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Megatrends in Treasury, Money and Banking

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Innovation, technology, regulation and geopolitics are intersecting and are about to change the face of treasury, money and banking as never before. Issues that appear small or incremental today could be seismic in the longer term. As markets, institutions and governments deal with these cross-currents, we could be witnessing the beginning of a transformation on a grand scale in finance.

In this series, The Carfang Group presents eleven issues that will change the financial world. We call these the "Megatrends". This article presents the eleven megatrends and invites your feedback. Subsequent articles will explore each of these in detail.

These are the eleven Megatrends which we believe will reshape our financial world over the next decade.

- **Central Bank roles are scaled back.**
- **Asset Managers overtake banks.**
- **Deposit Banking diminishes in importance.**
- **Deposit Insurance becomes universal.**
- **Private Liquidity Funds emerge as a major asset class.**
- **Technology disintermediates the intermediaries.**
- **Truly immediate payments eclipse "faster payments".**
- **20th century institutions and structures are realigned.**
- **Currency takes on a new role.**
- **Alternative currencies gain acceptance.**
- **Solutions for the underbanked take shape.**

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Central Bank roles are scaled back.

Without question, many central banks functioned superbly during the financial crisis in the dual roles of lender of last resort and payment guarantor of last resorts. They forcefully took on powers necessary to prevent a worldwide depression.

Instead of reverting to their historical role after the crisis abated by 2011, they continued to function in crisis mode and now seem to have taken for themselves an entirely new mandate of economic support. We believe that this will come under close scrutiny over the next decade and the missions of central banks world-wide will be scaled back.

Consider the following “last resort” moves that remain in place ten years post-crisis:

- Central bank balance sheets remain at levels which make them THE dominant players, distorting the financial markets rather than merely facilitating those markets. Securities on their balance sheets now stand at $23 trillion, up from $4 trillion pre-crisis.
- The Federal Reserve began paying interest on bank excess reserves in a not so subtle effort to inject capital into banks and to fund its swollen balance sheet. Long after the crisis, it still pays market interest, thereby competing for private capital while quashing the intrabank Fed Funds market.
- Operation Twist was a specific program designed to lower long term rates relative to short term rates. Many of these OT securities remain on the Fed balance sheet, impacting the shape of the yield curve today.
- Quantitative Easing and Quantitative tightening are direct attempts by central banks to impact growth levels, still ongoing today, and are not a direct part of their mandate.

Combined, these activities distort the important market signals that are necessary in robust markets.

Central bank roles will come under close examination. The debate will be intense but healthy. Should central banks be limited to their "first principles" of currency stability and lender of last resort? Or should they proactively manage world economies? We expect a tilt back toward the former.

Asset Managers overtake banks.

Commercial banks have historically been the primary conduit through which depositors and borrowers clear the market. Most individuals and businesses maintain bank accounts to facilitate transactions and savings. Similarly, for individuals and all but the largest businesses, these banks are also the primary source of loans.

Asset managers, on the other hand, provide investment management services primarily by deploying their investors' capital via the secondary markets.

That is abruptly changing in ways that are just beginning to emerge. We believe that over the next decade, asset managers will overtake banks as the primary financial institutions in both the retail and wholesale markets.

Commercial banks, long the dominant market players, saw their competitive advantage sharply curtailed following the financial crisis. They became subject to SIFI supervision, Basel III's liquidity requirements, tiered capital requirements and much more. Over the past ten years, total assets of the largest banks have been relatively flat.

Asset managers not subject to these requirements, in particular the largest three companies, have grown enormously. The "Big 3" have nearly tripled in assets since the crisis and are now larger than the largest commercial banks.

We expect that these supersized asset managers will be able to muscle into all aspects of the commercial banking franchise and radically alter the playing field. It is true that commercial banks enjoy the dual monopolies of deposit aggregation powers and payment settlement finality. However, technology will diminish those advantages (see below) to the point at which they cannot overcome their regulatory, capital and liquidity burdens.

