Can a country take out financial insurance against macro-risks like currency instability or global terrorism?

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Good evening, ladies and gentlemen. I would like to begin today by discussing the link between the personal insurance you and I take out every day and financial futures markets. I will then turn to a proposal to establish a Terrorism Futures market and how that would work. I will address the moral objections to such a market, and its possible benefits to our democracy. It should be a thought-provoking tour.

How do you feel when you take out life insurance for yourself or your partner? I always feel a little uncomfortable. It is bad enough to have to think about the possibility of your own death, to also have to consider how it could drive your family into penury. But it makes sense most of the time, and we all tend to be under-insured, or at least that?s what the insurance companies say...

Travel insurance makes me feel only slightly better, especially when you turn over the booklet and read on the back page how they value each of your limbs...

There are some things that insurance companies do not wish to insure, not because of any moral qualms, but because they find it hard to price - perhaps the insured event and consequences are hard to define - or perhaps they feel susceptible to adverse selection, where they fact that someone wants insurance is a sign that the premiums are too low given their superior knowledge of the risk. Adverse selection is a particular problem for medical insurance.

In many cases governments step in, either to offer insurance themselves or subsidise it. This is often the case in a flood-prone area or after 9/11, for instance, insuring airlines against a terrorist attack.

In this case, the government is acting as an insurance broker, and it is the taxpayer that is writing the insurance. As long as the government takes some responsibility in sharing the burden of life-changing events, be it benefits for unemployment or disability, then the government and taxpayers are writing insurance all the time. It is of course not often seen that way and governments seldom, if ever, treat their payments and reserves in the way an insurer would and should.

Insurance is commonplace, as individuals we take out insurance against the worse possible events that may occur to ourselves or our families and as taxpayers, we are insuring many others against sudden losses.

Financial futures markets are just insurance markets too. When you buy a 10-year mortgage, where the mortgage-rate you pay is capped above a certain level like 6%, you are insuring yourself against future rate rises above 6% and higher mortgage payments. The insurance premium you have to pay for this protection is either an up-front charge, or more usually because it is less transparent and more spread out, stuck on to the mortgage rate you pay. Your mortgage company in turn is insuring itself against the possibility that interest rates do rise above 6%, pushing up the cost of its borrowing from the money markets while your mortgage payments stay the same. It insures itself in the futures markets, or at least it should be doing so.

An oil-fired power station can insure itself against a benchmark oil price rising any further from its current level over the next two years by purchasing the right to buy oil in the future at today's price, or any other. The cost of purchasing that right is an insurance premium. Consensus expectations about the future will determine the cost of the premium. If everyone in the market thinks that oil prices are going to rise further because of instability in the Middle East, strikes in Venezuela or further rapid economic growth in China then the cost of this insurance, the premium, will be high. If everyone is worried about an economic slowdown or convinced that peace will break out, then the premium will fall.

Indeed, because oil price futures reflect all these variables they are often used as measures of these events happening, and as hedges or insurance against them happening.

It is estimated that some $10-15 on the price of a barrel of oil, which is around $44 this afternoon, so 20-25%, of oil prices today reflects not the demand and supply reality but expectations of oil supplies being interrupted by terrorism or other factors in the near future.

Markets reflect the balance of forces however, and if you were that endangered species, the British manufacturing exporter, and you believed that the global economy will slow, perhaps due to the collapse in the US dollar or interest rate rises in China, then there are few better ways to hedge your company's future revenues and its pay roll than buying the right to sell oil at its current price.

Financial futures markets are just insurance markets. Where they are liquid, and they have many different types of players and actors involved, they are also surprisingly accurate. As anyone who ever watched Trading Places will know, the best weather forecast in Florida is the price of frozen orange juice futures. If you want to know the result of an election today, you are better off checking the financial markets than you are checking the polls.

The reason why they are more accurate is that they are markets for information. They enable people to profit from having better information than reflected in the market price. This creates an incentive for people to find better information, but by taking advantage of this information in the financial markets, by buying or selling, they in effect distribute that information to everyone.

Let me explain. There is a financial futures market on the date of the next election, the number of seats the different parties will achieve and the name of the next prime minister. The presence of this information market means that there is an incentive for someone to obtain and research better knowledge on the likely turnout of different voters or the economic conditions at the time of the election. Let us say that information tells you that the winner will be the same as currently expected, a record third term for the Labour Party, but that the Liberal Democrats will do better than expected. You could exploit that knowledge by selling the predicted number of Labour seats and buying the predicted number of Liberal Democrat seats. Your activity will change the price and so while you potentially profit from your research, the changing market price distributes the results of your research to others.

Pure information markets are good at providing incentives for the private sector to do research into near-events and for everyone to benefit from the results of that research.

To ensure that there are enough people willing to participate in the market to make it liquid, they have to be standardised and based around certifiable events. Consequently, some markets do not exist and most require some initiative to establish, some agency to establish standardisation, certification and clearing of transactions.

