Redesigning Finance: Pathways to a Resilient Future

Summary of proceedings of August 9, 2012
San Francisco invitational gathering

Co-convened by
Tellus Institute
Capital Institute
Corporation 20/20

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"Redesigning Finance: Pathways to a Resilient Future" was a day-long invitational gathering in San Francisco, at the headquarters of Business for Social Responsibility, held on August 9, 2012. Some 25 participants attended, primarily from the financial, philanthropic, and nonprofit world. Attendees were provided three pre-readings, and there were three corresponding presentations. Pre-readings and PowerPoint presentations can be accessed at http://www.corporation2020.org/redesigning_finance.htm.

Co-conveners: Tellus Institute (www.tellus.org), Capital Institute (www.capitalinstitute.org), Corporation 20/20 (www.corporation2020.org).

With generous support from: Tides, Trillium Asset Management, Business for Social Responsibility (BSR), The San Francisco Foundation.

Report produced by:

Tellus Institute
11 Arlington St.
Boston, MA 02116
Phone 617-266-5400

Marjorie Kelly; mkelly@tellus.org
Allen White, awhite@tellus.org
Joshua Humphreys: Jhumphreys@tellus.org
John Fullerton, jfullerton@capitalinstitute.org

POST-WORKSHOP REFLECTIONS

Redesigning finance is both urgent and plausible. We find ourselves at an historical moment when transformational change is imaginable – and when talk of such change is beginning to make its ways into the larger dialogue.

Case in point: In the wake of the San Francisco gathering, it was a delight to see John Fullerton quoted in *Rolling Stone* – where Bill McKibben cited the very analysis laid out at our event.[1] John's analysis estimates that the world faces a $20 trillion "Big Choice." Based on climate science from the Potsdam Institute and the Carbon Tracker Initiative's report, "Unburnable Carbon," he estimates that we have five times more carbon embedded in "proved reserves" of fossil fuel than the atmosphere can withstand, if we are to avoid exceeding the threshold of 2 degrees Celsius warming. Beyond that tipping point lie potentially catastrophic consequences. What that means, John says, is that 80 percent of this carbon must be left in the ground. The reserves holding that carbon – seen by energy companies as their asset base – has a value of at least $20 trillion. "Civilization is facing our $20 trillion big choice," John writes, "our investments or our planet."

"The housing bubble was just a pilot project in comparison," he continued. Losses from that crisis were less than $3 trillion – a mere pittance, given the messes that potentially lie ahead for a financial world intent on financial overshoot. "Landing the plane will be a turbulent affair." John said. For the 24 financial and philanthropic attendees at our San Francisco gathering, he posed some challenging questions:

- What's the price/earnings ratio of a steady state economy?
- What's the debt capacity of the steady state?
- What's the unfunded pension liability of a steady state economy?

These are uncomfortable questions for a financial world where pension funds almost universally base their models on projections of obtaining annual returns of 7.75 percent in perpetuity, when in reality most have attained half that in recent years. The willingness to face up to a future of low financial returns means facing the fact that asset values today are inflated, if one assumes we will summon the will to correct ecological overshoot. Instead of managing for efficiency and maximum returns, we need to manage for resilience – and the more modest returns that entails.

> *"Civilization is facing our $20 trillion big choice: our investments or our planet."* -- John Fullerton

Compared to the nature of the challenges we face, the dominant discourse on financial reform is akin to rearranging the deck chairs on the Titanic, John emphasized. "There will be massive creative destruction as we work our way through this," he said. "More austerity or more stimulus – both are unworkable."

What we must begin talking about instead is a new kind of economy, which he terms a "regenerative economy." It's one where nature serves as the architectural model. Where

[1] Bill McKibben, "Global Warming's Terrifying New Math," *Rolling Stone,* July 19, 2012.

wealth is redefined as most fundamentally meaning natural and social capital. Where we recognize that all investment has impact. Where there is a humble retreat of finance, from its current role as master of the economy to a more appropriate role as servant.

