Democratizing Finance

Fred Block 5/21/2012

Paper prepared for American Sociological Association Meeting, Real Utopias, August 2012. I am grateful to Miriam Joffe-Block, Matthew R. Keller and Lucas Kirkpatrick for conversations that generated some of the ideas that are included here. John Kincaid and Tim Gutierrez provided valuable research assistance. I am also happy to acknowledge support from the Ford Foundation for my research. This is a working draft with incomplete references to the relevant literatures.

Democratizing Finance

This essay is an effort to provide a "real utopia" (Wright 2010) vision of how the financial system could be reorganized in the U.S. and globally in a way that would facilitate stable and more sustainable economic growth while increasing the possibilities for egalitarian reforms that would subordinate the economy to democratically-accountable governance.

The existing financial system—both in the United States and globally—failed spectacularly in recent years; it fueled a disastrous bubble in mortgage financing, and when the bubble burst, the collapse of financial institutions brought the world to the brink of a global depression. While a 1930's style crisis was avoided, recovery since 2009 has been slow and unemployment levels around the world remain at elevated levels. The need for radical reform of both the U.S. and the global financial order is obvious, but there are few existing visions of a reorganization that would be both radical and realistic. The present essay is an effort to suggest some of the outlines of an alternative organization of the financial system.

WHY DEMOCRATIZING FINANCE IS IMPORTANT

Karl Polanyi (2001 [1944]) argued that land, labor, and money are fictitious commodities because they were not initially produced to be sold on the market. Labor is the work effort of human beings and land is subdivided nature; neither nature nor human beings were created to be sold on the market. It follows for Polanyi that the conventional accounts of how a market system works are based on a lie because everyone has to pretend that these fictitious commodities behave in the same way as standard commodities.

But while Polanyi's discussion of land and labor and other possible fictitious commodities such as knowledge have received considerable elaboration, his discussion of money as a fictitious commodity has received less attention. It is useful to look more closely at his argument.

From the context, it is clear that Polanyi is using the term money to refer to something more than the legal currency that is issued by governments; he is talking about the money supply which includes both legal currency and credit. This becomes clear in his discussion of the gold standard. The operation of the gold standard mechanism meant that when a country spent more abroad than it was taking in, there would be an outflow of gold. This outflow would produce a contraction of the supply of money and credit, driving up the cost of borrowing funds, and slowing economic activity.

In the 19th Century, some nations did experiment briefly with something close to a free banking system in which banks were not regulated and were free to issue bank notes that could circulate as currency. In such a system, money would be a true commodity

because profit-making institutions would be producing it at different rates depending upon the market signals they received. But Polanyi believed that this type of system inevitably produced a rapid alternation between boom and bust. As banks competed, they would expand the supply of credit too quickly during the expansionary phase of the business cycle, producing inflation, and then a sudden collapse when depositors rushed to withdraw their funds from banks that were thought to be insolvent. Recovery from this kind of collapse tended to be painfully slow since many of the credit-providing institutions were eliminated in the downturn.

In Polanyi's view, it was this type of instability that led to the rapid diffusion in the 19th century of banking systems built around central banks. The primary purpose of central banks is to smooth out changes in the money supply in order to avoid inflation on the one side and deflation on the other and to assure that the banking system will be able to survive through business cycle downturns. Central banks accomplish these ends by using several distinct instruments. First, they set rules that govern the credit-creating activity of bankers to avert too rapid credit creation. Second, they use the discount window and other devices to influence banks to adjust the supply of credit either upward or downward as circumstances warrant. Finally, they serve as lenders of last resort to keep banks solvent even at times when depositors have lost confidence in the safety of the banking system.

Central banking makes money into a fictitious commodity because a government agency is determining the supply and demand independently of the profit calculations of bankers. This, however, is a deeply troubling point for defenders of "free markets" because their position is that the market is an autonomous entity that must be allowed to operate according to its own logic. How autonomous can the economy be if government has to manage the supply of money and credit to avert catastrophe? The most common way to handle this contradiction has been to mystify the activity of central bankers by pretending that the central bank is not really a part of the government and by emphasizing the charismatic authority of individual central bankers (Greider 1987).

Polanyi's point is that once we recognize that government must manage the money supply, then it is fair to ask the question of whose interests should be served in that process. In a democracy, it would seem obvious that the central bank should be responsive to the will of the majority, but defenders of existing inequalities have consistently argued that central banks should be insulated from democratic politics and this norm has generally prevailed in recent years.

There are, however, three distinct powerful reasons why the provisioning of money and credit should be subordinated to democratic politics. First, insulating the central bank from the citizens creates the distinct danger that the regulator will be captured by the banks that they are supposed to regulate. Second, differential access to credit has historically been a mechanism through which the power of existing elites is perpetuated; democracy demands more equitable access to credit. Finally, the lack of democratic accountability helps to perpetuate economically unproductive uses of credit.

1. Regulatory Capture and the Risks of Profit-Seeking Finance.

Minsky (1996) has effectively extended Polanyi's argument by explaining the logic of this process of capture. The reality of competition means that individual banks (and other financial intermediaries) are under constant pressure to increase the level of risk in their portfolios which can be accomplished either by accumulating riskier assets or shrinking the reserves that they hold against future contingencies. Since more risk generally means more profits, firms are always inclined in this direction and the only thing that can restrain them is counter pressure from regulators. But if bankers can capture the regulators, then they can take on more risk and earn more profits.

And what better way to capture the regulators than to persuade them that the selfinterest of bankers will be sufficient to keep them from taking on levels of risk that are unsustainable? This is, of course, exactly what happened in the period leading up to the 2008 Wall Street meltdown. Both Greenspan and his successor, Bernanke, stood idly by as bankers took on ever greater amounts of risk. In fact, a discrete series of actions by different regulators permitted key institutions to take on ever higher amounts of leverage. The result, of course, was a deep global crisis that almost produced a second great depression (Johnson and Kwak 2010; Stiglitz 2010).

The lesson is clear. Democracy is necessary to discourage this kind of regulatory capture and to assure that the provision of money and credit serves the needs of the entire citizenry—not just bankers. But once we open up the question of whose interests are served by the existing financial system, it becomes apparent that the allocation of credit has been one of the central mechanisms in maintaining class inequalities and in reproducing the disproportionate power of business elites (See also Block 1992).

2. The Credit Supply and Class Power.

While Marx and Engels consistently argued that class power was rooted in ownership of the means of production, it was Weber (1946, 185-186) who insisted that credit markets had also historically played a key role in systems of stratification. When certain groups have much better access to credit at more favorable terms—lower interest rates, less need for collateral, and less stringent conditions—it can provide them with critical leverage over others. In agricultural production, for example, even when farmers own their own land, the necessity to borrow can create a situation where their profits are transferred to merchants or money lenders.

In fact, one can think of differential access to credit as the principle axis of stratification in the contemporary global economy. Literally everyone could be placed on a single scale. At the top would be the owners of the largest hedge funds who can borrow tens and possibly hundreds of billion to finance leveraged positions at low interest rates and with fairly lenient conditions, while at the bottom are those whose only possibility of credit would be at confiscatory rates. In between, one could rank individuals by the maximum amount that one could borrow at any particular interest rate.

Moreover, access to credit plays a central role in reproducing the power of employers. Rebellious factory workers periodically decide that they could organize and manage production better without the employer, and they try to establish cooperative workplaces as an alternative (Scott 1974). But usually those cooperatives fail because the existing financial system denies them access to credit since groups of blue collar workers fail to meet the standards of creditworthiness used to evaluate potential entrepreneurs. By closing off this exit option for workers, the power of the employers at the point of production is reinforced.

