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The Global Marketplace and the Common Good: Sustainable Values in the Age of the Internet, Globalization, and Economic and Environmental Crises

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In this piece I hope to connect two themes that I have written about separately. One of the themes is globalization and the "flat world." The other theme is about values and ethics in international affairs, and particularly in commerce. The first theme is about the "flat world,"—What do I mean by that? What is the world we are living in right now? We need to start there because we cannot really make sense of the second theme, the issue of values and ethics in this world, unless we understand what kind of platform that we are operating on.

I. THE WORLD IS FLAT: THE MEANING OF AND CONTRIBUTING FACTORS TO INCREASED GLOBAL CONNECTIVITY

First, let me explain what exactly I mean by the "flat world." The first thing I have to explain is that I made this discovery—that the world is flat—completely by accident. I wish I could tell you it was all in my head and it all came out, but, in reality, it was a complete accident.

I became the New York Times foreign affairs columnist in January 1995. Between January 1995 and September 11, 2001, my column focused heavily on globalization. That was my interest. After 9/11, however, I spent three years totally focused on trying to understand the roots of 9/11. I started doing docu-

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mentaries for the Discovery Channel. We did one documentary on the roots of 9/11 and we did another on the wall Israel had built in the West Bank. In February 2004 we were trying to brainstorm our next documentary idea. At the time, the issue of why everybody hates America was a hot issue; so I thought we should do a documentary on why everybody hates America. To do it, I had this crazy idea that we should go to call centers all over the world and interview young foreigners who spend their days imitating Americans on what they thought of America. I thought that would make a very interesting double-mirror; you know, John by day, Juan by night. We were literally planning the budget for that documentary when John Kerry blasted against “Benedict Arnold CEOs” who engage in “outsourcing,” and suddenly the issue of outsourcing exploded onto the world stage. So I proposed to Discovery Channel that we just go to Bangalore, India, the capital of outsourcing, and do a documentary on the other side of outsourcing and try to explain this phenomenon to Americans.

So, we set off on February 1, 2004 to Bangalore, India, the capital of outsourcing, where we shot about sixty hours of film over a course of ten or eleven days. Across those ten or eleven days, I got progressively sicker and sicker. And it wasn’t the food. It was somewhere between the Indian entrepreneur who said to me, “You know, Mr. Friedman, I can read your x-rays from right here in Bangalore”; and the Indian entrepreneur who wanted to write my new software from Bangalore; and the Indian entrepreneur who wanted to trace my lost luggage on Delta Airlines from Bangalore, that I realized that while I had been off covering the 9/11 wars, something really big had happened in that globalization story and I had completely missed it. I kept asking, “What is the platform that is enabling all of this?” So our last interview was with Nandan Nilekani, who was at that time the CEO of Infosys, India’s equivalent of Microsoft. He had been away during the filming and he came back on our last day and was our last interview. While the film crew was setting up inside his office, he and I were sitting on the couch outside his office, I had my laptop open, and at one point Nandan said to me, “You know, Tom, the global economic playing field is being leveled, and you Americans are not ready.” I wrote that down in my little laptop.


After the interview, my mind was exploding. I got back in my Jeep and had about an hour ride back to my hotel and I just kept rolling over in my head what Nandan had just said about the global economic playing field being leveled. And then I thought what he was really saying was that the global economic playing field was being flattened. And in the crazy chemical way these things happen, it burst into my head that what Nandan Nilekani—India’s premiere engineer entrepreneur—was telling me was that the world is flat. And I wrote that down in my notebook: The World Is Flat.

I got back to my hotel, ran up to my room, called my wife and said, “Honey, I am going to write a book called ‘The World Is Flat.”’ She now says she thought that was a brilliant idea, but that’s not exactly how I recall the conversation. I came home and told my bosses at the New York Times that I needed to go on leave immediately because my software, the framework in which I look at the world, is out-of-date; I’m a Basic engineer and it’s a Java world. They granted my leave of absence beginning in June and I completed the book in December.

