



AMERICAN  
BANKRUPTCY  
INSTITUTE

## 2019 Mid-Atlantic Bankruptcy Workshop

### **Banking and Bankruptcy**

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News from the Federal Reserve

Excerpts From May 2019 Financial Stability Report

## Overview

This report reviews conditions affecting the stability of the financial system by analyzing vulnerabilities related to valuation pressures, borrowing by businesses and households, financial leverage, and funding risk. It also highlights several near-term risks that, if realized, could interact with such vulnerabilities.

Investor appetite for risk appears elevated by several measures, and the debt loads of businesses are historically high. However, the financial sector appears resilient, with low leverage and limited funding risk. Despite volatility in financial markets late last year, our assessment of each of the four vulnerability categories is little changed since the November 2018 FSR.<sup>4</sup>

Our view on the current level of vulnerabilities is as follows:

1. **Asset valuations.** Valuation pressures remain elevated in a number of markets, with investors continuing to exhibit high appetite for risk, although some pressures have eased a bit since the November 2018 FSR.
2. **Borrowing by businesses and households.** Borrowing by businesses is historically high relative to gross domestic product (GDP), with the most rapid increases in debt concentrated among the riskiest firms amid signs of deteriorating credit standards. In contrast, household borrowing remains at a modest level relative to incomes, and the debt owed by borrowers with credit scores below prime has remained flat.
3. **Leverage in the financial sector.** The largest U.S. banks remain strongly capitalized, and the leverage of broker-dealers is substantially below pre-crisis levels. Insurance companies appear to be in relatively strong financial positions. Hedge fund leverage appears to have declined over the past six months.
4. **Funding risk.** Funding risks in the financial system are low. Estimates of the outstanding total amount of financial system liabilities that are most vulnerable to runs, including those issued by nonbanks, remain modest relative to levels leading up to the financial crisis. Short-term wholesale funding continues to be low compared with other liabilities, and the ratio of high-quality liquid assets to total assets remains high at large banks.

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<sup>4</sup> The data for the November 2018 FSR closed on October 31. All references in this document to changes in data “since the previous FSR” signify changes since that date.

# Near-Term Risks to the Financial System

As we look forward, developments in domestic and international markets could pose near-term risks to the financial system, with the ultimate effects likely depending on the vulnerabilities of the financial system identified earlier in this report. The Federal Reserve routinely engages with other domestic and international policymakers, academics, community groups, and others in part to gauge the set of risks of particular concern to these groups. The box “Salient Shocks to Financial Stability Cited in Market Outreach” presents the views from a range of financial market analysts. We review the possible interactions of existing vulnerabilities with three broad categories of potential risks identified in these conversations: stresses in Europe; risks emanating from emerging market economies (EMEs), including China; and an unexpected and marked slowing in U.S. economic growth.

## *Stresses emanating from Europe may pose risks for the U.S. financial system . . .*

European economies have notable international financial and economic linkages, and a sharp economic downturn in Europe would affect banks, markets, and the global economy. First, heightened financial market volatility in Europe could spill over to global markets, including the United States, leading to a pullback of investors and financial institutions from riskier assets, which could amplify declines in equity prices and increases in credit spreads. In addition, spillover effects from banks in Europe could be transmitted to the U.S. financial system directly through credit exposures as well as indirectly through the common participation of globally active banks in a broad range of activities and markets. Finally, the consequent U.S. dollar appreciation and weaker global demand in such a scenario would depress the U.S. economy through trade channels, which could reduce earnings of some U.S. businesses, particularly exporters. Such effects could harm the creditworthiness of affected U.S. businesses, particularly those that already have high levels of debt.

Another prominent downside risk in Europe is a “no deal” Brexit, which remains a possible outcome later in the year, even after the European Council granted the U.K. government a further extension of the Brexit deadline until October 31. Brexit calls for a significant reorganization of financial arrangements between U.K. and EU residents, and without a withdrawal agreement, there will be no transition period. Despite extensive preparation and contingency planning by both the public and private sectors, addressing all of the many legal and regulatory details would be challenging. Consequently, a wide range of economic and financial activities could still be disrupted in Europe, which could prompt reactions in global markets as well.

Another near-term risk, which was cited in the November FSR, is elevated tensions between the European Commission and Italy over Italy’s budget plan, which had raised the country’s borrowing costs and prompted worries about its long-term fiscal sustainability. These concerns have been deferred for now, as Italy and the European Commission agreed on a budget plan for 2019, but Italy still faces longer-run fiscal challenges.

