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Acceptance speech 21 de septiembre de 2021

## **Mark Gertler**, awardee in the Economics, Finance and Management category (13th edition)

I would like to thank the BBVA, and the selection committee for awarding me this distinguished prize. It is also a great honor to receive the prize with my good friends, Ben Bernanke, Nobu Kiyotaki and John Moore.

I am sometimes asked by young economists what career advice I would give. My answer is simple: Find good co-authors. This thought brings me back to 1978 when I was a freshly minted Stanford PhD. A mutual friend introduced me to a bright young new PhD from MIT, Ben Bernanke. It was an exciting time as two major methodological revolutions were in process: In macroeconomics, the rational expectations revolution pioneered the use of micro foundations to build macro models. In microeconomics, the economics of information was providing a rigorous way to incorporate real world frictions in markets, and in financial markets in particular. Though our eventual research would build on both literatures, this work was not the subject of our initial discussion. Instead, it was baseball. But after that it was the Great Depression. Even then Ben was known for having an outsized interest in the Depression. I had to ask him why. His response: If you want to learn geology study earthquakes. If you want to know economics, study the Great Depression.

And so, a few years later we embarked on an effort to develop a framework that could explain phenomena like the Depression. What our theory emphasizes are fluctuations in borrowers' access to credit that in turn depends on their respective financial health. For example, as an economic downturn sets in, the associated decline in cash flows, equity values and so on, weakens borrower balance sheets. As borrowers' financial health declines, they become less credit worthy, leading lenders to restrict credit access. This endogenous reduction in credit access, in turn, leads to a kind of adverse feedback loop: Less access to credit reduces borrowing and spending, which amplifies the economic downturn, and so on.

Ben and I termed this adverse feedback loop between the real and financial sectors the "Financial Accelerator." While financial crises from the time of the Depression differ in detail, we think that at the core these crises, including the most recent one, have played out as the financial

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accelerator theory describes.

Our early work was mainly theoretical. But to bring financial factors into mainstream macroeconomics we needed to develop a quantitative framework. Fortunately, we were joined by a bright student of mine, Simon Gilchrist. Our challenge was the following: In the existing models, financial markets were frictionless, implying no role whatsoever for financial conditions to affect behavior. To build in a meaningful financial sector we used insights from both our financial accelerator theory and the credit cycle theory of Kiyotaki and Moore. The end product was a framework that could offer insights about real and financial sector interactions that one could place on the shelf alongside other macro models.

I have now brought you up to the late 1990s. But I have to confess that at this time I had no idea that a decade later the most complex financial crisis in modern history would hit industrialized nations across the globe. I had even less idea that my co-author Ben Bernanke – the academic's academic – would be Fed Chairman at the time. But in one of the great coincidences of history, the person most qualified to manage a financial crisis was at the helm as the crisis unfolded. It was no surprise to me that, through bold and creative action, the Bernanke Federal Reserve contained the crisis, saving the global economy from a catastrophic collapse.

The Great Financial Crisis also provided new challenges for research. Throughout history financial innovation has led shifts in what are the vulnerable sectors of the financial system. As a result, our models must be continuously updated to capture the risks to the economy. In the case of the Great Recession, the growth of shadow banking, which moved risky mortgage lending outside the commercial banking system and therefore outside tight regulatory control, was responsible for the buildup of financial vulnerability.

Fortunately, another set of excellent co-authors came along, including Peter Karadi, Nobu Kiyotaki and Andrea Prestipino. In various projects we adapted the financial accelerator/credit cycle framework to feature the critical role in the crisis of banking and shadow banking. In particular, Nobu and I developed a theory of how the banking panics that led to the collapse of Lehman Brothers ultimately led to the sharp contraction in real economic activity.

Finally, a word about research on the new central bank policy toolkit: Perhaps the defining feature of the Bernanke Fed during the crisis was the introduction of a whirlwind of new and unconventional monetary policies. The most famous was quantitative easing — or QE as it is known for short - which involved the central bank's purchase of long-term securities. In response to critics who questioned how this would work, Bernanke famously quipped "QE works in practice but not in theory." To my coauthors and I, though, the logic of the financial accelerator/credit cycle framework implied that unconventional monetary policies, including QE, can improve credit access, especially when this access been disrupted as it had been during the crisis. We

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accordingly developed a framework where unconventional monetary policies like QE could be analyzed alongside standard monetary policy.

I want to emphasize that the issues I have been discussing are not relegated to the past. It is true that the recent recession did not feature a financial crisis. But this is because the Federal Reserve and other central banks intervened early in the crisis to stabilize financial markets using the unconventional tools devised just a decade earlier. These considerations, plus the fact that financial innovation keeps the location of vulnerabilities a moving target, means that work on real/financial sector interactions is with us to stay.