Disasters radically change people’s lives and an area’s economic environment. Policy makers must decide which policies are most likely to help people rebuild their lives and the area’s infrastructure and economy. The best option for policy makers is to unleash the forces of entrepreneurship. The ingenuity of entrepreneurs can make a significant difference in whether a disaster-stricken area rebounds or stagnates.

Frederic Sautet

A few days after Hurricane Katrina wiped out her store, Alicia Cool returned, cleaned out her shop, replaced the walls and carpets, and purchased new merchandise. Six months later, her sales were double what they were a year earlier. Given her success in a post-disaster environment, one might think that Ms. Cool is in the business of home repair or construction or that she sells food. Actually, she is a florist. She thought that in the chaotic world that followed the Gulf Coast hurricanes of 2005, people would still want flowers in their lives, and she was right.

Ms. Cool is not just a florist. She is one from the legions of entrepreneurs who are putting commercial life back together in the Gulf Coast after Hurricane Katrina. Disasters radically change people’s lives and an area’s economic environment. Some people lose their sources of income while simultaneously facing huge expenditures to make their homes habitable again. Others lose parts of their customer bases as people decide to leave the disaster-stricken area.

In such situations, policy makers must decide which policies are most likely to help people rebuild their lives and the area’s infrastructure and economy. The best option for policy makers is to unleash the forces of entrepreneurship. Because entrepreneurs have better incentives than government officials do to identify problems and provide solutions, the more
chaotic a society is, the more it needs entrepreneurs to put it back on track. While post-disaster communities present institutional and policy challenges, the ingenuity of entrepreneurs can make a significant difference in whether a disaster-stricken area rebounds or stagnates.

What is Entrepreneurship?

Although it is often associated with the creation of new businesses, entrepreneurship encompasses more than just business start-ups. Fundamentally, entrepreneurship is the discovery of novelty. Entrepreneurs are those who develop new views and ideas and introduce them to society. As economists put it, entrepreneurial discovery is the discovery of gains from trade that were hitherto unknown to market participants. The entrepreneur offers new possibilities for trading in the market that no one previously knew.

To get a better sense of what entrepreneurial discovery means, consider an example from a situation without markets.1 Crusoe goes fishing every morning with a line he salvaged from the shipwreck. This fishing method is not very productive: He spends two hours on average before he catches a fish. As he ponders his plight, Crusoe notices that there are vines around the island. Some of them are very big, but others are thin and quite sturdy. He realizes that, by carefully arranging a number of well-chosen vines, he might be able to make a net and use it to improve his productivity while fishing. Implementing this idea takes a good deal of work and time. He has to find the right vines and assemble them in a way that enables him to catch the size of fish he wants. Also, he is not sure how long the vines will last in the water. They may just dissolve and prove to be inadequate for net building. After a few experiments though, he is in possession of a fully functioning net that enables him to catch on average five fish an hour. In other words, his productivity has gone up tenfold.

Crusoe has deployed available resources (the vines as well as his own time and energy) to increase his productivity. It may be tempting to ascribe his increased productivity entirely to the resources used in constructing the net. Yet, in a deeper sense, constructing a net resulted from Crusoe’s idea, not from those resources. Without the idea, Crusoe would not have perceived the vines, his time, and his energy as potential resources. It was his initial idea that changed his fishing method and productivity.

Crusoe’s idea is an entrepreneurial discovery. Crusoe is an entrepreneur not because he deployed resources to build the net but because he conceived of the idea of a net in the first place. While the crucial aspect of entrepreneurship is the discovery of ideas,2 an entrepreneur is seldom only a pure discoverer. Indeed, he is also often a manager who enacts his own ideas, hence the general perception of the entrepreneur as someone who creates businesses.

What is the Role of Entrepreneurship in Society?

The Crusoe example illustrates the function of entrepreneurship in human action, but it does not illustrate the role of entrepreneurship in society—especially in the context of post-disaster recovery. Understanding the societal role of entrepreneurship starts with recognition of the “knowledge problem” in society. The knowledge necessary to coordinate all human activities (e.g., what needs to be produced and by whom) is dispersed among all the individuals in society and is not known to anyone in its totality.3 Individuals need a way

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2. This is especially important because of the way in which entrepreneurial discovery links to prices and profit.
to reveal and marshal that knowledge (or parts thereof) to enable coordination within the division of labor.

