

Transforming Finance and The Regenerative Economy

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Summary:

The global economy, which is driving humankind beyond the limits of the planetary boundaries, is itself driven by the theoretical construct and practice of global finance. A perpetually growing economy is at some point in conflict with a finite biosphere, and will impose profound implications for how we live our lives, and without a doubt for finance, as well. Just as we are in ecological overshoot, we are even more in financial overshoot.ⁱ Finance in general and specifically the flow of real investment capital is one of the critical leverage points to shift to a Regenerative Economyⁱⁱ that serves humanity and stewards the integrity of earth's ecosystems.

Introduction

The current speculative excess and ethical shortcomings of contemporary Wall Street, the problems of too-big-to-fail and, more importantly, other “in-system” failures have all given the economy and the current financial system a bad name. But the challenge goes beyond this. The financial system is designed to propel growth in the economic system with no regard for the physical boundaries of the planetⁱⁱⁱ and little regard for the social constraints of human wellbeing.^{iv} Science tells us that this is fundamentally misaligned with the finite planetary boundaries of the biosphere.^v Notwithstanding all of its remarkable historical achievements, the global economy must now evolve not only to align itself with this scientific reality, but also to address such critical challenges as the grotesquely inequitable distribution of wealth, intractable poverty in much of the world, and chronic failure to deliver jobs or other means of achieving a livelihood with dignity. Meeting these challenges demands not merely problem solving, but systemic change to address root causes.

Climate change, ecosystem degradation, soil degradation and biodiversity loss are symptoms of an economic system that is beyond the limits.^{vi} Finance and the money system it is built upon embody the exponential function. Compound financial returns, beginning with compound interest on an expanding monetary base, force the economy to continue growing at a systemic level. Since the economy is linked to material throughput, eventually this must create conflict with the boundaries of the biosphere. The world has now arrived at that time.

The same planetary boundaries that constrain the economy with limits to material expansion also imply limits to investment since investment fuels growth. This is something no economic system in the history of civilization has ever before had to contemplate. How much and where large economic actors invest have critical implications for collective global security and, consequently, must become a central concern of global governance. This recognition is at the heart of new economic thinking.

The challenge facing the world is a question of story. Thomas Berry put it: “We are in trouble just now because we do not have a good story....The Old Story – the account of how the world came to be and how we fit into it sustained us for a long period of time. It shaped our emotional attitudes, provided us with a life purpose, energized action. It consecrated suffering, integrated knowledge, guided education....We need a [new] story that will educate man, heal him, guide him”^{vii}

If it is true that the story precedes change, the real job of the Post 2015 Development Goals is to tell a new story that stitches together the challenges facing finance and the economy and the necessary changes in these in such a compelling way that it invites all the necessary stakeholders to participate in the transformation.

The opportunity facing us is to transition to a regenerative economic system. If we fail, the world will face successive collapses of both ecosystems and the economies and financial system that depend on ecosystem health.

Regenerative Capitalism

Capitalism, as now practiced, is the simplified world view in which entrepreneurs combine natural resources with labor and money, with the goal of optimizing financial returns to owners of capital so that the capitalists can become rich. That part works well. The mythic invisible hand is supposed to ensure the most efficient outcome for society. The financial system and economy are growing exponentially, but the invisible fingers seem not up to the task, and any belief that it ever could have been so was naive. Business as usual will drive us to successive ecological and economic collapses, impoverishing the earth's life support systems and the majority of its people in the process.

Natural systems are sustainable because they are regenerative.^{viii} Regeneration is the "continuous process of becoming" necessary to sustain life in the natural world. As the world shifts from the ten thousand year old and stable Holocene to the human controlled and volatile Anthropocene,^{ix} it is our evolutionary destiny and the creative challenge of our age to usher in the Era of Regenerative Capitalism, bringing the human economy into holistic balance with nature, and harmony with the core beliefs of our many wisdom traditions that have stood the test of time.

Regenerative Capitalism will be characterized by an expansion of the meaning of "capital" to include multiple forms of capital, and the vital patterns of their interdependencies, in keeping with a holistic understanding of true wealth. It will also entail a recognition that the regenerative process that defines thriving, living systems, enabling many of them to be sustainable over the long run, must define the economic system itself.