## Salient Shocks to Financial Stability Cited in Market Outreach

As part of its market intelligence gathering, Federal Reserve staff conduct outreach to a wide range of market and official-sector contacts to gather their views on risks to U.S. financial stability.<sup>1</sup>

Respondents to outreach during the first quarter of 2019 prominently cited spillovers from trade policy and shocks abroad—particularly from Europe and China—as well as risks emanating from a possible turn in the U.S. business and credit cycles. Of note, the episode of heightened market volatility toward the end of 2018 drew different interpretations across respondents; while some felt that the episode heightened downside growth risks, others characterized the selloff in risky assets as a beneficial correction that would attenuate vulnerabilities and prolong the current business cycle.

### *Risks from trade are the most cited, and slowing global growth is in focus*

Trade tensions were the preeminent risk for respondents in the first quarter of 2019. While U.S.–China trade relations were the focal point, contacts also cited the risk of higher U.S. tariffs on imports of European autos and parts. Market participants were very focused on risks emanating from a generalized slowdown in growth, especially in China and Europe. Several other European risks were cited, including potentially unfavorable political dynamics, the prospect of a “no deal” Brexit, and a return of fiscal tensions in Italy.

On the domestic policy front, contacts viewed various aspects of U.S. monetary policy as potential sources of risk. During outreach at the start of the first quarter of 2019, contacts were focused on risks related to the potential for monetary policy to become overly restrictive; however, at the end of the quarter, some contacts noted the potential for excessive risk-taking, owing in part to a more accommodative monetary policy stance than had been previously anticipated. Many respondents raised concerns that the U.S. economic expansion was in its latter stages. While some respondents to the previous survey in the third quarter of 2018 had worried about the signals from the flat Treasury yield curve, a few contacts in the first quarter of 2019 volunteered that the temporary inversion of the curve—specifically, the temporary inversion between interest rates on the 3-month Treasury bill and the

*(continued)*

<sup>1</sup> Contacts included analysts and strategists at banks, investment firms, rating agencies, and political risk consultants as well as financial stability experts from central banks, think tanks, and multilateral agencies. The outreach this quarter was conducted in two periods (January and late March).

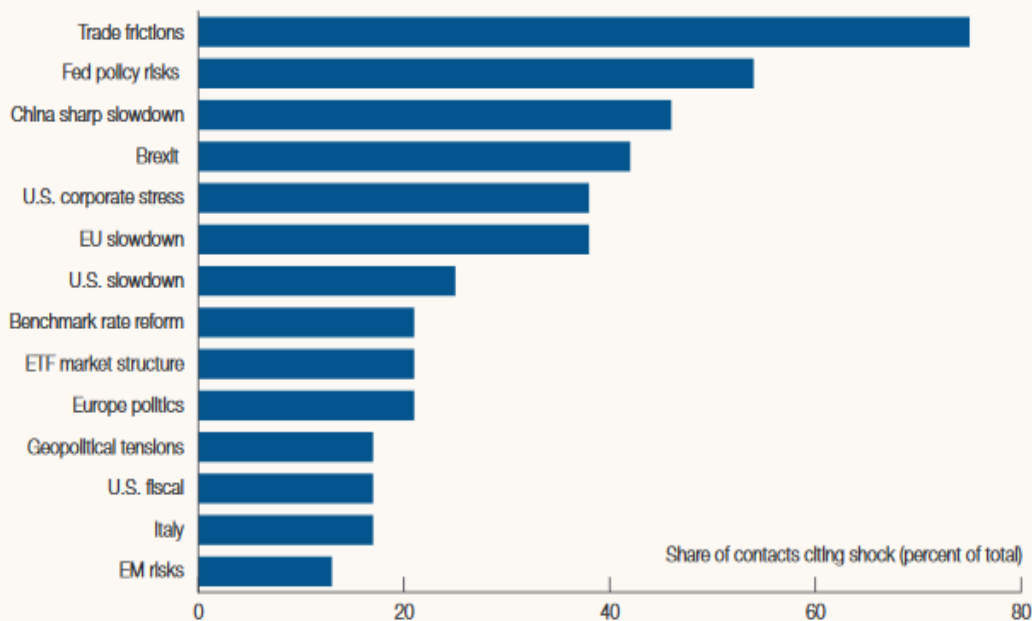


10-year Treasury note that occurred in late March—was not a cause for concern. Some respondents pointed to the prolonged government shutdown as a potential harbinger of a challenging debt ceiling negotiation that could unsettle markets. Legal and market uncertainties surrounding the transition from contracts based on LIBOR (London interbank offered rate) were also cited by multiple respondents.