Deposit Banking diminishes in importance.

The centuries-old deposit banking paradigm will not disappear anytime soon. But we believe it will radically change in the near future, creating significant winners and losers among financial and payments institutions. Financial institutions, especially banks, will need to reinvent themselves in some very important ways.

Deposits have long served two primary functions. They were a buffer to mitigate the uncertain clearing time for payments and they served as a repository for savings on the part of individuals who did not have direct access to the institutional markets. Rates paid on transaction deposits were negligible but that was part of the offset for transaction costs. Rates paid on savings were more competitive but slightly below market, given that banks provided the only way for retail savers to earn any return at all.

Even today, banks aggressively compete for deposits across most wholesale and retail segments.

Yet we believe this model is about to change as the cross currents of technology and regulation play out.

- On the transaction front, with faster (instant) payments will come greater certainty, leading to what we refer to as "just-in-time money". In this new world, the need for a buffer vanishes. Fintech solutions will fund these accounts as necessary and will deploy all excess funds into the money markets.
- On the savings front, technology is eliminating the friction and transaction costs that stood in the way of savers directly accessing the markets. On-line brokers and internet banks are just the tip of the iceberg. Further, traditional commercial banks are saddled with Basel III related capital, liquidity and stable funding requirements that further erode their competitiveness.

Deposits were once the holy grail of banking. That is about the change.

Deposit Insurance becomes universal.

Government insurance for bank deposits is a common safety net worldwide. By insuring a set level of deposits, governments boost depositors' faith in the banking system and encourage capital formation. Banks are assessed premiums by the insuring government agency. These premiums are generally passed along to depositors in the form of slightly lower rates or higher transaction costs.

At the onset of the financial crisis, the U.S. Congress raised the coverage amount from $100,000 to $250,000 per depositor per institution, and that has not been rolled back during the recovery. Temporarily, the limit was removed altogether for non-interest-bearing accounts.

Taking deposit insurance well beyond the safety net aspect, financial institutions and tech companies are partnering to expand coverage to all of a customer's deposits. A depositor can place funds well above the $250,000 limit with a lead participant. A servicer will take that large deposit, break it into $250,000 units and place one unit each with other banks in their network. Some networks include over 1,000 banks, enabling a depositor to place up to $250 million in a single deposit and have the entire amount insured.

While this might seem to be at odds with the spirit of deposit insurance, neither the FDIC nor Congress have taken steps to limit the rapid spread of these deposits that now exceed $1 trillion, one-eighth of the total insured deposit base. In fact, in 2018 Congress passed legislation that gave regulatory support to "reciprocal" deposits, a subset of these types of programs.

Consider, then, the rapidly approaching scenario in which ALL deposits are insured and the resulting moral hazard. A thin layer of bank shareholder capital is the only source of market discipline. The government is on the hook for all losses. That asymmetry likely

leads to outsized risk taking. Ultimately, the government will be forced to step in and de facto nationalize the banks.

Bills have been introduced in Congress, most recently in 2018, to allow the US Postal Service to take deposits and make loans. This could be the logical conclusion of unlimited deposit insurance. If the government is bearing all the risks of the banking system, the logical conclusion is that it takes over the banking system. USPS banks could be the first step in that direction.

Private Liquidity Funds emerge as a major asset class.

Like private equity funds a few decades ago, which provided a way to circumvent public markets for long term capital, Private Liquidity Funds will circumvent the public markets to enable the efficient provision of liquidity to both investors and borrowers.

Technology is enabling “just-in-time money” which will redefine “liquidity”. Sweep accounts are now available at low cost to most savers and investors. Funds can be fully invested right up to the day they are needed. Thanks to fintech advances, funds can be drawn down at precisely the time they are needed.

