Seer Capital Management LP
1177 Avenue of the Americas, 34th Floor
New York, NY 10036
(212) 850-9000
www.seercap.com

US Banks To Fuel Significant Growth in Reg Cap Issuance

US Regulatory Hurdle Must be Cleared

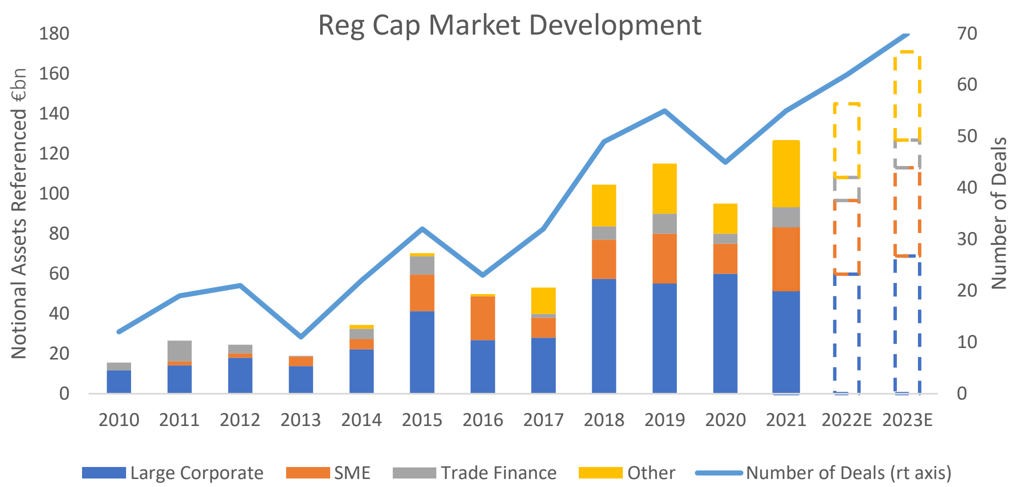
August 2022

Overview

Reg cap market transfers risk on €125 billion in loans annually and is growing rapidly

US large banks can increase the rate of growth substantially

The bank regulatory capital relief ("reg cap") transaction market has proven to be an effective tool for banks to manage their capital and balance sheets since the late 1990s. The market currently provides for the transfer of risk on an estimated €125 billion of loans per year, primarily from European banks, to a small group of highly sophisticated investors. Because reg cap transactions help so many banks manage their lending business and provide investors with attractive returns, Seer Capital expects the sector to grow at 15-20% per annum in the coming years. If large US banks are able to participate in the market, the growth rate will be substantially higher.



Source: European Banking Authority, Seer Capital Research

What Are Reg Cap Transactions?

Reg cap transactions involve the transfer of credit risk, generally in derivative format, on a specific portfolio of assets from a bank to investors in exchange for the bank's payment of an ongoing risk premium. These transactions enable banks to improve their capital ratios while continuing to lend and preserve client relationships. Reg cap transactions provide various advantages to banks including capital optimization among businesses, risk relief, expansion of credit to clients, and establishing capital market benchmarks to help price risk.

Investors in reg cap transactions earn double digit returns in exchange for taking credit exposure to diversified portfolios of assets residing on bank balance sheets. Investors can obtain outsized rewards relative to the credit risk they assume by helping banks solve a myriad of capital and balance sheet challenges.

Regulatory Challenge

Bank capital requirements are extremely complex, ever-changing, and increasing as regulators seek to reduce risks and eliminate loopholes. Banks face a significant challenge to manage capital while providing credit to support the economy and generating returns for shareholders.

Reg cap transactions improve banks' capital ratios by reducing the denominator, RWA, without shrinking the balance sheet or diluting existing shareholders

Banks must maintain minimum ratios of common equity ("CET1") to risk weighted assets ("RWA"). CET1 includes common stock and retained earnings but not alternative capital instruments such as Additional Tier 1 bonds. For many US banks, newly implemented regulations by the Federal Reserve Board require both higher minimum CET1 ratios and higher RWA calculations for the same asset portfolios. Reg cap transactions are a powerful tool for improving CET1 ratios because they reduce the denominator (RWA) without shrinking the bank's balance sheet or business and without diluting existing shareholders.

