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samuel.varga@stephens.com**Financial Services: Banks - East Coast****Reason for Report:** Industry Update**Banks & the Blockchain – New Kids on the Block and Thoughts on Stablecoin****INVESTMENT CONCLUSION:**

The banking and crypto industries continue to showcase an increasingly intertwined relationship with a growing number of banks looking to provide traditional deposit and lending services, and a growing number of institutions looking to provide custody, trading, and exchange services. In the former category, we count five institutions comprised of the two lead horses, SBNY and SI, as well as MCB, and new entrants consisting of PVBC and CUBI. In the latter category, we are mindful of new charter/licensing paths with three national trust banks granted conditional OCC approval, three granted the unique Wyoming SPDI charter, and +25 granted licenses via the NYDFS. In this report, we discuss who these banks/institutions are, the varying charter/licensing paths for new entrants, real-time payments and partnerships, the composition of deposits for banks servicing the industry, and implications to SBNY if stablecoin deposits are restricted from being freely deployed.

KEY POINTS:

Traditional Banks Servicing Crypto – Room for More? - Our peer list of "digital asset focused" banks continues to expand as PVBC has recently joined the fray, along with CUBI. These two smaller players join the ranks of the two headline grabbing leaders, SBNY and SI, as well as lesser known MCB. In the immediate term we see very little impact to SBNY's outlook in the crypto space from new entrants given their standing with the most crypto-related deposits in the industry. However, we do think it's notable that others (PVBC and CUBI) are building the infrastructure to support the niche in similar fashion, which could lead to less market share capture for SBNY long term. Part of SBNY and SI's recipe for success is real-time payments across the Signet platform and SEN, respectively; however, real-time payments have emerged at other players as well with CUBI also partnering with TassatPay and PVBC standing up its own RTP network called the provXchange. On top of these, NYCB recently announced a successful, blockchain enabled, real time, secondary trading of Figure Technologies shares through the minting of a new "digital marker" called USDForward (USDF). In addition, the bank announced its plan to participate in the USDF Consortium, a "syndicate of banks being organized in accordance with anti-trust law... that will operate under a common set of compliance standards to engage customers and mint USDF digital markers for use in a broad variety of DeFi transactions" – potentially allowing for the ability for RTP across bank institutions. In addition, we recently hosted a "Banks & the Blockchain" call with Mode PLC, a U.K. based open-banking app, combining real-time payments via QR codes with bitcoin rewards – another avenue, although more likely to be utilized for consumers vs. B2B payments. In short, we think the list of digital asset focused banks is set to grow, and we're excited to see how real time payment networks evolve along with it.

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Differentiating the Deposits - We think it's important to start segmenting crypto-related deposits as we believe the source of the deposits are indicative of different characteristics and expected behaviors, particularly around stablecoin reserve deposits which SBNY has the highest exposure to with \$4.4 billion on-balance sheet. Our two main concerns with stablecoin deposits revolve around the issuers' appetite for interest on those deposits (as Circle has already articulated), and oppositely, the bank's ability to generate yield on these deposits given recent news that USDC reserves will be held entirely in cash and short duration treasuries. We believe this announcement is negative for SBNY on what their potential EPS outlook looks like on a fully deployed liquidity basis and could be a sign of "best practices" forming within the stablecoin industry as Circle and Paxos (USDP coin) now mandate reserve deposits be held in cash and cash equivalents with Facebook's Diem carrying similar stipulations. With that in mind, we adjusted our outlook for EPS on a fully deployed liquidity basis (we now estimate usable cash balances of ~65% and ~40%-45% for year-end 2022 and 2023, respectively, vs. 75% and 65%, previously, on \$21.7 billion and \$14.6 billion of cash respectively) and now estimate a potential ~7% improvement to existing 2023 EPS estimates of \$20.62 vs. ~10% previously. See Exhibit 1.

