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Video: Two Barclays analysts, one hot topic, all sides explored. This is the flip side. The Flip Side is a podcast series featuring lively debate between two Barclays research analysts taking opposing viewpoints on timely topics of importance to economies and businesses around the globe.

Jeffrey Meli: Welcome to the flip side. My name is Jeff. I'm the head of research at Barclays. I'm joined today by Pete Troisi, our senior credit analyst covering financial institutions. Thanks for joining me, Pete.

Pete Troisi: Thanks for having me, Jeff.

Jeffrey Meli: Today, we're going to talk about the ongoing turmoil in the banking system, which I know has kept you, Pete, very busy over the past several months. It started in March when Silicon Valley Bank, or SVB, collapsed after experiencing extreme deposit outflows.

Pete Troisi: The bank crisis in the US quickly spread to include a handful of other mid-sized banks that had similar exposures, namely Signature Bank. Now, the FDIC, or the Federal Deposit Insurance Corporation, took steps to limit the contagion, like guaranteeing the large deposits at the failed banks that didn't qualify for FDIC insurance. And the banking industry also took action to try to stabilize First Republic Bank or FRB, which was also experiencing stress. But in the end, FRB failed as well, and the stock and bond prices of other mid-sized banks have recently come under pressure.

Jeffrey Meli: Doesn't appear that there's a quick fix, so, to speak, for this crisis. We've already seen some unprecedented moves like that coordinated effort to stabilize FRB that you mentioned failed to stem the volatility. so, in this episode, we're going to look back at the root causes of the recent crisis and debate the implications and potential fallout to come.

Pete Troisi: Well, Jeff, to start, I have a relatively positive view and I think we are close to the end of this crisis. The vulnerabilities in the banking system are tied to the massive increase in deposits that accompanied COVID, which for regulatory reasons flowed disproportionately into regional banks. Now, some banks manage this poorly by taking too much interest rate risk and they are being exposed. But the vast majority of banks handle it appropriately and the market pressures on those institutions will fade in the end. This will lead to moderate tightening of credit conditions,

which is in line with the goals of the Federal Reserve during this ongoing hiking cycle, but not further contagion or systemic risk.

Jeffrey Meli: Well, Pete, I think you're understating the long-term consequences. There's a bigger picture lesson here on the nature of bank runs in the modern era, one that we have been blissfully unaware of for the past decade, when interest rates were pegged at zero. The lesson for the US is that the very premise of regional banking is in doubt. But looking more globally, we've learned a deeper lesson about the vulnerabilities in banking writ large.

Pete Troisi: so, just let me take a step back and just start with why I think we are closer to the end of this crisis. Now, in order to understand the current volatility, we do need to go back in time to the onset of COVID three years ago when everyone was stuck in their homes with no ability to travel, eat out, go to the gym, et cetera.

Jeffrey Meli: Yeah, there was literally no place to spend your money.

Pete Troisi: That's right. And household savings spiked as a result, further supported by the COVID stimulus bills, which sent checks directly to most households and gave all sorts of other fiscal support.

Jeffrey Meli: Now we estimate that US consumers accumulated over \$4 trillion of excess savings over that period. That's an influx of cash unprecedented in history, and that has had all sorts of effects. I mean, we saw things like crypto prices getting pumped up. We saw the rise of so-called meme stocks where the prices were being affected by social media channels. And it's even continuing to support consumer spending today, which has remained remarkably resilient despite the hiking cycle that the Federal Reserve is engaged in, in part because of all these excess savings.

Pete Troisi: And one other important effect that you left out, Jeff, a massive increase in deposits, about \$1.5 trillion of that excess savings was deposited into the US banking system. That's a 20% increase in deposits over a very short window. Now, normally banks use deposits to make loans, but during COVID there weren't loans to make. Economic uncertainty was very high and businesses were able to access financing from other sources, like the Paycheck Protection Program or PPP. so, at the same time that deposits were rocketing up, loan demand was falling.

