Alternatives to Free Market Capitalism

Literature Review Essay

What are Viable Alternatives to Free-market Capitalism if Our Current System Fails?

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Introduction

Since the collapse of the stock market in 2008, there has been concern from several sectors that our current economic model of free-market capitalism is failing. The extremes in inequality produced by this system, with the top 1% of U.S. households now having a net worth greater than the bottom 90% combined (Kotin, 2009), not to mention, the environmental destruction of the planet's remaining ecosystems attributed to our current economic model (Watson, Zakri, et al, 2005), have economists and policy professionals from both the left and right calling for reforms. According to Dean Baker, Director of the Center for Economic Policy Research, laissez-faire economics enabled the growth of unbridled greed where the growth and collapse of financial bubbles wreak havoc over entire economies absent the regulatory restraints that could have contained it:

... the story of these financial bubbles is a tale of major institutional failures. The top corporate actors enriched themselves even as they drove their companies toward bankruptcy. The Federal Reserve Board and other regulatory institutions largely sat on the sidelines. Economists and the media promoted these bubbles, or at least ignored the danger of them popping (Baker, 2009, pp. 4-5).

In addition, according to Faber and Bradley (1996):

Economies are inextricably embedded in larger natural ecosystems, and exchange flows of materials and energy with natural systems....What makes humans and their economies unique as a sub-ecosystem is their ability, through willful effort, ignorance and human designed tools, to dramatically restructure and reform processes in ecosystems of which they are a part; and to such a magnitude that human welfare can be diminished or enhanced by those original actions (p. 1).

Given concerns raised by the 2008 stock market collapse, and increased evidence of environmental destruction, question remain around whether or not the worst impacts are over or if an even greater crisis attributed to free-market capitalism is still to come? Although the U.S. Treasury reportedly inserted an estimated \$700 billion taxpayer dollars into saving the collapsing financial system in 2008, the real total paid out to Wall Street

by the U.S Treasury and the Federal Reserve, according to Nomi Prins, author of *It Takes a Pillage: Behind the Bailouts, Bonuses, and Backroom Deals from Washington to Wall Street*, is \$14.4 trillion and counting (Prins as cited in Stiglitz, Mother Jones, Jan. 2010, p. 32). In addition, the Comptroller of the Currency Administrator of World Banks, for the third quarter of 2008, reported that the notional value of over the counter derivatives (OTCs) held in U.S. commercial banks were \$175.8 trillion (Schweber, 2009), while the total GDP of the planet in 2008 was only \$70.5 trillion.

In addition OTC's, or so-called "toxic assets" are currently sitting on the books of the largest world banks like a ticking time bomb waiting to go off. According to the *BIS Quarterly Review* (November 2009), as of June, 2009, OTC Derivatives worldwide stood at \$605 trillion – nearly 10 times the GDP of the planet. Paul Ferrell of MarketWatch, calls this one of 20 reasons why the global debt time bomb will explode soon:

Retire? You can fuggetaboutit if the new Global Debt Time Bomb is detonated by any one of 20 made-in-America trigger mechanisms. Yes, 20. And yes, any one can destroy your retirement because all 20 are inexorably linked, a house-of-cards, a circular firing squad destined to self-destruct, triggering the third great Wall Street meltdown of the 21st century, igniting the Great Depression II that George W. Bush, Ben Bernanke, Henry Paulson and now President Obama have simply delayed with their endless knee-jerk, debt-laden wars, stimulus bonanzas and bailouts. (Farrell, 2010, para 1).

Currently, unemployment remains dangerously high hovering at 17% when factoring in both the unemployed and the so-called, "marginally attached workers" according to the Bureau of Labor Statistics (February 2010). And, as if this weren't enough, the world has barely begun to address the looming crisis of peak oil and climate change, of which, free-market capitalism is a chief contributor (Costanza, et. al., 1997 & 2008; Faber & Bradley, 1996; Hopkins, 2008; Korten, 2009, and McKibben, 2007). Given this, there is much speculation that the social, environmental, and financial systems of the world are heading

for a possible collapse due to the negative impacts of unbridled free-market capitalism.

According to former Harvard Business professor and author, David Korten,

Our economy is wildly out of balance with human needs and the natural environment. The result is disaster for both. Wages are falling in the face of soaring food and energy prices. Consumer debt and housing foreclosures are setting historic records. The middle classis shrinking. The unconscionable and growing worldwide gap between rich and poor with its related social alienation is producing social collapse, which in turn produces crime, terrorism, and genocide...At the same time, excessive consumption is pushing the Earth's ecosystems into collapse (Korten, Dec/Jan 2009), p 1).

All this points to an economic model that is failing to serve the needs of either the people of the world or the planet with an eminent crisis looming. How or if capitalism should be saved for a second time is a matter of considerable debate. And if the model fails despite desperate measures to save it, what might take its place? "A Rasmussen poll taken in April of 2009, found that only slightly more than half of adults in the United States believed that capitalism was better than socialism" (Rose, 2009, p. 25). Yet socialism, as well as communism, and capitalism are all built on a growth model of increased consumption that the planet can no longer support. Given the waning of these traditional economic paradigms, what viable economic alternatives exist? In order to be viable for the long-term, any new model must consider not only economic impacts, but also social and environmental ones as well.

In researching viable alternatives to free-market capitalism, I found four distinct schools of thought:

- 1. Fixing our current free market system to protect from the worst aspects of capitalism in order to create more broad-based prosperity;
- 2. Using capitalistic criteria to create valuations for human and natural capital in economic exchange calculations in an effort to create a more sustainable system.

- 3. Supporting healthy, local economies that form alternative parallel economic systems within the larger capitalist system.
- 4. Scraping the old system entirely by dismantling its institutions and building new ones focused on sustainable local economies.

Below is a review of the literature exploring these four schools of thought as I attempt to answer the following question: What are viable alternatives to free-market capitalism if our current system fails?

Literature Review

Fixing the current system

How to "fix" our current economic system is a question of considerable debate, much of which revolves around what to do about large financial institutions considered "too big to fail." With the 2008 collapse of the stock market and large financial institutions teetering on the edge of ruin, there were multiple calls for action. At issue was whether or not to allow these large financial institutions to fail, nationalize them, or bail them out (Baker, D., 2009; Baker, J., 2009; Butler, 2009; Cohan, 2009; Canova, 2009; Elliott, 2009; Hackney, 2009; John, 2009; Johnson, 2009b; Knigge, 2009; Korten, 2009; Krugman as cited in Swint, 2009; Poole, 2009; Reinhart, 2009; Rodriguez, 2009; Sorkin, 2009; Stiglitz, 2010; Volker as cited in Uchitell, 2009; White, 2009).

Conventional wisdom at the beginning of the current economic crisis was that in order to "fix" the economy, we had to first fix the financial sector and get credit flowing again so that people could resume spending. The rationale, according to then Treasury Secretary, Henry Paulson was,

...we were at a tipping point. Credit markets were largely frozen, denying financial institutions, businesses and consumers access to vital funding and credit.

U.S. and European financial institutions were under extreme pressure, and investor confidence in our system was dangerously low. (Paulson, 2008).

To that end, the government launched a massive intervention that included trillions of dollars of taxpayer money to either prop up the financial sector or bail it out directly.

However, author and retired Wall Street banker, William Cohan, states that by choosing to bail out the financial sector, rather than allowing insolvent institutions to fail, the government sent a very bad message: that it would not allow under capitalized, poorly run, institutions to fail and taxpayers would absorb the risks of their bad behavior there by encouraging more poor management and risk. He thinks the government should have sent a very different message to these financial institutions: "Too bad."

You took risks you didn't understand? Got too greedy? Took your eye off the ball? Kept in place executives and their cronies on the board of directors who should have retired or been replaced years earlier? Well, then, you are about to learn the valuable lesson of American capitalism and what it means to take stupid risks with other people's money. You will lose your investments, your jobs and your company. Sorry about that. Stuff happens. The market understands that message loud and clear. (Cohan, 2010).

The result, Cohen claims, is not only a bad precedent, but a taxpayer-backed system of financial sector prop-ups that come to \$12 trillion and counting, not to mention a 10% unemployment rate going nowhere (Cohan, 2010). Given the toxic levels of global debt, David Korten, author of *Agenda for a New Economy* strongly states, "Spending trillions of dollars trying to fix Wall Street is a fool's errand" (Korten, 2009, p. 2). He argues that Wall Street needs Main Street, not the other way around. He claims Wall Street siphons off wealth from Main Street and uses it as capital for risky investments in highly leveraged casino like trades that do nothing more than generate short term "phantom wealth." According to Korten, if we let Wall Street fail, it will hurt primarily, Wall

Street, as the phantom wealth it was generating never really existed in the first place (Korten, 2009).

Not only are members of the left supportive of the "let them fail" strategy, so is a growing group on the right, though for very different reasons. William Poole, of the Cato Institute writes: "Congress should refuse to bail out any more firms—weak firms should be required to seek protection under the bankruptcy law" (Poole, 2009, p. 206) - a philosophy very indicative of the free-market capitalist "winners and losers" model.

David John of the Heritage Foundation also believes bankruptcy is the solution to failing banks and financial institutions that are "too big to fail." He states that a better approach would be to add a new chapter to the bankruptcy code specifically designed to address the issue of "too big to fail" institutions in a manner that would reduce their systemic risk (John 2009). He also believes requiring higher levels of capitalization would discourage bank size and provide the financial cushion to protect them from future loses (ibid).

However, a wide array of respected economists believes that the largest banks posing the most systemic risk (aka those "too-big-to-fail") must be broken up. According to former Head of the Financial Reserve, Alan Greenspan,

Those banks have an implicit subsidy allowing them to borrow at lower cost because lenders believe the government will always back them up. That squeezes out competition and creates a danger to the financial system (Greenspan as cited by Sorkin, 2009, para 2).

An editorial in "The Nation" describes the need to break up the banks and states why more than simple regulatory or bankruptcy reform is needed:

George Stigler who developed the theory of "regulatory capture" to describe the ways regulators are subverted or co-opted by the industries they oversee. Given the likelihood that, over time, new regulations will be subject to these forces, it

makes sense to supplement regulatory reforms with legal limits on the size and scope (and thus potential damage) of the firms in question. (The Nation, Nov. 16, 2009).

One means of breaking up current financial institutions that are "too big to fail" would be to reinstate the Glass-Steagall Act of 1933. The Clinton Administration, in 1999, repealed Glass-Steagall, which had mandated the separation of investment and commercial banks (Baker, 2008). Glass-Steagall was originally passed by Congress in 1933 in an effort to prevent the fraud and conflicts of interests that had formed between commercial and investment banks that led to the stock market crash and Great Depression. (Baker, D., 2009; Grumet, 2008). So it should be of no surprise that fraud, abuse, and conflicts of interest in the financial sector once again occurred after this consumer protection was removed.