Yet another realm where access to credit looms large is the politics of infrastructure. We know that the types of infrastructure projects that are funded or not funded have profound impacts on the patterns of settlement and on the costs and benefits for different social groups. Thomas Edison built his first electrical power station in lower Manhattan where it would provide electric lighting for Wall Street firms (Hughes 1983). This was not accidental; he knew the building out of a new electrical power grid would be hugely expensive and required vast amounts of new capital. Hence the importance of persuading the key Wall Street firms that this new technology was the wave of the future.

A less benign example is provided by Robert Moses, the urban planner responsible for much of New York City's system of highways and public works in the middle of the last century. Without being elected to office, Moses was able to wield enormous power as the head of the Triborough Bridge Authority. His control over toll revenues and his links to Wall Street allowed him to borrow tens of millions of dollars to finance a wide range of different public projects and effectively insulated him from public opposition (Caro 1975).

There have also been in different countries moments of intense social and political conflict that have revealed the political power that is embedded in the credit system. This happens when a left-wing government comes to power through the parliamentary system determined to carry out major structural reforms. As conflicts intensify, opponents of the new government engage in an investment strike designed to weaken the government's political support by driving unemployment upward (Block 1977b). While individual employers might be tempted to continue investing and producing to gain ground on their competitors, it is usually key financial actors that enforce noncooperation by withholding capital. Often, the investment strike is accompanied by capital flight as investors shift money to safer havens overseas. Here again, financial institutions can facilitate this flight by opening up generous credit lines to those who want to move capital overseas.

And we also know that in the global economic system, international institutions exert extraordinary power by making loans contingent on agreement by borrowing nations to fulfill certain conditions. Since the 1950's, the International Monetary Fund has imposed harsh conditions on developing nations in exchange for credit lines that allow nations to cover a shortage of foreign exchange earnings. In the 1980's and 1990's, structural adjustment loans often forced countries to dismantle economic and social policies designed to protect citizens from market pressures. And in the recent Eurocrisis, we have seen nations like Greece forced to impose extremely harsh austerity policies in exchange for new loans from the European Community and the International Monetary Fund.

In short, differential access to credit plays an extremely important role in reproducing the deep inequalities of income, wealth and political power in the contemporary world economy. This is a second reason to explore how a democratization of finance could allow a more just and equal organization of society.

3. The Misallocation of Credit.

The best way to think about the problem of capital misallocation is to recall Keynes' (1936) discussion in *The General Theory* of "the euthanasia of the rentier". He argued that as a consequence of advancing technologies and increasing material wealth, there would be a gradual reduction in the scarcity of money capital. With this declining scarcity, the prevailing interest rate would also decline. The consequence would be that the class of people who had lived on their investment capital—the rentiers—would experience progressively declining returns. Eventually, this entire category of people would ultimately disappear.

Quite obviously, Keynes' prediction has not come to pass. We live in an era of triumphant rentiers represented in particular by hedge fund managers some of whom now earn in excess of a billion dollars per year. But where did Keynes go wrong? His anticipation of continually advancing technologies was certainly correct; computerization has made both machine tools and factories both cheaper and more productive (Block 1990). At the same time, the total output of factories and offices continues to expand.

But even the current Federal Reserve Chair, Ben Bernanke (2005), has reproduced some of Keynes prediction with his argument that the real root of the global financial crisis was a global saving glut—driven particularly by the accumulation of vast pools of household saving in Asia. Bernanke insists that as those Asian investors sought high returns on their capital in the West, they ended up feeding the bubbles in markets for real estate and mortgage-based securities (See also Schwartz 2009; Tradico 2012). Bernanke is describing what Keynes anticipated—a situation where the problem is not too little money capital but too much.

What Keynes failed to anticipate and Bernanke ignores is that rentiers have been able to benefit from an artificial scarcity of capital even in the face of a saving glut. This occurs because the available supply of high quality investment instruments for purchase by investors around the world has been arbitrarily limited. With high quality paper in short supply, investors have no choice but to purchase lower quality and more speculative paper assets that undergo dramatic price swings and create greater profit opportunities for insiders in the financial system.

Many of these lower quality paper assets take the form of derivative contracts that now exceed \$500 trillion in nominal value. While these contracts can be purchased for a

small percentage of their nominal value, this still represents huge amounts of global capital that are tied up in this market rather than being invested for the financing of actual economic activity.

But how then did this scarcity of high quality paper come about and how is it maintained? As Schwartz (2009) argues, the scarcity reflects differences in financial practices around the world. Europe, Japan, and China have relied primarily on bank loans to finance business investment and they have been reluctant to securitize this debt. They do have stock markets, but the annual volume of new issues has been kept relatively low. The consequence is that their contribution to the global supply of high quality paper—both public and private bonds and corporate shares—falls far short of their contribution to global GDP or global saving.¹

The next critical factor is the ideology of balanced budgets that has been a critical part of the free market package pushed by Washington, the World Bank, and the IMF and which has also been embraced by the European Community. This ideology places limits on the extent to which all levels of government are able to finance productive spending by borrowing. Since certain types of government spending on infrastructure, science and technology, and education can be highly productive and as critical to the economy as private sector investment. But the ideology of balanced budgets claims that it is always wrong for governments to spend more than they take in. The result is an artificial restriction on the amount that governments can borrow to finance productive investments. This means that the global supply of government debt is kept well below an optimal level.

This ideology has also worked to block reforms that would expand the supply of high quality paper that facilitates lending to the less developed nations. Since the Brandt Commission Report in 1980, there have been strong advocates for a Global Marshall Plan that would provide tens of billions of additional capital every year to finance improvements in health, education, and infrastructure in the Global South.² The logic is that funneling a growing share of global saving towards bonds that could finance these expenditures would produce a win-win solution because it would accelerate improvements in the quality of life in the Global South while also stimulating demand for advanced export goods from the developed nations. However, the U.S. has consistently used its global power against this idea on the grounds that it would weigh the Global South down with excessive levels of debt.

The final piece of the story has been the transformation of the role of stock markets in the U.S. economy. In contrast to most nations on the European Continent, the U.S. has financed much industrial growth through stock issues rather than bank lending.

¹ The dynamic described here is tightly intertwined with the organization of the international monetary system. The United States has been running chronic current account deficits which force other countries to lend us capital to finance the deficit. The result has been inflows of foreign capital that supported and sustained the growing power of U.S. financial institutions (Krippner 2011).

² The basic mechanism would be the sale of bonds—guaranteed by the international community—the proceeds of which would be lent to finance projects in the developing world.

But over recent decades, the corporate sector has in the aggregate been a net purchaser of stock; it has actually transferred income from the corporate sector to the household sector rather than the other way around.

The major mechanism here has been the use by corporate management of share buybacks. As documented by Lazonick (2009, 2010) this has been a powerful mechanism to transfer income to top corporate managers. For thirty years, a growing portion of executive compensation has been through stock options in order to more closely align the interests of executives with the interests of shareholders. But by engaging in strategic share repurchases, managers can drive the stock price higher even in periods when the firm's performance is otherwise unexceptional. And with a higher stock price, the payoff from exercising the option puts more money in the hands of these executives.

This trick has been remarkably successful because the investment banking houses that underwrite new stock issues—have been careful—except at the height of the internet boom of the 1990's--to limit the quantity of new firms that are able to issue shares on the major stock markets (Ritter 2012). At the same time, with global saving growing, the demand for stocks on the major exchanges has been rising. The consequence of fewer shares available to purchase and increasing demand puts stock evaluations on a long-term upward trajectory.