"It's all a question of story," John said, quoting Thomas Berry. "We are in trouble now because we do not have a good story." He spoke of his efforts to offer a new story of finance, with the Capital Institute's series of publications called the "Field Guide to Investing in a Regenerative Economy." What we need, he said, is not just theoretical work but tangible examples of regenerative finance. One example is the story of John's own investments in the Grasslands LLC project, a custom grazing business run with holistic management, designed to restore ecosystem resiliency while delivering both social and financial returns.[2]

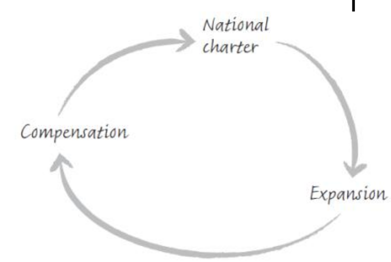
ENTERPRISE AS LIVING SYSTEM

In an intriguing convergence of language, the next presentation by Marjorie Kelly spoke of the emergence of "generative" enterprises – those that are designed as living systems. Coming from her many years of work with Corporation 20/20, and her recent book, *Owning Our Future,* her analysis had arrived at the same framework as that adopted by John: that of living systems.

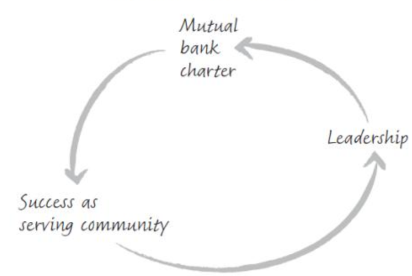
One leading theorist in systems thinking is physicist Fritjof Capra, author of *The Tao of Physics*, who attended the San Francisco gathering. Fritjof and Marjorie have been in long dialogue since teaching together years ago at Shumacher College in England. Fritjof will be using her framework of generative enterprise in his forthcoming textbook on systems thinking.

> *All living systems are self-organizing. Instead of relying on external regulation, we need to locate responsibility within the system.*

"All systems are self-organizing," Fritjof emphasized from the floor of the San Francisco event. If we view social systems as living systems – in particular, if we see publicly traded companies such as the big banks this way – we see that regulation alone is unlikely to get us where we need to go. What is needed is the deeper approach of *design.* "Behavior comes from structure," Marjorie said, citing a central systems principle. The real structure is found in the core rules of the game by which the players receive feedback, directing their behavior. In economic enterprises, that core structure has to do with *ownership.*



REINFORCING FEEDBACK LOOP

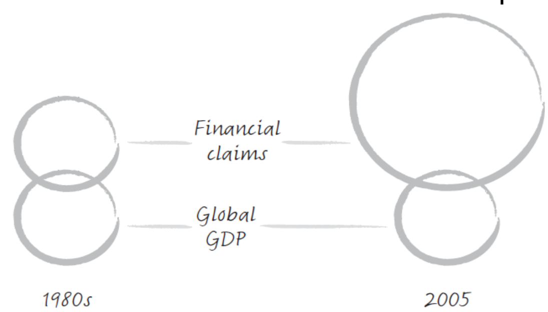


BALANCING FEEDBACK LOOP

Ownership is the foundational social architecture of economic systems. Communism is about state ownership, capitalism about private ownership, particularly Wall Street ownership. For an era of sustainability, new ownership architectures will be needed. "Questions about who owns the wealth-producing infrastructure of an economy, who controls it, whose interests it serves, are among the largest issues any society can face," Marjorie writes. "Issues of who owns the sky in terms of carbon emission rights, who owns water, who owns development rights, are planetary in scope."

[2] http://capitalinstitute.org/capital-lab/field-guide-investing-resilient-economy

The dominant financial enterprise designs of our day – the stock market ownership designs of the big banks – are aimed at maximum financial extraction. They are characterized by reinforcing feedback loops, where more is intended to lead exponentially to more: more earnings, higher stock price, higher CEO pay. Marjorie called this design "extractive." By contrast, she pointed to emerging alternatives she termed "generative" – aimed at creating the conditions for life. She spoke of cooperative banks, mutual banks, state-owned banks like the Bank of North Dakota, and community-owned building societies in the UK, which proved resilient during the financial crisis of 2008. Because of their ownership designs rooted in community, they are characterized by balancing feedback loops. The aim of their mortgage lending is to help people buy and remain in their homes over the long term; thus they made responsible mortgages that could be repaid. They did not accelerate their lending into abusive mortgage products and derivatives that enabled their creation.



"Systems do what they are designed to do," Marjorie said. When deregulated, the extractive nature of today's big banks leads naturally to financial overshoot. Again Marjorie and John had arrived independently at the same use of language. In her book, she defined financial overshoot as a condition where *financial claims exceed the load-bearing capacity of the real economy*. In the 1980s, according to an International Monetary Fund analysis, the global sum of financial assets was roughly equal to global GDP. But by 2005, financial assets had swollen to *four times* global GDP – setting the stage for crisis, triggered by the ripple effects of the failure of a few subprime mortgages, sending ripple effects throughout the entire, over-leveraged system..

