

FINANCIAL OVERSHOOT



FROM STRANDED ASSETS TO A REGENERATIVE ECONOMY



CAPITAL INSTITUTE

THE FUTURE OF FINANCE



ABOUT CAPITAL INSTITUTE:

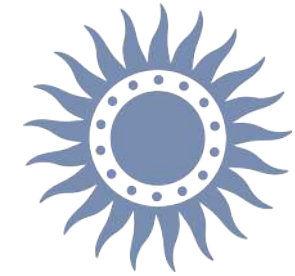
The Capital Institute is a non-partisan, transdisciplinary collaborative launched in 2010 by former JPMorgan Managing Director John Fullerton. Our mission is to explore and effect economic transition to a more just, regenerative, and sustainable way of living on this earth through the transformation of finance.
www.CapitalInstitute.org

ABOUT JOHN FULLERTON:

John Fullerton is the Founder and President of Capital Institute. Through the work of Capital Institute, regular public speaking engagements, and university lectures, he has become a recognized thought leader in the New Economy space generally, and the financial system transformation challenge in particular. John is also a recognized “impact investment” practitioner as the Principal of Level 3 Capital Advisors, LLC. Previously, he was a Managing Director of JPMorgan where he worked for over 18 years.
jfullerton@CapitalInstitute.org



Cover photo: This work is licensed under a Creative Commons Attribution 2.0 Generic License.
Source: www.FranceHouseHunt.com



FINANCIAL OVERSHOOT

From STRANDED ASSETS To A REGENERATIVE ECONOMY

TABLE OF CONTENTS

INTRODUCTION.....	2
THE BIG CHOICE.....	3
FINANCIAL OVERSHOOT	6
BEYOND DIVESTMENT.....	10
HARVARD AND BROWN FAIL MORAL LEADERSHIP EXAM	14

INTRODUCTION

In July of 2011, Carbon Tracker released an important report, “Unburnable Carbon-Are the world’s financial markets carrying a carbon bubble?” The report draws on a critical insight from Potsdam Institute’s prior research that if we intend not to exceed the two degree Celsius warming threshold established by the Intergovernmental Panel on Climate Change and endorsed by the United Nations, then we need to leave in the ground the vast majority of the fossil fuel reserves already discovered, making them in effect “stranded assets.” Carbon Tracker not only communicated this shocking reality effectively, but also connected it to the potential for a carbon bubble in the financial markets. In fact, if we are to summon, as we must, the political will to constrain fossil fuel production, a dangerous asset value bubble is inevitable.

This short pamphlet contains a series of thought pieces from Capital Institute’s syndicated *Future of Finance* blog, representing our contribution to the current discussion of stranded assets and to the movement to divest from them. We hope these offerings will help deepen our understanding of the magnitude and complexity of these issues, and help us begin to envision a pathway forward.

“The Big Choice” discusses the dilemma we face between giving ourselves up, on the one hand, to the ecological destruction that will result from runaway climate change, and on the other, to absorbing a \$20 trillion write-off into the global economy. “Financial Overshoot” goes on to explain that “stranded assets” are but one aspect of our collective overvalued balance sheet if we recognize the increasing resource limitations that will constrain future global economic growth.

“Beyond Divestment” is an essay that was sent with a personal letter to the president of Swarthmore College where the current fossil fuel divestment campaign began. It lays out the philosophical framework for a “breakthrough-thinking hypothesis,” which addresses how to move beyond divestment to an investment approach truly aligned with the college’s Quaker roots and deep commitment to social and ethical concerns. In this piece, we also introduce the transition to “Regenerative Capitalism.” Readers interested in exploring this concept further are invited to visit our “Field Guide to Investing in a Regenerative Economy” at FieldGuide.CapitalInstitute.org.

Our final piece, “Harvard and Brown Fail Moral Leadership Exam,” places climate change as the moral challenge of our time and examines the flawed logic in the decision-making that led each of these institutions to not join the fossil fuel divestment movement.

We hope you find this pamphlet instructive and provocative. One thing we know for sure: the emergence into the regenerative economy is by necessity a co-creative process in which we all have vital contributions to make. What will be your contribution? We’d love to hear from you!

—JOHN FULLERTON
jfullerton@capitalinstitute.org



THE BIG CHOICE 7/19/11

Carbon Tracker has released an illuminating report, “Unburnable Carbon – Are the world’s financial markets carrying a carbon bubble?”^[i]

The report nicely describes the potential “stranded asset risk” to resource company investors, and calls for a regulatory response on disclosure. What the report does not make explicit is the BIG CHOICE: Barring a miracle technology advance in the next decade (keep working brilliant scientists and entrepreneurs), if we want to avoid civilization-transforming and global security threatening climate change, we must absorb a global security threatening \$20 trillion write off (that’s 40 percent of global GDP) into our already stressed global economy. Even if gradually spread over a decade or more, with partial offsetting value creation in sustainable energy industries, this is an unprecedented challenge.