At the same time, regulators in the U.S. and around the world have hamstrung money market funds that focus on private sector liquidity. In 2016, US regulators implemented regulations that reduced the viability of prime money market funds. Prime funds invested in commercial paper and other private sector debt instruments. Thus, both the providers and users of liquidity were penalized. The bulk of prime fund assets flowed into government and treasury funds and are no longer available to provide liquidity to businesses. Similar regulations are currently being implemented in Europe.

Unfortunately, because of the dramatic scale-back of prime funds, the most efficient conduit between providers and users of liquidity has been significantly curtailed. The upshot will be an entirely new asset class.

Some forward-thinking asset managers have already established the first funds of this breed. They are similar to the pre-regulation 2a-7 funds but are limited to institutional investors. However, we expect these to morph into an asset class that will ultimately look very different from the current funds (MMFs, SMAs and Ultra Short Bond Funds) and incorporate the redefined “liquidity” and facilitate just-in-time cash.

Forty years ago, no one envisioned the current structure and transformative role of private equity funds. We believe a similar transformation is about to overtake the liquidity market.

Technology disintermediates the intermediaries.

Historically, banks and other financial intermediaries filled the information gap between suppliers of capital (depositors, investors) and users of capital. They also bridged the gap between risk takers and risk avoiders. Banks knew both sides of the trade and could comfortably stand between providers and users of capital who did not know each other. If a single bank did not know the counter party of a transaction, it could easily locate a correspondent bank that did.

These intermediaries lowered the transaction costs and risks (friction) that separated borrowers from lenders. The result was the rapid global expansion of trade and commerce. Fintech is changing all that in five key ways:

- Technology is fast closing that information gap. It is putting more reliable and more up-to-date information in the hands of all the parties in any given transaction, reducing the need for an intermediary.
- Social networks such as LinkedIn and others allow buyers and sellers to connect and investigate each other directly.
- Peer-to-Peer networks and microfinance schemes bypass the financial intermediary entirely.
- Technology is powering broad based sweep programs that move excess funds out of even the smallest investor or depositor accounts, the intermediaries, and directly into the financial markets.
- Intelligent technologies, such as robo-advisors, use sophisticated algorithms to bypass the traditional channels.

The upshot is that the intermediary role of financial institutions is being displaced.

Truly immediate payments eclipse faster payments.

Over the past several decades, payments have become faster, cheaper and more reliable. Checks used to take days in the mail and then days to clear once deposited. International funds transfers would pass through several banks, each taking a “lifting” fee as the funds slowly passed from originator to recipient. Fortunately, those days are over.

Now, central banks, commercial banks and payment networks are all racing each other to make payments even speedier. This is all very good since timing delays in payments and the attendant information flows create risk and uncertainty as well as wreaking havoc with cash forecasts and liquidity cushions.

In the US the Fed launched its Faster Payments task force with this statement: “The task force calls upon all stakeholders to seize this historic opportunity to realize the vision for a payment system in the United States that is faster, ubiquitous, broadly inclusive, safe, highly secure, and efficient by 2020.”

Around the globe, the UK announced its Faster Payments Service in 2008. In 2017, the European Central Bank kicked off its TIPS program (TARGET Instant Payment Settlement) with the goal of “instant” payments 24/7 within the euro area. The Monetary Authority of Hong Kong launched the Faster Payments System initiative in 2018.

No doubt, payments are becoming much faster, more secure and more universal. The benefits of these initiatives are immense.

In faster payments, funds and information, however fast and efficient, must still flow between the originator, the originator’s payment processor and/or bank, a central bank, the recipient’s payment processor and/or bank before becoming settled funds in the recipients account with finality. Even the ECB, in its TIPS communique, defined instant payments as “a matter of seconds”. That is a huge improvement. However, as high-frequency traders and arbitrageurs know, “a matter of seconds” is an eternity in financial markets.