When we combine these core dynamics—a shrinking pool of equities in the U.S., artificial limits on government debt around the world, a limited supply of high quality corporate shares available in Europe, Japan, and China, and a restricted supply of instruments that provide credit to the developing world—it becomes far easier to see how it is that the rentiers have continued to prosper. Moreover, we also see how it is that bubbles repeatedly occur with lower quality paper whether it was Third World debt in the 1970's, below investment grade bonds (junk bonds) in the 1980's, internet stocks in the 1990's, and mortgage-backed securities in the 2000's. Whenever a new type of paper promises above average returns, capital floods in to fuel a bubble until the inevitable crash occurs.

But the other side of this artificial scarcity of high quality investment instruments is that financing is not available for many potentially productive types of economic activity. This kind of neglect reflects the difficulty that financial intermediaries have in dealing with the information asymmetries in credit markets. Given the complexity of separating worthy and unworthy potential borrowers, financial institutions simply decide that the costs of generating reliable information are simply too high and they deny credit to the entire category of borrowers. Since these are profitmaking institutions, they opt for other investments where the transaction costs are lower relative to the potential returns.

In fact, in the United States, some of the central parts of the current credit market emerged only when government stepped in and offered various kinds of incentives or guarantees to private borrowers. For example, the rise of the thirty year residential mortgage in the United States was closely tied to mortgage guarantees offered by the VA and the FHA. Similarly, the Small Business Administration has underwritten a significant share of business lending to small firms through its loan guarantees. Moreover, government guarantees have also figured prominently in the growth of educational loans to students by private institutions.

These examples suggest that further governmental action will be required to reallocate capital towards sectors that have long been suffering from a scarcity of capital. There are numerous examples in the U.S. of projects with potentially substantial returns that have not been financed at adequate levels. Five examples should suffice to indicate the breadth of the problem.

First, there are clean energy and conservation retrofits for both residential and nonresidential buildings that have been proven to pay for themselves in a relatively short period of time. These include replacing older light fixtures, furnaces, and appliances installing insulation and reflective roofs, and accelerating the introduction of new energy-saving building technologies. These are expenditures that produce higher annual returns at lower risk than most other types of investments (Laitner et. al. 2012). But to date, our credit system has been reluctant to extend credit for these projects to homeowners, businesses, or public entities.

Second, there are many small high-tech firms that are pursuing the commercialization of new technologies. Many of them perish as they cross the "valley of death" –the period between a laboratory breakthrough and having a commercial product (Auerswald and Branscomb 2003; Block and Keller 2011). Since small businesses account for a very large share of new job creation, their problems in raising capital slow the economy's ability to produce new jobs.

Third, there is a more general problem of financing for the larger universe of small and medium sized businesses that are not high tech innovators (Rogers, Roel, and Gullason 2012). These firms loom ever larger in the U.S. economy as the largest corporations have reduced domestic employment and become reliant on these smaller firms to produce many of their key inputs. Data from the Federal Reserve show that even as nonfinancial, noncorporate businesses were significantly expanding their levels of investment during the 2000's, they were able to rely on outside capital to finance only a small share of their investments (Federal Reserve, Table F.103).

Fourth, there are also many infrastructure projects—including rebuilding of decaying bridges, sewer systems, and water treatment plants—that have been deferred because of the difficulty that local and state governments face in raising the needed capital. In fact, in 2009, the American Society of Civil Engineers estimated the total cost of rebuilding the national infrastructure to be \$2.2 trillion with the nation falling further behind each year. This does not even count the costs of shifting an energy system dependent on burning carbon-based fuels

to renewable energy sources or improving mass transit and inter-city transportation to reduce the wasteful dependence on the automobile.

Fifth, the deepening economic inequality in the United States has meant that many households in the bottom half of the income distribution are effectively excluded from any kind of non-predatory access to credit. As Hacker (2006) has shown, household income for many is highly unstable with dramatic ups and downs being common as a result of spells of unemployment or health crises or marital instability that are not offset by government transfer payments. But the consequence of this instability of household income is to produce extremely low scores on measures of creditworthiness.

This lack of access to credit on reasonable terms makes it far harder for households to engage in any of the kind of "bootstrap" operations that have historically been routes to upward mobility. It becomes substantially more difficult to fund advanced education for children who face substantially higher fees and tuition at public colleges and universities. Similarly, there are more obstacles to making a small business successful; even fixing up decaying housing requires some source of credit.

Some of these neglected forms of lending have a very long history. But the problems have grown worse in recent decades. Increasing income inequality and income instability have reduced the creditworthiness of many households. But the problem has also been intensified by the process of centralization in the banking industry. A relatively small number of banks that were deemed "too big to fail" (TBTF) used this advantageous position to swallow up many medium-sized banks that, in turn, had merged with or displaced an even larger number of small banks (Dymski 2011). The consequence was that by 2008, 40% of all consumer deposits were concentrated at just 5 giant banks. The comparable figure in 1984 was 9% (Zingales 2009).

These giant banks could only manage their geographically dispersed operations by using rigorous efficiency criteria to determine how to deploy their human and financial resources. By these criteria, keeping local loan officers on staff to accumulate portfolios of small business loans could not be justified. The ratio of what such a loan officer would earn as compared to what he or she would earn for the bank could not be justified.

But, of course, these banks did not completely abandon the small business sector. They sought instead to eliminate the high staffing costs of small business lending through automation; computer programs would be used to score and evaluate loan applications. While bank officers might be given some flexibility in adjusting the cutoffs for creditworthiness to reflect local conditions, the consequence was inevitably a sharp decline in the risk of the bank's small business portfolios. When a small business wanted a loan that was outside of the computerized parameters that predicted a high probability of repayment, the loan would be denied. In short, rationalization on the part of large banks meant that they economized on accumulating the local knowledge that might have led in earlier decades to taking risks in small business lending. And with the largest banks accumulating a virtual monopoly of consumer deposits, small businesses routinely had nowhere else to turn.

Similarly, underinvestment in infrastructure has worsened in recent decades as all levels of government in the U.S. have been struggling with a fiscal crisis. From the 1930's through the 1970's, the federal government either directly or indirectly underwrote much of the cost of infrastructure, some of it through revenue sharing programs (Kirkpatrick and Smith 2011). But as this federal support declined, state and local governments faced tighter fiscal constraints and were limited in the additional debt they could take on to finance infrastructure projects. Here again, the ideology of balanced budgets has blocked outlays that would produce significant economic dividends.

In sum, there are very powerful arguments for democratizing finance. As we learn from Polanyi, democratizing finance flows logically from a commitment to democratic governance. Since financial inequalities are at the root of many other inequalities, democratizing finance is also a means to create a more egalitarian society. Finally, democratizing finance is a response to the disastrous weaknesses of our current financial system which is prone both to speculative excesses and the systematic underinvestment in a variety of productive activities.

RESTRUCTURING FINANCE

There are three key elements to conceptualizing a democratic financial system. The first is to redefine what constitutes creditworthiness. The second is to design an alternative set of financial institutions to the ones that currently exist. The third is to explain the changes needed at both the global and the national level that would be required to make those alternative institutions viable.