First the essential facts as per the report:

- The Potsdam Institute calculates that in order to reduce the risk of exceeding 2 degrees Celsius warming to a 20 percent chance (not all that comforting), the global carbon budget for 2000 – 2050 cannot exceed 886 GtCO₂. Minus emissions in the first decade of the century, this leaves a budget of 565 GtCO₂ over the next 40 years.
- Total “proved” fossil fuel reserves listed on public company balance sheets and State reported reserves is estimated at 2795 GtCO₂, nearly 5 times the remaining budget, implying 80 percent of these reserves should be left in the ground.

[i] <http://www.carbontracker.org/wp-content/uploads/downloads/2011/07/Unburn...>

A \$20 trillion “externality” appears to present civilization with its BIG CHOICE: economic destruction or ecological destruction, both with chilling global security implications. Here’s why, along with a practical and more hopeful alternative to “Sophie’s Choice.”

- Seventy four percent of these reserves are State owned (Russia, China, Saudi, Venezuela, Iran, Iraq, etc.) or owned by private companies, 26 percent are owned by the 200 largest public energy companies.

According to James Leaton at Carbon Tracker, the market value of the top 100 public oil and gas companies and the top 100 public coal companies listed in the report exceeds \$7 trillion, approximately 12 percent of the global public equity market. Making a simple assumption^[ii] that State-owned companies and reserves have an equivalent market value per unit of carbon would suggest the global market value of proved fossil fuel reserves equals \$27 trillion.

A real cap on carbon emissions designed to limit warming to two degrees implies sovereign states and public corporations will need to strand 80 percent of their \$27 trillion of proved reserves. Rounding down, this implies a potential \$20 trillion write off^[iii].

The risk of systemic collapse of an already fragile, interconnected global economy is high if we incur a write off of this magnitude. Fossil fuel intensive economies and investors would be severely damaged, no doubt triggering a deep and prolonged recession while the losses were absorbed. Some, like Saudi Arabia where energy represents 75 percent of government revenues, and Venezuela

^[ii] This assumption is somewhat flawed because the market capitalization of a resource company should and usually does exceed the present value of its “proved reserves” because as a going concern, it is expected to create incremental value beyond its current reserves. However, my assumption remains conservative because it also ignores all “unproved” reserves whose values are only partially reflected in company valuations, and ignores reserves held by all private companies and public companies not in the top 100 lists. World recoverable reserves certainly exceed by a wide margin, some argue by multiples, the current quantity of “proved reserves” on the books, meaning the total potential for stranded reserves is far greater than indicated here.

^[iii] Yes this analysis ignores the potential of carbon sequestration technologies, but they are probably at least a decade away and uncertain. It also probably overstates the sovereign value of reserves, given the widely held belief that some governments overstate their reserves for political reasons. But it also ignores the value of many refining assets, power plants, shipping, rail, and pipeline infrastructure that will be devalued if we decide to leave fossil fuels in the ground in order to limit carbon pollution. It ignores the value of all private and smaller energy companies. It ignores the value to dependent governments of all associated production and consumption tax receipts associated with fossil fuels which have tremendous economic value. And, it only achieves an 80 percent confidence that we don’t exceed the 2 degrees warming target. Overall, we believe the \$20 trillion estimate of aggregate economic exposure is reasonable.

(50 percent of government revenues) would face economic devastation leading to widespread social unrest.

Not surprisingly, the markets are ignoring this risk today as the Carbon Tracker report makes clear. Why would they do otherwise when, as Bill McKibben pointed out, the US House of Representatives recently defeated a resolution stating simply that “climate change is occurring, is caused largely by human activities, and poses significant risks for public health and welfare”? Why listen to the broad scientific consensus when we can invent a more accommodating (and remarkably partisan) physics? No surprise that this week, American Electric Power announced that it is shelving plans for its \$668-million, full-scale carbon capture plant at Mountaineer in West Virginia, the nation’s most prominent effort to capture carbon dioxide from a coal-burning power plant in the United States, “until economic and policy conditions create a viable path forward.”

Rising fossil fuel stock prices coupled with no game-changing promise of carbon sequestration technologies (the present reality) implies the markets assume we blow past the 2 degree warming limit into catastrophic climate change.

