

# Lessons From SVB for Economists and Policymakers[1]

Par Russell Cooper and Hubert Kempf

Time has passed since the March 10 Silicon Valley Bank bank run. Yet this may not be the end of the affair. On Monday March 18, 2023, the *Financial Times* reported that savers withdrew 60 billion dollars in the first quarter of 2023 from three large US financial institutions. From other reports, withdrawals continue.

It is time to reflect on the SVB failure and the ensuing policy responses. Though this was a US banking experience, the lessons extend across borders. In fact, as noted, some of the concerns over commitment are perhaps even more of a concern in Europe.

## Lessons for economists: Enriching the theory of bank runs

Traditionally, bank runs have been addressed by economists through the lense of the work of Diamond and Dybvig (1983) model, hereafter DD. Last year, the committee for the Nobel prize in Economics made clear that this was a fundamental contribution to our understanding of banks and their inherent fragility. But models are abstractions and, based on our recent experience, the DD framework needs to be enriched to provide both an understanding of these events and the policy responses.

DD explains the illiquidity of banks and its consequences for banking fragility. Banks have a choice between short term liquid investment and long term illiquid investment. The returns are certain with the long term investment providing a higher return. All else the same, banks would prefer to invest deposits in these long term assets and thus earn higher returns.

But depositors, households in the model, have random liquidity needs. The bank meets these needs by investing some of its deposits in a liquid asset, just avoiding costly liquidations of the long term investment. The bank optimally selects its portfolio to meet the normal demand for liquidity of its depositors. The bank is solvent and sufficiently liquid. Normally.

But there is a chance that depositors will panic, turning the normal demand for liquidity into a bank run. In such a situation, the bank may be unable to meet the demand of all depositors even after liquidating its illiquid assets. In the end, the depositors, acting in their self interest, make the right choice: run on the bank when everyone else does. But collectively, there is a loss: a solvent bank failed due to its illiquidity.

In the DD framework, the problem of a run can be solved through the provision of deposit insurance. An **iron-clad guarantee** that the government will provide deposit insurance in the event of a run is sufficient to avoid the run. Theoretically this is known as a **commitment** assumption. What is important though is that the government's commitment to deposit insurance includes a willingness to use taxation as needed to finance the deposit insurance.

Looking at the SVB experience, there are clearly some elements missing in the DD framework. We here highlight some important items upon which economists should reflect.

1. Monetary policy impacts the value of liquid assets. In the DD model, the two assets's returns are invariant and there is no market risk. In the real life, this is not so. The tightening of the Fed raised interest rates and thus lowered the prices of liquid assets. All else the same, the reduction of the value of liquid assets makes banks, such as SVB, more vulnerable to runs.
2. Even with deposit insurance, there are depositors over the limit. In the standard version of the DD model, once there is credible deposit insurance, runs no longer happen as everyone is covered. But that is because it is assumed that all deposits are insured. The SVB episode taught us that this is not the case.
3. In the standard DD model, banks have no access to equity if they become unstable. In the SVB episode there was an attempt to raise more equity to meet the needs to depositors. But this source of funding evaporated. The need to understand the interaction of the decisions of equity investors along with depositors is made clear by this episode.
4. The standard interpretation of the DD model is that depositors are households. In the case of SVB, they were largely firms, with loans from that same bank. Evidently, probably for incentive reasons, there was a link between making a loan to a firm and requiring funds to be deposited at a bank. This connection is absent from the standard DD model.

## **Lessons for Bank Regulators and the Treasury.**

The policy response of the US government, involving bank regulators and the Treasury, to the SVB failure can be neatly summarized by two points:

1. the cap on deposit insurance, that is, the upper limit

on deposits entitled for insurance, is (apparently) gone and all depositors are protected;

2. yet, taxpayers are not at risk.

This looks too good to be true. Hence an annoying concern creeps in: does this package really stabilize the US banking system? This is an important question which cannot be neglected or put aside as all too often the policies which are adopted to deal with one crisis sets in motion the next one.

