

Spring 2018

Exchang Association for Financial Professionals' Quarterly Magazine

Ready or NOT Change is coming. Are you ready?

Survey: Treasury and finance ill-prepared for fintech

The opportunity and challenge of tax reform

How secure is blockchain?

A new start for FP&A

Plus: The newest class of CTPs, CTPAs



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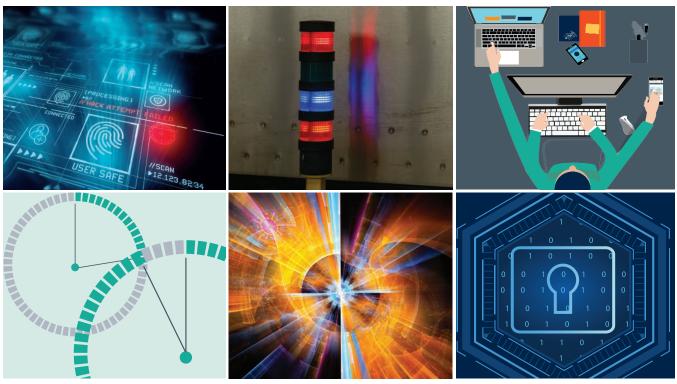


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LETTER FROM THE PRESIDENT & CEO



JIM KAITZ, PRESIDENT & CEO

HAPPY HOMECOMING

Dear AFP Members,

t's great to see corporate tax reform finally take effect. It's even better to see so many companies already taking advantage of it by investing some of their newfound tax savings and repatriated cash.

But treasury and finance executives can do more.

We know how challenging the old corporate tax rate was for resource allocation. We voiced our concerns for years about it, and Congress finally listened. It is incumbent upon us to show that our concerns were legitimate and take advantage of the lower rate.

Here's one suggestion: Spend some of the money on training your finance staff.

After all, treasury and finance executives know that updating employees' skills and closing the talent gap are absolutely critical in today's rapidly changing world.

According to a recent study published in the Harvard Business Review, the percentage of workers who received employer-funded training decreased from 21 percent in 2001 to 15 percent in 2009. That trend must be reversed, and now we have the resources to do it.

AFP offers a wealth of training and certification to improve your team's skillset:

We have two world-class certifications—the Certified Treasury Professional and the Certified Corporate FP&A Professional. Earning either accreditation will ensure your employees are on the cutting edge of their respective treasury or finance careers.

AFP also offers live and online instructor-led group training exclusive to your team, complete with customized agendas and delivery length. These courses will help you level-set your team's skills and teach new ones quickly and efficiently throughout the entire department, on any continent.

There is so much change occurring in the workplace today. Treasury and finance cannot afford to wait for staff to learn new skills on their own, or new employees with updated skills to join the organization.

More than anything, corporate tax reform presents an opportunity. I urge you to grab it.

Sincerely,

Jim Kaitz President and CEO



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CURRENT EVENTS

Rate Treasurers ponder the impact of corporate tax reform

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ANDREW DEICHLER

he tax-reform plan that passed at the end of 2017 has been categorized as a big win for businesses. But will the legislation induce corporates to substantially shake up their investment plans, using repatriated cash on capital expenditures?

Cutting the tax rate

The tax bill reduced the corporate tax rate to 21 percent. While proponents of the bill posit that lowering the rate on repatriated earnings would cause corporations to invest that money in the United States, there has been speculation that companies are much more likely to return money to shareholders. Wells Fargo CEO Tim Sloan even said at a Goldman Sachs investment that's exactly what his organization plans to do, and a much publicized video of National Economic Council Director Gary Cohn speaking to a room full of Wall Street executives indicates a similar outcome.

A corporate treasurer who spoke under condition of anonymity said that his organization is likely to follow this path. "I just don't see any change on my investment policy based on the tax bill, primarily because it doesn't change my pre-tax ROI," he said.

However, Marko Papic, senior vice president and chief geopolitical strategist for BCA Research, cautioned that these incidents shouldn't necessarily be used as barometers for gauging what corporates might be poised to do with any extra money this bill affords them. He stressed that the Cohn video in particular is "not empirical, it's not data—it's just a room full of dudes. We don't really know what companies will do."

