BANKS AND THE NEXT RECESSION

BANKERS AND REGULATORS MUST CAREFULLY CONSIDER HOW THE MANY CHANGES IN THE FINANCIAL SYSTEM COULD AFFECT US IN THE NEXT RECESSION. WE SHOULD TAKE ACTIONS NOW THAT WOULD REDUCE THOSE IMPACTS.

BY DOUGLAS J. ELLIOTT,
OLIVER WYMAN

WHEN THE NEXT RECESSION COMES, how will banks and the wider economy be affected? This is a timely question, given fears in the financial markets that one of the longest U.S. expansions in history may soon come to an end. We know a lot about banks in previous recessions, but we've changed the financial system profoundly; will that change the relationship between banks and the economy?

America has transformed its financial system through government action and private sector innovation. Banks and their affiliates are now held to much tougher prudential standards – specifically, higher capital requirements and newly minted liquidity requirements, but also mandatory resolution and recovery plans and tougher supervision. For its part, the private sector responded to lessons from the global financial crisis and to opportunities offered by new technology to change the competitive landscape and transform business models.

I will examine two major shifts and consider how they may change the relationships between banks and the wider economy:

QUESTION 1: Did new capital and liquidity standards reduce recession-related risks or add to them?

QUESTION 2: Has market-based finance lowered recession risks by diversification or shifted business to more pro-cyclical "shadow banks"?

I conclude with a discussion of how banks and regulators can reduce risks tied to recessions.

BANKS AND THE ECONOMY IN PAST RECESSIONS

The historical record is clear that a sudden stop in lending by banks can send the economy into recession or deepen an existing recession. Effects flow in the other direction, too. Recessions can do real damage to banks via credit losses, declines in the value of other investments, reductions in new business revenues, etc. Even worse, the situation can spiral downward as damage to banks cuts into credit availability, which exacerbates a recession, which forces banks to cut back further. Economists refer to this spiraling effect as the "financial accelerator."

There is every reason to expect this basic interaction to continue, but there are plenty of questions about whether the transformed financial system is less vulnerable to recessions and less likely to trigger them or is more pro-cyclical, increasing fragility.

Question 1: Did new capital and liquidity standards reduce recession-related risks or add to them?

Banks are now required to hold much more capital, and of better average quality, than before the crisis. For example, the minimum regulatory requirement for the ratio of common equity to risk-weighted assets (RWA) has roughly quadrupled since the crisis.

Before the crisis, global standards set by the revised Basel Capital Accord ("Basel II") called for a minimum ratio of Tier 1 capital to RWA of 4%, of which the majority had to be in the form of common equity, meaning that a bank could theoretically have common equity to RWA of just over 2% and still pass the test. Under the latest version of the Basel standards, the minimum ratio of common equity to RWA is effectively 7% (4.5% absolute minimum plus a 2.5% capital conservation buffer). There were also important definitional revisions that reduce the calculated value of common equity and raise the amount of RWA. Factoring this in almost certainly increases the new minimum ratio, calculated on a Basel II basis, by at least another point, to 8% or better.

Similarly, there are new liquidity requirements that force banks to hold more liquid assets and to cut back on their reliance on shorter-term funding. The Basel Accords now include a new liquidity coverage ratio intended to ensure that banks can survive 30 days on their own to give time for central banks to ride to the rescue in a severe liquidity crisis. There is also a new calculation for the net stable funding ratio that's intended to reduce excessive maturity transformation on bank balance sheets. Before these standards, most jurisdictions had very loose or nonexistent quantitative standards for liquidity management.

THE OPTIMISTIC CASE

If the system works as intended, the new prudential standards will make us safer by dampening the impacts of both banking troubles and recessions. Banks that encounter problems will not need to cut back on lending as quickly or sharply because their high levels of capital and liquidity will reassure their funders and customers and allow a gentler slowdown in credit provision or even a continuation of previous levels.

By the same token, recessions won't translate as quickly or harshly to problems in the banking system because of banks' greater safety margins. In short, our newly resilient banking system will be less likely to trigger a recession and will be less vulnerable to problems caused by a recession, lowering the importance of the financial accelerator.

This optimistic view is clearly the one held by the global standard setters and regulators who drove the post-crisis reforms. They explicitly intended the new prudential rules to increase financial stability, defined as the ability of the financial system to continue to provide needed credit and other services to the economy despite external shocks, such as a recession, or internal problems within the financial system.