Within the right institutional context, entrepreneurship is the key element that reveals such knowledge. Entrepreneurs can perform this feat because they are guided by monetary profit within the context of market prices. Prices never contain all the information possible, only part of it; entrepreneurs discover the missing knowledge in the form of opportunities for monetary profit. Monetary profit plays two vital roles in markets: It reveals instances where people would benefit from trading and guides entrepreneurs who otherwise would be in the dark. Profit acts like a magnetic field, attracting entrepreneurial attention to situations where the market is poorly served. By acting upon their discoveries, entrepreneurs help reveal knowledge that benefits society, thereby mitigating the knowledge problem. Consider the following example.

The price of Braeburn apples is $3 per pound in Arlington, VA and $1 per pound in Richmond, VA. People do not know about this price difference, but Mr. MacIntosh, a traveler between the two places, notices it. He wonders whether the difference would remain once all the costs are accounted. He gathers information and realizes that his entrepreneurial inkling is right. Transport and other costs amount to $1.60 per pound. Even with the addition of these costs, there is still a difference of 40 cents between the two locations. MacIntosh can buy apples at $1 per pound in Richmond, sell them for $2.90 in Arlington, and make a profit of 30 cents per pound.

This example sheds light on two vital roles of the entrepreneur. First, the entrepreneur lowers the price of goods. If MacIntosh were to try to sell his Braeburn apples for $3 in Arlington, it would be harder for him to dislodge incumbents. Instead, he uses his lower cost structure to reduce his selling price below the current market price and snatch the market under his competitors’ feet. Competition forces entrepreneurs to “do better” in order to pocket the profit they have discovered.

Second, when the entrepreneur lowers the prices of goods, consumers have extra money to use in other activities. Thanks to MacIntosh, Arlington consumers who eat Braeburn apples will save money, freeing their dollars for other consumption or investment. In this sense, entrepreneurial competition is an ongoing process that enables people to economize on resources and to invest in new production, thereby gradually improving living standards.

If people are free to enter the market and compete to buy and sell apples, eventually the competitive environment will squeeze out the MacIntosh’s 30-cents-per-pound profit. New entrepreneurs noticing the profit will take advantage of the price differential and push down the retail price in Arlington toward $2.60 per pound. At this price, no profit is left, but competition will keep the market going. For instance, to keep earning a profit on Braeburn apples, entrepreneurs will use new and cheaper means of transport between Richmond and Arlington or improve the way in which farmers grow the apples. This competition never stops because profit opportunities can be found everywhere.

This example describes what economists call the entrepreneurial process of competition. This process is fundamental to the way markets work to mitigate the knowledge problem. Through competition, innovation spreads throughout markets, new capital is put to use, and productivity increases. This whole process leads to economic growth (i.e., higher income per capita) and rests entirely on entrepreneurial discovery.

**The Conditions for Entrepreneurial Discovery**

Entrepreneurship can occur in many different contexts. The motivation to discover and resolve needs is not linked solely to the desire for financial gain. People can discover things for multiple reasons, starting with the sheer desire to help others, like the social entrepreneurs in post-Katrina New Orleans who are volunteering their time and money to...
help rebuild the city. This article, however, makes the point that only with monetary profit as motivation and guide will entrepreneurs systematically discover situations where people could benefit from trade. In that sense, for-profit entrepreneurship is essential to markets in general and to recovery in post-disaster situations in particular. For-profit entrepreneurs are needed to recreate the economic backbone from which social entrepreneurs can operate.

The U.S. economy is a very entrepreneurial economy by any measure (e.g., the number of start-ups, the amount of intellectual property). Indeed, the American population is, by and large, entrepreneurially minded. Yet, the salient fact about the U.S. economy is not so much that there are many entrepreneurs, but that there is plenty of socially beneficial entrepreneurship.