Investment Summary

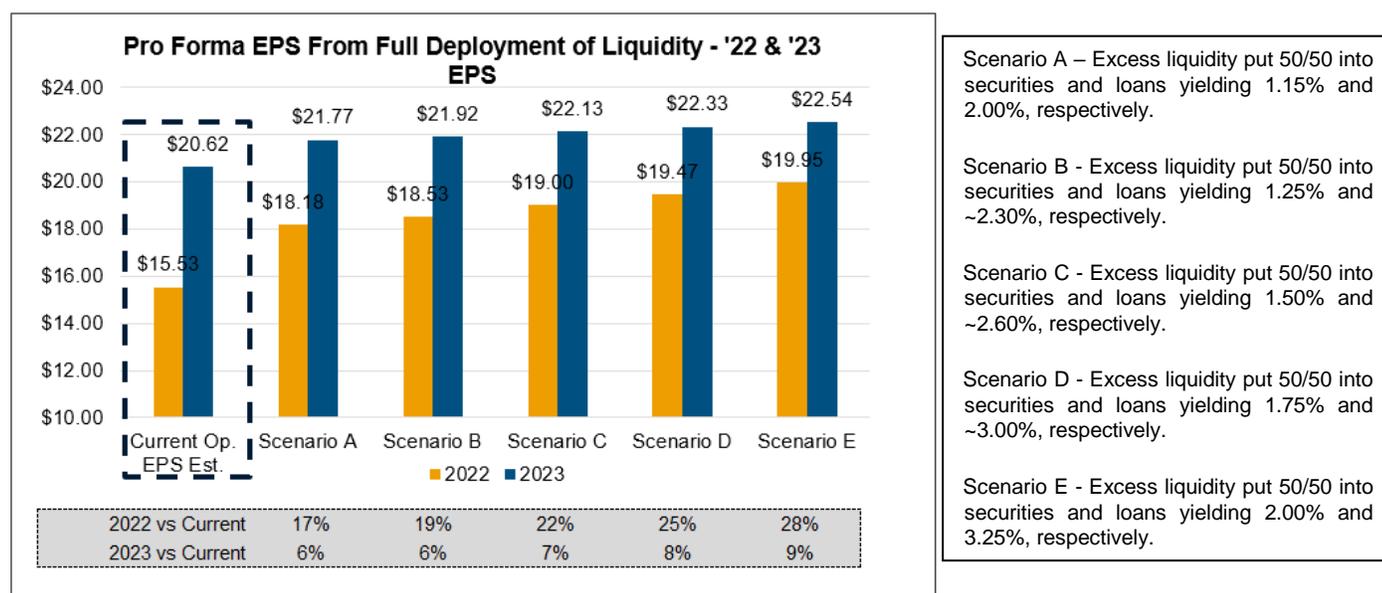
Conclusion – The banking and crypto industries continue to showcase an increasingly intertwined relationship, with a growing number of banks looking to provide traditional deposit and lending services, and a growing number of institutions looking to provide custody, trading, and exchange services. In the former category, we count five institutions comprised of the two lead horses, SBNY and SI, as well as MCB, and new entrants consisting of PVBC and CUBI. In the latter category, we are mindful of new charter/licensing paths with three national trust banks granted conditional OCC approval, three granted the unique Wyoming SPDI charter and +25 granted licenses via the NYDFS. In this report, we discuss who these banks/institutions are, the varying charter/licensing paths for new entrants, real-time payments and partnerships, the composition of deposits for banks servicing the industry, and implications to SBNY if stablecoin deposits are restricted.

Key Points:

- **Traditional Banks Servicing Crypto – Room for More?** – Recently we hosted an expert call with the management team from BankProv (ticker: PVBC) about their efforts to bank the cryptocurrency industry, joining alongside the better known players SI and SBNY with \$11.1 billion and \$17.7 billion in crypto-related deposits, respectively. Provident Bancorp is a \$1.5 billion bank based out of Amesbury, MA and while the bank's roots are similar to many mutual conversions, the path forward is anything but. Currently, the bank has ~\$95 million in crypto-related deposits (7% of total deposits), of which 85% are non-interest bearing, and balances are up 76% from \$54 million in 1Q21. Oppositely, the bank has \$45 million in crypto-related loans (lines of credit to enterprise businesses in the cryptocurrency space) up from \$15 million at year-end 2020. In addition, the bank has made investments in the payments space with a soon-to-be send/receive real-time payments platform, giving the bank seemingly many of the same offerings as other key players, but without the same scale and longevity in the space. Beyond SI, SBNY, MCB, and PVBC, we also believe Customers Bancorp (CUBI) is in the mix; recently partnering with Tassat and articulating a similar goal to the other three in regards to servicing the crypto-focused exchanges, investors, miners and related segments. While the established players have a foothold, clearly other banks are taking notice, building real-time payment capabilities of their own, and looking to crack into what so far has been a rich source of low cost deposits. That said, in the immediate term we see very little impact to SBNY's outlook in the crypto space from new entrants given their history in the space, product offering, and scale.
- **Real Time Payments** – We think it's notable that banks looking to serve the digital asset ecosystem are building the infrastructure to support the niche, including real time payments. Real-time payments have emerged at least at four of these players (SBNY, SI, PVBC and CUBI) in different forms to service the industry. For SBNY and CUBI, the banks' real-time payments network is built through its partnership with Tassat, a blockchain enabled real-time payments provider. For SI, the company's SEN network features real-time payments via API or an online banking portal. For BankProv, the company has stood up its own real-time payments platform known as the "provXchange" featuring API connectivity to PVBC's core and the ability to enact real-time transfers to other BankProv customers. NYCB recently announced a successful, blockchain enabled, real time, secondary trading of Figure Technologies shares through the minting of a new "digital marker" called USDForward (USDF). In addition, the bank announced its plan to participate in the USDF Consortium, a "syndicate of banks being organized in accordance with anti-trust law, by JAM FINTOP, and the Provenance Blockchain Foundation, that will operate under a common set of compliance standards to engage customers and mint USDF digital markers for use in a broad variety of DeFi transactions – potentially allowing for the ability for RTP across bank institutions. Furthermore, we recently hosted a "Banks & the Blockchain" call with Mode PLC, a U.K. based open-banking app, combining real-time payments via QR codes with bitcoin rewards – another avenue, although more likely to be utilized for consumers vs. B2B payments. In our view, we're in the midst of an arms race on real-time payments with each company pursuing it with the end goal of greater market share within their respective verticals. While these technologies likely mean wire, ACH and interchange fees are at risk, we continue to mull over how novel real-time payments platforms will compete and/or maintain relevance with FedNow, a Federal Reserve built real-time payments platform (24/7/365), available to all banks across the country, with a targeted release date in 2023.

