How Smart Leadership Revived Chile after an Historic Disaster

On Feb. 27, 2010, a massive earthquake struck Chile, causing widespread devastation and economic damage equal to 18% of its GDP. In what could have been further bad fortune, this catastrophe occurred during a moment of political transition, as a new administration prepared to take power. Under such circumstances, many countries might have needed years to rebound — but Chile bounced back faster than anyone would have thought possible.

In their new book, Leadership Dispatches: Chile’s Extraordinary Comeback from Disaster, Wharton professors Michael Useem and Howard Kunreuther and Erwann Michel-Kerjan, executive director of Wharton’s Risk Management and Decision Processes Center, examine how the South American nation’s leaders made that happen.

Knowledge@Wharton recently spoke to the trio about what they discovered, and the leadership lessons Chile’s response to crisis can teach us. An edited transcript of the conversation appears below.

Knowledge@Wharton: Serious earthquakes and natural disasters take place around the world every year. What was it about the earthquake in Chile that made you all decide to write a book about it?

Erwann Michel-Kerjan: This was not just another earthquake. That earthquake was … so powerful that it actually moved the entire country and the axis of planet Earth permanently. This earthquake was — in terms of energy released — 500 times stronger than the one that [had] happened a few weeks before in Haiti. It was a monster earthquake that knocked out of 20% of the GDP of the country.

Michael Useem: And as we began to look at the recovery from it, we were stunned by how rapidly and how completely the country did come back. Within six weeks, with about a third of the country’s schools destroyed or seriously damaged, all three million-plus Chilean school kids were back in school. And within a couple years, the country had put back in place about 250,000 homes that had been destroyed. If you take that relative to the U.S., it would have been close to eight million homes reconstructed or built from new where they had been destroyed, by the government and by private entities as well. So, on the one hand: Killer earthquake. Sixth biggest ever in recorded history. And the other side of that, one of the most complete and rapid comebacks with which we’re familiar.

Howard Kunreuther: I think there were two other aspects that were important here. One is we had a newly elected president … he hadn’t even taken office at the time the earthquake occurred, … [but] who had a very strong business perspective and really wanted to make sure that he could set the goals that Mike was just referring to right at the outset, in terms of what had to be done. And in the process of doing that, [he] was able to mobilize a whole set of people to follow through with him. So that’s point No. 1.

The other point is that Chile had a long history of earthquakes, serious earthquakes. They even had one that was more serious a number of years back. And they were really in a position where they had
developed a whole set of institutions that were in a position to actually deal with this earthquake in a way that made it feasible for President [Sebastian] Pinera to actually go forward with the kind of meeting the goals that he had in front of him.

Knowledge@Wharton: The earthquake happened during a time of political transition. Could you explain the implications of that, and what impact it had on the way the recovery was handled?

Useem: The earthquake is essentially less than two weeks before the presidential sash is passed from Michelle Bachelet, who had served for four years as president, to Sebastian Pinera. And not that it’s a vacuum at that time, but people are beginning to head out of the office. New people are getting ready to come into the office. And Sebastian Pinera and his party had campaigned for La Moneda [the Coin Palace], the term they use for the residence of the president, on the premise that the Chilean economy had to be strengthened. They had pledged to create a couple million jobs. Sebastian Pinera and his team had pledged to restore the country back to a 6% to 7% annual GDP growth.

So with that as a circumstance, the outgoing president Michelle Bachelet and the incoming president-elect Sebastian Pinera together in this transition period began to lock arms and plunged into immediate emergency responses. But then as the new president took office, he said to himself, he said to his advisors — to their shock, at the outset — “We’re not going to let up on any of our campaign promises. We’re going to get this country economically back to a very robust growth rate of at least 6%.” And during the four years that they had — presidential administrations there can serve only for four years, [though] they can come back later on — [he said.] “We’re going to do two things. We’re going to get this country completely back to where it was, all 200, 000 plus homes to be restored. All hospitals that have been destroyed [will] be reconstructed. All schoolchildren [will] be back in schools that work. And we’re going to do that, plus we’re going to leave this country better prepared for the next one.” And Chile being on a fault line, a huge fault line, much like California, that was probably a very good idea, because the next one could be indeed bigger.