Papic added that previous repatriated foreign earnings went into stock buybacks and not investment, with the most recent example being the Bush tax cuts of 2004. "We also know that the marginal tax rate for corporates is already fairly low," he said. "So it's unclear to what extent that will stimulate the economy."

Jeff Johnson, CTP, CPA, chief financial officer for Amesbury Truth and Chairman of AFP's Board of Directors, sees many companies utilizing the tax cuts primarily to pay down debt or buy back shares. "The question is, how much will be used to invest in individuals or capital," he said.

CURRENT EVENTS continued

Johan Nystedt, vice president, treasury for IR Conagra Brands, doesn't expect a big shakeup; he sees most companies adhering to the capital allocation plans that they already have in place. And if companies do make any changes as a result of the tax bill, he doesn't anticipate anything radical. "It's going to be a mix of investment in the business, capex, etc., he said. "And there will be things that benefit shareholders directly, like dividends and share repurchases."

Thus far there are high-profile instances of companies announcing wage increases and one-time bonuses from repatriated funds—namely Walmart, American Airlines and Bank of America.

Capex deduction

There is one provision in the tax bill that could potentially spur U.S. corporates to spend more money at home, and soon—for the next five years, companies can fully deduct their capital expenditures. "Unlike the reductions in tax rate, U.S. firms only benefit from this change when they deploy capital on qualified property and equipment at home, an unambiguously stimulative change," Papic wrote in a note to clients.

The IRS already allows accelerated depreciation of capex; the new tax bill just brings it forward. BCA's analysis suggests that this could lead to a change in corporates' spending behaviors in 2018. "We are already seeing capex recovery in some sectors, and we think this could stimulate further capex recovery," Papic said.

For example, a company's 20-year capex strategy might include plans to build a factory or do some natural resource exploration. "You might want to just accelerate those plans over the next five years," he said. "One company's capex is another company's incentive to hire. So it's a virtuous cycle."

Recession looms?

Papic noted that the risk of introducing a tax plan that is fiscally profligate in the late stages of an economic cycle can stimulate the economy considerably, prompting the Federal Reserve to raise interest rates. "This is a stimulus that is not really necessary, so it could bring forward a recession that was going to come anyway," he said. "We're going to have a recession at some point; it's natural to do so. The question is when."

An early indicator that a recession is brewing is the Treasury yield curve, which has been flattening significantly. "The 10-year yield is being kept fairly stable, whereas the short-term interest rates are rising, in expectation that Federal Reserve will raise interest rates," Papic said. "The yield curve usually leads a recession by 12 to 16 months and if the tax bill does prompt the Fed to tighten rates faster, because you have this late stage stimulus, then those interest costs become a burden on households and corporates, and we'll have a recession."

Nevertheless, Papic stressed that this looming recession is not an "apocalypse"; currently, there aren't the kinds of imbalances in the economy that existed in 2007-2008. "So this recession could actually be quite mild, and relatively tame," he said.

Nystedt agreed. "There were so many factors that contributed to the 2008 recession," he said. "My sense is that we are in a better spot than we were back then. I think a lot of people are going to say that the equity markets are very highly valued, and there is going to be a correction to that at some point. But a market correction and a recession are two different things."

But Papic warned investors and corporates against misjudging the Fed. "We could see nominal GDP growth this year, between 4 and 5 percent. That wouldn't be completely crazy," he said. "And if that happens, the Fed will raise rates four times. That's a certainty. And that, I think, would bring forward a recession in 2019."



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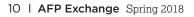
GLØBE Trotter

Frank Sansone handles corporate treasury for foreign banks

IRA APFEL

he prospect of doing business in China is always on the mind of corporate treasury and finance executives. Now, China has come to America. In 2016, the People's Bank of China awarded the Bank of China New York branch clearing-bank status for the new U.S. RMB trading and clearing hub. What does that mean for corporate treasury and finance? Frank Sansone, for one, is excited.

Sansone is the treasurer for the New York branch of China Construction Bank—the second largest bank globally. He's also the former treasurer of Belgian company, Dexia America, as well as the former treasurer of the National Bank of Kuwait U.S. operations. He recently spoke to AFP Conversations podcast about this new RMB development and his treasury-related travels.



"I think that part of it, is when you're treasury, it's treasury. There's certain standards, targets, and objectives that you want to achieve. Whether you're in a treasury in Kuwait, or in a French/Belgian/Luxembourg bank. I think if you remain curious about not only the business, but the people you operate with, it's a great opportunity."

