Thank you very much José Antonio. As José Antonio has mentioned, the Levy Institute was home not only to Hyman Minsky until his death in 1996, but also to Wynne Godley throughout the 1990s. As it has become a sport to take [credit] for having predicted the crisis, I should point out that Minsky and Godley, and other Institute Scholars, were amongst the earliest to voice the inevitability of the collapse of the US financial system as well as the inherent structural instability of the European single currency system. Unfortunately, these warnings were not heeded by policymakers, but the proof is available on the Institute website.¹

As José Antonio mentioned, I am going to try to make a slightly skeptical assessment of what seems to be an increasingly accepted idea: that macroprudential regulations can provide some sort of remedy to the basic procyclical tendencies of modern-day capitalism. Indeed, it often appears as a justification for micro-regulation: if only we had managed to introduce the appropriate macroprudential regulations to work with it. I think both of these ideas are questionable.

If we consider the impact of systemic instability on microprudential regulation, in the US this discussion goes back to the Great Depression and the 1930s Chairman of the Federal Reserve, Marriner Eccles. Eccles was a country banker who played a crucial role in the 1935 Banking Act reform of the Federal Reserve, which formalized open market operations. He argued from his background as a banker during the Great Depression. As a Utah banker, he argued that even though every bank loan that he made was a good performing loan, and every borrower was a good creditworthy borrower, all of them failed. Despite due diligence, despite the absence of fraud, despite the efficient operation of bank supervisors, all the borrowers failed to repay because commodity prices collapsed as the entire macro economy collapsed. This is probably the first elaboration of the idea that systemic behavior has an impact on micromanagement of the financial system, that the whole is greater than the sum of its parts, and brings forward the point that even if there is perfectly adequate microsupervision, perfectly correct micromanagement, nonetheless you are going to have financial instability.²

¹ www.levyinstitute.org
² It is instructive to note that US supervisory agencies recognised the need for more systemically macro considerations since the mid 1990s. "We believe that the key to enhancing our risk assessment programs is ... By "bridging the gap" between macro economic and market trends and the micro perspective of individual bank examinations ... As a first step in bridging the gap between the macro and micro concerns, I recently created a new division within the FDIC to enhance the FDIC's ability to analyze risks
The second is based on Hyman Minsky’s idea that many people have made indirect reference to in this conference. And that is the idea of endogenous instability. Minsky’s idea was not only that instability was endogenous, but that the persistence of stable, predictable conditions itself creates instability. If we take this idea very seriously, we come to the source of my skepticism, for it implies that even if we do manage to create stability in the system over a reasonably long period through the appropriate macroprudential measures, this will in and of itself generate forces which will create a semblance of financial fragility, which may eventually create a procyclical expansion in lending that will conclude in a systemic financial crisis. So it is the idea that success breeds its own failure that is at the basis of this result.

Minsky’s ideas on endogenous financial instability were born in the 1960s as a result of what then appeared to be the successful implantation of what was called Keynesian “fine-tuning” and the implication that its proper implementation could eliminate the business cycle. There was a very famous conference held at the time entitled “Is the Business Cycle Obsolete?” Minsky countered the opinion of mainstream Keynesian economists that even if business cycles could become obsolete in real terms—that is, it might be possible to stabilize the real economy—the financial system would continue to create fragility that would eventually create instability and crisis in the real system.

It is interesting that this discussion repeated itself; this time with the successful operation of monetary policy by central banks producing the “Great Moderation.” The Great Moderation produced a very well-behaved, stable real system. We had, as Sir John has just reminded us, acceptable and stable growth rates throughout this period and low and stable inflation rates, but all the while, underneath, the instability the financial system was creating would eventually produce the second Great Depression. This is the basis for Minsky’s ideas that even if we do manage to generate systemic stability in the system, we are going to get instability. And this is as true of the real system as it is of the financial system. Indeed, Minsky would argue that his position negates the possibility of treating the two as analytically distinct. Now, what is the basis for these sorts of ideas?

I am going to start out by giving what I shall call Minsky’s systemic priors; that is, what are the unquestioned initial conditions or assumptions of the theory? The first is that government is the monopoly issuer of currency. This is a very simple proposition. Look at the constitution of almost any nation: the government retains to itself the right to coin money. And in the United States the “legal tender” to the insurance funds from a more comprehensive perspective.” Written testimony of Ricki Helfer, Chairman, Federal Deposit Insurance Corporation before the Committee on Banking and Financial Services, U.S. House of Representatives, March 13, 1996 http://www.fdic.gov/news/news/speeches/archives/1996/sp13mar96.html
adjudications of the Supreme Court confirm that this extends to the sole right to creation of bank notes. These decisions supporting the issue of greenbacks to finance the civil war extend that monopoly power from the creation of coin to the creation of currency if government chooses to do so.