And [with] the finance minister, working hand-in-hand, …, the two of them together said, “We’re going to do this without making us indebted in the future, without imposing the cost of all this on our children.”

Michel-Kerjan: What was remarkable to us is none of these [people] — the president; Felipe Larrain, the finance minister, and most of the ministers — most of them had never been in government before. The president [had been] a businessman, heading some of the largest corporations in Chile. Felipe Larrain, the finance minister, was a great academic who had never served in a government capacity. So you have a new administration — a right-wing administration after 20 years of left-wing administrations in power — that would have to look at the campaign promises and look at [the aftermath of the earthquake] and say “Maybe we need to change that.” But actually, they did not. That’s pretty remarkable on many, many fronts.

Knowledge@Wharton: You say in the book that Chile’s comeback required a two-part recipe: able national leadership and strong institutional practices. Could you explain how that worked in practice?

Kunreuther: Well, let me start with the institutional practices and then move on. The institutional practices were really due to the fact that Chile did have this history of earthquakes. And I’ll give you two examples of how that played out. One had to do with building codes. It is certainly true that there were occasional buildings that did come down. But most of the buildings survived. … and did far better, for example, than the Haitian earthquake, where everything was destroyed, because there were no building codes.
In Chile, what they basically had was a law that had been passed a few years back and was actually enforced, that any developer, anyone who actually constructed a building, was responsible for any of the damages for a decade after that building was constructed. And if there was some damage or something had happened, it was conceivable that they could go to prison. And … a few people had gone to prison. That, as a development, is something that we know of [in] no other country. We’ve actually asked the question: Could something like that be done in the United States? It would be extraordinarily hard to do that…. Chile was really determined to make sure that their buildings would withstand [earthquakes].

The other aspect involves earthquake insurance as a protective mechanism. In the United States, about 10% of the people have earthquake insurance, and it isn’t required by the banks and financial institutions. You have 96% of the people, of the mortgaged homes in Chile, actually had insurance, because the banks were requiring it.

On the leadership level, [Pinera had] the enormous ability to say “We have to really make sure that we actually maintain our goals, we follow through on that, we’re able to get people to pay attention to these things.” … Not every goal was met exactly, [and] there were things that actually fell back. But in general, they did extraordinarily well because of that.

Useem: Those who came into office, many had come out of business, where they were used to getting things done. They had a strategy and they could execute around it. Sebastian Pinera himself came out of business. Many of the people in his cabinet were not politicians, but people who had a record of making things happen. If there’s a discretionary scale from “doing not so much” to “doing a whole lot,” they moved in the “doing a whole lot” direction.

Knowledge@Wharton: What were the key leadership decisions that helped Chile bounce back from the earthquake? And how did these differ from decisions made in other situations where recovery might have taken longer?

Michel-Kerjan: Let me start by saying we haven’t touched on the human aspect. Despite the massive power of the earthquake, 525 people died, most of them from the tsunami that came after the earthquake. For [most] people, building codes are a fairly dry topic…. When your family is in the building, it’s a little bit less dry whether you’re going to survive or not. The earthquake happened at about 3 a.m., so most of the people were sleeping. So the fact that only about 525 people died directly from the earthquake is pretty remarkable: That’s 500 people in Chile versus about 150,000 people in Haiti for an earthquake that was much less powerful. Which means that the president, the new president, could actually think very quickly about recovery. If you have 10,000 people who just died, it’s very different to handle than 500 people.