Laizzez-faire economist, Richard Posner, in his mea culpa manifesto, *A Failure of Capitalism: The Crisis of '08' and Descent into Depression* agrees that reinstating Glass-Steagall is critical. He states:

"The seeds of failure were sown in the movement to reduce the regulation of banking and credit, which began in the 1970s. They germinated during the Clinton Administration, when the housing bubble began and the deregulation of banking culminated in the repeal of the Glass-Steagall Act . . ." (Posner as cited by Hackney, 2009, pp. 541-542).

As such, there has been a bi-partisan call in Congress to reinstate Glass-Steagall in an attempt to reassert some safe guards through necessary regulation into the financial system. According to Kevin Spak in a 2009 *Newser* article:

John McCain, reconnecting with his inner maverick, has teamed up with liberal firebrand Maria Cantwell on a bill to break up Wall Street banks by reinstating the Glass-Steagall Act. The Depression-era law, dumped a decade ago, enforced a split between commercial banking and investment banking. The effort to bring it back, which will earn McCain and Cantwell the ire of both Wall Street and the Obama administration, has little chance of success, but is aimed at sending a message that not enough's being done to change Wall Street. (Spak, 2009, para 1).

Former head of the Federal Reserve, Paul Volker, agrees the nation should reinstate Glass-Steagall and break up the largest banks by forcing a separation between their banking and investment arms. "The banks are there to serve the public," Mr. Volcker said, "and that is what they should concentrate on. These other activities create conflicts of interest. They create risks…" (Uchitell, 2009. para 12).

However, Martin Bailey, former Chairman of the Council of Economic Advisors under the Clinton Administration, currently with the Brookings Institute, argues that breaking up our largest banks is a bad idea. He claims large financial institutions are needed to meet the needs of a global economy. He states that the US financial sector exported \$58 billion in services last year and we can't allow large European banks to encroach on that market. Breaking up our largest banks, he argues, would make them less competitive (NPR Planet Money interview, November 11, 2009).

Douglas Elliott, Bailey's colleague at the Brookings, agrees. He claims that breaking up the big banks "would hurt the economy, which ends up hitting the average person" (Elliott as cited by White, 2009, para 3). He argues that large U.S. Corporations like Microsoft and IBM need large banks that can work with anywhere in the world. He suggests that breaking up our largest banks would send that business to large European or Asian banks instead of keeping it at home. In addition, Secretary of the Treasury Timothy Geithner, states that bank size is not always the problem: "...the collapse of Bear Stearns and Lehman Brothers had a major impact on the market even though these companies wouldn't have been considered too big to fail" (Geithner as cited by White 2009, para 5). Geithner, Elliott, and Bailey also argue that limiting the size of banks could also limit the size of growth which could create more unemployment.

David John of the Heritage Foundation says if the government is going to break up anything, it should be the monopoly power of Freddie Mac and Fannie May who are too undercapitalized to survive without large taxpayer supports.

Congress should look at breaking up both. A larger number of smaller entities could compete with each other without artificially dominating the market. In other words, let's bring real capitalism to the housing-securitization markets (John, 2008, para 12).

Another school of thought contends that failed banks which received large amounts of taxpayer money should have been nationalized, including Nobel Prize-winning economist, Paul Krugman,

If taxpayers are footing the bill for rescuing the banks, why shouldn't they get ownership, at least until private buyers can be found?' His remarks echo those of Nassim Nicholas Taleb and Nouriel Roubini, who said last week that nationalizations will be necessary to bring the U.S. banking system out of insolvency" (Krugman as cited by Swint, 2009, para, 2).

Joseph Stiglitz, another Nobel-winning economist agrees:

American citizens have become majority owners in a very large number of the major banks. But they have no control. Any system where there is a separation of ownership and control is a recipe for disaster (Knigge, 2009).

Stiglitz suggests that the government temporarily nationalize failing banks, restore them to solvency and then sell them back to the private sector (Stiglitz as cited by Pal, 2009). Simon Johnson, former chief economist at the International Monetary Fund and current professor of global economics and management at MIT's Sloan School of Management, explains the rationale behind nationalization,

"The word "nationalization" has become a red herring. This is about intervention and cleanup. We need to realistically determine which banks are in trouble, then have the FDIC take them over. The idea isn't to have the government run our banks forever. The FDIC would dispose of the banks' bad assets, infuse new capital into them, and try to sell them off to private investors. This is what many foreign countries have done successfully." (Johnson, 2009b, para 1).

Johnson also describes a more ominous concern. He maintains that the United States is increasingly under the control of a small group of banking oligarchs that potentially trump the President, the Congress and the American government by the shear power of their ability to control our nation's economy. "...they are the people who could pull the strings. Who have the influence. Who call the shots" (Johnson, as interviewed by Moyers, 2009).

According to Johnson and members of the IMF, the government must break the power of the banking elites if we are to restore functional balance to our economy and our democracy (Johnson as cited in Moyers, 2009). He gave a frighteningly blunt assessment of the state of the relationship between our nation's government and financial institutions in an *Atlantic Monthly* article entitled, "The Quiet Coup" (May, 2009).

The crash has laid bare many unpleasant truths about the United States. One of the most alarming is that the finance industry has effectively captured our government—a state of affairs that more typically describes emerging markets, and is at the center of many emerging-market crises. If the IMF's staff could speak freely about the U.S., it would tell us what it tells all countries in this situation: recovery will fail unless we break the financial oligarchy that is blocking essential reform. And if we are to prevent a true depression, we're running out of time (Johnson, May, 2009a).

Even a rising tide of conservative voices during the banking crisis of late 2008 called for temporary nationalization of failing banks including Senator Lindsey Graham (R-SC), former, former Federal Reserve Chairman, Alan Greenspan, and former Secretary of the Treasury and Secretary of Defense, James Baker,

Evidence – a mountain of toxic assets, housing market declines, a sharp economic recession, rising unemployment and increasing taxpayer exposure through guarantees, loans, and infusion of capital – strongly suggests that some American banks face a solvency problem and not merely a liquidity one.... I abhor the idea of government ownership – either partial or full – even if only temporary. Unfortunately, we may have no choice. (Baker, J., 2009).

The issue of bank nationalization evokes a lot of nose-holding along with some

resignation as even Libertarians at the American Enterprise Institute agree. According to Vincent Reinhart,

Despite our squeamishness about the term, nationalization will most likely have to be done. Until the financial institutions at the center of the global trading system revive, the greater economy will be held hostage because lending will be crimped and financial market activity will be impaired. (Reinhart, March 12, 2009).

Elliott from the more liberal Brookings Institute concurs, "Full nationalization may prove necessary as a last resort for one or two of the larger banks, but should only be undertaken when and if, it is clearly necessary" (Elliott, 2009, p. 7).

Though Elliot (2009) reluctantly supports nationalization as a solution of last resort, he is quick to point out the many problems associated with this process, including:

- The government is almost universally considered to be worse at running banks than is the private sector
- The large banks being considered for nationalization are huge and extremely complex.
- Multiple nationalizations at once would strain government capacity.
- The government would likely own these banks for years.
- Large potential losses for the taxpayer.
- Scaring shareholders and creditors of other weak banks. (Elliot, 2009, pp. 16-12).

However, Stuart Butler from the Heritage Foundation argues that nationalization is not the answer to the "Too Big to Fail" problem of our largest banks:

"...it would give the government sweeping powers to take over the central nervous system of the economy. And its open-ended funding mechanism would virtually guarantee more bailouts....Instead, we should give bankruptcy courts stronger powers to move swiftly to appoint receivers to take over large failing banks, fire managers as needed, and rapidly sell off or close down parts of the firm. They can, and should, do this without using public money" (Butler, 2009, para 10).

Butler's colleague, David John, agrees that federal bankruptcy laws and capital standards can be improved to adequately address the problem of financial institutions that are "Too Big to Fail."

What's needed now to address the "too big to fail" part of the problem, says Mr. John, is two things. The first is to enact a new chapter of the bankruptcy statute (in addition to well-known parts like Chapter 11) specifically for large financial institutions....Properly designed, this would enable insolvent banks and insurers to be restructured or closed down in an orderly way to avoid a domino collapse. (Butler, 2009, para 12).

Rather than nationalize, John argues:

The better choice would be to amend U.S. bankruptcy law to create an open, expedited bankruptcy process in which an impartial court would oversee the restructuring or closure of large and complex financial firms. (John 2009, para 7).

Butler agrees:

Bankruptcy courts are a far better option than government agencies {i.e. nationalization} to take tough action. One major reason is that they are free of the political pressure that led to the dawdling and politically motivated deals and handouts seen in such cases as the auto-industry restructuring. (Butler, 2009, para 12)

Beyond nationalizing failed banks, breaking them up, or allowing them to fail, is the issue of how to prevent a future collapse of the financial sector. Canova (2009) argues that government regulation of the financial sector is critical to our democracy:

The generation that came of age during the Great Depression and World War II, the so-called Greatest Generation, achieved its most important public policy objectives—converting the economy first to enormous wartime production and then to peacetime rebuilding—in large part because of a financial regulatory regime that kept competition within prescribed limits while allocating credit and capital away from private, speculative activity and into longer-term public investment in physical and social infrastructure... Largely uncontrolled and uncoordinated, the current regulatory approach does not serve the interests of the public, but rather the far narrower interests of the regulated institutions that have captured the agencies of government and the policy-making process. (Canova, 2009, pp. 369-370).

Award winning economist, Joseph Stiglitz, agrees and argues that the current economic crisis was an outcome of the ideology that markets are self-correcting and work best absent government regulation (Stiglitz as cited in Harpers, 2008, p. 36). He is quick to point out that "the people making this argument are the ones who have been served well by it" (Harpers, Nov. 2008, p. 36), and that we must do more to protect against self-interest.

Stiglitz states we should change the system of incentives that award big players who gamble and lose through a bonus system based on short term profits and large pay packages regardless of outcomes. Incentives must be tied to performance outcomes that reward all players, not just the financial elites. In the subprime mortgage debacle, where loan originators made risky loans and paid large fees, only to bundle and sell those loan to unsavy investors, Stiglitz suggests a new regulation requiring loan originators to put up to 20 percent of their own money at risk with each loan as a way to curb abusive practices (Stiglitz as cited in Harpers, 2008, p. 37).

Economist Simon Johnson and Martin Bailey concur that regulations requiring higher capital standards would reduce risk. In addition, Johnson thinks financial institutions should be highly taxed if they go about a certain size and risk threshold. "If you put a steep enough tax in based on size, it will be a great incentive for big banks to break themselves up." (Johnson as interviewed by NPR Money Planet, November 2009).

Canova agrees,

For Keynes and Lerner, central points of extending capital, margin, and reserve requirements were to tame investors' incentives to gamble while channeling credit and capital back into the public sector to be invested to meet the long-term needs of society. It was through great public sector projects that the foundations of a sustainable economy were to be achieved: full employment, more equitable distributions of wealth and income, and the

maintenance of a truly free-enterprise competitive economic system." (Canova, 2009, p. 396).