Creditworthiness

Financial markets are organized around gatekeepers whose job is to decide who is worthy of credit at what interest rate and with what conditions.³ While much is made in the literature about the distinction between national financial systems that center on bank lending and those that center on stock markets, the reality is that gatekeepers necessarily play an indispensable role in both systems (Zysman 1983). In bank-centered systems, lending officers at banks evaluate potential borrowers and establish the lending terms. In the U.S. system, investment bankers underwrite stock and bond issues by businesses, state and local governments, and other entities. While impersonal markets determine the day-to-day value of the securities that have been issued, the investment banks play the

³ These gatekeepers inevitably do relational work with potential borrowers (Zelizer 2006). For more on the importance of the relational work concept and its relevance to financial reform, see the special issue of *Politics & Society*, June 2012.

role of gatekeepers. They are the ones who decide what entities are worthy of having their paper sold in a particular market and they shape the specific terms under which it is to be sold.

There is no way to avoid this gatekeeping function in the organization of capital markets. Even if Keynes' prediction of a fall in the interest rate as capital becomes more abundant is vindicated, there will still be less available capital than potential projects that are asking for finance for decades into the future. Somebody has to make decisions about which projects are worthy and which are not and what are the relative levels of risk of different undertakings. And it is simply a fantasy to imagine that the gatekeeping can be done effectively by some version of voting on the internet or by judgments on an impersonal market. One of the key roles that gatekeepers play is to extract detailed information from potential borrowers that the borrowers do not want to reveal more broadly. Without gatekeepers extracting key disclosures from those seeking funding, impersonal markets have no protection against fraudulent operations.⁴

But if a financial system needs gatekeepers, everything hangs on the decision rules that those gatekeepers employ to evaluate creditworthiness. We know that definitions of creditworthiness have changed over time and it follows that a successful democratization of finance requires further changes. In the past, gatekeeping positions in the U.S. were filled largely with upper class individuals who had gone to the right schools and knew all the right people (Bruck 1988). There were some cases of upwardly mobile financial wizards who successfully created firms on Wall Street or in the City of London, but their children and their successors tended to fit into the upper class mold. It was simply commonsense for these gatekeepers to define creditworthiness in class terms; the closer an individual came to the manners and styles of upper class men, the more creditworthy they were seen to be. If they were female, from a minority group, or working class in origin, then they were obviously less creditworthy.

Potential entrepreneurs from disfavored groups were then forced to find other ways to borrow the capital they needed. Certain ethnic groups developed parallel financial institutions or used informal mechanisms such as rotating credit associations to finance business efforts. In the worst case, they might resort to desperate exchanges with predatory lenders whose terms would significantly reduce the probability of business success.

But the central point is that creditworthiness has been defined in ways that incorporated existing social hierarchies of class, gender, and race. The merits of a particular lenders project was much less important than who they were. During the course of the 20th Century, these definitions of creditworthiness came under sharp attack.

⁴ To be sure, sometimes the gatekeepers fail to play this role. This happens particularly in a bubble situation where gatekeeping firms can achieve high returns in the short term by approving credit for unworthy entities. But this is just another illustration of Minsky's point that market competition will routinely lead profit-making firms to engage in risky and unsustainable practices and only regulatory counter pressures can stop them from doing this.

Laws were passed that required that creditworthiness be measured in ways that were independent of these ascribed social characteristics. But not surprisingly, these seemingly objective criteria to evaluate creditworthiness still reproduce and recreate older inequalities.

This was particularly clear in the sub-prime mortgage crisis. A seemingly objective scheme was used to measure creditworthiness and people whose scores fell below a certain point were put into the sub-prime category where they were only eligible for mortgages with higher interest rates and more demanding conditions. While this scheme was allegedly color blind, minority households were disproportionately placed into the sub-prime category because on average they have substantially fewer assets than comparable white households (Hernandez 2009; Rona-Tas and Hiss 2010)

A second problem with established ideas of creditworthiness is that they are excessively individualistic; they rest on the erroneous assumption that each individual entrepreneur either does or does not have the capacity to succeed. But the reality is that economic development is a collective project; whether one is talking about community revitalization or regional economic growth, the process depends on interdependent decisions by multiple actors. Gatekeepers who understand this interdependence can tilt the playing field towards more successful outcomes.

In short, a system of democratized finance would involve the continuing effort to improve the criteria used by gatekeepers to evaluate the creditworthiness of different parties attempting to raise capital. Such a system would need to incorporate three core principles:

1. Meritocratic evaluation.

Instead of just plugging an individual or organization's credit history into a computer model, the use of meritocratic criteria would involve evaluating that record in relation to the obstacles the individual or group confronted along the way. If, for example, someone seeking credit for a small high tech business had come to this country as an immigrant from rural poverty in the developing world, they would receive a higher credit score than someone with an equally compelling application who had grown up in middle class comfort. The justification is that the more hurdles you have surmounted in the past, the greater the likelihood that you will surmount barriers in the future. Similarly if a group had successfully established a bakery in a low income neighborhood, their application for funds to renovate the facility would be looked on more favorably than a comparable group that had done the same thing in a more affluent neighborhood.

Another element of meritocratic criteria is to eliminate any bias that is linked to the organizational form being used by those raising credit. As mentioned earlier, gatekeepers historically discriminated against employee cooperatives on the grounds that they were an untested form and they were concerned that democratic decision making would interfere with the firm's ability to respond quickly to market signals. But there is now sufficient data to show that alternative types of organizations can be effective, so credit discrimination against them should not be permitted. However, to facilitate capital flows to such nontraditional entities, there is also a need to develop new types of financing instruments that are recognized as legitimate and appropriate investments for investors to hold.

2. Synergistic evaluation.

While definitions of creditworthiness tend to be highly individualized, the reality is that making effective use of credit depends on factors that are usually beyond the control of an individual or a single firm. Even if the food at a pizza restaurant in a decaying downtown neighborhood is excellent, the business is much more likely to prosper if other storefronts on the same block are also being upgraded by entrepreneurs with access to credit. The same is probably even truer with investments in small firms that make things; they are much more likely to survive and prosper as part of a network of firms in the same locality.

It follows that gatekeepers can –to a certain degree--create self-fulfilling prophecies. By clustering flows of capital in certain areas, they can increase the probability that even some fairly marginal enterprises might be able to survive and prosper. This, in turn, argues for the importance of having a financial system that is decentralized. Only a decentralized structure assures that there are gatekeepers who have incentives to become knowledgeable about the economic potential of local communities and are then in a position to allocate capital in ways that create positive synergies.

3. Probablistic Criteria.

The standard mechanism in capital markets to deal with potential borrowers whose chances of being able to repay the loan are problematic has been to make loans contingent on collateral and charge such borrowers higher interest rates. But focusing on collateral tilts lending towards enterprises that involve real estate since land or buildings are assets that are relatively easy to value and that can be repossessed in the event of a default. The consequence, however, is that many businesses without real estate are effectively excluded from access to credit.

It is also the case that raising the interest rate for riskier borrowers creates a problem of adverse selection for the lenders. For example, the more conscientious entrepreneurs might well be discouraged by an interest rate of 12%, but those who are most unrealistic or least scrupulous might be unfazed by very expensive credit.

Precisely because of the positive synergies involved in capital allocation, it is important to create mechanisms that handle capital allocation on a probablistic basis. Depending on the resources of a particular society, the cutoff line would be drawn at a different level, but in a rich country, one might want to fund all enterprises that have better than a 50% probability of succeeding.

The classic example of probablistic lending has been the practice of venture capital firms. Especially in Silicon Valley, venture capitalists might take positions in ten firms with the idea that only one of them would be successful enough to offset the losses on the other and still produce a decent rate of return (Gompers and Lerner 2004). But, of course, the venture capitalists are still using a stringent screen; they are refusing to take positions in firms that they think have only a 10 or 20% probability of success.