Imagine you are the new president: The big challenge you have in front of you is how do you manage the short-term versus long-term relationships? You know you’re going to be president for only four years … which is great, because you can actually spend your four years doing the work rather than thinking about your next campaign. But you have only four years. At the same time, you are going to make decisions that will have an impact on the country for many years to come. There’s a tendency to concentrate on the short term, saying, “I’m going to deliver everything by tomorrow. Let’s rebuild in the same place where these buildings were.” And I think Pinera and his cabinet — and we talked to many of them — most of them were remarkable really, saying, “Well, we’re not going to [just] rebuild, we’re going to rebuild better.”
The popularity of the president was hit by that, because obviously, what could have been done in, let’s say, a year by simply rebuilding cheaply took two or three years. But at the end of the four-year mandate, the popularity of the president was even higher than it was when he was elected. We don’t have many examples around the world of something like that happening.

**Kunreuther:** What we see in so many other situations is that the short term just dominates and you say, “I’ve got to be successful here. I’ve got to have a result that everyone will appreciate. And I’m only in office for so long.”

We have our little expression that I’ll just throw out: “NIMTOF — Not In My Term Of Office.” …

Well, here Pinera basically said, “Look, this is something we have to live with in the long term, and we have got to deal with this. But at the same time, we have to recognize if we’re going to rebuild homes and we’re going to rebuild them better, we also have to have some short term results.” … He had a mandate, [and] he said “We have got to follow [the mandate], and make sure that these schools are open within 40 days.” And he was able to do that and made sure that his lieutenants and the people working with him were able to deliver. And I think it’s that notion that everyone was working together becomes very important.

**Michel-Kerjan:** And if I can add just one word on the schools, because people don’t necessarily realize, but the school is always the No. 1 priority, because if the kids are not in schools, they’re at home. If they’re at home, no one is working.

**Useem:** The earthquake hit at the very end of summertime — February’s the end of summertime in Chile way down there in the Southern Hemisphere — [and Pinera said] that if we don’t get these kids back in school, they’re going to lose a whole school year. A third of the kids have no schools…. So — a little bit to the shock of his minister of education — he said publicly, “We’re going to have every school child back in school within six weeks. Period.” Now some of those were kind of prefabricated barracks that they put up. They actually took some school buses, removed the tires and made them into “schools.” But the main point, I think here is that the president appreciated this could be done, and then executed around that.

So [they had] vision and they had a strategy to go with it. And a chapter right out of business effective leadership, he and his lieutenants, a very strong cabinet — they could execute. Six weeks later, every school kid was back in school.

**Knowledge@Wharton:** You use a term in the book: tiered leadership. I wonder if you can explain a little bit about how he worked with his team?

**Useem:** The idea of tiered leadership is simple and really comes down to this: You just can’t do everything yourself. And as soon as we appreciate that, we know we’ve got to work through others. Sebastian Pinera took a vision, had a strategy to go with it about reconstructing the country on a very tough timetable and wanting to make the country more earthquake resistant in the future. But to do that, he did have to have great people working for him in his cabinet.

So he was assiduous about picking people who understood his philosophy, shared his vision for the country — but equally importantly, could actually make things happen. For example, the person who became minister of mines had run the country’s biggest retail system. That person, when asked to become minister of mines, said “I don’t know a whole lot about mining.” Sebastian Pinera said, “I know that. What I’m going to have a hard time creating, after somebody’s in office, is an ability to get things done.” So that’s the second tier, the lieutenants, the direct reports. There were more than
20. And then, they in turn, understanding the president’s leadership philosophy — more than that, they had exercised it themselves — they brought their lieutenants into office, who could actually make things happen.

Knowledge@Wharton: In the book, you present a leadership checklist of how a country can recover from catastrophe. Could you take us through some of the elements of that checklist and how it can be used in these kinds of situations?

Michel-Kerjan: Sure. So first of all let me say we met several times with all of these people. Mike was with the President several times. [This is] a book about how the head of an organization can handle shocks. So forget a moment about the nature of the shock: It could be financial crisis. It could be a cyber attack. It could be a pandemic. In [this] case, it’s a massive earthquake, but almost I would like to say it doesn’t matter.