She closed with questions for investors:

- In an era of financial overshoot, is publicly traded ownership – predicated on infinite growth – fundamentally unsuited to banking and financial firms?
- How can alternative designs be more systematically promoted – particularly when the next financial crisis hits?
- In addition to Move Your Money and community investing, how can investors work for more fundamental shifts?

BEYOND MODERN PORTFOLIO THEORY

Picking up the notion of reorienting the entire financial system toward new goals, Josh Humphreys showed how a large, abstract goal like this can be made practical in a present-day sense for investors. He offered a presentation focused on a new concept of portfolio theory, called "Total Portfolio Activation." As he wrote in his paper, sponsored by Tides and Trillium Asset Management, there is a "pressing need for tools to help investors identify and seize opportunities to activate more of their assets for social and environmental benefit."

Asset classes are the central focus for this approach, because each has distinctive social and environmental functions. By understanding the specific social and environmental functions of each asset class, and the kinds of activities that generate impact within them, investors can pursue mission-related impact more effectively.

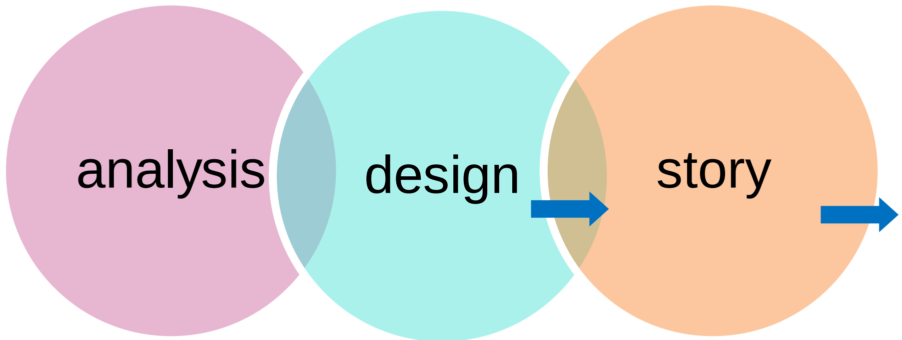
One asset class is cash and cash equivalents. These liquid assets can be put to use in pursuit of social and environmental impact via responsible consumer lending, affordable housing, and sustainable agriculture. Both Tides and RSF Social Finance have made cash deposits in community development credit unions, which are cooperative, nonprofit, member-owned financial institutions with a mission of serving low-income and minority communities. Tides, for example, has deposited a portion of its cash allocations with Hope Credit Union, which serves Mississippi Delta states, including New Orleans and other areas affected by Hurricane Katrina. In addition to its lending, Hope engages in policy advocacy in support of responsible financial services and tax fairness.

In the fixed-income asset class, opportunities include World Bank Green Bonds, which have financed large-scale climate-change mitigation and adaptation in emerging markets since their launch in 2008. These bonds, which Trillium has purchased for clients, are AAA-rated sovereign securities that have helped provide financing for projects from rapid transit systems in Colombia to flood prevention infrastructure in China.

In addition to fixed-income securities that are listed, Josh spoke of community development loan funds, like Boston Community Capital. Its most recent initiative is known as Stabilizing Urban Neighborhoods, which supports communities hard-hit by the foreclosure crisis. Investments in SUN notes finance BCC's repositioning of homes for those facing foreclosure, keeping residents in place and stabilizing neighborhoods.

> *"We call them bonds because they connect us. Equity is about fairness."*
> *– Josh Humphreys*

Through other asset classes – including public and private equity and real property – investors can realign their investments to enhance environmental sustainability and reduce poverty. Echoing John's words, Josh showed how finance can become a servant of families and community, instead of master. Echoing the words of Marjorie, Josh spoke of how generative enterprises – like Hope Credit Union and Boston Community Capital – are designed not to extract from communities but to create the conditions for them to thrive. Such activity returns finance to its original purpose of serving the real economy. "Equity is about fairness," Josh said. "We call them bonds because they connect us."