- Mapping the Crypto Banking Landscape – The Who’s Who** – The five aforementioned banks are not the only ones serving the crypto industry with three banks granted OCC national trust charters in 2020 (Paxos National Trust, Anchorage Digital Bank, and Protego National Trust) and three others given Special Purpose Depository Institution charters (SPDIs) from the state of Wyoming (Avanti Bank & Trust, Kraken Bank and Wyoming Deposit and Transfer). We think it’s important to draw a distinction here as these OCC nationally chartered trust banks aren’t accepting deposits while the SPDIs can accept deposits, but given the lack of FDIC insurance, they will be 100% reserved against those deposits. In addition, more charter applications are in the pipeline including First Blockchain Bank and Trust (which, uniquely, is seeking FDIC insurance), BitPay National Trust Bank, and Figure Technologies, which along with their relationship with NYCB and NBHC, has filed for a de novo national bank charter under the name “Figure Bank, NA.” More recently, Circle, the issuer of the USDC stablecoin (27.4 billion of which are in circulation), announced its intention of seeking an OCC charter. That said, while the former crypto-embracing head of the OCC, Brian Brooks, oversaw recent OCC charter approvals, the new head of the OCC, Michael Hsu, has struck a more cautious tone noting that past crypto-related initiatives at the bank regulator are under review, a clear sign that the once open-minded regulator could be rethinking its prior stance.
- Differentiating the Deposits** - Of the five banks publicly serving crypto-related customers, we have a good breakdown of exposures for four (SBNY, MCB, SI and PVBC). Typical sources of deposits include digital asset exchanges, blockchain technology/software companies and miners, OTC desk and institutional traders, and stablecoin reserve deposits. We think it’s important to segment these deposits as we believe their source can mean different characteristics and expected behaviors, particularly around stablecoin reserve deposits which SBNY has the highest exposure to with \$4.4 billion on-balance sheet. Our two main concerns with stablecoin deposits revolve around the issuers appetite for interest on those deposits (as Circle has already articulated), and oppositely, the bank’s ability to generate yield on these deposits given recent news that USDC reserves will be held entirely in cash and short duration treasuries. We believe this announcement is negative for SBNY on what their potential EPS outlook looks like on a fully deployed liquidity basis and could be a sign of “best practices” forming within the stablecoin industry as Circle and Paxos (USDP coin) now mandate reserve deposits be held in cash and cash equivalents with Facebook’s Diem carrying similar stipulations. With that in mind, we adjusted our outlook for EPS on a fully deployed liquidity basis (we now estimate usable cash balances of ~65% and ~40%-45% for year-end 2022 and 2023, respectively, vs. 75% and 65%, previously, on \$21.7 billion and \$14.6 billion of cash, respectively) and now estimate a potential ~7% improvement to existing 2023 EPS estimates vs. ~11% previously. See below.

Exhibit 1 - SBNY Fully Deployed Liquidity Analysis



Source: Company data and Stephens Inc.

Traditional Banks Servicing the Crypto Industry:

Who Are the Players – Big and Small – The current landscape of traditional depositories servicing the crypto industry, headlined by the two big players, SBNY (\$17.7 billion in on-balance sheet crypto deposits) and SI (\$11.1 billion of crypto deposits), is evolving. Newcomers include PVBC and CUBI, explicitly identifying the crypto-industry as one they too can service, and both have real time payments capabilities, as well as MCB. Given the wealth of low-cost deposits SBNY and SI have been able to accumulate in the digital asset vertical, we expect the number of banks offering depository services and real time payments to this ecosystem to expand even beyond these five. Of note, NYCB recently announced a strategic partnership with Figure Technologies with an aim to leverage blockchain to support financial inclusion and support “a faster and less expensive payments system” and has subsequently conducted a blockchain-enabled secondary trade of digital shares of Figure Technologies. In addition, NBHC in August announced their collaboration with Finstro Holdings and Figure Technologies “on a range of blockchain related initiatives to drive innovation, speed and convenience for payments, investments and other financial transactions.” Whether these two banks take faster, blockchain enabled payments to the crypto-ecosystem remains to be seen, but given it’s a key aspect to those already servicing the industry, we wouldn’t be surprised.