I think we touch upon a few of these things. One is you demonstrate that you’re in charge. Recognize that you need specific expertise to answer the issue. And be ready to hire people with that expertise or hire people who can deliver. I think too often what we see in many crises, [is] you keep your team as is and you try to hope for the best, not recognizing that the conditions under which you’re working have changed.

Two is to recognize very officially and quickly that you’re not going to do that by yourself. It’s not just the government, actually. We have a big chapter in the book about the role of the private sector, about civil society, the NGO world. So really, breaking the barriers is critical as well. And have very specific goals. All of the goals that the President put together were public goals. Be as transparent as possible. And be ready to be hit on your popularity level. You’re not the president to be loved by people, necessarily on the day of the job. You’re here to move your country forward.

Kunreuther: This is an important component. The checklist serves as a way to get everyone to focus on an important set of principles and issues, and they will vary depending on what one is doing.

There was a leadership checklist that was constructed to some extent on a framework that says you have to think strategically and make sure everyone understands where you’re going. So I’ll read you just a few points on a leader’s checklist just to highlight that.

Articulate a vision. So, make sure that everyone is clear: Where are we going? Where are we going in the long term? And then think and act strategically in order to be able to deal with that vision.

Identify the personal implications of that. Communicate persuasively, so people will pay attention. And decide decisively. Then [comes] the motivation of the troops, which ties in with the points that Mike was raising on tiered leadership. And then we have a checklist for tiered leadership. I won’t go through all of these, but the idea was to really provide a notion of the things that could be done, and then elaborate them in the context of a variety of decisions that are going to have to be made. And that’s what we felt was important.

Useem: We’re personally interested in Chile. I’d been there personally a number of times before. But as we stood back and looked at the rapidity and completeness of the recovery, … it became a case study in the best sense of that phrase. Many of the things they did didn’t work so well, but a good number of things that were done did work well. And then to take those ideas out of Chile, our task in writing the book was to phrase and frame them in a way where somebody who’s never been to Chile can say, “In light of what happened there, we think there may be some ideas for back here.”
And with it, I’m going to reference an epilogue that we did for the book, because I think there’s probably no better illustration of that than a governor-elect in California a few years in the future facing a very tough moment and wondering what she ought to be doing.

Michel-Kerjan: We looked at what Japan had done, what European countries have done, what the U.S. has done generally. And the book is written as a story. It’s not an academic book, so to speak. We have a lot of data, but it’s really a story. … [Essentially, it asks] “What does that mean for me as an executive of a big corporation here in America or me as a future governor of California given the exposure of California to earthquakes?” It would be hard after a big earthquake in California for all of us to pretend that we didn’t know that an earthquake could happen there. And, you know, California being the sixth- or seventh-largest economy in the world, taken as a standalone, that would be a big, big deal. What are we doing about it? Not enough.

Knowledge@Wharton: Disasters are always expensive. Could you talk a little bit about how the recovery was financed.

Useem: Let me do the cover on that, and then my colleagues will fill in the quite amazing, extraordinary story of how this country dug out of a disaster that by our standards would have been something 20 times greater financially than what Katrina did to this country.

The impact on the GDP was around 18% to 20%, wiped out in three minutes. If you put that in dollar terms back in the U.S., we’re talking about $2 trillion-plus of damage. Just think about the huge setback at the very time the President has committed to getting his country growing at a 6% annual growth rate. So paying for the recovery, it could be done and was done in a way that did not bankrupt the country, didn’t put it hugely in debt and got the country actually back to the 6% growth rate.

Michel-Kerjan: Just to summarize basically who paid what here: What was remarkable in Chile is the role that insurance and the insurance market have played. Chile is the fastest growing insurance market in Latin America. That many of the people who were living there, and businesses, had earthquake insurance, helped the President and Finance Minister Felipe Larraín. [When] you’re looking at that massive shock on your economy, and after looking at the data you say, “Well, one third of that will be paid by insurers and reinsurers, most of them outside of Chile.” Then, you [can] start breathing a little bit, saying, well, maybe it’s not 18% [of GDP], it’s 12%. It’s still massive, but you know that influx of capital will come.