Jeffrey Meli: I mean, even in the best of times, it's basically impossible to make a trillion and a half dollars worth of loans over such a short period. The only real source of borrowing in the economy was for housing. Remember, there was a housing boom during the early stages of COVID, but most

housing loans are guaranteed by the government sponsored enterprises Fannie Mae and Freddie Mac and bundled into securitizations. so, even the housing boom didn't help banks put this money to work.

Pete Troisi: so, where else can banks put their money? The answer is securities portfolios. They bought bonds like treasuries and agencies, which there were plenty of due to the government borrowing.

Jeffrey Meli: Yeah, that's right. The government was running record deficits, so, there was lots of treasuries out there. And like I mentioned, there was a housing boom, lots of mortgages being taken out, getting bundled into these securities which are guaranteed by the government, into agency securities, also ending up in the securities portfolio.

Pete Troisi: And so, you add it all up, what happened in the US banking system is the ratio of loans to deposits plummeted. It dropped from over 70% to a low of 55% in 18 months. Roughly 80% of the new deposits were invested in securities. Now let's fast forward to 2022 when the US Federal Reserve starts raising interest rates to combat inflation. Higher rates led to lower prices for securities, which was destined to cause problems at some of the banks if they failed to manage the interest rate risk of all these new securities carefully. Now, that is exactly what happened to SVB, and those losses led to deposit outflows and its eventual insolvency.

Jeffrey Meli: Now, hold on, Pete. That's too simple of a story. Basically, every bank in the US had deposit growth. We didn't jam a trillion and a half dollars worth of deposits into just a handful of banks. Yet only regional banks have experienced stress.

Pete Troisi: I agree with you, Jeff. Deposits increased at most banks, but regional banks experienced the largest deposit growth, the biggest, most systemically important banks, which are known as the g-sibs or globally systemically important banks. They actually limited the deposits that they accepted. The G-SIBs didn't want the money, and this wasn't an accident. It was linked to a specific feature of the Dodd-Frank reforms that were enacted in the wake of the global financial crisis. These reforms tightened a regulatory constraint on the g-sibs that govern how many low-risk securities they can own, like those treasuries and agencies that banks were forced to buy as deposits grew.

Jeffrey Meli: Yeah, that feature of Dodd-Frank is known as the leverage ratio, and it's meant to limit the total assets that the large banks can own. Relative to their equity, specifically designed to keep them from stocking up on assets that are deemed low risk. Now, of course, we should be careful about that term, low risk in this context, it refers really to credit risk because US government

obligations are not generally considered to be exposed to default. Obviously, we're going through a debt ceiling crisis right now, so, we have to take that with a little bit of an asterisk. But generally speaking, we don't consider US government obligations as being exposed to default risk, but they can decline in prices. And that happens exactly when interest rates rise.

Pete Troisi: The largest banks need those limits that you referred to, Jeff, because they are active in capital markets, they trade in finance stocks and bonds. That business naturally involves owning a lot of low-risk assets. And a notable example is the repo market or the market for repurchase agreements, which are effectively collateralized borrowing and lending where the collateral is often treasuries. This is obviously a huge market and one that the G-sibs are very active in. so, active that they really don't have the capacity to own even more low risk securities. so, as the wave of deposits was coming in, these banks couldn't accept their pro rata share. They just had no place to put the money. The result was that regional banks ended up with a lot of these deposits.

Jeffrey Meli: Now this leverage rule was tightened after the global financial crisis because low risk assets contributed to the concerns about financial stability at the largest banks. Now, it's interesting that you're claiming that this rule actually contributed to the current crisis. It forced deposits into regional banks, which generally don't have the big capital markets, businesses that consume this capacity. so, they had spare room for low risk assets that was going unused.

Pete Troisi: It did. They got the deposits, bought securities. And it's no surprise that some banks manage the associated risks poorly.

Jeffrey Meli: Now, one challenge to this narrative, Pete, is that there is an alternative place to invest the deposits that doesn't involve any risk that's keeping the money on deposit at the Federal Reserve. Now, just like you and I can deposit money at our banks, our banks can deposit their money with the Fed. It's like the bank for banks. And those deposits do not lose money even when interest rates rise. so, it's not inevitable that this flood of deposits would result in losses once the hiking cycle eventually started.