THE PESSIMISTIC CASE

But it's possible that the key to predicting actions by banks and their key constituencies is not the *total* level of capital and liquidity but the *margin* of capital and liquidity above regulatory minimums. If so, the recession-related risks have likely become higher, not lower, as a result of the increased requirements.

Prior to the global financial crisis, minimum regulatory capital requirements were so low that most of the banking system held considerably more capital. Banks did this in order to meet rating agency requirements for management's targeted credit ratings or to reassure funders or because their own internal economic models said they needed more to cap their risk of bankruptcy at a very low level. None of these nonregulatory targets turned out to demand high enough levels of capital in the face of the global financial crisis, but they were still well above pre-crisis regulatory demands.

> **The historical record is clear** that a sudden stop in lending by banks can send the economy into recession or deepen an existing recession. **Effects flow in the other direction, too.**

However, the post-crisis regulatory reforms have dramatically raised capital requirements and generally made them the binding capital constraint for the largest banks in the system and many smaller banks. To be more precise, the binding constraint is generally the toughest of the various regulatory requirements *plus* a safety margin that management chooses to hold on top of that in order to reduce the risk that losses will cause capital to fall below the regulatory requirement. Those managing banks want a safety margin in order to retain some flexibility in how to react to problems rather than immediately falling into the zone where regulators are telling them what to do.

The new regulatory requirements were deliberately constructed to reduce the risk that banks would suddenly stop lending if capital or liquidity levels fell across the board. On the capital side, the Basel Committee created a "capital conservation buffer" (CCB) that is not an absolute requirement. Instead, as the CCB is eaten up by losses, progressively tougher restrictions are placed on a bank's ability to pay dividends or take certain other actions, including paying some types of management compensation.

On the liquidity side, regulators have clearly stated that they would strongly consider lowering the minimum ratios in a widespread financial crisis to below 100% in order to allow time for banks and central banks to react in an orderly manner.

So, why might banks slam on the credit brakes if they come near to crossing these lines? First, neither they nor their investors want them to be so vulnerable to regulatory choices, especially after seeing how adverse the political environment can become. Second, there is the stigma effect. The first bank(s) to cross these red lines run the risk that funders and customers will flee to safer places, whether other banks or outside of the banking system altogether.

There is a counterargument that because all banks benefit from a safety net unavailable to many other institutions, funding in a crisis will flow to the banking system, not away from it. However, many conversations with senior bank executives leave no doubt in my mind that bank managers will strive mightily to avoid falling below the regulatory requirements for capital and liquidity, even when these are not intended to be absolute. They simply do not want to risk the potential stigma effects, even if banks as a whole may benefit from perceived safety.

It seems very likely that managers and investors view their safety margins above their most binding capital and liquidity **constraints as considerably lower than they did pre-crisis.**

Of course, this logic does not tell us whether the new rules worsen pro-cyclicality compared with pre-crisis rules. We need to know not just how banks would respond under the new rules but what they would have done under the old. One indication that there may be more pro-cyclicality now is that the margin of actual capital compared with regulatory requirements has declined. It is difficult to pin this down quantitatively because of the profusion of new capital requirements, which go well beyond the simple ratio described earlier. In particular, the largest U.S. banks are generally most constrained by the Comprehensive Capital Analysis and Review (CCAR) stress tests, created after the crisis, rather than the ratio of common equity to RWA. Bank managers generally have indicated that they look to hold a safety margin above the full regulatory requirements of 1 to 3 percentage points. For comparison, pre-crisis ratios for common equity to RWA were generally in the range of 8%, 6 points more than the 2% minimum regulatory requirement.

However, there were nonregulatory determinants of capital levels, such as the requirements set by rating agencies for the rating levels banks generally used as their targets. It is difficult to know (a) how much excess capital banks had compared with their desired ratings and (b) how much of a drop in ratings managers would have accepted rather than moving to raise expensive capital in bad times.

The case is much clearer regarding liquidity requirements. There are now clear and binding regulatory liquidity requirements, which did not exist pre-crisis. Further, rating agencies and other nonregulatory parties generally did not view liquidity as a serious issue for banks before the crisis, so nonregulatory constraints were also quite weak. Therefore, liquidity constraints should be much more binding in a recessionary environment than was true in the past.