### *U.S. corporate concerns increase, while emerging market concerns recede*

In the aftermath of credit market volatility in the fourth quarter, contacts increasingly focused on a turn in the credit cycle that could expose vulnerabilities in U.S. corporate debt markets, including the rapid growth of less-regulated private credit and a weakening of underwriting standards for leveraged loans. Contacts also highlighted the large volume of triple-B-rated corporate bonds and growth in retail participation in corporate credit, although respondents were less focused in the first quarter of this year on stretched credit valuations. Finally, in contrast to the third quarter of last year, only a few contacts mentioned risks emanating from emerging markets other than China, and the cited risks (for example, Argentina's elections and Venezuela's political instability) were not viewed as likely to generate meaningful spillovers to the United States.

Potential Shocks Cited in Market Outreach



Source: Federal Reserve Bank of New York.

*. . . and some risks in emerging market economies also could affect the United States*

In China, the pace of economic growth has been slowing over the past several years, and a long period of rapid credit expansion has left the nonfinancial sector highly indebted and lenders more exposed in the event of a further slowdown. Against this backdrop, developments that significantly strain the repayment capacity of Chinese borrowers and financial intermediaries—including a further slowdown in growth or a collapse in Chinese real estate prices—could trigger adverse dynamics. Should significant problems arise in China, spillovers could include a broader pullback from risk-taking, declines in world trade and commodity prices, and U.S. dollar appreciation. The effects on global markets could be exacerbated if they deepen the stresses in already vulnerable EMEs. These dynamics could tighten conditions in U.S. financial markets and affect the creditworthiness of U.S. firms, particularly exporters and commodity producers facing weaker demand and lower prices.

That said, some of the potential contributors to near-term risks in EMEs that were cited in the November report are, for now, somewhat less prominent. These contributors include trade tensions and the effects of monetary policy normalization by the Federal Reserve and other advanced-economy central banks.

*Market contacts cited the potential for a marked slowdown in economic growth as a salient risk to the financial system*

Although most forecasters expect continued expansion, market participants cited the possibility of a marked slowdown in the U.S. economy as a potential risk to financial stability, as highlighted in the box “Salient Shocks to Financial Stability Cited in Market Outreach.” Such a slowdown could affect the financial system through the balance sheets of businesses and households and through a decline in asset prices.

If the economy were to slow unexpectedly, profits of nonfinancial businesses would decrease, and, given the generally high level of leverage in that sector, such decreases could lead to financial stress and defaults at some firms. Also, given that valuations are elevated for a number of markets, investor risk appetite and asset prices could decline significantly. In addition to generating losses for the holders of the assets, a decline in asset prices could affect the financial system more generally either by impairing banks’ ability to lend or by inducing runs on withdrawable liabilities.

That said, business interest expenses are currently low relative to earnings. Shocks are less likely to propagate to the financial system through the household sector because household borrowing is moderate relative to income, and the majority of household debt is owed by those with higher credit scores. Moreover, U.S. banks generally remain strongly capitalized and hold ample liquidity. The Federal Reserve’s most recent stress tests indicate that the largest banks are sufficiently resilient to continue to serve creditworthy borrowers even under

a severely adverse scenario.<sup>11</sup> The broader financial system also has less leverage and funding risk compared with the period leading up to the financial crisis, so the effects of a decline in asset prices are less likely to be amplified through these vulnerabilities.

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<sup>11</sup> See Board of Governors of the Federal Reserve System (2018), *Comprehensive Capital Analysis and Review 2018: Assessment Framework and Results* (Washington: Board of Governors, June), <https://www.federalreserve.gov/publications/files/2018-ccar-assessment-framework-results-20180628.pdf>.

## Commercial Finance Association Education Foundation

### Excerpts from 2019 Secured Finance Market Sizing & Impact Study Extract Report

#### Summary analysis

##### Key market themes

##### Drivers of US secured finance market growth

- Overall economic growth and the avoidance of major economic slowdown
- Slowdown in pace of interest rate increases
- Commercial enterprise liquidity demand remains strong
- Regulatory landscape remains steady
- Unemployment remains low
- Innovation and alternative solutions are adopted
- Availability of talent improves

##### Trends in US secured finance market

- Private equity and hedge fund market players with significantly growing assets under management (AUM) are exerting increasing influence
- Intertwined financial system, abundant capital and resulting excessive competition for deals are putting negative pressure on pricing and weakening documentation standards
- Nontraditional market players' entry is adding to overall market size by serving underrepresented market segments, particularly in the small- and middle-market segments