Thoughts on Accepting Stablecoin Reserve Deposits – Of the five banks publicly serving crypto-related customers, we have a good breakdown of exposures for four (SBNY, MCB, SI and PVBC). Typical sources of deposits include digital asset exchanges, blockchain technology/software companies and miners, OTC desk and institutional traders, and stablecoin reserve deposits. We think it’s important to segment these deposits as we believe the characteristics and expected behaviors are different, particularly around stablecoin reserve deposits, which SBNY has the highest exposure to with \$4.4 billion on-balance sheet. As a reminder, stablecoins are a unique subset of cryptocurrencies, designed to provide some of the benefits of cryptocurrencies, such as instant payments, without the volatility and price fluctuations. For example, whereas cryptocurrency values like Bitcoin and Ethereum are arrived at through traditional bid/ask market mechanisms, stablecoins exhibit more stable prices as they are pegged to a commodity or currency, such as USDC, which is pegged 1:1 to the value of the U.S. Dollar. According to industry sources, the largest stablecoins today include Tether (\$62 billion market cap), USD Coin (\$27.5 billion), Binance USD (\$12 billion) and Dai (\$6 billion). Recently, we’ve seen a handful of banks announce partnerships with stablecoin issuers, where the bank acts as the depository for stablecoin reserve deposits. Examples include SBNY announcing its partnership with Circle (USDC) and TrueUSD, and Silvergate announcing its partnership with Facebook’s Diem. Per media articles, expectations are for the Fed to release a report on central bank digital currencies (CBDCs) in early September, which is expected to outline the risks/benefits of CBDCs as well as cryptocurrencies and stablecoins.

Exhibit 2 - Crypto Deposit Breakdown

| Crypto Deposit Breakdown | | | | | | | | | | |
|---|--------|-------------------|-----------------------------------|---------------------|-------------------------|----------------------------------|------------------------------------|-----------------------------|-------------|-----------|
| <i>figures in mil. unless otherwise noted</i> | | | | | | | | | | |
| Company Name | Ticker | Total Deposits | Digital Currency-related Deposits | % of Total Deposits | Digital Asset Exchanges | Blockchain Technology and Miners | OTC Desk and Institutional Traders | Stablecoin Reserve Deposits | Bitcoin ATM | Other |
| Silvergate Capital Corporation | SI | \$11,371.6 | \$11,115.0 | 97.7% | 48.5% | - | 35.9% | 0.0% | - | 15.6% |
| Metropolitan Bank Holding Corp. | MCB | \$5,288.3 | \$2,432.6 | 46.0% | - | - | - | - | - | - |
| Signature Bank | SBNY | \$85,562.5 | \$17,702.0 | 20.7% | 54.8% | 6.8% | 13.6% | 24.9% | 0.0% | 0.0% |
| Provident Bancorp, Inc. | PVBC | \$1,321.8 | \$94.6 | 7.2% | 32.0% | 23.0% | 23.0% | 0.0% | 20.0% | 2.0% |
| Customers Bancorp, Inc. | CUBI | \$13,873.9 | - | - | - | - | - | - | - | - |
| Mean | | \$23,483.6 | | 43% | 45% | 15% | 24% | 8% | 10% | 6% |
| Median | | \$11,371.6 | | 33% | 49% | 15% | 23% | 0% | 10% | 2% |

Source: S&P Global and Company data



Source: Circle Investor Presentation

For banks considering acting as a reserve bank for stablecoins, we think these partnerships could be a double-edge sword. On the one hand, given the size of the stablecoin market, now +\$100 billion among just the top three players, the ability to tap into a new and fast-growing source of deposits may be enticing. However, we think the devil is in the details on both sides of the balance sheet. For instance, for banks looking to benefit by bolstering their deposit base, we have concerns with how sensitive stablecoin related deposits may be to interest rate fluctuations. Why? Take Signature's partner, Circle, the issuer of the second largest stablecoin, USDC. In a recent presentation, the company highlighted that a portion of their anticipated revenue will come from interest income on reserve deposits, implying above average deposit betas. See the exhibit to the left from their investor presentation.

On the opposite side of the balance sheet, we are seeing a growing trend of stablecoins mandating reserve deposits be invested in cash and/or safe, highly liquid assets. Specifically, below is from Centre, a consortium founded by Circle and Coinbase to develop the USDC stablecoin:

"Centre requires that Centre-approved stablecoins be issued by regulated and licensed financial institutions that maintain, at a minimum, full reserves of assets denominated in instruments of the equivalent fiat currency, held in segregated accounts for the benefit of USDC holders... Circle reserves expanded beyond cash and cash equivalents in May, 2021, and the company provided a more detailed breakdown of reserve composition in July, adding clarity and insight into the funds backing USDC. *Mindful of community sentiment, our commitment to trust and transparency, and an evolving regulatory landscape, Circle, with the support of Centre and Coinbase, has announced that it will now hold the USDC reserve entirely in cash and short duration US Treasuries.* These changes are being implemented expeditiously and will be reflected in future attestations by Grant Thornton."