Reg cap transactions have historically been issued primarily by European banks, which have been less profitable and more capital constrained than US banks. In recent years US banks have begun to appreciate the potential of reg cap transactions to help meet capital requirements and improve risk and balance sheet management. Fannie Mae and Freddie Mac are frequent users of similar risk transfer technology in their CAS and STACR programs. Currently, regulatory hurdles prevent most large US banks from achieving capital benefits from reg cap transactions, even though the product has served as a highly effective tool for European banks over the past three decades. Once regulators remove the obstacles, Seer Capital expects significant issuance from the US which will put market growth well above our 15-20% per annum projection.

JP Morgan Capital Ratios and Targets

New Fed capital requirements are a "terrible way to run a financial system" according to Jamie Dimon

JP Morgan announced a suspension in share buybacks to meet higher bank capital requirements, as the bank currently faces a "double whammy" of higher RWA and higher required capital ratio due to adjustments in capital regulations. On the bank's 2Q22 earnings call, CEO Jamie Dimon criticized the revised capital requirements as "capricious" and a "terrible way to run a financial system."

JP Morgan's RWA ascribed to derivative counterparty exposures increased significantly at the beginning of 2022 based on the required adoption of the Standardized Approach for Counterparty Credit Risk ("SA-CCR"). Like other large US banks, JP Morgan is subject to the Collins Amendment to the Dodd Frank Act, requiring them to calculate RWA based on the higher of the standardized approach (which assigns risk weights based on broad asset categories), and the Internal Ratings Based ("IRB") approach (which relies on banks' internal risk models for specific assets). Owing in part to the adoption of the SA-CCR, the bank's standardized RWA increased by more than IRB RWA.

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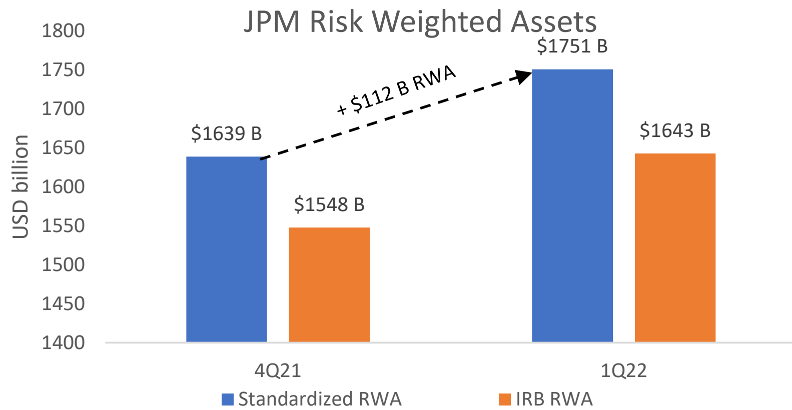
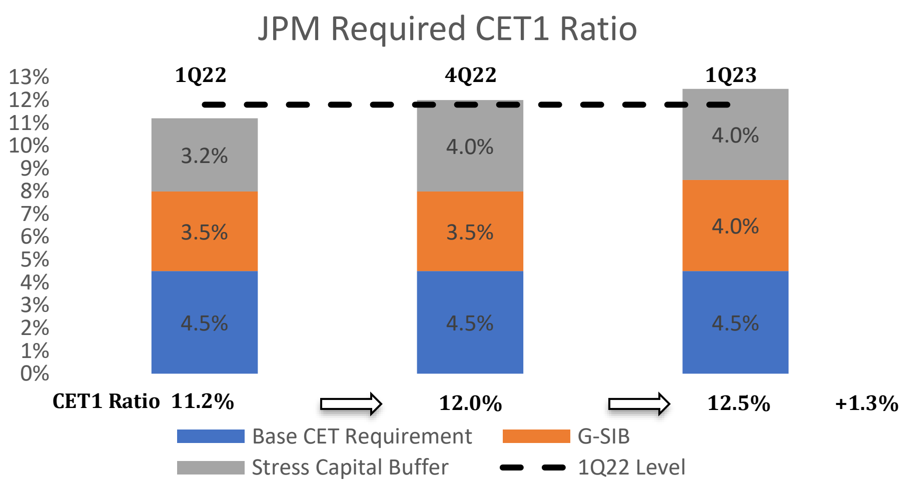