The core thesis of The World Is Flat is very relevant to our discussion of ethics and morals. The core thesis is that there have been three great eras of globalization. The first era I call Globalization 1.0. It shrunk the world from a size large to a size medium and lasted from 1492 to the early 1800s, the beginning of global arbitrage. That era of globalization was built around countries. You went global through your country: for example, Spain exploring the New World; Britain exploring India; France and Portugal exploring Africa and East Asia. The agent of globalization was the nation-state.

Globalization 2.0 lasted from the early 1800s until the year 2000. It shrunk the world from a size medium to a size small. That era of globalization was built around companies. Companies were searching for markets and for labor, and individuals went global through their company; the company was the dynamic agent of globalization.

Well, while we were focused on the 9/11 wars, we entered Globalization 3.0, which began in 2000 and continues to the present. It is shrinking the world from a size small to a size tiny and also flattening the global economic playing field at the same time. Only, what’s really new, really exciting, and really terrifying is that this era of globalization is not built around countries—

3. See id. at 9.
4. See id. at 9–10.
5. See id. at 11.
though they are still important. And it's not built around companies—although they are still important as well. What's really new and different about this era of globalization is that it is built around individuals. For the first time in history, individuals can now compete, connect, and collaborate globally as individuals. That's what's new.

A. How did we get here?

I go through ten “flatteners” in my book, but I am just going to discuss the three key flatteners here. The first was the personal computer (“PC”). What the PC did was allow individuals, for the first time, to author their own content in digital form. Let me disaggregate that last statement because it is really important. Individuals have been authoring their own content ever since cavemen and cavewomen etched on cave walls. But with the PC, suddenly individuals could author their own content—words, data, photos, spreadsheets, and videos—in digital form, in the form of bits and bytes. Once content was in digital form, it could be manipulated in so many more ways and sent to so many more places.

The second flattener—a date—soon followed. I think this date, August 9, 1995, is the most important date in modern history. On that day, a small start-up company in Mountain View, California called Netscape went public and the world has never been, and never will be, the same. That is because Netscape’s invention was a device called the browser. The browser, as we now know, allows people to illustrate on a computer terminal everything that was locked away in Internet files that were previously the exclusive domain of computer scientists. The browser is what brought the Internet to life and made it a tool of connectivity that could be used with equal facility by grandma and grandpa, grandson and granddaughter. But Netscape also did something else: on the morning of August 9, 1995, Netscape went public and that triggered the dot.com boom. And that triggered the dot.com bubble. And that triggered the crazy, absurd, utterly ridiculous over-investment of $1 trillion into fiber-optic cable. In the span of five years, the world was wired with so much fiber-optic cable that Shanghai, China and South Bend, Indiana accidentally became next-door neighbors. Remember all those people on their laptop computers authoring their digital con-

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6. Id. at 51-199.
7. Id. at 55-58.
8. See id. at 60.
tent? Suddenly, thanks to all of that fiber-optic cable, they could send their digital content anywhere in the world virtually for free.

This happened because Netscape's investment banker, Morgan Stanley, wanted the stock to be priced at $32 per share. James Barksdale, Netscape's CEO refused, however, saying that if the stock failed, he wanted Netscape to be remembered as a $20 stock.9 Netscape opened on the morning of August 9, 1995 at $71.50.10 It closed that day at $56.00 per share11 and we all saw "gold over them there hills." So we went out and bought every dot.com stock. When we did, we accidentally funded the massive wiring of the world with fiber-optic cable in the span of five years.

That, then, laid the foundation for the third flattener.12 The third flattener was a very quiet revolution. You didn't see it—you had to be a computer geek to appreciate it—but it was a revolution in transmission protocols: the alphabet soup of "html," "http," and "xml." No one needs to know what any of those things mean. All anyone needs to know is this: in five years, what all those transmission protocols did was make everyone's computer and software interoperable. No matter where you were living, no matter what software you were running, no matter what computer you were on, you could talk to someone through the Internet on their computer with their software.

When you put all three of these flatteners together, what you had was the crude makings of the flat world. We created a platform by the early 2000s where, suddenly, more people, in more places, could compete, connect, and collaborate with more other people for less money than ever before. When I say the "world is flat," that is what I mean. We created a platform for multiple forms of collaboration. And when we did, we fundamentally changed the world. We moved from a world where value would be created in vertical silos governed by command and control, to a world where value would be created horizontally based on whom you connect and collaborate with. That shift from vertical value creation via command and control to horizontal value creation via connect and collaborate is the mother of all inflection points. It is the biggest inflection point, I would argue, since Gutenberg invented the printing press. It is changing everything.

