

Banking Crisis—How Deep a Contagion?

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With the recent losses on bank debt, investors will likely reassess their holdings in the asset class, especially more junior securities. At the very least, investors in securities at the bottom end of banks' capital stacks may become more discerning as to which banks' debt they wish to own. We believe investors will reprice bank debt with higher loss potential, especially debt of those banks with weaker fundamentals.

We're In a Banking Crisis

Following the recent events involving bank failures on both sides of the Atlantic, which have so far resulted in losses of almost \$30 billion, bank investors are examining where they stand in a bank's liability stack.

We think it is useful to detail what a bank's financials look like, specifically the liability side of the balance sheet as it is there where investors' exposures are to be found.

After the 2008 Global Financial Crisis, regulators required banks to issue a new style of bank debt; bailin-able debt. This type of debt is designed to take losses if a bank were to get into trouble. This new style debt would be written down and converted into equity. The resulting equity would be used to capitalize a new bank that takes over the operations of the previously failed one. In this new regime, today's debt holders would become tomorrow's equity holders, though they are likely to be greatly diluted. The rules are designed to ensure taxpayers do not have to pay to recapitalize a failed bank; any losses would be imposed on bond and equity holders. In effect,

bank losses are to be privatized, not socialized; this was not the case in 2008.

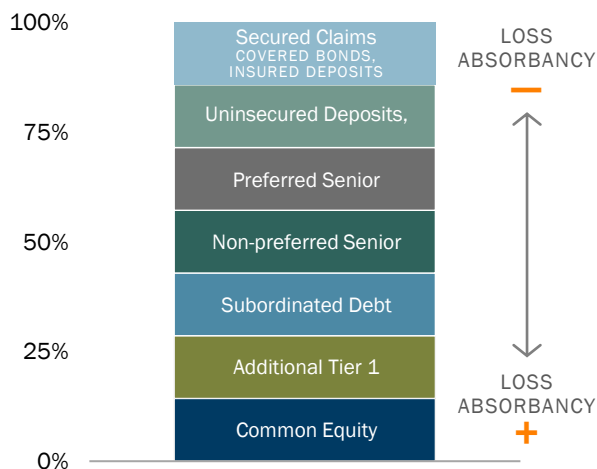
In response to these regulations, banks have had to issue large amounts of new style bailin-able debt to achieve the regulatory prescribed amounts. This debt includes the specific risk factor that it can be written down and converted into equity in the event of a failure.

Today, this means there are essentially two types of bank bonds: 1) funding bank bonds – bonds that support a bank's loan book; and 2) bail-in-able bonds that can support a loan book but are also there to absorb losses should the bank fail and/or reach a point of non-viability.

Bank regulations vary by jurisdiction; however, regulators have put in place a hierarchy of creditors within banks' liability stacks.

Figure 1 below shows a stylized view of the different classes of bonds in a bank's liability structure. Bonds are listed from the most senior to the least senior, meaning that bonds toward the top of the stack are least likely to experience losses if a bank's debt were to be bailed-in. It is worth noting that as one goes down the stack, securities become more equity-like.

FIGURE 1: BANK LIABILITY AND CAPITAL WATERFALL



Source: MacKay Shields LLC

Below are the broad characteristics of each major layer in a bank's liability stack:

- **SECURED CLAIMS** These are at the top of the liability stack and have the most protection from loss. Items in this bucket include insured deposits as well as covered bonds, as these have direct recourse to mortgage loans on a bank's balance sheet.
- **UNSECURED DEPOSITS** These are deposits that are not covered by national deposit insurance protection schemes and include large corporate deposits.
- **SENIOR PREFERRED BONDS** This is a tranche of debt that is similar to senior unsecured corporate debt. This debt funds a bank's operations and is the highest rank of unsecured debt in terms of seniority. There is no conversion trigger to equity.
- **SENIOR NON-PREFERRED/BAIL-IN BONDS** This layer of debt is junior to Senior Preferred bonds and converts to equity based on regulatory triggers and/or the regulator deeming a bank as having failed. This debt is required by regulators to absorb outsized losses should losses extend up from the levels of debt below this layer. The amount of debt each bank is required to hold is a function of the bank's size and complexity.
- **SUBORDINATED TIER 2 BONDS** These bonds are the most junior form of dated bond debt in a bank's balance sheet. They are also the most junior IG index-eligible bank capital category. Subordinated bonds can be bailed-in should losses exceed the equity layers below them. These bonds may also include embedded call features, Regulators set the percentage amount that these bonds can contribute to a bank's regulatory capital ratios.
- **ADDITIONAL TIER 1 BONDS (AT1S)** This is a hybrid instrument as these securities have bond and equity-like features. They include Contingent Convertibles (CoCos) as well as junior subordinated securities. Coupons on AT1s resemble dividends as if a bank has insufficient net income, but payments can be deferred. If missed, payments are not cumulative. These securities are callable but are perpetual, similar to equity. They can convert to equity or be written down if a bank's Common Equity Tier 1 (CET1) ratio falls below a pre-determined threshold (for example 7.0%) or when the regulator deems a bank to be non-viable and/or is in need of additional common equity. Whether the exact