##### Risks in the next three to five years

- Weaker credit documentation, underwriting standards and borrower quality caused by excessive competition on the supply side
- Trade policy uncertainty and challenges
- Rising competition from non-bank finance companies
- Rising interest rates, reducing the willingness and ability of commercial enterprises to finance
- Economic recession
  - Respondents stress that today's risks are not as great as pre-2008 crisis period

##### Regulatory framework expectations over the coming three to five years

- Overall, respondents felt a slight easing of regulatory pressures over the past 18 months and expect that trend to continue
- The current US administration is a key contributor in partial regulatory easing

Source: Study interviews

#### Service providers

Professional services play vital roles in maintaining the diversity of secured finance options available to commercial borrowers. The following describes those services primarily related to asset based lending.

##### Legal services

Behind all secured financings lie a credit agreement, a purchase agreement and often multiple other contractual arrangements necessary for protecting creditors and borrowers. Legal services arguably play the most important role in facilitating a secured financing.

<b>Competitive dynamics</b>	About a dozen national law firms have practice areas focused on ABL, with numerous regional firms also in the mix.
<b>Employment characteristics</b>	Large, national practice firms with diversified specialty practice areas can have over 100 professionals focused on ABL alone.
<b>Select economics</b>	Legal fees are billed on hours, which depend on deal complexity. Total legal billings for a typical syndicated ABL facility can amount to between 50 and 100 basis points of total commitments.



##### Transaction services

Relationships with clients commonly need to be supplemented with due diligence and, if needed, restructuring and turnaround advisory services.

<b>Restructuring</b>	There has been a meaningful level of consolidation due to competition, with three large restructuring firms holding their positions, middle-tier firms diminishing in presence, but an uptick in the number of boutique firms. The segment employs several thousand professionals.
<b>Diligence</b>	Diligence work is handled by a wide mix of transaction advisory firms.
<b>Controls audit</b>	Non-financial audit work is handled by a large number of national and local audit and advisory firms.





## Service providers

### Field exam and appraisal, valuation and liquidation services

<b>Field exam</b> Of particular importance to ABL lenders is the practice of periodic field exams that provide lenders understanding of the quality and condition of collateral and the appropriateness of the operating controls in place to make ABL lending secure.	
<b>Competitive dynamics</b>	There are about a dozen prominent independent firms, plus dozens of additional internal bank teams conducting field exams.
<b>Employment characteristics</b>	It is estimated that perhaps 250–300 persons are employed in the field exam departments of major bank ABL lenders. Independent firms employ perhaps an additional 200–300 persons, many of whom are contract employees.
<b>Select economics</b>	It is estimated that perhaps \$300 million annually is spent on field exam services, just by the top 10 ABL lenders alone. Exams costing \$200,000 and up are not uncommon for large deals.



<b>Appraisal, valuation and liquidation</b> The collateral underpinning secured finance transactions must be appraised by specialists understanding the diverse markets and avenues for liquidating if necessary. Virtually all ABL deals depend on appraisers' work to help ensure dollar amounts supporting borrowing bases are tuned to market conditions.	
<b>Competitive dynamics</b>	About a dozen prominent, independent appraisal and valuation firms serve the ABL market alone. Many more serve areas outside ABL.
<b>Employment characteristics</b>	The number of appraisal, valuation and liquidation professionals focused on secured lending are estimated to be in the 750–1,000 range.
<b>Select economics</b>	Appraisals are generally priced slightly below the cost of field exam, with most ranging from \$75,000 up to \$150,000, depending on the complexity of the appraised market. The size of the served market for valuation, appraisal and liquidation services in ABL is well in excess of \$100m annually.



## Service providers

### Technology services

<b>Technology</b> The role of technology greatly enhances the operating efficiency and potential for better serving borrowers, and will likely grow to become even more important in the future. Software for tracking borrowing base reporting, a networked tracking system for monitoring the flow of product through a supply chain, automated credit scoring systems for small ticket equipment finance, or a customer relationship management system that aggregates multiple forms of financings up to a single obligor-level view already play major roles in secured finance.	
<b>Competitive dynamics</b>	One provider of ABL software leads the space, with three or so other ABL workflow software providers in the mix. A greater number of software providers serve the overall secured finance spectrum.
<b>Employment characteristics</b>	Relatively light employment, in part based on the scalability of software.
<b>Select economics</b>	Annual maintenance contracts on software sales run about 20% of the installation costs.



**Dealing With Your Deposit Bank**  
**Common Consumer Bankruptcy Issues**

Why Is the Bank Freezing My Account?