Socially beneficial entrepreneurship creates net value for all the parties involved and beyond. Whether entrepreneurial discovery is socially beneficial depends largely on the conditions within which it takes place. Entrepreneurs are never in short supply. There are always creative individuals who discover new ways of doing things. The question is one of channeling entrepreneurial activity in the right direction. Society’s institutions, as well as its norms, determine to a large extent the nature of the entrepreneurial outcome. For instance, if a society’s institutions do not adequately punish theft, fraud, corruption, or other illicit transfers, some entrepreneurs will use those avenues to acquire resources. However, if these institutions punish illicit transfers and protect trade and commerce, the latter will flourish. Moreover, socially beneficial entrepreneurship exists when entrepreneurs believe that gains from trade are safe from predation. Only when they can safeguard monetary profits will entrepreneurs reallocate resources to exploit their discoveries. Thus, the socially beneficial entrepreneurial discovery process rests on the existence and enforcement of property rights and contracts.

The U.S. economy is rich in socially beneficial entrepreneurship because U.S. institutions and policies enable entrepreneurs to exploit their discoveries and to benefit from them. This is thanks to the clear definition and enforcement of private property, contract, and tort law, as well as other laws and social norms that facilitate trade. Indeed, while the fundamental laws of the land matter immensely, society only works if people follow the laws. In the United States, most people are law-abiding citizens who hold cultural norms conducive to market exchange and the introduction of novelty.

Government policies can also play an important part in the type of entrepreneurship that emerges in society. Taxes and regulation can affect entrepreneurial discovery negatively. By imposing extra costs on a given activity, taxes and regulation can divert entrepreneurial discoveries to less socially valuable outcomes. Gains from trade that could have been realized are left unexploited. Imagine in the Braeburn example above that Arlington County decides to levy a special sales tax of 40 cents per pound on all apples sold in the county (in addition to other taxes). In such a scenario, the profit that MacIntosh discovered has suddenly disappeared. Gains from trade that could have come into existence vanish, and apple consumers are worse off as a result.

These same scenarios also occur when the government regulates prices or the economy is highly inflationary.
However, when institutions do not compel entrepreneurs to bear the costs of their activities themselves—through subsidies that they receive, for example—entrepreneurial activities may not be as socially beneficial as they could have been had entrepreneurs had to bear all of the costs of their projects.10

As the Crusoe and MacIntosh examples show, the potential gains of their discoveries motivate entrepreneurs. Moreover, it is the motivation of the entrepreneur to make a profit that leads him to play a socially beneficial role (e.g., selling the same apple for a lower price). In a modern economy, institutions and policies that negatively affect financial gains may reduce the entrepreneur’s likelihood of discovering new gains from trade. This means that the coordination of human activity and the gains people derive from engaging in exchange will be lower.

The quality of the institutional framework is vital to the nature of the entrepreneurship that takes place. While it is increasingly regulated, the U.S. economy offers a relatively good environment in which entrepreneurs may exploit their discoveries. The availability of loans and credit through the United States’ well-developed financial markets enables entrepreneurs to try all sorts of ventures and test all kinds of ideas. This environment wherein one has great freedom to act upon one’s entrepreneurial inklings about the future is what makes the U.S. economy one of the best places to pursue entrepreneurial ideas.

**The Economic Conditions of a Post-Disaster Society**

What happens to the entrepreneurial environment following a disaster? Do post-disaster conditions disrupt it or does it continue to function? The answer to these questions depends first on whether the institutions and norms that enabled socially beneficial entrepreneurial activity to exist before the disaster are still in place after it.

The disaster may have weakened or destroyed some institutions necessary to the smooth functioning of an entrepreneurial society. Overwhelmed with more urgent issues such as deterring looting and keeping crime down, the police may not be able to enforce property rights everywhere in the immediate aftermath of a disaster. If it is difficult to get access to the courts in the months following a disaster, the enforcement of contracts becomes problematic and may influence the way people contract out for services. These are serious issues because a large part of entrepreneurial activity concerns buying and selling rights over assets using contracts. The weakening of these institutions and norms may shift entrepreneurship towards activities that are less contract-intensive. Moreover, alternative mechanisms that facilitate trade may play a greater role, such as a heavier reliance on reputation.

