S. HRG. 113–309

HELPING SMALL BUSINESSES WEATHER ECONOMIC CHALLENGES AND NATURAL DISASTERS: REVIEW OF LEGISLATIVE PROPOSALS ON ACCESS TO CAPITAL AND DISASTER RECOVERY

ROUNDTABLE

BEFORE THE

COMMITTEE ON SMALL BUSINESS AND ENTREPRENEURSHIP
UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

FIRST SESSION

MARCH 14, 2013

Printed for the Committee on Small Business and Entrepreneurship

Available via the World Wide Web: http://www.fdsys.gov

U.S. GOVERNMENT PRINTING OFFICE

87–581 PDF WASHINGTON : 2014

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
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THURSDAY, MARCH 14, 2013

UNITED STATES SENATE,
COMMITTEE ON SMALL BUSINESS
AND ENTREPRENEURSHIP,
Washington, DC.

The committee met, pursuant to notice, at 10:36 a.m., in Room 428a, Russell Senate Office Building, Hon. Mary L. Landrieu (Chair of the Committee) presiding.

Present: Senators Landrieu, Shaheen, Heitkamp, Cowan, and Risch.

OPENING STATEMENT OF HON. MARY L. LANDRIEU, CHAIR, AND A U.S. SENATOR FROM LOUISIANA

Chair LANDRIEU. All right, we are going to get started.

Well, good morning, everyone. I really appreciate all of our participants joining us for what I think will be an exciting and helpful roundtable on some very important issues that have been lingering before our Committee, and we would like to see them moving forward if possible. And that is why I have called this roundtable to order.

And I thank Senator Shaheen and Senator Cowan for joining us. Senator Risch will be here in just a moment, and we will have other members that will be joining us.

Some of you that might not be familiar with roundtables versus hearings—this is a lot less formal, a lot more informal, and I think a real exchange of information. So while you have come prepared, of course, with testimony, that will be received into the record, and there will be a lot of back and forth, hopefully, with you all and your participants and Senators about some of the bills that are on this agenda.

So let me just begin with a brief opening statement, and then we will go right into our roundtable.

I thank you all again for joining. This is the first roundtable of our 113th Congress of the Small Business Committee.

I want to congratulate Senator Risch for becoming Ranking Member. He and I have already had a couple of meetings, and our staffs have been working to see how we can forge a bipartisan agenda for this Committee, which has had a long history with Sen-

ator Kerry, Senator Snowe and others before that, in a very close bipartisan working relationship. We would like to continue that.

As Chair of this Committee and a Senator from a state repeatedly hard hit from natural disasters, I believe one of the most important responsibilities of our Committee is to ensure the SBA, the agency that this Committee oversees, has a very robust post-disaster response. Even well insured businesses, whether they are in the Gulf Coast area, the East Coast, the West or in the heartland of America, struggle to get back on their feet after earthquakes, fires, floods, hurricanes.

Hurricanes Rita and Katrina, and the SBA response in Hurricanes Katrina and Rita, which is now almost eight years ago—the response was slow, painful, inefficient and insufficient to that task. So, following those 2005 storms, it took 74 days to process a home loan, 66 days to process a business loan—far too long to wait—even longer for a disbursement of disaster funding. The SBA also pushed disaster victims for mountains of paper records when the SBA, which is a part of the Federal Government, should have been able to access that information without asking for people whose homes were under 14 feet of water to produce triple documents in black or blue ink in order for their loans to be processed.

Those days are happily over with.

Thank you, Senator, for joining.

Those days are happily over with, but we continue to focus and improve on, hopefully, the SBA's disaster programs. We need to continue to provide better rules for businesses in the Midwest and East Coast as those recoveries are still underway. That time frame has been cut significantly, Senator Risch, I am happy to say, from 74 days down to 26 days to process a home loan and from 66 days to 31 days, but we still have some challenges.

Recently, members, I was at a hearing on your behalf in Staten Island in New York. Our Committee heard testimony that interest rates on small business loans are still currently too high for many of the small businesses to use efficiently. The paperwork, in their mind, is still too cumbersome. And the rejection rate, which is over 50 percent, in the minds of many small businesses and the mayors and county officials that represent them, seem to be too high.

Our small businesses, whether it is in Wyoming or Idaho or Louisiana or in Staten Island or along the East Coast, are the economic heartbeat or these communities. And after a disaster, it is so important for small businesses to get back up and operating to give hope and signal to communities that these communities will come back even stronger.

And so, this is a continued focus and priority of this Committee. I thank you all for helping me with it. And we will continue to see what bills we can pass here, and rules and regulations and modifications, that can help the partnership between the SBA, the Federal Government and small business.

So we have a Small Business Disaster Reform Act of 2013. Senators Cochran, Gillibrand, Wicker and Pryor introduced this bill. It includes two common sense, no-cost disaster reforms.

It, first, modifies the SBA requirement that borrowers must use their personal home as collateral for business disaster loans of less than $200,000 when other collateral might be appropriate. While,

clearly, we have to secure loans and minimize the risk to the taxpayer, the SBA has at its disposal multiple ways to secure these loans.

A similar provision passed the House of Representatives twice in 2009 by a voice vote on October 29th of 389 to 32 and again by a voice vote on November 6th, 2009. The provision included in one of the bills pending before our Committee passed the Senate 62 to 32 on December 28th, 2012 as part of the Hurricane Sandy supplemental. And I want to just say that it has bipartisan support and bicameral support from Speaker Boehner, Eric Cantor and others on the House side.

So we also have a bill that will allow the SBA administrator to allow out-of-state small business development centers, which are in all of our states, to provide assistance to small businesses in other areas when there is a presidentially declared disaster.

In other words, it may be surprising to you all to know that a surge capability is actually not legal. And we need, I think, to have surge capability. So, if some of the Senators from the Gulf Coast can help the Senators in the Northeast when they are under such pressure because of a natural disaster, that—you know, it is just common sense.

And, again, we have got to authorize that in order for the surge capability, which makes much more sense that hiring additional people or—you know, it is a right-size issue for our natural disaster response.

Again, this provision has unanimously passed three times.

So I would love your feedback on that to see what we can do.

Let me move into the second part of the roundtable.

So the first part of the roundtable is going to be responding to disasters. What do you all want to testify to? What is working? What is not working? And we will have a good back and forth exchange.

The other is access to capital, and this is where many of my colleagues, both from the House—I mean the Democratic and Republican sides really have focused a lot of effort on how to get capital in the hands of small business. Many of you are experts in this field.

As you all know, we have one bill pending called the SUCCESS Act. Success ultimately comes from capital, contracting, education, strategic partnerships and smart regulation. I think every small business would think that that is a true statement.

The SUCCESS Act has received 57 votes as part of the Senate Amendment 2521 to S. 2237, the Small Business Tax and Job Relief Act of 2012. It includes some key provisions that I hope will be of great interest for our discussion this morning.

One provision was expanding access to capital for entrepreneurial leaders—EXCEL—which was introduced last year by myself and Senator Snowe. EXCEL would modify the Small Business Investment Company Program, SBICs, to raise the amount that we can guarantee from $3 billion to $4 billion as an authorization. It would also increase from $225 million to $350 million the amount of SBA-guaranteed debt for fund managers.

And the problem is we are actually meeting up against limits of our own success. Some of these funds are so successful that they

have already met the targets that we have set for them. And, if we do not allow them to go higher, the money will then either not flow or flow to companies that are less successful, which does not really make any sense.

And I am interested in hearing what you all think about this program that was created by President Eisenhower.

It is time, I think, for us to expand this family of funds limit as well as expand the program. It has proven to be cost effective.

The Investment Company Act, as I said, was signed into law by President Eisenhower. And I will not go into the details of that but to only say that we have invested, in partnership with private business, $56 billion to over 100,000 small businesses. Some of them are no longer small—Apple, Fed Ex, Callaway Golf, Jenny Craig and Outback Steakhouse, just to name a few of the extraordinary success stories related to this program. When these companies were small, they got those first loans, and now look at what they have produced for our Nation—a true success story.

Let me mention just one more—actually, two more issues. The CREED Act, which Senator Snowe and I dubbed last year, called the Commercial Real Estate and Economic Development Act, would significantly enhance the use of 504 loans to refinance qualified existing debt. The 504 refinance program allows small businesses to refinance major fixed assets or real estate debt with long-term fixed rate loans to help them lower their monthly mortgage payments at no additional cost to the taxpayer.

This is one of the most popular, necessary programs that the SBA runs. Some of you will testify to that today.

Let me give you just one example of one little business in St. Martinville, Louisiana. Tuffy's Quick Stop and Deli in St. Martinville, Louisiana, purchased its facility in 2010 for $1.2 million. They put down $200,000, the remaining balance financed with a monthly payment of $11,300.

By going through this program—504 refinancing—they financed their debt, and their new payment, monthly payment, is $6,100. For a small business, a savings of $5,000 a month—$60,000 a year—is significant. It was used to save two jobs in St. Martinville, Louisiana.

But if every small business in America could just save one job, the recession would be completely over. That is why programs like this, I think, are so important.

I am going to turn this over to Senator Risch for just brief opening statements. And then, if the other members do not mind, we are going to go right into the question and answer session, which is what this roundtable is about.

Unlike, you know, regular hearings, this is a lot of back and forth. We can, you know, ask and answer. When you want to speak, you can put your placard, you know, up like this. We will recognize you and be as fair as we can.

After the Senator gives his opening remarks, I am going to ask each one of you to quickly identify yourself and give kind of a 30-second what your focus is to be here.

So, Senator, let me welcome you.

Senator RISCH. Well, thank you, Madam Chairman.

Chair LANDRIEU. Thank you very much.

Senator RISCH. Why do I only get a brief opening statement? [Laughter.]

Chair LANDRIEU. Because I took up all the time.

Senator RISCH. Yes, I see that.

Chair LANDRIEU. So, take any time you want. Go right ahead. I was trying to be brief, but I had so many good things to say.

Senator RISCH. Well, it was a fine effort, Madam Chairman.

Chair LANDRIEU. Thank you.

Senator RISCH. Unsuccessful but a fine effort. [Laughter.]

OPENING STATEMENT OF HON. JAMES E. RISCH, RANKING MEMBER, AND A U.S. SENATOR FROM IDAHO

Senator RISCH. Well, first of all, thank you for holding the hearing, and I am glad to be here.

As the Chairman knows, my focus is also on helping small business. I have a little different view of it than my good friend and my distinguished colleague, the Chairman.

First of all, we are in absolute agreement that small business is the backbone of this country and really has been since the country was founded. Small business has done really well over the last two and a half centuries—indeed, have done really well over most of that period of time without the help of the Federal Government.

I am interested in helping small businesses. Having owned and operated a number of small businesses, and having known a lot of people in small business, I hear from them again and again and again: Leave us alone.

If we can lower their taxes, if we can lower the regulatory structure, if we can keep the government out of their shops, their stores, their books, and everything else, they will succeed. They proved it for well over two centuries.

I want to see us encourage small business. I want to see us leave small businesses alone and do everything we possibly can to get the government out of their business.

We have a strong and robust financial structure in this country where businesses that are able to get loans go and have become very successful over the years.

I want to see that this robust market is protected and that people have the freedom to start and be successful in businesses, to keep the fruits of their labors and not turn it over to the Federal Government to do what they want with it.

So, with that, thank you so much for holding the hearing.

Chair LANDRIEU. Thank you, Senator.

Let's start with Dr. Erwann.

Mr. MICHEL-KERJAN. My name is Erwann Michel-Kerjan, an adjunct professor at the Wharton School. I am also the Managing Director of the Wharton Risk Center, which has been in play for about 30 years, working exclusively on catastrophic risk management—so, from preparedness to crisis management and risk financing, who is going to pay at the end of the day. It has been a busy, busy 10 years for America.

I am also Chairman of the OECD Board on Financial Management of Catastrophes, which advises 34 finance ministers around the world, including, obviously, here in the U.S.

So I would be happy to talk more about disaster finance.

Chair LANDRIEU. Thank you very much. It is a very important topic.

And when you all speak with this mic system, you have to sort of lean into your mic for us to pick it up. Thank you.

Go ahead.

Mr. KUNREUTHER. I am Howard Kunreuther. I am a professor at the Wharton School at the University of Pennsylvania in the area of decision sciences and public policy, and I co-direct the Risk Management and Decision Processes Center.

My interest in being at this hearing is to raise the questions with respect to some of the things that could be done prior to a disaster, the role of insurance and other ways to avoid a lot of the challenges that you have just mentioned, Senator Landrieu and Senator Risch, in terms of small businesses.

We feel that there is a real opportunity here to try to link the two together, to get an appreciation of what these businesses and homeowners face—Hurricane Sandy having brought that out—and what they can do to reduce losses in the future.

Chair LANDRIEU. Fabulous. Thank you.

Mr. Needham.

Mr. NEEDHAM. My name is John Needham. I am the Assistant Inspector General for Auditing at the Small Business Administration, and what I will just talk about today is the work that we have ongoing that is related to the proposals.

Chair LANDRIEU. Wonderful.

And if you all could turn your placards so that I can see—I think it is Mr. Selassie.

Mr. SELASSIE. Thank you.

My name is Sengal Selassi. I am a co-founder of Brightwood Capital, which is a small business investment company. And we received our first license in 2011 and have made investments in 11 different states, including Louisiana, Idaho, Nevada, Texas, New York, New Jersey.

I want to thank you for introducing legislation, both Chairwoman Landrieu and Ranking Member Risch, the legislation that you have introduced to help small businesses and funding to them.

Chair LANDRIEU. Wonderful.

Dr. Muhlhausen.

Mr. MUHLHAUSEN. My name is David Muhlhausen. I am a research fellow at the Heritage Foundation. I am also an adjunct professor at George Mason School of Public Policy.

I guess basically what I am going to talk about today is I have concern about weakening the requirements for collateral. I think there are issues with that that probably the Inspector General is going to bring up far better than I can, but there are some problems with SBA.

And our focus should be on making communities more resilient, and preventing and mitigating disaster responses, instead of creating moral hazards where we come in and we try to fix problems afterwards.

Chair LANDRIEU. Thank you.

Ms. Hulit.

Ms. HULIT. I am Jeanne Hulit, the Associate Administrator for the Office of Capital Access at the SBA. I oversee the loan programs.

Thank you.

Jeanne Hulit, Office of Capital Access—I oversee the loan programs. I would like to address your questions and concerns about the 504 refinance program and to express the Administration's support for the reauthorization of that—it was a very successful program—as well as answer any questions on behalf of the Office of Investment on the SBIC program.

Chair LANDRIEU. Wonderful.

Mr. Hardt.

Mr. HARDT. Good morning. I am Ralph Hardt, President of Jagemann Stamping, Manitowoc, Wisconsin, a proud manufacturing company with 225 employees there. We also have a new subsidiary in Murfreesboro, Tennessee, where we have 31 new employees. We are just starting that operation up. And I also own a precision grinding company in Lake Wiley, South Carolina, with 31 employees.

And I am here to talk about the SBI 504 re-fi, which truly got us going after the Great Recession.

Chair LANDRIEU. Thank you.

Ms. Fingarson.

Ms. FINGARSON. Good morning. Ashley Fingarson, Manager of Legislative Affairs at the National Federation of Independent Business. We are the leading small business advocacy organization. We represent over 350,000 small businesses across the country. As you know, 60 percent of our members employ between 1 and 5 employees, and our businesses are independently owned.

And I am here to talk about our research and our research foundation's data as it pertains to how our members finance access to capital and, most recently, our tax study that just got released.

Chair LANDRIEU. Mr. Rivera.

Mr. RIVERA. I am James Rivera. I am the Associate Administrator in the Office of Disaster Assistance with the Small Business Administration. I am here to answer any questions in reference to Superstorm Sandy or any other disaster-related questions.

Chair LANDRIEU. Mr. Rich.

Mr. RICH. I am Jim Rich, President of the Greater Beaumont Chamber of Commerce in Beaumont, Texas, here on behalf of the International Economic Development Council, which is the largest organization of economic development professionals.

I do not think I would be here if it were not for two disasters that hit Southeast Texas—Hurricane Rita and Hurricane Ike—and I bring the experience of those two events as well as we are one of two chambers in the country that are certified development corporations under the SBA 504 program. So we did 10 loans last year, including one refinance.

So I can offer that.

Chair LANDRIEU. Fabulous.

Mr. King.

Mr. KING. My name is James King, and I am the State Director of the Small Business Development Center up in New York. I also serve as Chair of the National SBDC Association this year.

And I can tell you I wish I had never learned about superstorms, and I wish I did not have to be here, representing the disaster. But I am very thankful that Congress enacted the Hurricane Relief Bill, and it is going to mean a lot to a lot of people.

Chair LANDRIEU. Okay, let's start with the 504 program. I would really love to hear maybe from any of you that have direct experience in using the program, if you could share with us as specifically as you can how it helped you, why you think you could not have done what you did without it and what it might mean to other companies.

Okay, let's start with whoever has the most direct experience. Would that be you, Mr. Hardt?

Mr. HARDT. I guess it is me.

As I mentioned before, we have three businesses. We are a full——

Chair LANDRIEU. You need to speak right into the mic.

Mr. HARDT. We have three businesses, and we manufacture precision metal components, and we are very proud of what we do.

I am also a member of the Precision Metalforming Association and National Tooling and Machining Association where we have 3,000 member companies working with metal, averaging about 50 employees per business.

We recently completed an SBA 504 refinance. In fact, our debentures closed just this week.

Chair LANDRIEU. Okay. Ralph, I am sorry. Could you just start again with the last 30 seconds?

Mr. HARDT. That is fine. No problem.

Chair LANDRIEU. Okay.

Mr. HARDT. Okay. As I mentioned, we have three small manufacturing businesses. We make precision metal components. I have some——

Chair LANDRIEU. And you are going to have to answer this in one minute or one and a half minutes.

Mr. HARDT. I will do it very quickly.

Chair LANDRIEU. Okay.

Mr. HARDT. We recently completed an SBA 504 refinance program.

As we exited the Great Recession, that for most manufacturers went on from 2008 to 2010, we found ourselves in an uncomfortable debt and banking situation. We had utilized our line of credit to fund operational expenses through the recession, and our bank had concerns as to our outstanding loan amounts and several years of poor profitability. We really tried to retain every employee we could during that period.

However, we had substantial equity in our buildings and equipment. We were simply upside-down with our balance sheet. We had too much current debt, not enough long-term debt, and it was very difficult for us to grow and expand.

Also, half of our business is in the automotive business. So, once we came out of 2010, our customers started to grow again; we just simply had no access to capital to grow.

Our bank was under pressure. You know, banks were under scrutiny at this time we were under scrutiny. So it was a very difficult situation.

With the SBA program, we were allowed to use our excess capital in our assets—basically, refinance that debt into a long-term, stable interest rate position. And we had such substantial equity in our assets that we were able to put $5 million in cash back into our business and regrow our business dramatically.

Please remember that it was a loan that was not that risky because we had to go through an appraisal process and we had to demonstrate cash flows that both our bank—BMO Harris—and the SBA had to be comfortable with.

Chair LANDRIEU. Ralph, let me stop you right there because this is very important testimony.

Do any of you representing any other views take any issue with what Ralph said about his business or want to add anything?

Jim, go ahead. On this subject, go ahead.

Mr. RICH. Well, our example I think kind of really fits what the program can be for, and that is our refinance loan was Larry's Trades Day—Old Time Trades Day—in Winnie, Texas. Trade Days happens once a month. Thousands of people come to this town, and their economy benefits from this one flea market once a month.

Now for him to get refinance, you know, no conventional bank is going to approve a loan. This guy has been doing this for 30 years. It is not a new business. He had a high interest rate, you know, affected by the storms.

So, anyhow, that is how we used the 504 refinance—a project that is a square peg in a round hole. And there are a lot of square pegs out there.

And for the economy, the 504 program in our view is an economic development tool. In this Winnie, Texas, it is their economy one weekend a month.

Chair LANDRIEU. Does the Heritage Foundation or the small business organizations here have a different view of this or something they want to add because—go ahead, Ashley.

Ms. FINGARSON. I would just say that, you know, maybe for—a small minority of our folks reach out to the SBA. I think it is about 7 percent.

And most of our guys from our research have shown——

Chair LANDRIEU. Not the SBA. The 504 loan program specifically, the refinancing of commercial mortgage.

Ms. FINGARSON. What it shows is that our guys basically go after a line of credit or credit cards. That is where——

Chair LANDRIEU. And they do not want to use the equity in their buildings?

Ms. FINGARSON. They have been, but it has been low from the real estate values, from what our research has been showing. So it has been harder for them to use that as collateral.

Chair LANDRIEU. Correct, which is exactly what makes this program—that is exactly the point.

You know, with real estate values falling through the recession, it has been very, very hard for small businesses to try to get legitimate equity out of their, you know, physical facilities to be able to carry them through to a better day. That is why I am such a strong believer in this particular program—because I have seen it with my own eyes literally save businesses in Louisiana.

So the point of this discussion today is if anybody thinks it is not, speak up now—or if you think you have got a better program—because we have got to figure out a way to help this little flea market here that kept businesses and Ralph's businesses because I am finding a lot of positive comment about this.

Mr. HARDT. Yeah, I would like to just—if I can make a couple comments.

The problem that you just said about using the credit card or the line of credit was exactly the problem we were in. We could not grow anymore. We had tapped out our current ability to grow.

Chair LANDRIEU. What was your rate that you were paying on your credit card?

Mr. HARDT. We were paying a pretty decent rate at that point in time—prime plus 4—and the banks just simply could not look at their collateral on their own.

We freed up $5 million of capital and put it back into our business. We are hiring 101 people this year. We already have half of them hired. We have a great success story.

And financially, as a business owner, I had locked in 20-year long-term interest rates on 40 percent of my debt and 10-year long-term rates on my equipment. I mean, it was just the perfect thing to do as a business owner.

And it is a no-cost program to the government. I mean, the fees we pay, pay for the loan fund, pay for our local development corporation.

I just do not know why more people use it because it is a great program.

Chair LANDRIEU. Go ahead.

I am going to turn it over to the Ranking Member for a question in a minute, but go ahead.

Really, if anybody has any, you know, thing to raise about this does not make sense, why it does not make sense, what we could be doing better, now is your chance.

But, Jeanne, go ahead.

Ms. HULIT. I just wanted to follow up on that.

The demand is still there. The commercial real estate market values have not returned. The banks are still constrained in terms of refinancing commercial real estate and the loan-to-values that are out there. And at the last day of the program, when we had to stop, we had 405 loans that could not get process, representing about a half a billion dollars in financing that went unmet. So we know that there was demand for the program and that demand continues.

Chair LANDRIEU. Thank you.

And I just want to say—Ashley, I will get you in a minute—that one of my great supporters of this is Senator Isakson, who I think is probably the Senate's most expert on commercial real estate since he ran one of the largest real estate companies in Georgia.

And he and I have talked about this, and both of us—with a real estate background—are so frustrated that there does not seem to be enough capital out there for small businesses to access what is their money. It is their money. Sometimes they paid cash for their buildings and cannot seem to get it out because of I think what Senator Risch said is true.

The regulations have come down so hard on the banking industry, which our Committee cannot fix in this Committee because we do not have jurisdiction over banking. We can only, you know, give them advice about how they could, you know, loosen the regulations appropriately without putting taxpayers at risk.

But—I do not know.

Senator Shaheen, did you want to say anything on this?

And this is very informal. So anybody can speak up at any time. Do you want to say——

Senator RISCH. I thought it was my turn next

Chair LANDRIEU. Okay, go ahead. Go ahead. Go ahead.

Senator RISCH. Well, I have got——

Chair LANDRIEU. On this subject if we could, and then we will go to another subject.

Senator RISCH. Well, I have a different subject. So I guess——

Chair LANDRIEU. Well, then let Senator Shaheen go on this subject, and then we will open up another subject.

Senator SHAHEEN. Well, first of all, thank you all very much for being here.

Thank you, Chair Landrieu and Ranking Member Risch, for holding the hearing today.

I share what we have heard so far about the importance of the reauthorization of the 504 program. New Hampshire has over 96 percent of our employers who are small businesses under the SBA definition. So we are truly a small business state.

We had a hearing on this last fall, and we had a small business man named Bill Dunnigan from New Hampshire come down to say exactly what you said, Ralph—that the 504 refinancing program had allowed him to significantly free up cash flow, capital, improve his cash flow because of that program.

And so, my question is for you, Jeanne, and that is if we let this program expire, if we do not reauthorize it, can you talk about what the impact will be on those?

You talked about over 500 businesses that were in the queue waiting to try and get some help and the amount of money that that would leverage—almost half a billion dollars. What will happen to those businesses?

Ms. HULIT. Those businesses would not be able to get capital. The criteria for SBA lending is they cannot get credit elsewhere on commercially reasonable terms, comparable. So I think that those are jobs that would not be created; those are projects that would not be financed.

The 504 program's mission is economic development, and that has always been job creation.

The 504 refinance program was instrumental because it allowed for job creation in a different way than under the traditional 504 program. It does job creation and retention in extraordinary times.

Chair LANDRIEU. Thank you.

I am going to turn it over to Senator Risch who wants to talk about insurance, and I think that is what some of you all mentioned initially. We will come back to 504, but go ahead, Senator.

Senator RISCH. Thank you, Madam Chairman.

I want to talk a little bit about insurance. Since I have been on this Committee, I have been struck by the fact that so many people

look to the Federal Government as the insurer of disasters that they did not insure against.

I would like to hear your thoughts, Mr. Muhlhausen, and anyone else, as to how we convince Americans and small businesses in general that they need to buy insurance, that risk management is just as important as marketing, financing, or anything else. I would like to hear your thoughts on that.

Mr. KUNREUTHER. Thank you, Senator Risch. Let me make a brief comment on this, and obviously others may want to elaborate.

One of the real challenges in this area is that prior to a disaster there is a general feeling that it is not going to happen to me. As a result, there are people who do not take protection by buying insurance or making their home safer.

The hearing today offers an opportunity to bring together the kind of discussion that we are having as to what will happen after a disaster and tie in with insurance and steps that could be taken beforehand.

If there are requirements to buy insurance, if there is a way that homeowners and businesses can appreciate this, there is an opportunity here to maybe tie together the kinds of comments that you have been making, Senator Landrieu, and others, regarding insurance so that businesses would take the steps beforehand to protect themselves.

Two things would happen in that regard. One is you would have less of a need for those loans because people would have had insurance, and secondly, there would be an opportunity to aid the businesses afterwards if there were things that were not covered by insurance that would require a loan.

Senator RISCH. Thank you, Professor.

Mr. Muhlhausen.

Mr. MUHLHAUSEN. Thank you.

I think one of the issues is this hearing recalls memory of a hearing in the House Committee on Small Business Administration last year where a business owner was invited to testify about his experiences in needing loans for his company that repeatedly was flooded by the Susquehanna River.

And I was amazed that this person had a business that was repeatedly flooded, repeatedly destroyed, and he still had his business in the same location. So applying for disaster loans or trying to fix the problem after a disaster has occurred is very costly where, instead, maybe he should have moved his business somewhere else or had better preventive efforts, preventive measures, to keep the costs down.

What I think right now is our approach right now is to clean up after the fact instead of mitigating before the disasters occur.

Senator RISCH. Thank you.

Anybody else?

Chair LANDRIEU. Go ahead.

Mr. MICHEL-KERJAN. Thank you. Well, let me echo what you just said, Senator.

If you look at the number of presidential declarations here in the U.S. over the past 50 years, then you will see that back in the 1950s we used to have about 20 per year on average, that is one every two to three weeks. Now, we have them about once a week.

In 2011, there was a record high of 99 declarations for that year alone.

This has consequences. On the one hand, people have a tendency of relying more on the government as Hurricane Sandy clearly showed. If you think about who is paying at the end of the day, back in the 1950s it was very rare to find any disaster where the Fed would pay more than 10 percent of the total economic losses. And it would be almost impossible to find any disasters in the past 10 years where the Fed has not paid at least 50 percent of the losses.

I am not saying it is good or bad. These are just the facts.

So the next question is, well, what do we do about it?

For Hurricane Sandy, the American taxpayers paid about 75 percent of the total losses, including $10 billion for the National Flood Insurance Program.

I think it is important, whether it is the SBA or another vehicle, that we start having a serious discussion with small businesses about not just insurance but proper financial protection, and we tend to have that discussion after every single disaster. We had that discussion after Hurricanes Katrina, Rita and Wilma and Ike and now Sandy, but then we tend to forget. Six months after the disaster, we go back to business as usual and nothing much has changed.

I would love to hear from you, sir, as a business owner about how you think about buying insurance, whether it is flood insurance or wind coverage from the private sector. Is that something you purchase, or do you see it as too expensive? Are you more likely to purchase that protection now, after Sandy?

Chair LANDRIEU. I think that is an excellent question, and Ralph, I would like you to answer it. But let me let Jim answer it because he represents a variety of businesses that were devastated by a storm.

And, Jim, why don't you answer that and then Ralph?

Mr. RICH. What I was going to add is the insurance——

Chair LANDRIEU. Speak closer in your mic, please.

Mr. RICH. It is an important answer to this whole problem, and businesses that had interruption insurance fared even better because really the interruption because of lack of electricity can last for weeks—that is really what cripples a small business.

But let me also share with you that—and this is not just a Texas problem. You know, the private insurance market is abandoning the coast. Yet, 40 percent of our State's wealth is created by the people that work there.

Chair LANDRIEU. This is the problem.

Mr. RICH. My daughter, who is a single mother with three kids and lives in a small townhouse, her insurance payment for wind—only wind—is $2,800 a year.

So, you know, insurance is great if it is affordable.

The other thing with Hurricane Ike is we had record surges. Places flooded that never flooded before in history. They did not have flood insurance, and they were not on the map to have flood insurance.

Chair LANDRIEU. They were not required to have flood insurance if they were not on the flood map.

Mr. RICH. Right. So it is a little—it is complicated.

But we would love to have affordable insurance in Southeast Texas. We just do not.

Senator RISCH. Well that is going to reflect the risk, is it not?

I mean, if she is paying $2,800, that means the risk is a $2,800 risk and a company is going to undertake that risk, by putting it in the pool and earning a profit off of it.

Mr. RICH. That is the Texas State windstorm insurance, and it is, you know, basically if there was a storm tomorrow in Texas they could not pay off any of their policyholders. They do not have enough reserves because it is a state-run entity. The private market has left.

Senator RISCH. Do they buy re-insurance?

Chair LANDRIEU. No.

Mr. RICH. No.

Mr. KUNREUTHER. And that is changing as we speak.

Mr. RICH. There are reform bills proposed.

Chair LANDRIEU. Well, Texas and Florida are in very bad shape right now. Texas and Florida are in very bad shape.

Jeanne, you had something. Go ahead.

Senator SHAHEEN. Well, I just wanted to applaud the suggestion that this is a conversation that we really need to have because we are in a very different environment than we were 50 or 60 years ago, as you pointed out. And, you know, whether you want to attribute the basis for the disasters that we are experiencing to climate change or not, the fact is we are experiencing more disasters. The weather has changed, and it is having the kind of impact that you talk about, Mr. Rich, where we do need to think about how we are going to act differently to address this because it is not likely to go away based on what we are hearing from scientists.

And so, the question is, how do we revise Federal policies to better address the current environment that we are in?

Chair LANDRIEU. Insurance—let's stay on the Senator's point. Senator Risch, go ahead.

Mr. MICHEL-KERJAN. One thing we have proposed—and we would love to hear your feedback—is to have risk-based premiums so insurance is actually a signal of your exposure. Whether you like that price or not is another issue, but maybe you are actually exposed to that level of expected losses without knowing it.

So the other proposal we have made is the possibility for the Federal Government to start an insurance voucher program to address the affordability issue.

For instance, if, people have been living in an area for a long time, it is hard for them to just leave that area, and they might not have the means to pay for this rapidly increasing price of insurance, especially when it doubled or tripled over the past 10 years.

So, what about having an insurance voucher program that will compensate part of that price increase for some of these people?

That would be an up-front cost, but at the end of the day, given all the Federal relief we have been giving over the past 10 years and what I expect to come soon next, that might actually be the best investment that we can make.

I do not know whether, Howard, you want to chime in.

Chair LANDRIEU. Howard.

Mr. KUNREUTHER. To elaborate on the point that Erwann has just made, I think there is a real opportunity, in light of Hurricane Sandy, to use the Biggert-Waters bill, passed in July 2012 that reauthorized the flood insurance program for five years, where a number of these ideas are now on the table. To our knowledge, it is the first time that Congress has actually authorized risk-based rates as a basis for insurance. That poses problems that we are talking about in terms of affordability.

So we have to couple, as Erwann was saying and as we have been writing about over the last few years, some notion of affordability. Insurance can then play the role that it is designed to play—to let people and businesses know how hazardous the area is, and to encourage investments in risk mitigation measures.

And I know this is a Louisiana-Mississippi problem after Katrina—how do you build safer homes? And that is exactly what New Jersey and New York are facing right now, after Hurricane Sandy.

You can give people a premium reduction, but unless one couples the voucher with this, it is going to be very, very hard for all the reasons that we are going to hear, as you were saying, Senator Shaheen, people cannot afford premiums that reflect actual risk.

And that is, I think, the challenge we face here.

But, if we can move in this direction, then I think a lot of the issues that are being discussed in terms of what happens after the disaster can be mitigated and you may not require quite the same kinds of loans and collateral payments because small businesses will be protected.

Chair LANDRIEU. I am going to get to Senator Heitkamp in a minute, but I want to really focus our thoughts to the small businesses along the coast or in other areas that are experiencing these disasters. Okay?

We think of the coast; think small business.

Then also think big businesses and about the insurance that the Senator has raised because this is a real challenge to the sustainability of small business in America.

The question of: How do you get the right insurance, how do you afford the right insurance, to limit the Federal Government's exposure but to maximize resiliency.

Now let me just say one thing, and I will turn it over to Senator Heitkamp.

In Louisiana, I love to say this because it is true. We are not sunbathing on our coast. We are not building condos on our coast. We are running the Mississippi River for the entire country. We are developing oil and gas for the entire country. And we are supplying 40 percent of the seafood.

My small business people—yeah, we have ecosystem tourism and hospitality, and we can put on a party when we want. But most of the small businesses, Senator, that I represent on the coast are people that are fishing, commercial fishermen, you know, oil and gas roustabouts, small businesses that are—how do we keep them healthy and, yes, having insurance but insurance that they can afford for the benefit of the whole country?