Pete Troisi: That's technically true, Jeff, and in fact, that's exactly what the large banks did with the deposits they did accumulate. But do you know the interest rate that the Fed was paying?

Jeffrey Meli: Yeah, I do. It was zero. Rates were pegged at zero during the entirety of COVID. Many people think that they were pegged at zero for way too long, which is another factor behind this volatility that we're experiencing.

Pete Troisi: Right. And with those deposits paying zero, we can definitely understand why owning securities with some positive interest was so, tempting. The interest goes directly to shareholders and equity prices rise. Now let's fast forward to 2023. You have the perfect storm. Interest rates rise. so, unless you were careful about how you managed all those new securities, you lost a lot of money on paper. And with higher rates, keeping your money in a bank suddenly doesn't look all that attractive. so, the banks that were exposed to this storm because they increased their deposit base rapidly and used the proceeds to take interest rate risk, have solvency concerns, which leads to deposit outflows and then which leads to declining equity and in some cases eventually failure.

Jeffrey Meli: That is a good description of what happened at Silicon Valley Bank. Their deposits had increased by something like \$100 billion, nearly doubling. They invested the money in securities, did not adequately hedge their interest rate risk. Then their depositors got nervous and started pulling money. I think the statistic is that \$42 billion was withdrawn in a single day, but the story doesn't stop there. Recently, we've actually seen the causality reverse, where what happens first is that equity prices start falling. We've seen that happen with some regional banks over the past several weeks without evidence of deposit flight. But sharply declining equity prices can become self-reinforcing. Imagine you're a depositor. You see the equity price of your bank drop precipitously in the market. You get nervous. Maybe the bank isn't so stable after all. You pull your money. That's why I'm not so, convinced that we are through this crisis. so, far, only about a third of the excess deposits that you mentioned have left the system. What happens is when the other two thirds leaves.

Pete Troisi: so, have two reactions to that. First, most banks did not mismanage their interest rate risk. And second, banks have a lot of liquidity options available to them, especially when they don't have material losses on the asset side. They can borrow from the Fed either through the discount window or through facilities like the bank term funding program or the BTFP. That facility allows banks to pledge securities trading below par and get advanced 100 cents on the dollar. I believe most regionals can withstand these equity market pressures, which will fade once investors realize their prophecy isn't quickly becoming self-fulfilling.

Jeffrey Meli: And then that's the end of the story?

Pete Troisi: Absolutely not, Jeff. The natural reaction to this is to tighten credit and charge higher borrowing rates. Now, the capital markets are responding more quickly than the bank channel in this regard, even as the Senior Loan Officer opinion survey or the SLUES for short recently

showed a fourth consecutive quarter of tightening. But as a general matter, this is aligned with the motivation for higher rates. This is another transmission mechanism for higher interest rates.

Jeffrey Meli: Well, Pete, I agree with you that this is a likely outcome. Bank credit's going to get more expensive from here. I think follow on from that. Deposit rates are going to rise and likely margins will contract at some of the regional banks. But I also think that this episode has exposed a longer-term challenge for banks. Runs on deposits are just easier now enabled by technology, and that has changed the nature of systemic risk in the banking system.

Pete Troisi: There's no question that it's easier to move money. Today, we saw that with SVB, Signature and First Republic hundreds of billions of dollars of deposits were moved from them in a very short period of time. Those banks were not subject to enhanced liquidity rules known as the LCR or liquidity coverage ratio, which requires the largest banks to maintain liquidity sufficient to cover stressed deposit outflows.

Jeffrey Meli: Now, there is a big debate ongoing about what the right regulatory environment is for these smaller banks, but I think it's important to note that the scope of the deposit outflows far exceeded what is contemplated in even the most rigorous stress tests implied by regulators. Look, you used to have to get your passbook. I'm old enough to remember having a passbook for my deposit account. You'd go to your bank, wait in line to see a teller, get a cashier's check to cash out your money, get back in your car, drive to the new bank, fill out a bunch of forms, wait another line, see another teller deposit the cashier's check, wait several days for the money to clear. It was a whole process involved with moving your deposits, which made your deposit sticky at your institution. Today, thanks to massive investments in technology, all you have to do to move your money is a few clicks of the mouse.