Source: JPM Company Reports

Minimum CET1 ratios set by the Federal Reserve Board include a base requirement plus bank specific buffers determined based on criteria including size and performance in stress tests. Stress capital buffers ("SCB") for US banks will be adjusted based on 2022 Federal Reserve stress test results, and Global Systemically Important Bank ("G-SIB") surcharges will increase for the largest banks. As the chart below illustrates, JP Morgan is currently below the required CET1 ratio that will apply to it as from January 1, 2023.



Source: JPM Company Reports, Bloomberg

The increase in CET1 ratio from 11.2% to 12.5% as well as the increase in RWA means that JP Morgan's common equity requirement will increase by $35.3 billion (12.5% * 1.751 trillion of RWA – 11.2% * 1.639 trillion of RWA=$35.3 billion of additional capital). This does not mean that JPM needs to raise new capital in this amount, as the bank held capital in excess of the required level at the end of 2021 and can build capital through retained earnings. However, the same regulatory changes that lead to increased RWA and higher required CET1 ratio at JP Morgan will similarly affect other US banks, with $81 billion of additional capital required at the top 4 US banks alone.

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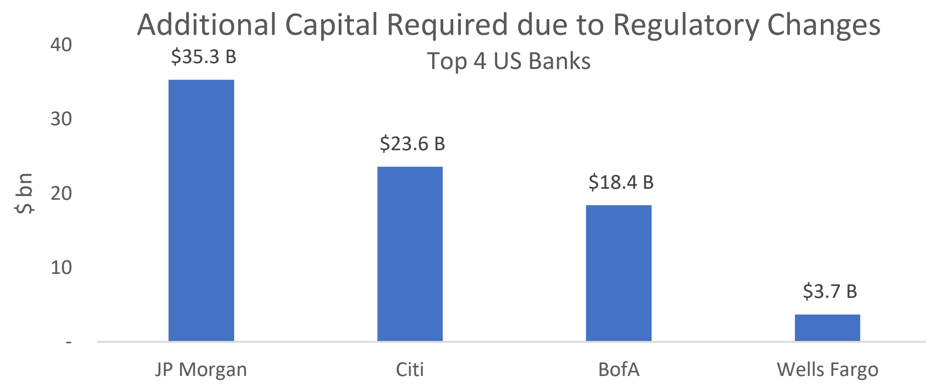
The 4 largest US banks will require substantial additional capital due to increased RWA and higher required capital ratios



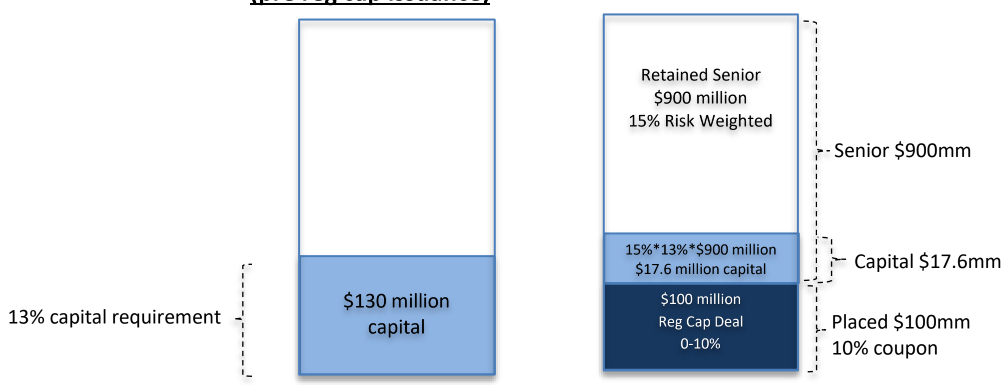
*Additional Capital Required=Revised required CET1 Ratio * 1Q22 RWA – Prior required CET1 Ratio * 4Q21 RWA*
Source: Company Reports, Bloomberg