Probablistic lending has been extremely productive for Silicon Valley and other industrial districts (Piore and Sabel 1984) because of the synergies it creates. It is not just that there are a lot of firms being funded but the potential availability of venture capital funding makes entrepreneurs more willing to take risks and everyone in the Valley understands that failures are necessary and productive. Firms that fail often add important new ideas to the industry's repertoire and failure frequently helps to point the way to alternative strategies that could be successful.

The standard measure to support probablistic lending are loan guarantees that effectively insure lenders against losses from providing funds to riskier enterprises. In the United States, federal loan guarantees have played an important role historically in mortgage lending, small business lending, and export credits. But loan guarantees can also be structured in ways that parcel out the risk broadly across a range of different public and private entities as has been done in Germany (Schmidt and Selbherr 2009). To be sure, any system of loan guarantees requires that gatekeepers continue to be effective in screening out those borrowers with a low probability of success. However, with the guarantees in place, gatekeepers are able to fund somewhat riskier borrowers without depending on collateral or prohibitive rates of interest.

Alternative Financial Institutions

If these are the principles that gatekeepers use to define creditworthiness, the next question is in what types of financial institutions should these individual gatekeepers work? It has already been suggested that local knowledge is extremely important if credit is to be allocated on a synergistic basis, so this points to the need for a decentralized model with thousands of distinct financial institutions none of which are too big to fail.

It also makes sense for the reasons that Minsky suggested that these institutions should be organized on a basis other than profit making; they could be cooperatives that return any surplus to their members or they could be organized as nonprofits or public entities. Credit unions that have existed in the United States since the 19th century are cooperatively owned nonprofit financial institutions that currently hold about 10% of consumer deposits. Since there is already a legal and regulatory framework that supports credit unions, they would seem to be the most likely institution to fill this need.

Eliminating the pursuit of profit is needed to reduce the danger that these institutions will follow the path of pursuing higher risks by accumulating ever riskier

investments. However, we also know that cooperative or nonprofit status does not automatically solve this problem; unscrupulous managers can still pursue risky strategies while also bidding up their compensation rates. A strong regulatory apparatus is still needed to make sure that these institutions do not take excessive risks.

There should also be relatively low barriers to entry for new institutions as a way to counteract the tendency of existing institutions to become insular and unresponsive to newcomers to a given locality. In other words, even without an orientation to profit, there is still room for ongoing competition among these institutions for consumer deposits and for loan requests. The more successful competitors could grow for some time with increasing numbers of local branches in a number of different communities before they were anywhere near being too big to fail.

There are numerous models for these kinds of nonprofit financial institutions that collect deposits from a geographical area and then relend the funds for mortgages and to finance local business activity. Schneiberg (2011) describes the wave of mutual banks and credit unions that were created in the pre-New Deal period as part of an infrastructure of local bottom-up institutions that played an important economic role particularly in the upper Midwest. Deeg (1999) describes the important role that public and cooperative banks have played in financing economic activity in Germany, especially investments by small and medium-sized enterprises, over recent decades. Mendell (2009) describes the complex web of locally-based financial institutions that have supported the development of the social economy in Quebec starting around 1996.

Moreover, with current technologies, even very small institutions of this type organized in networks—are able to provide clients with a broad range of financial services. For example, even very small credit unions can provide access to a network of automatic teller machines and the ability to wire funds to other destinations. And these small institutions need not hire all of the staff required to do the appropriate due diligence for small business lending. This could be done on a contract basis with small, nonprofit consultancies that develop expertise in particular business domains and work with a range of different financial intermediaries.

As a consequence of the historic popular distrust of Wall Street in the U.S., much of the regulatory and support structure for this type of decentralized financial system is already in place and credit unions have functioned well even in economic downturns (Wilcox 2005). The U.S. government has a system of deposit insurance and regulation in place for credit unions and both credit unions and newly created quasi-public local banks are eligible to be part of the Federal Home Loan Bank system that provides small banks with credit lines to help them through temporary liquidity crises (Hoffman and Cassell 2010).

Hence, only three steps would be required to set off a wave of entrepreneurial effort to create new nonprofit financial intermediaries and reinvigorate those that already exist:

1. A federal matching funds program to help capitalize or recapitalize new or existing nonprofit financial intermediaries.

Given the enormous costs that the society has paid for its dysfunctional financial system, an outlay of \$50 billion over five years would be a small price to pay to create a vigorous locally oriented financial system. The idea is that local investors would raise \$10 million to capitalize a new nonprofit bank or credit union and the government would provide an additional \$10 million—perhaps in the form of a low interest, thirty year loan. Or similarly, a sleepy bank or credit union would be recapitalized with an additional \$20 million that would be matched by \$20 million from the federal government. The idea is that the matching funds would simultaneously signal the government's strong support for these new institutions and create strong incentives for grassroots efforts to build this new sector.

2. A new system of loan guarantees to support lending by these institutions.

Along with the capital infusion, the federal government could also immediately provide loan guarantees for these institutions to lend to households, businesses, and government agencies for conservation or clean energy projects. The value of these investments has been documented by Laitner et.al. 2012. Again, the urgency of a green transition would justify the relatively small budgetary commitment that would be involved since these loans for energy-saving should have a very small failure rate. But this would be an efficient means to underwrite a dramatic initial expansion in the loan portfolios of these institutions.

On a less rapid timetable, there is also the need to build a system of loan guarantees to support long term lending to small and medium sized businesses. This requires more careful design because these loans are riskier and the dangers of abuse and fraud are substantially greater. The goal would be something similar to a guarantee program that exists in Germany where the risks are distributed across different institutions. One might imagine, for example, 25% of the risk being covered by the Federal Home Loan Bank Board, 25% by the Federal Reserve System, 25% by the Treasury, and the final part being carried by the originating institutions. Since these guarantees are designed to support probablistic lending at the local level, it is assumed that there will be periodic losses from businesses that fail, but these losses would be spread across strong institutions whose revenues would be increased by the stronger growth resulting from more vigorous lending to small and medium sized firms.

The idea here is to transition the U.S. to a system in which the role of the stock market is significantly diminished because much of the financing of long term business investment would be done by these decentralized banking institutions as has long been the pattern in Germany (Deeg 1999). Those in charge of small and medium-sized enterprises would have a viable alternative to having their firms listed on public exchanges and they would be effectively insulated from the short term time horizon problem that plagues publicly traded corporations. There would also be much enhanced

opportunities for employee owned firms to flourish since they would no longer face discrimination when attempting to borrow.

It will, of course, take time for these emergent financial institutions to learn the specific skills required to be effective as financers of small and medium sized firms. The clean energy guarantees and the broader guarantee program would help to facilitate this transition. But over time, the guarantee programs would be focused on recently created firms since this kind of lending becomes progressively less risky as these small and medium sized enterprises become more established. And during economic downturns when these firms experience temporary difficulties, the decentralized financial institutions will be able to maintain lending by increasing their own borrowing from the Federal Reserve or the Federal Home Loan Bank system.

3. The third step is to create a new set of institutions that would be nonprofit underwriters of bonds. When the investment needs of these small and medium sized enterprises pass a certain size threshold, bank loans would no longer be a proper instrument. When a firm, for example, needs \$1 billion to build new production facilities to meet existing demand, that should be financed by a bond issue. This would require creating nonprofit investment banks that would underwrite bond offerings for both public and private borrowers.