And you do not have a coast, Senator Heitkamp, but you have challenges, don't you?

Senator HEITKAMP. We have a lot of shoreline, Senator Landrieu. It is called Lake Sakakawea. You like to refer to it as other things. But we retain a lot of water for the whole Missouri Basin, and we are pretty proud of that.

And when it did not work in 2010, it was pretty scary as we watched the water come up and literally pass my house. Sixty-seven trillion gallons of water went by my house in a twenty-four-hour period in the Missouri River. Think about that.

No one ever thought that would happen. It is a discussion that we have with the Corps on a regular basis.

But I want to make a couple points, and I guess to the gentleman from the Heritage Foundation. We can always find the one or two guys who do not quite get it, who do not mitigate, who do not take care of themselves and expect someone to bail them out. That is not my experience in North Dakota.

My experience in North Dakota is people sit and they try and think proactively about: Now that I have had this experience what do I do to mitigate it? What do I do to protect myself?

We have a record of protecting ourselves in our flood and sharing those costs between neighbors and not burdening the Federal Government. But sometimes really bad things happen, and we need to have a system to recover.

Now, on business interruption insurance, I can tell you, you know, as a member of the Industrial Commission, I ran the state mill. You may find that interesting. We mill flour. We had business interruption insurance during the Grand Forks flood, but the people who worked at the mill had to protect their houses.

The sad fact is for a small business, frequently, in a natural disaster, they are not only hampered by the fact their business is impacted. Their home is impacted. Their employees are impacted.

And so, you cannot just look at business insurance necessarily. You have to broaden the whole scope of how do you protect communities.

And, you know, I just want to make one point about insurance and one point about risk mitigation.

I was asked when I bought a house here to buy earthquake insurance. Do you think I should have bought earthquake insurance?

Mr. KUNREUTHER. In North Dakota?

Senator HEITKAMP. No, no, no, here in Washington, D.C. You recently had an earthquake event.

Mr. KUNREUTHER. Was it expensive?

Senator HEITKAMP. Well, see right there. And isn't that the point?

The point is that right now we do not know what is going to come.

And when the Missouri River floods and no one thought the Missouri River ever would flood given the dam system, how much do we blame the person who has not done the right things?

And so, I think as somebody—I am going to have to leave pretty quick, but I just want to mention the economic value, the economic downturn. I saw it. And you might find this shocking given North Dakota's reputation right now, but during the eighties and the nineties we had some tough times. And if it had not been for SBA's loan guarantee programs, which are no cost in North Dakota be-

cause we repay our loans there—we were able to invest in businesses now that are enjoying tremendous success.

And so, that is not a handout. That is a hand up.

And I applaud you, Mr. Hardt, for the work that you have done in weathering the storm of this bad economy.

I applaud you, Mr. Rich, for the work that you have done in weathering the storm.

You guys are the guys who are going to make it happen for us, and so if we can make this no-cost government program work I am all for it.

Chair LANDRIEU. Okay. The Heritage Foundation—why don't you respond to that directly? And then we will get everybody else.

There was a vote called. There is going to be a vote called, I think, in a few minutes. We are going to go for another five minutes and then take a break and let everybody vote because we have two votes. Then I am going to come back and finish up.

And for anybody—all of you all need to come back, for those of you who can come back if you are able to.

But go ahead. Heritage, go ahead and respond.

Mr. MUHLHAUSEN. Senator Heitkamp, I think you should be commended for coming from a state that has communities that help each other. And I think all communities across any state are going to have people come out and help each other when a natural disaster strikes or any type of disaster strikes.

But I think the problem with the Federal Government is that it pays so much for natural disaster recoveries that were once entirely local or just within a state. What we are doing is the state governments now, and local governments, are less inclined to be prepared as they should to respond and solve these problems because the Federal Government is very generous in its funding of recovery efforts. And so, I think what happens is that you get less of a robust response from state and local governments in terms of the long-term recovery efforts.

Chair LANDRIEU. Okay. You know, I do not know if that is true in other states, but I have to tell you that is not the experience in Louisiana.

What the experience in Louisiana is, is communities—all 64 parishes—are just frightened to death that Katrina is going to happen to them, and they are desperately trying to get mitigation money every day.

Now we just had this debate on the Senate floor when there were some people that said that mitigation money had no place in a disaster response bill. I do not know if you missed that debate.

And then the other argument was some people thought we should not have the mitigation money in the Sandy bill and took it out because they did not think it belonged there.

So I do not know. If it does not belong there, where does it belong?

And, number two, if it had to belong, we had to offset it because mitigation either is not a high enough priority or it requires a reduction in other expenditures of the Federal Government.

You are talking to a person—you know, with all due respect, David—that had a whole city go underwater because the Federal Government does not have enough money in the Corps of Engi-

neers budget to protect us since the 1950s. And we kept saying please help us build these levees. Of course, they did not. Then when they built them, they collapsed in 52 places.

So I am a little bit confused.

I mean, I understand that you are opposed to—and I agree—the Federal Government picking up 100 percent of the tab or even 90 percent of the tab, but I am not sure it is correct that states and local governments are not taking precautions and using their own money to try to do this.

I mean, they are scrambling to build levees in my State, not depending on just the Federal Government to come in.

Let me get—and I will come back to you for response.

Go ahead, Mr. King.

Mr. KING. I would just like to add, I think, the insurance question is one that I wish I were not becoming more and more expert at daily. And I am amazed at the number of people who do the right thing, who take insurance, and then you find out that the coverage does not extend because of this unusual circumstance, and all of a sudden the coverage covers 10 percent of the damages.

Chair LANDRIEU. Right.

Mr. KING. And that is something that is extremely troublesome, and I am not sure how to resolve it within the Committee, but I think it needs to be addressed and really explained.

I mean, I do not know whether we have clear language opportunities. But we had people that were absolutely certain they were covered, and a very small portion were.

Chair LANDRIEU. And found out they were not.

Mr. KING. Right.

Chair LANDRIEU. Senator Cowan, and then I want to put into the record this affordability amendment that our Committee has submitted on insurance. I am not going to go into it, but for the record so the members can look. These are some of the suggestions that we have made about really focusing on—and you all helped us with this—the affordability piece of insurance for business and the coverage, et cetera.

But go ahead, Senator Cowan.

[The information follows:]

AMENDMENT NO.________ Calendar No.______

Purpose: To establish a pilot program to provide targeted financial assistance to low-income individuals who cannot afford flood insurance coverage.

IN THE SENATE OF THE UNITED STATES—112th Cong., 2d Sess.

S. 1940

To amend the National Flood Insurance Act of 1968, to restore the financial solvency of the flood insurance fund, and for other purposes.

Referred to the Committee on ____________________ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Ms. LANDRIEU

Viz:

In section 140, strike subsection (d) and insert the following:

(d) FUNDING.—Notwithstanding section 1310 of the National Flood Insurance Act of 1968 (42 U.S.C. 4017), there shall be available to the Administrator from the National Flood Insurance Fund, of amounts not otherwise obligated, not more than $750,000 to carry out subsections (a), (b), and (c) of this section.

(e) PILOT PROGRAM.—

(1) IN GENERAL.—Not earlier than 90 days and not later than 180 days after the date on which

the Administrator submits the report required under subsection (c), the Administrator shall establish a pilot program (referred to in this subsection as the "program") to provide means-tested, targeted assistance through vouchers or subsidies for the purchase of flood insurance to individuals who are economically distressed and cannot afford flood insurance coverage.

(2) ELIGIBILITY.—

(A) IN GENERAL.—The Administrator shall establish appropriate criteria under which an individual may qualify for a voucher or subsidy under the program.

(B) INCOME REQUIREMENTS.—The criteria established under subparagraph (A) shall specify that an individual is not eligible for a voucher or subsidy under the program if—

(i) the annual adjusted gross income of the household of the individual is greater than 80 percent of the area median income, as determined by the Secretary of Housing and Urban Development; or

(ii) the individual does not reside in an area that is subject to the mandatory purchase requirements under sections 102

and 202 of the Flood Disaster Protection Act of 1973 (42 U.S.C. 4012a and 4016).

(3) VOUCHERS AND SUBSIDIES.—

(A) ADJUSTMENT OF AMOUNT.—The Administrator may adjust the amount of a voucher or subsidy provided to an individual under the program based on the level of financial need of the household of the individual, including by establishing a tiered system, sliding scale, or standard of affordability that evaluates the cost of flood insurance coverage as a percentage of the adjusted gross income of a household.

(B) LIMITATION.—The amount of a voucher or subsidy provided to an individual under the program may not exceed the cost of flood insurance coverage for the individual under the National Flood Insurance Program.

(4) USE OF VOUCHERS AND SUBSIDIES.—The Administrator may not provide a voucher or subsidy under the program to an individual to pay for flood insurance coverage under the National Flood Insurance Program for—

(A) any property that is not the primary residence of the individual;

(B) any business property; or

(C) any real property purchased by the individual after the date of enactment of this Act.

(5) ADMINISTRATION.—

(A) IN GENERAL.—The Administrator may take all necessary and appropriate action to carry out the program, including entering into agreements with other Federal agencies, agencies or instrumentalities of State, local, or special-purpose local governments, or private or nonprofit organizations to carry out the program.

(B) REQUESTS FOR INFORMATION.—Notwithstanding any other provision of law, the Administrator may request information from the Secretary of the Treasury, the Social Security Administration, or a State agency in order to verify information relating to the income of—

(i) an individual seeking to participate in the program; and

(ii) the household of an individual seeking to participate in the program.

(6) FUNDING.—

(A) SOURCE OF FUNDING.—Notwithstanding section 1310 of the National Flood In-

surance Act of 1968 (42 U.S.C. 4017), the Administrator may use amounts of the National Flood Insurance Fund not otherwise obligated to carry out the program.

(B) TOTAL AMOUNT OF FUNDING.—The total amount of the vouchers and subsidies provided under the program for a fiscal year may not exceed $10,000,000.

(C) OFFSETS.—Notwithstanding any other provision of this title or the amendments made by this title, the Administrator may not increase risk premium rates for flood insurance coverage under the National Flood Insurance Program to offset amounts expended by the Administrator to carry out the program.

(7) REPORT.—Not later than 3 years after the date on which the Administrator establishes the program, the Comptroller General shall submit to the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Financial Services of the House of Representatives a report that evaluates the performance and outcomes of the program.

(8) SUNSET.—On and after September 30, 2017, the Administrator may not provide a voucher or subsidy to any individual under the program.

Legislative History of S. 415 Provisions

Section 2 (Clarification of Collateral Requirements)

111th Congress
Sec. 801 of H.R. 3854 (October 29, 2009)
Final Vote: 389-32
Notable votes in support (139 Republicans):
Sam Graves
John Boehner
Eric Cantor
Roy Blunt
Jerry Moran
Mark Kirk
Dean Heller

Sec. 2 of H.R. 3743 (November 6, 2009)
Final Vote: Passed by voice vote

112th Congress
H.R. 1 (December 28, 2012)
Final Vote: 62-32
Notable votes in support (12 Republicans):
Cochran
Collins
Heller
Hoeven
Murkowski
Shelby
Vitter
Wicker

Section 3 (Assistance to Out-of-State Businesses)

109th Congress
Sec. 425 of S. 3778
Vote 18-0 in committee on July 27, 2006 (10 Republican votes)
Notable votes:
Thune
Isakson
Enzi
Vitter
Cornyn

110th Congress
Sec. 104 of S. 163
Committee vote unanimously March 29, 2007 (9 Republican votes)
Vitter
Thune
Corker
Enzi
Isakson

Passed Senate by Unanimous Consent on August 3, 2007

111th Congress
Sec. 607 of S. 1229
Committee vote unanimously July 2, 2009 (7 Republican votes)
Thune
Enzi
Isakson
Wicker
Risch
Vitter

112th Congress
Sec. 433 of S. Amdt. 2521 to S. 2237 (July 12, 2012)
Final Vote: 57-42
Notable votes in support (5 Republicans):
Collins
Heller
Vitter

Senator COWAN. Thank you, Madam Chair. I want to thank you and Ranking Member Risch for calling the meeting and raising these two important and related topics. And I appreciate the conversation.

You know, I am one who believes that the government has a role, and it is not to solve everyone's problem, but it is to help people help themselves and better their situations. And when it comes to small businesses, the issues around insurance and disaster relief are critically important, and government does have a role to play there.

I, too, take issue with the suggestion that there is an abundance of cities, towns and states who are not thinking in advance and trying to do the right thing around these issues.

You know, I come from the State of Massachusetts where we are not known for being a tornado alley, but a couple of years ago we had a tornado unexpectedly. And when I say unexpectedly, I mean something that had not happened in too many decades to count sweep through Central and Western Massachusetts and devastate small businesses and homes.

I can almost guarantee you there was not enough insurance or no one had the kind of insurance necessary for that because the risk was de minimis, if it existed at all. There is a role for government to play in that circumstance, and I applaud the SBA who stepped in, as did some other Federal agencies, to help those small businesses get back on their feet and bring those communities back to life.

I also take exception—having worked in the government in Massachusetts as Chief of Staff of the Governor—to the suggestion that we were not prepared or our cities and towns are waiting for the Federal Government to give us a handout. We have a robust emergency management protocol in Massachusetts, but that emergency management protocol was not prepared for that situation because it was not on the books before.

I am all for risk management as a component of business and business development, economic development, and I do not know a small business owner anywhere in Massachusetts who does not think about insurance. But there is a real challenge, as Mr. Rich has addressed and others have alluded to; not every small business owner can get insurance.

We are talking about access to capital. There is a separate and related conversation about access to insurance.

And we, too, have a large coastal economy in Massachusetts, and we do throw a good party too.

[Laughter.]

And I invite you all, please come to the Cape and Islands this summer where you are always welcome.

Chair LANDRIEU. Where they do sunbathe.

Senator COWAN. We do sunbathe.

Chair LANDRIEU. They also work.

Senator COWAN. Not so much me, but we do sunbathe.

Chair LANDRIEU. Well, that is true, yeah.

Senator COWAN. But do come because you will see an abundance of small businesses—seasonable businesses—who need capital, who need coverage. But there are moments in time because of severe

weather events—and they are increasing more often—that the insurance is not there, or if they have insurance, as Mr. King has alluded to, it is just not the kind of insurance they thought they needed for those circumstances. And I think that is why it is important that the SBA and other governmental agencies, to the extent they have the resources and do the homework, are there for them.

And it is not easy for everyone to just move their business, and frankly, I do not want everyone to move their businesses. I need that coastal economy. Right?

I need that coastal economy. So I welcome the conversation.

I was actually going to—and I put it to Ms. Fingarson from the Independent Business Association. I would love to hear your thoughts around this issue, sort of access to insurance for those small businesses you represent. Is it a challenge, and how do your members meet that challenge?

Ms. FINGARSON. Thank you for the question.

I was looking at our small business economic trends report. It was released on Tuesday. We survey our members every month. We have been doing this since 1986 and quarterly since 1974, and cost and availability of insurance was 8 percent for the single most important business problem.

How does that compare to everything else on the list? Taxes and government regulation tied for 21 percent. So it is just not that high up on the single most important problem.

That is the latest data I have on that. I can also go back and see what our research foundation has in response to your question and get back to you.

Thank you.

Chair LANDRIEU. Go ahead.

Mr. KUNREUTHER. I would like to follow up on several of the points that have been raised, knowing we have only a couple of minutes. I think what you raised, Senator Heitkamp, is a very important aspect in terms of what people can do beforehand and then what they have to do afterwards.

And you, Senator Cowan, elaborated on that.

One of the really important issues is to understand what kinds of insurance are available.

Can we make it more transparent?

We can use the Biggert-Waters Act to move in that direction, to make insurance more affordable for people who are currently in the area—not for people moving in—recognizing that most are not purchasing insurance. You may have to think about requirements. It will be important to get data on how many businesses have been able to get insurance, actually purchased it and then later cancelled their policy.

We have a great deal of data, as Erwann was mentioning, on the National Flood Insurance Program where we see that after a few years, often those who do not have a claim, cancel their policies because they treat this as an investment and it is not paying off. They do not appreciate that the best return on an insurance policy is no return at all. You should celebrate the fact you have not had a loss.

We need to recognize at least that is a potential problem, as you were mentioning, and gain a better understanding of what insurance coverage businesses can purchase and whether they see hurricanes and floods as a concern. If we do not do that, I think we fail to take into account the lack sometimes of people saying this is something we should be doing and continue to do even if we do not collect on our premiums. And that is something, I think, needs to at least be addressed.

Chair LANDRIEU. Okay, I am going to get Ms. Hulit and then David again, and then we are going to break for the vote. And then I will get you, Ralph, when we come back. Go ahead, Jeanne.

Ms. HULIT. Thank you. I just wanted to add some perspective.

I was a commercial lender for 20 years, and we never wrote a commercial loan without doing a requirement check for whether or not they were in a flood zone and required flood insurance. And if they did not require flood insurance because they were not in a flood zone, if there had been a regulation requiring them to purchase flood insurance, I would have had a riot on my hands with my borrowers.

I mean, the fact is if they do not perceive that there is a need because there has been no experience of flood, then they do not want to pay the cost. So requiring people who may not be in an area to, as a small business, purchase insurance for a risk they do not expect is a burden to small business.

Additionally, I was regional administrator in New England, as Senator Shaheen knows, and had the opportunity to be in Massachusetts when the tornado hit, and in Vermont—not a coastal community, a mountainous community. Those communities were devastated by floods because of Hurricane, or storm, Irene. These were not rivers that had river flood plains. These were creeks that overflowed and wiped out businesses and homes. And so, the perception that those homes should have had flood insurance is, quite frankly, absurd.

And that is my concern—that we are—you know, the gentleman from the Heritage Foundation's position that they should have had insurance is concerning because in a mountainous region they could not have anticipated that.

Additionally, on the economic injury side, when in a mountainous region, when you have one road that goes this way and one road that goes this way, when the road that goes east-west is wiped out and the truckers who have to get the business goods to and fro had to increase their mileage by going all the way up north to Burlington and all the way back down and increase their costs, that is not business interruption. That is not physical damage. That is economic injury, and that is what the disaster program funds.

Chair LANDRIEU. David.

Mr. MUHLHAUSEN. Well, let's say that states and local governments actually need to do a better job. And what I mean is that, for instance, take caps on insurance premiums. When you have caps that prevent insurance companies from actually charging what the risk is, that is a problem. That is maybe beyond the scope of this Committee, but there are a lot of things that state and local governments need to do better.

And in many cases a lot of these disasters are entirely local and should be handled by the locals and not the Federal Government.

Chair LANDRIEU. Well, they are. Local disasters are handled 100 percent by the locals. It is only catastrophic disasters—you have to reach a certain threshold.

Now there is a debate going on right now about maybe that threshold is too low, but please do not let the record say the Federal Government comes in on every disaster. Local disasters are handled 100 percent locally. It is just when a disaster is regional in nature or it meets a threshold of injury that the Federal Government steps up.

All right, we are going to have to take a break to go vote, but we will come back. You all take 10 minutes. It will take us about 10 or 15 minutes, and we will resume.

[Recess.]

Chair LANDRIEU. Welcome back. The other members will join us as the votes on the floor allow, but let's continue our very robust and I think informative discussion on two major issues that are pending before this Committee.

One is the appropriate response to disasters through the SBA loan programs, how those programs are working and in what partnership they should be with insurance. I think because Senator Risch is very interested in this it got into a very good discussion of the problems and challenges for small business, you know, getting insurance, the right kind of insurance at the affordable levels, et cetera.

And then we also wanted to focus some time and attention—and we have about 20 minutes left—on this access to capital through the 504 refinancing and the SBIC family of funds issue in the Small Business Investment Companies.

So let's just take one last comment—I think it was Mr. Hardt—on insurance that you wanted to talk about, and then I would like to move to some discussion of the SBIC programs. Go ahead.

Mr. HARDT. Yeah, I just wanted to give you a perspective from the business owner side.

First of all, when I started the business, we had 10 employees. And I was doing the payroll, and I was doing everything to get us going.

And things were simpler then. I think part of the insurance issue is that things were simpler then.

We have business interruption. We have every type of insurance we can think of—kidnap and ransom, you name it. But our policy is probably 300 pages, and there are as many exclusions as there are inclusions. And if I did not have the size of the business that we have, that we have a very Type A CFO that actually reads these things and goes back and fights and gets additional riders from the insurance companies to mitigate our exclusions, we would not have the type of coverage we have.

So I think some of it is a larger business versus a small business issue, and somehow we have to overcome that.

The second thing, real quick, from a small business issue because I was there and still am there—the first thing I am going to do is pay my health care bill every month at $12,000 per family and $6,000 for individual. That comes out first.

The second thing I am going to do is pay my worker's comp insurance. That comes out second.

Hopefully, there is enough of a pie to have a good insurance policy after that.

Chair LANDRIEU. Thank you.

And one thing I would like you to submit for the record—and for those of you that are experts on it, the 300-page insurance form—is that generated by the company, the 300 pages, or is it 300 pages because the Federal Government or state governments require some of this disclosure?

And I do not want to get into a big discussion of that, but since we are really fighting with the SBA and the U.S. Government to get their forms down to reasonable, you know, clearly understood English, I would like to know if we need to push the insurance industry or they can push themselves to get that kind of, you know, plain English, big print, you know, clear guidelines because, well, yes, Federal regulations can be tough at times and we would like to eliminate ones that do not work. Sometimes there are businesses that are unnecessarily—the insurance industry may be making it difficult for some of our small businesses to get clarity on what they need.

Go ahead.

Mr. MICHEL-KERJAN. It is probably true for both private and public insurance. For flood, residential, and small business coverage is typically done through FEMA.

Chair LANDRIEU. Flood insurance?

Mr. MICHEL-KERJAN. Yes, flood insurance for small businesses. One possible challenge, though, is that you do not usually deal with FEMA directly, you are dealing with an insurance company or agent who is selling you a FEMA policy.

So because FEMA is the only insurer, there is nothing that would preclude FEMA from creating a simpler policy. We just need to ask them to do it. There is only one insurance company—the Federal Government.

Chair LANDRIEU. And how is that application? Have you seen one lately?

Mr. MICHEL-KERJAN. It is kind of long—maybe with fewer exclusions than the private market might have, but still—so I think we can do much better right here. It would be a matter of bringing FEMA to the table to see what could be done in collaboration with them.

Chair LANDRIEU. Okay. That is a very good idea.

Go ahead, Howard.

Mr. KUNREUTHER. I think this is a tremendous opportunity to push in the direction that you are talking about. The insurance industry is more receptive to this now because of all of the challenges that it is faced with. If one can make the case that unless one can understand what a policy is covering and not covering, you have really unfortunate occurrences of homeowners and businesses not being protected or thinking they are protected when they are not.

I hope we can take advantage of the dialogue we are having today to move in that direction. The Wharton Risk Center has advocated that the insurance industry has a responsibility to provide

the kind of information that makes it easy for people to understand the nature of the contract.

Chair LANDRIEU. Okay, Mr. Rivera.

Mr. RIVERA. Senator, I just wanted to say for the record there was an example about a recurring disaster loan, so forth and so on.

For Superstorm Sandy in a situation—the footprint of Sandy—I would say 80 percent of it had not been flooded before. So, in these kinds of situations, a lot of individuals did not have flood insurance because that is not part of the footprint. You know.

But as a result of the disaster loan, we will require where it is required by law to require flood insurance and where it is required by policy if they are outside the flood plain. Just so we can protect the collateral in the event there is another disaster that occurs. So they do not have to come back to the Federal Government and get another loan.

But I would go back to the situation where most of our loans are for uninsured or underinsured situations, where the gap is the rider that this person did not get because they did not anticipate having the earthquake or having, you know, the windstorm or having the flood insurance.

So just for clarity purposes, just to make—I sometimes—you know, I just want to make sure for the record everybody understands that we do require the insurance that is associated with the peril that impacted that disaster borrower.

Chair LANDRIEU. Okay. I am going to take one more comment, and then we are going to move to the SBIC issue.

Mr. MICHEL-KERJAN. To one point, I guess it is a question, "How long do you require people to keep their policy?"

We looked at the entire portfolio of the National Flood Insurance Program—about five million policies—and we have asked the question, how long do people keep their flood policy? On average, it is three years.

Chair LANDRIEU. Okay. How long do people keep——

Mr. MICHEL-KERJAN. Do people keep their flood——

Chair LANDRIEU [continuing]. Their flood policy for what?

Mr. MICHEL-KERJAN. Well, for protecting their house or their small businesses. And the answer on a national basis is three years.

So people—you may ask them to buy that coverage—

Chair LANDRIEU. To buy it to get the loan.

Mr. MICHEL-KERJAN. Yes.

Chair LANDRIEU. But then they do not keep it.

Mr. MICHEL-KERJAN. That is the point.

Mr. KUNREUTHER. That is not well enforced.

Mr. MICHEL-KERJAN. It has been a challenge——

Chair LANDRIEU. What is your answer to that?

Mr. RIVERA. So, if you do not keep it, you have assumed the risk and you do not get another loan.

That also applies for grants. If you get a FEMA grant, you are going to get a requirement that that property be insured by NFIP for the life of the property.

Mr. MICHEL-KERJAN. The enforcement aspect has been an issue.

Mr. RIVERA. It is very—well, we can ask Craig Fugate to come and testify, but I am sure he will say that that is enforced.

We have the same issue if somebody has a FEMA loan—I mean a FEMA grant or if we have had an SBA loan. You know, they have assumed the risk from our perspective. So we do not provide them with another disaster loan.

Chair LANDRIEU. One more point because I tell you this is getting a little bit out of our jurisdiction, as you know, but go ahead.

Mr. KUNREUTHER. For the record, we have talked with FEMA and they have said explicitly that it is the banks' responsibility to enforce this regulation.

Chair LANDRIEU. Okay. What I am going to suggest to our staff, both Rs and Ds, is let's think about either another roundtable or a hearing where we have FEMA—well, let's start with the committees. Homeland Security, our Small Business Committee and the Banking Committee——

Mr. KUNREUTHER. That would be great.

Chair LANDRIEU [continuing]. Because Banking has jurisdiction over insurance, Homeland has jurisdiction over FEMA, and we try to have an advocacy, not that we have jurisdiction, but we try to be an advocate for small business. And this is a real problem.

Mr. KUNREUTHER. It is.

Chair LANDRIEU. You know, on one side you are right, David; the Federal Government is spending more and more and more money responding to disasters.

On the other side, you know, you want to have an insurance-based risk management system, but if insurance is not available or too expensive or too complicated for businesses to understand, or if no one is enforcing them to have it, then the whole system gets out of balance.

That is why I have stayed on this issue—because I know the tendency is once the storm is over to forget. I have made a promise to my citizens never to forget Katrina or Rita or Isaac or Ike or Gustav.

I mean, we have had so many storms in the Louisiana-Texas area. I cannot let—we will not forget.

And this system is really broken, and it needs some fixing.

Now there was a House bill that is very interesting, that I have not studied, that was just filed on this subject yesterday, on a backup insurance. Does anybody know anything about that? A backup? Anybody?

Okay. I just found out about it this morning. So, anyway—but there are several insurance bills that are filed.

But I think the Senator has raised an excellent point. I was just going to say thank you for raising insurance because, I mean, it was part of our roundtable. But what we figured out is while our Committee does not have jurisdiction over this, Homeland does; Banking Committee does.

But it is a real problem for small business. So what I am going to suggest is we will come back and do something with those other committees at an appropriate time.

Senator RISCH. Madam Chairman, first of all, let me say that when you start talking about insurance it is a great intellectual exercise. When you are talking about insurance you have a loss that someone is going to have to sustain the loss, either the person who

actually sustained or someone else. There is going to be pain inflicted on whoever it is that sustains the loss.

The question is, how do you deal with that?

Is it right to take a loss that is painful to someone and force it off onto someone else who had nothing to do with it, someone who chose to locate their business in a place that had substantially less risk?

It is a really good intellectual exercise in American thinking as to how Americans handle a loss that they undertake.

After all, whenever we see tragedies like the hurricanes, it brings the issue into focus. However, the fact is that every day American businesses and individuals suffer from floods, fires, and earthquakes if you put all those daily occurrences together, it would equal the kind of tragedies that you see with a hurricane or other large disaster.

If you put all the losses together on a daily basis or all together on a weekly basis, you would find that the losses were very similar to what you get with large disasters, but they hit us differently. They are portrayed in our mind differently when you see so many people that are affected at once.

So it is good to have these intellectual discussions and see if we really are committed to a free enterprise system, where people do not view the Federal Government as being the solver of every problem that comes down the pipe.

It is a good exercise to have.

Chair LANDRIEU. No—and more than an exercise. I mean, there is actually some possibility of actually changing something. That is the great thing because this disaster is getting very, very expensive for the taxpayer, very frustrating for businesses.

The single most important problem according to this one organization, which is the largest organization—taxes at 21 percent; inflation at 6; poor sales, which would reflect a weak economy, at 18, finance and interest rates, 2; cost of labor, 4; government regulations and red tape at 21; compensation from large businesses at 8; quality of labor at 5; and insurance at 8; and all others.

But it still is an important issue to business, I think generally, and more importantly to the cost of the Federal Government.

But since we have spent a long time on insurance, let's go to FIB.

I am sorry. Let's go to SBIC. I am getting all my acronyms confused.

Go ahead, Sengal.

Mr. SELASSIE. Sure. Well, I just want to give you a perspective on the—and it is away from the disasters and sort of on some of the successes that are going on in small businesses through the Small Business Association.

So I am here on behalf of the SBIA, Small Business Investor Alliance, a premier organization for small and middle market investors. And SBIA members provide vital capital to small and medium size——

Chair LANDRIEU. And how many members are there? A couple hundred?

Mr. SELASSIE. There are 156 or so.

Chair LANDRIEU. Okay.

Mr. SELASSIE. And we provide vital capital to small and mid-sized businesses nationwide, resulting in economic growth and job creation.

So, as mentioned earlier, my fund has $230 million and makes equity investments in small businesses, and we have done so across the country in 12 states.

So I will highlight just one——

Chair LANDRIEU. If you can highlight one or two just really quickly, and then I would like some comments from everybody else.

Mr. SELASSIE. Sure. I will highlight a portfolio company in Senator Risch's State. We made investment in a company called Track Utilities, located in Meridian, Idaho. Track has grown since our investment from 109 employees to 155 employees, and it provides bundled services. It really lays fiber and cable for power companies.

So Idaho Power is a big customer. CenturyLink, which acquired the old U.S. West assets and happens to be headquartered in Louisiana, is their largest customer.

They really provide a vital service, particularly with some of the mandates for internet infrastructure and certain minimum levels for everybody in the country.

Chair LANDRIEU. Now why couldn't those companies go to a regular bank, or did they try to, and what was the added value that you were able to bring to them?

Mr. SELASSIE. Sure. And they do have a regular banker in the capital structure. The senior banker who has got a first lien on the trucks and the assets and one that looked at what is the actual asset value of the business is the old Valley Bank Corp which got—an Idaho bank which got acquired by KeyBank. And they provided the first $6 million of capital for the company.

We then provided the next $7 million, which was really collateralized by cash flows rather than assets. So it is that next level of capital below asset-based levels that the companies are having a hard time getting.

Chair LANDRIEU. And is it because the bank cannot use cash flows as collateral?

Mr. SELASSIE. Yes. I think with some of the regulation and laws that have come about it is very punitive to the bank's capital accounts.

Chair LANDRIEU. Under Dodd-Frank or even before Dodd-Frank?

Mr. SELASSIE. A combination, but I think it has been exacerbated with some of the legislation.

So, you know, for them to make that sort of loan, they have to reserve almost 100 percent cash against that, which is not an effective model for a bank.

So what actually a number of banks have begun to do is invest in funds like ours with their private capital to help——

Chair LANDRIEU. I want to be really clear about this because I think, Senator Risch, this is a very important issue for our Committee.

I mean, I think what you just said was so important. The bank, you could assume, might have wanted to lend the money, but they could not lend the money because the regulation would require them to keep 100 percent—retain 100 percent. So it was not a good model for them.

That does not negate the fact that the business was a reputable business, that the business absolutely could pay back the loan, that the business needed the loan to grow.

So we either have to support a program, in my view like this, that helps them get through this while we are trying to reduce the regulations that prevented the bank from lending them all the money at once.

Now does anybody have another solution?

Anybody have another solution to that—because what I cannot allow is the small business that could grow from 100 to 150, whether it is in Idaho or Louisiana, to not be able to grow because we will never get out of this recession if we do not.

Senator RISCH. I have a solution.

Chair LANDRIEU. Go ahead.

Senator RISCH. Repeal Dodd-Frank.

[Laughter.]

Chair LANDRIEU. Well, I am in for relief to community banks, yes. I am not in so that big banks can fail and the taxpayers have to pick up the tab again, not going to go there.

Anybody else?

The taxpayers picked up a huge, huge tab for that.

All right, is there any other comment you want to make? And then we are going to close up, and I will give my Ranking Member the final word.

Mr. SELASSIE. Sure. And I would say, I mean, this is—our fund is anchored and backed by private free market capital that has come in. So the SBIC program is a zero subsidy program.

Chair LANDRIEU. What does it cost the government?

Mr. SELASSIE. It has not cost the government. Yeah, it has not cost the government anything.

And, yeah, if it were our investors who put up in our fund $80 million of private capital, they would not have lost 100 percent of their money before.

Senator RISCH. He would not be here if it had cost the government.

Mr. SELASSIE. Exactly.

Chair LANDRIEU. Yeah.

Mr. SELASSIE. And, you know, I would say it is a zero subsidy, but you know, it is a—I think it actually is probably a positive from a deficit reduction and like perspective because a company like Track might have said: Without this capital, you know, we will just stay at 100 employees. We will maybe cut back—because they are paying with the economy and things going on.

So I think we were able to allow them to invest in infrastructure and have some capabilities where that was not the case.

You know, to touch the insurance conversation for a little bit, you know, we helped them get—we always do an insurance review before we go and make an investment in the company. And we have folks on staff who can go through those 300 pages and to try to help make sure that we are covered because, again, if there is business interruption or disruption, that comes out of our dollars.

Chair LANDRIEU. Right.

Mr. SELASSIE. So we are very incentivized to——

Chair LANDRIEU. You have private money invested, and you are very, very careful, which makes it a good partnership.

Mr. SELASSIE. Right.

Chair LANDRIEU. I just want to put a few letters in the record, and Senator, you have the last word.