Reg Cap Transactions Provide Banks with Cost Effective Capital Relief

The diagram below shows a typical reg cap transaction, which provides the issuing bank with capital relief at an attractive cost. The bank keeps the loans and customer relationships, does not dilute existing shareholders, and in some cases may benefit from a tax deduction for the cost of protection.

Pro-Forma Illustration of Reg Cap Relief

$1 billion loan portfolio (pre reg cap issuance) | **$1 billion reg cap transaction**



Cost of protection = 10% per annum, $10 million

$10 million / $112.4 million = 8.9% cost of capital relief

Capital is non-dilutive to existing stakeholders

Capital Required Loans 100% RW*13%*$1 bn =**$130 mm**	-	Capital Required Senior 15% RW*13%*$900 mm=**$17.6 mm**	=	Capital Relief **$112.4 million** ($130mm-$17.6mm)

15% risk weight for retained senior class of reg cap deal is based on Basel III framework

Reg Cap Transactions Provide Investors with Attractive and Stable Returns

Spreads in the reg cap new issue market have remained stable over time at about 10% above the floating rate index. Investors earn attractive returns for helping banks manage capital and for analyzing the complexity inherent in reg cap transactions. Investors experienced at sourcing and analyzing reg cap deals can identify investments where the coupon significantly exceeds the appropriate compensation for the risk transferred.

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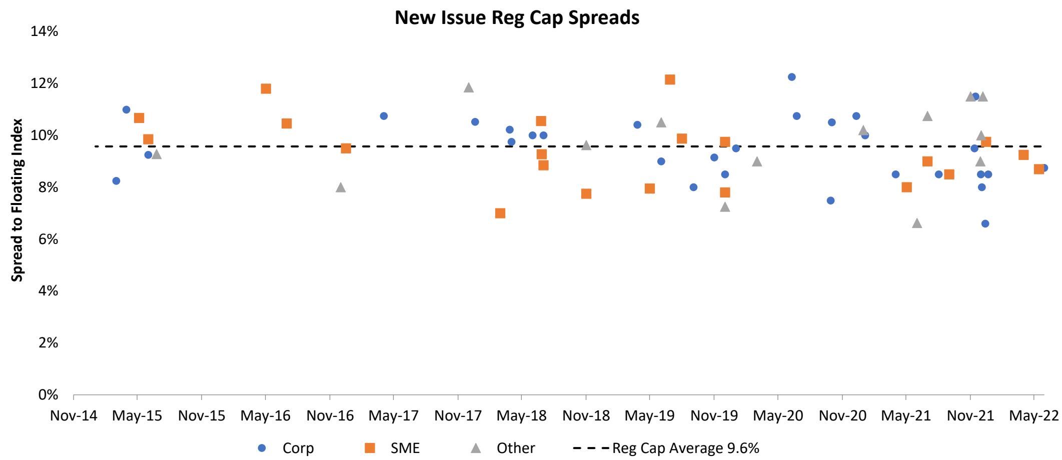
Reg cap transactions generally offer returns of SOFR + 8-12%



SME: Loans to Small and Medium Enterprises. Source: Seer Capital Research

Collins Amendment Skews Incentives for US Banks

As noted above, the Collins amendment requires large US banks to calculate RWA based on the higher of the standardized approach and the IRB approach. While this regulation was aimed at establishing consistency across institutions and avoiding overreliance on internal risk models, it has introduced the risk of unintended consequences.