In addition, this from the Diem White Paper:

"The structure of the Reserve is intentionally designed to mitigate threats and minimize risks. *In order to keep Libra Networks solvent and the Libra payment system functioning smoothly over time, the Reserve will rely on only high-quality liquid assets or assets that can rapidly be converted into high-quality liquid assets. In particular, we will require the Reserve to consist of at least 80 percent very short-term (up to three months' remaining maturity) government securities issued by sovereigns that have very low credit risk (e.g., A+ rating from S&P and A1 from Moody's, or higher) and whose securities trade in highly liquid secondary markets. The remaining 20 percent will be held in cash, with overnight sweeps into money market funds that invest in short-term (up to one year's remaining maturity) government securities with the same risk and liquidity profiles.*"

As a result of these factors (potential for above average deposit betas while limited uses on the asset side of the balance sheet), we believe within the digital currency ecosystem, stablecoin deposits are the least desirable. Oppositely, we believe the highest quality crypto-related deposits are ones that mimic traditional, non-interest bearing operating accounts, and can be freely deployed into non-agency securities and traditional loans. On this topic, SBNY noted that exchange-related deposits are expected to be the least sensitive to rate changes going forward. One potential outcome to limitations banks face with stablecoin reserves is a concept Mike Cagney from Figure Technologies recently brought up on the Finnovators podcast where he said:

"What we've been able to do... is work with bank partners to create 'digital markers', which are effectively stablecoins, but with the caveat that on Provenance, because it supports smart contracts, that digital marker can have a smart contract that says 'I can only go to a KYC wallet.' And so, what you're doing is creating a mechanism where you can represent fiat; it's only going to wallets that have been passported and KYC'd and because it's a public ledger, and public registry, you can see the movement of that digital marker between wallets. And so you actually create a very regulatory compliant framework where you now have the ability to create unlimited representation of fiat on the chain and you're taking bank credit risk vs. individual corporate credit risk. And the bank is treating it as a fungible deposit, so you actually, in terms of bank credit risk, you have FDIC 'backstop' against that. I think what you're going to see over the coming quarters are that there are banks doing this right now, they're not very public about it, but that's going to be public and people will

see there will be a bank consortium that creates reciprocity of these coins with one another. You're going to see effectively, a floodgate of fiat representation on blockchain open up. So what had been a real impediment to adoption will go away and will create a ton of use cases."

With NYCB announcing news this week in regard to the USDF consortium, we think it's clear that Mr. Cagney is discussing the creation of a network of banks sharing an agreed upon "digital marker" amongst only their customers, allowing for RTP across depositories. We think an end goal of the consortium is to have banks become the issuer of "digital markers" that represent their own customer deposits, helping alleviate the aforementioned restrictions applicable to some of the better known stablecoins currently in existence. In terms of "banks doing this right now," given NYCB's recent announcement, they are one of them; however, we think it's also worth noting again that Figure to date has also announced a collaboration with NBHC. We expect more news on the consortium over the coming months.

New “Crypto” Charters – NYDFS, Wyoming SPDIs and the OCC

Crypto Trust Banks – SBNY, SI, MCB, CUBI and PVBC are five “traditional” FDIC-insured banks servicing the crypto industry in terms of accepting deposits from exchanges, institutional investors, miners, blockchain technology companies, and in some cases, acting as the reserve bank for various stablecoins. Three of these banks also offer loans to the crypto-industry with similar characteristics as a margin loan, or securities backed line of credit, and therefore are capturing both sides of the proverbial spread. However, investors should be aware of other “banks” looking to service the industry from a custody standpoint with charters or licensures from the OCC, the State of Wyoming and/or the New York Department of Financial Services. While these institutions were given “bank” charters, or licenses (if from the NYDFS), the product set is more akin to a State Street or Northern Trust vs. a traditional commercial bank with revenues stemming mostly from custody, exchange, and trading vs. spread lending. For example, below is a summary income statement and balance sheet from Anchorage Bank’s call report, filed 6/30/21:

Exhibit 3 - Anchorage Digital Bank

| Anchorage Digital Bank National Association | | |
|--|---------------|---------------|
| <i>Call report summary, figures in \$000s</i> | | |
| Summary Income Statement | 1Q21 | 2Q21 |
| Net Interest Income | 3 | 2 |
| Provisions for Credit Losses | 0 | 0 |
| Net Interest Income less LLP | 3 | 2 |
| Income from fiduciary activities | 4,554 | 7,108 |
| Other noninterest income | 94 | 525 |
| Total Noninterest Income | 4,648 | 7,633 |
| Total Noninterest Expense | 1,411 | 4,586 |
| Net Income before Income Taxes & Discontinued Ops | 3,240 | 3,049 |
| Income Taxes | 0 | 0 |
| Net Income | 3,240 | 3,049 |
| Summary Balance Sheet | 1Q21 | 2Q21 |
| Total Cash & Bal Due Dep Inst | 13,351 | 14,136 |
| Total Securities | 0 | 0 |
| Tot Fed Funds & Reverse Repos | 0 | 0 |
| Loans & Leases Held for Sale | 0 | 0 |
| Total Loans & Leases (Excl HFS) | 0 | 0 |
| Total Reserves | 0 | 0 |
| Net Loans & Leases (Excl HFS) | 0 | 0 |
| Total Trading Assets | 0 | 0 |
| Premises & Fixed Assets | 0 | 0 |
| Total OREO | 0 | 0 |
| Invest in Unconsolidated Subsid | 0 | 0 |
| Direct and Indirect Inv in Real Estate Ventures | 0 | 0 |
| Total Intangible Assets | 0 | 0 |
| Total Other Assets | 4,362 | 3,293 |
| Total Assets | 17,713 | 17,429 |
| Total Deposits (Incl Dom & For) | 0 | 0 |
| Total Fed Funds & Repos | 0 | 0 |
| Total Trading Liabilities | 0 | 0 |
| Total Other Borrowed Money | 0 | 0 |
| Subordinated Notes & Debentures | 0 | 0 |
| Oth Liabilities (Excl Min Int) | 4,094 | 1,105 |
| Tot Liabilities (Excl Min Int) | 4,094 | 1,105 |
| Total Equity | 13,619 | 16,324 |
| Balance | 0 | 0 |
| Custody and safekeeping accounts | NR | 6,613,860 |
| Summary Metrics | 1Q21 | 2Q21 |
| ROAA | 73.2% | 70.0% |
| ROTCE | 95.2% | 74.7% |
| Efficiency | 30.3% | 60.1% |
| Margin on Custody/safekeeping accounts | - | 0.43% |

Anchorage is the only recent crypto-focused bank (OCC chartered or SPDI) to have a publicly available call report. We think the summary model to the left showcases a balance sheet-light model (no loans or deposits), heavily focused on fees from fiduciary activities, and custody and safekeeping account growth (said another way, growing crypto-related assets under custody). We are impressed by the ROA/ROTCE thus far and find the 43bp margin on custody accounts as notable as we are eager to compare these metrics to others crypto-focused institutions once/if call reports are filed. For reference, the median margin on fiduciary accounts for the industry over the last four quarters has been about 55bp.

Source: FFIEC.gov and S&P Global

Charting Crypto Charters - The regulatory framework around crypto is in its infancy with institutions carving different paths towards licenses and charter approvals depending upon the timing of their application (NYDFS has the earliest license applications/approvals), flexibility (three OCC national charters were given conditional approval in 2021), and product set (Wyoming SPDI can accept deposits, but are not FDIC insured, making for a higher bar on reserve requirements). Nascent charter paths are also expected to expand as other states (Nebraska and Texas) are warming to the formation of banks that can custody crypto. That said, the debate around access to the Fed payment system continues with neither the OCC charter, NYDFS nor SPDI charter automatically granting access. In addition, the three charter/licensing paths do not yet allow for FDIC insurance (although First Blockchain Bank and Trust is pursuing it) and loans, which is generally in-line with national trust bank charters from the OCC. We are, however, seeing the OCC national trust banks find partners to facilitate loans, as is the case with Anchorage Digital Bank and Provident Bancorp (PVBC).

Below we try to highlight key points for a few of the existing charter/licensing paths:

- **NYDFS** – The New York Department of Financial Services broke ground in 2015 with their regulations on the virtual currency business, requiring individuals, businesses or those with a place of business in New York and engaged in a “virtual currency business activity” to obtain a license from the NYDFS. So far, we count +25 related licenses, the earliest of which was granted to Paxos Trust Company in 2015. Other better known companies with one of these licenses include Circle, PayPal, Coinbase, Fidelity, NYDIG, SoFi, Robinhood, Square, Bitpay and Genesis. We think it’s also important that the NYDFS has a “Greenlist” of coins approved for use, tallying 14 and including mainstay cryptocurrencies including Bitcoin and Ethereum.
- **OCC** - The former head of the OCC, Brian Brooks, cleared the way for several conditional charter approvals in 2021 including Paxos National Trust, Anchorage Digital Bank, and Protego National Trust. In fact, each of the three conditional approvals from the OCC contains the following language, “[bank name here] shall limit its business to the operations of a trust company and activities related or incidental thereto. [bank name here] shall not engage in activities that would cause it to be a ‘bank’ as defined in section 2(c) of the Bank Holding Company Act.” Said another way, these are national trust charters without deposit gathering or lending services. These banks are largely in the custody, trading and exchange business. The key benefit of an OCC national charter vs. a state charter is that the OCC trust charter makes for a much more streamlined regulatory process vs. navigating state-by-state money licensing laws. That said, the OCC has only granted “conditional approvals” to those choosing this route and despite actions taken by the more crypto-friendly Brian Brooks, the current head of the OCC, Michael Hsu, has struck a more cautious tone with comments before the Senate Committee on Banking, Housing and Urban Affairs on May 19, 2021 shown below. What these comments mean for existing OCC conditional charter approvals remains to be seen.