Ira Apfel: What did the People's Bank of China announce exactly, and what's the impact on treasurers, and CFOs?

Frank Sansone: There are actually two currencies in the trade for the Chinese currency—the renminbi has an onshore, which is considered the CNY, and an offshore, which is the CNH. Until very recently, until only four or five years ago, you were restricted to transact only onshore with the CNY.

In 2010, they launched the first clearing hub in Hong Kong, and that enabled banks to trade, or corporates to actually transact offshore. What has developed recently, through the Bloomberg RMB Working Group, was it coordinated the actions of the four largest Chinese banks in the United States, and 10 very large U.S. and international banks and the PBOC to launch a currency hub in the RMB, the CNH offshore currency in the U.S. The objective is a true benefit for the U.S. corporates to level the playing field for U.S. corporates in transaction in China. Ira Apfel: Give me some examples of how it would help level the playing field for corporates, and treasurers doing business in China.

Frank Sansone: Good question. The main focus for any treasury is twofold: One is risk management, and the second is maximizing returns for the company, whether that be through enhanced returns, and/or cost efficiencies. How will this work? It will translate significantly to a number of significant positive effects. One will be an increased liquidity for RMB transactions. As anybody in the markets know, bankers, treasurers etc., increased liquidity translates to better pricing.

Currently, most of the market activities for the RMB occur in Asia times. As a consequence, for those that operate in Europe, there's less liquidity, and that's been improved with the launch of a RMB clearing hub in London the last couple of years. If you look at the U.S., you will see a significant drop [in liquidity], so if you actually want to try and hedge, and manage your risk in RMB in the U.S. times, you're not going to get great prices. This enhanced liquidity translates into cost efficiencies. Standard Charter estimated that with a local hub in the U.S., U.S. corporates can save anywhere from 2 to 3 percent on their transactions.

Finally, there's a transparency in the ability to understand your pricing. Currently U.S. corporates are usually dealing in U.S. dollars only, so as a consequence, they're really only dealing at the mercy of the Chinese counterpart, so they don't really understand, or even have an idea of what the currency hedging costs are for their counterpart. As a consequence, they're probably paying a lot more in the U.S. dollar contract, than they would in the RMB contract. Ira Apfel: You've been doing treasury with foreign banks since 1987. How did you get involved in that? Frank Sansone: It's been a world of fun. My first bank was actually an Israeli bank, and then I left two years later, I went to the National Bank of Kuwait. The joke at the time, was I was the Henry Kissinger of banking, because I was navigating the path between the Israelis and the Kuwaitis.

I think that part of it, is when you're treasury, it's treasury. There's certain standards, targets, and objectives that you want to achieve. Whether you're in a treasury in Kuwait for example, or in Dexia, which is a French/Belgian/Luxembourg bank. I think if you remain curious about not only the business, but the people you operate with, it's a great opportunity.

I parted ways with Dexia, and the opportunity to work with China Construction Bank appeared, it seemed like a perfect fit for me. I think if you respect people, and if you're culturally curious, and you respect people for their culture, and their beliefs, and you treat people fairly, equally, and respectfully, then you can operate, and achieve good success.

Ira Apfel: How much traveling do you do?

Frank Sansone: I do quite a bit of traveling, and it's really part of the fun. I've traveled all over the Middle East, all over Europe, and parts of Asia.

Ira Apfel: What's changed over the years? Frank Sansone: What has changed is the key players. When I look at 10, 20 years ago, the top banks in the world were not the Chinese. They were American banks, and European banks. What's really interesting is to be aware that who is on top today might not necessarily be on top tomorrow. You need to look forward, and think about who's going to be where. It's one of the reasons I joined China Construction Bank. It's clear and obvious that China is a growing place in the finance and corporate side.

Ira Apfel: What frustrates you?

Frank Sansone: Probably the additional enhanced regulatory environment. I think the pendulum has swung a little bit too far in the direction of too much regulation, and it's certainly hindered a lot of the growth of the banks.

Ira Apfel: What are you most optimistic about? Frank Sansone: I'm most optimistic about the direction of where the global economy is going. I think that the China growth model is going to continue, and I think that there's a tremendous opportunity for U.S. corporates, and other countries to just participate in that growth. I think that with advanced technology and innovation, here's just a lot more that can be done in this sphere.