A Regenerative Economy is characterized by eight principles:

1. Right Relationship^x: It holds the continuation of life sacred and recognizes that the human economy is embedded in human culture and the biosphere.
2. Entrepreneurialism: A Regenerative Economy draws on the innate ability of human beings to innovate and "create anew" across all sectors of society.
3. Wealth Viewed Holistically: True wealth is defined in terms of the well-being of the "whole," achieved through the enhancement of the multiple forms of capital.
4. Shared Prosperity: Wealth is equitably (although not necessarily equally) distributed in the context of an expanded view of true wealth.
5. Real Economy Circularity: The economy strives continually to minimize energy, material, and resource throughput radically at all phases of the production cycle, that products are remanufactured, recycled and composted, with natural outputs are safely returning to the biological world and that minerals and human made substances returning to the industrial cycle.
6. "Edge Effect" Abundance: Creative collaborations increase the possibility of value-adding

wealth creation through relationship, exchanges, and resiliency.

7. Resiliency: The whole system develops the long run ability to adapt and learn from shocks; adaptability to change is valued over current brittle concentrations of power and hyper-efficiency.

8. Honors Place: A Regenerative Economy operates to nurture healthy, stable communities and regions, both real and virtual, in a connected mosaic of place-centered economies.

Early green shoots of Regenerative Capitalism are already manifesting in a multitude of scalable projects, and enterprises on the ground. These include agriculture that replenishes soil fertility, the sharing economy, collaborative ownership structures, economic democracy, investments in renewable energy and resilient communities and much more. Such investments deliver 10 times the number of jobs as money spent on the old economy.^{xi} The task before countries, corporations and communities now is to suffuse Regenerative Capitalism into large global enterprises and to the large State actors in the economic system.

Regenerative Finance

The emergence of Regenerative Capitalism, particularly within a mainstream economy dominated by large-scale enterprises and state actors, is dependent upon a fundamental transformation of finance. Merely optimizing single variables such as the ill-conceived shareholder value maximization are insufficient in the era of Regenerative Capitalism. The well-meaning and ongoing financial reform agenda was conceived in the context of the old, degenerative world-view. Success cannot be defined as putting us back on the path of exponential expansion, which brings on ecological collapse. We must reconceive finance in service of a regenerative economic system.

Finance's primary function is to transform savings into productive investment, and drive the credit-creation process. The flow of credit and investment into the real economy is the bridge to, and the steering mechanism for, the Great Transition to a Regenerative Economy.

The Elements of Regenerative Finance include:

1. Means not Ends: finance is a means to a healthy economy, not the "purpose" of economic activity.
2. Ethical and In Service: Finance should be an ethical profession, grounded in a culture of service to clients and service to the emergence of a Regenerative Economy.
3. The Supremacy of Relationship: It should value relationships over transactions.
4. Transparency: Financial institutions should value transparency over complexity, while embracing genuine value-adding innovation.
5. True Wealth: Regenerative Finance generates long-term wealth creation, harmonizing multiple forms of capital in right relationship, using a fair financial return as a constraint for investment decisions.
6. Right Scale: To be sustainable, finance must be appropriately scaled as a system embedded in the economy, which in turn is embedded in culture and the biosphere.
7. Collaborative: Values-aligned investors, financial institutions, and enterprises from multiple sectors will behave collaboratively, mimicking nature's "edge effect."
8. Resilient: Regenerative Finance balances efficiency with structural resiliency at the system level through decentralization, diversity, and buffers within institutions and even within the money system itself.

The transition away from a collapse-prone financial system and economy, both of which are driving ecological collapse will not be quick or easy. It will require new energy for fundamental systemic reform to create the conditions for finance to serve the Regenerative Economy. Such reforms are complex and beyond the scope of this paper, but would include:

- Regain our will for sovereignty over domestic financial systems. Globalization has gone too far and encourages a negotiated race to the bottom.
- Separation of insured deposit taking banks with access to central bank liquidity from speculative activities of securities firms. The universal bank model unnecessarily pits shareholder interests against societal interests and should not be tolerated.
- Onerous capital and tax regimes should dis-incentivize leverage, scale and complexity making it unprofitable to be too big, too leveraged, and too complex. Such regimes must trigger a restructuring of the current system or they're inadequate.
- Eliminate the subsidy^{xii} to debt since leverage reduces systemic resiliency across the economy and facilitates dangerous speculation.
- Revoke the public charter of banks and securities firms who have breached their duty of trust to society. Private partnerships are the proven and most effective tool to regulate behavior in the securities industry.
- Implement a global financial transaction tax^{xiii}
- Modify capital gains tax so that investors are encouraged to put money into the things we need on timescales that matter.