9. See id. at 69.
10. Id. at 70.
11. Id.
12. Id. at 77–92.
II. Ethics and Sustainability in a Flat World

The first thing that the flat world is changing is how we think about ethics. So let me start this section by recounting a story. Five years ago, I was at Logan Airport in Boston and I went to buy a magazine. As I walked to the register, a woman came up from behind me as I put my magazines down on the register. Honestly, I thought I got there first. But she said, “Excuse me, I was here first!” And she looked at me with a look indicating, “I know who you are.” Today, if that happened, I would say, “Ma’am, can I buy your lunch? Can I shine your shoes? Just don’t blog about me or put me up on YouTube or tweet about this incident. I swear, I thought I got here first.” What is that about? When the world became flat, anyone who had a blog post was a journalist with a newspaper, anyone who had a cell phone camera was part of the paparazzi, and anyone who had a flip camera and access to YouTube was a filmmaker. Well, when everyone is paparazzi, a journalist, and a filmmaker, everybody else becomes a public figure. When that happens, ethics suddenly go nuclear.

Why is that? Well, I recommend a book from one of my teachers, Dov Seidman, based on the world is flat platform. The book is called How. Seidman’s argument is that when the world is this flat, and so many people can look into your life, into your business, into your school, into your performance, into your teaching, and then go out on their blog or on YouTube and tell the whole world about it without an editor, without a filter, and without a libel lawyer, how you live your life suddenly takes on a whole new importance. We are in the age of behavior; that is what the flat world does. If a company had a public relations problem twenty years ago, it would hire some top-notch PR firm to take care of it. Today, you can’t have somebody clean up the problem for you anymore. And we are all leaving digital footprints everywhere we go. In the old days, you could move to another town. Now, your reputation on Google precedes you and it is there forever. So, remember what Mark Twain said: “Always tell the truth . . . that way you’ll never have to remember what you said.” You can’t run or hide anymore. Privacy is over. Therefore, how you live your life, how you conduct your class, how you conduct your business, how you say you are sorry or don’t say you are sorry matters more than ever before.

14. See id. at ix–xiii.
15. The World Is Flat, supra note 2, at 530 (quoting Mark Twain).
A. Parallels Between the Financial Crisis and the Environmental Crisis

The first thing, then, is we have to get our “hows” right. As I look back upon the events of 2007 and 2008, a lot of people just look at it as a financial crisis. I don’t. I think that we have just been through a massive “how” crisis. I think that the story of the last three years was a massive American breakdown in how we did our business and how we interacted with Mother Nature. When historians look back upon this period that we have just been through, they are not just going to say that this was a financial crisis. Rather, they are going to say that this was a moment that both the market and Mother Nature, through the climate system, hit a wall. They are going to say that this was the moment when the market and Mother Nature said, “This is your warning heart attack. You are growing in an unsustainable way. Turn back now.”

How were we growing? In simple terms, we were building more and more houses and more and more stores, to sell more and more stuff, to be made in more and more Chinese factories powered by more and more coal, so that China would earn more and more dollars, so that it could buy more and more T-bills to re-circulate them back to America so that we could build more and more houses and more and more stores . . . . That is the cycle that we were in. The market and Mother Nature said, in 2007, that that loop was unsustainable and failure to change course would result in a crash. This is a financial crisis and an environmental crisis. That is why Citibank, the ice banks of Iceland, and the ice banks of Antarctica all melted at the same time. That is why it is not an accident that Bear Stearns and the polar bear both faced extinction at the same time. They both got their “hows” wrong.

How so? Basically, we were doing the same faulty, unethical accounting both in the market and in Mother Nature. In the market, we were allowing people to massively under-price risk, to privatize the gains, and to socialize the losses. We allowed people who sold sub-prime mortgages and credit-default swaps to massively under-price the risk involved in those instruments. We allowed the investment banks and brokers who did that to privatize the gain and homeowners got cheap mortgages in return. And when all of that blew up, we socialized the losses on the backs of every American taxpayer.