Barry Lynn, Fellow at the New America Foundation, posits that regulations eliminating stock options for top executives is what is required to move corporations from a wealth extraction to an investment model.

"The explosion of options and linking of earnings to short-term stock price fluctuations completed the transformation of the CEO from tribune of the industrial arts to Shareholder #1" (Harpers, 2008, p. 38).

In addition, Harvard Law School Professor Elizabeth Warren suggests a Financial Product Safety Commission to help consumers' decipher the growing array of unregulated financial products on the market and protect them from unscrupulous lenders. The purpose would be to require financial institutions to clearly reveal the terms, fee and amount of any transaction so that consumers could make wise decisions for themselves. The current system, Warren states, allows creditors to issue unintelligible contracts with hidden fees and interest rates that are unsustainable for many borrowers. (Warren as cited in Harpers, 2008, p. 39). Such a commission, she argues, could test financial products for risk, advertising the results, so that consumer could know which products to avoid.

"For families tangled up with truly dangerous financial products, the result can be wiped-out savings, lost homes, costlier car insurance, job rejections, troubled marriages, bleak retirements, and broken lives. Regulation can make the market for financial products more efficient and more dynamic while preventing substantial suffering for millions of Americans." (Warren, 2008, p. 453).

But David John of the Heritage Foundation disagrees. He states that creating a new financial products oversight agency would hurt consumers by raising the cost and number of loan options available to them. A far better approach, he claims, would be to

coordinate consumer activity laws using a common set of consumer standards (John, 2009).

Regardless of one's position, however, there appears to be a general consensus from the countries best economists (outside those employed by the White House) that the government's response to the financial crisis was mistaken. According to Rodriguez,

The worst course of action is the one we've taken up until now, gradually escalating capital injections and loan guarantees, preventing the banks from collapsing outright, but doing little to reinvigorate them. The Japanese spent the 1990s enacting similar half-measures, which spared them short-term political pain but cost them a decade of growth. And, in the end, they had to bite the bullet and administer the shock therapy anyway. (Rodriguez, E. 2009).

In addition, fixing the financial sector alone may not save the current economic system. According to Laguzza-Boosman (2009), other recalibrations of our economy must occur in order to stabilize our current system including: reform of the nation's wage and compensation structures, the tax system, the regulatory system, in addition to financial sector reforms (Laguzza-Boosman, 2009). These areas must be recalibrated in order to force the wealth of our nation that has consolidated at the very top of our economy, down into circulation though out the entire system in a manner to create more widespread prosperity (ibid). Additional research should also be done to investigate the role of corporate donations in political campaigns and how those impact policies that may be having a negative impact on our overall economy.

Ecological Economics

The problem with trying to "fix" the current economic system is that it is basically unsustainable (Coates & Leahy, 2006; Costanza, Farley, & Erickson (2008); Faber & Bradley, 1996; Hopkins, 2008; and Korten, 2009). Free-market capitalism is an economic model based on growth; an ever expanding need to produce and consume

which defies the limits of a finite planet (Farley as cited in Costanza, et al, 2008). Coates and Leahy refer to this system as an 'extractive economy' that "depletes non-renewable resources, exploits renewable resources beyond their capacity to survive, and causes irreparable damage to land, sea and air" (Coates and Leahy, 2006, p. 2).

Yet replacing our current economic paradigm under current conditions is unlikely, despite its obvious problems. A more practical option may be the build on the current model by adding elements that could recalibrate the system to include human and ecological well-being. An economic model that could achieve this is Ecological Economics (EE).

EE is an inter-disciplinary field that seeks to create a balance between economic, environmental, and human social systems. Anastasios Xepapadeas (2008) describes EE as a unified picture of ecology and economy that recognizes the interactions, feedback mechanisms, and links between human economic activity and the ecosystem. Faber and Bradley (1996) state that EE is a policy oriented perspective that explains the interdependence and interplay of needs that must be balanced between human economies, social interaction, physical and biological impacts within the limits of a viable ecosphere.

In their 1997 book, "An Introduction to Ecological Economics," authors, Robert Costanza, John Cumberland, Herman Daly, Robert Goodland, and Richard Norgaard define Ecological Economics as a system that can generate:

(1) sustainability, or the maintenance of human well-being and the services rendered by natural systems over intergenerational time scales; (2) economic efficiency, or the satisfaction of human preferences as operationalized through cost-benefit analysis; and (3) distributional equity, or the just sharing of burdens and benefits between social groups. (Howarth, 1998, para.1).

In an online video tutorial entitled, "Introduction to Ecological Economics" produced by the University of Vermont's GUND School of Ecological Economics, UV Professor Jon Erickson, explains how EE is an economic paradigm for the 21st century that recognizes basic scarcities in nature and the interdependence of our social, ecological and economic systems – something, he states, that mainstream economics fails to do. EE, he says, asks the same question that mainstream economics asks which is: How do we allocate our scare resources towards alternative, desirable ends? But that it "takes seriously what those scare resources are, and is starting a new conversation about what should be those desirable ends?" (Erickson as cited in Costanza, Farley, & Erickson (2008), FAQ 1).

The study of EE is important, Costanza explains, because human economic activity is now impacting our ecological systems in a way that could impede the ability of our species to survive (2008). He stresses the importance of integrating the study of economics with the study of ecology and sociology in order to create a sustainable system that will secure human and ecological survival. EE, he states, attempts to take a whole systems approach to the interplay of human, economic and ecological activities with the goal of creating working systems that will allow humans the ability to maintain their presence in the biosphere.

According to Costanza, et al (1997) sustainability, efficiency, and equity are the main characteristics of Ecological Economics. "Sustainability...involves limiting the scale of economic activity so that the throughput of matter and energy does not overburden the resource supply and waste assimilative functions of ecological systems" (Costanza, et. al, 1997, as cited by Howarth, 1998, para. 4). In order for the economy to be sustainable, net economic output cannot exceed the monetary value of resource depletion and economic degradation.

The most distinguishing feature of EE is that it places the economy as a subset of the ecosystem (Costanza, Farley, & Erickson, 2008; Farber & Bradley, n.d.). Free market capitalism, on the other hand places the environment as a subsystem to the economy whose main purpose is to provide resource extraction and waste deposit for economic development. The purpose of free market capitalism is to create profit. The purpose of Ecological Economics is to produce social and environmental well-being. (ibid).

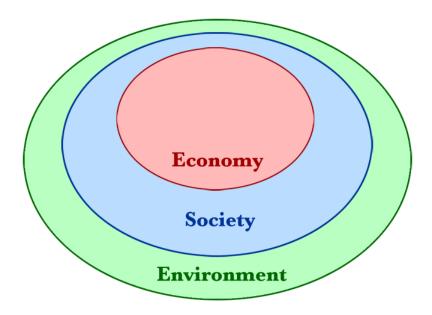


Image retrieved from http://en.wikipedia.org/wiki/Ecological_economics

According to Farber and Bradley (1996),

What makes humans and their economies unique as a sub-ecosystem is their ability, through willful effort, ignorance and human designed tools, to dramatically restructure and reform processes in ecosystems of which they are a part; and to such a magnitude that human welfare can be diminished or enhanced by those original actions. (Farley & Bradley, 1996, para 3).

Ecological Economics attempts to address this problem through 5 means:

1. Modeling and Science--Understand the interdependence between economic and natural systems, particularly between the structures, processes, and fluxes of material and energy upon which each system depends. This includes

understanding the tolerances of ecosystems to human induced changes as well as the tolerances of economies to ecosystem changes.

- 2. Conditions for Sustainability--Establish conditions on human economies that would allow for the sustainability and growth of human welfare, conditioned upon the sustainability of the economy's supporting ecosystem.
- 3. Indicators and Signals--Establish indicators reflecting the current status of economies and ecosystems relative to the norm of sustainability, and include measures of ecosystem and economic health. Also, establish signals reflecting potential impacts of human activity on welfare insofar as those impacts result from alterations in ecosystem structures and processes.
- 4. Instruments, Laws and Institutions--Develop necessary regulatory instruments, laws and associated institutions that assist human economies in attaining sustainable welfare development goals.
- 5. Moral Systems--Examine the implications of various moral systems for the sustainability of human welfare, and place in bold relief those instances where there are apparent incompatibilities between moral systems and sustainability norms. (Farber & Bradley, 1996, para 13).

One way EE attempts to create a balance between ecological, social, and environmental needs are to quantify the economic value of nature's services to the economy and humanity by adding natural capital as a capital asset, and quantifying its value in dollars. This is important, according to Faber and Bradley, "as some concept of value must be established since human {economic} decisions are going to be based on values gained versus values lost (1996, para 24).

For example, a paper published by Costanza and a team at the University of Maryland:

estimated the current economic value of 17 ecosystem services for 16 biomes, based on published studies and a few original calculations. For the entire biosphere, the value (most of which is outside the market) is estimated to be in the range of US\$16–54 trillion (1012) per year, with an average of US\$33trillion per year. Because of the nature of the uncertainties, this must be considered a minimum estimate. Global gross national product total is around US\$18 trillion per year. (Costanza, Arge, de Groot,, Farberk, Grasso, Hannon, Limburg, Naeem, O'Neill, Paruelo, Raskin, Suttonkk, & van den Belt, 1997, p. 253).

According to Barkin (2009), the four basic principles of an EE strategy of development as an economic model are: autonomy, self-sufficiency, productive diversification, and sustainable resource management (Barkin, 2009, p. 378). Ecological Economics as a theory is useful for policy-makers, Erickson explains, in its use of science to encourage economic development rather than simple economic growth. The focus in EE is on the quality of economic development rather than quantity of wealth in issues of resource allocation. He uses an example of a water development project in Tanzania that is not only looking at allocating the water resource to agriculture for economic development, but is also considering the human needs for that scare resource by quantifying the potential limitations of disease outbreaks, and the services of a healthy ecosystem through more equitable allocation of those scarce water resources (Erickson as cited in Costanza, Farley, & Erickson, 2008, FAQ 7).

Ecological Economics, according to Costanza (2008), encourages policies that support a sustainable quality of life rather than gross economic production. He refutes the claim of mainstream economists that increased wealth creates increased well-being for all, and states that our allocation of scares resources can no longer support this false assumption.

The process in which EE quantifies the value of nature in dollar terms is controversial. Farber and Bradley (1996) point out that,

...these valuation procedures may not be appropriate to valuing such services in a sustainability context. In a sustainability context, ecosystem structure and functions would be evaluated on the basis of the extent to which they contribute to the goal of economic and ecosystem health and sustainability, rather than on the basis of their immediate contribution to current economic welfare. (1996, para 26).

While Douglas McCauley (2006) in his article "Selling Out on Nature" strongly opposed the so-called commoditization of nature:

To make ecosystem services the foundation of our conservation strategies is to imply — intentionally or otherwise — that nature is only worth conserving when it is, or can be made, profitable. (McCauley, 2006, p. 28).