Sections 542(b) of the Bankruptcy Code provides that a depository institution is obligated to turn over funds in a debtor's bank account to the trustee:

(b) Except as provided in subsection (c) or (d) of this section, an entity that owes a debt that is property of the estate and that is matured, payable on demand, or payable on order, shall pay such debt to, or on the order of, the trustee, except to the extent that such debt may be offset under section 553 of this title against a claim a claim against the debtor.

Therefore, if a bank, with notice or knowledge of the bankruptcy, acts at the instructions of its customer who is a chapter 7 debtor, instead of at the instruction of the chapter 7 trustee the bank could be liable to the chapter 7 trustee.<sup>1</sup>

To avoid wrongful payments under Section 542(b), freezing an account holds a great deal of appeal. Freezing an account can also be a means of preserving the right of setoff.

*Depositors Filing Chapter 7 Cases*

Some institutions, upon learning of the bankruptcy, automatically place a hold on the account and request instruction from the chapter 7 trustee.<sup>2</sup> Several courts have addressed whether this procedure is a violation of the automatic stay. The majority position appears to be that imposing a hold while waiting for instruction from the chapter 7 trustee is not a violation of the automatic stay.<sup>3</sup> A recent case found that a bank's potential liability under Section 542(b) did not justify

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<sup>1</sup> 11 U.S.C. § 542(a). A bank acting in good faith without knowledge of the bankruptcy finds protection from turnover liability by Section 542(c)

<sup>2</sup> As an example, Wells Fargo has generated a substantial body of case law by adopting an internal standard procedure of placing a temporary freeze on its bankrupt depositors' accounts. *See, e.g., In re Mwangi*, 432 B.R. 812, 824 (B.A.P. 9th Cir. 2010) (criticizing policy by stating, "[t]he impact of Wells Fargo's national policy is to turn on its head the balance of rights of parties legislatively created. As a result of the policy, every party, except Wells Fargo, whose rights are impacted by the administrative freeze will need to take action."); *but see In re Phillips*, 443 B.R. 63, 65 (Bankr. M.D.N.C. 2010) (Wells Fargo did not violate automatic stay by holding funds pending authority from trustee).

<sup>3</sup> *See In re Bucchino*, 439 B.R. 761, 775 (Bankr. D.N.M. 2010) (placing an administrative hold on depositor's account while promptly notifying chapter 7 trustee of hold and requesting instructions was not violation of the automatic stay); *In re Phillips*, 443 B.R. 63, 66 (Bankr. M.D.N.C. 2010) (administrative freeze pending instruction from the chapter 7 trustee was not a

the unilateral imposition of a temporary administrative hold.<sup>4</sup> The court reasoned that it is the role of chapter 7 trustees (and not depository institutions) to police debtors' wrongful use of funds, that debtors need to continue to use money to meet their everyday needs and that a policy of automatic freezes encourages debtors to "squirrel away secret stashes of cash prior to filing."<sup>5</sup>

*Depositors Filing Chapter 11 Cases*

The administrative freeze analysis for debtors in chapter 11 or 13 is different. Unlike chapter 7 debtors, chapter 11 and 13 debtors continue to control their assets, including their bank accounts. Some courts conclude that freezing or closing a chapter 11 or chapter 13 debtor's account, simply because of a bankruptcy filing, is be a violation of the automatic stay.<sup>6</sup> Not all courts have drawn this conclusion however. The United States Bankruptcy Court for the District of Columbia held that a bank's freeze of a chapter 11 debtor's post-petition account was, at most, a breach of contract and not a violation of the automatic stay, reasoning that the bank's contractual obligation to pay the debtor was not property of the estate.<sup>7</sup>

*The Benefits Of A Freeze To The Customer*

If the Debtor has written checks before bankruptcy that are still outstanding, or has set up automatic payments to be made from a deposit account, a freeze can be advantageous. The freeze will prevent prepetition checks presented after bankruptcy from being honored, and it will prevent automatic payments for prepetition debtors from occurring.

Why Do I Have to Change Banks?

*Approved Depositories.*

Congress enacted Section 345 of the Bankruptcy Code to ensure that a debtor's funds are not at risk of loss from the financial failure of the debtor's bank, and that funds are not placed into unwise or risky investments. Unless the Court orders otherwise, a debtor may not deposit or

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violation of the automatic stay); *Wells Fargo Bank, N.A. v. Jiminez*, 405 B.R. 915, 921 (D.N.M. 2008) (same); *In re Calvin*, 329 B.R. 589, 602 (Bankr. S.D. Tex. 2005) (same).