Collins amendment to Dodd-Frank can motivate banks to buy protection on lower risk loans, making reg cap transactions even more attractive for investors

Effectively, under this regulatory paradigm, a US bank holding $1mm of corporate loans to two different borrowers, one with a probability of default in the next year of 1% and one with a probability of default in the next year of 2%, must hold similar amounts of capital against the two loans. Assuming the bank implements risk-based pricing for its loans, it can optimize return on capital by skewing its lending toward higher yielding, riskier loans. Conversely, assuming investors in reg cap deals accept lower compensation for less risk, <u>US banks can optimize capital benefit relative to cost by buying protection on lower risk loans</u>. This means that US reg cap deals are more likely to reference relatively attractive, low risk portfolios to optimize capital relief.

The table below shows the risk weight and resulting capital requirements for loans of different ratings under the standardized and IRB approaches. As shown, the standardized approach requires banks to hold more capital against highly rated loans but less capital against lower rated loans compared to the IRB approach.

Rating [1]	Annual Default Probability	Risk Weight (Standardized)	Capital Required (Standardized) [2]	Risk Weight (IRB) [3]	Capital Required (IRB) [2]	Capital Difference
BBB+	0.1%	100%	<u>13%</u>	26.4%	<u>3.4%</u>	<u>**9.6%**</u>
BB+	1.0%	100%	<u>13%</u>	82.1%	<u>10.7%</u>	<u>**2.3%**</u>
BB-	3.0%	100%	<u>13%</u>	114.2%	<u>14.8%</u>	<u>**-1.8%**</u>

[1] Moody's rating corresponding to 1 year default probability. [2] Assumes 8% capital + 5% buffers. [3] Source: BIS.

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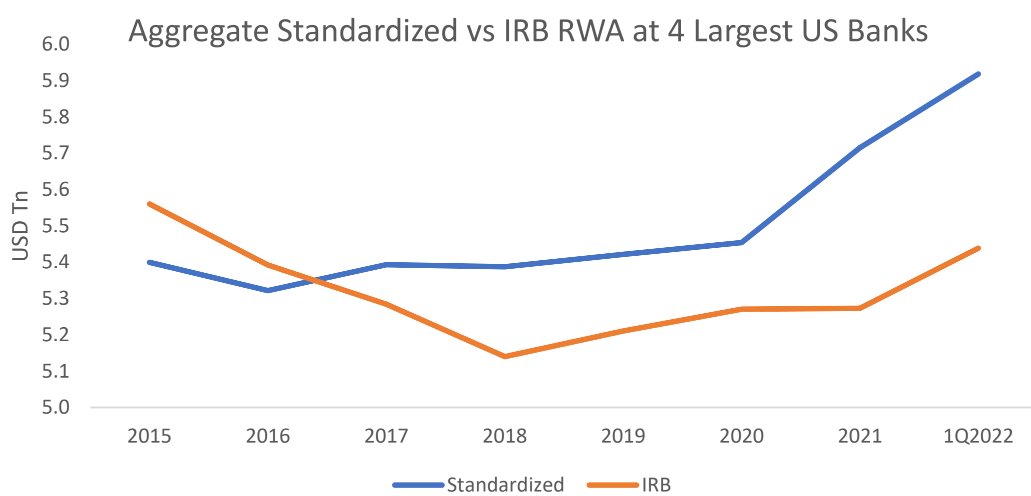
The European Parliament, adopting the Basel IV standards, will subject banks in its jurisdiction to a floor of 72.5% of standardized RWAs to be phased in by 2028. Even this "output floor" is causing consternation among European banks, as the treatment of the retained senior tranches of reg cap transactions under the standardized approach is likely to make the transactions less beneficial, barring further adjustments to the formula.

Jurisdiction	Implementation	Floor, % of Standardized RWAs	Capital Required	Minimum Capital, % of Standardized RWAs
US	Dodd-Frank Act, 2010	100%	13%	**13%**
Europe	Basel IV, phased in by 2028	72.5%	13%	**9.4%**

The trend among large US banks in recent years has been toward increasing standardized RWAs and decreasing IRB RWAs, due in part to reduction in certain complex assets which are treated punitively under the IRB approach.

