

Tim Phillips [00:00:00]:

Today on VoxTalks Economics, how do banks cope with disasters? Welcome to VoxTalks Economics from the Centre for Economic Policy Research. My name's Tim Phillips. Every week we bring you the best new research in economics. So remember, subscribe, follow us on Instagram as well. I've got bad news. There are more disasters happening now, and I've got worse news as well. We've got to expect the numbers of disasters to keep rising. Whether we're talking about war or disease or natural disasters, banks need to prepare for and cope with these events.

Tim Phillips [00:00:48]:

Steven Ongena of the University of Zurich and Anna Pestova of TBS Business School are two of the authors of the latest LTI. LTI stands for long term investors report from CEPR, and this investigates how banks respond to these three types of disasters. They join me now. Welcome. Well, it's welcome back to VoxTalk's Economics for both of you. Hello, Anna.

Anna Pestova [00:01:11]:

It's great to be here again. Thank you, Tim.

Tim Phillips [00:01:13]:

And Steven.

Steve Ongena [00:01:14]:

Thank you, Tim. Great to see you again.

Tim Phillips [00:01:19]:

Are there really more disasters, like I said, or is it just that we are more conscious of them because they have more of an impact on the financial system?

Steve Ongena [00:01:29]:

There are indeed more disasters. If you look at wars and sanctions, it's fair to say that, of course, there's been a long slide through history in terms of the number of violent deaths of a population decreasing. Having said that recently, there's a bit of an uptick in terms of the number of countries involved and also the number of sanctions that are imposed on these countries. We do clearly see in the last couple of decades an increase, according to, for example, the Uppsala database. That's with respect to war and sanctions, with respect to pandemics and epidemics. Also there, of course, there's a bit of a recency bias with respect to COVID, but also there, specialists in this field tell us that there's potentially an increase, partly due to population density and also travel. And when it comes to natural disasters on this account, the numbers are quite stark. In the last couple of decades, doubling in terms of impacts. Also the frequency, the link to climate change is often made these days. And we can clearly see in Europe, but also in the US, the number of natural disasters linkable to climate change have increased to the point, actually, that insurance in some instances is becoming difficult. So on all three accounts, wars, pandemics, natural disasters, the facts seem to suggest

that in detail is an increase in intensity and frequency.

Tim Phillips [00:02:46]:

And when we have these disasters, how is it that they end up propagating through the financial system? Who are we talking about as the victims if banks cannot contain them?

Steve Ongena [00:02:57]:

There are a number of different contact points between banks and the disasters that then may occur. Obviously, the banks may pass on some of the impact of the disaster to those that may be relying on credit, also depositors, other banks. So to this extent, the banking system is also going to act as an amplification mechanism for some of the disaster impact.

Tim Phillips [00:03:26]:

Let's talk about on conflict, war first of all, what immediate impacts are there on banks when there's a war?

Steve Ongena [00:03:34]:

I think there's clearly a negative economic impact and also an impact on the credit supply. So in the report we tried to estimate some economic relevancy on this account. And so we try to benchmark by the number of battle deaths per population. If we have an increase by one standard deviation, we see contraction in credit over GDP by 12% and an increase in the interest rate by 10%, say an interest of 10%, I would add one percentage point of lending rate. But this is quite permanent and clearly this effect should not be overlooked. And this comes on top, of course, of the contraction in GDP and the increase in inflation that has been documented in other papers. So there's really an effect at the aggregate level, but then there's also at the micro level, one could imagine that there's effects, I mean, beside the destruction of branches, which is rather rare, of course, there could also be impact on the way in which loan officers, not only in the battle area, are acting as a consequence of a raging conflict in the vicinity in terms of avoiding risks. This is all eating into bank capital, because clearly some of the loans may start becoming non performing. There is clearly also an effect, if you think on the market level, in the sense that the banks that are directly in the line of fire, so to speak, not necessarily on the front line, but in the vicinity, they are going to suffer. This is then going to lead to potentially some deconcentration because of the way in which the conflict plays out. But then afterwards there's going to be foreign banks that may actually enter the market because they have been waiting on the sidelines and they're not directly affected. And they're going to play to the increase in the demand for credit, which is inevitably going to result from some of the destruction and rebuilding. Now, what is very important, we cannot stress this enough, is that the way monetary and fiscal policy are going to affect how conflicts play out in bank lending and interest rate and also the behavior of foreign banks. So all of the government is going to play a key role. Monetary policies, fiscal policies, are going to be crucial. This is, by the way, a theme that is going to come back when we discuss the other disasters.