All things considered, it seems very likely that managers and investors view their safety margins above their most binding capital and liquidity constraints as considerably lower than they did pre-crisis.

BALANCING THE TWO CASES

So, is it good news or bad news? There are good arguments for both views. Having more total capital and liquidity will almost certainly provide greater reassurance to the key constituencies for banks and more freedom of movement for bank managements than having the substantially lower levels that existed before the global financial crisis. There should be less panic and therefore less economic impact.

At the same time, those managing banks will certainly adjust their lending and other risk-taking in order to stay above regulatory minimums, including the capital conservation buffer.

My hunch is that the relative impact of the greater safety versus the lesser margin over regulatory minimums will vary with the severity of a recession. In a mild recession, banks may act more pro-cyclically than before because of their strong aversion to crossing regulatory red lines. But in a severe recession, when these lines may be crossed anyway for a number of banks, the balance may be different. The protection and reassurance provided by higher total capital and liquidity levels may reduce the impact of the financial accelerator strongly compared with pre-crisis rules.

Question 2: Has market-based finance lowered recession risks by diversification or shifted business to more pro-cyclical "shadow banks"?

Both regulators and market forces have triggered an expansion of non-bank activity in many areas that were traditionally dominated by banks. This wasn't a surprise. Regulators knew that substantially increasing capital, liquidity, and other requirements for banks would reduce their competitiveness compared with non-banks that were not subject to the same rules. For some types of business, this was viewed as a clear win by regulators because they wanted to insulate the core of the financial system from certain risky activities. For other business lines, it was viewed as an acceptable side effect of important safety measures – and in a very few cases, regulators are actively considering modifying the post-crisis reforms to diminish undesirable declines in bank competitiveness.

Market forces have played a large role as well – in some cases, a bigger one than regulation has. Technological advances opened up new ways of doing business that allow non-banks to compete at least as effectively as banks in a number of areas. Non-banks have made substantial inroads into payments that were possible only with new technologies.

In some areas, regulatory and market forces pushed in the same direction – notably, market making. Higher capital and new liquidity requirements, along with the Volcker Rule, substantially decrease the attractiveness of this business for banks. At the same time, new players that rely on advanced software algorithms have stepped forward to provide liquidity to the markets, taking share from bank affiliates.

It is difficult to measure the extent to which non-bank financing has replaced bank financing in the aggregate in recent years, because it depends heavily on what activities and institutions are included and which starting point is chosen. However, some important traditional core bank credit activities clearly have shifted toward non-banks.

Irani *et al.* (2018)[1] find clear evidence that non-banks have gained a significantly larger share of syndicated corporate loans since the crisis. Further, their analysis of the data shows that higher regulatory capital requirements for banks play a strong role in this shift. Buchak *et al.* (2017)[2] similarly find that non-banks doubled their share of the residential mortgage market from 2007 to 2015, primarily because of regulatory constraints on traditional banks.

The big issue is whether these non-bank players will react to a recession differently than banks do. There are several reasons to believe non-banks, in general, will behave more pro-cyclically than banks. First, in some lines of business, non-banks rely on "hot money" for their funding, which leaves a distinct risk that it will evaporate in a recession. There has always been a tendency for wholesale funding, or other less-stable funding sources, to become more important as memories of past crises fade. Banks, on the other hand, continue to rely heavily on traditional deposits of one kind or another for much of their funding.

Second, banks argue that they operate on a relationship basis to a greater extent than some non-banks do. For example, banks are generally loath to reduce lending to long-standing customers and often profit over time from many non-credit services provided to these clients that may vanish if the customers have to turn to another lender. It is a common observation that banks are less relationship-oriented than they were decades ago, but relationships still play an important role. Some non-banks may operate in the same way, but generally they are more transactional.

Third, the majority of banking activity comes from large, diversified banking groups that operate in a wide range of geographies and multiple differing lines of business. Non-banks are usually smaller and less diversified, which can multiply the pressures on them when their core business lines hit trouble, leading them to cut back faster on their provision of credit or other services or even to go broke.

There is some empirical evidence that non-bank lending is more volatile. Irani *et al.*, for example, found that higher non-bank shares of syndicated loans had a clear correlation with larger drops in loan prices during the crisis. That said, it is at least possible that this relationship has changed since the crisis.