The second is that capitalism is a system in which the capitalists issue liabilities in order to acquire control over productive capital assets. This means that the motor force of the system is the ability of producers today to spend money they don’t have on the expectation of earning enough at some stage in the future to cover the initial expenditure.

This leads to the third: that even if the government is the monopoly issuer of the currency, you need some sort of institution that will allow the purchase of productive investment goods financed through the provision of means of payment today against the means of payment tomorrow. This can be called the liquidity function. And this liquidity function requires financial institutions that are willing and able to validate the liabilities of the capitalist investor; to turn them into ready means of payment that can be used to acquire assets today against payment in the future. A financial system is required to allow what Keynes considered a “spot/forward” economy, or a money now against money later economy, by taking on what is a short position in means of payment to allow investors a long position. In the modern system, this is done by the issue of transaction deposits.

If we consider the financial positions of the actors in this kind of system, it’s a system in which corporations are always short deposits that they need to repay the banks, and the banks themselves are always short deposits that they need to repay the deposits they borrow from their clients. It is a system that functions only if everybody has made a commitment to pay something in the future that it does not have. Everyone in the system is short means of payment. And it is a system that functions only if you are continually increasing the outstanding short positions. This is the first step in Minsky’s idea of the inherent instability of the economy, and it is not new to Minsky: you find it in Marx, you find it in Wicksell, you find it in a whole series of authors that wrote in the 18th and 19th century.

If you need an institution that allows everyone to be short and the government chooses not to provide it — it is important to stress that that government could do so if it wanted to and has done so in the past — it has generally been the case that this function has been outsourced to the private sector. This means a system that produces this kind of liquidity that is driven by the profit motive, i.e., banks not only are providing the liquidity that the system requires, they are doing this in order to maximize profits.

Now, if you then ask the question “What is stability?” in this sort of system in which everybody is short, the simple answer is that stability is the ability to cover your short positions. How do you do that? How do you cover your short positions in deposits? You can only cover your short positions today by means of
new lending today. You can generate the acquisition of deposits in the future to cover past borrowing if the banks are lending in the future. Those new loans are creating the deposits that allow existing borrowers to pay off their existing debts. So if the system is going to function, it means that the amount of lending over time has to be expanding over time.

If you take Minsky’s idea that there is some sort of endogenous process in which individual institutions reduce what he called the “cushions of safety,” or increase what we call “leverage” in the system, it means that bank lending has to be growing not only at the rate of growth in the system, but at an increasing rate as the system generates interest and profits—so that the system is always going to be procyclical if it is in a stable expansion. Any expansion thus becomes a boom in which there is an endogenous decline in the cushions of safety or an increase in leverage. Now, this is not only because of the banks being willing to lend more than they would normally lend against good credit, but because the relative profitability of banks may be declining as the economy is expanding. As rates of return are increasing in the real sector, banks will require higher returns in order to meet the market return on their capital. Now, return on bank equity is determined by a very simple relation: return on the bank assets times leverage. So if banks are faced with declining relative profitability, compared to the expanding rates of returns that their own increasing lending is generating, it means that they are going to be increasing leverage as well. Basically, what we have is what Soros would call a reflexive system or a self-referential system, which by definition is always going to be running itself into increasing leverage, increasing risk, and increasing short positions creating an ever-higher risk of failure to cover those positions. When the rate of increase in lending falls off, then some shorts are not covered and the banks restrict lending even further to defend their balance sheets, and the crisis ensues.

If this is a reasonable explanation of how a system with our given priors behaves, then the question is, how does macroprudential regulation dampen that process, or is it possible to dampen that sort of process with macroprudential regulation? We may say that we can introduce rules or limits to prevent this result. But if there are hard limits, this means that the rate of increase of the lending required to validate the prior lending is going to be reduced, and this means that some prior loans will not be validated; the short position will not be covered. So inherently this is going to introduce an additional instability into the system, and the problem is how to combine the necessity of restricting this inherent procyclical expansion in the credit and leverage that normally occurs in the system with avoiding the kinds of reversals that produce failures and default. And this doesn’t even need a reversal; all that is required is for lending to stabilize at a constant rate, i.e., for the rate to stop increasing.

This is the basic idea behind the skepticism I suggested above. The implication of this sort of analysis is that the liquidity required for the stability of the system is determined by the lending of the banks
themselves. The corollary of this position is that liquidity cannot be an attribute of particular types of assets. Liquidity is, or should be considered as, an attribute of balance sheets. Looking at balance sheets means that liquidity involves not only the liability side, but also the asset side. What is the volatility of the income that is generated by the assets that you have financed by issuing a liability may be just as important as the ability to use a particular asset as a pledge in order to get cash from the central bank.