And then the remaining 12% is a mix of private-sector exposure and public-sector exposure. The private sector, that would be for the private sector to pay for it. On the public sector side, what was remarkable is that if something like that had happened in the U.S. the first thing we would have done is to go to Congress and ask for Congress to, you know, print more money. Or ask our children and grandchildren to pay for that. So, basically increase our debt.

Chile didn’t want to do that. Actually, Chile is running a surplus as a country, which is very rare these days. And they had set up a sovereign fund that was set up to end all macroeconomic shocks, in the aftermath of the financial crisis in 2008-2009. They decided not to touch that sovereign fund — which was pretty courageous, to say the least — and instead, actually increase taxes on businesses, which was exactly what they had run a campaign against two years earlier. So politically that was a very, very brave move here. And they told the business leaders that this increase in taxes would be temporary, only for two years. And it was actually temporary only for two years.
**Kunreuther:** The only other point that I would add on that is that you got support from a number of sources. NGOs helped, you got other countries that were providing assistance in various forms, whether it was equipment or whether it was tents or whether it was other forms of aid, they all came to the rescue. And I think there was really a feeling of a community, a spirit that everyone had to cooperate and everyone had to play a role. And the other point that I think that’s really important to highlight which we have, but let me say it again, is the fact that Chile was prepared for this.

**Knowledge@Wharton:** What do you think are the main lessons that other countries should learn from Chile’s experience in terms of preparing for disasters before they happen; dealing with them while they happen; and then making sure that they’re well-protected after they happen and things happen well?

**Kunreuther:** I think that the challenge in all of this is to recognize the fact that events that you say are not going to happen to me, or not to us as a country, will happen. And that you recognize the fact that they are low probabilities. They are below one’s threshold of concern. One has to pay attention and do some planning.

Then, you have to put in place in your own head beforehand, and then implement it afterwards, the fact that you need to act long-term and strategically and do the appropriate trade offs. And that’s extraordinarily hard to do. We referenced Danny Kahneman’s book *Thinking Fast And Slow* as a part of our framework, simply because of the fact that he points out that so often decisions are made on the basis of intuitive judgment, without thinking [things] through deliberatively. And that’s usually very successful for most of our decisions. But when you’re dealing with low-probability events, events that people would prefer not to think about, then the idea is to figure out how you can put that on the radar screen before the disaster in order to avoid the problems one would have. And so the thinking deliberatively beforehand, and then putting in place essentially institutional arrangements that would enable one to respond after the fact.

**Michel-Kerjan:** I think the main takeaway is: It’s possible to recover. When you look at all the data that was against Chile, … it was impossible to recover from something like that. But they did. So that’s why it’s spectacular. More to the point, if you’re someone in charge, the likelihood of something happening under your watch is much higher these days than it used to be. So maybe 20 years ago, as a president or prime minister or finance minister, you could have ignored these issues, and [said,] “Well, I hope they will not happen on my watch.”

Right now it’s very unlikely that nothing will happen under your watch. So just get prepared for it. It’s coming your way.

**Useem:** I think I would add in closing that the terrain here is really captured by two words: risk and resilience. We owe it to ourselves. We owe it to ourselves. We owe it to the people we’re responsible for. And on the resilience side, we found in Chile a pair of factors that the same factors that are emerging from a study we’re doing on America’s 500 largest publicly traded firms. We’ve been inside many of those companies. And we find there, and we found unequivocally in Chile, that for that resilience to be there, we need great institutional values. Rule of law. Enforcement. Insurance. A commitment to fund — not out of thin air, but real sources of cash — recovery. And leadership of people who do have the levers in front of them. You need both … great leadership and great institutional values.