<sup>4</sup> *In re Weidenbenner*, 521 B.R. 74, 82 (Bankr. S.D.N.Y. 2014).

<sup>5</sup> *Id.*

<sup>6</sup> See *In re Chau*, 576 B.R. 821, 824 n.1 (Bankr. E.D. La. 2017) (finding that freeze of chapter 11 debtor-in-possession account was a violation of the automatic stay, and distinguishing chapter 7 cases); *In re Young*, 439 B.R. 211, 218-19 (Bankr. M.D. Fla. 2010) (in dicta, making the distinction between chapter 7 and chapters 11 and 13 and stating its "preliminary view" that freezing chapter 11 and 13 debtors' accounts would be a violation of the automatic stay); *In re Lee*, 35 B.R. 452, 457 (Bankr. N.D. Ga. 1983) (bank that unilaterally closed chapter 13 debtors' accounts and transferred the funds to the chapter 13 trustee violated the automatic stay). See also 11 U.S.C. §§1107, 1303. Note, however, that a debtor-in-possession must still maintain its funds in a depository approved by the UST under 11 U.S.C. § 345.

<sup>7</sup> *In re Randolph Towers Coop., Inc.*, 458 B.R. 1, 3 (Bankr. D.C. 2011).

maintain funds in banks or investments that are not: (i) approved depositories, and (ii) in compliance with Section 345.

In order to be an approved depository, the bank must pledge its own assets, on a dollar-for-dollar basis above the federally guaranteed minimum, for each dollar in each debtor-in-possession deposit account they hold. Compliance may also be achieved by posting a bond in that amount in favor of the United States. The deposit bank must sign an agreement with the UST and has reporting requirements. Not all institutions are willing to undertake these obligations.

### What Do I Do About Automated Payments

Automatic payment services enable a bank customer to make money transfers on a regular basis (i.e., daily, weekly, monthly, etc.), in recurring amounts. These services are often used to make regular payments, such as rent or installment loans. From the perspective of a debtor, it is important to prevent the inadvertent or accidental automatic payment of prepetition debts.

#### *Pre-bankruptcy Planning*

Some research and planning before filing the bankruptcy case can prevent accidental automatic payments from being made:

1. *Identify the auto-payments.* Identify all of the scheduled automatic payments, the purpose of each payment, and whether each payment pays an obligation in advance or retroactively.
2. *Determine where the bankruptcy falls in the payment cycle.* A bankruptcy filing will likely fall in the middle of various payment cycles. Because there is a prohibition on paying prepetition debt, some or all automatic payment instructions may need to be terminated before the petition date.
3. *Understand the bank's process for terminating automatic payments.* To ensure that automatic payments are properly terminated, determine the schedule of the automatic payments and each deposit bank's process (including any necessary lead time) for terminating them.
4. *Credit card automatic payments.* Steps 1 – 3 also apply if payments are made by credit card rather than directly from a deposit account.



## **Fintech and Fintech Products**

### **What Is Fintech?**

Fintech is used to describe new technology that seeks to improve and automate the delivery and use of financial services. At its core, Fintech is utilized to help companies, business owners and consumers better manage their financial operations, processes and lives by utilizing specialized software and algorithms that are used on computers and, increasingly, smartphones. Fintech, the word, is a combination of "financial technology".

When Fintech emerged in the 21st Century, the term was initially applied to technology employed at the back-end systems of established financial institutions. Since then, however, there has been a shift to more consumer-oriented services and therefore a more consumer-oriented definition. Fintech now includes different sectors and industries such as education, retail banking, fundraising and nonprofit, and investment management to name a few.

Fintech also includes the development and use of crypto-currencies such as bitcoin. That segment of fintech may see the most headlines, the big money still lies in the traditional global banking industry and its multi-trillion-dollar market capitalization.

**Source: Investopedia.com**

### **Who Uses Fintech?**

When was the last time you went into a bank branch? Do you use ATMs? Do you pay bills online or from your phone? Do you deposit checks by taking a picture? All of those "out of branch" products could be considered "Fintech".

When was the last time you used cash? Many people only use their ATM card for purchases. Some use their phones with stored value on the phone (e.g., ApplePay). Others pay for items through Paypal or send money electronically, using Zell or Venmo. More Fintech.

When was the last time you actually signed documents with a pen to get a mortgage or other loan from a financial institution or mortgage lender? Mortgage companies now gather information electronically and will send to you and receive from you electronically transmitted information (appraisals, financial statement forms, copies of tax returns, verification of income, other property information such as taxes, water/sewer, etc.). When it comes time to sign, you can sign from your computer, at home, and send the signed documents to your mortgage lender anywhere in the US.