These new institutions would ideally be created as entities jointly owned by large pensions funds or groups of nonprofit banks. They would compete directly against the institutions that currently underwrite bonds. They would also be able to issue bonds for state and local governments and to finance large-scale infrastructure projects. In evaluating these infrastructure loans, these nonprofit investment bankers would add an additional creditworthiness criterion—did the planning of the project involve sufficient democratic input and engagement from citizens in poorer and more marginal communities?

When they underwrite these new bonds, these newly created institutions would be able to sell some portion of the bond issue to their member institutions—public pension funds and nonprofit banks and credit unions. The latter would also offer their retail customers the option of owning some of these bonds as part of their own portfolios.

3. Shifts in behavior by consumers.

The viability of this transition requires that consumers be willing to change the way they manage their saving. At present, roughly 10% of consumer deposits—about \$600 billion-- are in credit unions while close to half are now in the hands of the four largest commercial banks. Moreover, the bulk of most people's retirement saving—IRA's and 401K's-- are held in mutual funds that hold the shares of giant corporations and are subject to dramatic fluctuations with shifts in the business cycle.

The assumption here is that consumers will shift when they see a viable alternative to the large commercial banks, but this requires creating these new institutions and getting those institutions actively engaged in providing a range of different loans to communities. As consumers, start shifting their deposits, it will then allow these new institutions to grow dramatically over time. The goal would be that at the end of a twenty year transition period, the current ratios would be reversed—most consumer deposits would be held in these nonprofit institutions, and most retirement saving would shift to bond portfolios that would be substantially less volatile than stock portfolios.

The intuition here is that most people are not looking for outsized returns on their personal saving; they want primarily security and predictability. By placing their deposits in local financial institutions, they would be earning rates of return that were higher than inflation and contributing to the viability of the local economy. Those with larger saving would purchase bonds or bond funds that would provide a higher rate of return and would help finance needed public investment and long term investment by businesses.

Global Shifts

As argued earlier, the deformations of the U.S. financial system are completely interwoven with weaknesses in the architecture of the global financial system. It was earlier discussed that a global shortage of high quality financial instruments helped assure that foreigners have no choice but to ship some of their surplus saving to the United States where it has helped fuel demand for a series of lower quality financial instruments.

But this problem is closely linked to a second difficulty—the U.S. has used its position as the only surviving Superpower to force other nations to finance its ongoing current account deficits. The basic ground rule for the international monetary system is that countries are supposed to bring what they earn overseas into balance with what they spend overseas. But since the U.S. enjoys the "exorbitant privilege" of providing the world's key reserve currency, it has been able to run substantial current account deficits for thirty years (Schwartz 2009; Eichengreen 2011).

In itself, this long-term imbalance creates a series of macroeconomic problems, but it also has worked to push significant reform of the global financial system off the agenda. Since the U.S. effectively has a veto on these discussions, it has been able to dictate to the rest of the world that the U.S. freedom to run deficits is not up for discussion.

Fortunately, the project of reforming the global financial architecture can draw on almost a century's worth of intellectual effort dating back to Keynes' 1919 essay on *The Economic Consequences of the Peace*. More specifically, the proposal for an International Clearing Union that Keynes advanced in 1943 is still extremely relevant to the task of creating an international monetary regime that meets the three key criteria of providing sufficient global liquidity, dealing effectively with global imbalances, and providing national economies with the maximum opportunity to subordinate their economies to democratic decision making.

The core of Keynes' idea was the creation of an international currency that would play the role that gold had played earlier. This currency "bancor" would be created as a credit on the balance sheet of an International Clearing Union and the supply of bancor could be gradually expanded to keep pace with the world economy's rising need for liquidity. Nations that were running chronic deficits and in danger of exhausting their reserves of bancor would be required to adjust by devaluing their currency in relation to bancor. Nations that were running chronic surpluses would essentially be adding to the supply of bancor that was available to loan out to other nations. Moreover, these chronic surplus nations would face the twin pressures of embarrassment and the fact that the additional reserves they were accumulating were earning no return (Block 1977a; Skidelsky 2000).

Keynes' mechanism meant that there would no longer be a need for one nation to provide the world's key currency. All nations would be under parallel pressures to eliminate global imbalances, and this meant that contractionary policies by deficit nations would largely be offset by expansion policies pursued by surplus nations.

While Keynes' initial design was rejected by U.S. negotiators who insisted that the dollar be the center of the post-World War II global financial system, the International Monetary Fund moved in Keynes' direction by the creation in 1969 of Special Drawing Rights. These are, essentially additions to a nation's quota in the International Monetary Fund that increase the supply of liquidity in the same manner as bancor. The value of the SDR is set in relation to a specific basket of global currencies. (As of 12/15/11, one dollar equaled 0.65 SDR's.) Between 1969 and 1981, the IMF distributed 21.4 billion in SDR's.

However, in response to the global economic crisis is 2009, the IMF agreed to add an additional 161.2 billion SDR's to member reserves. In short, after a twenty-eight year interruption, the SDR was reactivated as a mechanism for providing global liquidity. This was a means to fight the economic contraction by bolstering each nation's international reserves, but it can also be seen as an indication that world leaders are now contemplating a time when the United States dollar will no longer be the world's key currency.

But even if we see the 2009 measure as an indication that Keynes' vision is still alive, a move to a bancor system also requires that the U.S. would explicitly agree to a multi-year plan to return its current accounts to balance. Such a commitment would involve two major elements. The first would be a systematic effort to eliminate the U.S. balance of trade deficit. There has been some movement in this direction with the improvement in the U.S. trade balance for oil and natural gas, but there would also need to be a sharp improvement in the U.S. trade balance for manufactured goods. This would involve reversing the long-established pattern of outsourcing more and more industrial production to Asia and expanding U.S. exports of advanced manufactured goods. This process would be facilitated by changing current tax rules that incentivize U.S.-based firms to shift production overseas and postpone indefinitely repatriating the profits they earn. But deliberate government policies to support the modernization of the manufacturing sector are also needed.

A second prong would be a significant reduction in U.S. political and military commitments overseas. This means a more rapid winding down of the U.S. military role in Afghanistan, very substantial cuts to the network of global U.S. military bases, and significant reductions in U.S. military, security, and foreign assistance personnel stationed abroad. Since this overseas apparatus has been growing by accretion for seven decades, there is enormous room for rationalization and cost saving. Moreover, as part of the move to a truly multilateral global financial system, the U.S. would demand of its allies in Europe and Asia that they increase their role in global security (Block 2011a).

A global decision to replace the dollar with an international currency and a U.S. agreement to bring its deficit under control would also provide the opportunity to eliminate many of the other shortcomings of the current global financial and trade architecture. For one thing, the existing global institutions suffer from a severe democratic deficit and they provide insufficient power and influence to developing nations (Wade 2011). For another, the system of trade and finance rules negotiated over the last twenty years has significantly diminished the policy space that developing nations are able to use to catch up with more developed nations.

But developing a full list of necessary and desirable global reforms is beyond the mission of this particular essay. So I will limit the discussion to four key steps that follow closely from the idea of returning to Keynes' vision of how a global exchange system should be organized:

1. Developing a global currency through the IMF also requires a return to a fixed exchange rate system. The global experiment with floating rates since 1973 has been a failure. Supporters of floating rates claimed that with markets free to determine exchange rates on a daily basis, adjustments would occur smoothly and seamlessly. This has not happened; instead exchange markets systematically overshoot on both the upside and the downside. This is hardly surprising since exchange rate traders are able to make money by betting the trend and exaggerating movements in one direction or the other.