Download the entire interview, and more AFP Conversations, at www.AFPonline.org/Conversations.

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The deadline for your materials is June 15, 2018.



2018 New Year's Resolutions

It's never too late to start fresh

BRYAN LAPIDUS, FP&A



I want to be like Max.

The Wall Street Journal featured an article about Max Deutsch who challenged himself to "a series of monthly tasks that were ambitious bordering on absurd." Solving a Rubik's Cube in 17 seconds, learning to play the sitar, sketching an accurate self-portrait. Challenging chess grandmaster Magnus Carlsen. Max has a love for learning new things, and apparently the time to set for himself a goal of learning something new each month.

I am inspired to follow in Max's footsteps, although I do not have the kind of time he has to devote to this effort, nor am I about to learn how to land a standing back-flip. So, in the spirit of New Year's resolutions, and tailored for the AFP audience, I will put forth my goals for 2018 of things to learn and do, one for each month:

Get smart on blockchain.

This is on the list of things I should have done by now. I bought Blockchain Revolution by Don Tapscott book after attending his session at the AFP Conference in San Diego, but really I have just been watching from afar. This year, I will actually read the book and think about how it could impact my company and my personal life.

Meditate.

More than a decade ago, the CFO of my S&P500 company talked about the benefit of meditation, and distributed a CD of how to teach yourself how to do. I still have the disk, but have not listened to it. However, there is sufficient scholarship and devotees who extol the benefits of meditation: Reduced stress and anxiety, improved concentration and attention span, improved emotional health and self-awareness, and improved mental health.

2 month focus on data management!

- Focus on data science and data visualization. I will start with an online course to introduce me to the topic and of course, look through AFP guides and materials on this topic. However, study without application is like a sandwich with only bread, so that leads to...
- Learn a data management package. I have people on my team who mine data for me to look at...that is not good enough anymore. "Database thinking" is so important to how the world works that outsourcing this activity is contrary to the current and future trends in the workplace—self-service applications and an intuitive understanding of data. There are several competing packages with free trials that the hardest part is deciding which one; it is better to choose one and go forward than to equivocate.

Refresher on statistics.

This could be a third bullet under data science, as we are bombarded with so much information that managing it well is more important than ever. Also, with volatility becoming the new normal, understanding probability becomes more important in forecasting and understanding the options in front of us and remaining agile in our thinking. So many options here, the challenge is which topic and through which channel. In order to keep this "attainable" and "time-bound" (in SMART goal terms, I am leaning towards an online class.

FP&A FORESIGHTS continued

Up my Excel game.

Nhave gotten to the point in Excel where I know what I know, but have not advanced beyond that. To keep me growing, I will sign up for weekly Excel tips to be delivered to my inbox, look for new applications in my every day activities, and also look for an online class.

Set an athletic goal.

How does an athletic goal make a list of ways to improve my game at work? Per the Harvard Business Review, "Studies indicate that our mental firepower is directly linked to our physical regimen. And nowhere are the implications more relevant than to our performance at work. Consider the following cognitive benefits, all of which you can expect as a result of incorporating regular exercise into your routine:

- Improved concentration
- Sharper memory
- Faster learning
- Prolonged mental stamina
- Enhanced creativity
- Lower stress

My goal is go back to something I did before I had kids: Complete a metric century bike ride. My kids are now old enough that I will try to coax my family into joining me.

Wake up early every morning.

This may be the hardest thing on my list. I am not morning person, but I tired of my morning-loving friends who gloat about how much they get done before I finish my first cup of coffee. I am a night-owl by nature; I love the hours when the house is quiet and I get to organize myself. However, as I get older, it is harder to be productive at late hours, and there is an increasing body of evidence of the mental impairment that comes with getting a good night's sleep. Forbes reported a list of ten advantages that come with waking up early, including easier commutes and quiet time in the office; a feeling of being in control, optimism, better planning and being proactive; better sleep rhythms (assuming that I can go sleep earlier). No more snooze button for me.

Keep a work journal.