Answering this question and thus assessing the policies put in place builds upon the lessons drawn from the DD model.

## ***1. No cap anymore***

The first part of the package apparently extends deposit insurance to everyone, without limit.[\[2\]](#) Given that the run at the SVB was in part driven by uninsured depositors, this appears to be an easy way to stabilize the banks. But it should be emphasized that it came after the crisis, undermining the credibility of the whole deposit insurance scheme.

While the response to the SVB run did not take away deposit insurance, the extension to supposedly uninsured depositors made clear that the guidelines for the provision of deposit insurance are, just that, guidelines. Clearly the US government seems willing to decide after the fact exactly what insurance to provide. Raising doubts about the credibility of deposit insurance is a potential cost to this intervention.

And this is related to the relaxation of the cap. A cap limits the funds that are transferred from the relatively poor households to rich depositors through taxation, either direct or indirect. An increase in the cap means more redistribution towards the rich (more rich people are compensated by the public insurance scheme). All else the same, this reduces the credibility of promised deposit insurance, either in whole or

perhaps just through the adoption of a cap ex *post*.

## **2. No Taxpayer at Risk**

About the second point, [here](#) is a quote from the US President Joe Biden:

“First, all customers who had deposits in these banks can rest assured – I want to – rest assured they’ll be protected and they’ll have access to their money as of today. That includes small businesses across the country that banked there and need to make payroll, pay their bills, and stay open for business.

No losses will be – and I want – this is an important point – no losses will be borne by the taxpayers. Let me repeat that: No losses will be borne by the taxpayers. Instead, the money will come from the fees that banks pay into the Deposit Insurance Fund.”

Normally, one would think that in the event of a run, taxpayers have to bear some of the burden of providing deposit insurance. If the government has to provide say [\\$10 trillion](#) in deposit insurance in a systemic run, then a source for this **must be** taxation. It could be immediate taxation or debt financing of the deposit insurance today with taxes coming in the future.[\[3\]](#)

If, under the current US plan, taxpayers are off the hook for financing deposit insurance, then where will the resources come from? Could the answer be through the resources of the Federal Deposit Insurance Corporation (FDIC)? The fund is created through contributions of member banks. Depositors of these banks receive protection through this fund.

But the unfortunate reality is that the resources of this fund are small relative to potential depositor needs. From the [FDIC](#), the fund has a target to be able to protect 2% of the deposits in the US. This is surely enough money if one bank fails. It is far from enough if all banks fail.

The [FDIC states](#) that its insurance is backed by “ ... the full faith and credit of the United States government.” This is a good thing given the relatively small size of the actual funds at its immediate disposal. But this backing is what the recent policies of the US government have taken off the table. If no taxpayers are at risk, then there must be no tax revenue that will flow to the FDIC in the event of a run. That is fine, as long as the run is not too large.

The problem here is that a small run can become a big run due to contagion. Imagine there is a run and a bank is shutdown, requiring some FDIC insurance payments. To make the point directly, suppose that those payments alone required the 2% of the deposit insurance fund. This means that the remaining deposits in all other banks are not longer insured. This is a recipe for additional runs.

This prospect raises the question of the financing of this extended insurance. If taxpayers are protected (as claimed by President Biden) and deposit insurance coverage is extended, the fund of the FDIC is simply inadequate. So, with taxpayers out of the equation, it seems that this promise of full insurance is empty: no runs are prevented.

What if taxpayers were not protected and instead the FDIC had the backing of the US government? That means the government would raise taxes or issues debt (so raising future taxes) in response to a run. If this was credible, then that would be enough to avoid the run.

Is this promise credible? That is, would the government actually go ahead and raise taxes to pay off depositors?

This is exactly the question we have analyzed in our joint research. [\[4\]](#) We argue that the taxation needed to finance deposit insurance may entail a redistribution from poor (Main St.) to rich (Wall St.). The magnitude of this redistribution depends on the relatively size of the deposits being insured

and the progressivity of the tax system. If the tax system is not very progressive (we study the case of a lump-sum tax), then the provision of deposit insurance does imply that the rich get a lot more from their deposits being insured compared to the poor. This may be socially undesirable. If so, this means that in the event of a run the government may not have the incentive to provide the promised deposit insurance.