Tim Phillips [00:05:42]:

When it comes to war, our immediate reference point is, of course, Russia's war on Ukraine, and that quickly led to international sanctions on Russia targeting the financial sector. How do these sanctions constrain banks?

Anna Pestova [00:05:58]:

So sanctions do constrain banks, given the design of sanctions, we know that comes from the Office of Foreign Asset Control of the US. International financial sanctions may either restrict liabilities of Russian banks, for example, and banks from other countries affected by those sanctions, or both assets and liabilities of banks. So we call it in our research, debt sanctions or asset sanctions, depending on the side of the balance sheet of banks restricted. Recently, following the unprovoked war in Ukraine, more tight sanctions were implemented, the ones, for example, which restrict swift operations of Russian banks. So kind of cutting foreign transactions, sending and receiving money from abroad by Russian banks. These are broadly three types of sanctions we document and we study in our research. So of course those sanctions they propagated are transmitted through banks balance sheets. So those banks which are targeted by the sanctions, they transmit these restrictions, translate them on their borrowers through changes in credit available. They also see less deposits coming, but at the same time they see increased government support. So this is very well documented in our research, featured in CEPR working paper titled Crime and Punishment. So here in the recent LTI report, we actually don't go into all those details. But instead of that, we look whether sanctions imposed on Russian banks, whether they were spillovered to foreign banks operating in Russia, and how foreign banks, for example, think about European banks which were present in Russia before the sanctions. So how these foreign banks were responding to those sanctions.

Tim Phillips [00:07:43]:

Yes. What have we learned from the way that banks have responded to these Russian sanctions?

Anna Pestova [00:07:48]:

If you go to these foreign banks example, the final spillover effect of sanctions, because they are not directly targeted by sanctions. Of course they are foreign banks. These are not banks which are close to the Russian government. But what we find is that these banks actually, their behavior depends a lot on their political alignment. So whether these banks come from advanced economies or whether these banks come from emerging economies. By emerging, I mean Eastern economies. By advanced I mean Western economies. Those foreign banks operating in Russia before the war and before the sanctions pre Crimea, the banks coming from emerging economies served as financial vehicles. They continued to attract money to Russia from abroad, so they increased their foreign liabilities and they sustained domestic lending, they continued to attract domestic deposits and they enjoyed high profitability. So there was no, let's say, negative spillover effect on those banks. If we consider banks coming from advanced economies, Western foreign banks, initially, they cut their operations after the Crimea annexation. Okay, not the recent war. In two, three years, there was a rebound, so they came

back. Why? Because that was profitable. And that may shed some light on why some foreign banks are still slow in leaving Russian markets. Now, that's a clearly trade off. Whether you want to punish the country for their actions, which we don't like, or you want to do a business.

Tim Phillips [00:09:40]:

You also looked more generally across countries. Are there general lessons that we can pick up from this about the impact of armed conflict on banks during a conflict and to what you've just been talking about after a conflict?

Anna Pestova [00:09:53]:

There are several lessons we see, given our cross country analysis of the effect of armed conflicts on banking. So, as Steven already said, armed conflicts play as financial supply side negative equilibrium shock. We also see a very interesting effect of wars on inequality. We see that recent conflicts, in particular, over the last three decades, that's the period we are focused on. Recent conflicts, they tend to increase income inequality as compared to past conflicts, such as the first and second world wars, very well documented in the literature. They decreased inequality. So recent conflicts increase inequality. And why is that? Well, again, it looks like banks and financial system could play a role here because they do a good job in preserving income of the rich, whereas those who are on the lowest percentile of income and wealth distribution, they are suffering because they hold real assets compared to financial assets. Also, what we see is that whenever you have a war or any civil conflict within a country, it activates taste based discrimination by banks. So banks, of course, they take into account all those developments.