Is there an alternative to the BIG CHOICE between ecological destruction and economic destruction? I think the answer is “yes,” but not with the simple happy talk of “CSR” and “growing the green economy.” A viable plan will entail real costs, unprecedented commitment, and shared sacrifice.

Costs: The seminal “Stern Review”^[iv] on the economics of climate change suggests that for a range of manageable costs centered around a 1 percent reduction of GDP growth, greenhouse gasses can be stabilized at 500 to 550 ppm by 2050. While this modeling exercise is highly complex, it contains at least two fundamental flaws. First, it presumes 500 ppm is consistent with the 2 degree goal, when the scientific consensus, propelled by increasingly disturbing new evidence of climate change, is calling for a limit of only 350 ppm, what Bill McKibben calls “the most important number in the world.”^[v] And second, it appears to ignore the \$20 trillion stranded asset write down and associated economic spillovers by assuming carbon sequestration capabilities will allow us to continue burning fossil fuels largely unabated.

I can only speculate on what portion of the \$20 trillion stranded cost potential will need to be incurred. It will depend on the success of carbon sequestration technologies (unknowable), and their cost (also unknowable). But it will not be cheap. Prudence suggests we should plan to incur at least half of these costs, still a profound multi-decade economic challenge. We must

^[iv] <http://siteresources.worldbank.org/INTINDONESIA/Resources/226271-1170911...>

^[v] <http://www.350.org/about/science>

also determine what combination of caps, taxes, and regulation will best manage the difficult carbon-limiting prioritization decisions among coal, various qualities of oil, and gas, and among the resource bases of sovereign states (with armies) and multinational corporations that we decide to burn, all having profound financial, political, social, and security implications.

Unprecedented commitment: At the core, our challenge and our greatest chance to mitigate the most horrendous consequences of the BIG CHOICE boils down to a capital allocation decision. We must of course invest aggressively in the “green economy” of clean technologies including carbon sequestration, energy efficiency, and alternative energy. Indeed this process has begun as documented by Ethical Market's Green Transition Scoreboard^[vi], which now documents over \$2 trillion of private sector investments in, and commitments to, the “Green Transition.” We must accelerate low technology paths such as avoided deforestation and grassland restoration^[vii] to sequester carbon. But we must also remove subsidies and divest from the destructive fossil-fuel-based energy, transportation, and industrial agriculture systems, and from the destabilizing and counterproductive speculation of the Wall Street financial system. Only if we marshal unprecedented private and public resources to the great energy system transition can we hope to manage the BIG CHOICE.

Shared sacrifice: It's time for true leadership around shared sacrifice. This must start with the richest half billion people, less than 10 percent of the human race, whose consumption and investment decisions will determine the fate of civilization. It's time we awaken to the burden we bear. Seeking justice, our children will ask —What did you do, once you knew?

[vi] <http://www.ethicalmarkets.com/reports/2011GTSFebruaryReport.pdf>
[vii] see www.savoryinstitute.com

FINANCIAL OVERSHOOT 7/23/2012

Last week, I gave a talk to the Missouri Association of Public Employee Retirement Systems annual meeting. This was the first time I presented my developing thesis of financial overshoot, which arithmetically accompanies ecological overshoot unless we manage to decouple economic growth from material resource throughput in the economy, the Hail Mary pass of all time.

The implications are not comforting for investors, especially for pension funds, which have plenty of problems already with underfunded pension plans in a climate of financial repression caused by zero interest rates and economic stagnation.

First, the necessary context. The Global Footprint Network explains that ecological overshoot occurs when humanity's demand on nature exceeds the biosphere's supply or regenerative capacity. Draw-down of natural capital results, the equivalent of an endowment dipping into principal. With ongoing annual deficits and a shrinking residual stock of natural capital, the path to ecological collapse is set unless profound changes occur.

The Global Footprint Network calculates that our ecological footprint is now 1.5 times the earth's natural capacity to regenerate resources and absorb waste. If everyone on the planet used resources like the average American, the global economy would require five planet earths.

The global economy has a profound scale problem, as Herman Daly and many others have been telling us for decades. Scale problems demand limits, not simply getting prices right.

The exponential function embedded in compound interest, the foundation of finance, knows no limits.

Last year, I wrote about what I called the \$20 Trillion “Big Choice,” based on an excellent report titled “Unburnable Carbon” written by the Carbon Tracker Initiative, and using the climate science from the Potsdam Institute. The punch line was that we have 5 times more carbon embedded in the “proved reserves” (an accounting term meaning booked on the balance sheet) of the world's largest fossil fuel companies (24 percent) and State producers (76 percent) than the climate scientists tell us we can burn without exceeding the already dangerous 2 degree Celsius warming threshold, beyond which a climate tipping point is likely to trigger catastrophic consequences. In my essay, I estimated that the eighty percent of this carbon that we therefore needed to leave in the ground was worth at least \$20 trillion based on current market valuations.