It is now very popular to talk about imposing liquidity limits on financial institutions, but the attempts to set liquidity ratios and the identification of the particular financial liabilities the banks should be holding as liquid assets probably misses the point. Liquidity does not pertain to the assets, it pertains to the systemic nature of the system and the amount of lending which is in fact going on. We all know that Lehman Brothers met its capital legal ratios, and had a portfolio of Treasury bills that should have got it through the Ides of September weekend, but we now also know that Lehman Brothers could not use those Treasury bills to get one single penny out of another financial institution. Treasury bills are the most liquid assets that we have in the system. Lehman’s balance sheet was illiquid, and because its balance sheet was illiquid, it could not use those assets that were supposedly liquid.

The second issue we then have to face is, can we measure risk? Well, if the validation of your assets depends on the lending of the financial system itself, it means that the risk we think we are measuring is basically meaningless. It depends on your assessment; on the bankers’ assessment of whether or not to lend against a particular position. This goes back to a point Soros made in his first book, “The Alchemy of Finance”: that the simple action of approving a loan increases the value of the assets the loan finances. You are changing the value of the assets behind the loan and thus the value of the loan itself by approving the loan.

Risk is really about two things: one is about the expected return profile on the asset, but the return on the asset is determined by whether or not banks continue to expand lending. In this sense, we are back to this idea that if you are trying to measure the risk that is in the system by using any sort of historical measure of past performance, that historical measure of past performance means that bankers have to be behaving in a consistent way, and we know that in general they behave cyclically. Now, if we look at this sort of system, maybe macroprudential regulation is not the most efficient way of doing this.

The obvious question is then, is there some other alternative? A number of points have been raised in our discussions here. Joseph Stiglitz raised the problem that banks that are too big or too interconnected to fail—or bankers who are too influential to jail, which is the way we like to look at it—need to be addressed. Part of the problem of too-big-to-fail banks, as he suggested, came about from the way the US resolved failed banks. But it also came about as a result of the 1999 Financial Services Modernization Act
that allowed banks to offer any and every financial service through holding companies. When banks are
segmented by function, they are by definition much smaller than when banks are in very large holding
companies. Thus, legislation and the failed application of existing legislation allowed, even encouraged,
banks to become too big to fail.

The aspect of this problem is that banks became too big to fail because of the existence of moral hazard
created by deposit insurance. It is interesting that deposit insurance is something that no one questions
anymore. But I am going to argue, and this comes from a proposal that Minsky made in 1995\(^3\) that the
best way to reform the system would be to abolish deposit insurance. This is because the kind of moral
hazard that it creates allows the big banks to get into a position in which they become too large to be
resolved. What should be put in its place? Minsky said let’s keep the bank holding company but make the
bank in the financial holding company be a narrow bank.\(^4\) The payments function, the defense of the
small savers, the creation of the payments function should be done through the narrow bank, which is
funded with Treasury liabilities or whatever particular asset you believe is sufficiently safe to do this.
Since its liabilities are now riskless, the deposit insurance is redundant and can be eliminated.

At the same time, this would also eliminate the liquidity function of banks. To keep the essential function,
the holding company will be allowed to have an investment unit, an investment subsidiary. The insurance
eliminated from the deposits can now be applied to the loans that the bank makes in the investment
subsidiary; you can then direct that insurance to those particular areas which you believe you want the
financial system to support. Now, the first response to this proposal will be that we don’t want the
government picking winners; we don’t want the government intervening. But I will point out to you that
virtually every government in the world currently engages or is seeking to institute PPPs, Public Private
Partnerships, in which governments incur contingent liabilities in support of private sector institutions in
order to induce them to undertake investments. If PPPs are OK and contingent liabilities against these
private sector investments are OK, why can’t we simplify things and simply say that the government will
provide a certain amount of insurance against certain areas in which we want the banks to be investing
and not in those in which we don’t want to be investing? This comes back to the idea of ensuring sectoral
balance in lending that Stephany talked about from her experience as a central banker in Chile. Such a
system would hopefully provide a way to influence the banks to do what we would like them to do, which


\(^4\) For Minsky's views on why narrow banking on its own is not a solution to financial instability see Kregel, “Minsky and the Narrow Banking Proposal,” Levy Economics Institute Public Policy Brief NO. 125 | August 2012
is to fund productive investments rather than to fund speculation and at the same time to provide a safe and secure payment mechanism.

Thank you.