Voiceover [00:11:03]:

Well, Elmerhurst Hospital has hit capacity, and there's about 545 beds in here, and they're all filled with COVID patients.

Tim Phillips [00:11:14]:

Let's look at disease. The obvious reference for this is COVID-19. Are we assuming that COVID-19 in this case, wasn't a one off, that we are at some point going to go through a similar experience?

Steve Ongena [00:11:30]:

Yes, clearly, this is a bit beyond the scope of the specialty that we are having in terms of research on banking. Having said that, I think there's reasonable writing coming from colleagues in other parts of science that suggest that, yes, we may well see more occurrences of pandemics, partly because there's more and more proximity to nature, and then also the transmission mechanisms in terms of density of population and travel may make this more common. Again, whether or not this is true remains to be seen. What is, however, true is that to some extent, from all the disasters it seems that the pandemic had the least impact. But of course, it's very difficult to disentangle this from the public health responses and also the governmental support programs.

Tim Phillips [00:12:18]:

Yes. What do we know about the impacts on bank profitability from COVID how they responded

to it?

Anna Pestova [00:12:24]:

In the report, we document some findings from the literature regarding that, that of course, COVID eroded bank profitability. So that comes from the fact that many loans during COVID became non performing and banks had to make contributions to loan loss provisions. That's very well documented. COVID not only affected bank profitability, but also affected the business models of many banks. And there was a substantial change in the digitalization, in the fact that we now use more finance applications. So there was a really significant increase in financial app download following COVID. It's like 20/25% increase during that time. But again, speaking about inequality, we clearly see that any type of infectious disease, including COVID, tend to produce so called digital divide. So with people on the top, more educated, with higher income, they manage to improve their access to finance and get all these financial apps, whereas those who are relatively poor and maybe older population, they are less likely to get into that. So that's again the effect of infectious diseases on inequality, we see from the research we survey.

Tim Phillips [00:13:39]:

What are the legacies of COVID when it comes to a competitive landscape for banks?

Anna Pestova [00:13:45]:

Banks priced COVID in their lending decision. So in particular, if we look at US mortgage market, we can see from the research we survey in the report that banks increase their intermediation margin during this period, and especially in the segment which they know less and which is less secure. So the higher the risk of a mortgage, the more the spread on those credits was increasing. Then banks were different in their response, depending on whether they relied on financial technology or not in their lending decisions. So there is documented evidence that those banks relied more on so called financial technologies of fintech lenders, they gained more because they had already IT resources to process mortgage applications very fast. And given that the human resources were very limited during that period, during the COVID period. So they gained market share. So they won in this competition game during the COVID. This evidence comes from the US mortgage market. So those who are more prepared, they are better off during that time.

[Voiceover] [00:14:49]:

According to a study by the research group Climate Central, around 5 million Bangladeshis living along waterfront areas will be affected by floods by 2050 and the number may rise to 30 million.

Tim Phillips [00:15:04]:

And finally, the third aspect of this that you cover in the report, natural disasters. Natural disasters are local events, very bad in the place that they happen. But do they only affect local banks because of that?

Steve Ongena [00:15:19]:

Natural disasters are fairly localized. It's often the case that the banks are not directly in the way they also occur. Think about forest fires in areas where there's not necessarily bank branches. Of course, bank branches may be negatively affected, through floods, for example, but the effects are typically fairly moderate and short lived. Having said that, it depends a bit on the exposure of the bank. And so if banks are very well geographically diversified, they're not going to suffer that much. Also to this extent, these native banks, banks that are local, but at the same time have a wider geographical footprint. They're also going to be able to respond to the loan demand, so they're going to meet that loan demand during the recovery stage. There's going to be a bit of a negative spillover to other areas where these banks may also be present, where some of the demand there may be met less. I think it's one of the risks that is fairly well managed already by banks. They can lay some of this off. There's clearly an insurance mechanism in place, also other investors that are willing to take on these types of risks and get paid for it. Now this is in terms of natural disasters that could be driven by climate change. But of course, not to be overlooked is also some of the transition risks that emanate from climate change, where clearly also assets could strand, and those may actually be much larger when it comes to relative to the bank's balance sheet. But overall, I think it's fair to say that natural disasters is an area where banks have already some expertise and have the ability to lay it off. And so to this extent, the effect seems much less severe than for sure for wars and sanctions.