Thus civilization is facing our \$20 trillion big choice — our investments or our planet. Recall the direct financial losses of the subprime crisis in the US were a mere \$2.7 trillion, and we know what that did.

Bill McKibben's cover story this week in Rolling Stone, “Global Warming's Terrifying New Math,” is a powerful expansion of this thesis, again built on the Carbon Tracker Report, and naming the fossil fuel industry as the enemy in the war on climate change. Unfortunately, if the fossil fuel industry is the enemy, then the enemy must include the fossil fuel rich sovereign States themselves that account for 76 percent of proved reserves. In describing the piece, McKibben wrote “it may be the most important writing I've done since The End of Nature, way back in 1989,” which made him a leading authority on the looming ecological crisis.

As terrifying as this math is, we must comprehend that the financial ramifications of it, my \$20 trillion “big choice,” is only a piece of a more general problem, one I’m calling “financial overshoot.” Financial overshoot pits our financial resiliency against our ecological resiliency. Like all arms races, there’s no winner here, only hard choices with profound consequences.

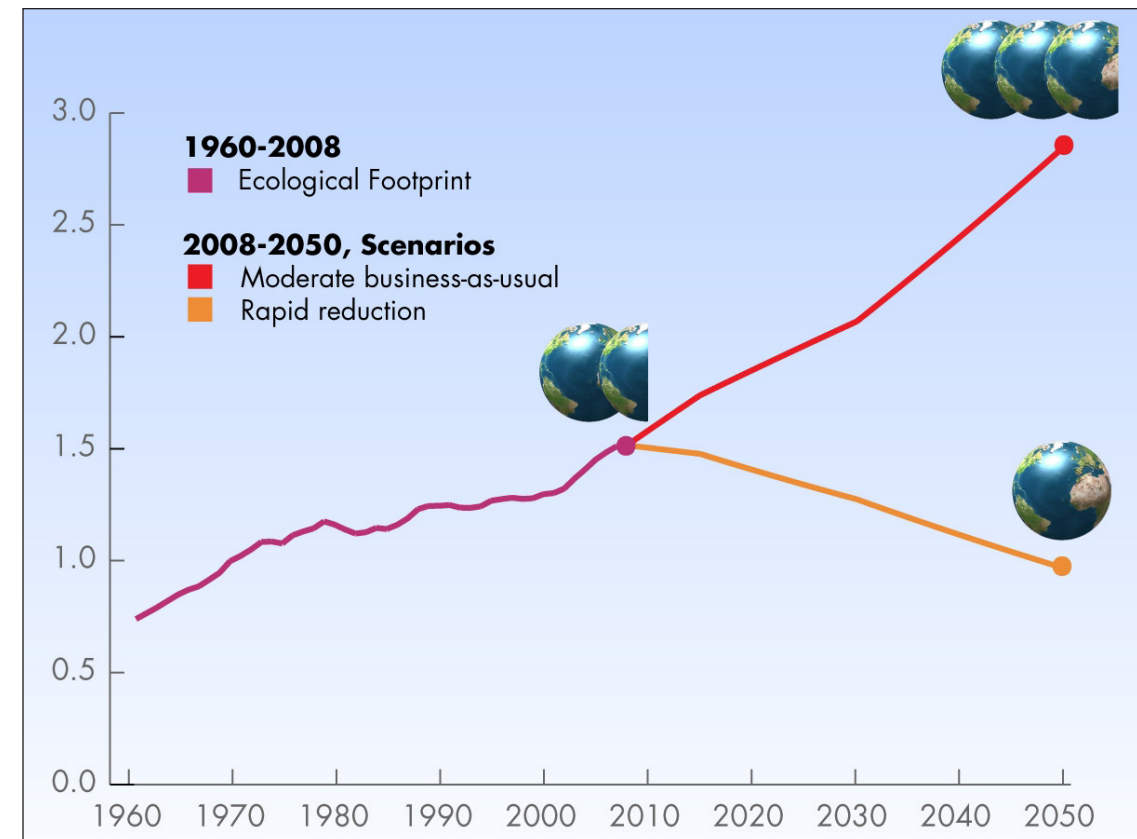
Had we accepted the need to limit CO2 emissions as the scientists have been telling us for decades, and had we mustered the political will to legislate firm emission limits and an allocation mechanism into place, the investment behind these excess fossil fuel reserves would never have been made, since there would be no path to market for them. Instead we’d be much further along in developing renewable energy, and no doubt, we’d also be much more thrifty in our use of energy in everything from transportation to agriculture.