Who uses Fintech? You do.

### **Some Fintech Examples**

#### **Zelle – How it Works, Behind the Scenes**

Banks in the Zelle network are “In-Network” banks. Banks that have not joined the Zelle network are “Out-of-Network” banks.

##### **In-Network to In-Network Transaction**

If both parties to a Zelle transaction bank at an in-network bank, settlement takes place over the normal ACH cycle. The banks agree that the funds will be made available in a matter of minutes, even though the transaction has not settled. Risk of the transaction is on the sending bank.

##### **In-Network to Out-of-Network Transaction.**

If one of the parties to the Zelle transaction uses a bank that is not in the Zelle network, funds are made available in approximately 30 minutes. The transaction actually occurs later, over the Visa and Mastercard payment rails. Risk of the transaction for is on the in-network bank.

Security offered by the “In-Network” bank is in effect.

#### **eSignature – Signing Electronically**

What it is: an identity verification program which allows for signature by clicking on a signature line and then storing the signature in an electronic “warehouse”. The verification of the identity of the signer is the most important part of the program.

E Signature documents are generally enforceable. See, the Electronic Signatures in Global and National Commerce Act (Federal law) and state enactments of the Uniform Electronic Transactions Act, other state alternatives and revised Article 9 of the Uniform Commercial Code (see, e.g., 9-102(a)(7)(B)).

While most institutions now rely on electronic signature documentation for consumer loans, some institutions are accepting electronic signatures for smaller commercial loans.

Incidentally, the following is not an electronic signature:

*John A. Smith*

JOHN A. SMITH

#### **Apple Pay/Stored Electronic Value**

The basis of Apple Pay is to store value on your phone/device for use in purchases or money transfers. You can tie a credit card or deposit account to your Apple Pay account or even store money in your Apple account (think iTunes). A reader at a vendor can read your phone to pay for a purchase or send money to others. Analogous to having a gift card – without the card.

## **Blockchain**

### **What is Blockchain?**

One of the biggest obstacles to discussing blockchain for some is the discomfort that comes from not knowing what, exactly, blockchain is. The buzzwords that accompany blockchain (distributed ledgers, algorithms and the like) do not exactly bolster the confidence of those of us who are not computer experts. Simply put, blockchain is the record-keeping technology behind bitcoin/cryptocurrency.

Delaware's Deputy Secretary of State, Kristopher Knight, gave a great explanation to those of us gathered at the New Castle County Chamber of Commerce's FINTECH conference ("Fintech Transforming the Future of Business," December 11, 2018).

He described blockchain as a network of identical filing cabinets. Each cabinet contains an identical set of records, arranged in the same order. As part of the network, the parties have agreed on a set of conditions under which a new record may be added to the cabinets. When the conditions are met, a new record is added, simultaneously, to each of the cabinets. The new record is added at the end of the existing records in each file cabinet. No one can change any of the records or take any of the records out of the file cabinets.

In other words, blockchain, boiled down to its essence, is this: a network of identical information files held by multiple users.

### **Key Characteristics of Blockchain**

Blockchain does not have a hub. Data is not stored in a central location or server. Instead, each member of the network has the same, exact information as every other member of the network. When information is added, each member receives the same thing, at the same time. There is no longer a risk that a central hub or repository of information will be compromised or breached.

The technology has other benefits. The distributed network makes the records tamper-resistant. If any member were to attempt to change an existing record, its set of records would no longer match the other sets of records in the network. The rest of the network could detect the altered records, reject them and replace them with the correct records.

Blockchain also cuts out intermediaries. The network's members deal with each other directly. This characteristic holds particular appeal for the financial world. Because financial assets are represented by electronic records, blockchain ledger entries (and by extension, transfers of cash) may be made directly, among the members of the network. This would enable the members of the network to transfer funds without using legacy systems, for faster transfers.

### **What Blockchain Is *Not***

Blockchain has suffered somewhat from its association with cryptocurrency and the dark net. Because the members of the blockchain network can be anonymous (and thus ownership of cryptocurrency can be anonymous), cryptocurrency has been used for nefarious and illegal activities. Importantly, however, blockchain is not the same as the dark net. Instead, blockchain is technological platform or structure. Said again, it is just technology. Like all technology, it can be used for purposes both good and ill.

