In a networked world, no longer controlling our own destinies
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You're only as strong as your weakest link. It's an old saying, but one that bears a new gravitas in today's interconnected world.

The recent bomb scares with FedEx and UPS are a case in point—and in this case, the weakest link took the form of deficient security at an obscure airport in Ana'a in Yemen, where the bombs were loaded.

This near miss, almost the cause of thousands of deaths, had striking similarities to the tragic Pan Am 103 crash over Lockerbie, Scotland, in 1988. In that instance the weak link was another obscure airport, Gozo in Malta, where terrorists checked a bomb on Malta Airlines that was eventually loaded onto Pan Am 103 in London's Heathrow Airport. Pan Am could not have prevented the crash without inspecting every item transferred from other airlines.

This is the central problem of today's networked world of interdependent security: the risks faced by your part of the system aren't preventable by you alone, they depend on the actions of others as well. Put another, starker way: we no longer control our own destinies.

And this isn't just with travel security. Consider the August 2003 blackout over the northeastern U.S. and southeastern Canada. The weak link in the system was an Ohio utility whose inability to provide electricity was passed on to other utilities and customers through an interconnected grid.

Or take the business world. Actions of even a small division in a giant corporation can cause the entire firm to go under and may have significant effects on the global financial system. One only has to look at the failure of Baring's Bank in February 1995, driven by the actions of a single trader in its Singapore branch, or the demise of Arthur Andersen in 2002 due to criminal action by its Houston branch auditing Enron.

Better yet, take the recent financial crisis. In 2008 the American International Group (A.I.G.), the world's largest insurer, suffered severe financial losses due to the actions of a 377-person London unit known as A.I.G. Financial Products, run with almost complete autonomy from the parent. That one unit decimated an entire firm's system, and played a central role in escalating a global financial crisis.

So what does all this mean? To start, decision-makers need to pay closer attention to standards in even their most obscure and remote branches, as, paradoxically, these are precisely the ones most likely to initiate systemic failure. Understanding this interconnectedness of their own internal systems is the first step; the next step is understanding the larger systems of which they are a part. European Union countries, for example, are planning to coordinate their security measures and centralize the oversight of airfreight in response to a German proposal.
For air security, this is a good first step—though just one piece of the global puzzle. With respect to cargo and baggage security, the United States, Europe and other developed countries should provide earmarked financial assistance to low-income nations that cannot afford an appropriate level of security. By strengthening weak links, these subsidies are very likely to more than be repaid in fewer costly (and fatal) accidents in the future.

And when it comes to reducing the likelihood of cascading failures such as large-scale power outages and global financial crises, we need well-enforced regulations to ensure that a firm undertaking specific risk-reducing measures does not feel at a competitive disadvantage. The economic incentive for any decision-maker to invest in protection depends on how she expects others to behave. And in many situations, if an interested party thinks that others in the system will not invest in protection, then this reduces her incentive to do so. Moreover, firms that do behave responsibly will be forced to charge more and may be priced out of the market if the disaster does not occur.

This is not the kind of system we want to promote. If any one player in an industry gambles by not undertaking such actions, it's likely to create systemic failures. The financial crisis of 2008 highlights this point. As documented in Michael Lewis' book, The Big Short, traders were hoping that only a few homeowners would default on their mortgages; herd behavior then created the global problem and recessions.

While strategies for dealing with such problems will depend on the nature of the risk in each case, the common element in coping with problems of interdependencies is to develop well-tailored incentives and public-sector interventions to create a level playing field. That's the only way we might actually lessen the chances that weak links will cause catastrophes such as terrorist attacks, power failures and financial crises in the future.

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