“At the OCC, the focus has been on encouraging responsible innovation. For instance, we created an Office of Innovation, updated the framework for chartering national banks and trust companies, and interpreted crypto custody services as part of the business of banking. I have asked staff to review these actions. My broader concern is that these initiatives were not done in full coordination with all stakeholders. Nor do they appear to have been part of a broader strategy related to the regulatory perimeter. I believe addressing both of these tasks should be a priority.” (emphasis added by Stephens)

- **State of Wyoming** - The Cowboy state has hung a big welcome sign to crypto-focused financial institutions, writing unique laws and creating a “Special Purpose Depository Institution,” otherwise known as a “SPDI.” These banks include Avanti Bank & Trust, Kraken Bank and Wyoming Deposit & Transfer (all based out of Cheyenne, WY). Unique vs. the other charter/licensing paths, SPDI can accept deposits; however, given the lack of FDIC insurance, deposit customers must be businesses with minimum balances of \$5,000 and such deposits need to be 100% reserved for in high-quality liquid assets. SPDI cannot make loans, including overdrafts.

Exhibit 4 - Charter Applications in Digital Asset Space – OCC and SPDIs

| Crypto and Digital Asset Bank Charter Applications | | | | | |
|--|-----------------|--------------|------------------|-----------------|------------------|
| Company | City, State | Bank Charter | Accepts Deposits | FDIC Insurance? | Custody Services |
| Filed/Pending | | | | | |
| First Blockchain Bank and Trust NA | Rapid City, SD | OCC | Yes | Yes | Yes |
| BitPay National Trust Bank | Alpharetta, GA | OCC | N/A | No | Yes |
| Circle Acquisition Public Limited Company | Boston, MA | OCC | N/A | N/A | N/A |
| Conditional Approval | | | | | |
| Paxos National Trust | New York, NY | OCC | No | No | Yes |
| Anchorage Digital Bank NA | Sioux Falls, SD | OCC | No | No | Yes |
| Protego National Trust | Olympia, WA | OCC | No | No | Yes |
| Full Approval | | | | | |
| Avanti Bank & Trust | Cheyenne, WY | State (SPDI) | Yes | No | Yes |
| Kraken Bank | Cheyenne, WY | State (SPDI) | Yes | No | Yes |
| Wyoming Deposit & Transfer | Cheyenne, WY | State (SPDI) | Yes | No | Yes |

Source: OCC.gov, Company data and Official Web Sources

Exhibit 5 - Charter Applications in Digital Asset Space – NYDFS

| NY Department of Financial Services - Virtual Currency-related Licensures | | |
|---|--------------|---|
| Company | Date Granted | Licensure |
| PayPal, Inc. | 2020-10* | Conditional Virtual Currency and Money Transmitter Licenses |
| Standard Custody & Trust Company, LLC | 2021-05 | Limited Purpose Trust Charter |
| Bakkt Trust Company LLC | 2019-08 | Limited Purpose Trust Charter |
| BitGo New York Trust Company LLC | 2021-03 | Limited Purpose Trust Charter |
| Coinbase Custody Trust | 2018-10 | Limited Purpose Trust Charter |
| Fidelity Digital Asset Services, LLC | 2019-11 | Limited Purpose Trust Charter |
| Gemini Trust Company, LLC | 2015-10 | Limited Purpose Trust Charter |
| GMO-Z.com Trust Company, Inc. | 2020-12 | Limited Purpose Trust Charter |
| NYDIG Trust Company LLC | 2018-11 | Limited Purpose Trust Charter |
| Paxos Trust Company, LLC (f/k/a itBit Trust) | 2015-05 | Limited Purpose Trust Charter |
| Bakkt Marketplace, LLC | 2021-03 | Virtual Currency & Money Transmitter Licenses |
| Eris Clearing, LLC | 2020-05 | Virtual Currency & Money Transmitter Licenses |
| SoFi Digital Assets | 2019-11 | Virtual Currency & Money Transmitter Licenses |
| Zero Hash LLC | 2019-07 | Virtual Currency & Money Transmitter Licenses |
| Robinhood Crypto | 2019-01 | Virtual Currency & Money Transmitter Licenses |
| NYDIG Execution LLC | 2018-11 | Virtual Currency & Money Transmitter Licenses |
| Square, Inc. | 2018-06 | Virtual Currency & Money Transmitter Licenses |
| Coinbase, Inc. | 2017-01 | Virtual Currency & Money Transmitter Licenses |
| Circle Internet Financial, Inc. | 2015-09 | Virtual Currency & Money Transmitter Licenses |
| Seed Digital Commodity Market, LLC | 2019-07 | Virtual Currency License |
| Bitstamp USA, Inc. | 2019-04 | Virtual Currency License |
| Cottonwood Vending | 2019-01 | Virtual Currency License |
| LibertyX/Moon Inc. | 2019-01 | Virtual Currency License |
| Bitflyer | 2018-11 | Virtual Currency License |
| Coinsource | 2018-11 | Virtual Currency License |
| Bitpay, Inc. | 2018-07 | Virtual Currency License |
| Xapo, Inc. | 2018-06 | Virtual Currency License |
| Genesis Global Trading, Inc. | 2018-05 | Virtual Currency License |
| XRP II LLC (Ripple) | 2016-06 | Virtual Currency License |