Financing new entrepreneurial ventures or the rebuilding of one’s own destroyed business can be very difficult. Entrepreneurs in a post-disaster situation face different financial constraints. Because of the potential lack of capital, the size of ventures will be smaller. Moreover, it will take time to rebuild and get things back up to speed. Rather than having grand plans for reconstruction, local entrepreneurs will generally cater to the needs of the communities they live in, thereby slowly rebuilding their asset bases.

Many of the entrepreneurs the Mercatus team interviewed in Louisiana and Mississippi used personal savings to refinance their businesses.11 Obtaining outside funding was difficult, even from the federal Small Business Administration (SBA). Many also sought funds from family and business networks outside the devastated area. Some borrowed money from banks and credit card companies, although at much higher interest rates than in normal circumstances. Various government agencies helped recapitalizing businesses with various degrees of success.12 For instance, Casey Kasim encountered many difficulties in trying to obtain a loan from the SBA to reopen his gas station and build a laundromat.

There seems to be evidence that the institutional environment in post-Katrina New Orleans has weakened and that this weakness affects entrepreneurs. Various people with whom the Mercatus team spoke told stories that showed that the cost of enforcing contracts had gone up. For instance, Lynn Nguyen, a restaurateur, leased a space before Katrina hit the city. After the storm, her landlord told her

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10. Subsidies may transfer resources into the hands of entrepreneurs who would not have had otherwise access to them, thereby superseding the market discovery process and potentially misallocating resources.

11. The examples in this article are taken from the fieldwork research Mercatus’s scholars and students have done in Louisiana and Mississippi in 2006 and 2007.

12. For a discussion of the role the government may play in financing entrepreneurial ventures in a post-disaster context, see Veronique de Rugy, “Drowning in Bureaucracy” in this volume.
that she could not rent the space anymore. He considered the contract null and void as the result of the hurricane. Ms. Nguyen still considered the contract valid. She wanted to continue running the restaurant in the same location, but she couldn’t obtain enforcement of the contract by local courts because the courts were unavailable.13 In the end, Ms. Nguyen had to move to a different location.

Ms. Nguyen’s situation may not seem like much of a problem, but this kind of behavior creates uncertainty, the effects of which are felt throughout the community. If no one knows how landlords and tenants will act, renting a space for business becomes even more difficult than it already is following a disaster. This uncertainty may cripple recovery.

Other examples point to the difficulty of doing business in the poor regulatory environment that is likely to occur post-disaster. In New Orleans’s Ninth Ward, Mr. Kasim reopened his gas station within a few months after Hurricane Katrina, a bold entrepreneurial move considering how much uncertainty there was regarding future population figures. Realizing that many people still did not have electricity and water in the months following the storm (many of his potential customers lived in FEMA trailers), Mr. Kasim decided that cleaning clothes could be a profitable service. He built a laundromat next to his gas station.

Unfortunately, after the laundromat was completed, Mr. Kasim spent weeks waiting for an inspector to sign off on the store’s piping. Without the inspector’s authorization, the gas company would not deliver the gas that Mr. Kasim needed to supply hot water and run the dryers. As a result, his laundromat sat idle for several weeks when people were in dire need of its services.

Rebuilding is a major economic activity in a post-disaster society. It attracts many entrepreneurs who see opportunities to make money from people who desperately need a roof. In a

13. Immediately after Hurricane Katrina, the Civil District Court records were soaked in water and sewage. The Court didn’t reopen until October 2005 and was relocated in Gonzalez, which is 50 miles away.
society with weakened contract enforcement, some contractors may feel free to take money from desperate people and not finish the jobs they have agreed to perform. However, evidence shows that the frequency of fraudulent activity does not increase much in post-disaster situations. While more complaints may be recorded, more jobs are also being performed. Moreover, roofers and other contractors often face severe supply shortages and price volatility. This makes the completion of jobs more difficult and customers less happy.

While the institutional environment may worsen in some areas, it may also become friendlier to entrepreneurs in others. Regulations that represented some form of barrier to entry in the market prior to a disaster may not be consistently enforced or may be lifted in the post-disaster situation. This can enable more entrepreneurial activity. Louisiana Governor Kathleen Blanco issued executive orders after the 2005 hurricane season that reduced regulation of entry to various fields such as medical professionals and personnel, towing operators, charter and proprietary schools, and veterinarians. Many new entrants in those markets have contributed to lower prices and increased quality of goods and services.