We have been doing the exact same accounting in nature. We have been massively under-pricing the risk of emitting carbon molecules. We are allowing the people who do that—cheap
coal and cheap gas—to privatize the gains. And we are socializing the losses in the form of carbon molecules in the atmosphere that we are charging on our children's Visa cards that they will pay for in the future in the form of disruptive climate change. In both the market and Mother Nature, we have been practicing the same dishonest accounting. That is why it is not an accident that Citibank, Iceland's banks, and the ice banks of Antarctica all melted at the same time.

Underlying these accounting principles were two "values," if you can call them that. The values of "IBG" and "YBG"—"I'll be gone" or "You'll be gone." If I sell you a sub-prime mortgage for an $800,000 house even though you only make $15,000 per year, no problem, "I'll be gone." If I bundle your mortgage with a thousand others into a bond that I sell in Düsseldorf, no problem, I'll be gone. When they told you when you got the mortgage that there was no down payment and nothing to pay for two years and now the two years are over and you can't pay for it, no problem, just walk away—you'll be gone. Those were the "principles" and the ethics that we were living by. Underlying that mindset is the real ethical crisis. We were moving from sustainable values to situational values.

B. Sustainable Values Versus Situational Values

The Greatest Generation of this country built us a world of incredible abundance and freedom because on more days and in more ways they lived by sustainable values. They had sustained relationships between bankers and clients, shopkeepers and customers, and between two neighbors over the fence. They valued honesty, transparency, integrity, decency, and long-term thinking. My generation, even though we did a lot of good things like the civil rights and women's rights movements, we turned out to be the grasshopper generation; we ate through all of that abundance like hungry locusts. Now, we—and our kids—need to be the "re-generation." The way we become the re-generation is by bringing back sustainable values, not situational values.

Situational values allow us to do whatever the situation allows. If the situation allows me to sell someone who makes $15,000 per year an $800,000 home for no down payment and no payments for two years, and my only criterion for approving the mortgage is whether they can "fog up a knife," no problem, I do it. Sustainable values, however, would tell me I shouldn't. If, situationally, I can plow up a thousand acres of the Amazon and plant soybeans there to sell to China, then I'll do it. But, sustainable values would tell me I never should.
I would argue that in this flat world, getting away from situational values and back to sustainable values is going to be the single most important ethical challenge and achievement of the re-generation, of the people coming of age right now. If we don’t do this, we are really in trouble because in the flat world, these two giant forces—the market and Mother Nature—will have effects that are further and wider felt than anything experienced before. Remember one thing about the market and Mother Nature: in a world without walls they are the two most autistic forces—in the sense that these forces feel no human emotion whatsoever—on the planet.

My friend, Rob Watson, the developer of LEEDS\(^\text{16}\) rating system for buildings, likes to say that Mother Nature is “just chemistry, biology, and physics”\(^\text{17}\); you can’t sweet-talk her, you can’t talk her up, you can’t say, “Mother Nature, the stock market is off this year, could you give us a break?” Mother Nature is just going to do whatever chemistry, biology, and physics dictate. And Mother Nature always bats last, and she always bats a thousand. Do not mess with Mother Nature.

Father Greed—the market—follows a similar dynamic. The market is just the ever-changing balance between greed and fear at any given millisecond around a stock, a bond, a piece of real estate, or a commodity. The market is going to do whatever the balance of greed and fear dictate at that moment. You can’t spin it and you can’t sweet-talk it. There is only one way that you can affect and moderate the market and Mother Nature, and that is through sustainable values. If we, the re-generation, fail to bring sustainable values to the market and Mother Nature, we are going to be more un-free than had the Soviet Union won the Cold War because of the constraints that the market and Mother Nature will impose upon us. What freedom was to our parents’ generation, sustainable values need to be for the re-generation.