How can we lift ourselves out of the thicket of to-do lists and inbox paralysis? Take note of where you are and where you are going. HBR notes four benefits to a work diary: focus on what matters, patience, planning and personal growth. I can search the web for writing prompts to help get started. What tasks energized me or drained me this month? What do I like or dislike about my colleagues? What are some positive and negative things about my work environment? Is there anything I can do to be happier at work? What are some pros and cons about my current job? Notice the strengths of people around me and give credit or compliments in my journal, which will flow into my verbalizing them in person.

Reacquaint with old friends and colleagues.

Expanding your social network is a good thing for personal and professional reasons. People are happier and healthier in life and in work with strong relationships. Professionally, the benefits of networking include sourcing expertise, partners, referrals, and opportunities. And the "strong benefit of weak ties" mean that you can tap into networks of people who are distant from you and significantly broaden your interactions. There really is little downside, just a question of how to get started and do it well. Here are some tips:

- Just do it—No loss if you are not in touch. Most people understand the benefit of networking
- Know why you are getting in touch
- Keep the first contact light—something simple, don't write a huge novel
- Find a reason to get in touch—send an article, ask their advice, share good news or change of position

Read a book.

I don't read enough books. I read newspapers and am addicted to podcasts, but there are some things that required a long-form content to explain and deliver. I noted one book above in my blockchain item, the next one on my list is Vaporized by Robert Tercek, which I also picked up at AFP 2017 in San Diego. I should set a goal of one book per quarter, but for me, this is already a stretch.

Pursue a certification.

Continuous learning is important to yourself as much as it is a signal to others that you are growing and adapting. What is relevant to you, your employer, your field, or the field that you want to be in? I already have my FP&A certification and—true confession—I was seduced by a Black Friday sale. I bought a course bundle that offers a Certified Information Security Manager certification, "designed for information security managers, the certification emphasizes the relationship between information security and the business goals of the enterprise."

Bryan Lapidus, FP&A, is a contributing consultant and author to the Association for Financial Professionals. Reach him at BLapidus@AllegianceAG.com.

PAYMENTS ESSENTIALS

Could Real Time Payments dethrone the almighty check?

> t long last, the United States has a real-time payments system. On November 13, the first transaction took place on the new system-a \$3.50 transfer between BNY Mellon and U.S. Bank-and it took only three seconds to settle. As one of the proposal submitters to the Faster Payments Task Force, The Clearing House (TCH) has with its Real-Time Payments (RTP) system certainly stepped up and delivered. I really think-and hope-that this marks the beginning of a new era for payments in the United States. But if that's truly going to happen, it will mean letting go of one constant in our payments system-the paper check.

"Do I think RTP can make a difference? With thousands of financial institutions, such a change is not going to happen overnight, but I do think the potential is there."

Checks: Alive and kicking

The United States is very special in that the government does not mandate a certain way of making payments; it is all up to the free market to determine how things are going to change. But this approach doesn't always yield positive results; the U.S. is still heavily relying on checks, particularly for B2B transactions. Even though checks are largely considered inefficient and costly, they are still around because no one is forcing market players to abandon them.

For corporations, it can be a massive undertaking to change internal payment system infrastructures. There has to be a really good alternative payments system that not only is ubiquitous, but also can promise efficiencies and cost savings sufficient enough to provide a clear business case to make a change.

There are of course alternatives to checks; certainly ACH is filling a very important need for mass transfers, and cards are very useful for various business payments. But neither of these payment methods have managed to dethrone the almighty check. This is why I'm pretty excited about RTP. It is a new and extremely fast rail alternative that has entered the market. With real-time capability and the ability to carry extended remittance information space, it sounds promising.

Enter real-time

So do I think RTP can make a difference? With thousands of financial institutions, such a change is not going to happen overnight, but I do think the potential is there. Financial institutions won't want to be left outespecially when their competitors can offer their clients real-time payments. TCH is comprised of banks, and if RTP begins making headway with corporates, you can bet that non-TCH banks will want to get in on the action.

I also really like the fact that RTP is about actual real-time payments. Not long ago there was a lot of discussion around faster and near real-time payments. I never really cared for the near real-time discussions. Why not aim for actual real-time, right away? Realtime has been done in other countries for years—why should we do anything less than that? With real-time, a payment clears and settles within seconds, not relying on a bank making funds available quickly, etc. The Swedish system BiR (Payments in Real-Time) using the Swish application interface has worked really well for over five years, although not yet for B2B. The underlying infrastructure of RTP is very similar, in that it uses pre-funding to facilitate real-time. It is set up within the existing infrastructure and can achieve realtime without new technologies such as distributed ledgers or digital currencies. This could be important when it comes to actual implementation. If the changes a corporation has to do to benefit from RTP are minimal a major hurdle could be eliminated. It is then up to the banks to provide the vehicles for RTP usage.