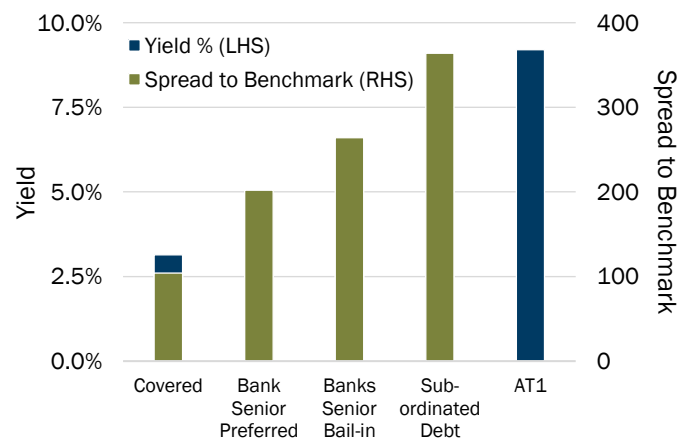
terms of an AT1 includes temporary write-down, permanent write-down or conversion to equity is likely a moot point as once converted, the instrument will be greatly impaired and bond investors are unlikely to see much in the way of recovery for the new equity instrument.

In the event of a bank's liabilities being bailed-in, the hierarchy of claims will be respected. Equity holders will first bear losses followed by AT1 holders, and if losses exceed these two instrument classes, the next layer of bonds would experience losses and be bailed in. Losses could extend all the way up through subordinated debt and non-preferred senior debt. It is not expected that senior preferred debt would incur losses. The regulator's objective is to generate sufficient new capital to capitalize a new bank by converting the failed bank's bonds into equity. The new bank needs funding to ensure it can operate. Hence, bailing in senior preferred debt would likely be counter-productive.

The credit ratings of the different bond types reflect the potential losses of each layer; bonds lower in the liability stack are rated lower than those higher in the stack.

Market prices also reflect this hierarchy as bonds lower in the hierarchy trade at wider credit spreads than those higher up the stack.

FIGURE 2: MARKET PRICES REFLECT RISKINESS



As of March 20, 2023
Source: Morgan Stanley

Additional Tier 1 (AT1) Securities Are More Equity Like

At the lower end of a bank's liability stack are AT1s. AT1 securities combine features of equity and debt, but are closer to equity-like instruments.

In the case of a bank failure and after common equity has been wiped out, AT1 securities are next in line to take losses if a bank is deemed by the regulators to be short of meeting its capital ratios (for example, its common equity tier 1 ratio falls below 7%) or if regulators deem the bank to be non-viable.

Recently we saw Swiss regulators write-down Credit Suisse's AT1 securities to zero as part of the proposed merger with UBS. By writing these securities down/converting them into common equity, regulators are able to bolster UBS's capital. A unique part of the Swiss banking resolution regime is that regulators are allowed to write-down AT1 securities to zero before common equity is fully written off. This meant that common equity holders of Credit Suisse received a small, but positive number of shares of UBS, but AT1 holders received zero. The Swiss regulator used a provision that allowed them to write down Credit Suisse's AT1 on the basis that Credit Suisse had become non-viable.

In light of these recent actions, AT1 investors were reminded of the risk of being converted into equity at very low prices or possibly even at zero. In a sense, AT1 securities have all the upside of par instruments like bonds, but all the downside of equity (which is zero).