Senator RISCH. Well, thank you, Madam Chairman. I think we have had a lively discussion and have probed some of the issues that need it. I want to thank you for holding the hearing.

Chair LANDRIEU. Thank you.

The record will stay open for two weeks. Please submit any additional comments that you want.

And thank you all so much for being a part of this.

[Whereupon, at approximately 12:31 p.m., the hearing was adjourned.]

APPENDIX MATERIAL SUBMITTED

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U.S. Senate Committee on Small Business and Entrepreneurship
Washington, DC - March 14, 2013

Have We Entered an Ever-Growing Cycle on Government Disaster Relief?

Erwann O. Michel-Kerjan
Managing Director, Center for Risk Management, The Wharton School, University of Pennsylvania
and
Chairman, OECD Board on Financial Management of Catastrophes

"Hurricane Sandy was not an isolated event. Indeed, the incidence of extreme events is far more frequent. Twenty of the 30 most expensive insured catastrophes worldwide from 1970 to 2011 have occurred since 2001---13 of them were in the United States. What's next? And who will pay?"

Michel-Kerjan and Kunreuther. Paying for Future Catastrophes.
New York Times Sunday Review, November 2012

1. Federal Disaster Relief Is Greater and More Frequent

America has suffered historical losses from terrorism, natural disasters, environmental disasters and financial crises since 2001. The upward trend in losses from natural disasters in particular has had an impact on post disaster relief to assist individuals, businesses and also the affected communities in rebuilding destroyed assets and providing temporary housing to displaced victims. Under the current system, the Governor of an affected state can request that the President declare a "major disaster" and offer special assistance if the damage is severe enough.[1] A look at the number of U.S. presidential disaster declarations between 1953 to 2011 clearly reveals an upward trend (see Figure 1).

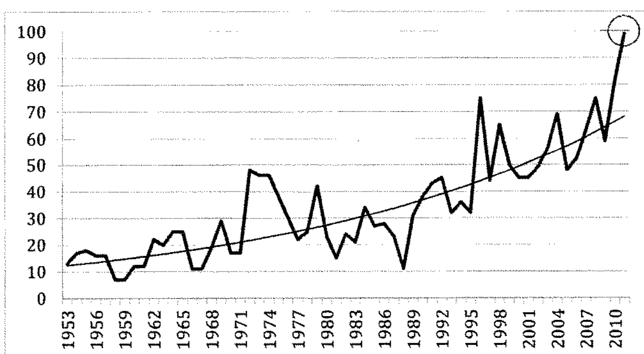

Figure 1. U.S. Disaster Presidential Declarations Per Year, 1953-2011.

[1] Public infrastructure are primarily rebuilt with federal funds through the Stafford Act, with only 25 percent picked up by state and local governments. Individuals and small businesses can apply for low-interest disaster loans from the Small Business Administration (rates vary from 4 percent to 8 percent); individual assistance grants are also available from FEMA to cover uninsured losses.

Overall, the number of Presidential disaster declarations has dramatically increased over time, from 191 declarations over the decade 1961-1970 to 597 for the period 2001-2010 (Michel-Kerjan and Kunreuther, 2011). As Figure 1 also shows, many of the peak years correspond to Presidential election years.

This is consistent with experience that Presidential election years spur disaster assistance. Four salient examples are the Alaska earthquake (March 1964) Tropical Storm Agnes (June 1972), Hurricane Andrew (September 1992) and the four Florida hurricanes (August-September 2004). In 1996 and 2008 (both presidential election years) there were 75 presidential declarations. This record number was exceeded in 2010 when there were 81 major disaster declarations, and again in 2011 with 99 declarations.

The more pronounced role of the federal government in assisting disaster victims in recent years can also be seen by examining several major disasters occurring in the past 60 years and how much federal disaster relief represented as a proportion of the total direct economic losses, as shown in Table 1 (see also Cummins, Suher and Zanjani, 2010).

Table 1: Role of the Federal Government in Paying for Natural Disaster Losses

Disaster	Federal relief as % of total damage
Hurricane Sandy (2012)	> 75% *
Hurricane Ike (2008)	69%
Hurricane Katrina (2005)	50%
Hurricane Hugo (1989)	23%
Hurricane Diane (1955)	6%

*Based on $60 billion federal relief figure (including the $9.7 billion additional borrowing capacity provided to the federally-run NFIP to pay its flood insurance claims). *Sources: Michel-Kerjan and Volkman Wise (2011).*

Media coverage in the immediate aftermath of catastrophes often raises compassion for victims of the tragedy (Moss 2010). The magnitude of the destruction often leads governmental agencies to provide disaster relief to victims even if the government claimed that it had no intention of doing so before the disaster occurred.

It is surprising how little data is *publicly* available on the amounts of federal aid that victims of disaster actually have received for, say, the disasters that occurred in the past 20 years. Likewise, no granular accounting of how taxpayers' money is used for federal relief (that is, how much money went to what city to do what exactly) is publically available on an historical basis (to the best of my knowledge). An initiative to create accessible record-keeping could be an important move towards more transparency, accountability, and ultimately, more responsibility.

It is also critical to better communicate information about relief programs that are available to victims of disasters, maximum compensation recipients can expect, and the conditions and limitations to obtaining such relief (for example, what collateral is required for a SBA loan).

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2. This Ever-Growing Relief Environment Has Consequences, But Not All Relief Policy Tools Create Moral Hazard

The expectation of governmental disaster relief funding for individuals and businesses results in economic disincentives to reduce their own exposure and/or purchase proper insurance coverage (Michel-Kerjan and Volkman Wise, 2011). If individuals assume that they will be bailed out after a disaster, they will be less likely to purchase insurance or avoid locating in high-risk areas (Brown and Hoyt, 2000).

The irony is that governmental disaster relief is usually earmarked to rebuild destroyed infrastructure, not as direct aid to the victims. To the extent that a large portion of such disaster relief goes to the states, post-disaster assistance also distorts the incentives of state and local governments to pre-finance their disaster losses through insurance and other mechanisms. Cities and states are not well-incentivize to incur upfront cost to make them more resilient to future disasters.

In a recent study jointly conducted with Carolyn Kousky and Paul Raschky, we examine the influence of federal disaster aid on individuals' flood insurance purchase decisions over a 10-year period (2000-2009) (Kousky, Michel-Kerjan and Raschky, 2013). We estimate the effect of grants from the Federal Emergency Management Agency's Individual Assistance (IA) program and low-interest loans to homeowners from the Small Business Administration (SBA).

We find that IA grants to individuals, while of fairly limited size, lead to a statistically significant reduction in insurance coverage purchased: **a \$1,000 increase in the average IA grant decreases average insurance coverage by \$4,300.** We also find that the moral hazard impact of federal aid is more important for large disasters.

Overall, **low-interest SBA loans have no effect on insurance demand**, maybe because borrowers have to pay it back, while IA is "free money."

While relief certainly helps those in need, they would have been better off being covered by an insurance contract. **Insurance**, as one of the largest industries in the world and an **effective risk-transfer mechanism**, can play an important role in dealing with these losses by providing financial protection following a disaster. It can also encourage property owners and businesses in hazard-prone areas to invest in cost-effective mitigation measures. But for insurance markets to work well, insurance premiums should be determined by demand/supply forces, rather than being artificially suppressed by insurance regulators, as they are today for homeowners' insurance in many states of the Union.

Risk-based premiums might be challenging to implement politically though, so it is important to address affordability issues as well, for instance by the development of means-based insurance voucher programs (see Kunreuther and Michel-Kerjan, *At War with the Weather*, 2011 and Howard Kunreuther's remarks at the Roundtable today on our ongoing work in this area).

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3. Conclusion

Disasters will only get worse because of growing population in high-risk areas, aging infrastructure, low levels of public and private investment in risk reduction measures, and predicted climate-related extremes. Superstorm Sandy is another reminder of our vulnerability.

America has entered a dangerous cycle of ever-growing reliance on *ex post* government relief rather than building *ex ante* physical and financial protection. With over $15 trillion of insured assets in coastal states from Texas to Maine, and much more uninsured, making America more resilient to disasters should become a national priority of the Administration and Congress. Let's make this happen before another massive disaster hits the country. The clock is ticking.

I commend the Committee for organizing this Roundtable today on such an important topic.

References

Browne, M. J. and R. E. Hoyt (2000). "The Demand for Flood Insurance: Empirical Evidence." *Journal of Risk and Uncertainty* **20**(3): 291-306.

Cummins, D., M. Suher, G. Zanjani (2010). "Federal Financial Exposure to Natural Catastrophe Risk." In: D. Lucas (ed.) *Measuring and Managing Federal Financial Risk.* (National Bureau of Economic Research. University of Chicago Press, 2010).

Kousky, C., E. Michel-Kerjan and P. Raschky (2013). "Does Federal Disaster Relief (Always) Create Moral Hazard?" Work in progress, The Wharton School, University of Pennsylvania.

Kunreuther, H., and E. Michel-Kerjan (2011). *At War with the Weather: Managing Large-Scale Risks in a New Era of Catastrophes.* MIT Press. Paperback edition.

Michel-Kerjan, E. and H. Kunreuther (2012). "Paying for Future Catastrophes." *New York Times*, Sunday Review, November 24.

Michel-Kerjan, E. and H. Kunreuther (2011). "Reforming Flood Insurance." *Science* 333, July 22.

Michel-Kerjan, E. and J. Volkman Wise (2011). "The Risk of Ever-Growing Disaster Relief Expectations." Paper presented at the annual NBER Insurance Group conference, Cambridge, MA, September 2011. Accessible at: http://nber.org/confer/2011/INSf11/Michel-Kerjan_Volkman_Wise.pdf

Moss, D. (2010). "The Peculiar Politics of American Disaster Policy: How Television has Changed Federal Relief." Chap. 18 in *The Irrational Economist*, Erwann Michel-Kerjan and Paul Slovic (eds.), 151-160. New York: Public Affairs Books.

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Remarks for the U.S. Senate Small Business Committee Roundtable
Washington, DC - March 14, 2013

Improving Insurance Decisions in the Most Misunderstood Industry

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Insurance is an extraordinarily useful tool to manage risk. When it works as intended, it provides financial protection to individuals and a profitable business model for insurance firms and their investors. But insurance is broadly misunderstood by consumers, insurers, and regulators.

A key challenge in designing insurance programs is to recognize the limitations of public and private decision makers when dealing with risk and uncertainty. Understanding these limitations may help policy makers create incentives that enable informed and efficient decision-making. Many of the biases and simplified decision rules that characterize human judgment and choice under uncertainty are based on feelings rather than on statistical concepts (Loewenstein et al. 2011). Everyone from an early age uses these automatic emotional responses because they usually result in reasonably good outcomes with little effort, as detailed by Nobel Laureate Daniel Kahneman in his recent book *Thinking, Fast and Slow* (Kahneman 2011).

1. Why Insurance is Misunderstood for Extreme Events

But although intuitive perceptions of risk are relatively accurate over a broad range of situations, this is not the case for unfamiliar risks that involve small probabilities and high degrees of uncertainty (Cutler and Zeckhauser 2011; Kunreuther, Pauly and McMorrow 2013). In situations of extreme events, consumers are likely to deviate from expert assessments of probability and judge the likelihood of an event by its salience (Tversky and Kahneman 2011). There is thus a tendency to ignore rare risks until after a disaster occurs.

Many consumers do not voluntarily buy coverage against potentially risky and serious losses because they feel a catastrophic loss *will not happen to them.* Only after suffering a loss will they voluntarily buy insurance, but many will cancel their policy if they haven't suffered a loss after several years. They view insurance as an investment rather than a protective measure. When one doesn't make a claim there is a feeling that the premium has been wasted.

Insurance firms also behave non-optimally. After they suffer a severe loss, they may decide that a risk is completely uninsurable rather than determining whether they should increase their premium to cover the risk. Prior to 9/11, insurers did not price terrorism risk when providing coverage against damage to commercial property. After 9/11, most insurers refused to offer any terrorism insurance because they feared catastrophic losses from future attacks. The few who did provide insurance charged extremely high premiums for it (Wharton Risk Center 2005).

To illustrate, prior to 9/11, Chicago's O'Hare Airport had $750 million of terrorism insurance coverage at an annual premium of $125,000. After the terrorist attacks, insurers offered O'Hare Airport only $150 million of coverage at an annual premium of $6.9 million. This reflected an increase in the premium per dollar coverage of over 275 percent! The airport was forced to purchase this policy since it could not operate without coverage (Jaffee and Russell 2003).

State regulators often constrain insurance premiums because they are concerned that insurance will not be affordable, especially to those who are at higher risk. In Florida, for example, the state set up its own insurance company, Citizens Property Insurance Corporation, which is structured such that homeowners residing in hurricane-prone areas are charged highly subsidized rates that undercut private insurers' premiums Kunreuther and Michel-Kerjan 2011). Over the past eight years, Citizens has become the state's largest insurer, with about 1.4 million policies at the beginning of 2013.

Behavior of this kind defeats the three main purposes of insurance:

1. Provide information via premiums as to the severity of one's risk
2. Motivate those at risk to undertake protection against an event that could produce a significant loss but has a low probability of occurrence
3. Offer incentives in the form of premium reductions to reward people who invest in risk-reducing measures

2. Guiding Principles for Insurance

To motivate consumers, insurers and regulators to properly view insurance as a way of reducing risks, there is a need for guiding principles for each of these interested parties. The following principles, discussed in more detail in Kunreuther and Michel-Kerjan (2011) and Kunreuther, Pauly and McMorrow (2013), are designed to make insurance more transparent, understandable and equitable than current policies are today:

Principle 1: Premiums reflecting risk. Insurance premiums should reflect risk to signal to individuals how healthy and safe they are and what preventive or protective measures they can undertake to reduce their vulnerability to illness and/or property losses. Risk-based premiums should also reflect the cost of capital that insurers must integrate into their pricing to ensure adequate return to their investors.

Principle 2: Dealing with equity and affordability issues. Any special treatment given to consumers at risk (e.g., low-income uninsured or inadequately insured individuals) should come from means-tested insurance vouchers. These vouchers should be financed by the federal government or at a state level through general taxes and ***not*** through insurance premium subsidies

Principle 3: Multi-year insurance. To encourage investment in preventive and protective measures, insurers should design multi-year contracts with premiums reflecting risk over a longer time horizon than the traditional annual insurance policy. The price of this insurance may be higher than single year coverage, but it would provide consumers with price stability. Regulators would have to allow insurers to charge premiums that reflect risk.

Several recent pieces of legislation have set the tone for appropriately dealing with risk. In light of the private insurance industry's refusal to provide sufficient amounts of terrorism coverage following 9/11, Congress passed the *Terrorism Risk Insurance Act (TRIA)* in 2002 so that businesses can now purchase reasonably priced terrorism coverage (Wharton Risk Center, 2005). The *Biggert-Waters Act*, passed in July 2012, authorizes major reforms to the National Flood Insurance Program over the next five years. Premiums for structures that have had repetitive flooding will reflect risk so individuals will be aware of the hazard they face. Insured individuals can be rewarded with lower rates if they undertake protective measures (see Title II in http://www.govtrack.us/congress/bills/112/hr4348/text). The *Affordable Care Act* requires insurers to offer health insurance to all U.S. residents who do not currently have coverage through either their job or a public plan. It also levies a tax penalty on those who choose to be uninsured (see http://www.govtrack.us/congress/bills/111/hr3590/text).

3. What More Can Be Done to Make Insurance a Better Policy Tool?

One way to convince people of the long-term benefits of insurance is to stretch the time horizon over which the event can occur. Studies have shown that people are much more likely to buy insurance or invest in protective measures if an event such as a hurricane that has a 1 in 100 chance of occurring next year is presented as having a greater than 1 in 5 chance of happening at least once in the next 25 years (Slovic et al. 1978; Weinstein et al. 1996).

Insurers should construct worst-case scenarios for rare events so that they would be able to determine premiums that reflect their best estimate of expected future losses. Insurers should also consider offering multi-year policies if state regulators allow them to price coverage that reflects risk over that period.

State insurance regulators should be appointed rather than elected so they are less prone to being influenced by special interest groups and lobbyists. Regulatory decisions should make transparent who stands to benefit from a subsidized insurance program, and who will be paying part of that cost to protect others.

These concepts, if followed, will increase the chances that insurance is better understood so it can fulfill the roles it is designed to play: reducing future losses and financially protecting those at risk.

References

Cutler, D.M., R. Zeckhauser (2004). "Extending the theory to meet the practice of insurance." Pp. 1–53 *Brookings-Wharton Papers on Financial Services:* R. Herring and R. E. Litan (eds.) Washington, DC: Brookings Institution Press.

Jaffee, D., T. Russell (2003). "Market Under Stress: The Case of Extreme Event Insurance." In: Arnott, Greenwald, Kanbur and Nalebuff (eds.), *Economics for an Imperfect World: Essays in Honor of Joseph E. Stiglitz*, MIT Press.

Kahneman, D. (2011). *Thinking, Fast and Slow.* New York: Farrar, Straus and Giroux

Kunreuther, H., E. Michel-Kerjan (2011). *At War with the Weather: Managing Large-Scale Risks in a New Era of Catastrophes.* MIT Press. Paperback edition.

Kunreuther, H., M. V. Pauly, S. McMorrow (2013). *Insurance and Behavioral Economics: Improving Decisions in the Most Misunderstood Industry.* New York: Cambridge University Press.

Loewenstein, G.F., E. U. Weber, C. K. Hsee, N. Welch (2011). *Psychological Bulletin* 127: 267–286

Slovic, P., B. Fischhoff, S. Lichtenstein (1978). "Accident Probabilities and Seat Belt Usage: A Psychological Perspective." *Accident Analysis and Prevention* 10: 281:285.

Tversky, A., D Kahneman (1973). "Availability: A heuristic for judging frequency and probability". *Cognitive Psychology* **5** (1): 207–233

Weinstein, N., K. Kolb, B. Goldstein (1996). "Using Time intervals Between Expected Events to Communicate Risk Magnitudes." *Risk Analysis* 16:305-308.

Wharton Risk Center (2005). *TRIA and Beyond: Terrorism Risk Financing in the U.S.* Philadelphia: The Wharton School, University of Pennsylvania.

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CONGRESSIONAL TESTIMONY

Small Business Disaster Reform Act of 2013: A Failed Effort at Reform

Testimony Before
the Committee on Small Business and Entrepreneurship
United States Senate

March 14, 2013

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Introduction

My name is David Muhlhausen. I am Research Fellow in Empirical Policy Analysis in the Center for Data Analysis at The Heritage Foundation. I thank Chairwoman Mary Landrieu, Ranking Member James Risch, and the rest of the committee for the opportunity to testify today on the Small Business Disaster Reform Act of 2013 (S. 415). The views I express in this testimony are my own and should not be construed as representing any official position of The Heritage Foundation.

After federally declared disasters, the Small Business Administration's (SBA) Disaster Loan Program (DLP) offers taxpayer-funded direct loans to assist businesses, nonprofit organizations, homeowners, and renters in repairing or replacing property damaged or destroyed.[1] Within the SBA, disaster loans are administered by the Office of Disaster Assistance (ODA). SBA offers four types of disaster loans:

- Home Physical Disaster Loans,
- Business Physical Disaster Loans,
- Economic Injury Disaster Loans (EIDL), and
- Pre-Disaster Mitigation Loans.[2]

Under current law, for disaster loan applicants who are unable to obtain credit elsewhere, the interest rate shall not exceed 4 percent. For those applicants who have access to credit elsewhere, the interest rate shall not exceed 8 percent. In the 112th Congress, there was a failed effort to set the interest rates for disaster loans at 1 percent for eligible applicants in declared disaster areas, regardless of whether applicants have access to credit.[3]

In fiscal year (FY) 2010, the SBA approved $574 million in disaster loans for 15,356 applicants.[4] The dollar amount of disaster loans increased to $739 million for 13,643 applicants in FY 2011.[5] However, the total monetary value of disaster loans decreased to $690 million in FY 2012.[6]

As of January 31, 2007, according to the Government Accountability Office, the SBA approved over $5 billion in disaster loans for homeowners and renters affected by the Gulf Coast hurricanes of 2005 (Katrina, Rita, and Wilma).[7] The interest rate subsidy of these 2005 hurricane SBA disaster loans cost the federal government almost $800 million.[8]

Unfortunately, as my testimony will illustrate, the Small Business Disaster Reform Act does not provide the necessary reform to our nation's disaster prevention and recovery programs. My testimony focuses on the following deficiencies of the Disaster Loan Fairness Act:

- The Act will likely make defaults on taxpayer-funded loans more prevalent.
- The Act unnecessarily increases the moral hazard and other unintended consequences of providing disaster loans.

- The Act fails to address the increasing nationalization of disaster responses.
- The Act fails to address the federal government's out-of-control spending.

Instead of considering legislation like the Small Business Disaster Reform Act of 2013, Congress should focus on reforms that make America more resilient to catastrophes and reduce recovery costs imposed on the federal taxpayer.[9]

Increasing the Likelihood of Default

For disaster loans of not more than $200,000, the Small Business Disaster Reform Act allows the SBA to forego using the primary residence of owners applying for loans as collateral if the SBA concludes that the owner has other assets equal to or greater than the amount of the loan that could be used as collateral. In general, the prospective borrower should have enough assets to pay off the loan, so primary residence assets are instrumental in setting conditions where borrowers will be less likely to default on their taxpayer-funded loans.

Simply stated, borrowers who own their primary residences are more likely to do whatever is necessary to keep from defaulting on their loans and losing their homes. This very common and acceptable requirement helps protect both the taxpayer and the lender. Research has demonstrated that small-business owners putting up personal collateral are less likely to pursue unnecessarily risky projects as there is more at stake; therefore, they are less likely to default.[10]

There is good reason to suspect that the Small Business Disaster Reform Act may increase the likelihood of defaults. A series of SBA Office of Inspector General (OIG) audits of 2005 Gulf Coast hurricane disaster loans have clearly found that the SBA awarded loans without regard to the applicants' ability to repay them.

The Small Business Disaster Reform Act fails to reform serious problems at the SBA.

- First, the SBA far too frequently disregards the ability of borrowers to repay taxpayer-funded loans by failing to conduct updated credit reviews.
- Second, mismanagement at the SBA has contributed to borrowers defaulting on their loans.
- Third, the SBA did not make certain that borrowers obtained appropriate insurance policies to cover their collateral; thus, taxpayers are potentially on the hook for hundreds of millions of dollars of inadequately insured loan balances.
- Last, the SBA inappropriately released collateral before disaster loans were paid in full.

Failure to Update Credit Reviews. As of September 30, 2007, the OIG identified 11,217 loans totaling $1.1 billion in disbursements for which one or more disbursements transpired more than a year after initial loan approval.[11] Due to the amount of time that can pass between initial loan approval and loan disbursement, the SBA often needs to perform credit reviews at the time of disbursement to ensure that loan applicants are still

creditworthy. At the time of initial loan application, the applicant may be creditworthy, but circumstances can change when there is a delay between initial application and disbursement. When too much time passes, the creditworthiness of loan borrowers often changes, sometimes for the worse. To ensure that disbursements are not made to borrowers who are unlikely to repay the taxpayer-funded loans, the SBA needs to check the creditworthiness of borrowers prior to disbursement of funds when there are delays between initial loan approvals and disbursements.

This problem was particularly pronounced in the case of the 2005 Gulf Coast hurricane recovery efforts. "Because rebuilding efforts in the Gulf Coast region have been slow due to the extensive damage caused by the hurricanes," according to the OIG, "many disaster loans were not fully disbursed until long after they were initially approved."[12] During this time period between initial approval and disbursement, the financial conditions of borrowers often worsened due to loss of business and employment in the region.

Originally, the SBA decided that there would be additional credit reviews if disbursement took place one year after the initial approval.[13] During the response, however, the SBA extended the one-year credit review requirement to 18 months. The 18-month requirement was later changed to 24 months. Accounting for this evolving credit review requirement, the OIG found 1,117 loans that required updated credit reviews.[14] Based on a random sample of 159 of these 1,117 loans, 110 loans (70 percent) worth $4.9 million were disbursed to recipients without any verification of their creditworthiness.[15] From this sample, the OIG estimates that the SBA disbursed at least $29.2 million to borrowers that had a higher risk of defaulting.

The SBA, as a result, through downgrading the use of updated credit reviews "circumvented a critical management control, disbursing additional funds on these loans without first determining whether adverse changes had occurred in the financial condition of borrowers that would have impacted their ability to repay the additional loan proceeds that were disbursed."[16] According to the OIG:

> [The SBA] explained that the credit review extensions were justified since economic conditions in the hurricane-hit areas had negatively impacted borrower repayment ability in many cases, through no fault of the borrowers. Therefore, they intended to disburse the full amount of the approved loans regardless of whether borrowers could repay their loans.[17]

By disregarding the ability of borrowers to repay taxpayer-funded loans, the SBA "was negligent in carrying out its fiduciary responsibilities."[18] Further, "By law, SBA is authorized to make disaster loans, not grants."[19] In essence, the SBA's disregard for borrower repayment ability transformed the disaster loans, in many cases, into a handout rather than a helping hand. According to the OIG:

> SBA's monitoring efforts were not adequate to ensure that the financial status of borrowers had not deteriorated to levels that would adversely impact their loan repayment ability. Generally, ODA did not: (1) perform

annual credit reviews, as required by the Agency's standard operating procedures, before making distributions of loan proceeds; (2) obtain updated financial information; and (3) cancel loans where the borrower had no repayment ability. As a result, SBA disbursed over $1 billion in loans 1 year or more after loan approval without assurance that borrowers had repayment ability.[20]

Improper Loan Origination and Servicing. The OIG audited "early-defaulted" disaster loans—loans that defaulted within 18 months of first due loan payment—awarded to victims of the 2005 Gulf Coast hurricanes.[21] The OIG randomly sampled 117 loans from 4,985 disaster loans that were at least 90 days delinquent or charged off as of September 30, 2007.[22] The OIG "determined that improper loan origination and/or servicing may have contributed to early loan defaults because all but 4 of the 117 loans reviewed were either improperly originated and/or inadequately serviced."[23] Further, about "63 percent of the loans reviewed were approved although the applicants lacked repayment ability or were not creditworthy, and 79 percent were inadequately serviced after becoming delinquent."[24]

Based on its random sample, the OIG estimates that approximately 4,815 (96.6 percent) of the 4,985 early-defaulted loans, totaling $98.4 million, defaulted due to deficiencies in the SBA's loan origination and servicing practices.[25]

Failure to Require Insured Collateral. The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 dictated that federal loan programs cannot provide a loan that is secured by real estate located in federally defined flood hazard areas unless the loan is continuously covered with appropriate flood insurance.[26] Further, if borrowers fail to purchase the required insurance, the loan-backing agency must purchase insurance on behalf of borrowers and charge them for the costs.[27]

For the hurricanes of 2005 and 2008 and the 2008 Midwest floods, the OIG set out to determine the degree to which the SBA adequately monitored the coverage of required insurance policies on collateral properties in the disaster loan portfolio.[28] From 23,068 fully disbursed disaster loans that required flood and hazard insurance coverage until maturity, the OIG randomly sampled 120 cases.[29] The OIG "found that SBA did not ensure that borrower insurance policies provided adequate coverage and were continuously renewed."[30] Further, the SBA "did not comply with statutory requirements to purchase policies for borrowers who let their policies lapse."[31]

The 120 cases sampled comprised "$3.8 million in outstanding loan balances that may not be adequately protected."[32] Based on its sampling technique, the OIG estimated that at least 5,341 (23.2 percent) of the 23,068 loans had collateral properties that were not adequately covered by insurance.[33] This deficiency means that the taxpayers were on the hook for $510 million in outstanding loan balances that were not adequately insured.

Inappropriate Collateral Releases. The OIG audited disaster loans from September 1, 2007 to May 31, 2010, to determine whether the SBA was releasing collateral

appropriately.[34] Under most circumstances, loan collateral is released when disaster loans are paid in full. However, borrowers can petition the SBA for a full or partial release of loan collateral. Releases of collateral can be approved by the SBA as long as there is sufficient collateral remaining to continue securing the loan.

The OIG "found that both servicing centers did not consistently make appropriate decisions to release collateral on active loans."[35] The OIG randomly sampled 120 cases from 2,706 incidences of collateral releases.[36] Of these 120 cases, 55 (45.8 percent) collateral releases were inappropriate.[37] These 55 cases were for property values of at least $3.1 million. Thus, the remaining collateral for many of these loans was insufficient to protect the taxpayer because the loan balances exceeded the values of the properties.

According to the OIG, these inappropriate collateral releases occurred because the SBA failed to perform a full collateral analysis. The OIG estimates that 979 (36.2 percent) of the 2,706 collateral releases for properties worth $33.7 million could be inadequately protected, exposing the taxpayer to a higher risk of loss.[38]

Moral Hazard and Other Unintended Consequences

Generous federal disaster relief creates a "moral hazard" by discouraging individuals and businesses from purchasing natural catastrophe insurance. Currently, SBA disaster loans are awarded regardless of whether the beneficiaries previously took steps to reduce their exposure to losses from natural disasters.

Limiting the range of collateral that can be secured will likely encourage more defaults, leaving taxpayers increasingly at risk. Instead, congressional reform efforts should encourage Americans to become better prepared to prevent property losses from disasters. The Small Business Disaster Reform Act does nothing to reduce the exposure of Americans to property losses and the need for disaster assistance for future catastrophes.

While SBA disaster loans are intended to help applicants return their property to the same condition as before the disaster, the unintended consequence of this requirement is that borrowers are forced to rebuild in disaster-prone locations. For example, instead of relocating out of a town sitting in a major flood zone, applicants are required to rebuild in the exact same location. Thus, applicants are still located in a high-risk area. In many cases, the loans fail to offer a long-term solution. The Small Business Disaster Reform Act does nothing to stop rebuilding in high-risk areas.

Increasing Nationalization of Disaster Responses

By reducing the SBA's options for securing collateral, the Small Business Disaster Reform Act does nothing to reduce the overreliance of state and local governments on the federal government for the provision of recovery assistance. Far too frequently, the federal government has been the primary source of recovery efforts for natural disasters

that are inherently localized in small geographic areas and do not rise to the level that should require action by the federal government.

Overly generous federal assistance encourages state and local governments to underinvest in disaster preparedness, because state and local government expect the federal government to bail them out.[39] Consequently, the more proactive the federal government becomes at supplying disaster recovery assistance, the more it provides an incentive for state and local governments to reduce their own investments in preparedness.

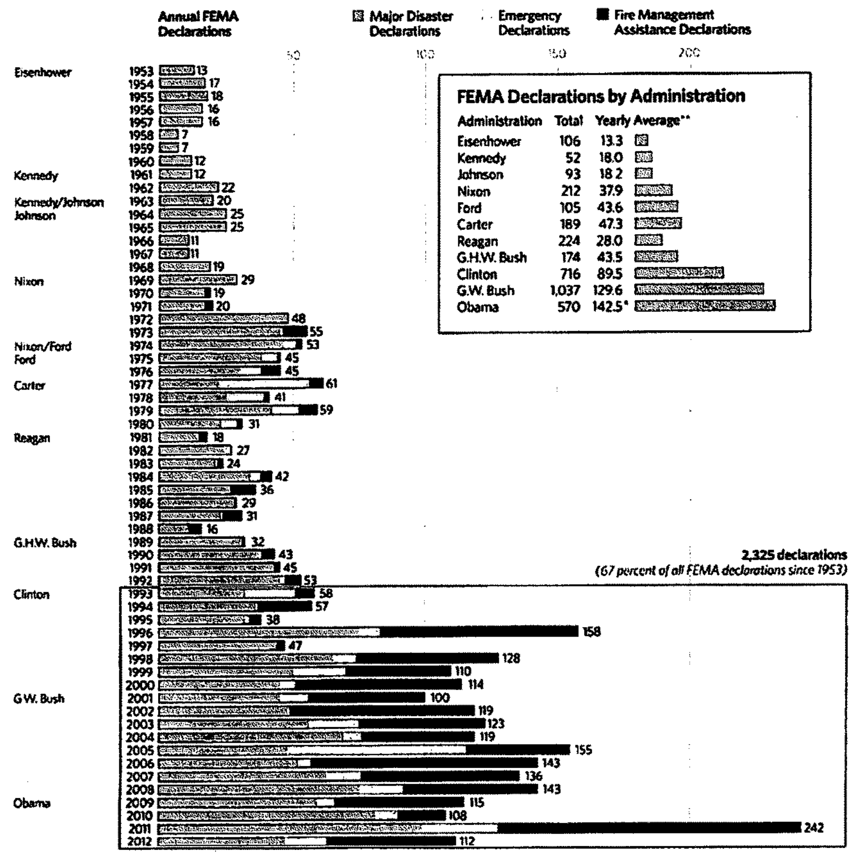
Increasingly, Americans are becoming overly dependent on federal assistance after natural disasters occur. In fact, there is evidence that with each new catastrophe, disaster victims have come to expect more federal relief than was previously offered.[40] Further, disaster assistance appears to have become a political tool because the number of disaster declarations is significantly higher in election years compared to non-election years.[41] For example, one study of Federal Emergency Management Agency (FEMA) disaster payments found not only that states having higher political importance to Presidents receive higher payments, but also that states with greater congressional representation on subcommittees with FEMA oversight responsibilities receive more in disaster payments than states with less representation receive.[42]

Since 1996, the year President Clinton sought reelection, the number of disaster declarations issued by FEMA has increased dramatically.[43] Chart 1 demonstrates this trend. As my Heritage Foundation colleague Matt A. Mayer has previously written, "the yearly average of FEMA declarations tripled from 43 under President George H. W. Bush, to 89 under President Clinton, to 130 under President George W. Bush."[44] The record for the most declarations in a year was set by President Clinton in 1996 with 158 declarations. However, President Obama smashed this record with 242 declarations in 2011.

Since 1953, there have been 3,478 disaster declarations.[45] During the past 20 years, from President Clinton to President Obama, presidential declarations number 2,325—66.8 percent of all declarations.[46] Since the beginning of President Clinton's first term in 1993 through the end of 2012, there has been an average of 116.2 disaster declarations per year, compared to an average of 28.8 declarations from 1953 to 1992. Essentially, this trend is the result of disaster responses that were once entirely local in nature and handled by state and local governments becoming "nationalized" and thus the responsibility of the federal government.