C. Where Do God and Values Fit Into All of This?

So, we come again back to the question of values: where do they come from? My first book on globalization was *The Lexus and the Olive Tree*.\(^\text{18}\) I got that name because, in 1998, I had visited the Toyota-Lexus factory in Toyota City, Japan and I was

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blown away. I watched them build cars almost entirely with robots. Afterwards, I got on the bullet train to go back to Tokyo and read in the Herald Tribune about some dispute in the UN between Israelis and Palestinians. And it occurred to me, the Japanese—whose train I was riding on and whose factory I had visited—are building the greatest luxury vehicle with sophisticated robots, and Israelis and Palestinians are still fighting over who owns which olive tree. Isn’t that the twenty-first century? Half of us are struggling to build a better Lexus—to modernize, to globalize, to integrate—and the other half of us, are still struggling with the identity issues of ethnicity, religion, place, family, and tribe. So much of the world, today, is really about the struggle between those two forces.

After *The Lexus and the Olive Tree* came out, a friend asked me to send a bunch of copies. I was signing the books and putting them in a box in my living room when the deliveryman arrived. He was a heavy-set, middle-aged guy, and I invited him into the kitchen to wait while I was signing. Sitting at my kitchen table, he picked up a copy of *The Lexus and the Olive Tree*, and he started to leaf through it. After a few minutes, he put the book down and said to me, “So, the Lexus, that represents technology and computers, right?” I said, “That’s right, you got it.” He replied, “And the olive tree, that represents community and family, right?” To which I responded, “You got it!” Finally, the deliveryman asked, “Well, tell me something, where does God fit into all of this? I’ve been in the presence of our Lord, Jesus Christ. Where does he fit in?” I had to laugh at that question only because I have been asked that question so many times while speaking to groups about that book. Indeed, some of the most oft-asked questions I received were some variation of “is God in cyberspace?” So, I started thinking about it and I actually consulted my teachers, my rabbis.

The question of whether God is in cyber-space—or not—really depends, I concluded, on one’s view of God. If you think God makes His presence felt through Divine Intervention in the world, then you would have to believe that God is not present in cyberspace because it is hard to look at cyberspace and say that it is being shaped by the hand of God, given the fact that the most popular websites are pornography, gambling, and pop music. My own view of God, and this is how I wrestled with this question, grows out of my own Jewish faith. I share the post-Biblical view of God. In the Biblical view of God, He is always intervening; He is responsible for our actions. In the Biblical view, He punishes the bad and rewards the good. The post-Biblical view of God, however, is that we make God present by our own actions, choices,
and decisions. In the post-Biblical view of God, in the Jewish tradition, God is always hidden, whether in cyberspace or in the neighborhood mall. And to have God in the room with you, whether it is a real room or a chat room, you have to bring Him there yourself by your own behavior—by the moral or immoral mouse-clicks you make. My rabbi pointed out to me that there is a verse in Isaiah that says, “You are my witnesses, . . . I am God.”

According to my rabbi, second century rabbinic commentators interpreted that verse to be saying, “If you are my witnesses, I am God and if you are not my witness, I am not God.” In other words, explained my rabbi, unless we bear witness to God’s presence by our own good deeds, He is not present. Unless we were to behave as though He is running things, He is not running things. In the post-Biblical world we understand that from the first day of the world, God trusted man to make choices when He entrusted Adam to make the right decision about which fruit to eat in the Garden of Eden. We are responsible for making God’s presence manifest by what we do. And the reason that this issue is most acute in a flat world in cyberspace is because no one else is in charge there. There is no place in today’s world where you encounter the God-given freedom to choose more than in cyberspace.

So, what I should have told that deliveryman was that God is not in cyberspace, but He wants to be there and only we can bring Him there by how we act. God celebrates such a universe of human freedom because He knows that the only way He is truly manifest in the world is not if He intervenes, but if we all choose sanctity and morality in an environment like cyberspace where we are free to choose anything. As my rabbi put it to me, in the post-Biblical Jewish view of the world, you cannot be moral unless you are totally free, because if you are not free you are not really empowered, and if you are not empowered, the choices you make are not entirely your own. What God says about cyberspace is that you are really free there, and I hope that you make the right choices because if you do, then I will be present.

D. Going Forward: In the Micro

That is where I think the values conversation starts. One of the things that parents often ask me is how to prepare their kids for this world. They will ask, “Should he take computer science? Should she study calculus? Maybe engineering?” All of those are important, but I believe strongly in the idea that the more wired
the world gets, the more technologically integrated we become, the more, I believe, old-fashioned values become important.