McCauley insists that "We will make more progress {protecting nature} in the long run, by appealing to people' hearts rather than their wallets" (2006, p. 28), and that, "we must directly confront the reality that conservation may be expensive and stop deceiving ourselves and partners in conservation with hopes that win-win solutions can always be found" (ibid). He claims that nature has an intrinsic value that makes it priceless, and this should be reason enough to protect it (McCauley, 2006, p. 28).

Other criticisms of EE are that its all encompassing, interdisciplinary nature, though well-founded, appears to lack a solid overarching framework that can readily be applied to real world problems. As Howarth points out:

It is one thing to question the specific normative and factual assumptions that drive neoclassical economics as an approach to policy analysis and management. It is a somewhat different task to construct an alternative that is intellectually grounded, practically operational, and tailored for professionalization. (Howarth, 1998, para 3).

Faber and Bradley concur that EE is a "somewhat operationally vague notion of jointly sustainable human and natural ecosystems (1996, p. 1) and is "ungrounded as a discipline" (ibid).

Rotering (2009) criticizes EE for what he claims is its failure to maintain human well-being as an explicit end to economic activity. "Though it professes this as a goal, it has developed none of the concepts required to achieve it" (Rotering, 2009, part 1). He also criticizes EE in the way it mimics market mechanisms and embraces capitalistic concepts by adding "natural capital" as an asset in this market (the value of all goods and services provided by the biosphere). He claims that by simply grafting ecology onto market

capitalism, EE as a theory, makes it even more difficult to overcome the limitations of the free market system that has currently run its course (Rotering, 2009, Part II). Rotering also claims that EE relies on subjective value "measured by the strength of consumer desires and their willingness to pay" (Rotering, 2009, Part II). But he stresses that human well-being and the survival of the planet should not be left to peoples' willingness to pay, and that human subjective wants could easily surpass the planet's ability to pay for them. "Values should reflect objective needs rather than objective wants" (Rotering, 2009, Part II). Rotering's main criticism is that EE is not a viable economic model as it does not provide answers sufficient to save our species from ecological collapse (ibid). *Building local economies*

In looking for an alternative to free-market capitalism it is important to understand that both capitalization and globalization have been largely fueled by the availability of cheap fossil fuel. However, due to the eminent passing of peak oil production (referred to as "peak oil"), the fossil fuel we have become dependent upon is running out (Curtis, 2007; Hopkins, 2008; Hopkins & Lipman, 2008; Korten, 2009; McKibben, 2007; McKibben as cited in Harpers, 2008). What this means, Hopkins warns, is that, "The end of the Age of Cheap Oil is rapidly coming upon us, and life will radically change, whether we want it to or not" (Hopkins, 2008, p.8).

Drew University Economist, Fred Curtis, agrees. In his article, *Climate Change, Peak Oil, and Globalization: Contradictions of Natural Capital* (2007), Curtis explains the looming economic impacts of peak oil:

...economic globalization may be undermined by predicted impacts of global warming and peak oil (depletion). They are projected to cause significant damage to transportation infrastructure and increase transportation costs. They may also increase business risk, food prices, and general prices. As a result, the long

distance exploitation of cheap labor may lose much of its economic profitability in coming decades, and supply chains may contract to regional and local lengths. (Curtis, 2007, p. 385).

A 2007 report published by Germany's Energy Watch Group agrees:

The world is at the beginning of a structural change of its economic system. This change will be triggered by declining fossil fuel supplies and will influence almost all aspects of our daily life (Germany Energy Watch Group, 2007, as cited in Hopkins, 2008, p. 20).

As a result, Hopkins explains

The very notion of economic globalization was only made possible by cheap liquid fossil fuels, and there is no adequate substitute for those on the scale we use them. The move towards more localized energy-efficient and productive living arrangements is not a choice; it is an inevitable direction for humanity (2008).

Bill McKibben, in his book, "Deep Economy" (2007) agrees that economies of the future will, by necessity, be local economies where much of what we buy, eat, and use is made close to home as the transportation of consumer goods becomes more and more expensive with the rising costs of fossil fuel. "The cold economics of the world now dawning is that a relocalization must happen, one way or another: fossil fuels are becoming too expensive for it *not* to happen" (McKibben as cited in Harpers, 2008, p. 46). While David Fleming adds: "Localization stands, at best, at the limits of practical possibility, but it has the decisive argument in its favour that there will be no alternative" (Fleming as cited in Hopkins, 2008, p. 46).

"Localization" is defined as:

"The process by which a region, county, city or even neighbourhood frees itself from an overdependence on the global economy and invests its own resources to produce a significant portion of the goods, services, food and energy it consumes from its local endowment of financial, natural and human capital. (Hopkins, 2008, p. 46).

Moving from a global to a local economy will be easier said than done, but there are several models that can provide support and instruction along the way including: The Natural Step at http://www.naturalstep.org; Sustainable Communities at http://sustainable.org/index.html; The E.F Schumacher Society at http://www.smallisbeautiful.org/about.html; and New Economics Institute and Resources at http://www.neweconomicsinstitute.org/resources.htm.

However, one of the most promising models on delocalization is the *Transition Initiative* started by Permaculture educator, Rob Hopkins, at Kinsale Further Education

College in Ireland. According the *Transitions United States* web site:

The Transition movement emerged from the work of Permaculture educator, Rob Hopkins, and his students at the Kinsale Further Education College in Ireland. In early 2005 they created the Kinsale Energy Descent Action Plan, which was later adopted as policy by the Town Council. It was the first strategic community planning document of its kind, and went beyond the issues of energy supply, to look at across-the-board creative adaptations in the realms of food, farming, education, economy, health, and much more. (Transition US, n.d. para 1).

The purpose of the Transition movement according to *Transition US* Founder and President, Jennifer Gray, is to "provide a process for relocalizing the essential elements that a community needs to sustain itself and thrive" (Gray, 2008., p. 5). *Transition US* does this by helping communities build self sufficiency and resiliency in the face of peak oil, climate change and the economic crisis. In addition, the *Transition Movement* provides support to enable communities to create their own "Energy Decent Plans" on how they will transition away from dependency on fossil fuels and create a more sustainable local economy and system (Hopkins & Lipman, 2008).

According to Transition organizer and author, Carolyn Baker, since it's founding in 2005, the Transition model has spread to over 1,500 communities in 15 countries on

four continents including Europe, North America, Australia and beyond. (Baker, 2009, para 2). The primary guide for the Transition Movement is the *Transition Handbook* written by founder, Rob Hopkins (2008), which provides both the rationale and academic underpinnings for the *Transition Movement*, as well as a guide to help individual communities transition and adapt to become more self-sufficient and self-reliant in the face of diminishing oil supplies, climate change, and the economic crisis. According to Hopkins:

Central to this book is the concept of resilience - familiar to ecologists, but less so to the rest of us. Resilience refers to the ability of a system, from individual people to whole economies, to hold together and maintain their ability to function in the face of change and shocks from the outside. The Transition Handbook, argues that in our current (and long overdue) efforts to drastically cut carbon emissions, we must also give equal importance to the building, or more accurately to the rebuilding, of resilience. (Hopkins, 2008, p. 6).

Hopkins points out that becoming more self-sufficient, conserving more, using less and working in closer relationship with members of a community to meet local needs can actually create healthier communities and people:

Rebuilding local agriculture and food production, localizing energy production, wasting no people, rethinking healthcare, rediscovering local building materials in the context of zero energy building, rethinking how we manage waste, all build resilience and offer the potential of an extraordinary renaissance - economic, cultural and spiritual. (Hopkins, 2008, p. 9).

Hopkins describes his model as "a positive, solutions-focused way of gathering those around you together to start exploring community-scale responses to peak oil and climate change" (Hopkins, *Handbook*, 2008, p. 87). He states that the *Transition* model is based on four key assumptions:

- 1. That life with dramatically lower energy consumption is inevitable, and that it's better to plan for it than to be taken by surprise.
- 2. That our settlements and communities presently lack the resilience to enable them to weather the severe energy shocks that will accompany peak oil.

- 3. That we have to act collectively, and we have to act now.
- 4. That by unleashing the collective genius of those around us to creatively and proactively design our energy descent, we can build ways of living that are more connected, more enriching and that recognize the biological limits of our planet. (Hopkins, 2008, p. 87).

Hopkins and Transition co-founder, Peter Lipman (2008.), describe 7 principles of the Transition Initiative:

- 1. Positive Visioning
- 2. Help People Access Good Information
- 3. Trust Them to Make Good Decisions
- 4. Inclusion and Openness
- 5. Build Resilience
- 6. Inner and Outer Transition
- 7. Subsidiarity: self-organization and decision making at the appropriate level (Hopkins & Lipman, 2008, p. 5-6).

The main Transition web sites (http://www.transitiontowns.org and http://transitionus.org) provide tools and support to enable communities to become *Transition Towns* by launching their own Transition Initiatives. These tools can help construct, in a sense, parallel communities that includes the building blocks for individual initiatives such as local energy and power generation, food networks, local currency, barter systems, post carbon transportation systems, sustainable homes, and community re-skilling that can be scaled up as need be, or grown as a community desires. In the best case scenario, such a group could improve the quality of local life. In the worst case scenario, it could help them survive a future that's less than certain. According to the Transition US web site, *Transition* projects occurring across the US are as diverse as development of a local currency in Whidbey Island, WA, supporting sustainable, self-reliant homes in Berea, KY, and skill-sharing workshops in New Haven, CT. (see http://www.transitionus.org/stories).

Hopkins explains that the success of the Transition movement is its vision of a positive and abundant future in a "powered down" era; "one which is energy-lean, timerich, less stressful, healthier and happier" (Hopkins, 2008, p. 67). According to Gray, "As a species, we'll be transitioning to a lower energy future whether we want to or not. It is far better to ride that wave than to be engulfed by it" (Gray, Transitions Primer, 2008, p. 23).

She describes the 12 Steps in forming a local Transition Initiative:

- 1. Set up a steering group and design its demise from the outset
- 2. Raise Awareness
- 3. Lay the foundations
- 4. Organize a Great Unleashing
- 5. Form working groups: Ideally, working groups are needed for all aspects of life that your community needs to sustain itself and thrive. Examples of these are: food, waste, energy, education, youth, local economics, transport, water, local government.
- 6. Use Open Space Philosophies and Technology to run meetings
- 7. Develop visible practical manifestations of the project
- 8. Facilitate the Great Reskilling: Research among the older members of our communities is instructive after all, they lived before the throwaway society took hold and they understand what a lower energy society might look like. Some examples of courses: recycling grey water, cooking, bicycle maintenance, natural building, herbal medicines, basic home energy efficiency, practical food growing, harvesting rainwater, composting waste.
- 9. Build a Bridge to Local Government
- 10. Honor the elders
- 11. Let it go where it wants to go... Your role is not to come up with all the answers, but to act as a catalyst for the community to design their own transition.
- 12. Create an Energy Descent Plan: Since its formation, each Working Group has been focusing on practical actions to increase community resilience and reduce the carbon footprint. Combined, these actions form the Energy Descent Action. (Gray, Transitions Primer, 2008, p. 13-16).