But instead, we overshoot our investment by trillions, and continue to do so today. The housing bubble was just a pilot project in comparison. Exxon alone plans to spend \$37 billion per year on developing additional fossil fuel reserves according to McKibben.

Financial investment overshoot goes hand-in-hand with ecological overshoot and manifests itself in financial assets valued by the market under the assumption that we will proceed head-on into ecological collapse. Given political cowardice and worse, especially in the United States, the markets are unfortunately right in making that assumption at the moment.

But if we fully comprehended the implications of ecological overshoot, we would understand that the perpetual growth of material throughput that goes hand-in-hand with economic growth is also unsustainable unless we engineer the magical decoupling of growth from resource throughput. Energy is a piece of that unsustainable equation but it is by no means the whole of it. The use of water, the destruction of soils, the release of chemicals into the environment, and the loss of biodiversity often from land misuse are also high on the list of unsustainable qualities of the global economic system.

If we choose to reverse the ecological overshoot caused by these realities of our economic system, there will inevitably be an associated massive destruction of financial asset value, mitigated to be sure by value creation from innovative new technologies. As a simple example, Puma, a leader in corporate sustainability, calculated in a comprehensive report that their business costs the earth Euro 145 million in 2010 (mostly from carbon emissions and water use), a year in which they reported net income of Euro 202 million. Bold for them to do the analysis and then to make it transparent. Perhaps more problematic, the debt capacity of companies and nations will need to be reassessed in light of lower growth and shrinking fully costed margins, making the current oppressive debt burden of the developed economies far worse.



Source: Global Footprint Network

How much of the financial asset value of the world’s stock and bond markets, private companies, State enterprises, much less the viability of our fiscal national accounts dependent upon economic growth is predicated on an unsustainable economy in ecological overshoot? I don’t know. But I do know it’s likely that the overvaluation is a multiple of the \$20 trillion in fossil fuel assets we should leave in the ground and therefore make uneconomic. As one data point, Japan’s economy has been in effective zero growth stagnation for over twenty years. The Japanese stock market now sits at less than a third of its valuation at the peak in 1990, admittedly from an inflated level.

Technological optimists will cry foul; we will innovate our way out of this. I say innovation is our only hope to avoid outright catastrophe, so I’m in the technological breakthrough camp. I’m also in the consciousness shift camp. But I’m trying to raise awareness and remain realistic about the box we’ve put ourselves in from decades of inaction. As we wrestle to comprehend what the transition to sustainability really means, we had better factor in the seismic shift in financial asset valuations that will undoubtedly accompany the essential reversal of ecological overshoot.

Maybe there’s a reason we had Madoff and “Ponzi Scheme” thrust in our faces on an unimaginable scale. The financial collapse showed us what happens when complex systems collapse. There’s no central bank for the planet. The choice is ours: our money or our planet.

Two years ago, students at Swarthmore College began a fossil fuel divestment campaign, initially focused on coal. Last November, 350.org, the grassroots activist NGO dedicated to reducing carbon in the atmosphere to 350 parts per million, joined the fight with a nationwide “Do the Math” campus tour. The movement spread to cities, and soon to churches, unions, and beyond.

The champions of divestment know that as an economic strategy it is flawed. Their purpose is to shift the debate into the moral sphere, by drawing parallels to the divestment campaign that ultimately helped bring down the Apartheid regime in South Africa. By raising divestment as a call to action, the students have opened the door to the really important conversation university endowments and all institutions with responsibility over large pools of capital should be wrestling with at this pivotal moment in history. If we seize this opportunity, that conversation will go far beyond a debate over divestment, deeply into the very purpose and responsibilities of these multi-billion dollar endowments.

The “math,” first presented years ago by the Potsdam Institute and now even validated by Fatih Birol, the chief economist of the International Energy Agency, is staggering. If we are to avoid exceeding the 2 degree warming threshold that leading climate scientists privately will tell you they believe is too high, only about one third of the 3,000 gigatons of CO2 contained in the world’s “proved” oil, gas, and coal reserves can be released into the atmosphere. Two thirds of the reserves need to be abandoned, a write off measured in the tens of trillions of dollars. Since these carbon estimates are all based on statistical probability assumptions, to be “highly confident” (like 95 percent+ confident), our only choice, if we are not to trigger catastrophic climate change, is to leave virtually all known fossil fuel reserves in the ground beginning, basically, now. This reality pits the immense short-term economic interests of the fossil fuel industry (and by connection its investors) against the long-term well-being of life on the planet (including the institutions who are the investors).