This nationalization has led to an ever-growing share of the total cost of natural disasters being dumped on an already strained federal budget.[47] According to my fellow roundtable panelist Professor Howard Kunreuther of the Wharton School's Risk Management and Decision Processes Center, the amount for aid provided by the federal government as a percentage of total damage caused by a major disaster is steadily increasing.[48] For example, federal aid comprised 50 percent of the total damage caused by Hurricane Katrina (2005).[49] Just three years later, federal aid increased to 69 percent of total damage caused by Hurricane Ike (2008).[50]

FEMA Declarations, by Year and by Presidential Administration



* Based on data through December 31, 2012. ** Figures are prorated for Kennedy, Johnson, Nixon, and Ford Administrations.

Note: Annual totals may not add up to presidential totals during the same time period due to the January 20 inauguration date.

Source: FEMA Disaster Search database, http://www.fema.gov/disasters?action=Reset (accessed March 12, 2013).

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The Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1998 (Stafford Act) established that for a disaster to be eligible for federal assistance, it must be "of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments and that Federal assistance is necessary."[51] Regardless of this apparent requirement, FEMA "has approved disaster declarations for many natural disasters that historically and factually were not beyond the capabilities of states and localities."[52] Returning to the original understanding of what necessitates the federal government's involvement does not mean that local natural disasters are not

"catastrophic" for a particular community. Rather, "It simply means that most natural disasters occur within confined geographic areas and that states and localities can handle them without federal involvement."[53]

The majority of states do not benefit from federal assistance, because only a minority of states receives the benefit of FEMA disaster declarations.[54] Thus, the majority of states send their disaster-response tax dollars to Washington, D.C., so the federal government can subsidize disaster response for the minority of states.

Out-of-Control Spending

The Congressional Budget Office (CBO) reported throughout 2012 that the federal deficit for FY 2012 will be nearly $1.1 trillion.[55] "Measured as a share of gross domestic product (GDP)," the CBO reports, "that shortfall will be 7.0 percent, which is nearly two percentage points below the deficit recorded last year but still higher than any deficit between 1947 and 2008."[56] GDP is the total market value of all officially recognized goods and services produced within a country in a given year. FY 2012 is the fourth year in a row that the federal government has posted a deficit exceeding $1 trillion.[57] In 2009, the CBO warned that these "Large budget deficits would reduce national savings, leading to more borrowing from abroad and less domestic investment, which in turn would depress economic growth in the United States. Over time, the accumulation of debt would seriously harm the economy."[58]

These persistently large deficits have caused the federal government's debt to explode. On December 31, 2011, the gross debt racked up by the federal government reached $15.2 trillion—the legal limit as authorized by Congress.[59] In response, on January 12, 2012, President Barack Obama formally notified Congress of his intent to raise the nation's debt ceiling by $1.2 trillion, from $15.2 to $16.4 trillion.[60] In November 2012, the CBO reported that the nation's gross debt stood at $16.3 trillion.[61] The federal government's debt has reached such a staggering sum that it is difficult for Americans to comprehend. If we did, we would be truly frightened at the prospect of paying it off.

While the deficit and debt are driven largely by entitlement spending—Medicare, Medicaid, and Social Security— the failure to reform federal disaster assistance and all the other spending programs advocated by Congress only moves the nation closer to fiscal insolvency. The Small Business Disaster Reform Act does nothing to reduce the cost of future disaster recoveries. Given the increasing financial stress facing the federal government, reform should be focused on preventive measures that limit the costs of disaster recovery.

Conclusion

The Small Business Disaster Reform Act fails as a reform effort. Weakening collateral requirements is neither fair to the federal taxpayer nor an effective reform of our nation's disaster prevention and recovery policies. The Act fails to address the increasing nationalization of disaster responses while doing nothing to address the federal government's out-of-control spending. The Act fails to address the SBA's violation of its

fiduciary responsibilities. Last, the Act fails to address the moral hazards of providing disaster loans.

Instead of considering legislation like the Small Business Disaster Reform Act, Congress should focus on reforms that make America more resilient to catastrophes and reduce recovery costs imposed on the federal taxpayer.

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[1]Bruce R. Lindsay, *The SBA Disaster Loan Program: Overview and Possible Issues for Congress*, Congressional Research Service, June 29, 2010.
[2]Ibid.
[3]The Disaster Loan Fairness Act of 2011 (H.R. 3042).
[4]U.S. Small Business Administration, *FY 2012 Congressional Budget Justification and FY 2010 Annual Performance Report*, p. 56, http://www.sba.gov/sites/default/files/FINAL%20FY%202012%20CBJ%20FY%202010%20APR_0.pdf (accessed February 13, 2012).
[5]U.S. Small Business Administration, *FY 2013 Congressional Budget Justification and FY 2011 Annual Performance Report*, p. 53, http://www.sba.gov/sites/default/files/files/FY%202013%20CBJ%20FY%202011%20APR.pdf (accessed February 13, 2012).
[6]U.S. Small Business Administration, *Summary of Performance and Financial Information: Fiscal Year 2012*, p. 2, http://www.sba.gov/sites/default/files/files/FY%202012%20Summary%20of%20Performance%20and%20Financial%20Information.pdf.pdf (accessed March 9, 2012).

[7]U.S. Government Accountability Office, *Natural Disasters: Public Policy Options for Changing the Federal Role in Natural Catastrophe Insurance*, November 2007, p. 16, http://www.gao.gov/assets/270/269745.pdf (accessed February 13, 2012).
[8]Ibid.
[9]For an example of proposed reforms, see Matt Mayer, David John, and James Jay Carafano, "Principles for Reform of Catastrophic Natural Disaster Insurance," Heritage Foundation *Backgrounder* No. 2256, April 8, 2009, http://www.heritage.org/research/reports/2009/04/principles-for-reform-of-catastrophic-natural-disaster-insurance.
[10]Sumit Agarwal, Souphala Chomsisengphet, and Chunlin Liu, "Determinants of Small Business Default" in *The Analytics of Risk Model Validation*, ed. George Christodoulakis and Stephen Satchell (Burlington, Mass: Academic Press, 2008), pp. 1–12.
[11]U.S. Small Business Administration, Office of the Inspector General, "Annual Credit Reviews for Gulf Coast Hurricane Disaster Loan Disbursements," Report Number 08-10, March 28, 2008, p. 1, http://www.sba.gov/sites/default/files/oig_dl_8-10.pdf (accessed March 11, 2013).
[12]Ibid, p. 2.
[13]Ibid, p. 1.
[14]Ibid.
[15]Ibid., p. 3.
[16]Ibid.
[17]Ibid., p. 4.
[18]Ibid.
[19]Ibid.
[20]Ibid., pp. 2–3.
[21]U.S. Small Business Administration, Office of the Inspector General, "Early-Defaulted Gulf Coast Hurricane Disaster Loans," Report Number 08-19, September 12, 2008, http://www.sba.gov/sites/default/files/oig_dl_8-19.pdf (accessed March 11, 2013).
[22]Ibid., p. 1.
[23]Ibid., p. 2.
[24]Ibid.
[25]Ibid.
[26]U.S. Small Business Administration, Office of the Inspector General, "Monitoring of Insurance Coverage for Disaster Loan Recipients," Report Number 10-01, October 20, 2009, p. 2, http://www.sba.gov/sites/default/files/oig_reptbydate_10-1.pdf (accessed March 8, 2013).
[27]Ibid., pp. 2–3.
[28]Ibid., p. 1.
[29]Ibid.
[30]Ibid., p. 2.
[31]Ibid.
[32]Ibid.
[33]Ibid.
[34]U.S. Small Business Administration, Office of the Inspector General, "Release of Collateral by the Disaster Loan Servicing Centers," Report Number 11-15, June 3, 2011, http://www.sba.gov/sites/default/files/Audit%2011-15%20Release%20of%20Collateral%20by%20the%20Disaster%20Loan%20Servicing%20Centers.pdf (accessed March 8, 2013).
[35]Ibid., p. 1.
[36]Ibid., p. 6.
[37]Ibid., pp. 1–2.
[38]Ibid., p. 6.
[39]Matt A. Mayer, *Homeland Security and Federalism: Protecting America from Outside the Beltway* (Santa Barbara, Cal.: Praeger, 2009); James F. Miskel, *Disaster Response and Homeland Security: What Works, What Doesn't* (Stanford, Cal.: Stanford University Press, 2008).
[40]Erwann Michel-Kerjan and Jacqueline Volkman-Wise, "The Risk of Ever-growing Disaster Relief Expectations," University of Pennsylvania, The Wharton School, Risk Management and Decision Processes Center *Working Paper* No. 32011-09, July 2011,

http://opim.wharton.upenn.edu/risk/library/WP2011-09_ReliefExpectations.pdf (accessed February 13, 2011); Michele L. Landis, "Fate, Responsibility, and 'Natural' Disaster Relief: Narrating the American Welfare State," *Law & Society Review*, Vol. 33, No. 2 (1999), pp. 257–318; and Michele L. Landis, "Let Me Next Time Be Tried by Fire: Disaster Relief and the Origins of the American Welfare State 1789–1874," *Northwestern University Law Review*, Vol. 92, No. 3 (1998), pp. 967–1034.

[41]Thomas R. Garrett and Russell S. Sobel, "The Political Economy of FEMA Disaster Payments," *Economic Inquiry*, Vol. 41, No. 3 (2003), pp. 496–509, and Erwann Michel-Kerjan, "Catastrophe Economics: The U.S. National Flood Insurance Program," *Journal of Economic Perspectives*, Vol. 24, No. 4 (2010), pp. 165–186.

[42]Garret and Sobel, "The Political Economy of FEMA Disaster Payments."

[43]The data presented in Chart 1 are based on Matt A. Mayer, "Congress Should Limit the Presidential Abuse of FEMA," Heritage Foundation *WebMemo* No. 3466, January 24, 2012, http://www.heritage.org/research/reports/2012/01/congress-should-limit-the-presidential-abuse-of-fema.

[44]Matt Mayer, "States: Stop Subsidizing FEMA Waste and Manage Your Own Local Disaster," Heritage Foundation *Backgrounder* No. 2323, September 29, 2009, p. 1, http://www.heritage.org/research/reports/2009/09/states-stop-subsidizing-fema-waste-and-manage-your-own-local-disasters.

[45]FEMA Disaster Search database, http://www.fema.gov/disasters?action=Reset (accessed March 8, 2013).

[46]Ibid.

[47]Some may argue that the growth of the federal government's role in disaster recovery is a result of the states not being able to afford to finance their own disaster recoveries. The federal government is facing a severe financial crisis and can no longer bail out the states that avoid their responsibilities. Public safety is a priority of state and local governments. If state and local governments are not willing to adopt policies to mitigate the effects of natural disasters and recover from these incidents afterward, then they are not fulfilling their obligations to their citizens.

[48]Howard Kunreuther and Erwann Michel-Kerjan, "People Get Ready: Disaster Preparedness," *Issues in Science and Technology*, Vol. 28, No. 1 (2011), pp. 1–7, http://opim.wharton.upenn.edu/risk/library/J2011IST_PeopleGetReady.pdf (accessed March 11, 2013).

[49]Ibid., p. 3.

[50]Ibid.

[51]42 U.S. Code § 5191(a).

[52]Matt A. Mayer, David C. John, and James Jay Carafano, "Principles for Reform of Catastrophic Natural Disaster Insurance," Heritage Foundation *Backgrounder* No. 2256, April 8, 2009, p. 3, http://www.heritage.org/research/reports/2009/04/principles-for-reform-of-catastrophic-natural-disaster-insurance.

[53]Ibid.

[54]Mayer, "States: Stop Subsidizing FEMA Waste and Manage Your Own Local Disaster," p. 3.

[55]Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2012 to 2022*, January 2012, p. x, http://www.cbo.gov/ftpdocs/126xx/doc12699/01-31-2012_Outlook.pdf (accessed December 11, 2012); Congressional Budget Office, *An Update to the Budget and Economic Outlook: Fiscal Years 2012 to 2022*, August 2012, p. 1, http://www.cbo.gov/sites/default/files/cbofiles/attachments/08-22-2012-Update_to_Outlook.pdf (accessed December 11, 2012).

[56]Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2012 to 2022*, January 2012, p. x.

[57]Congressional Budget Office, *An Update to the Budget and Economic Outlook: Fiscal Years 2012 to 2022*, p. 1.

[58]Congressional Budget Office, *The Long-Term Budget Outlook*, June 2009, p. xii, http://www.cbo.gov/ftpdocs/102xx/doc10297/06-25-LTBO.pdf (accessed December 11, 2012).

[59]U.S. Department of the Treasury, Bureau of the Public Debt, "Monthly Statement of the Public Debt of the United States, December 31, 2011," Table 1: Summary of Treasury Securities Outstanding, December 31, 2011, http://www.treasurydirect.gov/govt/reports/pd/mspd/2011/opds122011.pdf (accessed December 11, 2012).

[60]David Nakamura, "Obama Asks Congress for Debt Limit Hike," *44* (blog), *The Washington Post*, January 12, 2012, http://www.washingtonpost.com/blogs/44/post/after-delay-obama-asks-congress-for-debt-limit-hike/2012/01/12/gIQAA3ADuP_blog.html (accessed December 11, 2012).

[61]Congressional Budget Office, *Federal Debt and the Statutory Limit, November 2012*, November 2012, p. 1, http://www.cbo.gov/sites/default/files/cbofiles/attachments/43736-FederalDebtLimit-11-12-12.pdf (accessed December 11, 2012).

SBA 504 refinance – Jagemann Stamping Company

United States Senate - Committee on Small Business & Entrepreneurship

Roundtable – Thursday March 14, 2013

Thank you for the opportunity to talk before you today on an issue that impacts manufacturers of all sizes, especially small businesses like ours. My name is Ralph Hardt. I am the President of Jagemann Stamping Company based in Manitowoc, Wisconsin, a family–owned business with 225 employees where we manufacture precision metal parts for the automotive, industrial, consumer and defense markets. We also export 22 percent of our products to over 15 different countries. We have a subsidiary in Nashville with 33 employees. I am also Chairman of another small manufacturing company in South Carolina with 31 employees in precision grinding and finishing. My involvement with these three small businesses, located in very different parts of the country, gives me an excellent understanding of how to compete globally and grow our investments in equipment and our employees.

I am also a member of the Precision Metalforming Association and National Tooling and Machining Association, which together have about 3,000 member companies averaging 50 employees per business.

My comments are to reflect the success of a recent initiative that we have completed, in specific, a SBA 504 Refinance. This program was recently completed in early March with the final funding and restructure of our business debt. While I will present a summary, I have also prepared a detailed presentation for your records and files as to the detailed initiatives we took and the results obtained.

As we exited the "Great Recession" that for most manufacturers went from 2008-2010 we found ourselves in an uncomfortable debt and banking situation. We had utilized our line of credit to fund operational expenses and had our bank concerned as to our outstanding loan amounts and several years of poor profitability

.
However we had substantial equity remaining in our buildings and equipment but could not easily access such as again our bank was not interested in further loan growth with us. They as all banks were under increased scrutiny as well which made the situation even more difficult.

As the economy recovered, especially in our automotive sector, we again wanted to grow and expand. We looked at various financing options but it appeared that the best one available to us was the SBA refinance program.

Specifically this program allowed us to use our excess equity in our assets, through appraised values, and if more than our outstanding debt put the excess cash received from a refinancing directly into our business.

We did exactly such, in fact the end result was a reduction in our annual principal and interest payments of approximately $400,000 and an improvement in our liquidity or line availability of over $5,000,000.

Our bank also supported the program, and with their reductions in outstanding balances, coupled with our improved financial health, have allowed us to again begin reinvesting into our business and we are growing again.

In fact in 2012 our sales grew by 23 percent, we added many employees and purchased over $5M in new capital equipment.

In 2013 we are planning growth of 25%, hiring over 100 new employees, many who will enter our technical training and apprenticeship programs, and are adding $10M in new equipment and manufacturing capabilities.

Our customers again have confidence in us, our communities are energized, and we are on a positive track. Similar growth is also seen in our Tennessee and South Carolina operations.

Small manufacturers are ready to grow and expand as our economy recovers. We have many challenges in front of us and the SBA 504 refinance program is a tool to help us with some of these challenges, especially in a tougher banking environment.

And it needs to be remembered that this program is not a subsidy based program as the fees paid at the inception and during the term of the loan fund the expenses of operating this program. So there are no governmental funds appropriated as the program costs are paid by the borrower.

It is important for our government to continue to support programs such as this to aid in the regrowth of our manufacturing sector and to help us compete in an ever changing global economy.

Thank you for the opportunity to speak before you today and I look forward to answering any questions you have.

Question for Ashley Fingarson, NFIB
From Chair Mary L. Landrieu
Small Business Committee Roundtable: "Helping Small Businesses Weather Economic Challenges & Natural Disasters: Review of Legislative Proposals on Access to Capital and Disaster Recovery"

ACCESS TO CAPITAL

Question – SBA Lender Activity Index

As of September 2012, there were over 2,400 SBA lenders nationwide. While the SBA currently releases some information publicly about SBA lending activity, it is extremely difficult to find and comprehend if you are not an SBA lending professional. If a small business, mayor, or governor wants to determine SBA lending activity in their area, they lack the ability to do so easily. My Communicating Lender Activity Reports from the Small Business Administration (CLEAR SBA) Act would require the SBA to establish an online database to provide consumers with more transparent, user-friendly data about their local SBA lenders.

- This question is for all of you- do you think that more small businesses would find it easier to use SBA resources if more information was publicly available?

Response to Question for Ashley Fingarson, NFIB
From Chair Mary L. Landrieu
Small Business Committee Roundtable: "Helping Small Businesses Weather Economic Challenges & Natural Disasters: Review of Legislative Proposals on Access to Capital and Disaster Recovery"

While there are some small businesses for which the Small Business Administration (SBA) is important, for the vast majority of small businesses the SBA is not a resource that small businesses utilize, according to the National Federation of Independent Business (NFIB) Research Foundation's *National Small Business Poll – Small Business Administration.* Only 7 percent of small employers have participated in some SBA or SBA-sponsored program or activity in the prior three years from 2006 data, and participation ranges from receipt of financial assistance to attending a Small Business Week awards ceremony. Additionally, only 14 percent of small employers have visited the SBA website in the last year from 2006 data, and 89 percent of those who did visit the site visited infrequently, only a couple of times in the year.[1]

Most small-business owners appear to be embracing technology. Ninety-one (91) percent of small employers now personally use a computer in their businesses, which means nearly one in 10 do not. Furthermore, for those small employers who utilize a computer within their businesses, a majority (51 percent) spend less than an hour a day working on the Internet on the computer.[2]

Additionally, almost half of small-business owners now consider one of the largest 18 banks in the country to be their primary financial institution. Eight-eight (88) percent of small employers either have credit outstanding or access to it (in the form of lines or cards), and that number includes 79 percent with a credit card(s) used for business purposes, 47 percent with credit lines, and 29 percent with a business loan. [3]

[1] See, *Small Business Administration – NFIB National Small Business Poll*, NFIB Research Foundation, Washington, DC, Volume 6; Issue 5; 2006.
[2] See, *Communication – NFIB National Small Business Poll*, NFIB Research Foundation, Washington, DC, Volume 12; Issue 8; 2012.
[3] See, *Small Business, Credit Access, and a Lingering Recession*, NFIB Research Foundation, Washington, DC, January 2012. The NFIB Research Foundation has conducted five surveys on the issue of small businesses and credit access, and from the data, published five separate reports: 2008, 2009, 2010, 2011, and 2012.

Questions for Jeanne Hulilt, SBA
From Chair Mary L. Landrieu
Small Business Committee Roundtable: "Helping Small Businesses Weather Economic Challenges & Natural Disasters: Review of Legislative Proposals on Access to Capital and Disaster Recovery"

PRIORITY QUESTIONS – ACCESS TO CAPITAL

Question #1 – 504 Refinance:
2012 was the highest year on record for the 504 loan program, spurred in part by the utilization of the new 504 refinance program. As you know, the ability to refinance commercial real estate debt into long term, fixed rate interest rates has been very beneficial for many small businesses. Over $2 billion was refinanced through the program, and this was really only being utilized for less than the full year. Unfortunately the program expired in September of 2012. I introduced bipartisan legislation this year with Senator Johnny Isakson, Jeanne Shaheen, and Claire McCaskill to extend the 504 Refinance Program for 5 years.

- Can you speak to what could happen if we are able to renew the program?

Answer: The President's FY2014 Congressional Budget Justification calls for a one year extension of the 504 refinance program. As you have indicated, there was a lot of interest and demand for the 504 refinance program, particularly in the final months of the program. The final rules that went into effect October 12, 2011 succeeded for a number of reasons, including the allowance of borrowers to access their equity for working capital. In FY12, SBA approved 2,424 504 refinance applications. These added up to over $2.2 billion in lending for the CDC/SBA portion of the loans. On the last day of the program in 2012, we had over 400 projects pending work and almost $500M that did not get funded. We believe significant demand still exists in the marketplace, as commercial real estate values are still depressed. Therefore, a short-

term reauthorization would be extremely helpful to struggling small businesses.

- At zero cost to the taxpayer, why would we not extend this program?

Answer: SBA and the Administration believe that a short-term reauthorization makes a tremendous amount of sense at this point. As you indicate, new loans have zero estimated cost to taxpayers because the Agency will charge an adjusted fee to cover the projected costs.

Question # 2 – SBA Lender Activity Index

As of September 2012, there were over 2,400 SBA lenders nationwide. While the SBA currently releases some information publicly about SBA lending activity, it is extremely difficult to find and comprehend if you are not an SBA lending professional. If a small business, mayor, or governor wants to determine SBA lending activity in their area, they lack the ability to do so easily. My Communicating Lender Activity Reports from the Small Business Administration (CLEAR SBA) Act would require the SBA to establish an online database to provide consumers with more transparent, user-friendly data about their local SBA lenders.

- This question is for all of you- do you think that more small businesses would find it easier to use SBA resources if more information was publicly available?

Answer: SBA believes that is important for small business borrowers to be able to access information about lenders in their communities. This is why the SBA makes lender information available on our website. At http://www.sba.gov/districtoffices, each district office's webpage can be found from which SBA lenders can be searched by proximity to a zip

code or by district office. These results can be sorted by gross approval amount or number of loans.

Additionally, more narrowly tailored information such as the number of loans and dollar amount of loans made to women owned/controlled small businesses, socially and economically disadvantaged small businesses and veteran owned/controlled small businesses can be easily obtained from any of the SBA's 68 district offices. Directing these information requests to district offices allows small businesses and interested parties to be served by lender relations specialists. Lender relations specialists are professionals with a great deal of knowledge about the lending communities in their districts and can best steer interested small business to the appropriate lenders in their community.

<u>Questions for Howard Kunreuther, Wharton</u>
<u>From Chair Mary L. Landrieu</u>
<u>Small Business Committee Roundtable: "Helping Small Businesses Weather Economic Challenges & Natural Disasters: Review of Legislative Proposals on Access to Capital and Disaster Recovery"</u>

DISASTER RECOVERY

<u>Question #1 – Flood Insurance</u>

In articles you have written, you indicate that your Guiding Principle #1 is that premiums must reflect risk and that your Guiding Principle #2 are ways to deal with equity and affordability issues. While I want our flood insurance program to be sound, I am very mindful of those on Louisiana's coast – and many other coastlines – who are not millionaires. Many of my constituents have lived on the coast for generations and do so because they work the coasts – for seafood, energy production, or port activities.

During the debate on the Biggert-Waters flood insurance bill, my staff reached out to you to discuss an affordability amendment. My amendment created a pilot program to provide means-tested vouchers or subsidies for the purchase of flood insurance to individuals either economically distressed or unable to afford flood insurance.

- Would you say that this amendment finds the balance between your two principles by finding a way for working class family to afford living near our ports and oil rigs, while still having most flood insurance rates reflect their true risk?

Response by Howard Kunreuther

The amendment does reflect a balance between Guiding Principles 1 and 2 for insurance under the assumption that the premium without a voucher reflected the risk of flooding based on accurate FEMA maps. Two additional points to consider:

1. The homeowner should be told how much the risk-based premium would be without a voucher.
2. Low-income homeowners who receive a voucher or subsidy will still get a premium reduction if they invest in loss-reduction measures.

To illustrate these points consider the following example:

- Suppose a low-income homeowner receives a $200 voucher to purchase flood insurance. He or she would also be told what the annual risk-based premium would be without a voucher.

- If the annual risk-based premium were $1,000 then the homeowner receiving a $200 voucher would pay $800 for an annual flood insurance policy.

- If the homeowner invests in a loss reduction measure that promises to reduce annual expected losses by $300, then the annual insurance premium would decrease by $300 whether or not he or she received a voucher. The decrease in insurance premiums would be based on the lower claims payments from future floods and hurricane storm-surge due to the loss reduction measure. In this example, the homeowner who receives a voucher and invests in a mitigation measure would pay a premium of $800-300=$500.

- If the homeowner obtains a home improvement loan to spread the costs of mitigation over time, it is likely that the annual loan payment will be less than $300. In this case, mitigation will be financially attractive while at the same time reducing future disaster losses.

By coupling risk-based premiums with vouchers and home improvement loans, low-income property owners currently residing in flood-prone areas will be able to afford insurance and should want to invest in loss-reduction measures.

ACCESS TO CAPITAL

Question #2 – SBA Lender Activity Index

As of September 2012, there were over 2,400 SBA lenders nationwide. While the SBA currently releases some information publicly about SBA lending activity, it is extremely difficult to find and comprehend if you are not an SBA lending professional. If a small business, mayor, or governor wants to determine SBA lending activity in their area, they lack the ability to do so easily. My Communicating Lender Activity Reports from the Small Business Administration (CLEAR SBA) Act would require the SBA to establish an online database to provide consumers with more transparent, user-friendly data about their local SBA lenders.

- This question is for all of you- do you think that more small businesses would find it easier to use SBA resources if more information was publicly available?

Response by Howard Kunreuther

The importance of making information publicly available and transparent on the annual interest rate and terms of a loan cannot be overemphasized. In this case small businesses should be provided with data on their monthly payments with an SBA loan. If the small businesses were using the loan to reduce future losses to their property and contents, then they should be provided with a flood insurance premium reduction to reflect the reduction in damages. This would encourage small businesses to make their property safer since their total costs (i.e., insurance premium and SBA loan cost) are likely to be lower than if they had not invested in loss reduction measures. For the NFIP to provide a premium reduction, flood insurance rates would have to reflect risk. (See my response to Question #1 for more details on this point.)

Question for Erwann Michel-Kerjan, Wharton
From Chair Mary L. Landrieu
Small Business Committee Roundtable: "Helping Small Businesses Weather Economic Challenges & Natural Disasters: Review of Legislative Proposals on Access to Capital and Disaster Recovery"

ACCESS TO CAPITAL

Question – SBA Lender Activity Index

As of September 2012, there were over 2,400 SBA lenders nationwide. While the SBA currently releases some information publicly about SBA lending activity, it is extremely difficult to find and comprehend if you are not an SBA lending professional. If a small business, mayor, or governor wants to determine SBA lending activity in their area, they lack the ability to do so easily. My Communicating Lender Activity Reports from the Small Business Administration (CLEAR SBA) Act would require the SBA to establish an online database to provide consumers with more transparent, user-friendly data about their local SBA lenders.

- This question is for all of you- do you think that more small businesses would find it easier to use SBA resources if more information was publicly available?

ANSWER:

Clear communication and open access to data is very critical. One could also think of small tutorial videos (2 to 3 minutes each) answering key questions in plain English. Also, and while SBA is very important, one should encourage small business owners to purchase proper levels of insurance protection which remains the most complete source of compensation.

-- Erwann Michel-Kerjan
erwannmk@wharton.upenn.edu

Questions for John Needham, SBA
From Chair Mary L. Landrieu
Small Business Committee Roundtable: "Helping Small Businesses Weather Economic Challenges & Natural Disasters: Review of Legislative Proposals on Access to Capital and Disaster Recovery"

PRIORITY QUESTION – ACCESS TO CAPITAL

Question # 1 – SBA Lender Activity Index

As of September 2012, there were over 2,400 SBA lenders nationwide. While the SBA currently releases some information publicly about SBA lending activity, it is extremely difficult to find and comprehend if you are not an SBA lending professional. If a small business, mayor, or governor wants to determine SBA lending activity in their area, they lack the ability to do so easily. My Communicating Lender Activity Reports from the Small Business Administration (CLEAR SBA) Act would require the SBA to establish an online database to provide consumers with more transparent, user-friendly data about their local SBA lenders.

- This question is for all of you- do you think that more small businesses would find it easier to use SBA resources if more information was publicly available?

ANSWER: The Office of Inspector General is generally supportive of transparency and open government initiatives. The proposed SBA Lender Activity Index prescribes certain information relating to lenders making covered loans be made available on the SBA website in user-friendly database. The Office of Inspector General believes that data quality and integrity and related quality controls are key to the success of such an initiative. The SBA is best positioned to provide the Committee information on the status of available resources or any resource needs to support such an initiative.

ADDITIONAL QUESTION - ACCESS TO CAPITAL

Question # 2 – SBA Loan Program Oversight

The October 15, 2012 Management and Performance Challenges report for Fiscal Year 2013 mentions that the SBA has made substantial progress on implementing a quality assurance program for all SBA loan centers.

- Can you talk about what the SBA has done that has showed substantial progress?

Answer: The OIG has identified a management challenge for which the SBA needs to implement a quality control program in its loan centers. Quality control is a key component of a quality assurance program. The quality control program for SBA's loan centers is managed by the Office of Financial Program Operations. The quality assurance program, which has yet to be implemented, will be managed by the Office of Credit Risk Management.

The purpose of the quality control program for the loan centers is to assess the loan processes from origination to close-out to identify where material deficiencies may exist so that remedial actions can be taken. The purpose of the quality assurance program is to provide oversight of quality control activities and perform reviews to ensure quality control measures are effective.

To demonstrate substantial progress in implementing its quality control program, the SBA has done the following:

1. **Developed a Quality Control and Assurance Program Guide.**
2. **Hired a QC manager to oversee the development and implementation of the program.**
3. **Hired a QC Specialist for each loan center.**
4. **Developed Quality Program guides and Checklists for each center.**
5. **Developed monthly quality control activity reports**
6. **Refined its feedback and training processes.**

Notwithstanding this substantial progress, the OIG continues to have concerns about the thoroughness of the Agency's quality control reviews. Previous audits have demonstrated quality control specialists applied internal guidance that conflicted with the Agency's policies and procedures and were unfamiliar with or misinterpreted Agency policies.

We recently initiated an evaluation of the SBA's quality controls program for its loan centers, the results of which will be used to assess the Agency's status on our management challenge.

- The 504 Refinance program expired in September of 2012. Does the Inspector General have any evidence to suggest the program was problematic?

Answer: Though the OIG has vast experience in the area of SBA loans and lender oversight programs, and many OIG recommendations for loan origination, servicing, liquidation, close out, etc. are generally applicable to the 504 program, only one audit (OIG Audit Report 12-23R: Audit Report *12-23R: 504 Recovery Act Loans were Originated and Closed in Accordance with SBA Policies*, issued September 27, 2012) was completed that, in part, addressed the original 504 Refinance Program, which was authorized by the *American Recovery and Reinvestment Act of 2009*. Specifically, the OIG reviewed 10 loans which involved low interest refinancing under the 504 program and were approved between June and October 2009. The OIG identified a material SBA origination deficiency in 1 of these 10 loans regarding the creditworthiness of the borrower. The SBA took appropriate action to prevent this deficiency from occurring in other SBA-approved 504 loans.

Under the *Small Business Jobs Act*, the SBA implemented a temporary program allowing small businesses to refinance eligible fixed assets in its 504 program without the requirement of an expansion. The first loan was made in March 2011, key program changes were made in April and October 2011, and the program ended in September 2012. The OIG will continue to monitor the performance of loans made under this temporary program as the loans season or age. One interesting fact to note is that 24-percent of all loans approved under this temporary program were approved in September 2012, immediately before the program sunset.

Given our limited insight into this program, the OIG believes the 5-year sunset provision set forth in the proposed bill titled "Commercial Real Estate and Economic Development Act of 2013" is prudent and necessary.

Questions for Jim Rich, Beaumont Chamber
From Chair Mary L. Landrieu
Small Business Committee Roundtable: "Helping Small Businesses Weather Economic Challenges & Natural Disasters: Review of Legislative Proposals on Access to Capital and Disaster Recovery"

PRIORITY QUESTION – DISASTER RECOVERY

Question #1 – Small Business Disaster Reform Act

As I mentioned in my opening statement, I have introduced legislation with Senators Cochran, Gillibrand, Pryor, and Wicker to address some longstanding SBA disaster issues. The bill clarifies SBA's collateral requirements for businesses and allows the Administrator to authorize out-of-state SBDCs to assist in disaster areas.

- Will these reforms benefit chambers of commerce like you, as well as your fellow members of the International Economic Development Council?

We are very supportive of the legislation.

ADDITIONAL QUESTION – DISASTER RECOVERY

Question #2 – SBDC Coordination

You have previously indicated that you have a great relationship with your local SBDC chapter?

- How has your chamber worked with your local SBDC chapters after disasters?

We work closely with the leaders and the business consultants of the SBDC. We created two bridge loan programs and involved them in the formation of the rules and in the evaluation of the loan candidates.

PRIORITY QUESTION – ACCESS TO CAPITAL

Question #3 – SBA Lender Activity Index

As of September 2012, there were over 2,400 SBA lenders nationwide. While the SBA currently releases some information publicly about SBA lending activity, it is extremely difficult to find and comprehend if you are not an SBA lending professional. If a small business, mayor, or governor wants to determine SBA lending activity in their area, they lack the ability to do so easily. My Communicating Lender Activity Reports from the Small Business Administration (CLEAR SBA) Act would require the SBA to establish an online database to provide consumers with more transparent, user-friendly data about their local SBA lenders.

- This question is for all of you- do you think that more small businesses would find it easier to use SBA resources if more information was publicly available?

While I like the idea of more information about SBA lending activity, I am not sure it is worth the expense or if the consumer public will access. Borrowers are concerned about confidentiality and might shy aware from the using the programs.

Questions for James Rivera, SBA
From Chair Mary L. Landrieu
Small Business Committee Roundtable: "Helping Small Businesses Weather Economic Challenges & Natural Disasters: Review of Legislative Proposals on Access to Capital and Disaster Recovery"

PRIORITY QUESTIONS – DISASTER RECOVERY

Question #1 – Interest Rates

I understand that SBA disaster loan interest rates are generally below market. However, I note that for a business that SBA determines has "credit elsewhere," the interest rate is about 6 percent, which is higher than what a borrower can get on a conventional loan in the New York area, which is approximately 5 percent.