### **The Transformative Potential of Blockchain**

Blockchain-related applications are being filed at the United States Patent and Trademark Office at a rapid pace. Mastercard International Incorporated, Nasdaq, Inc. International Business Machines Corporation, ADP, LLC and Samsung SDS Co., Ltd. are filing multiple patent applications, reflecting their commitment of resources to blockchain. As of December 27, 2018, a search on the United States Patent and Trademark Office website showed 59 patents and 377 pending patent applications whose titles contain the words “block chain” or “blockchain.” Mastercard alone has filed more than two dozen patent applications. An even cursory review of the applications reflects a wide array of potential applications for blockchain: financial transactions, payroll, fulfillment, software licensing, intellectual property management, supply chain records, health care data, food shelf life management and more.



## Cryptocurrency as Collateral

### What, exactly, is it?

Cryptocurrencies such as Bitcoin are digital currencies not backed by real assets or tangible securities. They are traded between consenting parties with no broker and tracked on digital ledgers. Bitcoin is one of the original cryptocurrencies. There is little regulatory oversight, leaving the future of Bitcoin and other cryptocurrencies up in the air. Cryptocurrencies have shown relatively low correlation to economic fundamental data and other markets, leaving technical analysis and crypto-specific news as the main drivers for analyzing them.

**Source: Investopedia.com**

### How does it fit under the Uniform Commercial Code?

Its classification may depend upon how it is used by its holder/owner.

Intangible personal property. See *Currier v. PDL Recovery Group, LLC*, 2018 WL 4057394 (E.D. Mich. August 27, 2018) (cryptocurrency accounts with Coinbase were intangible personal property whose situs is the domicile of the owner (New York), and therefore, could not be garnished through a Michigan court); *United States v. 50.44 Bitcoins*, 2016 WL 3049166 (D. Md. May 31, 2016) (Bitcoin are personal property subject to forfeiture); IRS Notice 2014-21 (March 26, 2014) (virtual currency is property subject to taxation).

### Is it a general intangible?

“General intangible’ means any personal property, including things in action, other than accounts, chattel paper, commercial tort claims, deposit accounts, documents, goods, instruments, investment property, letter of credit rights, letters of credit, money, and oil, gas, or other minerals before extraction.” U.C.C. §1-201(b)(42). But what if the asset is held out for sale?

### Is it currency, or money?

“Money’ means a medium of exchange currently authorized or adopted by a domestic or foreign government. The term includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more countries.” U.C.C. §1-201(b)(24). But...cryptocurrency is not established by any government.

*U.S. v. Ulbricht*, 31 F. Supp. 3d 540 (S.D.N.Y. 2014) (The money laundering statute uses the term “funds” and that term is defined as “money.” “Money’ is an object used to buy

things.” Thus Bitcoin which is used to buy things, is “money” and therefore “funds” within the money laundering statute.) But what if it is used for investment?

Is it investment property?

“‘Investment property’ means a security, whether certificated or uncertificated, security entitlement, securities account, commodity contract or commodity account.” U.C.C. §9-102(49).

Is it a security?

(15) "Security," except as otherwise provided in § 8-103 of this subtitle, means an obligation of an issuer or a share, participation, or other interest in an issuer or in property or an enterprise of an issuer:

(a) Which is represented by a security certificate in bearer or registered form, or the transfer of which may be registered upon books maintained for that purpose by or on behalf of the issuer;

(b) Which is one of a class or series or by its terms is divisible into a class or series of shares, participations, interests, or obligations; and

(c) Which:

(i) Is, or is of a type, dealt in or traded on securities exchanges or securities markets; or

(ii) Is a medium for investment and by its terms expressly provides that it is a security governed by this chapter.

U.C.C. § 8-102(15).

*In the Matter of Gladius Network, LLC*, SEC Administrative Proceeding File No. 3019004, Release No. 10608 (February 20, 2019) (digital coins issued as part of an initial coin offering were securities under *SEC v. W.J. Howey Co.*, 328 U.S. 293 (1946)) (<https://www.sec.gov/litigation/admin/2019/33-10608.pdf>)

Is it a commodity?

*Commodity Futures Trading Commission v. McDonnell*, 287 F.Supp.3d 213 (E.D.N.Y. 2018 (virtual currencies are commodities and subject to regulation by the Commodity Futures Trading Commission)).

Is it a payment intangible?

“Payment intangible” means a general intangible under which the account debtor’s principal obligation is a monetary obligation.” U.C.C. § 9-102(62).

**Issues:**

How do you properly document a security interest on virtual currency?

Does the lender have a valid, perfected first-priority lien on the virtual currency?

Does a lender’s lien travel remain attached to the virtual currency after a transfer in the ordinary course?

What are the barriers to the use of cryptocurrency (slow transaction times, fluctuating value, lack of recourse for fraud, stolen or lost funds).