There is no precedent in the history of human civilization for an economic challenge of this scale, with consequences so profound. Is Swarthmore College, with a strong respect for multi-disciplinary thinking, rooted in Quaker traditions that emphasize “a deep sense of ethical and social concern,” led by a former Yale Divinity School professor, yet addicted to annual endowment revenues like so many elite institutions, up to the challenge to develop the breakthrough thinking that decades of responsible investment debates have so far failed to deliver?

It is easy to make the case for rejecting divestment as a strategy to meet this challenge. Reflecting on the moral dilemma of investment choices, George Soros once said in an interview:

“The financial market is amoral in that respect, because individual investors can’t affect the outcome. And that’s a very happy position to be, because then I don’t have that moral problem...”

There are few institutions better qualified to wrestle with this [divestment] dilemma than Swarthmore College, with its Quaker roots, deep commitment to social and ethical concerns, focus on trans-disciplinary education, a theologian as president, and its \$1.5 billion endowment.

This is a comforting and, on the surface, logical position in which to take refuge. But does it hold up under scrutiny, particularly for an institution that genuinely is committed to its Quaker roots?

Make no mistake. The reality is that the bottom lines of Big Oil and Coal will not be hit if Swarthmore, or for that matter all university endowments combined, sell their fossil fuel stakes in the secondary market. Nor will divestment materially change these companies’ real investment decisions, which are funded largely out of their own cash flow. As for reputational damage, what could be worse than pictures of BP’s Gulf of Mexico disaster, or coal miners suffocating deep underground, yet these organizations continue to operate, reputations tarnished or not. And there is no denying that the annual financial returns of a portfolio restricted from investing in one of the largest sectors of the economy will indeed behave differently than the benchmarks against which endowments have traditionally chosen to measure themselves.

So, it can be argued, a logical assessment of the case for divestment appears to be weak. As Soros said, if investors can’t affect the outcome, then the financial markets (and by implication, investment decisions) are “amoral.” The long history of the “socially responsible investment” movement, which has led to far more talk and signing of pledges than change in investment practice, has had an uphill struggle against this very argument.

Yet, one could argue, there are few institutions better qualified to wrestle with this dilemma than Swarthmore College, with its Quaker roots, deep commitment to social and ethical concerns, focus on trans-disciplinary education, a theologian as president, and its \$1.5 billion endowment. Here’s the holistic “breakthrough-thinking” hypothesis for Swarthmore to advance that will lead, not only to divestment from energy companies that refuse to make the necessary transition to clean sources of power, but also to an entirely new investment philosophy.

First, it is clear that business as usual with regard to our fossil fuel based energy system takes us well past two degrees of warming and represents a clear and immediate threat to the future of

civilization. The science demands (among other things) that we aggressively switch out fossil fuels as an energy source within twenty years, long before we run out of these reserves. Swarthmore Trustees must ask themselves, “What did you do, once you knew?”

Second, logic is not working. We know what we need to do logically to avoid the catastrophic consequences of climate change, but we are way off course. The arctic melted ahead of what the scientists projected, and we know the next IPCC report will be horrific, documenting the non-linear shifts that are spinning rapidly out of control. The status quo is very resilient (in a bad way) for multiple well-understood and “logical” reasons, not the least of which is our short-term profit focus. Abandoning the fossil fuel energy system will entail economic write-offs measured in the tens of trillions of dollars (our “\$20 Trillion Big Choice”), so naturally there is unprecedented resistance. The financial stakes in South Africa’s economy were trivial in comparison.

Third—and here is where the real opportunity for the college lies—a serious, open multi-disciplinary dialogue among the Swarthmore community (leadership, faculty, students, board) questioning the validity of the assumption that investment decisions are “amoral” and have “no impact on the outcome” will draw a conclusion quite contrary to what the conventional logic outlined above would suggest.

Let’s imagine how that dialogue might unfold: The humanities professor will kick off the discussion by questioning Soros’ presumption and instead will draw on Henry David Thoreau’s morality that teaches, “our whole life is startlingly moral. There is never an instant’s truce between virtue and vice.” The physics major will assert that quantum physics tells us that everything is literally connected to everything, so to suggest that individual investment decisions have no larger impacts is a dubious assumption, in conflict with the insights of modern physics. This will then trigger Swarthmore’s theologian president to reflect that the one common thread underpinning all leading religions and spiritual practices the world over is the idea of “oneness” - everything is connected - startlingly consistent with the insights of quantum physics. The biology professor, armed with the latest understanding of life’s principles, will nod in approval.