- Why does the SBA charge higher interest rates than for-profit banks?

Answer: SBA is not in competition with private sector lenders and sets it rates based on similar instruments in the private sector based on statute. The interest rate and 7 year term restriction for business loans determined to have credit available elsewhere directs the disaster impacted business to the lender that best meets its needs. If a business determined to have credit available elsewhere is unable to find better terms (including interest rate), then SBA isn't charging a higher interest rate than for-profit banks.

- Can you describe what SBA looks for in its credit elsewhere test?

Answer: The Business Credit Elsewhere Test (CET) measures the business applicant's ability to address the disaster loss from available resources or to obtain credit from non-Federal sources at reasonable

rates and terms by evaluating two criteria: Cash Flow Test and Asset Test. The Cash Flow Test determines whether the applicant has sufficient cash flow to repay the loan based on commercial or market rates without incurring undue hardship. The Asset Test measures the applicant's ability to utilize available net worth to repair or replace the disaster damage. Credit Available Elsewhere is determined when the application meets both criteria. We consider the applicant, its owners or principals, and its affiliates when determining if credit is available elsewhere.

Question #2 – High Decline Rates

The decline rate for SBA disaster loans to businesses in New York is currently 66 percent. I recognize that the deadline for applications is not until later this month but this is extremely high. I am also concerned that businesses that may want to apply for SBA might give up once they hear that your agency is declining 66 percent of applications reviewed.

- One would assume that business owners in the New York area have really good credit. If that's the case, why is SBA declining so many applications?

Answer: Unsatisfactory credit is not the only reason for a decline. In fact, approximately half of the businesses declined have been declined because they lacked repayment ability.

- There is a requirement, for Presidentially declared disasters, that individuals must first apply to SBA and be declined, before they can be referred to FEMA for possible grant assistance. Are these FEMA- related pre-processing declines only on the homeowner side or are they contributing to high business decline rates?

Answer: Businesses that are declined by SBA are not referred to FEMA for grant assistance, because FEMA does not provide grant assistance to businesses.

ADDITIONAL QUESTIONS – DISASTER RECOVERY

Question #3 – Low Motivation to Take Up Loans

Reports from areas impacted by Hurricane Sandy indicate that many small businesses are refraining from taking up SBA disaster loans. One reason seems to be that business owners believe they must wait until they get insurance settlements before they can apply to the SBA.

- Is this lukewarm response due to business owners misunderstanding how the application process works or are other factors causing them to hold off on SBA applications?

Answer: Some business owners do not want to apply for additional debt after a disaster. In addition, some business owners prefer to wait until they receive their insurance recovery or grant assistance to determine whether it's necessary to apply for a disaster loan.

- What is SBA doing to ensure disaster victims have a clear understanding of how the program actually works?

Answer: SBA is using a myriad of resources to provide outreach to the business community.

SBA has created a dedicated Hurricane Sandy page on its Website that allows disaster victims to access recovery resources 24/7, including the Electronic Loan Application (ELA). SBA has participated in numerous phone calls with various State and local officials and agencies including

Governors, Mayors, Chambers of Commerce, Trade Associations, etc. to provide disaster recovery information.

In order to provide additional resources to the business community, in addition to having SBA representatives in each of the Federal Disaster Recovery Centers, SBA has also opened more than 25 Business Recovery Centers (BRCs) in the Hurricane Sandy affected states.

In an attempt to target additional disaster victims SBA has engaged in the use of social media. SBA has placed ads on Facebook that appear on profiles of individuals in the States that have been Presidentially declared. Blogs have also been instrumental in helping SBA get the word out about disaster assistance. Since the disaster there have been six blog posts by the Associate Administrator for Disaster Assistance covering different topics: SBA Coordinating with Our Federal Partners; SBA Standing Ready to Help Businesses, Homeowners and Renters Recover; Top Five Reasons You're Eligible to Apply for SBA Disaster Assistance; Send Us Your Completed Loan Application before the Deadline; A Lending Milestone as Congress Adds Recovery Funds and Six Months Later, A Steady Recovery.

In coordination with our resource partners, SBA has also launched a Technical Assistance Loan Application Initiative (TALAI). The goal of this initiative is to provide follow-up assistance to disaster business applicants whose business loan applications were either declined or withdrawn. Declined and withdrawn business applicants are referred to SBA's resource partners to get additional counseling and guidance to help strengthen their loan applications for resubmission and possible reconsideration.

Question #4 – SBA Deferment of Disaster Loan Payments

The Small Business Act authorizes the SBA to defer payment of principal and interest on a case-by-case basis. During that time, however, interest still accrues. This is helpful to some businesses in the short term but, as the deferment ends, they receive a balloon payment.

The Act also allows SBA to "use other methods as it deems necessary and appropriate to assure the successful establishment and operation of [small businesses]." With this language, Congress intended for the SBA Administrator to have the tools necessary to keep businesses afloat after it makes both business and disaster loans. For example, Congress the 2009 *Recovery Act* dovetailed on this intent by reducing fees on 7(a), 504, and Microloan borrowers.

- When does interest begin accruing on disaster loans and does SBA have existing authority to stop interest from accruing on these loans?

Answer: Interest accrues on the disbursed loan funds starting from the date of the initial disbursement to the borrower. Interest only accrues on the amount disbursed. SBA does not have the authority to stop interest from accruing on disbursed loan funds but does provide an initial deferment period before the first payment is due.

- When SBA provides a six-month deferment on disaster loan payments, does interest continue to accrue? (Yes/No)

Answer: Yes, interest on disbursed funds continues to accrue during the deferment period. The initial accrual of interest during the deferment period is taken into consideration when the initial payment and term of the loan is calculated. SBA disaster loans are simple interest loans and the SBA loan accounting system does not charge interest on interest.

- Please provide the committee with recommendations on improving the deferment process for disaster loans including, if available, best practices from private lenders and community banks.

Answer: SBA's deferment policy is substantially more favorable than standard private lending practices. SBA recognizes that financial hardships, slow return of customer base or limited availability of

contractors and resources may lead to significant delays in the reconstruction project. Accordingly, we frequently consider requests to extend the borrower's initial deferment period on a case-by-case basis.

PRIORITY QUESTION – ACCESS TO CAPITAL

Question # 5 – SBA Lender Activity Index:
As of September 2012, there were over 2,400 SBA lenders nationwide. While the SBA currently releases some information publicly about SBA lending activity, it is extremely difficult to find and comprehend if you are not an SBA lending professional. If a small business, mayor, or governor wants to determine SBA lending activity in their area, they lack the ability to do so easily. My Communicating Lender Activity Reports from the Small Business Administration (CLEAR SBA) Act would require the SBA to establish an online database to provide consumers with more transparent, user-friendly data about their local SBA lenders.

- This question is for all of you- do you think that more small businesses would find it easier to use SBA resources if more information was publicly available?

Answer: SBA believes that is important for small business borrowers to be able to access information about lenders in their communities. This is why the SBA makes lender information available on our website. At http://www.sba.gov/districtoffices, each district office's webpage can be found from which SBA lenders can be searched by proximity to a zip code or by district office. These results can be sorted by gross approval amount or number of loans.

Additionally, more narrowly tailored information such as the number of loans and dollar amount of loans made to women owned/controlled small businesses, socially and economically disadvantaged small businesses and veteran owned/controlled small businesses can be easily obtained from any of the SBA's 68 district offices. Directing these information requests to district offices allows small businesses and interested parties to be served by lender relations specialists. Lender relations specialists are professionals with a great deal of knowledge about the lending communities in their districts and can best steer interested small business to the appropriate lenders in their community.

INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

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February 13, 2013

The Honorable Mary L. Landrieu
Chair
Committee on Small Business and Entrepreneurship
United States Senate

And

The Honorable James E. Risch
Ranking Member
Committee on Small Business and Entrepreneurship
United States Senate
Russell Senate Office Building, SR-428A
Washington, DC 20510

Dear Senator Landrieu and Senator Risch,

On behalf of the International Economic Development Council (IEDC), please accept our appreciation for this opportunity to provide comments related to proposed changes to federal disaster assistance programs offered by the United States Small Business Administration (SBA). Your continuing support of these critical programs is worthy of praise and we thank you for your leadership.

IEDC has a strong history of supporting disaster planning and recovery. Our organization, with a membership of over 4,000 dedicated professionals, responded to communities in need following the 2005 hurricane season, the BP Gulf oil spill and other disaster-related incidents by providing economic development recovery assistance. We have continued our work in this area through technical assistance projects and partnerships with federal agencies and other non-governmental organizations. Our profession is invested in helping our country prepare for and respond to disasters, much the same as you and your colleagues on the Committee on Small Business and Entrepreneurship. To this end, we support proposed changes that will allow SBA to more effectively deliver disaster recovery assistance to local businesses in need of federal aid.

Rebuilding the local economy must be a top priority following a disaster, second only to saving lives and homes. IEDC supports changing the current collateral requirements that state a business owner must place their home up as collateral in order to secure an SBA loan. In times of crisis, affected business owners are understandably reluctant to place their homes up as collateral in order to obtain a much

needed loan to rebuild their business. Consequently, SBA loans put in place to help businesses rebuild following a disaster go underutilized. As lawmakers, you have a responsibility to protect the taxpayer, which is why we understand the need for posting collateral of equal or greater value to the amount of the loan. The proposed change that eliminates the specific requirement of using a home as collateral, and instead allowing other assets to act as collateral, will promote greater utilization of the loans. This is an idea we can all get behind; one that will lead to greater, faster economic recovery.

When disaster strikes, we should do everything in our power to bring the full resources of the federal government to bear in the impacted community. This includes, most especially, bringing in top experts who can immediately begin helping businesses and local economies recover. The national network of over 1,100 Small Business Development Centers (SBDC) could be an excellent resource to stricken communities. Unfortunately, current rules prevent SBDC's from assisting their counterparts in other jurisdictions. For example, those communities in the mid-Atlantic and New England impacted by Sandy are not able to benefit from the enormous amount of knowledge and experience in storm recovery held by SBDC's in Florida and the Gulf region. Certainly, we can all agree that disasters warrant an extraordinary response and that response must include qualified expertise from all corners of the federal government.

Forty to Sixty percent of small businesses that close as a result of a disaster do not reopen. This is an unacceptably high number. We would not accept that level of loss in homes and we cannot accept that level of loss in jobs; our communities cannot sustain such losses and duty dictates we make certain they don't have to. By enacting common sense legislation, like that which is under consideration here, and freeing the flow of capital and recovery expertise, we are taking concrete steps to give our small businesses and local economies the greatest chance to recover.

IEDC is your partner in the work of job creation. We thank you for your leadership in support of small business and stand ready to offer our assistance in this and future efforts.

Sincerely,

Paul L. Krutko
Chairman, International Economic Development Council
And
President and CEO, Ann Arbor SPARK

ASBDC Association of Small Business Development Centers®

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February 10, 2013

Honorable Mary Landrieu
Chair
Committee on Small Business and Entrepreneurship
United States Senate
428A Russell Senate Building
Washington, DC 20515

Dear Senator Landrieu,

Thank you for giving the Association of Small Business Development Centers (ASBDC) the opportunity to comment on your proposed legislative amendments to the disaster assistance provisions in the Small Business Act (15 USC 631et seq.).

While Congress has taken a significant step in addressing the resource issues following Sandy and other disasters there are still restrictions in the SBDC assistance authority and the US Small Business Administration's loan making authority that could complicate future disaster recovery efforts. We applaud your efforts to deal with those issues.

Under section 21(b) (3) of the Small Business Act (15 USC 648(b) (3)) SBDCs are limited in their ability to provide services across state lines. This prevents SBDCs dealing with disaster recovery, like New York and New Jersey, from being able to draw upon the resources available in our nationwide network of nearly 1,000 centers with over 4,500 business advisors. It likewise prevents states with great experience in disaster recovery assistance like Louisiana and Florida, from providing assistance to their colleagues.

Your proposed legislation amends that SBDC geographic service restriction for the purposes of providing disaster support and assistance. Our Association wholeheartedly endorses that change. Allowing SBDCs to share resources across state lines or other boundaries for the purpose of disaster recovery is a common sense proposal, little different from utilities sharing linemen. In addition, we would like to note that this provision has been supported by the Senate Committee on Small Business and Entrepreneurship twice in previous Congresses.

In addition, the ASBDC wishes to express its support for your proposals to amend the collateral requirements in the disaster loan program for loans under $200,000. SBDCs routinely assist small business owners with their applications for disaster loan assistance and have often faced clients with qualms about some of those requirements.

We share a common goal of putting small business on the road to recovery after disaster strikes and getting capital flowing is a key factor in meeting that goal. To that end, ASBDC supports your efforts to ease collateral requirements and help improve the flow of disaster funds to small business applicants. We believe your proposal to limit the use of personal homes as collateral on smaller loans is consistent with the need to get capital flowing to affected businesses and ease the stress on these businesses. We also agree that this change will not undermine the underwriting standards of the disaster loan program.

Thank you again for kind attention and continuing support of small business.

Sincerely,

C. E. "Tee" Rowe
President/CEO
ASBDC

greater new orleans inc — regional economic alliance

PARTNERSHIP for New York City

March 5, 2013

The Honorable Mary Landrieu
Chair
Committee on Small Business and Entrepreneurship
United States Senate
428A Russell Senate Office Building
Washington, D.C. 20510

The Honorable James Risch
Ranking Member
Committee on Small Business and Entrepreneurship
United States Senate
428A Russell Senate Office Building
Washington, D.C. 20510

Dear Chair Landrieu and Ranking Member Risch:

We write to you today in strong support of the Small Business Disaster Reform Act of 2013. *Greater New Orleans, Inc.* is a regional economic development alliance serving the 10-parish region of Southeast Louisiana. *The Partnership for New York City* is a nonprofit organization of the city's business leaders. We represent very different regions of the country, but we are both strong contributors to the national economy and we have been seriously impacted by natural disasters that caused huge economic damage.

The overall economic impact of Hurricane Katrina was estimated to be $150B – the costliest natural disaster in U.S. history. Similarly, the disruption and damage inflicted by Super Storm Sandy – the second costliest natural disaster – is estimated at over $80 billion and resulted in daily loss of billions of dollars in economic output, not only locally but across the country. The impact of these storms has been particularly serious for small businesses, forcing some to close shop entirely and many to reduce services. The Federal government has programs that were intended to insure that small businesses and local economies can quickly recover from such disasters, but in our experience these programs are not working as effectively as they should be and require legislative amendment. That is why we are very interested in prompt action on the Small Business Disaster Reform Act.

Here are some examples of what needs to change:

- Small business owners are currently required by the Small Business Administration (SBA) to put up their primary residence as collateral for SBA disaster loans of less than $200,000, even though the value of their home often exceeds the value of the loan. The Small Business Disaster Reform Act of 2013 would put in place a common sense solution that requires the SBA to collateralize small loans with available business assets of equal or greater value before requiring the business owner to put up his or her personal home. In a time of crisis, every possible measure should be taken to avoid business owners having to put their families at further risk. This reform would reduce pressure on affected business owners and increase utilization of the SBA disaster loan program, while still providing necessary protections to the government in the event of default.

- Small Business Development Centers (SBDCs) have also played a critical role in helping businesses recover following disasters. However, under current law, SBDCs can only assist businesses in their prescribed geographic region, even though often times after major disasters like hurricanes, SBDCs are affected right along with businesses. Following a Presidential declaration of a disaster, effected regions need aid quickly and SBDCs in surrounding regions, including across state lines, should be able to help neighboring effected regions. This bill would allow for that.

- Small businesses are often disproportionately damaged by natural disasters due to loss of customer base, thin profit margins, diminished access to capital and difficulty with relocation. The reforms proposed would help business owners take full advantage of available resources and accelerate their recovery by cutting bureaucratic red tape and providing businesses with the tools needed to resume normal business as quickly as possible – putting people back to work.

We appreciate the Committee's work on this critically important issue and urge the Senate to work together to deliver these much needed reforms. Thank you in advance for your work towards strengthening the economy.

Sincerely,

Michael Hecht
President & CEO
Greater New Orleans, Inc.

Kathryn S. Wylde
President & CEO
Partnership for New York City

cc: Senator Charles Schumer
Senator Kirsten Gillibrand
Senator David Vitter
Senator Carl Levin
Senator Tom Harkin
Senator Maria Cantwell
Senator Mark Pryor
Senator Ben Cardin
Senator Jeanne Shaheen
Senator Kay Hagan
Senator Heidi Heitkamp
Senator Marco Rubio
Senator Rand Paul
Senator Tim Scott
Senator Deb Fischer
Senator Mike Enzi
Senator Ron Johnson

north louisiana
economic partnership
nlep.org

February 26, 2013

The Honorable Mary Landrieu
Chair
Committee on Small Business and Entrepreneurship
United States Senate
Russell Senate Building, SR-428A
Washington, D.C. 20515

Dear Senator Landrieu:

The North Louisiana Economic Partnership thanks you for the opportunity to comment on the proposed changes to the disaster assistance programs offered by the United States Small Business Administration. The proposed amendments to the Small Business Act (15 USC 631 et seq.) will greatly enhance federal assistance to small businesses recovering from disasters. NLEP applauds your efforts to support our small businesses which make up the backbone of the American economy.

As a regional economic development organization promoting North Louisiana, NLEP often works with businesses impacted by natural or manmade disasters. The impact of these disasters can temporarily or permanently shut down small businesses, leaving both small business owners and their employees without a livelihood. The SBA disaster programs offer a real lifeline to these impacted businesses which have very few options available to them. The proposed amendment to Section 1 of the bill regarding collateral for business disaster loans would allow more small businesses to utilize the disaster loan programs. If approved, small business owners would no longer have to use their primary residence as collateral toward a SBA disaster business loan of less than $200,000, if other assets are available. During a widespread disaster, the primary residence of business owners may also be impacted and requiring them to use their home as collateral would create an onerous burden and/or be financially unfeasible. Eliminating this collateral requirement opens up assistance to those businesses most impacted by disaster, speeding recovery for businesses and a region's economy.

The second proposed change to Section 2 of the Small Business Act would allow Small Business Development Centers (SBDCs) to provide technical assistance to impacted small businesses beyond the current 250 mile limitation. The Louisiana Small Business Development Centers (LSBDCs) have successfully worked with countless small businesses devastated by Hurricanes Katrina, Rita, Gustav and Ike, and most recently the BP oil spill. The experience and expertise that the LSBDC could have shared with the SBDCs in the New York and New Jersey area would have enhanced their capabilities to cope with Superstorm Sandy. In times of disaster, it is essential to collaborate and pool resources in order to speed up delivery of much needed assistance.

For these reasons, the North Louisiana Economic Partnership fully endorses the proposed amendments to the current SBA legislation that would open up, enhance and efficiently deliver disaster assistance to small businesses.

Sincerely,

Scott Martinez

Scott Martinez
President
North Louisiana Economic Partnership

JAXCHAMBER
Connect. Grow. Prosper.

March 12, 2013

The Honorable Mary Landrieu
Chair
Committee on Small Business and Entrepreneurship
Untied State Senate
428A Russell Senate Office Building
Washington, D.C. 20510

The Honorable James Risch
Ranking Member
Committee on Small Business and Entrepreneurship
Untied State Senate
428A Russell Senate Office Building
Washington, D.C. 20510

Dear Chairwoman Landrieu and Ranking Member Risch,

On behalf of the JAX Chamber, I write to you today in support of the Small Business Disaster Reform Act of 2013. The JAX Chamber is the business membership organization dedicated to driving quality economic growth in Northeast Florida to make this region the best place to work, live and play.

As a Chamber of Commerce focused on economic development, we not only have partnerships in Northeast Florida, but across the state and the entire country. We are keenly aware of the long-term impact natural disasters can have on a local economy, especially on the small business community.

We were very pleased to learn that issues like the Collateral Requirements for Business Disaster Loans are being addressed. In this instance, a small business may only be applying for loans in the range of $200,000 or less, but it is required to put up their personal home as collateral. This typically far exceeds the value of the loan instead of being able to use business assets of equal or greater value.

Small business is the heart of any community, and we should not be burdening them even more after they have lost so much. This legislation tackles the above issue head-on by clarifying that the SBA must use business assets, if available, as collateral for disaster loans of $200,000 or less.

The other major issue to be addressed is the current law which prohibits Small Business Development Centers (SBDC's) from assisting businesses outside of their geographic areas. When a natural disaster strikes, there should be no boundaries or burdens to assistance. In Northeast Florida, we have quick access to several states and should be allowed to deploy resources to aid those in need.

JAXCHAMBER
Connect. Grow. Prosper.

By passing the Small Business Disaster Act of 2013, SBDC's will now be allowed to assist in presidentially declared disaster areas.

As a Chamber of Commerce that also works very closely with our own SBDC, we strongly encourage you and your colleagues to pass this legislation with the utmost speed. We can never be sure when, or where, the next disaster will strike.

Sincerely,

Jerry Mallot
Interim President & CEO
JAX Chamber

3 Independent Drive | Jacksonville, Florida 32202 | Office (904) 366-6600 | Fax (904) 632-0617 | www.myjaxchamber.com

BAY AREA HOUSTON
Economic Partnership

February 13, 2013

Honorable Mary Landrieu
Chair
Committee on Small Business and Entrepreneurship
United States Senate
428A Russell Senate Building
Washington, D.C. 20515

Dear Senator Landrieu,

The Texas economy has outperformed the rest of the country not only over the long term but also during the recent recession. Our pro-business climate has been a huge contributing factor to that, and so have Texas' small businesses. From 2002-2009, small businesses of fewer than 10 employees fueled the Texas employment engine, adding nearly 800,000 new jobs. When disaster strikes the Gulf Coast, as it did with Hurricanes Katrina, Rita, Gustav, and Ike, our small businesses are hit hard. The sooner they are able to recover the better it is for the region, the state, and the nation.

This is why I am writing to support your proposed legislative amendments to the disaster assistance provisions in the Small Business Act (15 USC 631 et seq). Section 1 of the bill addresses collateral on business disaster loans. If approved, no longer would small business owners have to use their primary personal residence for collateral towards SBA disaster business loans less than $200,000 if other assets are available of equal or greater value than the amount of the loan. This would certainly help to reduce anxiety on the part of small business owners and their families who have already experienced enough stress through damage to or total destruction of their businesses.

Section 2 of the bill includes the provision that authorizes the Small Business Administration to allow out-of-state small business development centers to provide assistance in presidentially-declared disaster areas, which is currently not allowed. When Hurricane Ike devastated our region in September 2008, we welcomed any and all kinds of disaster relief. The northeast just experienced a similar disaster with Hurricane Sandy. Utility crews from across the nation responded quickly to each. State lines should never be used to prevent aid from reaching disaster victims. The majority of the membership of our organization is comprised of small businesses. On their behalf, we fully endorse this provision.

Thank you for working to keep America's small businesses strong and helping them to recover from major storms that we know will strike again.

Sincerely,

Bob Mitchell
President
Bay Area Houston Economic Partnership

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St. Tammany
EDF
ECONOMIC DEVELOPMENT FOUNDATION

February 19, 2013

The Honorable Mary Landrieu
Chair
Committee on Small Business and Entrepreneurship
United States Senate
428A Russell Senate Building
Washington, DC 20515

Dear Senator Landrieu,

The St. Tammany Economic Development Foundation thanks you for the opportunity to comment on the proposed amendments to the disaster assistance provisions in the Small Business Act (15 US 631 et seq). As we learned from Hurricanes Katrina, Rita and most recently Isaac, the sooner our small businesses are able to recover, the better it is for the region, the state and the nation.

We fully endorse the proposed amendment to Section 1 of the bill regarding collateral on business disaster loans. If approved, no longer would small business owners have to use their primary personal residence for collateral towards SBA disaster business loans less than $200,000 if other assets are available of equal or greater value than the amount of the loan. In times of crisis, affected business owners are understandably reluctant to place their personal homes up as collateral in order to obtain a much needed loan to rebuild their business. Allowing business assets to act as collateral will promote greater utilization of the loans; leading to faster economic recovery.

Under Section 2 of the bill, Small Business Development Centers (SBDCs) are limited in their ability to provide services across state lines. This prevents SBDCs in affected areas from being able to draw upon the resources available from their colleagues nationwide. Louisiana SBDCs have great experience in disaster recovery assistance and should not be prevented from providing assistance to their colleagues outside of Louisiana in the event of disaster. Therefore, we fully support this provision.

We applaud your efforts to protect small businesses in the wake of disasters and thank you for continuing to be a strong advocate on their behalf. After all, small businesses are the lifeblood of our great nation.

Sincerely,

Brenda Bertus

Brenda Bertus
Executive Director
St. Tammany Economic Development Foundation

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SWLA ECONOMIC DEVELOPMENT
ALLIANCE

February 25, 2013

The Honorable Mary Landrieu
Chair
Committee on Small Business and Entrepreneurship
United States Senate
428A Russell Senate Building
Washington, CD 20515

Dear Senator Landrieu,

The Southwest Louisiana Economic Development Alliance welcomes the opportunity to comment on the proposed amendments to the disaster assistance provisions in the Small Business Act (15 US 631 et seq.). As we learned from Hurricanes Rita and Ike, the sooner our small businesses are able to recover, the better it is for the region, the state and the nation.

We fully endorse the proposed amendment to Section 1 of the bill regarding collateral on business disaster loans. If approved, no longer would small business owners have to use their primary personal residence for collateral towards SBA disaster business loans less than $200,000 if other assets are available of equal or greater value than the amount of the loan. In times of crisis, affected business owners are understandably reluctant to place their personal homes up as collateral in order to obtain a much needed loan to rebuild their business. Allowing business assets to act as collateral will promote greater utilization of the loans; leading to faster economic recovery.

Under Section 2 of the bill, Small Business Development Centers (SBDCs) are limited in their ability to provide service across state lines. This prevents SBDCs in affected areas from being able to draw upon the resources available from their colleagues nationwide. Louisiana SBDCs have great experience in disaster recovery assistance and should not be prevented from providing assistance to their colleagues outside of Louisiana in the event of disaster. Therefore, we fully support this provision.

About 85% of the members of the Chamber SWLA are small businesses. We applaud your efforts to protect small businesses in the wake of disasters and thank you for continuing to be a strong advocate on their behalf.

Sincerely,

George Swift
President/CEO
SWLA Economic Development Alliance

CHAMBER SOUTHWEST LOUISIANA | SOUTHWEST LOUISIANA ALLIANCE FOUNDATION | Southwest Louisiana Partnership for Economic Development

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Phone: 337.433.3632 • Fax: 337.436.3727 • www.allianceswla.org

CHAMBER OF COMMERCE
OF THE
UNITED STATES OF AMERICA

R. BRUCE JOSTEN
EXECUTIVE VICE PRESIDENT
GOVERNMENT AFFAIRS

1615 H STREET, N.W.
WASHINGTON, D.C. 20062-2000
202/463-5310

March 14, 2013

The Honorable Mary Landrieu
United States Senate
Washington, DC 20510

Dear Senator Landrieu:

As a longstanding advocate for increasing access to capital for small businesses, the U.S. Chamber of Commerce supports S. 511, the "Expanding Access to Capital for Entrepreneurial Leaders Act." If enacted into law, S. 511 would make available an additional $500 million a year in funding for small businesses through the Small Business Administration's Small Business Investment Company (SBIC) program. Furthermore, the resulting increase in capital to small businesses would come at no additional cost to the taxpayer.

Policies that foster and encourage robust entrepreneurial activity and small business ownership provide the basis for economic prosperity important to the long-term vitality and success of our nation. The SBIC program is an important source of early funding for entrepreneurs, and it plays an important and vital role in providing an alternative means of obtaining capital where funding has not been available through conventional lending methods.

The U.S. Chamber of Commerce is the world's largest business federation, representing more than three million businesses of every size, sector and region. More than 96 percent of the Chamber's members are small businesses with 100 or fewer employees. On behalf of our smaller members, the Chamber thanks you for introducing S. 511 and looks forward to working with you to make access to capital more affordable and available to small businesses.

Sincerely,

R. Bruce Josten

R. Bruce Josten

DISASTER MANAGEMENT

Redesigning Flood Insurance

Improved knowledge from a range of disciplines will be needed to price the much-needed financial products appropriately.

Erwann Michel-Kerjan* and Howard Kunreuther

Insurance and government assistance play central roles in ensuring economic and social resilience in the aftermath of catastrophes in developed countries. Around the globe in the past decade, disasters have led to unprecedented claims payments to insured victims, and government relief to aid the uninsured and the affected communities has risen to historic levels (*1–3*). Increases in population, property values, and concentration of assets in hazard-prone areas are primary causes (*2*). Recent climate studies indicate we should also expect more extreme weather–related events in the future (*4–6*). The cumulative expected exposure of the U.S. government to catastrophes over the next 75 years could reach $7 trillion (*7*).

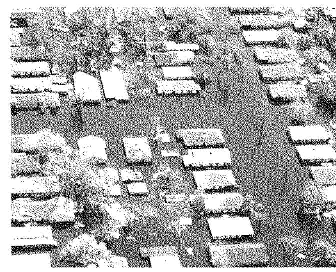
We propose routes to improve flood insurance coverage through the U.S. National Flood Insurance Program (NFIP), one of the largest government disaster-insurance programs in the world. The U.S. Congress is discussing options for continuing the NFIP, which now operates under a 1-year extension, set to expire on 30 September 2011. The Federal Emergency Management Agency (FEMA), which is responsible for the NFIP, is reanalyzing the program. We argue that a new strategy for managing floods can increase personal responsibility, decrease risk, and lower government exposure. Improved scientific knowledge from a range of disciplines will be needed to price the proposed financial products appropriately. If successful in the United States, the approach could be explored by other countries.

Insuring Flood Risk

Floods are one of the most destructive hazards (*8*). In the United States, floods account for nearly two-thirds of all presidential disaster declarations over the period 1953–2010 (see supporting online material). Hurricanes Katrina, Rita, and Wilma and their resulting storm surge in 2005 cost over $180 billion (2011 prices) (*9*). In the summer of 2010, one of the worst floodings in Pakistan's history affected more than 20 million people and inflicted $8 billion to $10 billion in recovery and reconstruction costs (*10*). China also experienced the worst floods in a decade, which cost $50 billion (*11*). In December 2010, Australia suffered historical flooding.

Low-income countries typically rely on government and international aid to cope with major floods. As countries reach a higher level of economic development, insurance mechanisms are used more broadly. Flood insurance can be private, as in Germany and the United Kingdom. In the United States, residents purchase flood insurance mostly through the federally run NFIP, established in 1968 as a result of increased federal relief triggered by disasters in the 1960s and the insurance industry's refusal to cover this hazard because of their inability to accurately assess the risk (*12*). The NFIP covers $1.2 trillion of property today (mainly in coastal states), over three times what was covered 20 years ago (*13*, *14*).

NFIP premiums are established by the federal government. A homeowner can purchase building and contents coverage up to $250,000 and $100,000, respectively, but only if the community that he or she lives in participates in the program. This requires that a flood-risk map has been completed and that the appropriate public body has adopted adequate floodplain management regulations. Homeowners in high-risk areas (defined as "100-year" or "base" levels, expected to be flooded at least once every 100 years) are required to purchase coverage if they hold a federally backed mortgage.



Devastating losses require better insurance.

CREDIT: MARK MORAN/NOAA CORPS, NMAO/AOC

Limits of the NFIP as Currently Designed

The absence of a large reserve has forced the NFIP into debt, as it has borrowed over $19 billion from the U.S. Treasury to cover losses caused by the 2005 and 2008 hurricanes and floods (*13*). Subsidized insurance is part of the problem: Buildings that are near or below base flood elevation but that were in place before community flood-risk maps were completed are still charged rates that are considerably below the actuarial risk. This was done originally to maintain property values. About one-fourth of insured properties are still subsidized that way (*15*, *16*). And even properties constructed after flood mapping are charged premiums based only on an average historical loss year (*17*).

The NFIP has not been able to enroll and retain many homeowners exposed to flood risk. Recent studies show that insurance penetration in flood-prone areas remains only at about 50% (*18*, *19*). This lack of coverage is likely to increase the need for disaster relief after major floods. This situation is not specific to the United States. In Germany, flood insurance penetration is only 10% for single-family homes (*20*). After the major 2002 Elbe floods, the German government provided the largest amount of public funds ever paid in the country's history to compensate uninsured flood victims. In China, only 1 to 2% of the $50 billion losses of last year's floods were insured (*11*).

Do a large proportion of homeowners never buy coverage, or do many who once purchased insurance let their policies lapse? To answer this question, we analyzed all new policies issued by the NFIP over the period 1 January 2001 to 31 December 2009 (n = 8.9 million) (*21*). The median length of time before these new policies lapsed is 3 to 4 years. On average, only 74% of new policies were still in force 1 year after they were purchased; after 5 years, only 36% were still in place. The lapse rate is high even after correcting for migration and does not vary much across flood zones (*21*).

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Behavioral research can shed light on the underinsurance problem. As the probability of flood in a given year is low, individuals often treat these potential disasters as below their threshold level of concern. Studies on risk perception show that individuals do not understand low probabilities well and often simply ignore likelihood information when making decisions (*22*, *23*). The language used to communicate risks is also a problem. Scientists often talk about a "100-year return flood," but many individuals do not understand what that means. Some who have suffered a flood believe that they will not have another flood for 100 years. Homeowners are often myopic: If they paid insurance premiums for a few years but have not collected on their policy, they often view insurance as a bad investment and cancel their policy (*12*). Finally, there might be rational reasons for not purchasing coverage when this expense competes with other needs that have to be satisfied with a limited budget.

Better Tools for Disaster Financing

Our proposal for redesigning flood insurance has five prongs, to be implemented simultaneously because they complement each other. First, to account for myopic behavior, we recommend that flood insurance be sold not as 1-year contracts but as multiyear contracts (e.g., 5 or 10 years) that would be attached directly to the property at risk rather than to the homeowner (as is currently done). We propose that this be made mandatory for all homeowners in high-risk areas. To ensure that the requirement is enforced, FEMA could be empowered by Congress to monitor both existing and new construction in those areas. This reform will generate several benefits. It would avoid cancellation of insurance after just a few years. If a homeowner were to move to another location, the contract would be transferred to the new owner. As a result, many more properties will be covered and remain so over time. This should also increase the diversification of the NFIP's portfolio.