How many times have we heard people say, "But I read it on the Internet"? Whenever I hear people say that I want to tell them that the Internet is an open sewer of untreated, unfiltered information. Yet, this open sewer is now at the center of our lives and our kids' lives. That is how our kids are interacting, communicating, and collaborating. So, if we don't build the internal ethical filter into our students, young people, adults, and citizens, when they interact with this open sewer, bad things are going to happen because you are not always going to be over your kids shoulder every time she is on Facebook. You are not going to be over your son's shoulder every time he is surfing the web. So, if we don't build the internal filters in, as we go to this flat world where all these people are interacting situationally, bad things are going to happen. And they do; we saw that at Rutgers in September of 2010, when people take a modern technology and use it for the most destructive kind of bullying, that it drives someone to commit suicide. So, pardon me if I am old-fashioned about this. I think all of the old stuff—all of the stuff that you cannot download—matters more than ever: reading, writing, arithmetic; church, synagogue, temple, mosque; parenting, teaching. All of the stuff that happens under the olive tree, that happens one-on-one, between you and your religious leader, between you and your parent, between you and your peer group, matters more than ever the more the world becomes wired.

Back in the days when I wrote *The Lexus and the Olive Tree*, when we still had things called modems, I wrote that if I had one fervent wish it would be that every modem sold in America would come with a warning from the surgeon general. The warning would simply say, "Judgment Not Included." You cannot download that; you have to upload it the old-fashioned way. Don't buy into all of the whiz-bang stuff; all of the old-stuff, which will give us those ethical filters, matter more today, not less.

Cheating is one example of the situational ethics in action in our flat world. Somewhere in the last twenty years, everything got short. Quarterly earnings statements became increasingly important. We went through a spate where people lost their jobs due to posts on Twitter. Apparently, 140 characters is just enough to get yourself into trouble, but not enough to make a point. Everything is short. Expectations are short. There is a

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whole set of technologies and economic events that have conspired to shorten everything. And when everything gets shortened, people look for short cuts. They look for short cuts in business and they look for shortcuts in academia. My motto has always been that the long way is actually the shortest way because ultimately when you build a solid foundation you have a base upon which to perform and excel. I sometimes think back to what Charles Prince, the former head of Citibank, said, “When everyone is dancing you have to get up and dance,” even though he knew he was selling products everybody knew would blow up. But everybody was dancing, everybody was looking for his quarterly returns, and so he had to dance. We have to move from a notion of “too big to fail” to “too sustainable to fail.”

E. Going Forward: In the Macro

My book, Hot, Flat, and Crowded, addresses the question of where we, as a country, must go from here. I don’t know if we have lost our ability, in this country, to act collectively. We have a lot of people saying that climate change is a hoax. If there is a climatologist who says that climate change is a hoax, then I want to hear from them; but I do not want to hear from politicians that climate change is a hoax. You are not entitled to an opinion on quantum mechanics or the laws of gravity, and trust me, climate change is in that realm. So, I tried to be tactical about this. When speaking to a group where there are skeptical people, the first thing is to learn to speak to people who don’t believe or share a single belief you believe in. So, I spent a lot of time thinking about how to sell my ideas. One of the things I tried to do in my column was to rename “green.” They named it liberal, tree-hugging, and unpatriotic. I argue that “green” is geo-political, geo-strategic, geo-economic, capitalistic, patriotic; green is the new red, white, and blue. So, I tried to take the language and argue within that framework. When people tell me they don’t believe in climate change, I just tell them to take out my book, take out an eraser, and just erase “hot”; you don’t believe in climate change, no problem. But what about “flat” and “crowded”? So, I say to them, given that we live in a world that will go from 6.7 billion people to 9.2 billion by 2050, where flat meets crowded, where more and more people can live in American-size homes, can drive American-size cars, and eat American-size Big Macs, what do you think is going to happen to the price of energy? And what is going to happen to energy consumption?