Whatever one's estimates of the relative riskiness of non-banks versus banks, we must also recognize that some newer types of non-bank business, such as marketplace lending, have never been through a serious downturn. This adds unpredictability to the system.

All in all, there is clearly a risk that non-banks, taken as a whole, could either choose or be forced to pull back on their activities more sharply in a recession than banks have historically done or would likely do in the future.

REDUCING THE RISKS

Regardless of one's views on whether recession-related risks have risen or fallen as a result of changes to the financial system and its regulation, there is clearly more that banks and their regulators can do to minimize those risks.

WHAT CAN BANKS DO TO REDUCE RISKS?

Banks can do many things to prepare for the inevitable next recession, while keeping an eye on the proper balance between the risk mitigation benefits and the costs, both direct and in terms of potential lost opportunities. Some suggestions from a paper by my colleague, Dan Rosenbaum, are paraphrased below:[3]

DEVELOP A COST MANAGEMENT PLAN FOR THE DOWNTURN: Categorize your costs into the minimum needed for survival, those needed to fulfill strategic objectives, and discretionary activities. Creating a cost management plan for each of these categories in advance will both allow a faster and more effective reaction when recession hits and will reveal changes that could be made now. For example, this may be the time to replace some fixed costs with variable ones, depending on the specific trade-offs.

INCORPORATE A RECESSION SCENARIO INTO YOUR STRATEGIC PLANNING PROCESS: Conduct a detailed scenario analysis of a moderate down cycle, which is significantly more likely than the severely adverse scenario that CCAR stress testing focuses on. Look for ways to minimize the major factors likely to hurt the bank's capital or earnings, as well as considering the opportunities that appear with every recession or crisis.

CONSIDER LIKELY MERGERS AND ACQUISITIONS OPPORTUNITIES THAT MAY ARISE IN A RECESSION: Ensure that the bank is prepared, and has the financial resources, to move quickly in a downturn to pursue strategic targets when they become available. In addition to having the financial resources, management needs to know what they would like to do if the opportunity arose and should try to solidify the important personal relationships that will ease eventual negotiations. Do not underestimate the advantages of being the one to show up at the right time with the necessary financing and previously established friendly relationships.

MODERNIZE YOUR COLLECTION AND RECOVERY FUNCTION: Ensure these functions have been modernized since the last downturn. Technology has changed people's behavior massively since the last recession and created many new tools to maximize recoveries and collections. You also need to ensure that there will be enough capacity when it is needed.

WHAT CAN REGULATORS DO TO REDUCE RISKS?

There are three broad types of actions regulators and supervisors can take to cut down on these risks:

- **Fix incentive problems with existing regulation**
- **Prepare in advance for potential recession-related problems**
- **Consider the use of macroprudential tools**

FIX INCENTIVE PROBLEMS WITH EXISTING REGULATION: Some regulations unintentionally encourage pro-cyclicality, as noted earlier. The new liquidity and stable funding requirements create the perception of a major stigma problem for any bank that falls below a ratio of 100%, even though the stated regulatory intention is to soften this in practice in the event of a widespread liquidity problem. Ideally, there would be a more-nuanced approach without such a strong cliff effect.

The aggregate impact of much tougher prudential requirements for banks without any significantly expanded regulation of non-banks that operate in similar markets has likely increased pro-cyclicality. The answer here is easy to describe but difficult to put into practice. Similar activities should face similar regulatory burdens whether conducted out of a bank or a non-bank. This is not precisely accurate because there are reasons to want banks to be more stable than non-banks that are less central to our financial system and payments functions. However, moving regulation in this general direction, with appropriate modifications, should increase financial stability and reduce the impact of recessions.

Market liquidity also appears to be unnecessarily handicapped by the degree of regulatory burden banks and their affiliates face when conducting market making. This raises the risk of greater market volatility that can move the financial accelerator faster when recession hits and markets suffer.

PREPARE IN ADVANCE FOR POTENTIAL RECESSION-RELATED PROBLEMS: Given the many complex changes to the financial system and its regulation since the last recession, regulators and the industry would be well-advised to analyze recession risks more carefully. In fact, it would be useful to have a series of "war game" exercises that provide the opportunity to mimic the likely reactions of important human players in the financial system as they respond to unexpected recessionary impacts.

