To be aware…or not to be aware

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Over the last weeks, we have experienced a situation that many had relegated to the past: massive withdrawals from banking institutions. As a consequence, between Friday 10 March and Monday 20, three mid-sized US banks failed (Silicon Valley Bank (SVB), Signature Bank and Silvergate Bank) and the iconic Credit Suisse bank had to be rescued through a merger operation. This triggered a wave of panic across the globe fearing for contagion, with shares of banks falling and fears for other banks starting to boil, including banks such as Deutsche Bank, which shares were down 26.6% between 8 March and 24 March. But how far is this due to bad luck, ignorance or moral hazard? We will let you make your own opinion based on some elements here below.

Concentrating on the cases of SVB and Credit Suisse, we can certainly say that these were very different banks. The accounts of SVB are impressively, if not deceptively, simple. Based on the consolidated statements of December 2022, SVB has total assets of 211 billion $, roughly made of 14 billion of cash, 74 billion of loans, 26 billion of available-for-sale securities (AFS), and 91 billion of held-to-maturity securities (HTM)! This is financed by 173 billion deposits, 14 billion short-term borrowings, 5 billion longer-term debt, 16 billion equity, and some minor amounts. Without using Basle ratios and accepting the idea that 41 billion of loans relate to the funding of receivables and that we could of course dig deeper into the details, that still makes roughly 124 billion of long-term holdings financed by 187 billion of short-term or non-maturity items. Not a precise estimate but a sufficient one for "warnings to be checked", duration-wise.

Still, on the paper, being financed by 82% of deposits, or having a loan/deposit ratio of 95% is enviable. One of the major points of attention of the 2008 crisis was the high dependence of many banks on interbank debt and other forms of short-term debt, with loan/deposit ratios well above 100%. This is because depositors are considered to be your most loyal financiers.

The first ones to pull out the plug are the other banks. It is the reason why central bankers are so worried to see pictures of depositors queuing to withdraw their money on the newspaper's front page. Times are different, the structures of balance sheets are different, but it all comes down to "a crisis of confidence". Credit Suisse's balance sheet is far more complex than SVB's, and there was no direct dependence between both. But in times of questioning over the soundness of banks, a comment over "material weaknesses" in a financial report stating a 7.3 billion CHF loss, followed by the withdrawal of one of their major lenders, became too much in the eyes of big depositors. These examples show that a crisis of confidence can easily undermine the stability of those highly levered institutions, whatever their complexity and situation are.

What central bankers have learned in the previous crisis is that you must react swiftly because a crisis of confidence produces the quickest impacts and inorganic contagion. Solvency is one thing, illiquidity is another. Authorities therefore jump in by providing cash, increasing insurance levels, but also guarantees like the European Central Bank (ECB) did, hoping never to have to use them if that can restore confidence. Ultimately, they can revert to other alternatives like bailouts, or given the simplicity of SVB's balance sheet, take care of depositors and leave an empty shell for the shareholders, a much harder, if not impossible, thing to do in the case of Credit Suisse to avoid a bigger disruption.

But that doesn't mean "this is it". Yes, we can blame social media, we can blame internet banking that increases the speed of

transfer when withdrawing money; I personally don't subscribe to that, at least not as the root cause. Technology increases speed. So maybe the tide goes out swifter and you see more quickly who is swimming naked. But it is not the speed that has led them to swim naked. And it is neither a question of enough compliance and regulatory reporting, which have been substantially upscaled in the past. Some banks report that 40% of their personnel expenses is devoted to that. We have (small) financial authorities that had six quantitative experts at the beginning of the 90's, and that have hundreds of them today. We have a huge population of quantitative risk modellers, many former derivative specialists.

Finally, we have data science capabilities, up to a level never dreamt before. I am provocative on purpose here: we have full autopilots for our cars but we don't feel anymore when we may have a flat tire. And even if we think it might be the case, we do not pull over to check because the system tells us everything is ok. It seems we have plenty of indicators, yet we do not easily apprehend the big picture. Here are some examples for illustration purposes only, in no particular order.

AFS or HTM? After the criticism that "having enough equity doesn't mean it is readily available", Basle III's regulation came up with the liquidity-coverage ratio (LCR) which requires the identification of high-quality liquid assets (HQLA), such as cash parked at the central bank or safe-haven securities like high-quality government bonds. Since these must be rapidly "liquefiable", these assets are to be seen as AFS, and therefore reported at fair-value. But on the accounting side, a wide portion of these positions can be considered as held-to-maturity (HTM) based on reasonable assumptions, which implies they are reported at book value.

For example, the Financial Accounting Standards Board (FASB) provides an exception to pass assets from HTM to AFS in the case of an event that couldn't have been anticipated. In other words, these assets are held-to-maturity except if an extraordinary condition pushes you to sell them before. We can debate a lot on naming conventions and the idea here is not at all to blame the frameworks, but the users. We know accounting by construction is not as forward-looking as finance.

Even if long-term US Treasury bonds are originally HTM, when SVB holds half of its balance sheet in them (or other similar assets; see here below), the risk to have to sell some before maturity is far from nil. And being safe-(credit)haven assets doesn't mean they are insensitive to interest rate changes. Where is our **financial literacy about the valuation and risk exposure of bonds**? A 10-year 0-coupon bond at 0.5% has a 95.13% value today. When interest rates go to 4%, it is worth 67.56% only.