Anna Pestova [00:16:56]:

Given that natural disasters are local events. Our nationwide cross country analysis really didn't reveal any country level negative effects of natural disasters. Yes, local banks are suffering, and depending on the level of geographical diversification, other banks may help. But there is no negative countrywide effects of natural disasters, according to our analysis.

Tim Phillips [00:17:19]:

We know, however, that some regions are at higher risk of natural disasters than others. Do we have evidence that banks behave differently in those regions?

Steve Ongena [00:17:31]:

Clearly, if banks take a hit, they're directly affected. Then credit is going to flow within the bank to that area because it's going to be a credit demand driven by rebuilding. Also, there's clearly going to be government programs kicking in that allow people to take credit. Having said that, it's going to come at a detriment of some other areas that the bank is covering. Now this effect may be smaller for banks that are better prepared, that have prepositioned elements, that have higher capital, so that are better able to deal with this local calamity. Those are the banks are going to respond less in terms of draining credit from other unaffected areas.

Tim Phillips [00:18:10]:

As you've mentioned, the provision of credit is very important. It's one of the reasons that we have banks. It's one of the social roles of banks, so that people can respond to adverse events. How well are banks performing at this function?

Anna Pestova [00:18:25]:

They are smart and they are not always willing to help. That's also a general finding we have when we wrote this report. So banks first, they price natural disaster risk. Research shows that when there is a risk of sea level rise, bank already take it into account and price mortgages accordingly. Then banks also like to transfer natural disaster risks, meaning that they are more likely to get rid of the securities which are subject to natural disaster risk. And also, there is recent research on drafts in the United States, which shows that depending on the pre disaster level of financial sector, and mentioned that the response to the disaster is different. So in the regions which has less access to finance pre disaster, the negative effect was mass much higher and people and businesses had to migrate from the affected areas. Whereas if the financial debt was high enough, banks and access to finance really helped to survive and to cope with the disaster.

Tim Phillips [00:19:33]:

To sum this up, disasters are not new. They've been around for longer than banks have. Have you found in your report that there are still avoidable negative consequences for banks and their customers? For all of us from disasters?

Steve Ongena [00:19:48]:

Clearly one of the lessons of recent research is that arguing that, for example, bank capitalization or business models could be reassessed in the light of the increasing frequency and intensity of disasters. Clearly also some sort of training of employees could help could increase the local resiliency of the bank employees, maybe also of the bank customers, as there's evidence that also local resiliency matters a great deal given the natural disasters occurring more frequently. This seems to be something that could also be in the toolkit of the supervisors and regulators to deal with this looking forward and making sure that the system becomes more resilient.

Tim Phillips [00:20:30]:

Yes. Should regulators and supervisors be looking at tightening regulation? If we're going to have more disasters?

Steve Ongena [00:20:37]:

The answer has to be inevitably yes, but there's always cost to this. So there one needs to weigh. Preparation is something that costs also to institutions like banks. But to avoid some of the credit contractions and negative effects on the local communities, surely one could consider ramping up some preparations on this account.

Anna Pestova [00:20:55]:

It really depends on the type of disasters, right like we have some recurring or routine disasters which we can think of natural disasters, right, hitting at a particular frequency and for that type of disasters that really may be helpful some regulation and supervision like increased capital

buffers. Wars that's really hard to predict I mean, we are economists we don't predict wars but still that's something which is less foreseeable. Infectious diseases who could predict the scope of COVID that was less feasible? So depends on the type of disasters but we of course should prepare themselves and banks can be prepared better.

Tim Phillips [00:21:31]:

Anna, thank you very much.

Anna Pestova [00:21:32]:

Thank you Tim.

Tim Phillips [00:21:35]:

And Steven as well

Steve Ongena [00:21:38]:

Thank you so much, Tim. Thank you.

Tim Phillips [00:21:47]:

We've been discussing the third LTI report it's called Disasters and Bank Financing. And the authors are Mikhail Mamonov, Steven Ongena and Anna Pestova.

Voiceover [00:22:04]:

This has been a VoxTalk from the Centre for Economic Policy Research. Next week comparing military policy responses to post pandemic inflation.