We believe that there will be one more step beyond faster payments: truly immediate payments. These payments will settle instantly, anywhere, anytime. At present, it’s difficult to envision. Perhaps blockchain technology is providing us the first glimpse. This has the potential of eliminating the sequential process of moving money and information (however fast) among transactors, their intermediaries and their settlement network.

Alternatively, the paradigm for instant payments might come from outside the industry. Consider this analogy with railroads. In the late 19th century, railroads competed with each other to provide faster, safer and cheaper options in moving both passengers and freight between two points. Yet, even in the heat of that competition, no one within the industry considered putting wings on rail cars. Ironically, most payment intermediaries today refer to their networks as “rails”.

20th century institutions and structures are realigned.

Post-WWII, late 20th century institutions and structures are unraveling. But, because they are so ingrained in our psyche, these shifts seem incomprehensible. The magnitude and scope of their impact are difficult to assess. But we believe that this is a megatrend impacting Treasury, Money and Banking.

Trade organizations and trade agreements are coming apart or are being realigned in material ways. To see just a few underway right now, look no farther than the Pacific trade agreements, NAFTA and the EU with Brexit. Countries are subtly shifting to bi-lateral rather than multi-lateral constructs.

Structures are also giving way. SWIFT is caught in a tug of war between its nominal role as a funds transfer communication system and its externally imposed role of sanctions enforcer. LIBOR, the reference rate for several trillion dollars of actual debt and hundreds of trillions of dollars of derivatives is phasing out within the next two years. The financial world needs to be repapered!

Government-Sponsored Enterprises (GSEs) are coming under scrutiny. Agencies such as Fannie Mae and Freddie Mac that provide government guarantees in order to meet a "social good" took shape following the early 20th century's great depression. They have now grown into behemoths, and some lay the blame of the 2008 financial crisis at the doorstep of the housing GSEs. Although governments decried the size of these agencies and vowed to trim then, they have continued to grow since the crisis. Paradoxically, central banks need GSE to create the instruments that now sit on their swollen balance sheets. We believe that many of these agencies will be downsized over time.

The 20th century financial and geopolitical world is changing, and all market participants must adapt.

Currency takes on a new role.

This megatrend is counter-intuitive, but the data are clear. For decades, we've heard that we're moving toward a cashless society. One with everything on a card or in a chip. Not so.

The evidence is that, over the last decade, currency in circulation as a percentage of GDP has nearly doubled worldwide. In the US, currency increased from $800 billion in 2006 to $1.7 trillion in late 2018. That's hardly a cashless society. (Scandinavia is an exception we need to explore.)

Central banks and academia are beginning to study this phenomenon. Some key hypotheses about factors contributing to this are currently being formulated. They include:

- Convenience – It's easy to transact in cash.
- Low holding cost – In an ultra-low interest rate environment, cash is cheap.
- Privacy – Currency transactions (and barter) are the only types of economic activity that don't inherently require a corresponding exchange of data. Historically, currency has defined the underground economy. We now see an

emerging role for currency in the above-ground economy for market participants desiring and valuing privacy or anonymity.

- Store of Value – In negative interest rate environments we see in some parts of the world, there is actually an economic benefit to holding currency in order to retain value. More interestingly, in certain low interest rate environments, the low carrying costs, to many, seem like a small price to pay to hedge political or economic uncertainty.

India is a fascinating case study in progress. In November 2016, India eliminated large denominated rupee notes that represented 86% of India's currency. Citizens had the opportunity to exchange the notes for smaller denomination notes. The intent was to root out the underground economy and raise tax revenue. The ramifications were far reaching and still playing out. But Bloomberg offers one interesting conclusion: "Cash remains the most popular form of tender in India. Currency with the public has increased to 18.5 trillion rupees in August 2018 from 17.9 trillion rupees before demonetization." That is a 3% increase in currency in spite of an 86% drop in large denominated notes!

Again, economists at present are trying to understand the factors behind this trend. Obviously, however, this creates a nightmare for regulators and those managing monetary policy. The trend is both real and "Mega".