Aggregate Standardized RWAs among the top 4 US banks exceed IRB RWAs by $480 billion, giving rise to additional capital requirements of approximately $62 billion ($480 billion * 13%)



JPM, Citi, BofA, Wells Fargo. Source: Company Reports

Reg Cap Market Historically Europe Focused

Reg cap transactions have historically been issued primarily by European banks, which have suffered from numerous challenges including: 1) less developed capital markets, resulting in bank balance sheets that are clogged with low-margin loans to entities with limited alternative sources of financing, 2) low return on equity, 3) shares trading below book value, making raising capital in the equity markets in order to meet required ratios dilutive to existing shareholders.

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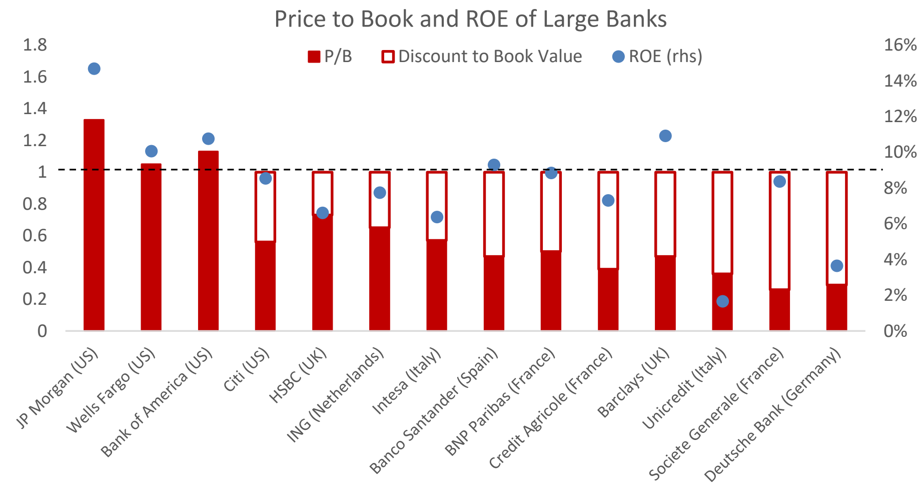
All large European banks trade significantly below book value



Source: Bloomberg, as at 7/25/22

Reg cap issuance is currently on hold at large US banks due to a regulatory issue

Reg cap transactions have become an essential tool for European banks to meet capital requirements and manage risk. Market participants have long predicted the development of the US market. Citi has been a regular issuer, and several new entrants including JP Morgan and Goldman Sachs completed transactions in 2020, but regulators have since put the brakes on the market.

Recent US Bank Reg Cap Issuance

Issuer	Pre-2020	2020	2021	2022
Citi	Regular issuer of corporate loan deals	Corporate loan deals	Corporate loan deals	On hold
Goldman Sachs	None	$3 bn corporate loan deal	None	On hold
JP Morgan	Limited issuance in late 1990s	$2.5 bn corporate loan deal Auto deals HNW mortgage deal	Auto deals HNW mortgage deal	On hold
Texas Capital Bank	None	None	Mortgage warehouse deal	
Western Alliance Bank	None	None	Mortgage warehouse deal Mortgage deal	Mortgage deal Subscription line deal

JPM's Jamie Dimon expressed his frustration over increasing capital requirements, and he is undoubtedly frustrated by US regulators' opaque position on reg cap transactions. Unlike European regulators, including the European Central Bank (ECB) and European Securities and Markets Authority (ESMA), US regulators make available little information or guidelines on reg cap transactions. According to market participants, the Federal Reserve Board and the Federal Reserve Bank of New York ceased granting capital relief to large banks for reg cap transactions in 2021,

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although smaller banks are still proceeding with transactions. See the Appendix for more detail on the regulatory issue.

<u>In an environment of economic uncertainty triggered by inflation and the threat of a slowdown/recession, it does not make sense for regulators to deny large US banks access to an important tool that enables their European counterparts to manage capital and risk without reducing profitable lending business</u>.