In the United States, *Transition US* (TUS) currently has 58 communities (and counting) implementing *Transition Initiatives* in 30 states using the above set of tools and principles. In addition, TUS offers suggestions on various transition projects communities can undertake in *The Action Handbook: Ideas for Transition Projects*. Ideas include:

Revitalize your local food systems (p. 2)

Start a Food Co-operative •

Develop a Garden Gleaning Project •

Re-think transportation (p. 3)

Start or Join a Car-Sharing Co-operative •

Start a Walking School Bus •

Revitalize local culture (p. 4)

Produce a Documentary Film Meta-Project •

Develop Community Walking Tour •

Get to know your community (p. 5-6)

Nature and Resources •

Society and Business •

Municipal and Regional Political Structure •

Local Skills Database •

Local Needs Assessment •

Personal Energy Audit •

Goals for Reduction •

Engage your community & local government (p. 7-8)

Local Community Directory •

Form a Community Coalition •

Run for Municipal Office •

Reclaim Public Space •

Barn Raising Project •

Get involved in meetings and media (p. 9)

Hold a Film Screening or Film Festival •

Coordinate Letters to the Editor •

Raise Awareness with Press Releases •

(Retrieved from

 $\frac{http://www.transitionus.org/sites/default/files/HowTo_ActionHandbook_v1\%200.}{pdf\ .}$

Supporters of the Transitions Movement are enthusiastic about its appeal. Jay

Griffiths, in Orion Magazine, said,

If the Transition Initiative were a person, you'd say he or she was charismatic, wise, practical, positive, resourceful, and very, very popular. Starting with the town of Totnes in Devon, England, in September 2006, the movement has spread like wildfire across the U.K...and on to the U.S., Canada, Australia, New Zealand, and Japan. (Griffiths, 2009. para 3).

Lisa Chase in *Elle Magazine* (April, 16, 2009) says, "What attracted me to Transition, as the movement is called, was the word *resilience*, with its implications of being skilled,

being ready, being confident, and therefore being optimistic about The Day After Tomorrow" (para 4).

The reality, however, may be a little less impactful. In an article in the *New York Times Magazine*, *Green Issue* (April 16, 2009) entitled "The End is Near (Yea!)" Jon Mooallem highlighted a *Transition Initiative* in Sandpoint Idaho which describe their goals as:

...putting things like local power generation or local food networks in place to survive the slow crumbling of our current ones. But for the most part, the projects evolving in Sandpoint seemed designed to make the town's current infrastructure a little greener and more livable. (Mooallem, 2009).

Critics claim that the *Transition Movement* focuses on making small, local changes, instead of changing the larger, (and, they maintain, more critical) systems within which we all operate. Alex Steffen, in a highly critical article of the *Transition* movement states:

Transition thinking seems obsessively focused on coordinating individual actions (like helping people barter their free time or connecting people who want to garden); even at its most ambitious, it generally focuses on building alternative systems (say, starting a local currency scheme) rather than reforming the larger systems that shape life all around us (say, starting an actual credit union or rewriting banking regulations (Steffen, 2009, Para 7).

Sophie Andrews fears the *Transitions Movement* is too touchy feely to succeed in the real world:

The Transition initiative has brightened up Bristol's greenies, but I wonder how a very very non-violent revolution will be able to secure the land which is vital for successful post-petroleum societies, and for sane and equitable human communities. (Andrews, 2008, p. 60).

She also criticizes the *Transition Movement* for being made up primarily of "white, middle class hippies" and asks "why aren't there any black people in this movement?" (Andrews, 2008, p. 60).

Paul Chatterton and Alice Cutler (2008) believe the Transition Movement

over-estimates the willingness of the powers-that-be to change in the face of peak oil and climate change. They quote *Transition* founder, Rob Hopkins when he said:

These are, in the huge majority, not wicked people, rather they are as lost and enmeshed in the way the world works at the moment as the rest of us are, they have families they return to at night. We are all in this together. (Hopkins, May 15, 2008, para 12).

However, Chatterton and Cutler disagree,

While Rob doesn't like using labels like 'us' or 'them', this unfortunately doesn't diminish the huge oppressive differences between those with power and resources and those with less that continue to shape our world. We are seeing more and more bloody resource conflicts throughout the world from struggles over indigenous land across Africa and the Americas to the right to control energy resources in Nigeria and Bolivia and Ireland. We are also seeing 'developing world' style structural adjustment right here in the UK as money is shifted from the public sector and welfare state to the banking sector in huge amounts, while we are forced to accept cuts in public sector wages, pensions and services. What we are seeing is the socialization of risk, and the privatization of profit, as the saying goes. (Chatterton & Cutler, 2008, para, 9).

Chatterton and Cutler claim the *Transition Movement* should act in solidarity with the struggle against oppression occurring in developing worlds rather than non-confrontationally attempting to love and peace people into change. They claim that the *Transition Movement* should not only focus on building relationships of shared understanding and meaning, but it also has to "recognize and respond to conflict and repression" (Chatterton & Cutler, 2009).

We support any transition away from the hugely ecologically unsustainable and socially unjust structures and ways of life that dominate in our towns and cities. But we also believe that we should be prepared to fully engage with and challenge the causes of these problems. (Chatterton & Cutler, 2008, p. 3).

Outside the peaceful approach to the Transitions Movement, Alex Steffen points out what he refers to as "the dark side of the Transition Movement." in his article,

"Transition Towns or Bright Green Cities" he writes,

Jennifer Gray, the founder of Transition U.S. (the American wing of the movement) told a New York Times reporter that she expects "a big population die-off." Board member Richard Heinberg says that central governments will "have to self-destruct in favor of local autonomy" and that "overpopulation will eventually be solved by starvation and disease." (Steffen, 2009, para 10).

Steffen accuses the Transition Movement of being eager for the coming environmental collapse and states their "eagerness for the death of others is appalling" (Steffen, 2009, para 10). He also states that the Transition Movement's implication that they can somehow create a soft landing in such a situation "is delusional" and that, "Anyone who thinks an energy descent plan prepared by a community group future-proofs them against people like Charles Taylor has simply taken a vacation from reality" (Steffen, 2009, para 10).

Hopkins, on the other hand, is quick to respond that the Transition movement is about preparing for an energy descent, rather than collapse, which is based on the observation that the world is passing the peak in fossil fuels, and that we need to be designing for the declining availability of both oil itself and of net energy. He further explains that the "desire of Transition is to be able to create a safe, intentional way through energy descent, avoiding collapse, shifting the focus to local economies and increased resilience," (Hopkins, November 3, 2009). Pining for collapse is not what Hopkins says the Transition movement is about. Steffen, on the other hand, insists that citizens should fight to reclaim controls over our larger systems:

The first step in those efforts is to stop seeing the systems we depend on as out of our control. They aren't, and that we're so convinced they are is a testament to the dedication of the powers that be to shoo us away from interfering in their profits. (Steffen, 2009).

As opposed to giving up on the system, Steffen advocates becoming the system:

It's time to make ourselves into the people who can do what's needed. To fight the powers that be, we need to see ourselves as the powers that *will* be, building the future we want. (Steffen, 2009).

However Carolyn Baker (2009), refutes Steffen's criticisms and claims that the Transition Movement focuses on building alternative systems rather than trying to reform larger systems, which she says, fail to offer any hope for change given that they are bought and paid for by corporations and their legislative minions (para 5). She claims that the current system is not even capable of reform given how it appears to have been "captured" by those who would resist any attempt at doing so.

A "New Economy" Paradigm

In addition to reforming the current economic system, augmenting it to render it more sustainable, or transitioning it from a global to local economies, a completely different model that scraps the current free-market capitalist paradigm all together is starting to take shape. One example is outlined in former Harvard Business School Professor and current *Yes! Magazine* editor, Dr. David Korten's latest book, *Agenda for a New Economy: From Phantom Wealth to Real Wealth* (2009). In it, Korten advocates prioritizing Main Street over Wall Street and human and environmental well-being over profit. He places blame for the economic collapse on Wall Street financial institutions which, he states, produce tremendous wealth for a few while creating nothing of real value for everyone else (Korten, 2009).

Their seeming success created an economic mirage that led us to believe the economy was expanding exponentially, even as our economic, social, and natural capital eroded and most people struggled ever harder to make ends meet" (retrieved from http://www.davidkorten.org/NewEconomyBook).

As a result

We can trace each of the major failures of our economic system to the misperception of money as wealth: the boom-and-bust cycles; the dissemination

of the middle class; families forced to choose between paying the rent, putting food on the table, and caring for their children; the decline of community life; and the wanton destruction of nature (Korten, 2009, p. 1).

Instead of allowing the economy to be controlled by Wall Street for the benefit of financial elites, Korten says we should allow Wall Street to fail and focus on building a new and better economy based on Main Street; one that will "create real wealth from real resources to meet real needs" (Korten, 2009). He states that the current economic model is so broken it is beyond repair and we should not waste time and resources trying to fix it if we hope to escape destruction of both our species and the planet. When corporations and Wall Street falter, he maintains, we should refuse to bail them out and allow them to fail. Such a collapse, Korten maintains, would allow us to build new institutions that support human and environmental well-being and life.

To accomplish this, Korten outlines his "Agenda for a New Economy" that is locally based, community oriented, and devoted to creating a better life for all, instead of increasing profits for some:

Communities are best able to set their own economic priorities and achieve economic security when most of their basic needs are met by local businesses that employ local labor and use local resources to meet the needs of local resident for employment, goods, and services (Korten, 2009, p. 128).

Korten states that his new economic model will require radical changes in how we measure economic success, organize our financial institutions, and even how we create money. He claims that we will be required to change by the forces of ecological, social and economic decline capitalism has unleashed, such as peak oil and climate change.

And, as such, it is imperative that we direct this change in a way that will benefit both human beings and the environment which sustains us.

To achieve this, Korten identifies a 12-point plan for creating a New Economy:

- 1. Redirect the focus of economic policy from growing phantom wealth to growing real wealth.
- 2. Recover Wall Street's unearned profits, and assess fees and fines to make Wall Street theft and gambling unprofitable.
- 3. Implement full-cost market pricing.
- 4. Reclaim the corporate charter.
- 5. Restore national economic sovereignty.
- 6. Rebuild communities with a goal of achieving local self-reliance in meeting basic needs.
- 7. Implement policies that create a strong bias in favor of human-scale businesses owned by local stake-holders.
- 8. Facilitate and fund stakeholder buyouts to democratize ownership.
- 9. Use tax and income policies to favor the equitable distribution of wealth and income.
- 10. Revise intellectual property rules to facilitate the free sharing of information and technology.
- 11. Restructure finanical services to serve Main Street.
- 12. Transfer to the federal government the responsibility for issuing money (Korten, 2009, p. 122).