21. Hot, Flat, and Crowded, supra note 17, at 18.
22. Id. at 66, 234.
And, therefore, what is going to happen to the environment? So, sometimes you have to approach a problem using different language. Renewable energy is going to be the biggest industry in the world. What would our standard of living be like if Google was a German company, IBM was a Swiss company, Sun was a Japanese company, and Apple was a French company? What if we didn't own the IT revolution? What do you think our standard of living is going to be like in the future if we do not own the energy revolution?

For every skeptic, however, I fortunately encounter many more energy entrepreneurs. It is amazing how many people I meet that tell me they have energy ideas. I get dozens of business cards when doing talks. What this tells me is that our country is still alive and exploding with innovation around energy and environmental ideas, in particular.

Despite this groundswell of innovation, however, our country faces a leadership problem. If I were to draw a picture of America today, it would be a picture of the space shuttle taking off. All of that incredible thrust below the shuttle would represent American ingenuity. But in this shuttle, the booster rocket is cracked and leaking energy and the astronauts in the cockpit are fighting over the flight plan. So, right now, we cannot achieve the escape velocity required to get into orbit in energy technology to achieve the next great innovation revolution.

In order to achieve escape velocity in this shuttle analogy, policy-makers need to establish the necessary policies and regulations to foster an environment for economies of scale in green technology. I spoke at a management retreat for GE, and Jeffrey Immelt, GE's CEO, said he wished Washington would just impose all the prices, taxes, incentives, and regulation on us to harness all of that innovation that is being developed on an ad hoc basis so that we could achieve the necessary economy of scale for the industry to take off. Everyone would complain for about a month, but then the whole American innovation system would take off. After thinking about it, I found that he wanted us to be China for a day.

So this is my fantasy of what would happen if we could put all of the necessary conditions in place to enable an innovation revolution. I was in Tianjin, China at the World Economic Forum when an energy innovator approached me. What is great about people like Dr. Michael Biddle is that in the middle of this recession, in a time when our country does not have any real

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23. See id. at 430.
energy policy—and the reason why I am ultimately an optimist—there is always someone who doesn’t get the word. Mike Biddle didn’t get the word that he wasn’t supposed to go out and invent the most sophisticated process for recycling. He invented a process where if you give him any pile of junk, he puts it through his recycling machine and out comes raw plastic materials in the exact five colors that the plastic industry wants. The company is called MBA Polymers and I wrote about him because he is the story of the energy revolution. Indeed, MBA Polymers was named by The Economist magazine as the world’s best innovative company in energy and the environment in 2010. Our guy. MBA Polymers was supported for nine years by grants from the Department of Energy, National Institute on Standards and Technology, and the Department of Commerce. I met him in China because he has twenty-five employees in California and 250 employees in China and Europe. Mike Biddle’s company does what he calls “above ground mining.” He needs huge piles of recyclable material in order to generate a constant stream to run through his machine to create the recycled material for the industry. In its next five-year plan, China is about to pass—and Europe already has passed—a law that requires any product that has a battery, or an electric cord attached to it, to be recycled at the cost of the manufacturer. You might be thinking what a terrible burden this law imposes on manufacturers. But what this law does is that it breeds a market of middlemen who cannot wait to collect this stuff because they sell it to the recyclers. A whole new industry comes up. So Mike Biddle’s business is scaling in China and Europe, but not in America because we have not put in the necessary rules, standards, and regulations to enable his business to take off here.

The same dynamic occurred in the auto industry in Detroit. The government bailed out the auto industry and told Detroit to build smaller, more fuel-efficient cars. Robert Lutz, the former vice Chairman of GM essentially told Congress that it was

directing the car companies to build smaller, more fuel efficient cars but did not want to impose a gas tax that would provide the consistent flow of customers to buy these cars. He said that is like ordering every shirt company in America to only manufacture size small shirts and never asking anyone in America to go on a diet. You won’t sell a lot of size smalls.

F. Time for Leadership

Without a fixed, long-term, durable consumer demand, we will never get the green industry to scale. We will only ever have hobbies basically supported by government and local incentives until we can set the conditions necessary to enable economies of scale. There are plenty of green technology start-up companies out there, but without a price signal, there will not be the scale-consumer pull to build those products. This is just basic market economics, which we refuse to recognize because we just want to run away from the price signal. So, instead, we are letting OPEC set the price signal and they are capturing all of the rent from that price signal. Maybe the price will go up or the price will go down, but if investors never know where the floor is they will be very hesitant to invest.

