when news of a disaster dominates media, money pours into nonprofits that promise to aid those affected. Technology has enabled charities to raise significant contributions, especially small donations, through text messages and the Internet. These gifts typically peak in the months following disaster and recede as coverage diminishes. The relief effort for victims of the 2005 Gulf Coast hurricane brought in $3.9 billion over the following six months; the 9/11 tragedy, $2.4 billion; the 2004 Indian Ocean tsunami elicited $1.7 billion; and the 2010 Haitian earthquake, $1.4 billion, in 2009 dollars.

Funding can overwhelm nonprofits, especially in the first chaotic months when aid is uncoordinated, particularly in undeveloped countries. Yet nonprofits face many needs and don’t want to turn away funds or donors. “The organizations may not want to cut off that spigot when people are in the giving mood,” says Daniel Borochoff, founder and president of the American Institute of Philanthropy, a charity information service. He suggests people give an unrestricted amount following a disaster, and also donate to nonprofits that address continuing, intractable problems like hunger.

That’s because restricted funds limit charities’ flexibility, philanthropy professionals and economists say, and may lead to inefficiencies. Such donations legally obligate the nonprofit to spend as directed by the donor, even if contributions to the disaster exceed needs. The Red Cross was widely criticized after 9/11 when it considered using excess funds for other projects. As a result, many nonprofits today, including the Red Cross, publish “escape clauses,” which are disclaimers that allow redirection of gifts if necessary.

In 2010, natural disasters affected roughly 300 million people worldwide; some made the news, some didn’t. About 4,000 people in China, for instance, were reported killed or missing in floods, with very little international assistance provided or requested. Aid to the Caribbean nation of Haiti, nearer in geography and culture to the United States, reached $1.4 billion in U.S. contributions, of which about 38 percent has been spent, according to Borochoff. Assorted “smaller” disasters every year affect millions worldwide.

Donors give faster and more generously to victims of particular events than to organizations working on chronic problems such as disaster preparation in less-developed countries or combating hunger or disease. University of Maryland economist Thomas Schelling has called this the “identifiable victim” effect. Looking at Internet donations to eight relief agencies after the Indian Ocean tsunami in 2004, economists Philip Brown of Colby College and Jessica Minty of the Boston research firm The Analysis Group found that, on average, daily donations increased by 13.2 percent with one extra minute of nightly news coverage; an additional 700-word New York Times or Wall Street Journal article raised donations by 18.2 percent of the daily average.

The recent earthquake and tsunami in Japan raises questions about whether developed nations are an efficient target for aid donations. Institutions in richer nations are stronger and better organized and able to cope with the aftermath of disaster, according to a paper by economist Matthew Kahn of the University of California at Los Angeles. The Japanese earthquake and tsunami brought pledges or donations of about $184 million in less than a month. Yet Japan’s economy is the world’s third largest, with relatively effective disaster plans in place.

Japan allowed only 13 international organizations into the nation, according to Saundra Schimmelpfennig, a consultant and international aid worker. Because of Japan’s caution, some nonprofits decided against responding to the Japanese crisis. But the decision backfired, and sparked angry emails and even accusations of racism in some cases. “Donors got upset,” she says. “They wanted their money to go to Japan.” If charities don’t fundraise in the first months, it becomes hard to raise money later. But if they do fundraise, using a disaster as a vehicle, then donors want to see results. “That enormous pressure to spend causes problems.”

Schimmelpfennig saw many such examples in Thailand, where she spent four years after the 2004 tsunami to help the government there coordinate nonprofits working in the region. An organization without prior expertise built boats for Thai fishermen. “They sank during the handover ceremony because they hadn’t been caulked,” she says.

Good work takes time and oversight. Case in point: After the 2004 tsunami wiped out some 230,000 people, the Red Cross got $581 million; five years later, in 2009, the organization had $68 million of that money still unspent.

The influx of money and supplies also may distort incentives and interfere with local markets. Food shipments to Haiti, for example, have probably fed many hungry people but have also hurt rice farmers outside of the earthquake zone because customers in Port-au-Prince, where farmers market the rice crop, can get rice for free. A cash transfer might enable people to buy rice from local farmers or keep a small business going. As soon as markets are up and running, some organizations now arrange cash transfers for disaster victims, according to Schimmelpfennig. “The sooner you can do that, the better off the economy is.”