On a macro level, Korten advocates that the federal government make dramatic changes in how our economy currently functions, including changing the way we measure national progress from the stock market and GDP to more accurate measures of well-being that include social and environmental indicators (Korten, 2009, p. 121). He thinks the government should close down Wall Street and its "gambling casino" of over the counter derivate trading that brought the nation to its economic knees (Korten, 2009, p.124). He supports strict government regulations on capitalization and taxing large trading firms to help keep them from becoming "too big to fail." He thinks corporations should have to include in their pricing, the external costs of doing business, which they currently pass on to the public in the form of cheap labor, pollution and toxic waste; and that they should not be given taxpayer supported subsidies with which they generate huge profits for themselves (Korten, 2009, p. 126). Korten also advocates living-wage laws that he says would reduce the need for high amounts of consumer credit (Korten, 2009, p.

144) and increasing the retirement age in order to reduce the growing burden on young people to pay for the "extended vacations" of their elders (p. 145).

Korten states that government should be the issuer and controller of currency creation and flows, not a private bank like the Federal Reserve, which he says appears more focused on allowing Wall Street to accumulate wealth through its policies, rather than keeping money and wealth fully circulating throughout Main Street (Korten, 2009).

Ironically, the objective of Korten's Agenda is to enable strong local economies similar to those first proposed by Adam Smith, author of "The Wealth of Nations" (1776); the so-called founder of capitalism. According to Korten,

Smith envisioned a world of local market economies populated by small entrepreneurs, artisans, and family farmers with strong community roots engaged in producing and exchanging goods and services to meet the needs of themselves and their neighbors. His vision bears little resemblance to the Wall Street economy of footloose global capital, credit default swaps, reckless speculation, and global corporate empires. (Korten, Dec/Jan 2009, p. 2).

A new relocalized economy, according to Korten, would require the nation to reindustrialize; to make the things we need closer to home, "but on a new model of green technology, functional durability, closed-loop product cycles, and zero emissions production process (Korten, 2009, p. 132). Local production, according to Korten, should be owned by local communities and local banks should loan to local businesses so that everyone has a stake in ensuring positive economic and outcomes. Income policies should ensure that everyone who works a legal full time job should have the means to support a healthful dignified life. Tax policies should ensure a more equitable distribution of income and wealth. "A strong middle-class society free from the extremes of poverty and wealth is the American ideal (Korten, 2009, p. 133).

The response to Korten's book appears to be overwhelmingly supportive, though admittedly left leaning. Van Jones, former special advisor to the White House Council on Environmental Quality and Green Jobs, states: "Korten turns conventional economic thinking upside down and inside out. His book reveals what is really going on in the U.S. and global economies – and what can and should be done about it" (Van Jones as cited in Korten, 2009, "Praise"). John Cavanagh, Director of the Institute for Policy Studies states, "No one should be surprised that David Korten is the first great thinker to assemble a detailed road map for a new economy where people, the planet and communities come first. He replaces fear and anxiety with clarity and hope" (Cavanagh, 2009, as cited in Korten, 2009, "Praise"). Charlie Cray, Director of the Center for Corporate Policy states "By outlining a foundational framework for extricating the economy from the clutches of Wall Street and creating a real-wealth New Economy based on Main Street, Korten provides essential guideposts for those working for change" (Cray, as cited in Korten, 2009, "Praise").

Critics of Korten's agenda point out that if the government would have allowed Wall Street and the banks to collapse instead of bailing them out, as suggested, millions of Americans would have lost their 401(K)s, college funds for their children, their pensions and all other investments in the stock market. "The author provides no estimates of the costs to tens of millions of average people who have been forced to create retirement portfolios in 401k accounts if Wall St is shut down" (Grattan, February 4, 2009, as cited in Amazon, 2009)

. Gratten contends that eliminating Wall Street rather than fixing the mechanisms that caused it to fail would create enormous problems of their own. He suggests stronger

regulations on Wall Street trading, corporations, and free trade agreements that could mitigate the worst aspects of our current system:

Enforceable labor and environmental standards could have been a part of trade agreements. Mileage and emissions standards could have been set and enforced after the first oil crisis in 1975. The FDA could have the power to really protect us against harmful medications and contaminated food. (Gratten as cited in Amazon.com, 2009).

Gratten also claims that it is unrealistic to think Korten's plan could be enacted in our current cultural environment. "The author makes no attempt to assess the existence of the social harmony and wisdom that would be required to drastically revamp our way of life" (Gratten as cited in Amazon.com, 2009). With strict regulations, Gratten explains, Wall St and corporations "can fit in an economy where citizens have the upper hand" (ibid). While agreeing with Korten's premise that our economic institutions, and our government, which is currently controlled by them, has put us on a dangerous and unsustainable path, Gratten contends that Korten's Agenda, "provides no help in describing a path by which we can get from a society dominated by a self-interested, wealthy social layer to one where the average person can expect a life-enhancing future" (Gratten, February 4, 2009, as cited in Amazon.com, 2009).

Kinnar (as cited in Amazon, 2009) agrees and calls Korten's book a new "Socialist Manifesto." He states, "The major missing piece in this work is a thorough understanding and explanation of how we can overcome human nature and keep the espoused utopian view viable and corruption free" (Kinnar, March 17, 2009, as cited in Amazon.com reviews, 2009). While agreeing with much of what Korten says, he criticizes him for his tone and inflammatory language which, he says, makes any real discussion of the issue difficult.

Brady states that if Korten were able to successfully achieve a break up of all large national and international corporations into smaller, community owned enterprises, "This would lead to the loss of all of the economies of scale and scope that have been generated by technological progress and innovation over the last 200 years" (Brady, March 30, 2009, as cited on Amazon.com, 2009). While McKenzie concurs:

It is no coincidence that world population grew to unprecedented size during globalization before and after the World Wars. The lives of millions (if not billions) depend upon the rise of international finance capitalism during late 19th century globalization. Contrary to what Korten believes, there is no alternative (MacKenzie, March 20, 2009, as cited in Amazon.com 2009).

Bartkin, on the other hand, refutes Korten's claim on the need to curb global consumption,

Dr. Korten is convinced, as are some segments of the environmental community, that long-term environmental sustainability requires a significant shrinking of our current consumption of material goods. Yet he never seriously critiques the opposing view of most mainstream economists that environmental problems can be addressed adequately, and economic growth maintained at a moderate rate, if we "get the prices right" via pollution taxes or permits for CO2 emissions. (Barkin, February 12, 2009, as cited in Amazon.com).

On the academic side, members of the *Harvard Business Review* blog engaged in a lively debate of Korten's proposal. Steve Kaplan (Neubauer Family Professor of Entrepreneurship and Finance at the University of Chicago Booth School of Business) took issue with Korten's failure to note anything of value in the current economic system:

From 1980 to 2007, living standards, education, and life expectancies around the world reached all-time highs. All were delivered by the system that Korten criticizes. And those measures are likely to remain high when we exit this recession....In their criticism, Korten (and others) ignore the progress and focus only on the negative. And, they do not provide a workable alternative. (Kaplan, April 22, 2009).

However, CV Harquail, a former MBA faculty member argues,

Assumptions about the inevitable preeminence of capitalism as practiced are rarely challenged, and then only with great difficulty and against significant resistance. When it comes time to ask whether 'the system' as we know it isn't working and needs to change, things change. Mention democratic socialism, collective organizing, the idea that a 'free market' is a technical construct not found in collective human experience, or that values other than 'enlightened self-interest' are important to business & personal success, and watch a whole lot of MBA knees jerk. Minds close, the conversation ends, no more learning takes place. (Harquail, April 20, 2009).

Rob Kall, Executive Editor of OpEdNews strikes a compromise position on Korten's "Agenda:"

A paradigm shift which moves from a Wall Street economic model to a Main Street model just may not work. But when times are this bad, when our way of life is threatened, it is time, now, to have the wisdom, capacity and courage to consider all the options, all the issues, models and possibilities. The "put out the fire" mentality is a symptom which is the tip of the iceberg..." (Kall, 2009, para 15).

Conclusion

In looking at viable alternatives to free-market capitalism each of the four models and schools of thought have their pros and cons. None appear to offer an immediate alternative to the current system given the challenging political and cultural environment in which they would need to exist. However, pressure from peak oil and climate change could radically alter those parameters. Regardless, the literature appears to provide a path for moving through each of the four models presented as we transition away from the current form of free-market capitalism towards an economic model that can better meet human and environmental needs. First on the list is fixing the current system.

Attempting to fix the current system rather than see it fail, as it nearly did with the stock market collapse in September 2008, is strongly supported in the literature. All the authors reviewed agree that our economic system needs fixing (Baker, D., 2009; Baker, J., 2009; Butler, 2009; Cohan, 2009; Canova, 2009; Elliott, 2009; Hackney, 2009; John,

2009; Johnson, 2009b; Knigge, 2009; Korten, 2009; Krugman as cited in Swint, 2009; Poole, 2009; Reinhart, 2009; Rodriguez, 2009; Sorkin, 2009; Stiglitz, 2010; Volker as cited in Uchitell, 2009; White, 2009). The question is, how? The literature clearly points out deficiencies in how the government responded to the 2008 economic crisis and stock market crash with few outside the White House approving of their plan. As Rodriguez states:

The worst course of action is the one we've taken up until now, gradually escalating capital injections and loan guarantees, preventing the banks from collapsing outright, but doing little to reinvigorate them. (Rodriguez, E. 2009).

However debate on what should have happened instead, and what is still left to do, paints a picture that is less clear. In looking at the options outlined in the literature, some are better than others. For example, forcing failed and undercapitalized financial institutions into bankruptcy, as described by Poole (2009) and Johnson (2009), appears to be far more preferable than sending the message that the government and taxpayers will not allow a large financial institution to fail regardless of how poorly they are run, as Cohen (2010) and Korten (2009) point out. Though as Poole and Johnson state, our bankruptcy laws are not currently up to the job of unraveling complicated financial institutions that are deemed "too big to fail" and those laws must be updated.

The issue of breaking up large, financial institutions that pose a systemic risk to our entire economy also has merit as maintained by Baker (2009); Greenspan (as cited by Sorkin, 2009); Grumet (2009); Johnson (2009); Poole (2009); Stiglitz (as cited in Pal, 2009); and Volker (as cited in Utchitell, 2009). The issue in question appears to be timing.

In Poole (2009) and Johnson's (2009) opinions, breaking up large institutions could occur as part of bankruptcy proceedings if they fail due to undercapitalization. At the point of failure, another camp advocates (some very reluctantly) nationalizing failed banks in order to secure deposits, protect taxpayers, and allow for continued lending including Baker (2009); Johnson (2009); Krugman (2009); Rhinehart (2009); and Stiglitz (as cited in Knigge, 2009). Elliot (2009) agrees with nationalization, but only as a last resort for the largest banks, and only under strict conditions. Though Butler (2009) and John (2009) argue nationalization is a terrible idea as it gives too much power to the federal government, at which point we return to the bankruptcy option. The question seems to be, which comes first; the failure or the fix?