Fallout from the Credit Suisse AT1 Write Down

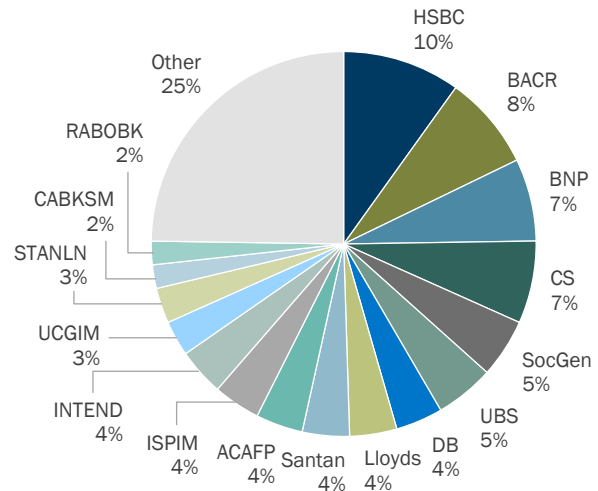
Investors' recent experience of Credit Suisse's AT1s, who saw almost 16 billion of their capital written down, likely means investors will reconsider whether they should own these securities in bond portfolios.

In this regard, there are several notable takeaways from the recent experience that investors may find worthy of considering:

ADDITIONAL TIER 1 MARKET IS LARGE

As of March 7, 2023, the European bank AT1 market totals over \$200bn, having grown from zero 10 years ago.¹ Banks are incentivized to issue AT1s as regulators required banks to

FIGURE 3: ADDITIONAL TIER 1 MARKET BY SIZE OF ISSUER



As of March 7, 2023
Source: Bank of America

build out their capital bases in order to absorb unexpected losses. Rather than issue more common equity (which would have been dilutive to equity holders), banks were able to issue AT1 securities; AT1 securities count towards regulatory capital buffers and represented a cheaper form of equity for banks.

The AT1 market is comprised of securities issued by many banks including the larger banks such as HSBC and Barclays whose securities are rated investment grade by some, if not all, of the established credit rating agencies (see Figure 3 above).

Investors are compensated for owning these more risky securities by relatively higher yields when compared to more senior debt.

Investors were of the view that bank regulators would ensure that the AT1 market would remain well-functioning as regulators were seen to endorse the product as part of banks' capital robustness. Furthermore, many investors own the senior debt of these banks as well as the more junior instruments. Banks rely on these investors to fund their operations by buying the debt of the various layers of the liability stacks. The view that regulators would look to convert a bank's AT1 to zero as in the case of Credit Suisse was not a widely held market view.

1. Source: JP Morgan. March 24, 2023

Was the Credit Suisse Situation a One-off for AT1 Holders?

Credit Suisse was 7% of the AT1 market and 13% of the USD AT1 market. This likely means a large number of investors in the AT1 market have been adversely impacted by Credit Suisse's AT1s being written down.

In light of Swiss regulators writing down Credit Suisse's AT1s to zero and AT1s not being part of the larger corporate fixed income investment indices, investors will likely question whether:

- They need to own AT1s
- They should own AT1s of weaker performing banks
- They should own AT1s of banks located in jurisdictions where regulations do not respect the hierarchy of creditors in the event of a bail-in

Ultimately we believe that the AT1 market will move past the Credit Suisse experience as investors will look to own AT1s of those banks with stronger business models and where regulators respect the hierarchy of claims in a bank's liability stack. However, the universe of investors will likely get smaller and the product will become a more specialist one.

Repricing of Bank Debt

Having seen AT1 investors take sizeable losses, bank credit investors are likely to reprice how they view both senior non-preferred and senior preferred debt. Credit spreads are likely to widen for banks' riskier debt as investors will charge a greater premium for owning debt lower in the liability stack.

A further widening of banks' credit spreads will likely weaken bank profitability and could lead to tighter financial conditions.

Fragility of the Banking System

The EU bank regulator, the Single Resolution Board, noted in its Q3 2022 quarterly update that EU banks continued to grow the quantum of bailin-able capital. By the end of Q3, 2022, these banks had issued bailin-able capital of EUR 1.8 trillion, which was equivalent to 23.3% of their total risk exposure.

Several issues need to be considered here:

The bank unsecured debt market is large and banks require regular access to the capital markets to fund themselves. Should regulators ever look to impose losses on senior non-preferred bonds, this could mean the wider bank funding

market seizes up as investors take fright. Such a scenario would likely create another financial crisis.