Some of SVB's assets had a maturity of up to 30 years, hoping for earlier redemptions. In an era of explosion of data science, and with all the ALM information that banks must provide, financial authorities should be able to easily assess the impact of raising interest rates…unless you bet on the stability of deposits, i.e. the clientele of SVB does not have urgent needs itself, something that could be affected by raising interest rates.

Banks are corporate firms at the end of the day. We can debate on the role of financial institutions and why they can be seen as different animals, benefiting from a huge leverage ratio and lower-than-market conditions on their deposits, thanks to the deposit insurance. Still, it should not prevent its management and outside stakeholders to assess them as they would do it for non-financial firms.

First, SVB had so-called "wrong-way" risks. A nice term for "lack of diversification" in the present case, with a high concentration of clientele in tech sectors which made SVB a traditional interest-rate premium earner on the revenue side but a kind of venture investor on the risk side. It is easy to see nice revenues if you don't see the real underlying risk profile which, given the inherent leverage ratio of a bank, was mostly amplifying the market risk linked to the sector of its clients.

Stage 1, good years made tech firms deposit vast amounts of liquidities that SVB partially invested in longer-term US treasury debentures, agency-issued mortgage-backed securities (MBS) (with original maturities of 10 to 30 years), collateralized mortgage obligation (CMOs), and commercial mortgage-backed securities (CMBS), to avoid negative or very low interest rates, instead of trying to find money-market alternatives to keep a better liquidity at a lower revenue overall for a fraction of them, a problem fuelled by the quantitative easing (QE) programme. For the rest, SVB continued to "serve…commercial clients in the private equity/venture capital, technology, life science/healthcare, commercial real estate and premium wine sectors. Loans made to private equity/venture capital firm clients typically enable them to fund investments prior to their receipt of funds from capital calls" (cited from SVB's annual report 2022).

Stage 2, the sector is confronted with a difficult market situation, stemming in part from interest rate hikes that generate as well a decrease in the market value of the securities (even more with 57 billion out of 91 billion made of mortgage-backed securities) that SVB was forced to start selling to make liquidities available to clients who need to burn cash again. The lack of diversification and the overall connectedness to a market variable probably creates here a strong circularity, with a potential underestimation of the real riskiness of the game, by many parties. We can hardly believe we can use low-risk money to finance high-risk activities and still extract back a low-risk outcome, and that increasing interest rates won't impact the game.

Similarly, Credit Suisse had a series of issues in the last years and, diversification-wise, for an external eye who just reads the press, or their annual report (and might use its internet banking), it is quite impressive or worrying to see that such a former "rock institution" can rely on the willingness of a major lender to continue investing.

When you come from the corporate side, you know that, with such a leverage, you cannot make too many mistakes before being wiped out. Still, we want banks to perform a social and support function to the economy, here for example bringing the huge liquidity poured by the QE programme to the sectors that could benefit from it, including new sectors with scale-up challenges.

Financial diagnosis. Again, I am not a big fan in examining risks through the name of the category we allocate our assets to. Any financial instrument or position can be disentangled into its constituent cash flows, each with its own risk level (certain, estimated, expected), along a timeline. We can then create scenarios, simulate potential outcomes, and have a very generic way to examine our cash flow resilience through time. On the other side, financial regulation tends to ask for snapshots of ratios and a variety of measures for market, credit, counterparty, operational, liquidity, … and model risks that generate a requirement at a moment in time. This leads for example to the computation of exposures with factors that obey to specific treatments per type of instrument and per type of risk, with clearly an aggregation puzzle at the end.

Globally, I am afraid that (1) the ratios we compute do not really allow us to represent a "cash flow through time" picture of the firm, and (2) that the complex aggregation of measures in silos is both opaque and might not allow us to understand well the global bet made. There is always one. We try to verify that with model risk estimates but awareness is better reached when all managerial functions share a reasonable understanding of the risk in the game, even with known limitations, than when a very quantitative expert asserts that it is ok to think that the measure is right. Communication is key. Precision and accuracy are not the same. Risk management is not auditing. But this would probably deserve another article.

Financial contracts. We tend to be very creative about the design of instruments but we, financiers, still model an instrument very generically, based on its name, even though each contract might contain many "non-plain-vanilla" covenants. In short, lawyers start where financiers stop. In the case of Credit Suisse, it was quite impressive to see how many people seemed surprised about the application of a covenant by the Swiss authorities for the additional tier one (AT1) contingent convertible bond (CoCos). In March 2010, I was in a private meeting with top risk managers from major banks, where Credit Suisse was presenting its idea of CoCos (with a first issue by them on 8 March 2012), and I remember we were already quite surprised by the large leeway left to the triggering of the covenants. The same happened with the definition of "default" in credit default swaps (CDS) contracts during the previous crisis. Again, this is not about who is right and who is wrong, but about how many people were probably rushing to (re)read the contract they probably never examined in detail. A coupon of 9% was probably "too good to pass up".

The present article is written in the subjunctive mode. The goal is here not to blame but to say "what did we expect?". As long as we are all aware of the real game we play and we make sure to be ready to confront its limits or circumvolutions, we will be able to talk about trust and confidence. When something looks bizarre to us, based on our experience and our common sense, even though some expert tells us it is ok or that we should be ashamed to ask that from a top institution, it can also be because it is really bizarre.