TOWARD A RESILIENT WORLD

In the discussions that followed at the meeting, over dinner, and in subsequent talks, there has been rich dialogue on how thoughtful analysis and design can be woven into compelling stories, creating a body of work that can begin to create a fundamentally new dialogue on the role of finance in a more resilient world. A few thoughts:

- **Living systems provide the fundamental frame.** Whether we call it a regenerative economy, or a generative economy, it is clear that what we need is an economy that calls on the wisdom of living systems life, and is designed in harmony with its principles. As John put it, "we may not have the answers, but we know where to look for them, and that's toward living systems." We need to a new narrative built on the only sustainable model we know, that of nature.
- **Despite the fact our session was titled "Redesigning Finance," it became clear that the core issue is really about repositioning finance as servant to communities and the earth.** The problem is that finance has become master not only of the real economy but of the planet; that means financial tinkering alone cannot solve the problem. As systems science teaches us, there are no separate systems. Biologist Harold Morowitz writes, "Sustained life is a property of an ecological system rather than of individual organisms." In a world of warming temperatures, rising seas, distressed families, and collapsing portfolios, we can best flourish by pulling together.
- **Because the fundamental issue is the larger system, we need more voices at the table.** We cannot solve the problem of finance solely with financial thinkers in the dialogue. We need systems thinkers, labor, government, geographers, economists, sociologists, philosophers and others with knowledge of and commitment to a just and sustainable future – but also with the capacity to participate in sophisticated financial dialogue (which we see as a major obstacle given the complexity of modern finance).
- **A key challenge is the notion of unending, exponential growth, which lies at the base of financial thinking.** Growth is designed into a debt-based money system, debt-based government, and endowment-funded institutions

like pensions, universities and foundations. Moving beyond this will be wrenching. Denial is endemic and is likely to remain so.

- **Another key issue is inequality and the tendency of finance to extract from other players**, including government and the working and middle classes. The analysis of social extraction needs more exploration, as a companion to the analysis of ecological extraction. In what ways, and in what circumstances, is financial wealth earned at the expense of workers, communities, and the biosphere, and how much of this is simply the byproduct of financial optimization? In what circumstances is the role of finance beneficial and enlivening?
- **Story is a key part of how we will move forward.** Policy options and new financial designs are needed at the enterprise and system level. But we also need a new story of where we stand, what is possible, how moving forward can be enlivening – a story that allows us to see that we are moving not toward a cliff but toward a whole new kind of society, one that can be more satisfying and whole and alive than the financialized society of today. It must be a story that draws finance and others in as designers and partners in solutions, a story that unites us all in a common vision, a common challenge, and a common destiny.

Marjorie Kelly, Allen White, John Fullerton, Josh Humphreys.
September 25, 2012.

ADDITIONAL HIGHLIGHTS FROM PROCEEDINGS

Lurching from one crisis to the next

This workshop comprised representatives from finance and philanthropy to explore how and why a new narrative of finance might emerge in the coming years. In his opening remarks, Allen White emphasized that we face a historical moment when the structure, fragility and moral fiber of finance are under increasing scrutiny. Specifically, the workshop focused on:

* **Flaws:** Exploring deficiencies of contemporary finance in the broader context of global resiliency from an ecological, economic, social standpoint.

* **Solutions:** Beginning to identify corrective actions—through repurposing, redesigning, reframing finance to change the public discourse regarding the fundamental aims of finance.

* **Agency**: Seeding a multi-party initiative to catalyze transformational change.

Major paradigm shifts have occurred in the last half century. The environmental, civil rights, women's, gay rights and corporate accountability movements are examples. All resulted from a convergence of a shared grievance, propitious timing and visionary leadership. The same can happen with finance.

It begins with rethinking the basic purpose of finance. Conventional wisdom describes four such functions:

- Savings and investment
- Resource allocation
- Risk management
- Liquidity provision, payment, settlement and safekeeping

To this we must add, indeed, position as paramount:

- Support the creation of just and sustainable economies

Multiple crises reveal the structural deficiencies and systemic risk posed by the current financial system, for example:

- Collapse of Lehman Brothers triggering viral reaction globally
- LIBOR rate fixing
- Money laundering
- Hyper-leveraging through exotic instruments –in effect, creating money out of thin air
- Excessive global debt
- Growing wealth inequalities

Many explanations feed together create the current crisis:

- Loss of purpose—finance has become the master rather than servant of the global economy
- Unrealistic and unsupportable expectations—Of asset owners for 7+ percent returns in perpetuity
- Regulatory oversight—failure of political will and regulatory capture
- Publicly traded ownership models based on infinite and maximum growth of earnings
- Technology—high speed trading feeding fires of short-termism
- Financialization—blurring risk management and risk bearing – enabling the latter through lax oversight and perverse incentives
- Outsized returns created through phantom wealth—growing portion of profits and GDP going to finance, which has become "extractive" rather than "generative"
- Concentration—creating systemic risks, i.e. five largest US banks represent half the assets of US economy; European bank assets larger than Euro economies, e.g. France 4.3 T Euro, Germany 4.9, Italy 2.5

We need to move from incremental tinkering to deep structural change. All financial organizations are "social enterprises" in that they generate social consequences for human and ecological well-being. True assets—human, social and natural capital-- have productive value in their own right; they cannot be created with a computer key stroke.

A dollar accumulated or extracted by the financial economy can represent a drain on the real economy.   We must definancialize the economy through reimagining finance theory and practice, and repurposing and redesigning financial institutions such that they continuously enrich, rather than deplete, the real economy and the earth upon which it depends.

The workshop agenda illustrates a number of approaches to structural change from three vantage points:

- **macro** –through the lens of global ecological limits and the role of economics and finance in "overshooting" such limits;
- **meso**—the creation and transformation of enterprises aligned with the tenets of generative design;
- **micro**—challenging modern portfolio theory with a new construct for investment management rooted in the principles of sustainable development.

DISCUSSION

Following the three presentations – summarized in the Commentary portion of this report – participants reflected on the various viewpoints and discussants' observations with an eye toward creating a finance initiative aimed at changing the financial narrative in the coming years. What is a vision for repurposing finance and what is a pathway to realizing such repurposing?

Critical questions need to be addressed. The current financial system is moving society to ecological disruption and human suffering. We must rethink what a "fair" return means, as well as the role financial intermediaries in building a resilient future. Impact investing provides a glimpse of a way forward, but must be vastly scaled up in line with the urgency and magnitude of the problem. Part of the solution is creating structures to link capital to small enterprise, and to provide the small investor with access to a range of investment opportunities that currently don't exist.   But such innovations must incorporate measures of success beyond the (unsustainable) focus on maximum financial returns.

Traditional functions of capital markets must be zero-based, e.g. perhaps liquidity be demoted in importance, small enterprises and small investors should be elevated, and high frequency trading—and its corrosive effect on stewardship investing—should be tamed. Challenging such entrenched behaviors and practices should lie at the core of a future initiative aimed at changing the finance narrative to build a just and resilient future.

ATTENDEE NEEDS AND OFFERS

In a final session, participants were asked to submit their ideas on priority needs for advancing the redesigning finance agenda, along with their offers to help meet such needs.   Highlights of these needs and offers follow.

Needs

- Collapse of Lehman Brothers triggering viral reaction globally
- LIBOR rate fixing
- Money laundering
- a compelling new argument/reason/vision for changing purpose of investing
- disincentives and other forms of interventions to mitigate the adverse effects of high frequency trading
- reinvigorate the movement toward a financial transactions tax
- tighten leverage requirements to tame risk taking and the creation of phantom wealth
- create local regional networks for debt creation
- scale up the level and reach of impact investing
- educate investment community about environmental and social consequences and opportunities of various asset classes
- change ERISA language to broaden the definition of fiduciary duty and "best interest of participants"
- support integrated reporting
- allow unaccredited investors to invest in small business and allow access of such businesses to venture capital and private equity markets
- return to Congress the sole right to create money
- support legislation to create local currencies
- attract $30 million to launch a mission-driven stock exchange with listing requirements to include full transparency
- tame inequality and wealth concentration
- strengthen inheritance tax
- break up organizations that are "too big to fail"

Offers

- advocate actions that enable hybrid public/private investments with different levels of liquidity
- mobilize young people to practice responsible investing at an early age
- connect PE, Public Equity, entrepreneurs and NGOs to drive responsible investment
- scale up opportunities to form community investment funds
- reduce pressures/incentives that induce early exit from social investments
- advocate new forms of II through hybrid public/private offerings
- amend Flexible Purpose Corporation law in California to become Flexible Benefit Corporation
- support Integrated reporting (http://www.theiirc.org/)
- support Sustainability Accounting Standards Board (www.sasb.org)
- advance impact investing among non-accredited investors
- structure private markets such that new asset classes can be readily traded