Source: DFS.NY.Gov

| Companies Mentioned | | | Private Companies Mentioned |
|------------------------------------|---------------|------------------|---|
| Company Name | Ticker | 9/14/2021 | Company Name |
| Coinbase Global, Inc. | COIN | \$0.39 | Anchorage Digital Bank NA |
| Customers Bancorp, Inc. | CUBI | \$38.44 | Avanti Bank & Trust |
| Facebook, Inc. | FB | \$376.51 | Bakkt Marketplace, LLC |
| Robinhood Markets, Inc. | HOOD | \$40.60 | Bakkt Trust Company LLC |
| Metropolitan Bank Holding Corp. | MCB | \$78.45 | Bitflyer |
| Mode Global Holdings, PLC | MODE-LON | \$245.38 | BitGo New York Trust Company LLC |
| National Bank Holdings Corporation | NBHC | \$36.16 | BitPay National Trust Bank |
| Northern Trust Corporation | NTRS | \$113.73 | Bitpay, Inc. |
| New York Community Bancorp, Inc. | NYCB | \$11.99 | Bitstamp USA, Inc. |
| Provident Bancorp, Inc. | PVBC | \$15.72 | Centre |
| PayPal Holdings, Inc. | PYPL | \$280.49 | Circle Acquisition Public Limited Company |
| Signature Bank | SBNY | \$268.71 | Circle Internet Financial Limited |
| Silergate Capital Corporation | SI | \$109.17 | Circle Internet Financial, Inc. |
| SoFi Technologies, Inc. | SOFI | \$15.01 | Coinsource |
| Square, Inc. | SQ | \$246.68 | Cottonwood Vending |
| State Street Corporation | STT | \$88.30 | Eris Clearing, LLC |
| | | | Fidelity Digital Asset Services, LLC |
| | | | Figure Technologies Inc. |
| | | | Finstro Holdings |
| | | | First Blockchain Bank and Trust NA |
| | | | Gemini Trust Company, LLC |
| | | | Genesis Global Trading, Inc. |
| | | | GMO-Z.com Trust Company, Inc. |
| | | | JAM FINTOP |
| | | | Kraken Bank |
| | | | LibertyX/Moon Inc. |
| | | | NYDIG Execution LLC |
| | | | NYDIG Trust Company LLC |
| | | | Paxos National Trust |
| | | | Paxos Trust Company, LLC (f/k/a itBit Trust Company, LLC) |
| | | | Protego National Trust |
| | | | Provenance Blockchain Foundation |
| | | | Seed Digital Commodity Market, LLC |
| | | | Standard Custody & Trust Company, LLC |
| | | | Tassat |
| | | | Tether Limited |
| | | | Wyoming Deposit & Transfer |
| | | | Xapo, Inc. |
| | | | XRP II LLC (Ripple) |
| | | | Zero Hash LLC |

APPENDIX A

ANALYST CERTIFICATION

The analyst primarily responsible for the preparation of the content of this report certifies that (i) all views expressed in this report accurately reflect the analyst's personal views about the subject company and securities, and (ii) no part of the analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the analyst in this report.

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Ratings Definitions

OVERWEIGHT (O) - The stock's total return is expected to be greater than the total return of the company's industry sector, on a risk-adjusted basis, over the next 12 months. EQUAL-WEIGHT (E) - The stock's total return is expected to be equivalent to the total return of the company's industry sector, on a risk-adjusted basis, over the next 12 months. UNDERWEIGHT (U) - The stock's total return is expected to be less than the total return of the company's industry sector, on a risk-adjusted basis, over the next 12 months. VOLATILE (V) - The stock's price volatility is potentially higher than that of the company's industry sector. The company stock ratings may reflect the analyst's subjective assessment of risk factors that could impact the company's business.

Distribution of Stephens Inc. Ratings

| Rating | Count | Percent | IB Serv./Past 12 Mos. | |
|-----------|-------|---------|-----------------------|---------|
| | | | Count | Percent |
| BUY [OW] | 262 | 59.82 | 66 | 25.19 |
| HOLD [EW] | 171 | 39.04 | 33 | 19.30 |
| SELL [UW] | 5 | 1.14 | 0 | 0.00 |

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