The deeper problem is that exchange rate volatility is basically inconsistent with the predictability that economic actors require to make long term contracts. A variety of new financial instruments were invented that purported to help actors protect themselves from this volatility, but we now know that this elaborate structure of derivative instruments simply shifts risk around in ways that are unpredictable and ultimately destabilizing. Rather than build more elaborate systems of regulation to manage the risks involved in derivatives, it makes more sense to eliminate much of the need for these instruments by making exchange rates more stable.

To be sure, as Keynes envisioned, nations would have the opportunity to reset their exchange rates to overcome disequilibria, but this would involve a consultative process that would place strong pressures on nations that sought to keep their exchange rates pegged at unreasonable levels.

2. But even with a fixed exchange rate system, there will be opportunities for speculators to take large bets against particular currencies or to take massive short positions on a target nation's government bonds. In order to discourage this type of activity, it is essential to have a global financial transaction tax that would apply to all financial instruments including derivative contracts. As proposed initially by James Tobin, the theory of the tax is to make these markets work better by assuring that investors face some transaction costs when they make large bets against a particular currency or financial instrument. The analogy is with the operation of the gold standard in the 19th century where those who wanted to make significant bets against a particular currency faced the quite substantial transaction costs of buying gold in another country and transporting it to a place where it would earn a higher return. In short, there is a need in markets for people to engage in arbitrage when prices are not properly aligned, but overall market stability is enhanced when arbitrageurs cannot profit from small misalignments. Part of the reason that the financial transaction tax is needed is that advances in computerized trading have driven transaction costs for arbitrageurs near to zero.

3. Even with the financial transaction tax in place, asset holders might still engage in the strategy of moving capital abroad as a way to undermine an elected government that is pursuing policies that are against the interests of the wealthy. As stated earlier, this has been a classic means by which those with capital have tried to overrule the results of democratic politics. While the existence of an International Currency Union would give governments access to resources needed to offset this kind of financial pressure, they would also need the legal authority to impose capital controls that would halt this type of strategic disinvestment.

4. Moving to a global currency and fixed exchange rates will solve certain problems, but it does not address the need for long-term capital to finance infrastructure, clean energy, small business, community development, and improved health and education systems. The need for such capital is particularly acute in the developing nations, but as we have seen, it is a problem in rich nations as well. Under normal conditions, nations such as Germany, the U.S., and Japan would be able to finance these needs out of domestic saving. However, access to credit from global or regional development banks could play an important role even for rich nations when they faced acute balance of payments or governmental deficit problems.

The basic idea is that there are many investors around the world who would eagerly purchase long-term bonds with a guaranteed return. For example, the World Bank has since 2008 issued \$2 billion worth of Green Bonds often with interest rates of 2% or 3% designed to finance climate-friendly projects. If such bonds were also made tax-free by national authorities in the way that municipal bonds enjoy tax-free status in the U.S., they would be even more attractive. Furthermore, if the expanded issuance of these bonds were linked to the creation of a Financial Transaction Tax, revenues from that tax could be used to subsidize the interest rates for loans to the least developed nations in the world. For example, funds raised by the issuance of bonds paying 3% could be relent at subsidized rate of as low as 1% per year to the poorest nations. Since these nations are already paying for imported energy, the expected energy savings from green projects would provide the revenue needed to service the bonds.

The long-term goal of this international lending mechanism would be to increase the availability of capital far above the current efforts of the World Bank and the various regional development banks. Annual bond issues by the World Bank and the other regional development banks have been on the order of \$80 billion per year. The goal over a period of years would be to raise this by a factor of ten to significantly expand global real investment.

It is complicated to envision an institutional design for achieving such a goal while assuring that the investment flows were consistent with minimizing corruption and maximizing democratic input. Ideally, there should be a multi-level governance structure where each level has an interest in monitoring what goes on at both higher and lower levels and all participants—except for some fraction of ultimate borrowers—would not be seeking to make profits on the transactions.

One possibility would be to have a single peak organization –perhaps a successor to the World Bank--issuing the bonds to establish a visible and reliable brand for investors around the world. However, there would need to be considerable democratic input at this peak level to assure that the criteria for lending did not privilege private corporations or in other ways reproduce the technocratic and anti-environmental biases that have historically been associated with the World Bank and other development agencies. This peak agency would then relend the money to the regional development banks—reorganized with greater democratic accountability-- that would do the actual lending of money to organizations within countries in their regions.

CONCLUSION

These global reforms would work to support the democratization of finance within the United States through several distinct channels. First, the phasing out of the dollar's reserve currency role would disempower the dominant Wall Street firms by eliminating the current guarantee of huge capital inflows from abroad. Second, creating new channels for global saving to finance productive investments in both the developed and developing worlds would end the current scarcity of high quality paper that has worked to protect the rentiers. Instead, in both the U.S. and the rest of the world, most household saving would be routed through nonprofit financial intermediaries directly into productive investments. And the supply of quality securities would be augmented by global issues designed to finance development related projects. Third, by overcoming the artificial scarcity, long term interest rates would head downward making it easier to finance all kinds of productive investments. Finally, all levels of government in the U.S.

and abroad would have more ready access to credit, so more public sector productive investment could occur.

Some readers might argue at this point that while all of these changes might be desirable, they hardly add up to a utopia. After all, there will still be great inequalities of income and wealth, employers will still have a structural advantage over people needing work to put food on the table, and profitability will still dominate in large sections of the economy.

But a real utopia is not intended to make all problems go away in a single instant; that corresponds only to the literal meaning of utopia—something which can exist nowhere. What makes something a real utopia is both that the changes are actually feasible and they have the potential to change the balance of forces in favor of further reforms and improvements. The proposals advanced here for democratizing finance accomplish this end by significantly expanding the scope of democratic politics and weakening the resistance of current elites.

So, for example, let us think of the scenario in which a reformist government comes to power determined to redistribute income in favor of households at the bottom while also strengthening the rights that employees have at the workplace. The classic scenario is that large employers and financiers would express their displeasure by engaging in an investment strike and by shifting capital abroad. The strategy would be to subject the population to enough economic pain that the government would be forced to retreat.

When we replay that scenario with these proposed reforms in place, things play out very differently. The decentralized and nonprofit financial institutions might see little danger in the reforms. On the contrary, some small and medium sized enterprises might imagine that income redistribution would boost consumer demand for their products. And as long as the government could get the central bank to keep interest rates low, the volume of new investment might stay relatively high. And if needed, the government could increase its own borrowing from the regional development banks to maintain a high level of economic activity.

At the same time, access to resources through the International Clearing Union and the use of capital controls could limit the damage from any capital flight that occurs. This would give the government time to prove to everyone that the redistributive and employee empowering reforms were not actually bad for business. In other words, the consequences of reforms would be determined by actual experimentation and not by the ideological claims made by those opposing redistributive measures.

In sum, these changes would reinvigorate the social democratic project of creating a society in which citizens could use democratic politics to make key decisions about how their economy would operate (Berman 2006; Block 2011b). While there is no way to legislate an end to scarcity, democratic politics can play a major role in deciding who will bear the costs of particular scarcities and how various critical tradeoffs—for

example, between investment and current consumption—will be managed. For this to happen, requires the kinds of reforms described here to overcome the despotic power of those who have historically controlled key financial resources.

Bibliography

Arrighi, Giovanni and Beverly Silver. 1999. *Chaos and Governance in the Modern World System*. Minneapolis: University of Minnesota Press.

Auerswald, Philip E. and Lewis M. Branscomb. 2003. "Valleys of Death and Darwinian Seas: Financing the Invention to Innovation Transition in the United States." *Journal of Technology Transfer* 28 (3-4): 227-239.