Regulators have pushed banks to issue more bail-in-able debt and make banks' more reliant on the capital markets for funding. So to some extent, regulation may have made the banking system more vulnerable to conditions in the wider bond market. This is evident by the central bank programs to buy bank debt during the Covid period and highlights the balancing act regulators must perform between forcing banks to issue more debt whilst ensuring banks can successfully fund themselves in the capital markets.

The Role of AT1s Going Forward

The UK and EU banking regulators recently reiterated that in the event of a bank failure, the hierarchy of claims will be respected. This is reassuring in light of the recent action by the Swiss regulator. This means that common equity holders will be first bailed-in, followed by AT1 holders.

EU authorities also recently stated that AT1s have an important role in European banks' capital structures. However, we note that last year, the Bank of England raised the issue whether banks' capital structures are too complex. It is possible over time that regulators could look to refine the role of AT1s as they represent a small slice of a banks' liability stacks. However, there is currently little if any appetite to change regulations, especially as this would require political agreement.

Furthermore, in such an instance, the question whether shareholders want to replace a \$250 billion market will need to be asked, especially given the weaker equity performance of banks in recent years.

The Role of Coupons: Deferral Risk for Weak Names

European regulators in recent years have raised the issue whether dividends on AT1s should be paid if a bank's distributable profits are low or negative. In such a case, AT1 coupons could be cancelled (they are non-cumulative). Coupons could be resumed if distributable net income is deemed sufficient. In the case of coupons being skipped, the impact on the price of AT1s would likely be material.

In light of this, investors should look to own those banks with strong profitability where coupon deferral risk is minimized. Credit selection will matter for outperformance.

Callability Considerations

AT1 securities, while technically perpetual in nature, are callable. However, many AT1s may remain outstanding for longer than initially expected as banks may not be incentivized to call these instruments which currently are experiencing unfavorable market pricing conditions; this will likely weigh on returns, at least in the near-term. Given the recent experiences of Credit Suisse and investors questioning whether they need to own the asset class, banks (in general) are unlikely to be able to refinance their existing AT1s at lower yields in today's market. Consequently, AT1 securities may extend without being called; this will likely weigh on returns, at least in the near-term.

AT1 and US Preferreds Are Different

The US preferred market is around a \$300bn with the majority comprised of bank preferreds. US bank preferreds perform a similar function to European banks' AT1s in the sense they are equity-like, sit above common equity in the liability stack, constitute an important part of regulatory capital and pay dividends that can be deferred and are not cumulative.

The US preferred market is predominantly a retail investor market as securities are sold with a \$25 par price and can trade on exchanges like the NYSE. In contrast, the European AT1 market is typically a \$1,000 par market with initial minimum order sizes of at least \$100,000 and traded OTC. European AT1s are specifically not marketed to retail investors, and in fact, the European regulator forces issuers to disclose in their prospectuses that the product is not to be sold to retail investors.

We believe these attributes likely mean US regulators may be less inclined to force losses on US preferreds given the wider wealth effect on the US retail investor market.

US preferreds do not have conversion triggers like European AT1s. In the US, the regulator has the discretion whether to convert preferreds into equity. We have not seen a case of this in the US. We have seen companies like Citigroup incentivize preferred holders to convert their holdings into equity. In this instance, preferred holders actually benefited greatly from the recovery of Citigroup's share price. However, we have seen cases of preferreds being written down to zero when a bank fails.

US preferreds also have dividend stoppers meaning that if the dividend on a preferred security is not paid, the dividend on the common equity cannot be paid. Importantly, common equity securities need to pay a dividend to be included in certain widely followed equity indices. This likely means bank management teams would be reluctant to suspend preferred dividends as doing so could mean a large drop in the price of the bank's equity as the stock would be removed from widely followed equity indices.

More Regulation—Financial Utilities

The fallout from the recent bank failures likely creates more regulation. Most likely banks will need to hold more capital and liquidity. It is worthy to note that the higher standards Credit Suisse had to adhere to in terms of liquidity and capital standards did not prevent its demise.

We expect to hear a growing cry for banks to be regulated along the lines of utilities where pricing and returns are set by regulators. The idea would be to attempt to de-risk the banking sector and reduce the wider cost to society from bank failures. Arguments will be made about how efficient a utility-type bank can be at allocating capital.

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