The solution for some authors is preventing banks from becoming "too big to fail" in the first place, as advised by Baker (2008), Grumet (2008), Hackney (2009) and Posner (2009). They suggest reinstating the Glass-Steagall Act as a way to break up the investment and commercial enterprises of banks. This would effectively reduce their size and the systemic risk they pose to the entire economy. Stiglier (2009), also points out that limiting the size of financial institutions would be an important safe guard over new regulations alone, given his theory of "regulatory capture" where regulators are often subverted or co-opted by the industries they oversee.

The argument that large multinational companies like Microsoft and IMB need to be able to do business with these large multinational banks as stated by Bailey (2009) and Elliott (2009) fails to justify the systemic risk they pose in light of revelations by Johnson that most multinational companies employ a number of different banks in their business dealings worldwide (NPR Planet Money, 2009).

In reviewing the data, preventing the need for either bankruptcy or nationalization of our large financial institutions appears to make the most sense. As the authors explain, this can be done through a number of different means such as: reinstating the Glass-Stegall Act in order to break up financial institutions that pose the greatest systemic risk and improving incentives to make good loans (Stiglitz, 2009); taxing banks that grow beyond a healthy size (Johnson, 2009); as well as imposing new capitalization requirements on banks so they are better able to weather future loses (Butler, 2009; Canova, 2009; and John, 2009). An additional layer of consumer protections as described by Warren (2008) may also be required such as creating a Financial Products Safety Commission that would oversee the loan products offered by banks. However, as Laguzza-Boosman points out (2009), there are other critical areas of our economy that must be recalibrated other than just financial regulation if a real "fix" for our current economic model is to be found, including reform of the nation's wage and compensation structures, the tax system, and the regulatory system.

If economic reform can be achieved through the above suggestions, the natural outcome of a more balanced form of capitalism that creates broad-based prosperity could well lead to the adoption of ways to incorporate the needs of nature and people into our economic calculations, especially given the increasing pressures of peak oil and climate change (Curtis, 2007). Ecological Economics and the manner in which it builds on the free market model could help with a transition to a more viable economic system. This could be especially true if the EE tools are seen as a way to adapt capitalism to the realities of peak oil and climate change. Curtis (2007) agrees that these forces will provide capitalism the motivation required to create lasting systemic change.

The issues surrounding Ecological Economics are that it appears to be a somewhat "operationally vague" theory rather than a hard science. Its interdisciplinary approach without a strong overarching framework can make practical application challenging, as Faber and Bradley (1996) point out. However EE does contain useful tools that can aid in the transition to a more viable economic model including calculations on the value of nature's services, and information on how economies, people, and nature interact and impact each other's systems in a time of increasing resource scarcity (Costanza, et al., 2008, Howarth, 1998).

According to Faber & Bradley (1996) and Costanza, et al, (2008), balancing out these interests in a sustainable way will be critical to human survival. The equation for this balance, according to Costanza (1997 as cited by Howarth, 1998) is that net economic output cannot exceed the monetary value of resource depletion and economic degradation if the human species wishes to survive. Practitioners of Economic Economics appear able and prepared to make the necessary calculations to find the optimal balance between human, economic, and environmental needs (Costanza, 1997). In addition, placing the economy and humans as subsets of the biosphere could well create the paradigm sift in thinking that will be required in transitioning our species to a more viable economic model. I saw no argument in the literature refuting the logic of that placement especially as one comes to understand the interaction and interdependency each of these asset sets have with one another.

According to Costanza, Farley, and Erickson (2008) EE is also very helpful to move people from thinking of economics in terms of growth, and viewing it, instead of in terms of development, as the limits of the growth paradigm are becoming increasingly clear

according to Costanza, et al, (2008), Hopkins (2008), Korten (2009) and McKibben (2007). And though McCauley (2006) and Faber and Bradley (1996) complain that we should value nature for nature's sake and that the valuation strategies of EE fall short of true sustainability goals, they could be very useful in terms of moving humankind along the cultural road required to see nature as more than a commodity, and, instead, as something worthy of preservation for its sake and our own.

It is likely moving from A to Z on this path will not happen overnight, but, rather be part of a larger cultural, environmental, social, and economic transition that the future of peak oil and climate change will bring upon us. And, although Rotering (2009) complains that EE simply grafts ecology onto free market capitalism, it is an important and potentially paradigm-shifting combination that could well be the first steps along the path towards a more viable economic model.

As the reality of peak oil, climate change, and the economic crisis, begin to impact our daily lives, Curtis (2007), Hopkins (2008), Korten, (2009), and McKibben (2007) argue that the most logical economic system appears to be one involving relocalization efforts. A promising model is the *Transition Initiative*. It is also the most hopeful, and, in deed the most plausible model investigated as it has a readily available set of tools and support structures to aid would-be Transition groups, and currently has hundreds, if not thousands of communities participating in the Transition process to date. Part of the success of this model is Permaculturist, Rob Hopkins', optimistic and infectious view of a post-carbon future, filled with a vision of resilient and self-sufficient communities thriving beyond peak oil:

Rebuilding local agriculture and food production, localizing energy production, wasting no people, rethinking healthcare, rediscovering local building materials in

the context of zero energy building, rethinking how we manage waste, all build resilience and offer the potential of an extraordinary renaissance - economic, cultural and spiritual. (2008, p. 9).

The principles, processes, and tools presented as ways to organize local *Transition Initiatives* seem both practical and enriching. Whether they will actually succeed in creating the sort of community resiliency required to withstand a serious shock is less clear. According to Hopkins, only Kinsale Ireland (the first Transition Town) has successfully completed a full Energy Decent Plan to guide them to their "Post carbon future" (2008). However, the movement is still very young (starting in 2005), and such a process will naturally takes time.

Most striking is how invigorated those engaged in the Transition process appear to be as their fear of the future is replaced with a sense of can-do confidence in their communities. Though members of the Transition Sandpoint group, for example, envision creating local energy production and food networks, what their group has actually accomplished to-date is to "green up" their town to make it a bit more livable. But it's a start. However it manifests itself, the positive vision Hopkins has of the future appears to be engaging hundreds, and, perhaps, thousands of communities to act (Gray, 2009). These communities will likely be much more able to survive whatever the future holds though their efforts at improving resiliency and self-sufficient local systems in an organized and collective manner.

Critics such as Alex Steffen, claim that the Transition movement focuses on small changes rather than tackling the larger systems that needs changing if humankind is to survive (2009). This may be true but it seems to ignore that often transformational change starts at the grassroots and moves larger systems from below. The old adage, "If

the people lead, the leaders will follow" may well apply. In addition, Steffen appears to criticize the Transition Movement for doing what he says they ought to. Specifically, "To fight the powers that be, we need to see ourselves as the powers that *will* be, building the future we want" (Steffen, 2009) which sounds very much like what the *Transition Movement* is all about.

Chatterton and Cutler (2008) are concerned that the movement fails to account for the strength of force those benefiting from the current system may well employ to maintain it. However there is a stealth nature to Hopkins' "under the radar" approach to this change that may end up surprising even their strongest foes. These benign little groups of Transition do-gooders seem to be springing up around the globe at a very rapid rate. Five new groups surfaced in the United States just from the first week of February to the second (2010). And they are well-networked. It is hard to imagine even the most powerful forces being able to put out fires world-wide once they finally stop marginalizing such a movement to the point of taking them seriously. Ultimately, the success of this model is yet to be seen.

Ironically, the final chapter in this transition to a more viable economic model appears to lead full circle to the original concepts of Adam Smith's vision of capitalism, where, according to Korten (2009) the purpose of the economy was to serve the needs of the people – not the other way around.

Korten's view, like McKibben's (2007) and Hopkins' (2008) is "locally based, community oriented, and devoted to creating a better life for all, not simply increasing profits" (Korten, 2009). Though instead of staying focused on local changes, Korten takes on the larger system within which local communities could thrive. His proposal

through his "12 Point Plan" would support the creation of these thriving local communities and economies by leveling the playing field in which local businesses must now compete with their enormous multinational counterparts.

Korten's views make sense from a logical perspective. Local businesses have a stake in the health of their local communities and the environment in which they and their customers live. Multinationals, as Korten explains, do not. Putting control of local economies, though new policies and laws, back in the hands of local people who live, work, and raise their children in those communities, could produce not only healthier communities, but a healthier nation and planet.

However, Korten's vision does raise some concerns. Though allowing Wall Street to fail, as opposed to bailing it out with taxpayer dollars, has obvious appeal, it is hard not to question whether or not it would create more problems than solve as Gratten (2009) points out. This is completely unchartered territory so it's impossible to know.

But Korten's model has something significant to offer: a national vision of policy proposals that could enable the relocalization effort described in the Transition Town model, in addition to incorporating the revaluing work of Ecological Economics. Yet his view is such a radical departure from where we are today, it would be difficult to reach without first undertaking all the other models in sequence. As Gratten (2009) Kinnar (2009) point out, Korten's plan lacks a road map for how to even arrive at a starting point for his Agenda. Yet this position assumes a life as usual scenario, while the advent of peak oil and the continued heating of the planet, not to mention the current global "debt bomb" waiting to burst, could radically change the parameters under which we live.

Such a system shock could well provide the opening to a brand new economic model

since a large shock from any one of these areas could conceivably destroy the current one under which we now live. Should that occur, it would be well-advised to have a good roadmap at the ready to help us steer a new sustainable course. Korten and Hopkins may have done just that.