- write, think, dialogue on MPT, growth, investment purpose, ownership
- develop creative coalitions and policy initiatives to drive ESG into institutional investing
- embed ecological risk into bond markets
- create multi-layered portfolios in community loan funds
- accelerate the launch formation of alternative currencies
- educate investors on the social/environmental opportunities across all asset classes
- sharpen disclosure of corporate political contributions

NEXT STEPS

Workshop organizers reiterated the urgency of moving beyond incremental change toward deeper transformation of the financial system. This, in turn, hinges on changing the narrative regarding the purpose of finance, its role in enriching the real economy, and widespread deployment of the kind of concepts—ecological overshoot, generative design, total portfolio activation—in public discourse and professional practice. Toward this end, the organizers will offer concrete suggestions for next steps for consideration by workshop participants and the organizations they represent.

AGENDA

REDESIGNING FINANCE:

PATHWAYS TO A RESILIENT FUTURE
August 9, 2012
AGENDA

Noon Lunch, welcome and introductions

Setting the Stage
Lurching from one crisis to the next: the imperative of structural change

A series of boom and busts,volatility and hyper-leveraging, are symptoms of the fragility of global finance and attest to the imperative of moving beyond incremental to systemic change.
Allen White, *Corporation 20/20*

12:30pm A Systems Perspective
Finance for the Anthropocene: A Holistic Perspective

How compound interest on a finite planet is driving ecological and financial overshoot **--** and what to do about it.
John Fullerton, *The Capital Institute*
Commentator: **Susan Burns,** *Global Footprint Network*

1:15pm An Organizational Architecture Perspective
Owning Our Future: Revolutionizing Ownership for Resilience

How ownership design drives overshoot and can drive a new era of "generative" enterprise.
Marjorie Kelly, *Tellus Institute*
Commentator: **John Katovich,** *Katovich and Kassan Law Group, Presidio Graduate School*

2:00-2:15pm BREAK

2:15pm A Portfolio Perspective
Total Portfolio Activation: Investing beyond Modern Portfolio Theory

How investors can re-allocate capital across asset classes for social and environmental resilience.
Joshua Humphreys, *Tellus Institute*
Commentator: **Leslie Christian,** *Upstream21*

3:00pm Open discussion: vision, strategy and action
4:00pm Adjourn
4:30pm Reception
The San Francisco Foundation
225 Bush Street, Fifth Floor, Koshland Room
(Significant others welcome to the reception)

PARTICIPANTS

Susan Burns	Global Footprint Network
Fritjof Capra	Center for Ecoliteracy
Catherine Chen	RBC Wealth Management
Leslie Christian	Upstream21
Patricia Farrar-Rivas	Veris Wealth Partners
Lindsey Franklin	New Media Ventures
Ellen Friedman	Compton Foundation
Tim Freundlich	ImpactAssets
John Fullerton	Capital Institute
Nick Hodges	Tides
Joshua Humphreys	Tellus Institute
Jenny Kassan	Katovich and Kassan Law Group
John Katovich	Katovich and Kassan Law Group
Marjorie Kelly	Tellus Institute
Will Lana	Trillium Asset Management
Susan Mac Cormac	Morrison & Foerster Attorneys
Alex McIntosh	Ecomundi Ventures
Justin Martello	Effective Assets
Lincoln Pain	Effective Assets
Ali Partovi	Investor
Tom Sargent	New Field Foundation
Ben Thornley	Pacific Community Ventures
Kate White	San Francisco Foundation
AllenWhite	Tellus Institute

BIOS OF PRESENTERS

John Fullerton is a former managing director of JPMorgan and founder of Capital Institute, which has a mission of exploring and effecting economic transformation to a more just, resilient and sustainable way of living through the transformation of finance.

Joshua Humphreys is a fellow at Tellus Institute, an historian of the social problems of capitalism, and a leading advocate of more sustainable and transparent forms of finance. He formerly taught at Harvard, Princeton, NYU, and in the Bard Prison Initiative.

Marjorie Kelly is a fellow at Tellus Institute and author of two books, *The Divine Right of Capital* and *Owning Our Future: The Emerging Ownership Revolution*. She is a leading theorist and consultant on ownership and financial design for the common good.

Allen White is a senior fellow and vice president of Tellus Institute. He is cofounder of the Global Reporting Initiative and director of Corporation 20/20, an initiative focused on designing future corporations to create and sustain social mission.

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