Entrepreneurs as the Coordinating Agents in a Post-Disaster Society

A post-disaster society is a chaotic place. Houses and infrastructure may be partially or totally damaged. People’s expectations about their everyday lives have changed. Normal things that everyone takes for granted, such as driving on certain roads or perusing the phone book to find a needed company or service, are no longer possible. In other words, the coordination of human activities that existed before the disaster is gone. Instead, people experience a sense of chaos.

The coordination of human activities is necessary in both normal and post-disaster situations. Entrepreneurs are the agents that enable greater coordination to take place. External observers, such as policy makers, have little incentive to accurately identify the problems that people face on the ground because they do not operate on the basis of profit. Entrepreneurs, on the other hand, are motivated by the gains they could obtain identifying problems and finding swift and efficient solutions. They are also sanctioned when they misjudge the situation by losing money. Entrepreneurs act as coordinating agents, bringing society back into a more harmonious situation in the wake of disaster. Thus, the more chaotic the situation is, the more opportunities for entrepreneurs to discover ways to improve everyone’s life. Provided some institutions and social norms are still operating, a post-disaster society offers ample scope for entrepreneurship.

15. Ibid. Skarbek shows that in spite of the reduction in occupational licensing after the 2004 and 2005 hurricane seasons in Florida, there is no evidence that the quality of jobs decreased.
16. Although not strictly for-profit entrepreneurship, the enormous development of various public and private chartered schools in post-Katrina New Orleans is a very telling example of entrepreneurship.
17. For more on this subject, see Kirzner, Competition and Entrepreneurship and Israel Kirzner, How Markets Work: Disequilibrium, Entrepreneurship, and Discovery 133 (London: IEA Hobart Paper, 1997).
Indeed, the evidence highlights the vital role of entrepreneurship in post-disaster recovery.\(^\text{18}\)

One characteristic of a post-disaster society that might affect entrepreneurship is declining population, which can curtail some opportunities for entrepreneurs. The market will be “thinner,” meaning that some of the economies of scale available with a large population are gone. Some businesses will close down (or not be started in the first place) because they are viable with a large customer base.

However, other businesses may emerge to cater to the needs of thinner markets. Following a disaster, people may have greater demand for basic needs.\(^\text{19}\) While stores that sell luxury and tourist-oriented goods and services might close, do-it-yourself stores are likely to reopen and develop. For instance, many in St. Bernard Parish credit the reopening of the Home Depot store in Chalmette as critical to community recovery. Because the store had been entirely damaged by water, it reopened aisle by aisle until it was fully cleaned, enabling people in the community to receive needed goods quickly and efficiently.

The problem-solving nature of entrepreneurial activity is what makes it vital to post-disaster recovery. Entrepreneurs will discover opportunities in reconstruction or food retail or whatever is needed on the ground. Entrepreneurs will allocate resources to offer goods and services according to the on-the-ground needs they observe. When they make mistakes in their assessment of the situation, the feedback will be immediate, as they will lose money. This differs from those who operate outside profit, such as government and non-government organizations, and thus lack such immediate feedback.

Many people in New Orleans who were not previously entrepreneurs have started businesses post-Katrina. The changed conditions they faced after the hurricane led them to begin offering products or services to others. Some people, for instance, have lost their jobs and must find a new way to make a living. Others have no other choice but to develop skills to fix their house and discover they can make a living (at least temporarily) selling their skills to others.\(^\text{20}\) Take mold remediation. In the weeks that followed Hurricane Katrina, people with experience in dry walling started businesses to cater to others with this problem. In many cases, these entrepreneurs hired Latino immigrants who had come to New Orleans looking for work. Moreover, the price of hiring dry-wall laborers decreased over time, as more and more entrepreneurs entered the market.\(^\text{21}\)

