Minsky's financial instability hypothesis, this chapter analyzed financial instability from the perspective of PKI. The main argument derived from its analysis is that an economy characterized by income inequality and worker insecurity has been both a consequence of and breeding ground for unregulated financial innovation and speculation. The theoretical synergies of the Post Keynesian and Institutionalist traditions provide the ideal analytical tools to unveil the inner workings of the economic institutions that breed and spread financial instability in the era of money-manager capitalism.

The endogenous nature of economic instability underscores the need for government intervention to tame business-cycle fluctuations. The PKI analysis suggests that although monetary policy intervention is crucial for preventing a complete financial-system meltdown, fiscal policy intervention is of paramount importance for stabilizing employment and economic growth. In particular, an ELR jobs programme can break the decades-old link between inequality and financial instability. With a commitment to full employment and a bit of creativity, such a programme can be designed and implemented in a successful and affordable manner.

The analysis of PKI does not claim that ELR will end all financial instability, but it will address a key source of the instability experienced in the US since the 1980s – instability driven by financial innovations that obscured and drew attention away from rising inequality and household over-indebtedness. The ELR policy option provides an opportunity to tackle inequality, poverty, and environmental problems – enabling us to achieve Minsky's (1986: 293) goal of a humane economy as the first step towards a more humane society.⁵

ACKNOWLEDGEMENTS

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NOTES

1. Post-Keynesian Institutionalist have sought to draw attention to wage stagnation and the threat it poses to economic growth and social well-being for decades. See, for example, Wilber and Jameson (1991), and Whalen (1996).
2. For more on the ELR concept from viewpoints similar to the one described in this chapter, see Copeland (1967), Briggs (1981), Gordon (1997), Forstater (1999, 2002), Harvey (1989),

3. See Lerner
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3. See Lerner (1943 and 1947) and Vickrey (1992).
 4. A generous ELR programme would provide enough employment to cover not only the officially unemployed, but also discouraged workers, involuntary part-time workers, and people marginally attached to the labour force. My assumptions include the following: the ELR wage is \$10 per hour; ELR employees work 40 hours per week; and ELR employees receive a benefits package that costs \$10 000 per year. As a result, the total of wages and benefits would be \$876 billion. Adding a generous material cost of \$50 billion per year brings the total to \$926 billion annually. Finally, if we assume a Keynesian multiplier of 1.5, an average income tax rate of 15 per cent, and an average sales tax of 6.5 per cent, then the net total ELR cost would be \$727 billion per year, or 4.8 per cent of GDP. This estimate does not even take into account the reduction in government spending on social and welfare services that would be possible with an ELR programme in place.
 5. An ELR is also compatible with the United Nations Universal Declaration of Human Rights, article 23, which states that everyone has the right to work and to protection against unemployment (United Nations, 1948).

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5. Toward incorporating macroeconomics David

INTRODUCTION

The recent global financial crisis has affected millions of people in the professional and academic world. In 1977, it was revealed that the 'Few economists at the top of the profession are the least of the financial world's business to the very profession. Seeking an alternative, practical and near-term solution, economists, and institutionalists (Wray (2009), president of the American Economic Association (2008) and McCulley (2008) of the largest mutual fund company) on his 10 June 2009 lecture night they reread Minsky's work. The widespread view is long overdue. Minsky – such as Christopher Brown and L. Randall Wray (2009) – a convincing explanation of the economic downturn of PKI offer important insights. The financial and economic crisis has created the need for some form of economic downturn.