Second, premiums must be risk-based for all, so that homeowners will be informed of the true exposure of their residence to potential flood damage.

Third, such insurance contracts could be complemented with multiyear home-improvement loans provided by the government or commercial banks to encourage investment in cost-effective risk-reduction measures, such as flood-proofing one's house; the reduction in insurance premiums could offset the annual cost of the loan. The benefits of mitigation may also become more apparent over a 5- or 10-year period.

Fourth, we recommend a new flood insurance voucher program to address issues of equity and affordability to complement the strategy of risk-based premiums for all. Property owners currently residing in a high-risk zone who require special treatment would receive a voucher by the NFIP as part of its budget or through special appropriations. This program would be similar to the Supplemental Nutrition Assistance Program ("food stamps") and the Low Income Home Energy Assistance Program, which in the United States assist millions of low-income households meet food and energy needs every year.

This proposal will require that building vulnerability be updated at policy renewal (every 5 or 10 years) and be reflected in the new premiums. Reevaluation of the flood hazard across the country will be needed over time to reflect hydrological changes due to factors such as additional runoffs caused by new construction, loss of wetlands, and possible effects of a changing climate (*24*).

Fifth, given the current level of U.S. public debt and the desire to lower taxpayers' financial liability, we propose that the NFIP reduce its catastrophe exposure by purchasing private reinsurance and catastrophe bonds (*13*, *25*). We recommend a four-layer approach. After the NFIP determines how much risk to retain, private reinsurers would provide coverage for a second layer of losses. Investors would then provide capital through catastrophe bonds to cover a third layer of losses. For truly exceptional events, the NFIP would utilize its borrowing capacity from the U.S. Treasury (fourth layer). Determination of these layers will be based on their price and how much exposure the program opts to retain or transfer.

Transparent measurement of risk exposure is critical. Sophisticated catastrophe-modeling techniques must be used to determine average annual loss, standard deviation, probable maximum loss, and other features that enter into the pricing of disaster risk–financing instruments. Catastrophe models developed by the scientific community can be used to update U.S. flood maps, as about half of the NFIP's roughly 106,000 maps were more than 15 years old in April 2008 (*26*). Some steps have already been taken to address this problem. FEMA has begun to digitize flood maps using geographic information systems so that they are easier to update. After the failure of the New Orleans' levee system in 2005, the U.S. Army Corps of Engineers began reevaluating levees throughout the United States using data from hydrology, climatology, soil science, and engineering. These studies have helped determine which levees no longer meet the standards for which they had been designed. These developments in assessing risk more accurately could be useful in determining costs and benefits of the proposed redesign of flood insurance.

References and Notes

1. K. Froot, Ed., *The Financing of Catastrophe Risk* (Chicago Univ. Press, Chicago, 1999).
2. H. Kunreuther, E. Michel-Kerjan, *At War with the Weather* (MIT Press, Cambridge, MA, 2009).
3. D. Cummins, O. Mahul, *Catastrophe Risk Financing in Developing Countries* (World Bank, Washington, DC, 2009).
4. D. A. King, *Science* **303**, 176 (2004).
5. P. C. D. Milly *et al.*, *Science* **319**, 573 (2008).
6. T. Knutson *et al.*, *Nat. Geosci.* **3**, 157 (2010).
7. D. Cummins, M. Suher, G. Zanjani, in *Measuring and Managing Federal Financial Risk*, D. Lucas, Ed. (National Bureau of Economic Research, Univ. of Chicago Press, Chicago 2010), pp. 61–96.
8. N. Pinter, *Science* **308**, 207 (2005).
9. The White House, *Economic Report of the President* (White House, Washington, DC, 2007).
10. The World Bank, *Pakistan Floods 2010: Preliminary Damage and Needs Assessment* (World Bank, Washington, DC, 2010).
11. Guy Carpenter and Co., *China Floods Report* (Guy Carpenter and Co., New York, 2010); www.gccapitalideas.com/2010/12/20/china%E2%80%99s-costly-floods-in-2010-likely-to-have-limited-impact/.
12. H. Kunreuther *et al.*, *Disaster Insurance Protection: Public Policy Lessons* (Wiley, New York, 1978).
13. E. Michel-Kerjan, *J. Econ. Perspect.* **24**, 165 (2010).
14. E. Michel-Kerjan, C. Kousky, *J. Risk Insur.* **77**, 369 (2010).
15. F. Wetmore *et al.*, *An Evaluation of the National Flood Insurance Program: Final Report* (American Institutes for Research, Washington, DC, 2006).
16. Congressional Budget Office (CBO), *Value of Properties in the National Flood Insurance Program* (CBO, Washington, DC, 2007).
17. Government Accountability Office (GAO), *Flood Insurance: Public Policy Goals Provide a Framework for Reform* (GAO-11-670T, GAO, Washington, DC, 2011).
18. W. Kriesel, C. Landry, *J. Risk Insur.* **71**, 405 (2004).
19. L. Dixon, N. Clancy, S. A. Seabury, A. Overton, *The National Flood Insurance Program's Market Penetration Rate: Estimates and Policy Implications* (RAND Corp., Santa Monica, CA, 2006).
20. A. H. Thieken *et al.*, *Risk Anal.* **26**, 383 (2006).
21. E. Michel-Kerjan, S. Lemoyne de Forges, H. Kunreuther, *Risk Anal.* (doi 10.1111/j.1539-6924.2011.01671.x); http://opim.wharton.upenn.edu/risk/library/2011-06.pdf.
22. C. Sunstein, *Yale Law J.* **112**, 61 (2002).
23. H. Kunreuther, R. Meyer, E. Michel-Kerjan, in *The Behavioral Foundations of Policy*, E. Shaffir, Ed. (Princeton Univ. Press, Princeton, NJ, in press); http://opim.wharton.upenn.edu/risk/library/2009-08.pdf.
24. R. J. Burby, *Global Environ. Change B Environ. Hazards* **3**, 111 (2001).
25. Reinsurance is coverage purchased by one insurer from another. Catastrophe bonds would transfer part of the NFIP exposure directly to institutional investors. If no catastrophe occurs (as defined in the contract), investors would receive their capital back plus a return on their investment and a premium from NFIP. If a predefined catastrophe occurs, the NFIP would use investor payments to cover a portion of the claims. As of December 2010, there were about \$13 billion invested in such bonds to cover losses from future disasters in the Americas, Asia, and Europe.
26. R. King, *Mandatory Flood Insurance Purchase in Remapped Residual Risk Areas Behind Levees* (Report 7-5700, Congressional Research Service, Washington, DC, 2010).
27. We acknowledge support from the NSF, U.S. Department of Homeland Security, and the Wharton School's Risk Management and Decision Processes Center.

Supporting Online Material

www.sciencemag.org/cgi/content/full/333/6041/408/DC1

10.1126/science.1202616

ISSUES IN SCIENCE AND TECHNOLOGY

National Academy of Sciences
National Academy of Engineering
Institute of Medicine
The University of Texas at Dallas

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People Get Ready
Disaster Preparedness

Natural catastrophes are becoming more common and more expensive, but human and financial losses can be greatly reduced through incentives to purchase insurance and install protective measures.

In recent years, we have witnessed a dramatic increase in the economic cost and human impact from hurricanes, earthquakes, floods, and other natural disasters worldwide. Economic losses from these catastrophic events increased from $528 billion (1981–1990) to more than $1.2 trillion over the period 2001–2010.

Although we are only halfway through 2011, an exceptional number of very severe natural catastrophes, notably the March 2011 Japan earthquake and tsunami, will make 2011 a record year for economic losses. In the United States, the southern and midwestern states were hit by an extremely severe series of tornadoes in April and May, and at about the same time, heavy snowmelt, saturated soils, and over 20 inches of rain in a month led to the worst flooding of the lower Mississippi River since 1927. Hurricane Irene in August caused significant flooding in the northeast and is responsible for at least 46 deaths in the United States. Global reinsurance broker Aon Benfield reports that U.S. losses from Irene could reach as high as $6.6 billion; Caribbean losses from Irene are estimated at nearly $1.5 billion.

Given the increasing losses from natural disasters in recent years, it is surprising how few property owners in hazard-prone areas have purchased adequate disaster insurance. For example, although it is well known that California is highly exposed to seismic risk, 90% of Californians do not have earthquake insurance today. This is also true for floods. After the flood in August 1998 that damaged property in northern Vermont, the Federal Emergency Management Agency (FEMA) found that 84% of the homeowners in flood-prone areas did not have insurance, even though 45% of these individuals were required to purchase this coverage because they had a federally backed mortgage. In the Louisiana parishes affected by Hurricane Katrina in 2005, the percentage of homeowners with flood insurance ranged from 57.7% in St. Bernard Parish to 7.3% in Tangipahoa when the hurricane hit. Only 40% of the residents in Orleans Parish had flood insurance.

Similarly, relatively few homeowners invest in loss-reduction measures. Even after the series of devastating hurricanes that hit the Gulf Coast states in 2004 and 2005, a May 2006 survey of 1,100 adults living in areas subject to these storms revealed that 83% of the respondents had taken no steps to fortify their home and 68% had no hurricane survival kit.

For reasons we will explain in this article, many homeowners are reluctant to undertake mitigation measures for reducing losses from future disasters. This lack of resiliency has made the United States not only very vulnerable to future large-scale disasters but also highly exposed financially. Given the current level of government financial stress, it is natural to wonder who will pay to repair the damage caused by the next major hurricane, flood, or earthquake.

To alleviate this problem, we propose a comprehensive program that creates an incentive structure that will encourage property owners in high-risk areas to purchase insurance to protect themselves financially should they suffer losses from these events and to undertake measures to reduce property damage and the accompanying injuries and fatalities from future disasters.

Why are losses increasing?

Two principal socioeconomic factors directly influence the level of economic losses due to catastrophic events: exposed population and value at risk. The economic development of Florida highlights this point. Florida's population has increased significantly over the past 50 years: from 2.8 million inhabitants in 1950 to 6.8 million in 1970, 13 million in 1990, and 18.8 million in 2010. A significant portion of that population lives in the high-hazard areas along the coast.

Increased population and development in Florida and other hurricane-prone regions means an increased likelihood of severe economic and insured losses unless cost-effective mitigation measures are implemented. Due to new construction, the damage from Hurricane Andrew, which hit Miami in 1992, would have been more than twice as great if it had occurred in 2005. The hurricane that hit Miami in 1926 would have been almost twice as costly as Hurricane

TABLE 1

15 most costly catastrophe insurance losses, 1970–2010 (in 2011 U.S. dollars)

Cost ($ billion)	Event	Victims (dead or missing)	Year	Area of primary damage
48.6	Hurricane Katrina	1,836	2005	USA, Gulf of Mexico, et al.
37.0	9/11 Attacks	3,025	2001	USA
24.8	Hurricane Andrew	43	1992	USA, Bahamas
20.6	Northridge Earthquake	61	1994	USA
17.9	Hurricane Ike	348	2008	USA, Caribbean, et al.
14.8	Hurricane Ivan	124	2004	USA, Caribbean, et al.
14.0	Hurricane Wilma	35	2005	USA, Gulf of Mexico, et al.
11.3	Hurricane Rita	34	2005	USA, Gulf of Mexico, et al.
9.3	Hurricane Charley	24	2004	USA, Caribbean, et al.
9.0	Typhoon Mireille	51	1991	Japan
8.0	Maule earthquake (Mw: 8.8)	562	2010	Chile
8.0	Hurricane Hugo	71	1989	Puerto Rico, USA, et al.
7.8	Winter Storm Daria	95	1990	France, UK, et al.
7.6	Winter Storm Lothar	110	1999	France, Switzerland, et al.
6.4	Winter Storm Kyrill	54	2007	Germany, UK, Netherlands, France

Katrina had it occurred in 2005, and the Galveston hurricane of 1900 would have had total direct economic costs as high as those from Katrina. This means that independent of any possible change in weather patterns, we are very likely to see even more devastating disasters in the coming years because of the growth in property values in risk-prone areas. In addition, recent climate studies indicate that the United States should expect more extreme weather-related events in the future.

Table 1 depicts the 15 most costly catastrophes for the insurance industry between 1970 and 2010. Many of these truly devastating events occurred in recent years. Moreover, two-thirds of them affected the United States.

Increasing role of federal disaster assistance

Not surprisingly, the disasters that occurred in now much more populated areas of the United States have led to higher levels of insurance claim payments as well as a surge in the number of presidential disaster declarations. Wind coverage is typically included in U.S. homeowners' insurance policies; protection from floods and earthquakes is not.

The questions that need to be addressed directly by Congress, the White House, and other interested parties are:

- Who will pay for these massive losses?
- What actions need to be taken now to make the country more resilient when these disasters occur, as they certainly will?

In an article published this summer in *Science* about reforming the federally run National Flood Insurance Program (NFIP), we showed that the number of major disaster declarations increased from 252 over the period 1981–1990, to 476 (1991–2000), to 597 (2001–2010). In 2010 alone there were 81 such major disaster declarations.

This more pronounced role of the federal government in assisting disaster victims can also be seen by examining several major disasters that occurred during the past 60 years as shown in Table 2. Each new massive government disaster relief program creates a precedent for the future. When a disaster strikes, there is an expectation by those in the affected area that government assistance is on the way. To gain politically from their actions, members of Congress are likely to support bills that authorize more aid than for past disasters. If residents of hazard-prone areas expect more federal relief after future disasters, they then have less economic incentive to reduce their own exposure and/or purchase insurance.

Reducing exposure to losses from disasters

Today, thanks to developments in science and technology, we can more accurately estimate the risks that different communities and regions face from natural hazards. We can also identify mitigation measures that should be undertaken to reduce losses, injuries, and deaths from future disasters, and can specify regions where property should be insured. Yet many residents in hazard-prone areas are still unprotected against earthquakes, floods, hurricanes, and tornados.

We address the following question: How can we provide short-term incentives for those living in high-risk areas to invest in mitigation measures and purchase insurance?

We first focus on why many residents in hazard-prone areas do not protect themselves against disasters (a behavioral perspective). We then propose a course of action that overcomes these challenges (a policy perspective). Specifically, we believe that multiyear disaster insurance contracts tied to the property and combined with loans to encourage investment in risk-reduction measures will lead individuals in harm's way to invest in protection and therefore be in a much better financial position to recover on their own after the next disaster. The proposed program should thus reduce the need for disaster assistance and be a win-win situation for all the relevant stakeholders as compared to the status quo.

Empirical evidence from psychology and behavioral economics reveals that many decisionmakers ignore the potential consequences of large-scale disasters for the following reasons:

Misperceptions of the risk. We often underestimate the likelihood of natural disasters by treating them as below our threshold level of concern. For many people, a 50-year or 25-year storm is simply not worth thinking about. Because they do not perceive a plausible risk, they have no interest in undertaking protective actions such as purchasing insur-

TABLE 2

Examples of federal aid as percentage of total disaster losses

Disaster	Federal aid as % of total damage
Hurricane Ike (2008)	69%
Hurricane Katrina (2005)	50%
Hurricane Hugo (1989)	23%
Hurricane Diane (1955)	6%

Source: Michel-Kerjan and Volkman-Wise (2011)

ance or investing in loss-reduction measures.

Ambiguity of experts. Experts often differ in their estimates of the likelihood and consequences of low-probability events because of limited historical data, scientific uncertainty, changing environmental conditions, and/or the use of different risk models. The variance in risk estimates leads to confusion by the general public, government entities, and businesses as to whether one needs to pay attention to this risk. Often, decisionmakers simply use estimates from their favorite experts that provide justifications for their proposed actions. We recently conducted an empirical study of 70 insurance companies and found that insurers are likely to charge higher premiums when faced with ambiguity than when the probability of a loss is well specified. Furthermore, they tend to charge more when there is conflict among experts than when experts agree on the uncertainty associated with the risk of flood and hurricane hazards.

Short horizons for valuing protective measures. Many households and small businesses project only a few years ahead (if not just months) when deciding whether to spend money on loss-reduction measures, such as well-anchored connections where the roof meets the walls and the walls meet the foundation to reduce hurricane damage. This myopic approach prevents homeowners from undertaking protective measures that can be justified from an economic perspective after 5 or 10 years. This short-sighted behavior can be partly explained by decisionmakers wanting to recoup their upfront costs in the next year or two even though they are aware that the benefits from investing in such measures will accrue over the life of the property.

Procrastination. If given an option to postpone an investment for a month or a year, there will be a tendency to delay the outlay of funds. When viewed from a long time perspective the investment will always seem worthwhile, but when one approaches the designated date to undertake the work, a slight delay always seems more attractive. Moreover, the less certain one is about a correct course of action, the more likely one is to choose inaction. There is a tendency to favor the status quo.

Mistakenly treating insurance as an investment. Individuals often do not buy insurance until after a disaster occurs and then cancel their policies several years later because they have not collected on their policy. They perceive insurance to be a bad investment by not appreciating the adage that the "best return on an insurance policy is no return at all."

Failure to learn from past disasters. There is a tendency to discount past unpleasant experiences. Emotions run high when experiencing a catastrophic event or even viewing it on TV or the Internet. But those feelings fade rapidly, making it difficult to recapture these concerns about the event as time passes.

Mimetic blindness. Decisionmakers often imitate the behavior of others without analyzing whether the action is appropriate for them. By looking at what other firms in their industry do, or following the example of their friends and neighbors, decisionmakers can avoid having to think independently.

In addition to these behavioral biases, there are economically rational reasons why individuals and firms in hazard-prone areas do not undertake risk-reduction measures voluntarily. Consider the hypothetical Safelee firm in an industry in which its competitors do not invest in loss-prevention measures. Safelee might understand that the investment can be justified when considering its ability to reduce the risks and consequences of a future disaster. But the firm might decide that it cannot now afford to be at a competitive disadvantage against others in the industry that do not invest in loss prevention. The behavior of many banks in the years preceding the financial crisis of 2008–2009 is illustrative of such a dynamic.

Families considering whether to invest in disaster prevention may also find the outlay to be unattractive financially if they plan on moving in a few years and believe that potential buyers will not take into account the lower risk of a disaster loss when deciding how much they are willing to offer for the property. More generally, homeowners might have other rational reasons for not purchasing disaster coverage or investing in risk-reduction measures when this expense competes with immediate needs and living expenses within their limited budget. This aspect has more significance today given the current economic situation the country faces and the high level of unemployment.

Reconciling the short and long term

The above examples demonstrate that individuals and businesses focus on short-term incentives. Their reluctance to invest in loss-prevention measures can largely be explained by the upfront costs far exceeding the short-run benefits, even though the investment can be justified in the long run. Only after a catastrophe occurs do the decisionmakers express their regret at not undertaking the appropriate safety or protective measures.

But it does not have to be that way. We need to reorient our thinking and actions so that future catastrophes are perceived as an issue that demands attention now.

Knowing that myopia is a human tendency, we believe that leaders concerned with managing extreme events need

to recognize the importance of providing short-term economic incentives to encourage long-term planning. We offer the following two concepts that could change the abovementioned attitudes.

Extend financial responsibility over a multiyear period. Decisionmakers need an economic incentive to undertake preventive measures today, knowing that their investments can be justified over the long term. The extended financial responsibility and reward could take the form of multiyear contracts, contingent or delayed bonuses, reduced taxes, or subsidies.

The public sector should develop well-enforced regulations and standards to create level playing fields. Government agencies and legislative bodies need to develop well-enforced regulations and standards, coupled with short-term economic incentives to encourage individuals and the private sector to adopt cost-effective risk-management strategies. All firms in a given industry will then have good reasons to adopt sound risk-management practices without becoming less competitive in the short run.

Insurance mechanisms can play a central role in encouraging more responsible behavior in three ways. First, if priced appropriately, insurance provides a signal of the risk that an individual or firm faces. Second, insurance can encourage property owners in hazard-prone areas to invest in mitigation measures by providing them with premium reductions to reflect the expected decrease in losses from future disasters. Third, insurance supports economic resiliency. After a disaster, insured individuals and firms can make a claim to obtain funds from their insurance company, rather than relying solely on federal relief, which comes at the expense of taxpayers.

A multiyear approach

We propose that insurance and other protective measures be tied to the property rather than the property owner as currently is the case. We recommend the following features of such a program:

Required insurance. Since individuals tend to treat insurance as an investment rather than a protective mechanism, it may have to be a requirement for property located in hazard-prone areas, given the large number of individuals who do not have coverage today.

Vouchers for those needing special treatment. We recommend a new disaster insurance voucher program that addresses issues of equity and affordability. This program would complement the strategy of risk-based premiums for all. Property owners currently residing in a risky area who require special treatment would receive a voucher from FEMA or the U.S. Department of Housing and Urban Development as part of its budget or through a special appropriation. This program would be similar to the Supplemental Nutrition Assistance Program (food stamps) and the Low Income Home Energy Assistance Program, which enable millions of low-income households in the United States to meet their food and energy needs every year. The size of the voucher would be determined through a means test in much the same way that the distribution of food stamps is determined today.

Multiyear insurance tied to property. Rather than the normal one-year insurance contract, individuals and business owners should have an opportunity to purchase a multiyear insurance contract (for example, five years) at a fixed annual premium that reflects the risk. At the end of the multiyear contract, the premium could be revised to reflect changes in the risk.

Multiyear loans for mitigation. To encourage adoption of loss-reduction measures, state or federal government or commercial banks could issue property improvement loans to spread the costs over time. For instance, a property owner may be reluctant to incur an upfront cost of $1,500 to make his home more disaster-resistant but would be willing to pay the $145 annual cost of a 20-year loan (calculated here at a high 10% annual interest rate). In many cases, the reduction in the annual insurance premium due to reduced expected losses from future disasters for those property owners investing in mitigation measures will be greater than their annual loan costs, making this investment financially attractive.

Well-enforced building codes. Given the reluctance of property owners to invest in mitigation measures voluntarily, building codes should be designed to reduce future disaster losses and be well enforced through third-party inspections or audits.

Modifying the National Flood Insurance Program

The National Flood Insurance Program (NFIP) was established in 1968 and covers more than $1.2 trillion in assets today. The federally run program is set to expire at the end of September 2011, and options for reforms are being discussed. We believe that revising the program offers an opportunity to take a positive step in implementing our abovementioned proposal.

We recently undertook an analysis of all new flood insurance policies issued by the NFIP over the period January 1, 2001, to December 31, 2009. We found that the median length of time before these new policies lapsed was three to four years. On average, only 74% of new policies were still in force one year after they were purchased; after five years,

only 36% were still in force. The lapse rate is high even after correcting for migration and does not vary much across different flood zones. We thus propose replacing standard one-year insurance policies with multiyear insurance contracts of 5 or 10 years attached to the property itself, not the individual. If the property is sold, then the multiyear flood insurance contract would be transferred to the new owner.

Premiums for such multiyear insurance policies should accurately reflect risk and be lower for properties that have loss-reduction features. This would encourage owners to invest in cost-effective risk-reduction measures, such as storm shutters to reduce hurricane damage. If financial institutions or the federal government provide home improvement loans to cover the upfront costs of these measures, the premium reduction earned by making the structure more resistant to damage is likely to exceed the annual payment on the loan.

A bank would have a financial incentive to make such a home improvement loan because it would have a lower risk of catastrophic loss to the property that could lead to a mortgage default. The NFIP would have lower claims payments due to the reduced damage from a major disaster. And the general public would be less likely to have large amounts of their tax dollars going for disaster relief, as was the case with the $89 billion paid in federal relief after the 2004 and 2005 hurricane seasons and resulting floods. A win-win-win-win situation for all!

A governmental program that has some similarities to our proposal is the Property Assessed Clean Energy (PACE) program, which has been adopted by 27 states for promoting energy efficiency. PACE provides short-term rewards to encourage investments in technologies that will have long-term benefit. PACE provides long-term funding from private capital markets at low cost and needs no government subsidies or taxes. It increases property values by making heating and cooling less expensive, and it enjoys broad bipartisan support nationwide at state and local levels. Several features of the program that encourage property owners to take measures to make their home more energy-efficient mirror how property owners would want to make their homes more disaster-resistant:

Multiyear financing. Interested property owners opt in to receive financing for improvements that is repaid through an assessment on their property taxes for up to 20 years. PACE financing spreads the cost of energy improvements such as weather sealing, energy-efficient boilers and cooling systems, and solar installations over the expected life of these measures and allows for the repayment obligation to transfer automatically to the next property owner if the property is sold. PACE solves two key barriers to increased adoption of energy efficiency and small-scale renewable energy: high upfront costs and fear that project costs won't be recovered before a future sale of the property.

Annual savings. Because basic energy-efficiency measures can cut energy costs by up to 35%, annual energy savings will typically exceed the cost of PACE assessments. The upfront cost barrier actually turns into improved cash flow for owners in much the same way that the reduction of annual insurance premiums could exceed the annual loan costs.

Transfer to new property owner. Like all property-based assessments, PACE assessments stay with a property after sale until they are fully repaid by future owners, who continue to benefit from the improvement measures. The multiyear insurance and mitigation contracts we propose would operate in the same way.

Now is the time

The nation has entered a new era of catastrophes. Exposure is growing, and the damage from disasters over the next few years is likely to exceed what we have experienced during this past decade. When the next catastrophe occurs, the federal government will very likely come to the rescue—again. If the public sector's response to recent disasters is an indicator of its future behavior, new records will be set with respect to federal assistance.

In order to avoid this outcome, we recommend that the appropriate governmental bodies undertake an economic analysis of the benefits and costs of the proposed multiyear insurance and risk-reduction loan programs compared to the current system of private and public insurance and federal disaster assistance.

We need bold leadership for developing long-term strategies for dealing with low-probability, high-consequence events. If Congress authorizes a study that examines these and other proposals when the NFIP comes up for renewal in September, it will be major step forward in setting a tone for addressing the challenges of managing catastrophic risks. The United States is at war against natural hazards and other extreme events. Winning this war will be possible only if public policy integrates behavioral factors much more systematically into efforts to find sustainable solutions. As we have indicated, taking these steps will be difficult because of human reluctance to change. But we know what steps need to be taken. All it takes is the courage for us to act and the initiative to do so now.

Recommended reading

Jeffrey Brown, ed., *Public Insurance and Private Markets* (Washington, DC: American Enterprise Institute, 2010).

Erwann Michel-Kerjan and Howard Kunreuther, "Redesigning Flood Insurance," *Science* 333 (July 22, 2011): 408–409.

Howard Kunreuther and Erwann Michel-Kerjan, *At War with the Weather: Managing Large-Scale Risks in a New Era of Catastrophes* (Cambridge, MA: MIT Press, 2011).

Howard Kunreuther and Erwann Michel-Kerjan, testimony before the U.S. Senate Committee on Appropriations: Financial Services and General Government Subcommittee on July 28, 2011, Federal Disaster Assistance Budgeting: "Are We Weather Ready?" http://appropriations.senate.gov/htfinancial.cfm?method=hearings.view&id=15863533-bd47-4e77-81df-8acf693e73b0.

Deborah Lucas, ed., *Measuring and Managing Federal Financial Risk* (Chicago: University of Chicago Press, 2010).

National Research Council, *Adapting to the Impacts of Climate Change* (Washington, DC: National Academies Press, 2010).

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Modifying the National Flood Insurance Program to Reduce Flood Losses: Risk-Based Premiums and Affordability

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Working Paper # 2012-14

Congressional Research Service Capstone Project
Spring 2012

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Spring 2012

Contents

1 Executive Summary

After the turbulent 2005 Atlantic hurricane season and Hurricane Ike in Texas in 2008, the National Flood Insurance Program's (NFIP) debt lies at $17.8 billion, calling into question the NFIP's lack of fiscal sustainability in the wake of large-scale disasters. The U.S. debt crisis calls further for a re-evaluation of all government programs running a deficit. This study is thus motivated by Congress' call for more information on the fiscal sustainability of the NFIP, as it is currently structured.

With recent legislative proposals related to the NFIP and frequent short-term reauthorizations, there has been much discussion about revising current premiums to more accurately reflect flood risk. The Senate Committee on Banking and Urban Affairs Bill (S. 1940) and the House Bill (H.R. 1309) both propose to reauthorize the NFIP through 2016 and require that premiums reflect true flood risk as confirmed by actuaries. **However, there has been a lack of focus on the effects on affordability of these new proposed premiums. In this paper, we examine these effects and explore ways to make this shift more affordable and implementable.**

In our study, we assess the impact of the implementation of these legislative proposals. Our study seeks to build on the 2012 study, *A Methodological Approach for Pricing Flood Insurance and Evaluating Loss Reduction Measures: Application to Texas*, conducted by the Wharton Risk Center, Swiss Re and CoreLogic utilizing state of the art catastrophe models. Our analysis is based on data from this study and focuses on the impact on affordability of a change to risk-based premiums for households in Galveston County, Texas. What makes Galveston County a particularly appropriate county for this study on affordability is the fact that a large percentage of its population (33%) is located in a Federal Emergency Management Agency (FEMA) floodplain. Galveston County was ranked first out of 18 Texas coastal counties for the percentage of designated "high-risk" populations located in a FEMA floodplain, with 37% of the total population over age 65 living in a floodplain and almost half (43%) of the total population in poverty located in a floodplain.[1]

Using data from the above-mentioned study on current premiums and comparing them to the risk-based premiums calculated using sophisticated catastrophe models, which are common in the insurance industry, we found that out of the 14 Zip

[1] "Coastal County Snapshots - NOAA Coastal Services Center." NOAA Coastal Services Center. Web. 8 Feb. 2012.

Codes eligible for this comparison, the annual premiums in 4 Zip Codes decreased while the annual premiums in 10 Zip Codes increased as the result of a risk-based policy. The maximum percentage increase for a zip code was 159.06% (from $549 to $1,442).

A major concern facing policy-makers regarding affordability is the question of *who* will pay for this increase in insurance premiums. Having calculated the total expected premium increase in Galveston County, we looked into the possibility of allowing for insurance vouchers for those households who may not be able to afford the premium increases. In order to address these issues of affordability, especially for those who would experience steeper increases in premiums, we propose that the government provide insurance vouchers to citizens to bear the cost of the premium increases. Under a select few definitions of affordability, we explored different scenarios under which those with annual household income below certain thresholds (e.g. under 50% of area median income, under 150% of the poverty line) would receive the vouchers in order to afford the increases in flood insurance premiums they have to pay to be protected.

In addition to analyzing the effects that a move to risk-based premiums would have on the affordability of insurance in Galveston County, it is important to look at other challenges in the implementation of updated risk-based premiums. One of the points of interest that emerged when comparing the Senate Banking Committee's and House of Representative's bills is that they differ in the rate at which they permit insurance premiums to increase per year in order to reach their "actuarially-indicated levels that reflect the true risk of flooding."[2] Currently, NFIP premiums may not increase by more than 10% a year. The Senate bill would allow premiums to increase by 15% a year while the House bill would allow premiums to increase by 20% a year. Using our data for Galveston County, we found that for the most aggressive strategy of the proposed strategies (the 20% phase-in policy), it would take six years until all Zip Codes are at risk-based levels (as measured by the mean). On the other hand, for the slower phase-in policy of 10%, it would take 10 years until all Zip Codes are at risk-based levels. These results strongly indicate the importance of an aggressive phase-in strategy.

We propose that premiums should be adjusted for risk *immediately* alongside the implementation of insurance vouchers. The immediate implementation of risk-based premiums would offer a number of benefits for the NFIP. Firstly, the immediate implementation would discourage development in high-risk areas. In addition,

[2] "Senate Committee Passes Federal Flood Insurance Reform Legislation." Insurance Journal. 8 Sept. 2011. Web. 20 May 2012.

it would improve the financial sustainability of the program by increasing funding with the higher premiums. Finally, immediate implementation of risk-based premiums would further encourage households to adopt mitigation measures.

It is also important to look at ways to reduce exposure to flood risk. In this respect, we chose to explore the use of mitigation measures and the ways in which efforts towards mitigation should be incorporated into a move towards risk-based premiums. One of the primary drivers for a move towards accurate and updated risk-based premiums is that homeowners will better recognize their real exposure to risk. This recognition should thereby incentivize homeowners to adopt mitigation measures more readily. There are, however, a number of decision biases and economic constraints that explain why homeowners may choose not to invest in expensive flood mitigation.

Continuing to look at affordability in relation to mitigation investments, we also suggest offering assisted financing for mitigation efforts. While this is particularly important for those who may be unable to afford the high up-front investment costs, even those who may be able to afford the costs may choose not to invest in these measures, especially if they feel that they would not realize the benefits of their investment in the short-term. As such, we propose that FEMA or financial institutions offer mitigation loans to households in order to encourage investment in mitigation measures. The loans, to be paid back over the long-term, would make investment in mitigation more affordable and would spread the high investment costs over time. For low-income households, mitigation loan payment assistance could be provided. If the mitigation measures are effective, we expect households to experience a reduction in their risk-based premiums due to the reduced flood exposure. These savings in premiums could go towards the re-payment of loans. While this scheme should incentivize households to adopt mitigation, challenges remain regarding the awareness of the actual measures a homeowner can undertake to mitigate flood risk. Hence, it is imperative that these mitigation loans be coupled with information sharing on the forms of mitigation available to households. Moreover, we must weigh the costs of implementing certain mitigation measures against their benefits. Once again, information sharing of which mitigation measures homeowners should employ and which may be ineffective becomes a key part of the process.

While the Senate and House bills have suggested a shift towards risk-based premiums that more accurately reflect flood risk, it is crucial to examine this shift's impact on affordability for homeowners. As we will show in this paper, the Senate and House Bills need to be reconciled with appropriate policy supports to ensure

the sustainability of the National Flood Insurance Program and to minimize negative effects on affordability while reducing flood exposure and losses. We suggest an immediate implementation of the updated risk-based premiums, so that insurance payments would help improve program funding and thereby its sustainability. At the same time, we recommend that the government provide insurance vouchers to households that meet certain income thresholds to reduce the financial burden of premium increases on these homeowners. Lastly, we propose mitigation loans as a way to incentivize homeowners to employ mitigation measures and reduce flood exposure.