Alternative currencies gain acceptance.

This megatrend challenges the definition of money itself – the gaining acceptance of alternative currencies including crypto currencies.

In ancient times, post-barter, precious commodities were the prevailing instrument of exchange and store of value. These commodities had intrinsic value that resulted in their reliability and acceptance.

The middle ages saw the emergence of fiat currencies. They had value because a government said they had value. The problem with pre-modern fiat currencies is that they could be easily debased. A ruling body could simply turn on the printing press.

Current fiat currencies such as the dollar, euro, pound, etc. are much more stable than their predecessors. That's because they are issued and backed by the full faith and credit of sovereign governments. They are managed with a "goal" of price stability by central banks. The track record is far from perfect and debasement examples abound, but it is certainly improved.

Crypto technologies are now enabling a new genre of fiat currency: crypto currencies like bitcoin and others. They are not the product of precious metals or scarce

commodities. They are not issued by governments (yet). They are not "full faith and credit" instruments. They are not managed by central backs. Proponents insist that this litany of "they are nots" is actually a benefit, not a shortcoming.

Following the Subjective Theory of Value, crypto currencies have value because buyers and sellers believe they have value. They are fiat currencies without governments or central banks. Adherents argue that frees them from manipulation by governments or central banks and creates a universal value.

Air-BnB, Uber and Lyft offer instructive examples. After all, who would invite a total stranger to spend a night in their homes or jump into a stranger's car. A key thing these companies provide to the gig economy is a decentralized mechanism of trust (in contrast to the trusted "central" bank). In doing so, they have transformed industries. This could be the trajectory of certain crypto currencies.

We believe that some alternative currencies will become mainstream. While they might not be both a universal store of value and medium of exchange, some might take hold as settlement vehicles for specific types of payments. Others, because of their distributed processing security, could be liquidity vehicles. Still others, because of their global nature, could eliminate the need for foreign exchange in global trade. We'll explore the profound implication in later megatrend articles.

Solutions for the underbanked take shape.

30% of the world's population do not have bank accounts. Many more do not have access to a basic set of banking services. They must either transact in cash, barter or use third party payment services, which tend to be very expensive. Check cashing services, payday lending, money orders, money transfer services, etc. provide the underbanked with some ability to make payments, but at a high cost.

The economic impact is significant. In addition to the direct cost that the underbanked pay to access the financial system, there is an even greater cost in terms of lost economic activity. The inability to easily transact reduces the level of transactions and depresses commerce and trade.

Fortunately, new technologies could provide economically viable solutions for the underbanked in the three most critical financial functions:

- Payment system access – Currently, people and businesses need a bank account to initiate or receive payments. Solutions developed by payments intermediaries and enabled by blockchain will provide the underbanked with payment services, conceivably bypassing the banking system altogether.
- Store of value – Blockchain could become the system of record for certain types of financial assets. This promises to allow the underbanked to safely and

securely accumulate financial assets without having bank accounts. Assets could even be denominated in traditional central bank currencies or in crypto currencies.
- Access to capital – Peer to peer lending and micro finance are already providing non-traditional access to capital for the underbanked. Technology will accelerate this trend and make these services available to a larger population.

Bringing the underbanked into the mainstream of the world's economies creates opportunities that are difficult to fully appreciate. Increased economic activity, improved standards of living, expansion of markets are just some of the benefits that await.

In Conclusion, this paper has presented eleven megatrends impacting treasury, money and banking on a global scale. Some of these trends are natural extensions of technological innovation, others are regulatory work-arounds or the result of geopolitical forces well beyond the control of any single jurisdiction. The Carfang Group believes that each of these megatrends, individually, are transformational and collectively point to a potential radical change to the financial system.

Future articles will consider each of these megatrends in greater depth. We welcome your feedback as we embark of this exploration.

About the author:

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