Moral indignation has been raised at the prospect of the US government establishing a Terrorism Futures market. The original initiative was called the Policy Analysis Market and led by the infamous Admiral John Poindexter. Let me choose some choice quotes from Senator Byron Dorgan's response to the idea. Senator Dorgan is from North Dakota. "A market for the future of the middle east is a sick idea...unbelievably stupid...that combines the worst of all our instincts."

This was my initial response. But one of the things I have learned mixing around financers is that crazy people can have good ideas, and while I would prefer to call it a Disaster Insurance Futures market, let us forget about names and try and peel back the initial instinct to see whether this would be a good idea or not.

What are the objections?

The main objection to this idea is that it is immoral to trade human misery, to profit from calibrating disaster. And this might allow terrorists to profit financially from their dirty deeds.

It would be unethical to profit from a disaster that you made happen. It also happens to be illegal. But insuring yourself, or your family, or your firm or your country, against a disaster, you do not wish to happen, but may happen, with large consequences, is something almost all of us do with our life, health and travel insurance.

That would be the principal purpose of the market. That said, the market would work better, offering better priced insurance, the more people were involved in it, even people with nothing to hedge but an interest in analysing the probability of disaster.

Here is another way to look at it. The alternative is that the government sets aside money for research into this area - we would all welcome that. Then they decide to out-source this research to a private company specialising in terrorist analysis - many would welcome that too. Then they ask a range of researchers to estimate the probability of a terrorist attack and they average these probabilities - few would object to that. The government then promises to award a separate large contract to those whose probability of a terrorist attack was more accurate than others - few would object to that either - and yet that is what this market is, just more inclusive, probably more accurate and more public.

You would of course have to make sure that terrorists are not involved in this market. You would not have to resort to insider dealing rules as terrorism and profiting from it is illegal already. You would need permission to trade in that market, permission which would be based on a more aggressive version of the know thy customer rules that already exist, requiring you to provide sufficient information and money trails to ensure that there is no criminal activity behind the trades, only people looking to hedge themselves and people with a view. Terrorists are unlikely to risk giving themselves away or warning the authorities by buying disaster insurance before an event.

How would this market work?

There are a number of possibilities, but in short and in danger of making you as uncomfortable as I get when filling out my life insurance form, it would have to be based around a certifiable event, such as a human disaster that accounted for a greater than specified number of civilian casualties, in a specific place, caused intentionally, within a specific time period.

You would have buyers of disaster insurance and sellers. The seller would have to pay out say $1 per contract if the event occurred within the time period. You could buy as many contracts as the market would bear. Let us say that you were convinced that the invasion of Iraq had raised the likelihood of a terrorist attack in the United States, you would be a buyer of disaster futures. Let us say that your company depended on air services being uninterrupted, you may hedge yourself by buying disaster insurance futures. If you had an opposite view or ran a security company in a potential target place, you could hedge your company's revenues by being a seller on the other side of these trades.

To the uneasy, I promise just one more moment discussing the workings of this market. The price of the disaster futures would represent the probability of a disaster occurring. Let us say that for the first quarter of next year the price was 35 cents, that would imply that the market felt there was a 35% probability of a disaster striking in the first quarter. If the price rose it would imply that the market felt the risks of a human disaster had risen, if the price fell, that risks had receded. The point is that it would be very easy to interpret.

The advantages

At best, you may feel a little ambiguous about this market, but what influenced me are some of the less obvious benefits.

One of the reasons why governments have declared a war on terrorism is that wars allow governments to use fear to get people to agree to things they would not otherwise agree to, and they can take greater liberties with the truth.

How many times have we heard that we must trust the government's intelligence, which cannot be revealed, and that there is no alternative to abandon hard won rights such as no detention without trial, charges or due legal process? And we have reluctantly agreed because we live in fear. And how many times have we heard that the sacrifices we have made have been worth it and the government is winning the war on terrorism through its actions.... now we would have an independent measure.

What would happen if, following the Iraqi tragedy and the capture of Saddam Hussein and the insistence by the governments on both sides of the Atlantic that the world was a safer place, that the price of disaster futures rose?

Information markets are excellent ways of getting the private sector to carry out research and letting us all benefit from the results. The alternative is the taxpayers pay for the analysis, they agree to sacrifices on the basis of the government's assessment of the results, but the analysis is kept from them.

When disaster insurance prices fall, they will find it harder to increase defence budgets, and undermine our civil liberties, when the prices rise, they will have to explain why their actions have failed and what they plan to do instead.

Disaster Insurance Futures will help individuals and businesses to hedge themselves against one of the most important risks of modern day life, but one of its main attractions for me is that the first casualty of war is truth, and disaster insurance futures will help to keep governments honest, focused on the tasks at hand, and will guide them better than a look over the shoulder to the polls on where they should be doing more, or perhaps less.