2 Background

2.1 Overview of the National Flood Insurance Program

The National Flood Insurance Act of 1968 created the National Flood Insurance Program (NFIP), which was designed as a voluntary partnership between the federal government and local communities. The program had a three-prong plan: 1) To identify areas most at risk of flooding; 2) To minimize the economic impact of flooding events; and 3) To provide flood insurance to individuals and businesses.[3] The program was, however, not set up to deal alone with truly extreme events, and this is a critical point to bear in mind when analyzing the program's effectiveness. The NFIP provides insurance up to a maximum limit for residential property damage, now set at $250,000 for building coverage and $100,000 on contents' coverage. The program was structured to subsidize the cost of flood insurance on existing homes, in order to maintain property values, while charging actuarially fair rates on new construction.[4]

In 2007, about 1.2 million, or almost one of four, residential flood insurance policies under the NFIP continued to be sold at subsidized rates that did not fully reflect the actual risk of flood damage. The subsidized rates averaged 35 to 40 percent of what full-risk rates would be on the same properties and represented a large financial burden on the NFIP.[5] As of May 2012, the NFIP's debt is at $17.8 billion, and under current legislation, the NFIP may borrow an additional $3 billion from the Treasury. The Congressional Budget Office expects that this

[3] King, Rawle O. "National Flood Insurance Program: Background, Challenges, and Financial Status." 4 Mar 2011.

[4] Erwann Michel-Kerjan (2010). "Catastrophe Economics: The National Flood Insurance Program." Journal of Economic Perspectives.

[5] "Options for Addressing the Financial Impact of Subsidized Premium Rates on the National Flood Insurance Program." United States Government Accountability Office. November 2008.

borrowing authority will be exhausted in 2014.[6]

2.2 March 2011 NFIP Congressional Research Service Report Summary

In Rawle King's March 2011 Congressional Research Service Report, "National Flood Insurance Program: Background, Challenges, and Financial Status,"[7] he cites several lessons from Hurricane Katrina and the 2008 Midwest floods, which could help inform Congress on the reform of the NFIP. First, program participation has not yet reached the level that was originally envisioned by Congress, as homeowners do not truly recognize their flood risk. The altering of rivers and streams by the construction of levees and other flood control structures has actually increased risk of floods throughout the affected floodplains, and there is thus a need to improve the NFIP's floodplain management standards. Moreover, actuarial policy rates do not always accurately reflect the flood risk in a given location because of inaccurate or outdated flood hazard maps. Levees provide a false sense of security, even though homeowners face significant uninsured losses if the levee is overtopped and they do not have flood insurance. Lastly, there is a moral hazard issue due to the availability of federally-subsidized flood insurance in high-risk areas, which encourages homeowners to locate in flood-prone areas and lowers their incentives to avoid flood risk because they expect compensation for flood-related losses from the federal government.

Given all these issues, King's report suggests several options to respond to these challenges. The government could reform and modernize the NFIP, which may include a gradual phase-in of actuarial rates, strengthening of floodplain management regulations and enforcement of mandatory insurance purchases, ongoing review of flood insurance program maps, and incentives for private sector participation. Another proposal is for multi-year flood insurance contracts that include mitigation loans tied to the property's mortgage. The government could also shift flood insurance back into the private sector, enabling private insurers to cover more flood risk. Two other proposals are for community group flood insurance policies and interstate compacts for flood control and management.

[6]"Flood Insurance Reform and Modernization Act of 2011." Congressional Budget Office Cost Estimate (2011): Web. 27 Jan. 2011.

[7]King, Rawle O. "National Flood Insurance Program: Background, Challenges, and Financial Status." 4 Mar 2011.

3 Our Study

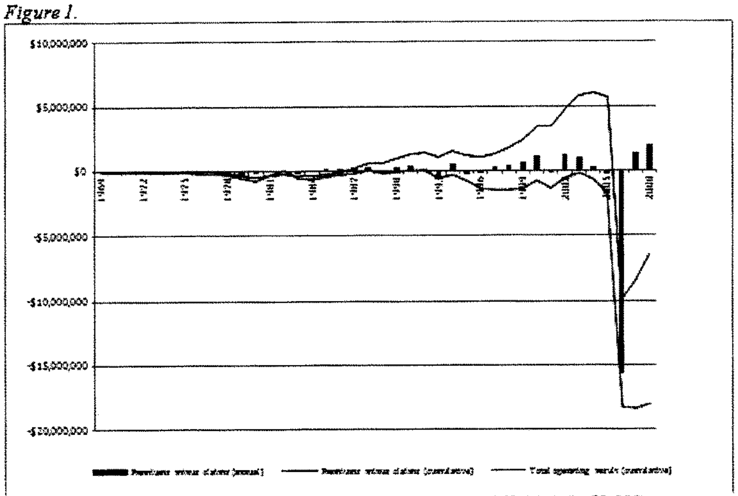
3.1 Thesis

With recent legislative proposals related to the National Flood Insurance Program (NFIP) and the upcoming expiration of the program, there has been much discussion about updating flood insurance premiums to more accurately reflect flood risk. **However, there has been a lack of focus on the effects on affordability of these new premiums. In this paper, we examine these effects and explore ways to make this shift more affordable and implementable.** In our study, we use Galveston County in Texas to assess the impact of actual implementation of the updated risk-based premiums and our proposal for flood insurance vouchers.

3.2 Motivation for Study

In the aftermath of the 2005 and 2008 hurricane season, Congress realized that the U.S. government's level of debt was unacceptable and that, within weeks, the government would not be able to pay off its debt owed to creditors. Congress met for many weeks to decide whether or not to raise the U.S.'s debt ceiling, allowing the U.S. to borrow more money to pay off outstanding debt. Fierce debate from many politicians made finding a solution to the problem suitable to the majority a difficult task. The pending default of the U.S., the potential demotion from a AAA credit rating, and the possible economic effects pushed the U.S. budget to the forefront of the minds of a large portion of the citizenry. Congress ultimately decided to re-evaluate all government programs which were running a deficit. This study is thus motivated by Congress' call for more information on the fiscal sustainability of the NFIP, as it is currently structured, and we will see in the following section that the upcoming expiration of the program and recent legislative proposals make this a timely and relevant study for Congress.

Figure 1.



Financial Operation of the NFIP – 1969-2008 (in $1,000)

Sources: Michel-Kerjan (2010). "Catastrophe Economics". Journal of Economic Perspectives.

Figure 1 reveals that the NFIP lost a substantial amount of money in 2005, due in large part to Hurricane Katrina. Prior to 2005, the financial balance of the NFIP had been quite stable and in fact, performed quite well in the years leading up to 2005. Thus, the central question is whether the poor performance in 2005 and the resulting debt are evidence of the NFIP's lack of fiscal sustainability. We note here that it is not the purpose of the NFIP to generate revenue for the government; its goal is to provide fiscal stability to citizens in the face of flood risks while not losing money over the long-term.

From a purely statistical point of view, Hurricane Katrina was a low-probability, high-consequence event. Events such as these very rarely happen, but when they do, the consequences are severe. If the NFIP's unknown yearly return distribution is zero, than the NFIP's expected losses are equal to its expected profits and the program is fiscally stable (although borrowing will be necessary to cover losses at some points). Alternatively, we can propose the following question: given the performance of the NFIP since its inception, is the mean loss in any given year 0? In this example, we are observing events occurring from an unknown and potentially changing distribution and trying to make inferences about certain parameters, most importantly the mean. As an example, if the true distribution of the loss is normal with mean zero, the Law of Large Numbers tells us the average yearly profit of the NFIP (which is currently negative), will converge to zero as time

goes on. Given that we have a limited number of data points on the NFIP's net profit per year, it is difficult to determine whether or not the mean loss is different from zero with very high confidence, and we cannot conclude with certainty that there exists a property whose premiums do not reflect risk. However, there are two important observations:

1. As we can see from Figure 1, the variance of the yearly loss is increasing over time, due to the increasing number of policies-in-force and high correlation between large subsets of those policies.

2. Random checks of flood maps and corresponding risk-based premiums by experts suggest current premiums underestimate true risk and should be, on average, revised upward.

From the first observation, we derive that the NFIP will need to be able to borrow more money from the Treasury in order to cover losses. From the second observation, we note those losses will likely exceed gains and thus, if premiums are not changed to better reflect risk, the NFIP will likely lose money over time. The Senate and House have both proposed to phase in new risk-based premiums to increase the NFIP's revenue to a level necessary to meet losses over the time horizon. In the following section, we will give further background on recent legislative proposals.

3.3 Recent Legislative Proposals: Senate Banking Committee Bill and House Bill (H.R. 1309)

The NFIP will expire on May 31, 2012, and the Senate and House have created legislative proposals in response to the upcoming expiration. The Senate Committee on Banking and Urban Affairs Bill (S. 1940) and the House Bill (H.R. 1309) both reauthorize the NFIP through 2016 and require that premiums reflect true flood risk as confirmed by actuaries.

The Obama Administration's proposal, passed July 12, 2011, by the House of Representatives under H.R. 1309, reported that "1.2 million, or 20%, of all NFIP properties are charged premiums below the actuarial value of the insured liability," while NFIP premium collections, including subsidized and unsubsidized policies, cover about 70% of the actuarial value of the insured liability. Under this House bill, the NFIP would collect about $700 million in additional premium revenue in the next five years and about $4.2 billion in the next decade. The proposal includes the following changes:

1. Increase premiums in the next five years for a subset of "subsidized properties" (non-residential or non-primary residences, residences sold to new owners and severe repetitive loss properties)
2. Redefine severe repetitive loss properties as residences with at least four paid claims greater than $5,000 or with two paid claims that cumulatively exceed the market value of the house
3. Increase premiums one year after enactment for policyholders of the "subsidized properties" by no more than 20% per year until the amount collected covers the full expected cost of the insurance
4. New policies that fit the "subsidized properties" one year after enactment would immediately pay the full cost actuarial premium.[8]

The Senate Banking Committee passed its version of the bill on September 8, 2011. This proposal would forgive the NFIP's nearly $18 billion debt, and unlike the House bill, would only allow for premiums to be increased by 15 percent per year to reach their actuarially indicated levels that reflect the true risk of flooding.[9]

An important point to note is that while both bills deal with phasing in updated risk-based premiums, they do not tackle the issue of affordability, which is what we will examine later in this paper, with a comparison of the affordability effects of each of these bills.

3.4 Focus of Our Study: Texas

Our study seeks to build on the study *A Methodological Approach for Pricing Flood Insurance and Evaluating Loss Reduction Measures: Application to Texas*, conducted by the Wharton Risk Center, Swiss Re and CoreLogic. Swiss Re is one of the leading global reinsurers, and CoreLogic is a large data analytics provider to businesses and government. This study assesses the risks and associated costs and benefits of a selected number of loss reduction measures (mitigation measures) and also compares different pricing methods with those used by the NFIP.[10] The

[8]Brockway, Jaime L. "Obama supports fewer NFIP premium subsidies, cutting $4.2 billion." Insurance & Financial Advisor. Web. 1 Feb. 2012.

[9]"Senate Committee Passes Federal Flood Insurance Reform Legislation." Insurance Journal - Property Casualty Insurance News. Web. 9 May 2012.

[10]Czajkowski, Jeffrey, Howard Kunreuther, and Erwann Michel-Kerjan. "A Methodological Approach for Pricing Flood Insurance and Evaluating Loss Reduction Measures: Application to Texas." Center for Risk Management and Decision Processes, The Wharton School, University of Pennsylvania (2011).

study focuses on Travis County and Galveston County in Texas, and our study specifically uses data on Galveston County's existing premiums and updated risk-based premiums from this Texas study.

3.5 Why Texas?

There are a number of factors that make Texas an ideal focus of study for this report. In terms of flood risk, Texas is frequently affected by hurricanes and other tropical cyclones; there is exposure to both storm surge and riverine flooding. Texas also has the second largest number of NFIP policies-in-force after Florida, at 12% of total policies-in-force. Additionally, there are several socioeconomic factors that make Texas an important state to study. In terms of population, Texas is the second most populous state in the U.S. with over 24 million residents, and is one of the fastest growing states in the nation, averaging 21% population growth per decade since 1960. Finally, Texas has the second largest state GDP in the U.S. at over $1.2 trillion.

3.6 Galveston County: Background and Flood Risk

In the following study, we present a detailed analysis of the impact on Galveston County of switching from its current insurance premiums to updated risk-based premiums, and the implications on the affordability of flood insurance for Galveston's residents.

Galveston County is located on the southeastern coast of Texas and is comprised of the mainland, Galveston Bay and Galveston Island[11] (see Figures 2 and 3). Galveston County currently has a population of 287,918[12] (ranking as the 16th most populated county in the state, of 254 counties) with a median household income of $58,324 according to the 2010 Census. As seen in Figure 4, Galveston County's income distribution is skewed to the left, with 13% of the population in poverty.[13] Poverty and a skewed income distribution are both key issues for the county. In addition, the unemployment rate is higher than the Texas average (at 9.8% vs. 8.7%).[14]

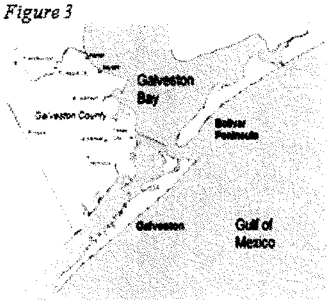
[11] Diana J. Kleiner. "GALVESTON COUNTY." Handbook of Texas Online.

[12] Hoque, Nazrul. "Estimates of the Total Populations of Counties and Places in Texas for July 1, 2009 and January 1, 2010." (2010): Texas State Data Center. Web. 8 Feb. 2012.

[13] "Small Area Income and Poverty Estimates." U.S. Census Bureau. Web. 8 Feb. 2012.

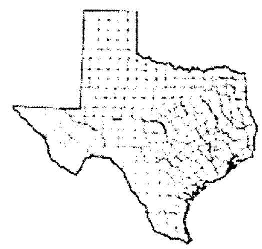
[14] "Map: LA." Databases, Tables & Calculators by Subject. Web. 8 Feb. 2012.

Figure 3



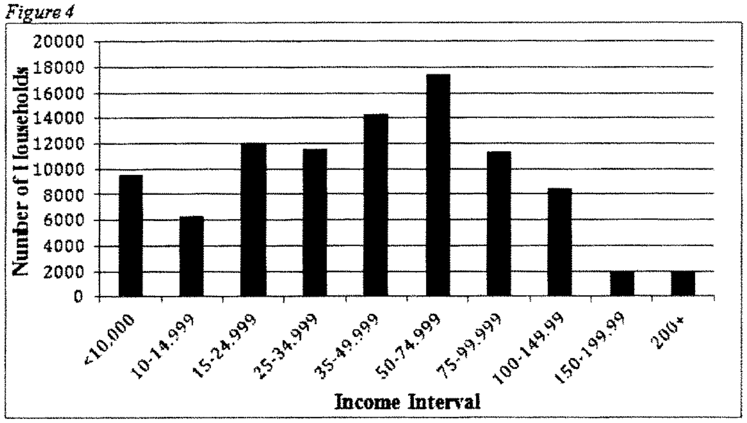
Map of Galveston County
http://en.wikipedia.org/wiki/File:Galveston_county_map.jpg

Figure 2



Map of Texas Highlighting Galveston County
http://en.wikipedia.org/wiki/File:Map_of_Texas_highlighting_Galveston_County.svg

Figure 4



Galveston County is further appropriate for the analysis because the county is exposed to both types of flood risk: flash floods from excess rain as well as flooding from hurricanes moving large bodies of water. Galveston is the Texas county most frequently hit by hurricanes and tropical storms, most recently being directly hit by Hurricane Ike in 2008.[15] The damage from Hurricane Ike was severe, with about 17,000 homes seriously damaged. Of these homes, 5,200 of the families affected did not have flood insurance. Joe Higgs of Gulf Coast Interfaith (a group that helped hurricane victims in Galveston) said that most of the home-

[15] Czajkowski, Jeffrey, Howard Kunreuther, and Erwann Michel-Kerjan. "A Methodological Approach for Pricing Flood Insurance and Evaluating Loss Reduction Measures: Application to Texas." Center for Risk Management and Decision Processes, The Wharton School, University of Pennsylvania (2011).

owners affected were poor or elderly. This is supported by the fact that significant percentages of Galveston's poor and elderly populations reside in flood plains, as discussed later in this section.[16]

Galveston County has also been hit by hurricanes that caused major damage in 1900, 1915, 1961 and 1983[17] , with the hurricane in 1900 the most severe one the county has experienced. Galveston Island was hit by this Category 4 hurricane on September 8, 1900. The hurricane killed approximately 8,000 people, and is considered the deadliest storm in U.S. history. Engineers built a sea wall to protect Galveston Island in 1902, which reduced the effect of later storms, and even raised the entire city, but the city remained vulnerable.

The county contains 17 Zip Codes with varying levels of flood risk depending on house location, elevation and type. Given the large size of Galveston, there are many households in each income bracket as reported by the U.S. Census Bureau. In terms of exposure of the NFIP, Galveston is ranked second, with nearly $14 billion in NFIP-insured exposure. The total number of NFIP policies in place was 64,694 in 2008.[18]

What makes Galveston County a particularly appropriate county for this study on affordability is that a large percentage (33%) of its population is located in a FEMA floodplain (see Figure 5); the National Oceanic and Atmospheric Association (NOAA) ranked Galveston County second out of 18 Texas coastal counties for the percentage of the population located in a FEMA floodplain. Moreover, Galveston County was ranked first out of the 18 Texas coastal counties in the same study for the percentage of designated "high-risk" populations located in a FEMA floodplain, with 37% of the total population over 65 living in a floodplain and almost half (43%) of the total population in poverty located in a floodplain.[19]

[16]McKinley Jr., James C. "As Galveston Recovers From Hurricane Ike, Some Residents Feel Left Behind - NYTimes.com." The New York Times. 20 Sept. 2009. Web. 9 May 2012.

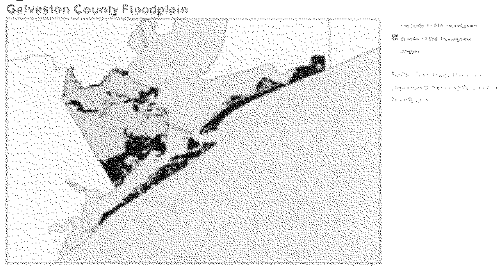
[17]Diana J. Kleiner, "GALVESTON COUNTY," Handbook of Texas Online.

[18]Czajkowski, Jeffrey , Howard Kunreuther, and Erwann Michel-Kerjan. "A Methodological Approach for Pricing Flood Insurance and Evaluating Loss Reduction Measures: Application to Texas." Center for Risk Management and Decision Processes, The Wharton School, University of Pennsylvania (2011).

[19]Coastal County Snapshots - NOAA Coastal Services Center." NOAA Coastal Services Center. Web. 8 Feb. 2012.

Figure 5

Galveston County Floodplain



"Coastal County Snapshots - NOAA Coastal Services Center." NOAA Coastal Services Center. Web. 8 Feb. 2012. <http://www.csc.noaa.gov/snapshots/#flood&48167>.

4 Analysis

4.1 Determining Risk-Based Premium Calculations

Building off "A Methodological Approach for Pricing Flood Insurance and Evaluating Loss Reduction Measures: Application to Texas,"[20] we use the results of this study on the cost of insuring a large sub-sample of houses in each zip code to determine how flood insurance premiums would change given a shift from current premiums to the risk-based premiums calculated using sophisticated catastrophe models common in the insurance industry. We calculate changes in flood insurance premiums for 14 of the 17 Zip Codes that comprise Galveston. Three Zip Codes are left out of the study: 77511, 77546 and 77581, because there was insufficient data on houses in these Zip Codes to run a catastrophe model with requisite statistical significance and because most of the houses for which data is available is from one subpopulation of the zip code which is not representative of the zip code as a whole.

Before we proceed, it is important to understand how Swiss Re's catastrophe models work. A rudimentary, simplified sketch is as follows: CoreLogic collects data on each building in Galveston County. Collected data for each building may include height above sea level, horizontal distances to each nearby body of water, strength of building foundation, and many other variables on which the amount of damage caused by a flood and the likelihood of a flood are dependent. Swiss Re then runs a stochastic simulation in which floods of different type and magnitude

[20] Czajkowski, Jeffrey, Howard Kunreuther, and Erwann Michel-Kerjan. "A Methodological Approach for Pricing Flood Insurance and Evaluating Loss Reduction Measures: Application to Texas." Center for Risk Management and Decision Processes, The Wharton School, University of Pennsylvania (2011).

occur over time. After running the stochastic simulation many times, the result is a probability distribution with respect to the cost of damages to each house. Finally, the average annual loss (AAL), the expected cost of damage done to each building over a year's period of time, is computed. Averaging the AAL for each building in a given zip code yields the mean risk-adjusted premium for that zip code. We should note both the current NFIP premiums and risk-adjusted premiums do not include loading costs (that is, costs of administration, marketing, operating). Furthermore, the simulations used to calculate the AAL are performed under the true probability measure, not the risk-neutral measure, and thus are not adjusted for the risk preferences of the insurer. Thus, the risk-adjusted premiums below do not compensate insurers for bearing the risk of losses and thus are lower bounds on premiums that insurers would actually charge. The difference between the AAL and the price charged by an insurance company would depend heavily on the variance of flood damages, particularly the fatness of the right tail of the distribution for which they may need to purchase reinsurance to protect themselves against a catastrophic loss.

Assumptions:

1. We assume the number of households within a certain income bracket have incomes uniformly distributed across the bracket. For example, if there are 10,000 houses in the $25,000 to $35,000 income bracket and the mean premium increase is $1000, this then assumes there are 1,000 households with incomes between $25,000 and $26,000 who would fall below $25,000 as a result of the premium increase. Note this assumption is necessary because we do not have household-level income data.

2. We assume the distribution of income for those with flood insurance is identical to the distribution of income for all citizens in Galveston County (there is no selection bias with regard to income when focusing on households with flood insurance policies).

3. We assume every household will experience the mean increase in premium for a given zip code. This assumption is necessary because we do not know the current premiums and risk-based premiums on a household level, only on a zip code level. Thus the implicit assumption is also made that the sampling of houses used by the aforementioned study is representative of those currently covered by flood insurance policies.

4. We assume the distribution of incomes in 1999 is the same as it is now and we can convert from 1999 dollars to 2011 dollars simply by looking at the

increase in the median income. This assumption is necessary because we do not have more recent income data at the zip code level.

Thus, the following analysis is an example of analyses that could be done to examine how changes to the NFIP would affect homeowners, rather than a near-perfect calculation of affordability rates in Galveston County.

The table below, broken down by zip code, shows the current mean NFIP premium paid by the average household, the mean risk-adjusted premium (as projected by Swiss Re's catastrophe models), and the dollar (percentage) change between the two figures. The main takeaways from this table are as follows:

1. "Flood risk" differs drastically by zip code. As the table shows, zip code 77517 needs to pay only $165.68 on average to insure against losses whereas zip code 77554 needs to pay $2,399.57 on average to insurance against future losses. Comparing the two numbers, we can rationalize flood risk as approximately fourteen times as great (on average) in the later zip code as compared with the former.

2. Changes in flood risk have not occurred uniformly across the county. Taking the mean current NFIP premium as a proxy for the flood risk as determined by the outdated flood maps, and the risk-adjusted premium as a proxy for the current flood risk, we see the percentage change in risk is not constant across the Zip Codes. Some Zip Codes, such as 77517, are actually paying much more than is warranted given the current risk of flooding, whereas other Zip Codes are paying significantly less than is warranted given the current risk of flooding. Under this framework, the expected value of future losses has actually decreased in zip code 77517 since the creation of the old maps.

Table 1: Rate Changes by Zip Code

Zip Code	Current Premium NFIP	Risk-Adjusted Premium	$ Change	% Change
77510	$ 296.29	$ 270.68	$ (25.61)	-8.6%
77517	$ 290.54	$ 165.68	$ (124.86)	-42.97%
77518	$ 297.42	$ 301.08	$ 3.66	1.23%
77539	$ 396.83	$ 606.47	$ 209.64	52.83%
77550	$ 881.14	$ 804.05	$ (77.08)	-8.75%
77551	$ 866.54	$ 1,161.07	$ 294.53	33.99%
77554	$ 1,786.43	$ 2,399.57	$ 613.14	34.32%
77563	$ 701.16	$ 983.58	$ 282.42	40.28%
77565	$ 549.06	$ 1,422.41	$ 873.35	159.06%
77568	$ 322.04	$ 599.44	$ 277.40	86.14%
77573	$ 307.06	$ 534.08	$ 227.02	73.93%
77590	$ 292.03	$ 728.48	$ 436.45	149.45%
77591	$ 277.79	$ 325.77	$ 47.98	17.27%
77650	$ 1,411.04	$ 987.29	$ (423.74)	-30.03%

4.2 Affordability

The analysis is performed as follows: for each zip code, we calculate the mean increase (or decrease) in premium a household would experience when moving from the current premium to the risk-based premium given by the aforementioned study. Then, we define affordability as a percentage above the official poverty line and calculate the expected number of households that would fall below that income level from the income loss resulting from the premium increase. The results are shown in Table 2. Note we show our analysis for two different defined affordability levels: the poverty line and 150% of the poverty line.

The table below documents the affordability analysis for each zip code. The first two columns show "current affordability" (that is, the percentage of households which are above the poverty line and 150% of the poverty line in a given zip code). The middle two columns indicate affordability after the premium increase (or decrease). As stated above, each household's yearly income in each zip code is decreased by the difference between the current NFIP premium (which we assume they are currently paying) and the risk-adjusted NFIP premium (which we assume they will be paying). The percentage of households who fall under the defined affordability lines after the requisite income adjustment are thus displayed. Finally,

in the right two columns, the percentage changes in affordability due to the premium increases are shown. We note that Zip Codes 77517 and 77650 experience a decrease in the number of households who are now under the poverty line (for both Zip Codes) and a decrease in the number of households who are now under 150% of the poverty line due to significant premium decreases, as seen in Table 1 above.

Table 2: Affordability Statistics By Zip Code

Zip Code	Number of Households	Current Affordability		Affordability After Premium Increase/Decrease		% Change in Affordability	
		100% PL	150% PL	100% PL	150% PL	100% PL	150% PL
77510	4596	19.8%	31.4%	19.7%	31.3%	0.0%	0.0%
77517	1920	18.2%	32.0%	18.0%	31.8%	-0.2%	-0.3%
77518	2427	33.5%	52.3%	33.6%	52.3%	0.0%	0.0%
77539	11452	25.9%	42.1%	26.3%	42.5%	0.3%	0.4%
77550	5450	47.5%	65.4%	47.5%	65.4%	0.0%	0.0%
77551	3952	35.0%	50.1%	36.0%	50.8%	1.0%	0.7%
77554	6820	22.3%	35.8%	22.8%	36.3%	0.4%	0.4%
77563	3680	31.9%	49.1%	32.4%	49.6%	0.4%	0.6%
77565	**2215**	**17.0%**	**28.2%**	**18.1%**	**29.5%**	**1.1%**	**1.2%**
77568	3610	30.8%	49.7%	31.5%	50.6%	0.8%	0.9%
77573	21380	9.6%	18.2%	9.8%	18.4%	0.1%	0.1%
77590	8538	31.5%	47.4%	32.9%	48.5%	1.4%	1.1%
77591	2061	35.2%	50.9%	35.4%	51.0%	0.2%	0.1%
77650	1644	32.2%	47.8%	31.6%	47.3%	-0.5%	-0.5%

To provide additional insight behind the calculations in the table above, we will illustrate changes for a sample zip code. Take, for instance, zip code 77565. From the table above, we notice from the left two columns that 17.0% of households in this zip code currently have yearly incomes less than the federal poverty line. Likewise, 28.2% of households in this zip code currently have yearly incomes less than 150% of the federal poverty line. The middle two columns document affordability after the premium increase. From the table documenting rate changes, we see households in this zip code on average need to be paying an extra $873 in flood insurance each year. Thus, after $873 is subtracted from each household's annual income in zip code 77565, 18.1% of households are now below the poverty line and

29.5% are below 150% of the poverty line. With an eye on the right two columns of the table, we see this represents a 1.1% increase in the number of households below the poverty line and a 1.2% increase in the number of households below 150% of the poverty line.

Thus, if we define affordability as having an annual income above the poverty line, 1.1% of households in this zip code were originally able to afford flood insurance and now can no longer do so after the premium increase. Additionally, another 11.9% of the population was never able to afford flood insurance in the first place and continues to not be able to do so. The remainder of the population can still afford flood insurance after the premium increase.

4.3 Proposal: Flood Insurance Vouchers

An important follow-up question related to affordability and relevant for policy makers is – who pays? We first propose the government will bear the full cost in the form of providing vouchers to citizens to cover the premium increases. Note that these vouchers have to be used to pay for flood insurance and cannot be used for other purposes. We then show the same calculations under various public policies, such as not giving vouchers to households whose income is above a certain level. The results are shown for a level of $200,000, $150,000 and $100,000. As we decrease the income level, the share of the premium increase paid by the government drops as the share paid by high-income citizens rises. Note it is likely not all citizens will actually use the vouchers when purchasing insurance so the expected amount paid by the government is an upper-bound, as it assumes all citizens will redeem vouchers.

In Table 3 below, we generate a variety of scenarios to illustrate the relative, monetary share of the increased flood risk borne by the government and individuals. These scenarios are laid out below:

Scenario A: Households with total income above $200,000 do not receive vouchers

Scenario B: Households with total income above $150,000 do not receive vouchers

Scenario C: Households with total income above $100,000 do not receive vouchers

Scenario D: Only households below 150% PL receive vouchers

Scenario E: Only households below 100% PL receive vouchers

Table 3: Major Stakeholders – Spending Required

Scenario	Amount Paid by Government (Thousand U.S.D)	Amount Paid by Individuals (Thousand U.S.D)	Number of Households Receiving Vouchers
A - below $200,000 net income	12,000	400	38,500
B - below $150,000 net income	11,700	700	37,600
C - below $100,000 net income	10,400	2,000	33,500
D - below 150% PL	4,400	8,000	13,700
E - below 100% PL	2,700	9,700	8,600

The rightmost column of the table, the number of households receiving vouchers, is estimated as follows: we first calculate the number of households that qualify for a voucher (as indicated by the given scenario) for each zip code. Second, we calculate the percentage of houses in the given zip code which have flood insurance (out of the total number of houses in that zip code). Finally, we multiply the percentage of houses with flood insurance by the number of households which qualify for a voucher to arrive at the number of households which will receive a voucher.

4.4 Additional Scenarios: Altering our definition of affordability

Our analysis thus far has used two different definitions of affordability: a household is eligible for the voucher scheme if they are below 100% of the poverty line, and a household is eligible for the voucher scheme if they are below 150% of the poverty line. We have defined affordability based on income relative to the poverty line as this definition seems to be common among literature dealing with affordability.[21]

Additional scenarios for the provision of vouchers to households could be created based on the common "income limits" used by the U.S. Department of Housing and Urban Development (HUD). Income limits are established by the HUD to help determine whether households are eligible for certain programs provided by the HUD (e.g. HUD-subsidized housing).[22]

[21] Kunreuther, Howard C., and Erwann O. Michel-Kerjan. At War With the Weather. Cambridge, MA: The MIT Press, 2011.

[22] "HUD HANDBOOK 4350.3: OCCUPANCY REQUIREMENTS OF SUBSIDIZED MULTIFAMILY HOU.S.ING PROGRAMS." Department of Housing and Urban Development, 2003.

HUD establishes and publishes income limits for each county or Metropolitan Statistical Area (MSA) in the country. The income limits are based on the median income of the geographic area for which the limit is established, or the "area median income."[23] HUD uses the following limits to define very-low income households, low-income households and moderate-income households:

1. Very-low income: persons at or below 30% of the Area Median Income (AMI)
2. Low-income: persons at or below 50% of the AMI
3. Moderate income: persons at or below 80% of the AMI[24]

Using these definitions, certain programs may only be available to low-income and very-low income housing vs. all three income limit groups.

In our study, we create three additional scenarios for our affordability vouchers:

1. Provide vouchers only to those households categorized as very-low income
2. Provide vouchers to those households categorized as very-low income and low-income
3. Provide vouchers to those households categorized as very-low income, low-income and moderate income

The analysis was performed as above in the case of the 100% and 150% of the poverty line definitions of affordability. For each zip code, we used the mean increase (or decrease) in premium a household would experience when moving from the current premium to the risk based premium given by the study conducted by the Wharton Risk Center. Then, we define affordability as a percentage of the Area Median Income (referring to Galveston County's median income) and calculate the expected number of households that would fall below that income level from the income loss resulting from the premium increase. The results are shown in Table 4 below. Note we show our analysis for the three different defined affordability levels: 30% of AMI, 50% of AMI and 80% of AMI. Households below 30% of the area median income had annual income of $17,495.10 or less, households below 50% of the area median income had annual income of $29,159.50 or less, and households below 80% of the area median income had annual income $46,653.60 or less.

[23] "CHAPTER 3. ELIGIBILITY FOR ASSISTANCE AND OCCUPANCY 4350.3 REV-1." HUD Occupancy Handbook. Department of Housing and Urban Development. Web. 9 May 2012.

[24] "Finding affordable housing, affordable apartments and rental homes." Apartments for rent — Affordable Housing — Section 8. Web. 9 May 2012.