Once the system has been shrunk, simplified, de-levered and made more resilient in the process, the foundation will be laid for Regenerative Finance to emerge. Indeed it is already happening under the radar as evidenced by the Global Alliance for Banking on Values,^{xiv} the emergence of impact investing and efforts to integrate environmental, social, and governance (“ESG”) factors into investment decision-making. The traditional role of community banks, the well established co-operative financial institutions and the Community Development Financial Institutions are also parts of a foundation. The complementary currencies taking root around the world in response to the economic collapse are providing much needed resiliency to fragile economies.

There are well functioning, purpose driven, public banks. Their prudent and responsible role in the economic system should now be recognized after the repeated failure of the so-called private sector banks which are really only private when times are good. The United States, Spain, Switzerland, Germany, and of course Russia and China are just some of the nations that have a variety of state owned banks that behave not merely as a business that needs to be regulated but in service with a unique public purpose. With informed public leadership, these public institutions, and essential new public infrastructure banks can become the foundation for financing the transition to a Regenerative Economy.

The financial community argues that any regulation inhibits market efficiency. Until 2008 this prized characteristic was believed to be self-regulating. But in 2012, former U.S. Federal Reserve Chairman Alan Greenspan admitted, “I made a mistake in presuming that the self-interests of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders and their equity in the firms....I was shocked.”

The rest of the world was devastated. An April 2013 Financial Times article observed that bankers were flying blind, quoting a former European Central Banker who stated, “We don’t fully understand what is happening in advanced economies.”^{xv} Economics is all about efficiency, but the current system pursued the idea of efficiency to the exclusion of system resilience. Like unfettered globalization, securitization and derivatives all increase efficiency, but at a cost. Important inventions with many productive applications, they are misused, now, as highly leveraged speculative instruments reducing system resilience, which becomes apparent in times of crisis.

There are three core elements to achieving a sustainable economy on a planet that is not expanding—what has been called a dynamic steady state economy.^{xvi} First, we need quantum leaps in material throughput efficiency, beginning with energy productivity^{xvii}. This will help get us back toward balance and buy time. Second, we need to shift our goal to well-being and limit aggregate material consumption while providing room for those living below acceptable material living standards to get their fair share. And third—and this is new—since there are indeed limits to growth, and since investment drives growth, somehow we must control both the quality and aggregate quantity of real investment in the global economy.^{xviii} This is heresy in classic economics and in a Wall St world in which more investment is always thought of as a good thing. But it is essential if we are to begin dialing down the throughput of natural resources that is eroding ecosystem health and the ecosystem services we depend upon to live. Arithmetic tells us we will never achieve a steady state if financial capital compounds indefinitely and is reinvested in more growth rather than in ways that enhance social and natural capital. We simply have too much money (inequitably distributed) and not enough planet.

The Regenerative Economy is about seeing the world in a different way

We can do this. What we read about in the New York Times Business Section and in the Wall Street Journal is focused on perhaps 20%, maybe 30%, of total global economy. Only about 30% of people in the world now eat food from industrialized agriculture. Even after decades of globalization, only 20% of India is directly connected to the global economy. Less than a billion people work in the degenerative economy—maybe as few as ½ billion. If the developing world and emerging local and regional economies in the first world were to recognize their common interest in transforming the way the world works, it could be the basis for a bottoms up strategy to create the new reality. If you count the value of the gift economy, the value of natural ecosystem services, the problem part of the economy is really just a small part of the total system. And great strides are being made in the numerous place-based economies the world over that are on a path to a Regenerative Economy.

In looking at the increasing concentration of power in the world’s largest public corporations, Harvard Professor Robert Eccles^{xix} estimates that the 1,000 biggest corporations represent half of the market capitalization of the \$60 trillion market capitalization of the 60,000 public companies in world. Directly and through their influence, they “virtually control” the now degenerative mainstream global economy, yet provide direct employment to less than one percent of the global population. It is not an exaggeration to say that one thousand CEOs and perhaps twenty heads of state hold the future of civilization in their hands, most importantly through the long term investment decisions they make and the public policy influence they choose to exercise.

Our challenge is to enable 1,020 people, mostly men, to think differently.

Let's shine a light on what IS working, improve it qualitatively, and at the same time, crimp what is horribly wrong—investment in expanding our fossil fuel based energy system when we can't afford to burn what we've got, and destabilizing excessive speculation in capital markets that has no value to society and detrimental costs to the world. The Energy Information Agency estimates that \$17 trillion is needed in renewable energy and sustainable transmission infrastructure to meet climate challenge. Booz Allen says that \$22 trillion is needed in water investments to meet world's water needs in next 20 years. A shift in the flow of capital on such an unprecedented scale demands the leadership of one thousand and twenty people. As a practical matter, we need leadership from the United States and China. Civil society must demand it without delay.