Moving the needle

So, to recap, for real-time payments to truly catch on, and perhaps finally unseat checks in the B2B payments sphere, two important things need to happen.

- Banks need to get on board. Corporates trust their banks more than fintech startups who may be developing other real-time systems. TCH launching RTP is therefore a big step towards corporate adoption, and more banks following suit would only help.
- System changes need to be minimal. The reason checks have hung around for so long is because upgrading to a better system is costly and time consuming. The less painful adopting a real-time system can be, the more likely it is that it will happen.

Am I looking at this simplistically? Yes, but that is also one of my points. From a corporate perspective this needs to be looked at with a simplistic approach. Otherwise it might just be easier to stay with the check after all.

Magnus Carlsson is Manager Treasury & Payments, AFP.

AFP Makes Recommendations for Same Day ACH Expansion

AFP has responded to NACHA's request for comment (RFC) on expanding Same Day ACH. AFP supports the expansion overall, but made some recommendations for how it could best benefit corporate end-users.

The proposals

NACHA has proposed raising the Same Day per-transaction limit from \$25,000 to \$100,000. AFP supports this measure, as it would expand the service to include a broader range of transactions. And as treasury professionals have already said repeatedly, the \$25,000 threshold has kept many of them from adopting Same Day ACH.

NACHA is looking to add a third processing window that expands access to later in the day. AFP believes this measure would provide corporate treasurers with more flexibility when managing cash. Adding a new window would also make Same Day ACH more accessible for corporates operating in the Pacific Time Zone; this has been a challenge to due to the three-hour time difference.

NACHA's proposal to provide faster funds availability to receivers of both Same Day and non-Same Day ACH credits also received AFP's support. Faster funds availability would add speed and flexibility to corporate end-users of both Same Day and legacy ACH.

AFP also supports exploring ACH processing on weekends and holidays, however, it noted that there may not be a great need for additional B2B ACH payments processing. Generally, mass ACH payments are previously scheduled transactions and are not time sensitive.

Other considerations

AFP noted that faster payments result in faster fraud—and increasing the dollar amount per transaction means exposing larger dollar amounts to fraud. Thus additional fraud protections may need to be developed.

AFP stressed that all legacy ACH pricing and products need to remain intact and available. Disrupting current systems could have a negative effect on the way corporate treasury professionals do business.

Lastly, AFP recommends that merchants have flexible ACH filters. If someone wants to shut off the second or third presentation window, they should be able to do so and collect the next day.

All in all, AFP sees the expansion as highly beneficial; the association simply encourages NACHA to be mindful of some of the risks and wants to make sure that corporate treasury professionals can continue to maintain the status quo of their ACH payments if they choose to do so.

"Overall this kind of extension of Same Day ACH should be welcome as it opens up the options for corporates," said Magnus Carlsson, Manager Treasury & Payments, AFP.

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KEY TAKEAWAYS:

- IFRS 9 is intended to make the hedge accounting process easier, and to enable firms to align their hedge accounting more closely with their overall risk management strategy.
- IFRS 9 is significantly more lenient than its predecessor when it comes to what can and cannot be treated under hedge accounting rules.
- The amount and variety of data required is likely to increase under IFRS 9.



ith the New Year comes the new accounting standard for financial instruments, IFRS 9, which replaces the IAS 39 regulations. And with the new standards come substantial changes to the way that derivative instruments and hedging strategies are accounted for, along with potential benefits for a broad range of businesses—provided they are able to take advantage of the opportunity.

The objective of hedge accounting is to represent, in the company's financial statements, the effect of using complex financial instruments to manage exposures and the impact they have on profit or loss. It describes a means of giving fair value to options, swaps, futures and more exotic instruments that are dependent on the changing value of an underlying instrument.

One of the key advantages of hedge accounting is that it helps to smooth earnings over time. For firms dealing with FX and interest rate swaps, or who are heavily exposed to physical and financial commodity markets, hedge accounting reduces the impact of volatility on their market capitalization and price and earnings statements.