The food business has also been very busy. Ben Cicek opened a coffee shop in St. Bernard Parish because he noticed increased traffic in the Parish due to children going to school in a new area. He decided to open a place to offer coffee and breakfast to people on their morning commutes. Mr. Cicek told us that opening his business was simple even though it was located in a place that, prior to Katrina, was not friendly to foreigners (Mr. Cicek is of Turkish origin). This example shows that in dire situations social norms may evolve because the need to trade and rebuild is greater than that of, say, ethnic exclusion. The same is true with Mr. Kasim, who is originally from Iraq. He told us that people in his community were very pleased with his decision to stay and provide gas after the hurricane.\(^\text{22}\)

As touched upon above, whether and how much of the pre-storm population will return places a limit on the activities of entrepreneurs (and those of the government as well). Indeed, it may be the case, as in New Orleans, that no one really knows whether people are going to stay or leave and if they have left, whether they will return. Migration largely depends on the alternatives that are available elsewhere, the extent of the disaster, and the quality of government policies set in place after the event. However, entrepreneurs can help a community achieve a critical mass of people by reopening

\(^{18}\) Two important examples in which entrepreneurs played an important role are the Great Fire of Chicago in 1871 and the 1906 San Francisco Earthquake.

\(^{19}\) Note that the example of Ms. Cool shows that it is difficult for an external observer to know what these “basic needs” are.

\(^{20}\) While the net change in total employers has been negative in the New Orleans region since the disaster (i.e. there are more employers leaving the region than opening businesses), data also show that more and more new employers have moved in and old ones have returned. See New Orleans Index, (2008), Table 24, http://www.gnocdc.org.

\(^{21}\) Data on average weekly wages by industry sectors in New Orleans seem to corroborate this view. In the construction sector, the average weekly wage jumped in the last quarter of 2005 to $1,118 and then progressively went down to $989 in the third quarter of 2007. As of April 2008, it is not yet back to pre-Katrina level, but the labor market is less tight in 2008 than it was at the end of 2005. See New Orleans Index, Table 23

\(^{22}\) For another intriguing example of the need to trade and rebuild overcoming previously held social norms, see Karol Boudreaux, State Power, Entrepreneurship, and Coffee: The Rwandan Experience, Mercatus Policy Series, Policy Comment 15 (Arlington, VA: Mercatus Center at George Mason University, 2007).
businesses and providing speedy rebuilding. Because they put their capital on the line, they tend to judge the future state of the economy better than government officials do.

Furthermore, a post-disaster situation wherein entrepreneurs actively reopen businesses and provide new goods and services sends the rest of the population a strong signal: People are committed to living in the place again, and it makes economic sense to come back. This is a much stronger signal when it comes from entrepreneurs than when it comes from government because entrepreneurs are committing their own assets to the future of the area. They are literally putting their money where their mouth is. Moreover, entrepreneurs create jobs, and jobs and businesses strengthen the sense that normalcy can return to an area devastated by disaster.

**Conclusion**

**Entrepreneurship derives from** the creative power of the human mind and is the engine of prosperity. In order to foster socially beneficial entrepreneurship in a post-disaster society, policy makers must pay attention to the quality of the institutional framework, as a disaster can affect the functioning of institutions and thus the level of socially desirable entrepreneurship.

However, the paradox is that, barring a complete breakdown in institutions and social norms, profit-driven entrepreneurship is vital to rebuilding post-disaster societies. Entrepreneurs have access to knowledge on the ground, face strong incentives to identify problems, and provide better solutions than governments (or even non-governmental organizations) do. Reconstruction after a disaster cannot take place without for-profit entrepreneurs. Empowered members of civil society—especially entrepreneurs—increase the chance that successful rebuilding will occur following a disaster, because, among other things, entrepreneurial action signals a return to life as it was.

In the aftermath of a disaster, people thirst for normalcy. They want to buy mundane things that give them a sense that life is back as it was, like flowers. Alicia Cool understood this desire. It was a large part of the reason why she decided to reopen her flower shop. “It was very important for me to get the shop opened,” she said, “since I wanted things to get back to normal, not only for myself, but for the community.” Policy makers might not have imagined that reopening a flower shop was something that the community needed. They would not have intuited that the intangible benefits of a florist’s shop would help revive a community. But the entrepreneurial Ms. Cool did. She discovered the needs of people on the ground and built upon this knowledge in a way that was unavailable to more remote decision makers. She unleashed the power of the entrepreneur.

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