This time is different. Our well-intentioned financial system regulators are no doubt overwhelmed responding to yesterday's recklessly induced financial crisis. They are doing it under suboptimal political conditions, all while the plane needs to keep flying (since we are presently dependent upon the too-big-to-fail banks to keep the economy flowing. It is essential that financial system leaders and regulators also look forward to the perils ahead. Grasping the unprecedented challenges of financial overshoot is imperative if we are to manage the stormy times ahead. There is now an overwhelming public and global security interest in how investment capital flows, with profound governance and ethical implications the world has never had to consider.

The Post 2015 Goals process has the opportunity to guide humanity as it evolves beyond the outdated mechanistic worldview of the Holocene and the no longer possible paradigm of exponential growth that has defined contemporary economics and finance, to a regenerative paradigm grounded in the holistic ecological or living systems worldview of contemporary science. If humanity fails to see the global economy as a complex adaptive natural system, and manage accordingly, we'll end up in a bad place.

No one knows how this transformation will work out. However, as the challenges of climate change, loss of species, resource constraints and breakdown of social order become more severe, what now seems impossible will suddenly become inevitable. The Regenerative Economy is an emergent idea. It's never been done. But it is the story that now is needed to save the world.

ⁱ John Fullerton, "Financial Overshoot," The Capital Institute, <http://www.capitalinstitute.org/blog/financial-overshoot#.UjsgI2Rgaxg>

ⁱⁱ The concepts contained in this paper are presented more fully in "Regenerative Capitalism," and "Limits to Investment," available from the Capital Institute <http://www.capitalinstitute.org/>

ⁱⁱⁱ Johan Rockström, et al, "A Safe Operating Space for Humanity," *Nature*, 461, 472-475 (24 September 2009) doi:10.1038/461472a; Published online 23 September 2009 <http://www.nature.com/news/specials/planetaryboundaries/index.html>

^{iv} UN Human Development Report, <http://hdr.undp.org/en/reports/global/hdr2013/download/>

v Johan Rockström, et al, "Planetary Boundaries: Exploring the Safe Operating Space for Humanity," *Ecology and Society*, Vol 14m No 2, Art 32
<http://www.ecologyandsociety.org/vol14/iss2/art32/>, see also,
<http://www.stockholmresilience.org/planetary-boundaries>

vi Donella H. Meadows, Jorgen Randers, Dennis L. Meadows,
Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future,
Chelsea Green Publishing Company, 1993

vii http://www.journeyoftheuniverse.org/storage/The_New_Story.pdf

viii For more on the concept of regeneration see: <http://www.regenesisgroup.com/>

ix Paul Crutzen, Eugene F. Stoermer, *IGBP Newsletter* 41, 2000

x Peter B. Brown, Geoffrey Garver, *Right Relationship: Building a Whole Earth Economy*, Berrett-Koehler Publishers, Inc. 2009

xi UNEP and the ILO have tracked the extent to which investing in regenerative projects better create decent jobs, and greater numbers of jobs:
<http://www.unep.org/greeneconomy/Portals/88/documents/Information%20Materials/Webinars/ILO%20Green%20Jobs%20Decent%20Work.pdf>

xii In many countries, interest expense is tax deductible, while the cost of equity capital and dividends are not.

xiii John Fullerton, "Why We Need Financial Transaction Tax," 21 Aug 2011, Capital Institute, <http://capitalinstitute.org/blog/why-we-need-financial-transactions-tax#.UjuwX2RoTWg>

xiv <http://www.gabv.org/>

xv Chris Giles, "Central bankers say they are flying blind," *Financial Times*, 17 April, 2013, <http://www.ft.com/cms/s/0/b0fe5588-a787-11e2-9fbe-00144feabdc0.html#ixzz2cS7xSZqm>

xvi Herman Daly, *Steady State Economics*, Island Press, 1991. The work is now being carried on by Center for the Advancement of the Steady State Economy,
<http://steadystate.org/meet/mission/>

xvii Hunter Lovins, et al, "The Future of Industry," Paper prepared for UNIDO, July 2009,
http://natcapsolutions.org/UNIDO/UNIDO_TheFutureofIndustry_DRAFT_NCS.pdf

xviii John Fullerton, "Limits to Investment," Great Transition Initiative,
<http://gtinitiative.org/resources/CriticalIssues.html>

xix Robert Eccles, George Serafeim, "Top 1,000 Companies Wield Power Reserved for Nations," *Bloomberg*, 11 Sept 2012, <http://www.bloomberg.com/news/2012-09-11/top-1-000-companies-wield-power-reserved-for-nations.html>