References

- Amazon.com (n.d.). Reviews of "Agenda for a New Economy" by David C. Korten (2009). Retrieved from http://www.amazon.com
- Andrews, S. (2008). Transitional Therapy. The Land Summer 2008. Retrieved from http://transitionculture.org/wp-content/uploads/59-60.pdf
- Baker, C. (2009). Transition towns or 'bright green' cities? Carolyn Baker Responds to Alex Steffen of "Worldchanging." Transition California. (Retrieved from http://transitioncalifornia.ning.com/profiles/blogs/transition-towns-or-bright).
- Baker, D. (2009). Plunder and blunder: The rise and fall of the bubble economy. Sausalito, CA: PoliPointPress.
- Baker, J. (March 1, 2009). How Washington can prevent 'zombie' banks.' Financial Times. Retrieved from FT.com at http://www.ft.com/home/us
- Barkin, D (Summer 2009). Principles for Constructing Alternative Socio-economic Organizations: Lessons Learned from Working Outside Institutional Structures. *Review of Radical Political Economics*, Volume 41, No. 3, Summer 2009, 372-379. DOI: 10.1177/0486613409336352
- BIS Quarterly Review (November 2009). OTC derivatives market activity for the first half of 2009. Business for International Settlement. Retrieved from http://www.bis.org/publ/otc_hy0911.pdf
- Blumenauer, E. (December 1, 2009). Put Americans to work. *USA Today*. (*AN J0E052080025509*). Retrieved from Academic Search Complete
- Bureau of Labor Statistics (February 2010), The Unemployment Situation. Household Survey Data. Retrieved from http://www.bls.gov/news.release/empsit.nr0.htm
- Butler, S. (November 20, 2009). New Bankruptcy Policy Can Avoid Mass Bailouts. Press. The Heritage Foundation. Retrieved from http://www.heritage.org.
- Chase, L (May 1, 2009). Don't worry. Be happy. *Elle Magazine*. Retrieved from http://www.elle.com/Beauty/Health-Fitness/Do-Worry.-Be-Happy
- Chatterton, P. & Cutler, A. (2008). The Rocky Road to Transition. Trapese. Retrieved from http://www.paulchatterton.com/?p=1785
- Coates, J. & Leahy, T. (April 2006). Ideology and politics: Essential factors in the path toward sustainability. *Electronic Green Journal*. Issue 23. Retrieved from EBESCO.
- Cohan, W (January 7, 2009). The three magi of the meltdown. Opinionator. New York

- Times. Retrieved from http://opinionator.blogs.nytimes.com
- Canova, T. (May 2009). Financial market failure as a crisis in the rule of law: From market fundamentalism to a new Keynesian regulatory model. *Harvard Law & Policy Review*. Vol. 3 Issue 2, p369-396, 28p; (*AN 45828215*). (Retrieved from the Academic Search Primer).
- Costanza, R., D'Arge, R., De Groot, R., Farberk, S., Grasso, M., Hannon, B. Limburg, K., Naeem, S., O'Neill, R., Paruelo, J., Raskin, J., Suttonkk, P. & Van den Belt, M. (May 15, 1997). The value of the world's ecosystem services and natural capital. Nature, Vol. 387, pp.253-260. Retrieved from http://www.geog.umontreal.ca/donnees/geo2312/Constanzaetal1997.pdf).
- Costanza, R., Farley, J., & Erickson, J. (2008). Video FAQ 1: What is ecological economics? Introduction to Ecological Economics. University of Vermont Gund School of Ecological Economics. Retrieved from http://metacourses.org/ecologicaleconomics/resources/ecological_economics_faqs
- Curtis, F. (Summer 2007). Climate Change, Peak Oil, and Globalization: Contradictions of Natural Capital. *Review of Radical Political Economics*, Volume 39, No. 3, pp. 385-390. (Retrieved from Sage Publishing)
- Elliott, D. (February 26, 2009). Bank Nationalization. What is It. Should We Do It? The Brookings Institute. (Retrieved from http://www.brookings.edu/papers/2009/0225_bank_nationalization_elliott.aspx)
- Faber, D. & Bradley, D. (1996). Ecological economics. U.S. Forest Service publication (Retrieved from http://www.fs.fed.us/eco/s21pre.htm)
- Farrell, P. (February 2, 2010). 20 reasons global debt time bomb explodes soon. MarketWatch. (Retrieved from http://www.marketwatch.com).
- Goodman, A. (February 4, 2009). Facing foreclosure? Don't leave. Squat. Chronicle. Editorials. San Francisco Chronicle. (Retrieved from http://www.sfgate.com).
- Gray, J. (2008). Transition Initiative Primer: Becoming a transition town, town, community. Transition United States. Retrieved from http://transitionus.org/sites/default/files/US%20Transition%20Initiatives%20Primer.pdf
- Griffiths, J. (July/August 2009). The Transition Initiative: Changing the scale of change. *Orion Magazine*. Retrieved from http://www.orionmagazine.org/index.php/articles/article/4792
- Grumet, L. (December, 2008) The only real mistakes... *CPA Journal*, Vol. 78 Issue 12, p7-7, 1p; (*AN 35766513*).

- Hackney, J. (November 2009). On markets and regulations: Richard Posner's conservative pragmatist evolution. *Law & Financial Markets Review*. Vol. 3 Issue 6, p539-543, 5p; (*AN* 45669410).
- Harpers Magazine Forum (November 2008). How to save capitalism: Fundamental fixes for a collapsing system. (Retrieved from http://www.scribd.com).
- Hopkins, R. (2008). The Transition Handbook. Chelsea Green. White River Jct, VT.
- Hopkins, R. (May 15, 2008). "The Rocky Road to Transition" A Review. Transition Culture. (Retrieved from http://transitionculture.org).
- Hopkins, R. & Lipman, P. (October 2008). Who We Are and What We Do. The Transition Network Ltd. (Retrieved from http://www.transitionnetwork.org
- Hopkins, R. (November 8, 2009). Responding to Alex Steffen's critique of Transition at WorldChanging. Transition Culture. Retrieved from http://transitionculture.org
- Harquail, CV (April 20, 2009). Comments on "The system is broken. Will Business Schools help fix it?" *The Harvard Business Review* Blog. (Retrieved from http://blogs.hbr.org).
- Howarth, R. (December 1998). *A Introduction to Ecological Economics* Book Review. Ecology. (Retrieved from http://findarticles.com).
- John, D. (July 16, 2008). Freddie and Fannie: Break'Em Up. The Heritage Foundation. (Retrieved from www.heritage.org).
- John, D. (November 24, 2009). Using bankruptcy and capital standards to address financial institutions that are "Too Big to Fail". Backgrounder #2343. The Heritage Foundation. (Retrieved from http://www.heritage.org).
- Johnson, S. (May, 2009a). The quiet coup. *Atlantic Monthly*. (Retrieved from http://www.theatlantic.com).
- Johnson, S. (May 2009b) Nationalize the banks and quick! *Money Magazine*. Vol. 38 Issue 5, p18. (Retrieved from Academic Search Primer).
- Kall, R. (March 10, 2009). DOS, left brain minds playing with fire metaphors in windows times. OpEdNews.com. (Retrieved from http://www.opednews.com
- Kaplan, S. (April 22, 2009). The system isn't broken, but it can be improved. *The Harvard Business Review* Blog. (Retrieved from http://blogs.hbr.org).
- Knigge, M. (February 6, 2009) Nationalized banks are "Only Answer," Economist Stiglitz says. DW-WORLDE DE. Retrieved from http://www.dw-world.de

- Korten, D. (December 2009/January 2009). Beyond the bailout: Agenda for a new economy. Sentient Times. Retrieved from http://www.sentienttimes.com
- Korten, D. (2009). Agenda for a new economy: From phantom wealth to real wealth. Berrett-Koehler Publishers, Inc. San Francisco, CA
- Kotin, J. (January 26, 2009). The end of upward mobility? *Newsweek Magazine*.
- Laguzza-Boosman (2009). PLAN B: Recalibrating an economy in decline building an economy in balance. (Retrieved from http://www.klbcommunityconsulting.com).
- McCauley, D. (Sept. 2006). Selling out on nature. Nature, Vol. 443/7, pp. 27-28.
- McKibben, B. (2007). Deep Economy. Henry Holt. New York, NY.
- Mooallem, J. (April 16, 2009). The end if near! (Yea!). The New York Times. Green Magazine. (Retrieved from http://www.nytimes.com).
- Moyers, B. (February 13, 2009). Interview with Simon Johnson. Bill Moyers Journal. Public Broadcasting Service. Retrieved from http://www.pbs.org/moyers
- NPR Planet Money (November 11, 2009). Podcast: Breaking Up (Big Banks) Is Hard To Do. National Public Radio. (Retrieved from http://www.npr.org).
- Pal, A. (October, 2009). Interview with Joseph Stiglitz. *The Progressive*. (Retrieved from the Academic Search Primer).
- Paulson, H. (November 12, 2008). Remarks by Secretary Henry M. Paulson, Jr. on Financial Rescue Package and Economic Update. Press Room. U.S. Department of the Treasury. (Retrieved from http://www.ustreas.gov/press/releases/hp1265.htm).
- Poole, W. (Winter 2009). The way forward: Incentives, not regulations *Cato Journal*, Vol. 29, No. 1. (Retrieved from http://www.cato.org)
- Reinhart, V. (March 12, 2009). The nationalization paradox. *The American: A Journal of the American Enterprise Institute*. (Retrieved from http://www.american.com).
- Rodriguez, E. February 18, 2009). The N-Word. *The New Republic: A Journal of Politics and the Arts.* Vol. 240. No. 4853. (Retrieved from the Academic Search Primer).
- Rose, N. (October 2009). Lessons from the new deal public employment programs. Socialist Magazine, Vol. 61 Issue 5, p21-32, 12p; (AN 44371141)
- Rotering, F. (September 5, 2009). A critique of ecological economics. Part 1. YouTube video documentary. (Retrieved from http://www.youtube.com/watch?v=aFryZrsMtQY).

- Rotering, F. (September 5, 2009). A critique of ecological economics. Part 2. YouTube video documentary. (Retrieved from http://www.youtube.com/watch?v=X9gods1LHDw&NR=1)
- Schweber, H. (February 28, 2009). Geithner's dragon. The Huffington Post. (Retrieved from http://www.huffingtonpost.com).
- Stiglitz, J. (January/February 2010). Moral Bankruptcy. Too Big To Jail. *Mother Jones*. (Retrieved from http://motherjones.com).
- Sorkin, A. (October 15, 2009). Greenspan calls to break up banks "too big to fail." New York Times online. Retrieved at http://dealbook.blogs.nytimes.com).
- Spak, K. (December 16, 2009). McCain, Cantwell, join forces to break up banks: Unlikley duo sponsor bill to reinstate Glass-Stegall. *Newser*. (Retrieved from http://www.newser.com).
- Steffen, A. (October 28, 2009). Transition Towns or Bright Green Cities? WorldChanging. (Retrieved from http://www.worldchanging.com)
- Swint, B. (February 2, 2009). Obama should nationalize U.S. banks, Krugman says. Bloomberg.com. (Retrieved from http://www.bloomberg.com).
- The Nation (November 16, 2009). Break up the banks. Editorial. (Retrieved from http://live.thenation.com).
- Transition United States (n.d.). History. Retrieved from http://www.transitionus.org
- Uchitell, L. (October 20, 2009). Volcher fails to sell a bank strategy. New York Times online. (Retrieved from http://www.nytimes.com).
- Warren, E. (Fall 2008). Product safety regulation as a model for financial services regulation. Journal of Consumer Affairs, Vol. 42 Issue 3, p452-460, 9p; DOI: 10.1111/j.1745-6606.2008.00122.x; (AN 34038016). (Retrieved from EBSCO)
- Watson, R.T. & Zakri, A.H. (2005). Millennium ecosystem assessment. The United Nations. Retrieved from http://www.millenniumassessment.org.
- Wikipedia (n.d.). Ecological Economics. Retrieved from http://en.wikipedia.org.
- White, M (December 5, 2009). Should we break up big banks? WalletPop. (Retrieved from http://www.walletpop.com).
- Xepapadeas, A. (2008). Ecological Economics. The New Palgrave Dictionary of Economics. (Retrieved from http://www.dictionaryofeconomics.com).