Berman, Sheri. 2006. The Primacy of Politics. New York: Cambridge University Press.

Bernanke, Ben. 2005. "The Global Saving Glut and the U.S. Current Account Deficit." Sandridge Lecture, Richmond Virginia. Available at:

http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/.

Block, Fred. 1977a. *The Origins of International Economic Disorder*. Berkeley: University of California, 1977.

-----1992. "Capitalism with Class Power." *Politics & Society* 20:3 (September): 277-303.

-----1997b. "The Ruling Class Does not Rule." Socialist Revolution 33:

----- 1990. Postindustrial Possibilities. Berkeley: University of California Press.

-----. 2007. "Understanding the Diverging Trajectories of the United States and Western Europe: A Neo-Polanyian Analysis." *Politics & Society* 35 (3): 3-33.

-----.2011a. "Breaking with Market Fundamentalism: Toward Domestic and Global Reform." Pp. 210-227 in Jon Shefner and Patricia Fernandez-Kelly.eds. *Globalization and Beyond*. University Park, Pa.: Penn State University Press.

-----.2011b. "Reinventing Social Democracy in the 21st Century." *Journal of Australian Political Economy* 67: 5-21.

Block, Fred and Matthew R. Keller. Eds. 2011. *State of Innovation*. Boulder, Colorado: Paradigm Publishers.

Brandt, Willy. 1980. North-South: A Program for Survival. London: Pan Books.

Bruck, Connie, 1988. The Predator's Ball. New York: Simon and Schuster.

Caro, Robert. 1975. The Power Broker. New York: Vintage.

Deeg, Richard. 1999. *Finance Capital Unveiled*. Ann Arbor: University of Michigan Press.

Dymski, Gary. 2011. "Genie out of the Bottle: The Evolution of Too-Big-to-Fail Policy and Banking Strategy in the U.S." unpublished paper, UC Riverside.

Eichengreen, Barry. 2011. Exorbitant Privilege. New York: Oxford University Press.

Evans, Peter. 2008. "Is an Alternative Globalization Possible?" *Politics & Society* 34(2): 271-305.

Federal Reserve Board. *Flow of Funds Data*. Available at http://www.federalreserve.gov/releases/z1/

Gompers, Paul Alan and Josh Lerner. 2004. *The Venture Capital Cycle*. 2nd edition. Cambridge: MIT Press.

Greider, William. 1987. Secrets of the Temple. New York: Simon and Schuster.

Hacker, Jacob. 2005. The Great Risk Shift. New York: Oxford.

Hernandez, Jesus. 2009. "Redlining Revisited: Mortgage Lending Patterns in Sacramento 1930-2004." *International Journal of Urban and Regional Research* 33:2 (June): 291-313.

Hoffman, Susan M. and Mark K. Cassell. 2010. *Mission Expansion in the Federal Home Loan Bank System*. Albany: SUNY Press.

Hughes, Thomas P. 1983. Networks of Power. Baltimore: Johns Hopkins Press.

Johnson, Simon and James Kwak. 2010. 13 Bankers. New York: Pantheon.

Keynes, J.M. 1919. The Economic Consequences of the Peace. London: Macmillan.

Kindleberger, Charles P. 1973. *The World in Depression, 1929-1939.* Berkeley: University of California Press.

Kirkpatrick, L. Owen and Michael Peter Smith. 2011. "The Infrastructural Limits of Growth." *International Journal of Urban and Regional Research* 35(3): 477-503.

Krippner, Greta. 2011. *Capitalizing on Crisis*. Cambridge, Mass.: Harvard University Press.

Laitner, John A. et al. 2012. "The Long-Term Energy Efficiency Potential: What the Evidence Suggests." Report Number E121, American Council for an Energy-Efficient Economy.

Lazonick, William. 2009. Sustainable Prosperity in the New Economy? Kalamazoo, Michigan: Upjohn.

-----2010. "The Explosion of Executive Pay and the Erosion of American Prosperity." *Enterprises et Histoire*. 57 (4): 141-164.

Lowenstein, Roger. 2000. When Genius Failed. New York: Random House.

Mendell, Marguerite. 2009. "The Three Pillars of the Social Economy: The Quebec Experience (1996-2007)." in Ash Amin, ed. *The Social Economy*. London: Zed books.

Minsky, Hyman. 1986. *Stabilizing an Unstable Economy*. New Haven: Yale University Press.

Newfield, Chris. 2008. *Unmaking the Public University*. Cambridge, Mass.: Harvard University Press.

Piore, Michael and Charles F. Sabel. 1984. *The Second Industrial Divide*. New York: Basic Books.

Polanyi, Karl. 1944 [2001]. The Great Transformation. Boston: Beacon Press.

Ritter, Jay. R. 2012. "Initial Public Offerings: Tables Updated Through 2011." Department of Finance, University of Florida. Available at: http://bear.warrington.ufl.edu/ritter/ipodata.htm.

Rogers, Nathalia, Ronald E. Roel, Edward T. Gullason, and Susanne Bleiberg Seperson. 2012. "Small Businesses in a Struggling Economy: Socio-Economic Issues and Measures to Improve the Small Business Climate." Dowling College. Available at <u>http://www.dowling.edu/aci/SBA_Report_Final_March2012.pdf</u>.

Rona-Tas, Akos and Stefanie Hiss. 2010. "The Role of Ratings in the Subprime Mortgage Crisis." Pp. 113-154 in Michael Lounsbury and Paul M. Hirsch, eds., *Markets on Trial*. Bingley, U.K.: Emerald Group.

Schneiberg, Marc. 2011. "Toward an Organizationally Diverse American Capitalism?" *Seattle University Law Review* 34: 1409-1434.

Schmidt, Axel and Guy Selbherr. 2009. "Tasks, Organization and Economic Benefits of German Guarantee Banks." *The Journal for SME Development* 11: 45-86.

Schwartz, Herman. 2009. Subprime Nation. Ithaca: Cornell University Press.

Scott, Joan. 1974. *The Glassworkers of Carmaux*. Cambridge, Mass.: Harvard University Press.

Skidelsky, Robert. 2000. John Maynard Keynes: Fighting for Freedom 1937-1946. New York: Penguin.

Stiglitz, Joseph. 2010. Freefall. New York: Norton.

Tridico, Pasquale. 2012. "Financial Crisis and Global Imbalances: its labour market origins and its aftermath." *Cambridge Journal of Economics* 36:1 (January):17-42.

Wade, Robert. 2011. "Emerging World Order? From Multipolarity to Multilateralism in the G20, the World Bank, and the IMF." *Politics & Society* 39 (3): 347-378.

Weber, Max. 1946. "Class, Status, Party." Pp. 180-195 in Hans Gerth and C. Wright Mills, eds., *From Max Weber*. New York: Oxford University Press.

Wilcox, James. 2005. "Credit Union Failures and Insurance Fund Losses: 1971-2004." *Federal Reserve Bank of San Francisco Economic Letter*. August 19: 1-3.

Wright, Erik. 2010. Envisioning Real Utopias. New York: Verso.

Zelizer, Viviana. 2006. The Purchase of Intimacy. Princeton: Princeton University Press.

Zingales, Luigi. 2009. "Capitalism After the Crisis." *National Affairs*. Accessed at <u>http://www.nationalaffairs.com/publications/detail/capitalism-after-the-crisis</u>.

Zysman, John. 1983. *Governments, Markets, and Growth*. Ithaca: Cornell University Press.