Table 4: Affordability Statistics By Zip Code (AMI Standard)

	% of households within each income limit below before premium increase			% of households within each income limit below after premium increase			% Falling Below Affordability Line		
Zip Code	30% AMI	50% AMI	80% AMI	30% AMI	50% AMI	80% AMI	30% AMI	50% AMI	80% AMI
77510	14.5%	26.0%	45.2%	14.4%	26.0%	45.2%	0.0%	0.0%	-0.1%
77517	13.0%	25.3%	41.7%	12.8%	25.1%	41.5%	-0.2%	-0.3%	-0.2%
77518	25.5%	43.5%	66.3%	25.5%	43.5%	66.3%	0.0%	0.0%	0.0%
77539	19.2%	34.5%	56.3%	19.5%	34.8%	56.6%	0.3%	0.4%	0.3%
77550	38.4%	57.3%	76.9%	38.4%	57.3%	76.9%	0.0%	0.0%	0.0%
77551	25.2%	43.7%	65.2%	26.3%	44.4%	65.8%	1.0%	0.7%	0.7%
77554	16.1%	29.6%	45.7%	16.6%	30.0%	46.0%	0.4%	0.4%	0.3%
77563	25.6%	40.8%	61.9%	26.1%	41.4%	62.3%	0.4%	0.6%	0.4%
77565	12.3%	23.0%	38.8%	13.3%	24.2%	39.8%	1.1%	1.2%	1.1%
77568	22.7%	40.8%	63.7%	23.4%	41.7%	64.2%	0.8%	0.9%	0.6%
77573	6.4%	14.1%	28.8%	6.5%	14.3%	29.0%	0.1%	0.1%	0.1%
77590	22.2%	40.4%	61.1%	23.6%	41.5%	62.0%	1.4%	1.1%	0.9%
77591	26.1%	44.0%	64.4%	26.2%	44.2%	64.5%	0.2%	0.1%	0.1%
77650	24.9%	40.6%	59.2%	24.9%	40.6%	59.2%	0.0%	0.0%	0.0%

As in our analysis above, we developed three distinct scenarios for which households would receive affordability vouchers and which would not. The monetary share of the increased flood risk borne by governments and individuals in each scenario is expressed in Table 5 below:

Table 5: Major Stakeholders – Spending Required (AMI Standard)

Scenario	Amount Paid by Government (Thousand U.S.D)	Amount Paid by Individuals (Thousand U.S.D)	Number of Households Receiving Vouchers
30% AMI	2,000	10,400	6,200
50% AMI	3,600	8,800	11,400
80% AMI	5,800	6,600	18,600

4.5 Phasing In Updated Risk-Based Premiums

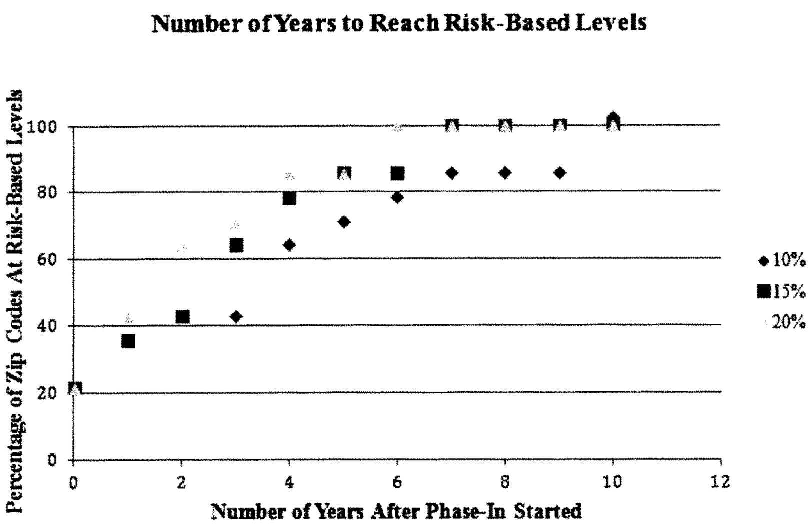
Having analyzed the impacts a move to risk-based premiums would have on the affordability of insurance in Galveston County, it is important to look at certain

other challenges in the implementation of updated risk based premiums. One of the points of interest that emerged when comparing the Senate Banking Committee's and House of Representative's bills is the fact that they differ in the rate at which they permit insurance premiums to increase per year in order to reach their "actuarially-indicate levels that reflect the true risk of flooding".[25] Currently, the premiums cannot be increased by more than 10% a year. The Senate bill would allow premiums to increase by 15% a year, while the House bill would allow premiums to increase at 20% a year.

Using an illustrative example from our data on Galveston County, we can see that it would take a maximum of 10 years to reach the risk-based premium levels (at the 10% premium increase rate). While the gradual phasing in of increased premiums is important – it would seem almost incomprehensible from a politician's point of view for their constituents to experience a steep increase in premiums within the span of a year – it is also important to consider how practical a phase-in policy is and the potential downsides to having a phase-in policy rather than an immediate implementation of risk-based premiums.

The graph below shows the percentage of Zip Codes in Galveston County (of a total of 14 Zip Codes) that have reached risk-based levels over time. We see for the more aggressive strategy (20% phase in policy), it takes only 6 years until all Zip Codes are at risk-based levels (as measured by the mean). For a slower phase-in policy of 10%, it takes 10 years until all Zip Codes are at risk-based levels. These results strongly indicate the importance of an aggressive phase-in strategy. While a phase-in policy of 10% is understandable in order to protect those who may be unable to afford a steeper increase in their premiums, our proposal above of providing vouchers to households to assist with the affordability of these premium increases could actually allow for a more aggressive strategy to be put in place.

[25] "Senate Committee Passes Federal Flood Insurance Reform Legislation." Insurance Journal. 8 Sept. 2011. Web. 20 May 2012.



We propose that premiums should be adjusted for risk immediately, alongside the implementation of insurance vouchers. This proposal has the potential to make the NFIPreforms more politically feasible. We recommend that insurance vouchers support the immediate implementation of risk-based premiums since, as is seen in our data on Galveston, there are going to be households that cannot afford an immediate increase in premiums. These households would be supported by the insurance voucher scheme, resolving equity issues.

The immediate implementation of risk-based premiums would offer a number of benefits for the NFIP. Firstly, an immediate implementation of risk-based premiums would discourage development in high-risk areas. In the cases where risk-based premiums represent an increase on current premiums, these increased premiums would act as significant disincentives for families or individuals looking to move into these areas. Risk-based premiums would allow families and individuals to make more fully-informed decisions as the new premiums would reflect the real hazard in the area rather than a misleading subsidized rate. Even if those looking to move into the area choose not to take into consideration the actual flood risk involved, they are more likely to be deterred by an immediate increase in the premiums they would have to pay, solely from a financial viewpoint, rather than a gradual increase in premiums spread over a few years which they may not consider as severe.

In addition, the immediate implementation of risk-based premiums would improve the financial sustainability of the program by increasing funding. As we saw in our analysis, there are households that can afford the new risk-based premiums. Hence, the NFIP would no longer have to subsidize these households. Financially, this is a much more sustainable option than the NFIP slowly phasing out premium subsidies to those who do not need the subsidization while still subsidizing premiums for those who cannot afford the increases.

Finally, immediate implementation of risk-based premiums would also further encourage households to adopt mitigation measures. As discussed in the section below, there are a number of biases that prevent homeowners from investing in mitigation. An important barrier to investment in mitigation measures is that people do not have an accurate understanding of their exposure to flood risk. If a household's premium were to increase significantly, an immediate increase in their premium would more likely help them understand that their home is located in a high-risk area. If their premiums increased over a period of six to 10 years, the impact of the premium increase would not be as strong. If a household were made aware of the actual risk they were facing, they would be more likely to employ mitigation measures in order to reduce their flood risk.

5 Mitigation

In our study so far, we have been working under the assumption that the physical exposure to flood risk stays the same for all households in Galveston. It is, however, important to look at ways in which one can reduce exposure to flood risk as well. In this respect, we have chosen to explore the importance of mitigation measures (i.e. risk reduction), and the ways in which efforts towards mitigation should be incorporated into any changes in insurance premiums that move towards updated risk-based premiums. In addition, one of the primary drivers for a move towards accurate and updated risk-based premiums is that homeowners will recognize their real exposure to risk. This recognition should incentivize homeowners to adopt mitigation measures more readily. There are, however, a number of decision biases and constraints that prevent homeowners from investing in flood mitigation.

5.1 Decision-Making Process For Purchasing Mitigation Measures

In looking to incorporate the adoption of mitigation measures into a more comprehensive strategy to create more affordable insurance premiums, it is important to first examine homeowners' decision-making process and associated biases in choos-

ing whether or not to purchase mitigation.

When making mitigation purchase decisions, individuals think about a wide range of considerations and goals. These can vary from financial considerations to emotion-related goals, such as reducing anxiety or avoiding regret. How people prioritize each goal varies by individual and context. For instance, people often buy flood insurance after suffering losses in a flood, but cancel their policies after several years without a flood.[26] After a flood, anxiety is high, and people seek to reduce and avoid it, but after some time with no flood, people feel more at peace and are less concerned with a flood occurring. Similarly, people will choose to invest in mitigation measures only after suffering losses in a flood or if flood risk has been made more salient to them (by flooding in neighboring towns, or other parts of the country). Experimental findings also reveal that "people focus on the unpleasantness of the outcome rather than on its probability when they have strong emotional feelings attached to the event."[27] Moreover, after suffering a loss, people may invest in mitigation as a form of consolation. However, they are unlikely to invest if their community has not been impacted by a flood in many years.

Decisions to protect against natural hazards, in the form of both purchasing insurance and investing in mitigation, are also based in part on what other people are doing or think is appropriate according to social and cognitive norms. One example of this behavior comes from a pretest interview of an earthquake questionnaire, whereby a homeowner indicated that he would buy earthquake insurance after hearing that his neighbor had purchased it, even though his beliefs about the risk he was facing and the actual cost of the coverage did not change.[28] As when buying new products, people are influenced by what others are doing in deciding whether or not to buy insurance.

Myopia is also a key bias, whereby people tend to focus on short-term horizons. As a result of myopia, people fail to consider the future occurrence of a catastrophe and assume it will not happen to them. Conventional wisdom holds that major catastrophes are low-probability events, which further compounds the problem since people are even less likely to believe those catastrophes will occur and thus choose not to protect against them by buying insurance or investing in mitigation.

[26]Kunreuther, H., Meyer, R., Michel-Kerjan, E. (in press). "Overcoming Decision Biases to Reduce Losses from Natural Catastrophes," in E. Shafir (ed.), Behavioral Foundations of Policy, Princeton University Press.

[27]Kunreuther, H., Meyer, R., Michel-Kerjan, E. (in press). "Overcoming Decision Biases to Reduce Losses from Natural Catastrophes," in E. Shafir (ed.), Behavioral Foundations of Policy, Princeton University Press.

[28]Ibid

People will focus only on the potential benefits of protecting their homes over the next several years due to myopia, but will find it difficult to justify a high, upfront investment for loss reduction measures, even though they will be effective for 20 to 30 years.

Furthermore, many households are reluctant to invest in mitigation measures due to a tendency to discount future benefits more heavily, especially if they know they are already insured against losses from floods. A survey of 1,131 individuals conducted by the Department of Environment, Food and Agriculture (DEFRA) in the UK showed that many households and small businesses in areas of significant flood risk recognize the benefits of property-level measures, including the potential long-term financial savings, greater feelings of safety and reductions in the disruption caused by floods. However, the survey also showed that "many people are deterred from taking action because they feel [the measures] are expensive or not their responsibility."[29]

In addition to these decision biases, budget constraints exist ("I live from payday to payday"), especially in regions such as Galveston County. The above sections of our study focused on the challenges of affordability of insurance. Mitigation measures are often seen as a secondary or additional step for protection after having purchased insurance. For households that are unable to afford flood insurance at the increased risk-based premium rates, a key question arises as to how they could be expected to adopt flood mitigation measures that require significant up-front investments as well.

5.2 Encouraging Investment in Mitigation: Mitigation Loans

Continuing to look at affordability in relation to mitigation investments, we find that it is crucial to offer assisted financing for mitigation efforts. While this is especially important for those who may be unable to afford the high up-front costs, even those who are able to afford the costs may choose not to invest in these measures.

As such, we propose that FEMA or financial institutions offer long-term mitigation loans to encourage investment in mitigation measures. These loans, to be paid back over the long-term, would make investment into mitigation more affordable and would spread the high investment costs over time. For low-income households, mitigation loan payment assistance could be provided. In addition,

[29] "Developing the evidence base for flood resistance and resilience: Summary Report." Department of Environment, Food and Rural Affairs. Environment Agency. Web. 9 May 2012

if the mitigation measures are effective, we expect households to experience a reduction in their risk-based premiums. The savings from a household's reduced premiums could be used towards repayments of the mitigation loan. This once again highlights the importance of premiums accurately reflecting the flood risk, as risk-based premiums will be updated to reflect the new, reduced risk after the household's investment in mitigation.

While this scheme should incentivize households to adopt mitigation, challenges remain regarding the awareness of the actual measures a homeowner may undertake to mitigate flood risk. The survey mentioned above, conducted by DEFRA in the UK of households and small businesses in areas of significant flood risk, showed that the flood resistance or resilience measure of which most people were aware was the sandbag, despite the fact that most flood management experts consider sandbags to be a largely ineffective preventative technique. In addition, less than one in four of the 1,131 surveyed were able to recall any resistance measures (measures to prevent entry of water into a building fabric) other than sandbags and only one in ten could think of an example of a resilience (measures to limit the impact of flood water within a building) measure.[30]

Hence, it is imperative that these mitigation loans be coupled with information sharing on the forms of mitigation available to households. It is important to weigh the costs of implementing certain mitigation measures versus the benefits in terms of reduced risks to households. In certain cases, such as the elevation of an existing house, the costs involved may outweigh the benefits gained from a reduced exposure to risk. Information sharing of which mitigation measures homeowners should take on and which may be ineffective becomes a key part of the process.

We note that our focus for this mitigation proposal, however, is on the creation of new structures rather than an assessment of existing homes.

6 Conclusion

With the U.S. debt ceiling issues from the summer of 2011, the significant flood losses from recent hurricanes and the uncertain future of the National Flood Insurance Program, it is a crucial time to review the program and propose structural changes. While the House and Senate have suggested a shift towards risk-based premiums that more accurately reflect flood risk, it is also important to examine this shift's impact on affordability for homeowners. As we have shown in this pa-

[30] "Developing the evidence base for flood resistance and resilience: Summary Report." Department of Environment, Food and Rural Affairs. Environment Agency. Web. 9 May 2012.

per, these new risk-based premiums have important implications for homeowners, but moving to risk-based premiums can be effective with appropriately designed supports to achieve policy goals. We suggest an immediate implementation of the updated risk-based premiums, instead of the phase-in proposed by the legislative bills, so that insurance payments would help improve program funding and thereby its sustainability. At the same time, we recommend that the government provide insurance vouchers to reduce the financial burden of premium increases on homeowners. Lastly, we propose mitigation loans as a way to incentivize homeowners to employ mitigation measures and reduce flood exposure.

We recognize, however, that further study is needed before the implementation of the above recommendations. Our focus on Galveston County in this paper represents a small subset of the potential impact of the implementation of the updated risk-based premiums. Moreover, our proposal for mitigation loans will more likely affect new construction than existing homes. In general, it will be important for the government to conduct a cost-benefit analysis of updating floodplain maps to determine new risk-based premiums and study more in-depth the costs and benefits of providing insurance vouchers and mitigation loans.

Furthermore, aside from the various scenarios we have conducted to examine the impact of insurance vouchers to improve affordability, there are additional ones that would be interesting to explore for further research. Two ideas are as follows:

1. Analysis of second homes: In this scenario, the government would not provide insurance vouchers to homes that have been identified as second homes or vacation homes.

2. Analysis of repetitive losses: In this case, the government would not provide insurance vouchers to homes that have suffered repetitive losses.

While there are further research points to consider, this paper begins to examine the affordability effects of the implementation of the updated risk-based premiums for flood insurance according to recent legislative proposals. The Senate and House bills need to be reconciled with appropriate policy supports to ensure the sustainability of the National Flood Insurance Program and to minimize negative effects on affordability while reducing flood exposure and losses.

7 Acknowledgements

We would like to thank the Congressional Research Service for giving us the opportunity to participate in this Capstone Project. Rawle King provided much support

in our research, as well as in organizing our meetings and presentations in Washington, D.C. We would like to thank all the participants at our D.C. presentations for their insightful feedback and Pamela Jackson for providing us with additional data.

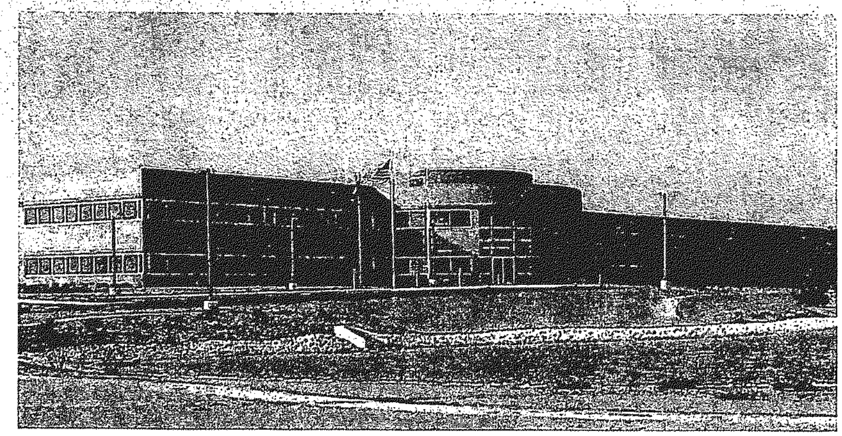
Furthermore, we would like to acknowledge our supervisors at the Wharton School, Professor Howard Kunreuther and Professor. Erwann Michel-Kerjan, for their support on this project. Dr. Karen Campbell, Dr. Dena Gromet, Dr. Jeffrey Czajkowski, and Christina Zima also generously offered their time to meet with us, share data and research, and provide feedback.

Finally, we would like to thank our family and friends for always supporting us through each of our endeavors.

Jagemann Stamping Company

SBA 504 Refinance W/ Wisconsin Business Development

March 14, 2013



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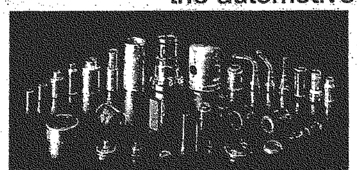
Our Company

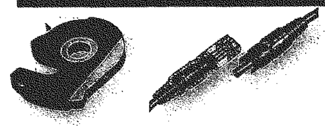
- We are a privately held 70 year old business located in Manitowoc, WI.
- We have a stamping and molding facility also in Murfreesboro, TN
- Are sales are approximately $50M per year.
- We focus on precision deep draw, progressive, fineblank and molded components.
- Tier I Automotive is approximately 50% of our business. We also make precision components for certain industrial, consumer produces, and defense applications.
- We have a total of 225 employees.
- We suffered several years of losses during the “great recession” of 2008-2010 and are now exceeding pre-2008 sales levels.
- We currently see growth opportunities in front of us, and while we remain cautious, we are adding capital equipment and new employees on a regular basis.

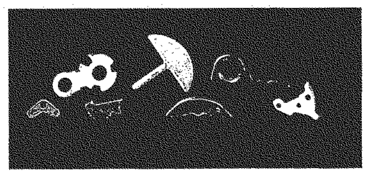
Jagemann Products

Precision deep-draw, progressive, and fineblank metal stampings for the automotive industry used primarily in fluid handling, valve, and solenoid applications, as well as consumer goods, and industrial markets.

Plastic and metal components to produce high-precision composite components and assemblies that are used in the automotive and solar industries







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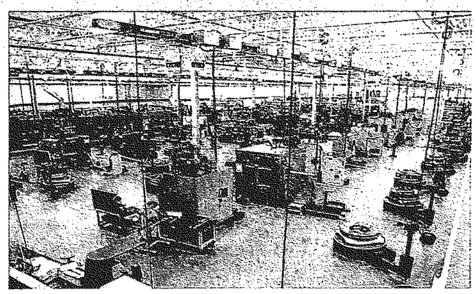
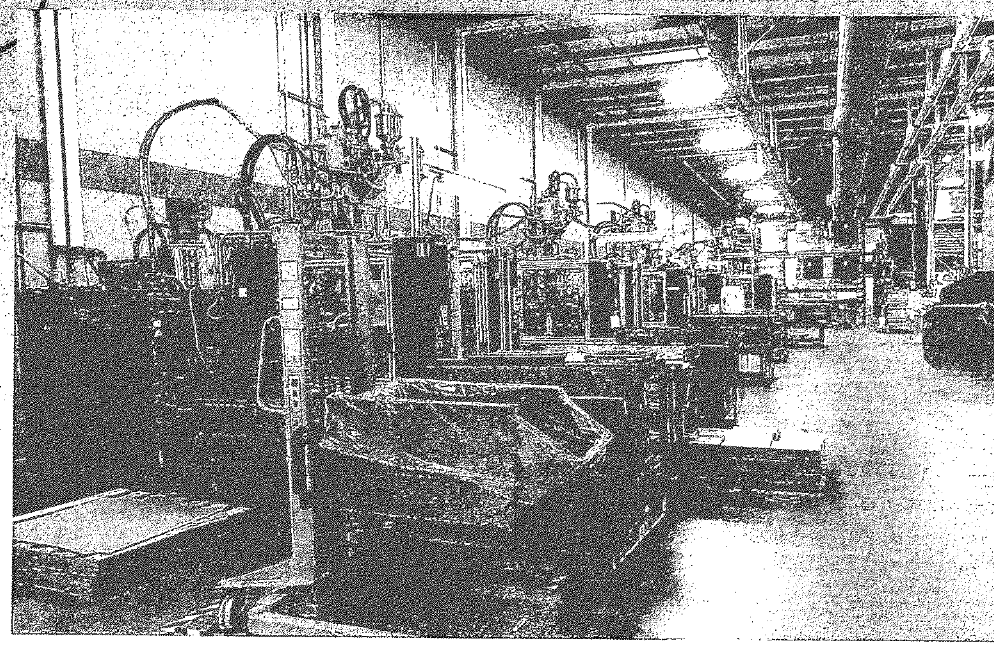
Production Capabilities - WI

56 presses ranging in size from 15 to 330 tons
Transfer, Progressive, and Fineblank
Fineblank: Presses ranging in size from 40 to 250 tons



Production Capabilities - TN



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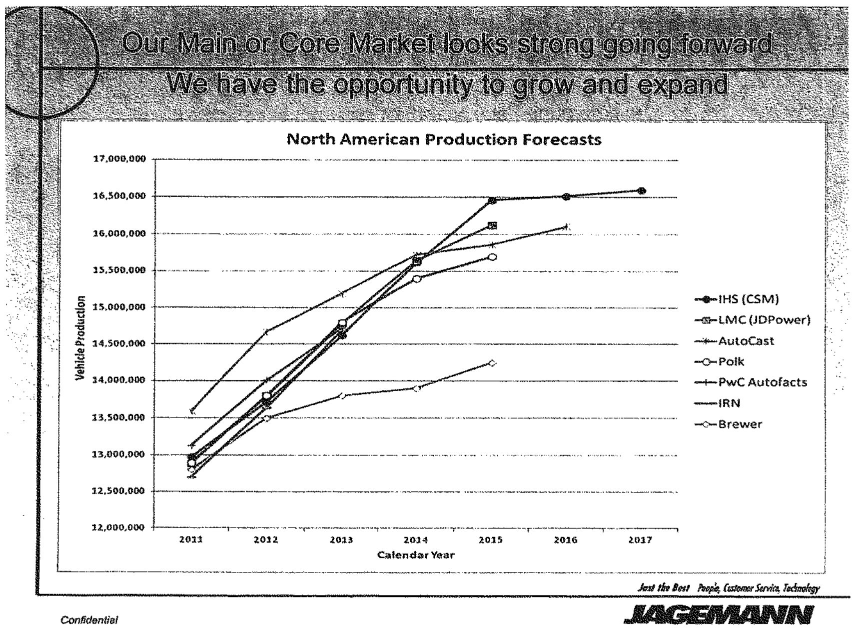
Our Banking Situation – at the end of 2011

- Due to the "great recession" we had a line of credit balance that was at its limit - $6M. We had also come off several years of losses and difficult decisions.
- This put us in a very tight cash position and also reflected a poor current or liquidity ratio.
- Therefore our lead bank, and other banks, made it very difficult to obtain growth capital. They were under increased scrutiny as well as to loan review and we were deemed substandard (historical losses plus overall debt level)
- Therefore our ability to again grow and expand was severely limited or challenged, at a time our core market automotive was in a major rebound.
- We investigated the SBA 504 re-fi program to see if this could help alleviate our growth funding needs.


Our Main or Core Market looks strong going forward
We have the opportunity to grow and expand
North American Production Forecasts
17,000,000
16,500,000
16,000,000
15,500,000
15,000,000
14,500,000
14,000,000
13,500,000
13,000,000
12,500,000
12,000,000
Vehicle Production
2011
2012
2013
2014
2015
2016
2017
Calendar Year
IHS (CSM)
LMC (JDPower)
AutoCast
Polk
PwC Autofacts
IRN
Brewer
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SBA Refinance (actual chart used for Board approval)

- Goal is to lock in 10 to 20 year long term as to a portion of our debt.
- SBA will take 40% of new or re-financed loans. (WBD)
- Also to improve our debt service coverage ratio (lower P payments).
- Can use excess funding for working capital purposes within JSC. Goal is to infuse several MUSD into JSC – reduce LOC outstandings.
- Refinance JSC building
  - Can be done at FMV and 90% Loan to value.
  - SBA to take 40% - fixed – 4.6% - 20 year amortization.
  - Bank to take 50% - thought is to continue to float.
  - Inject excess cash into JSC to reduce line – fund growth.
- Refinance $5M of Equipment at JSC
  - Can be done at FMV (not orderly liquidation) and 90% Loan to value.
  - SBA to take 40% - fixed – 4.3% - 10 year amortization.
  - Bank to take 50% - thought is to continue to float.
  - Inject excess cash into JSC to reduce line – fund growth.

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SBA Refinance

1. We increased our line availability to fund growth
2. We reduced our P & I requirements

1) Current Debt Balance

M&I BMO/Harris Current Structure	Annual	Annual	Balance	Balance	Line Commitment
M&I	Principal	Avg Interest	as of June 30, 2012	as of July 31, 2012	Through 08/2013
Line of Credit	0	$ 180,000	$ 6,004,799	6,295,000	$ 6,750,000
Custer St. Mortgage	$ 300,000	$ 154,000	$ 4,875,000	4,825,000	$ 4,900,000
Equipment Term Loan	$ 1,711,980	$ 218,000	$ 6,984,710	6,699,398	$ 7,270,022
Equipment Acquisitions Term Loan	$ 160,440	$ 35,000	$ 1,122,972	1,096,232	$ 1,122,972
	$ 2,172,420	$ 591,000	$ 18,987,420	18,915,629	$ 20,042,994

2) Debt

Restructure SBA and M&I

Restructure Debt Spreadsheet	Appraisal Real Estate @ 6.875 mil		Pay down			
	Appraisal Equipment @ 12 mil		Balance	Change to M&I	Future Balance	Future Line of Credit
M&I - LIBOR plus 2.75	Term		as of 11/30/2012		Estimated	Available
Line of Credit	Revolving	$ 9,250,000	$ 6,295,000	$ (1,045,000)	$ 2,000,000	$ 9,250,000
Real Estate @ 50%	20 Years	$ 3,400,000	$ 4,825,000	$ (1,425,000)	$ 3,400,000	
Equipment @ 50%	7 Years	$ 6,000,000	$ 7,795,629	$ (1,795,629)	$ 6,000,000	
Total M&I BMO Harris		$ 14,650,000	$ 18,915,629	$ (4,265,629)	$ 11,400,000	
SBA 4.6% fixed	Term					
Real Estate @ 40%	20 years	$ 2,750,000			$ 2,750,000	
Equipment @ 40%	10 years	$ 4,800,000			$ 4,800,000	
Total SBA Loan		$ 7,550,000			$ 7,550,000	
					$ 18,950,000	Restructured Loan Balance

3) Annual Cash Change

Year 1 Analysis	Loan Balance	Principal	Interest	Total Payments	
SBA - Real Estate - 20 yrs	$ 2,750,000	137,500	126,500	264,000	
SBA - Equipment - 10 yrs	$ 4,000,000	400,000	220,000	700,000	
M&I - Real Estate - 20 yrs	$ 3,400,000	170,000	119,000	289,000	
M&I - Equipment - 7 yrs	$ 6,000,000	857,143	210,000	1,067,143	
M&I LOC revolving	$ 2,000,000		70,000	70,000	Note $2,000,000 is an estimated Avg Balance
Total	$ 18,950,000	$ 1,644,643	$ 746,300	$ 2,390,943	
vs. Current	$ 18,987,420	$ 2,172,420	$ 591,000	$ 2,763,420	
Difference	$ (37,420)	$ (527,777)	$ 155,300	$ (372,477)	Additi

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And substantially improved our financial ratios

	Jun-12
Debt Service Ratio (Rolling 12 Mo's)	
	-
Total Net Income Plus Deprec & Int Less Div	4,003,208
Divided By	-
Total Debt Service	2,845,558
	-
Ratio - Current Debt Structue (SBA Restructure)	1.407
Required	1.150

Tangible Equity	
Tangible Net Worth	7,273,953
	-
Required	6,500,000
Over (Short)	773,953

Debt to Equity	
	24,356,143
Tangible Equity	7,273,953
Calculated	3.35
Required < 3.50	3.50

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Hiring and Training Plan – Growing Again

Ramp up Staffing Plan - CORE, FB, AMMO/JAG												
Adds in Jagemann Technologies	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mfg. Engineer/GM			1									
ME				1								
Brut Operators			6	10			4	4	2	4	4	
Press Operators			4	4		6	4	4	4	4	4	4
Wash/Inspect/ Polish				2			2			5		
Tool Designer - Casings			1									
Total Technologies Hires	0	0	12	17	0	6	10	8	6	13	8	4
Adds in JSC Core and JPP												
CNC Machinists			1		1	1						
Machine Tool Operator			2									
Maintenance Technician			1		1	1						
Logistics Support Techs			2									
Safety/Training Specialist				1								
General Accountant/Payroll				1								
Tool Designer - Core				1								
Tool Detailer - Core				1								
Press Technicians - FB						1	1	1				
Press Technicians - Core			3									
SE - JPP			1									
Total Other Hires	0	0	10	4	2	3	1	1	0	0	0	0
Total JSC, JPP, & Technologies Hire	0	0	22	21	2	9	11	9	6	13	8	4

TOTAL HIRES - 2013	**105**
PLANNED HIRES - 2014	**28**

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Hiring and Training Plan - 2013

- **The costs to add this many personnel at Jagemann will be significant:**

Recruiting advertising, etc - $4K per month for 8 months - $32K
Recruiter fees – 3 @ 20K - $60K
LTC manual writing - $50K total – for all modules
Jagemann Training Specialists (allocated JSC personnel multiple shifts, etc) - $15K per month – 8 months - $120k
Training support – new hires – 60 days of initial cost
  80 total personnel (technical/vocational)
  1 months average over time of wages and benefits (lesser skilled) – 40 people - $40K /yr total comp (including benefits) – or $3,333 or $133,000
  2 months of average over time of wages and benefits (press techs/etc) – 40 people - $50K/yr total comp (including benefits) – or $8,333 – total $333,000

<u>TOTAL- $728,000</u>

SBA Refinance – COMPLETE!

- We funded our debentures March 13, 2013.
- Our lead bank has had their exposure reduced, their loan to values improved, and is again providing us funding for growth.
- In 2012 our sales grew 23% - and we invested over $5M in new equipment into our business.
- In 2013 sales are projected to grow 25% and we will invest over $10M of new capabilities into our business.
- We also export over 25% of what we make – to 16 different countries.
- This would NOT have been possible without the SBA refinance.
  - ***We created financial breathing room.***
  - ***We improved our cash flow and liquidity dramatically.***
  - ***We managed the risk of a combination of short and long term interest rates.***
  - ***We are achieving solid growth – and over three years will have added more than 150 new employees***
  - ***And finally – our bank(s) are willing to "invest" in us again.***

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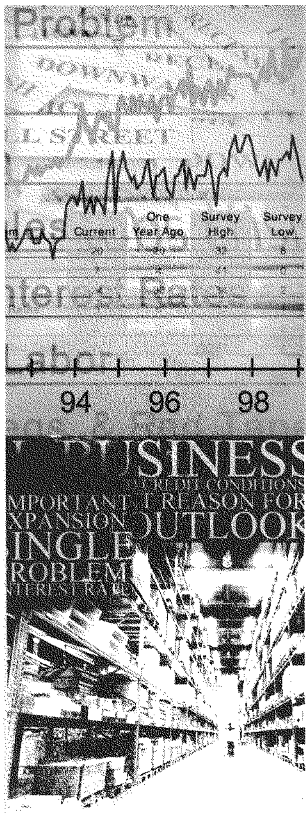
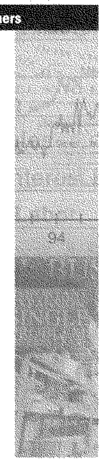


NFIB SMALL BUSINESS
ECONOMIC TRENDS

William C. Dunkelberg
Holly Wade

March 2013

Based on a Survey of Small and Independent Business Owners



SMALL BUSINESS OPTIMISM INDEX COMPONENTS

Index Component	Seasonally Adjusted Level	Change from Last Month	Contribution to Index Change
Plans to Increase Employment	4%	1	5%
Plans to Make Capital Outlays	25%	4	20%
Plans to Increase Inventories	-1%	6	30%
Expect Economy to Improve	-28%	2	10%
Expect Real Sales Higher	1%	2	10%
Current Inventory	-1%	2	10%
Current Job Openings	21%	3	15%
Expected Credit Conditions	-8%	1	5%
Now a Good Time to Expand	5%	-1	-5%
Earnings Trends	-26%	0	0%
Total Change		-20	100%

(Column 1 is the current reading; column 2 is the change from the prior month; column 3 the percent of the total change accounted for by each component; * is under 1 percent and not a meaningful calculation)

SINGLE MOST IMPORTANT PROBLEM

SINGLE MOST IMPORTANT PROBLEM

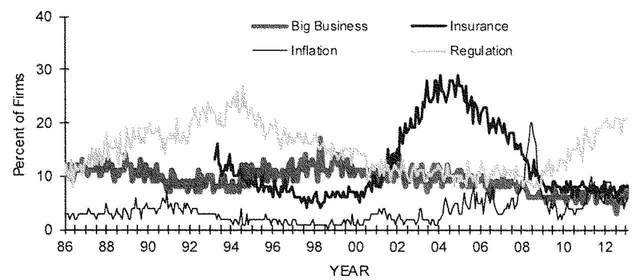
February 2013

Problem	Current	One Year Ago	Survey High	Survey Low
Taxes	21	21	32	8
Inflation	6	9	41	0
Poor Sales	18	22	34	2
Fin. & Interest Rates	2	4	37	1
Cost of Labor	4	3	9	2
Govt. Reqs. & Red Tape	21	21	27	4
Comp. From Large Bus.	8	5	14	4
Quality of Labor	5	5	24	3
Cost/Avail. of Insurance	8	7	29	4
Other	7	3	31	1

SELECTED SINGLE MOST IMPORTANT PROBLEM

Inflation, Big Business, Insurance and Regulation

January 1986 to February 2013



SELECTED SINGLE MOST IMPORTANT PROBLEM

Taxes, Interest Rates, Sales and Labor Quality

January 1986 to February 2013