Therefore, Washington needs to find a way to bridge the ideological gap between the two parties to find a solution. That said, I think there is a huge Tea Party in this country, and it is not the one we have been seeing in the news. I think there is a radical center in this country that feels deeply unrepresented by the current two-party duopoly that is basically bankrupting the country. I think the country is ripe for a third party. In 1992, for instance, Ross Perot ultimately received 18% of the votes in the presidential elections. And because of Ross Perot, Bill Clinton made deficit-reduction his number one priority, which turned out to be for the good of all of the economy.

I would really like to see a presidential debate where there is a really smart third-party candidate in the middle providing the practical solutions, on any given issue like budget-cuts, taxes, investment, and clean energy. What is frustrating about our country is not that we don’t know the solutions. For instance, we know that we need a gasoline tax. If we were to phase-in a dollar per gallon gasoline tax at five cents per month over twenty months, we could use half of the proceeds to pay down the deficit, a quarter to give cuts in payroll taxes and a quarter to give a cut in corporate taxes. With gasoline taxes, we could lower the pollution in the air. With a gasoline tax we could spur innovation in clean technology. A gasoline tax strengthens the U.S. dol-
lar because it reduces the amount of dollars sent abroad used to buy oil. And we would take money away from the very people we are fighting in the Middle East. It has the potential to be a win-win-win-win scenario. Every one of the 535 senators and representatives knows this, yet not one will dare propose it. In *Hot, Flat, and Crowded*, I play-out a hypothetical debate with someone opposed to this tax.27 My hypothetical opponent would say, “There he goes again, Mr. Friedman has never seen a tax he doesn’t like and now he wants a gasoline tax.” My response would be,

Let’s get one thing straight: we’re both for a tax because if you don’t think having your oil price set by the world’s biggest cartel—OPEC—is not a tax then you are not paying attention. What differentiates you and me is that I want my tax dollars to fund American schools, American research, American learning, American hospitals, American roads, American highways, American infrastructure and you seem to want our tax dollars to fund the Saudi treasury, the Russian army, and the Iranian Revolutionary Guards. You seem to be indifferent; I like to use my tax dollars to build my country.

The fact that we can’t even have that debate means that we are in a bad place as a country.

In the 1960s and 1970s we had a space race where only two countries—the United States and the USSR—had the resources to compete and there could only be one winner. I really believe that what we now need is the Earth Race—which country can invent the greatest amount of clean technologies. I also believe that unless the United States leads that race, it is not going to happen at the necessary speed, scope, and scale to make a difference. The United States is still the straw that stirs the drinks—for how much longer, I don’t know—but I tell you this: you give me a green America and I’ll give you a green world. But if you don’t give me a green America, I am not sure what is going to happen.

III. Conclusion

On this challenge I am nevertheless a bit of an optimist. I think one of the greatest things about America is that this is a country that can—when at its best—balance Lexus and olive tree, technology and values issues. To conclude, I like to think back to the last passage from the ten-year-old book, *The Lexus and the Olive Tree*, because I think it is still relevant to this discussion:

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27. See *Hot, Flat, and Crowded*, supra note 17, at 316.
America is not at its best everyday, but when it's good, it's very, very good. In the winter of 1994, my oldest daughter, Orly, was born in Israel when I was a correspondent there, whose name means “my light” in Hebrew, was in the fourth grade chorus at Burning Tree Elementary School in Bethesda, Maryland. At Christmastime, all of the choruses from the local public elementary schools got together for a huge performance in the Bethesda town square. I came to hear my daughter sing. The chorus conductor was an African American man, and for the holiday songfest he wore a Santa Claus outfit. The first song the chorus sang was the Hanukkah classic, “Maoztzur,” to the tune of “Rock of Ages.” Watching this scene, and hearing that song, brought tears to my eyes. When I got home, my wife, Ann, asked me how it was. I said to her: “Honey, I just saw a black man dressed up as Santa Claus directing four hundred elementary-school kids singing the Hanukkah classic, ‘Maoztzur,’ in the town square of Bethesda, Maryland. God Bless America.”