Particularly in light of Fannie and Freddie's chief regulator, the Federal Housing Finance Agency (FHFA), approving and encouraging the use of risk transfer technology, Seer expects US bank regulators to establish clear guidelines for reg cap transactions that will spur significant US market growth in the near term. JP Morgan has indicated that they hope to obtain regulatory clearance and complete a reg cap deal backed by European high yield loans before the end of 2022. Following that, the bank plans to buy protection on a significant volume of US large corporate revolvers in a series of transactions. Like an increasing number of European banks, JP Morgan employs a team that is reviewing all areas of its balance sheet to assess suitability for inclusion in reg cap transactions, which we expect will lead to significant issuance volume referencing a wide range of assets.

Conclusion

Reg cap transactions are a "win-win", providing banks with a cost-effective tool for managing their capital and balance sheet, and providing investors with attractive returns for the risk taken. European banks are driving significant growth in the market, with US banks lagging due to regulatory restrictions. US banks, particularly the largest banks, face increasing complexities and constraints on their business due to ever changing capital standards, not to mention headwinds from inflation and slowing economic growth. US regulators need to permit large banks to benefit from reg cap transactions, and once they do, significant pent-up supply will be released. To dimension the market, the largest 10 US banks hold approximately $6 trillion of loans on their balance sheets. Were these 10 banks to issue reg cap tranches against 5% of this volume, it would amount to $300 billion of assets referenced, compared to the current market size of approximately $120 billion per annum.

For further background see Seer's previous research on reg cap on www.seercap.com:

Title	Date
Complex Bank Capital Regulations Provide Opportunities for Investors in Regulatory Capital Relief Transactions	February, 2021
Relative Value Considerations: Regulatory Capital Relief Junior Tranches vs Double-B rated CLO Tranches	October, 2021

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Appendix: US Regulatory Issue

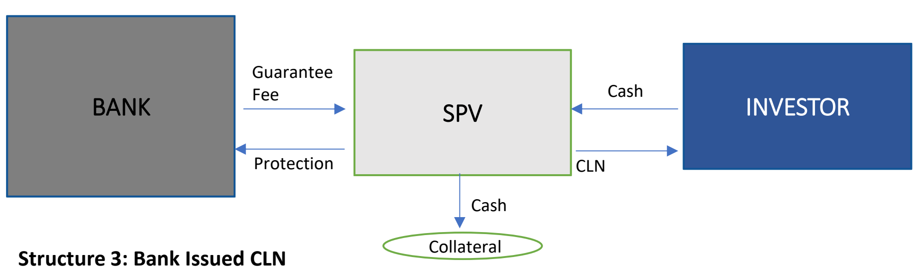
Most large banks prefer to complete reg cap transactions by issuing credit-linked notes directly off their balance sheets. These credit-linked notes are written down when losses occur on the relevant tranche of the reference portfolio (see structure 3 below). Apparently, US regulators are concerned that under this structure the investors' cash is not explicitly on deposit and available to protect the bank from credit losses on the portfolio. We believe this concern is unfounded, as the credit linked note documents only allow investor cash to be applied to compensate the bank for losses on the portfolio.

Alternative structures may obtain regulatory approval, but these are generally not feasible for large banks. The SPV structure (structure 2) would resolve concerns about the collateral because investor cash is held in an account in the name of the SPV, but the bank consolidating the SPV may be required to register as a Commodity Pool Operator, which would create burdens that would render the transaction infeasible. Bilateral guarantees (structure 1) also work, however many large banks are reluctant to assume significant counterparty exposure.

Note that, despite the concern over the CLN structure, structure 3, such transactions have been completed recently by regional banks, including Texas Capital Bank and Western Alliance Bank. This suggests either that regional Fed banks may be adopting a different stance than the New York Fed and the Federal Reserve Board, or that a different stance may apply to large vs. small banks.

Structure 1: Bilateral Guarantee

Structure 2: SPV-Issued Note



Structure 3: Bank Issued CLN