The entire trans-disciplinary group will marvel at how all signs point to an irreconcilable conflict between the reductionist logic of the endowment’s current investment practices, and what the humanities, science, and religion professors are teaching in the classrooms. The Chair of the Investment Committee’s protests about the “risk” of altering the investment strategy away from the conventional approach will ring hollow when the group discovers that “risk” in his mental frame relates only to the backward looking volatility of monthly returns in a portfolio of securities, an abstraction entirely divorced from the very real forward looking risk of climate change threatening unimaginable disruption of civilization itself in the lifetimes of the students in the room.

The ecology professor will then suggest we are at an evolutionary moment when there is no physical choice between system collapse or its emergence into a higher level of complexity, like a caterpillar turning into a butterfly. The systems scientist in the room calls this emergence a phase transition. This unprecedented trans-disciplinary dialogue leads the collective thinking to conclude that in fact Swarthmore, including its \$1.5 billion endowment which is an inseparable part of the whole, have an important role to play, a higher purpose than imagined when the deliberations began. That purpose is to participate in and help direct this phase transition through the investment practices of the endowment. The group will come to understand that consistent with the insights of both modern science and the great wisdom traditions, this investment practice is holistically connected to, and inseparable from, the educational, social, and moral mission of the college.

Suddenly the Trustees will see that an investment philosophy aimed at “optimizing risk-adjusted financial returns” on an annual basis using failed modern portfolio theory, independent of any reference to the context of the great ecological crisis facing mankind, is not only irresponsible and yet immoral, but also in conflict with our best understanding of how the universe actually works, as taught in the classrooms of the college.

Armed with this conclusion, President Chopp and her new “unconventional” financial advisors will lead the Trustees to craft a bold new investment philosophy for the endowment. It will be grounded in a holistic decision-making process that seeks to harmonize (not trade off) financial, social, and ecological objectives, consistent with the mission of the college. It will dismiss a strategy of mere “divestment” from passive fossil fuel holdings as an inadequate stewardship of resources and an abdication of fiduciary responsibility. The new policy will solicit proposals for investment managers that invest prudently and directly in the energy transition, through direct infrastructure and efficiency projects, many right in the college’s home state of Pennsylvania, and directly in enterprises that will flourish in the shift to regenerative capitalism underway. A fresh approach to asset allocation will include a planned phase out of exposure to the fossil fuel energy system – yes, divestment - beginning with coal and tar sands oil, and will be seen as prudent and genuine real world risk management against the looming stranded asset risk that both HSBC and S&P have recently addressed.

Swarthmore’s approach will become the standard against which other universities benchmark their own investment philosophy and strategies. Capital will flow into the real investments of the economy of the future, helping to bring about that future in the process, and out of meaningless stock speculation in secondary shares. Indeed it’s already happening, to the tune of \$4 trillion dollars of real investment in the past five years according to the Ethical Markets Green Transition Scoreboard.

The student activists will cheer. The faculty will feel empowered, their collective knowledge valued like never before. The Trustees will worry, which is their job. The future will have been affected since everything is literally connected to everything. The Academic Dean will revamp the economics curriculum. Emergence will be set in motion.

HARVARD AND BROWN FAIL MORAL LEADERSHIP EXAM 11/19/13

At a time when institutions of business and government continue to fail society, two of our leading academic institutions missed the opportunity to provide essential moral leadership on the most pressing challenge ever faced in the history of human civilization.

Harvard President Drew Faust issued her October statement first: She and her colleagues on the Board do not believe "that university divestment from the fossil fuel industry is warranted or wise."

Brown President Christina Paxson followed three weeks later with her own statement: "Our consideration of divestment [from coal] is over."

Both statements, read in their entirety, explain the careful and thorough deliberations that took place within their respective academic communities. That these institutions can both fail to see the stark moral implications of their decision after such extensive deliberation only reinforces the severity of the crisis facing civilization.

Divestment is no panacea and as a stand-alone strategy, not likely to be effective in changing the investment decisions and business models of the world's energy industry. But until we properly define climate change as the greatest moral challenge of all time, affecting not just our fellow man, but all of mankind now and forever, and all of life as we know it on planet Earth, which is our gift, we will not take the bold steps we need to take.

THE STAKES

Before looking at the rationales of these decisions, let us remind ourselves of the unprecedented challenge before us. Thanks to a paper released in 2009 by the highly respected Potsdam Institute for Climate Impact Research, we have known for four years a staggering truth: if we are to avoid blowing through the 2 degree warming threshold and ushering in likely catastrophic climate change, we must leave the majority of the fossil fuels already discovered and on the books, beginning with coal, in the ground. The Carbon Tracker Initiative brought this issue into common focus two years ago. At that time, we described a \$20 trillion "Big Choice" facing society, anticipating OECD Secretary General Angel Gurría's recent statement: "The looming choice may be either stranding those assets or stranding the planet."