Regulators and others have benefited from war games simulating financial crises or massive cyberattacks. They should give similar thought to how a recession would play out in reality, even if a recession is a slower-moving event than these other situations. It is important to go through the thought process of responding to a critical situation well in advance of it occurring, even though the exact circumstances always vary from the simulation.

> **Banks can do many things to prepare for the inevitable next recession,** while keeping an eye on the proper balance between the risk mitigation benefits and the costs, **both direct and in terms of potential lost opportunities.**

CONSIDER THE USE OF MACROPRUDENTIAL TOOLS: More controversially, many regulators, central bankers, and academics believe that macroprudential tools can work to reduce the damage that financial cycles do to the wider economy. Others in the official and academic sector are more skeptical, and it appears that most executives in the banking industry are opposed.

The simplest macroprudential tool is the countercyclical capital buffer (CCyB), which is a tool available to U.S. regulators and is part of the Basel Accord. This is an additional layer of capital requirements that would be put into effect when regulators believed that the financial cycle was in a boom phase, creating various risks that were inadequately captured in traditional capital requirements. Done properly, there are two advantages to the CCyB. First, it should result in higher aggregate capital levels in the banking system when a recession or banking crisis hits, lowering the damage. Second, by making banking activities more expensive, it should at least moderately slow the growth in lending and other financial activities during a boom, potentially reducing the risk of a crisis.

One of the great theoretical advantages of the CCyB is that it provides a buffer that can be used without significant stigma or other negative effects. If regulators

have raised capital requirements by 2 percentage points through the CCyB during a boom, they can drop that down again to 0 without singling out any particular bank and while maintaining perfect intellectual consistency. (The CCyB was put in place because of a boom and is taken away when the boom turns into a bust.)

If U.S. authorities were to choose to use this tool now, it would mean raising the CCyB from zero to some positive level, with the intent of bringing it back down if future conditions warranted. The primary argument for doing this would be a belief that the credit cycle has moved into a late stage where risks are higher than they appear.

Multiple other countercyclical macroprudential tools exist, including more targeted approaches, such as raising the minimum underwriting standards for mortgages when the housing sector appears to be overheating.

The arguments against countercyclical macroprudential tools are largely the same across the different tools, including the CCyB, although any specific tool may face some additional technical concerns. The big picture questions are: Will regulators know the right time to put them in place? Will they have the political will and strength to do so and not be overridden, and can they really unwind them appropriately?

Done badly, the CCyB and other such tools could either be useless, because the authorities never pull the trigger, or even harmful, if bureaucratic or political pressures cause them to be triggered unnecessarily.

This topic is too complex to do justice to in this short space, but I believe there should be a more active debate in the U.S. on countercyclical macroprudential policy. A number of countries around the globe have now implemented such policies, including the U.K., and believe they are important tools to use going forward. Even the U.S. took countercyclical macroprudential actions for decades prior to a disastrous experiment with one version under President Jimmy Carter in 1980. (Earlier, less radical efforts had generally had the intended counter-cyclical effects to at least some extent.) Readers interested in a long-term view of U.S. macroprudential policies should see a paper I co-authored, "The History of Cyclical Macroprudential Policy in the United States."[4]

CONCLUSION

Like death and taxes, recessions are a certainty. Bankers and regulators must carefully consider how the many changes in the financial system and its regulation could affect us the next time around. It would be even better if we started taking actions now that would reduce those impacts.

ENDNOTES

1 Rustom M. Irani, Raymakal Iyer, Ralf R. Meisenzahl, and Jose-Luis Peydro, "The Rise of Shadow Banking: Evidence from Capital Regulation," Finance and Economics Discussion Series 2018-039. Washington: Board of Governors of the Federal Reserve System. https://doi.org/10.17016/FEDS.2018.039

2 G. Buchak, G. Matvos, T. Piskorski, and A. Seru, "Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks," Working Paper, University of Chicago, 2017.

3 Dan Rosenbaum, "Thinking Ahead: A Late-Cycle Checklist for US Regional Banks," Oliver Wyman, 2018. https://www.oliverwyman.com/our-expertise/insights/2018/nov/thinking-ahead-a-late-cycle-checklist-for-us-regional-banks.html