Pete Troisi: That's right, Jeff. What you just explained is a process a consumer would likely go through, and it is possible that household deposits are more flight prone, but a lot of the deposit flight was from businesses too. If they have operating deposits, meaning the money they use for payroll, working capital expenses, etcetera, those are harder to move.

Jeffrey Meli: They're harder to move than a personal checking account, but I think also much easier to move today thanks to technology. And while I suspect that the regulators are refining their assumptions about deposit stability generally, this is particularly an issue for smaller banks. Look, banks borrow and lend to the same people. Their depositors are their customers, and that fundamentally distinguishes them from basically every other type of company, like an auto company, for example, doesn't sell its cars only to its equity holders or its bondholders. But banks

primarily provide financial services, including credit provision to customers who bundle those services at the bank, including their deposits. Now, for a small bank, a shock to their borrowers is also a shock to their lenders, and it raises the risk of deposit flight in this technology enabled world that we're living in right now. so, when banks, a bunch of startups and VC funding becomes scarce as interest rates are increasing, the risk of concentrated deposit flight is high. It's almost like they had one type of customer or one customer, and they're not benefiting from diversification.

Pete Troisi: Now, the way you presented that, Jeff, certainly is a concerning story, but I think it's overly dramatic. Now, recall that none of this would have happened absent the massive rise in deposits that was caused by COVID, although I guess another pandemic is possible, I doubt we would see the same fiscal response. And I don't think we have to reimagine our banking system so, that it is well equipped to handle a trillion and a half in excess deposit flows.

Jeffrey Meli: Well, first, Pete, what we believe isn't the point. What matters, I think, is if regulators rethink deposit risk, which I think is happening in real time, but the story isn't limited to deposits. I mean, look at what happened recently with Credit Suisse. The large Swiss bank was about to fail and is now in the process of being taken over by UBS.

Pete Troisi: Right, but that wasn't really a deposit issue. The problems at Credit Suisse were initially linked to some risk management issues, mostly in their investment bank, for example, associated with how they managed exposures to some highly leveraged hedge funds. As the investment bank declined the importance of their wealth management business grew. And once that started losing assets under management, the whole institution was vulnerable.

Jeffrey Meli: Yeah, I agree. But the point is that the same technological advancements that allow for more rapid deposit flight. Allow for more rapid declines in a wealth management business, too. It's really very closely related. As soon as there's a hint of solvency or sustainability concerns at the institution, the collapse in the assets under management in the wealth business was very rapid. But what's the solution then?

Pete Troisi: Isn't it worse if all deposits and assets go to the top three banks, then we have systemic risk on steroids.

Jeffrey Meli: Well, that is concerning and I think that would be a bad outcome and actually raise systemic risk. I think what we might see instead is a wave of intra-regional consolidation that would avoid that that migration of all of the assets going to the biggest banks, but also achieve what I think is

required geographical and industry diversification across your deposit and customer base. Now look, deposit market share has consolidated over time through bank failures, but also through M&A. And that's really the longer-term trend. I mean, in 1980, in the United States, there were over 15,000 banks. Today there are fewer than 5000. And I think it's reasonable to expect that number to have again over the next decade.

Pete Troisi: I still do think that regionals will serve an important role in the economy, even with consolidation in regionals, particularly serve a role for small and medium sized enterprises or SMEs. so, businesses that do not have access to the capital markets generally obtain financing from banks, and about half of that credit comes from regionals. Now, any pullback in credit by the regional banks would therefore likely affect those smaller companies disproportionately.

Jeffrey Meli: Look, in the short run, I think that is, as you mentioned, in keeping with the goals of the current hiking cycle that we're in. In the longer term, I agree that is a challenge for small and medium sized enterprises and they may have to start looking to other sources of capital. For example, the private credit market which has grown recently and was a topic of another episode of the Flip side. And this is obviously an issue that we're going to watch carefully over the next several months, Clients of Barclays can access our latest research on volatility in the banking system on Barclays live under the hashtag banking fallout. Thanks for joining me, Pete.

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