Beyond the shrinking lunatic fringe of climate change deniers, there is no apparent debate regarding this stark choice, only a judgment call around what is an acceptable degree of certainty we should shoot for in our quest not to destroy the planet for life as we know it. On this question, the scientific community is far too timid given all the non-linear risks they understand but shy away from talking forcefully about, on the pretext that such risks are by definition "uncertain." The financial crisis made us aware of the growing prevalence of Black Swan events and their consequences in complex systems. The global climate system is a complex system that makes finance appear simple in comparison. It's time to connect the dots.

HARVARD'S FALSE CHOICE

With this as context, let us turn to the failures of moral leadership at Harvard and Brown. Harvard's decision rests on two arguments. First, Harvard is an academic institution and its endowment is held in trust to advance its academic mission. No argument. But then the rationale against divestment heads down its slippery slope by asserting a false choice between "the University as a political actor rather than an academic institution."

The toxic political climate in the United States has successfully defined climate change as a "political issue" pitting "business-friendly conservatives" against "wimpy green liberals" and both sides trapped in their worship at the altar of economic growth (no matter the costs). It is certainly conceivable that such lazy and reckless thinking has infected Harvard's own Corporation Board.

Let us be clear: climate change is a moral issue, not a political issue. Would the President of Harvard assert that the choice of the most prestigious University in the world is between being an academic institution or a moral actor (rather than a "political actor")?

After asserting its false choice between academics and politics, Harvard then reveals the crux of the matter. Divestment will come “at a substantial economic cost.” It is reasonable to debate both the costs of divestment and the risks of not divesting (stranded asset risk), but that is not the point. Any hard moral choice by definition comes with very real costs. That is why it is so vital for us all as individuals, and certainly for our leading academic institutions, to be clear on issues of morality.

BROWN’S DEADLY RATIONALIZATION

Brown University’s decision was focused simply on divesting from both mining and electricity generation from coal. The students who organized Brown Divest Coal apparently were trying to make it easier for the Board, since divesting from Coal and Tar Sands oil production are the relative “no brainers” from both a moral and an economic risk perspective.

One can feel Brown President Christina Paxson’s struggle to explain her board’s decision (which she tells us she “agrees with,” although I have my doubts) as she delicately walks the reader through Brown’s “guidelines for incorporating ethical and moral issues into investing.” Those guidelines have supported previous divestiture decisions such as Brown’s 2003 decision to divest from tobacco companies.

Unlike Harvard, Brown recognizes climate change as a moral issue, and Brown has “guidelines” for incorporating ethical and moral issues into investment decision-making. Brown is at least a decade ahead of Harvard it would appear in that regard; as part of their non-divestment decision the latter announced the hiring of their “first-ever vice president for sustainable investing.”

Brown’s failure lies not in recognizing climate change as a moral issue, but in how they consider whether the social harm caused by burning coal is “sufficiently grave” to warrant divestment. Tobacco passed that test because there were no offsetting benefits that tobacco enables. In considering coal divestment, Paxson writes, “Although the social harm is clear, this harm is moderated by the fact that coal is currently necessary for the functioning of the global economy.”

Let’s substitute “slavery” for “coal” in that statement and see how it reads.

As I have written in “Beyond Divestment” and elsewhere, divestment is no panacea and as a stand-alone strategy, not likely to be effective in changing the investment decisions and business models of the world’s energy industry. But until we properly define climate change as the greatest moral challenge of all time, affecting not just our fellow man, but all of mankind now and forever, and all of life as we know it on planet Earth, which is our gift, we will not take the bold steps we need to take, now.

Consider the ongoing costs of what was our failed moral leadership for far too long on the “energy system” of slavery. Now, on the 150th anniversary of the Gettysburg Address, let us be inspired by the courage of Abraham Lincoln’s leadership. He endured great costs personally and on behalf of the nation he led for a moral clarity devoid of convenient or self-serving rationalizations in the face of entrenched and wrong ideology.

Now consider just this month’s climate injustice of Typhoon Haiyan with a 20-foot storm surge, nearly twice as high as what Hurricane Sandy delivered to the New York metropolitan area at this time last year. Naderev Sano, the Philippines delegate to the U.N. Climate talks in Warsaw this week, in a desperate search for moral leadership, announced he would fast “until we stop this madness.”

“Those who have the privilege to know, have the duty to act.” – Albert Einstein

Harvard and Brown have let us down.



Photo taken on the Middlebury College campus, where officials opted not to divest from fossil fuels this fall.

Source: Middlebury College

*“Those who have the
privilege to know,
have the duty to act.”
– Albert Einstein*