A commitment problem exists in the US system even with deposit insurance provided at the federal level. In Europe this problem is magnified by three factors: (i) country specific deposit insurance schemes, (ii) cross border flows of deposits and loans and (iii) the lack of a central Treasury to provide a fiscal backstop for deposit insurance.

## Lessons for Monetary Policy

Lastly, there is the issue of monetary policy and the role of central banking. Two issues require attention.

The first one is about the impact of tighter monetary policy on the fragility of banks. The monetary authority needs to keep this in mind. If the Fed (or the ECB) chooses to “fight” inflation through high interest rates, the resulting reduction in the value of government debt impacts the balance sheets of banks. This additional (perhaps new) channel of monetary policy needs to be taken into account in making assessments of the effects of higher interest rates. It looks pretty clear that the central bankers in advanced countries recently tended to downplay this channel, focusing instead on fighting the surge in inflation. It might end up in being an adventurous challenge. If the current state develops into a full-fledged banking panic, central banks will have to rapidly shift to an extremely accommodative policy, as in 2008. But, this time, it will be in an inflation-prone sequence.

The second issue is about the policy mix. Answering a question from Simon Rabinovitch, US economics editor for *The Economist*,

Jerome Powell, the chairman of the Fed, said depositors "should assume" they are safe. Around the same time Janet Yellen, the treasury secretary, said that expanding insurance to all depositors is not under consideration. As the editor-in-chief of the magazine wrote,

"They can't both be right ! "

This is disturbing for two reasons. The first is, as we said above, that claiming that depositors "should feel safe" is ambiguous enough to be a clear sign of the unwillingness to commit and therefore spread defiance toward the banking sector, or at least to its weaker part.

The second reason is that the plurality of opinion from the two top policymakers in the US is weakening further the trust in the solidity of the US banking sector. The willingness of the Treasury secretary not to lift the cap on deposit insurance is understandable. The dimension of a bank panic (a generalized bank run, not targeting one particular bank but the entire banking system) cannot be foreseen ex ante. It may be so large that it would create havoc on the financial system and in case of a pledge to insure all deposits an unsustainable burden on the federal Treasury. But it also shows that the claim by Biden that the no tax will be used to insure banks is shallow. On the opposite, the assertion by Jerome Powell that depositors should feel safe is both a tentative to instill optimism in the depositors and play on their beliefs and a way to put pressure on the Federal Treasury pointing to its responsibility (and not the Fed) in the case of a run or a panic. The combination of both claims is a further example of the impossibility to commit and the need to insure bank deposits. The contradictions between the two statements prove that the cooperation between the two major public authorities concerned by the stability of the banking system is likely not to be smooth and harmonious.



# Going Forward

To sum up, after the SVB debacle, it is not clear where we stand with the provision of deposit insurance in the US even though the stability of the banking system requires clearly stated and credible policies. To achieve this objective, the sound advice of economists should be searched for rather than the quick solutions provided by the political process.

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[1] This is a revised and expanded version of "[Lessons From SVB](https://cooperecon.substack.com/p/lessons-from-svb)" posted on Substack by Russell Cooper on April 16, 2023. <https://cooperecon.substack.com/p/lessons-from-svb>

[2] [Recent testimony](#) by Treasury Secretary Yellen appears to take a step back, linking the provision of deposit insurance above caps to the determination of systemic risk.

[3] Of course the FDIC can respond by replenishing its fund by demanding more contributions from the remaining banks. But this itself will hasten the instability, putting more banks in trouble.

[4] Cooper, Russell, and Hubert Kempf. "Deposit Insurance and Bank Liquidation without Commitment: Can We Sleep Well?" *Economic Theory* 61, no. 2 (2016): 365–92. <http://www.jstor.org/stable/24735338>.