Understandably, this has been popular with stakeholders and market analysts alike, since they prefer smoothed out earning statements to unexpected shocks. The problem has been that hedge accounting certainly under the IAS 39 regime—was been far from straightforward and has required a vast amount of data. The probability of making a mistake is relatively high, which has often resulted in withdrawn and restated earnings. In other words, an unexpected shock—exactly the opposite of what was trying to be achieved.

New opportunities

For the reasons listed above, a limited number of firms have adopted favorable hedge accounting treatment under IAS 39 and awareness of its implications has very rarely left the treasury department. So when the accountants welcome in the New Year with its replacement, they are unlikely to be joined by colleagues in the risk management department—or indeed anywhere else.

However, they will miss a significant opportunity. The new accounting standard has much wider repercussions than many at first assume. First of all, IFRS 9 is intended to make the hedge accounting process easier, and to enable firms to align their hedge accounting more closely with their overall risk management strategy. In effect, it represents a move away from a purely quantitative methodology into something more qualitative.

In practice, this means that instead of running extensive and complicated mathematical risk assessments in order to qualify for hedge accounting treatment, firms merely have to demonstrate that a specific derivative instrument fulfills the hedging purpose as set out in their enterprise risk strategy. In other words, companies can use information from their risk policies to justify their accounting.

By making the relationship between hedge accounting and enterprise risk management more explicit, and at the same time removing the need for rigorous analysis of validated historical data to justify the positions that have been stated, the new standard should create a simpler process overall. The net result is likely to be that more companies will be able to adopt hedge accounting strategies—and more will be able to explain their risk management strategy to investors as a key part of their communications strategy.

IFRS 9

More lenient

The second point about IFRS 9 is that it is significantly more lenient when it comes to what can and cannot be treated under hedge accounting rules. It means that companies can hedge a component of their risk—for example, just the commodity—rather than all fair-value movements, which can be posted to equity.

The impact of this change could be wide reaching. While some financial institutions and major commodity traders found that application of the old IAS 39 standard was beneficial overall, they were a fairly exclusive club. But now it is possible to envision scenarios in which a manufacturing company would individually hedge one or more of the contractually agreed components that go into its final product. In so doing, it reduces the risks associated with exposure to volatile global markets and international supply chains.

IFRS 9 therefore could be the catalyst that draws accountancy and risk management together. It should certainly make hedge accounting more accessible to a wider range of firms. And it may add a new weapon to the risk manager's arsenal. But there are some caveats.

Key challenges

Hedge accounting is not a spreadsheet process. Swapping market risk for the operational risk of non-specialist tools does not represent much of a step forward. Hedging strategies may backfire without the proper tools to accurately gather, assess, analyze and integrate risk.

The amount and variety of data required is likely to increase. Under the new standard, firms are required to incorporate credit risk considerations into the valuation of their financial assets and liabilities under an expected credit loss model. This adds complexity to general accounting requirements, because firms need more data to calculate those potential losses. They need to know what the probabilities are of default; they need recovery rates and to make a decision on types of data to support the expected loss calculation. Nor can firms opt for complete abandonment of the quantitative approach. To date, hedge accounting has required firms to obtain concise and reliable information, which, in turn, supports an enterprise-wide view of a company's real and potential risk exposures. Shifting to a qualitativeonly approach can obscure this view, and may weaken hedge accounting practices—even when internal risk management guidelines are met.

A commitment to hedge accounting is therefore still not something to be undertaken lightly. The policies and procedures for aligning risk management activities and treasury need to be supported by centralized and integrated systems designed for the task. Disparate systems are the easiest way to lose control of the data needed to inform company strategies and to build up information silos that restrict the effectiveness of those strategies.

Integration is also essential to prevent data quality and integrity from being compromised whenever hedge accounting figures created in one system flow to another. Such an integrated solution gives firms a holistic view of their risk. An integrated system also enables firms to directly calculate valuations from the underlying transactions and asset values—without having to stage data across from other sources— and recalculate values in response to changing data.

With data flowing seamlessly from front to back, accountants, risk managers and even auditors can see precise valuations at any given point, down to a very granular level.

The advent of IFRS 9 is a timely one. Hedge accounting looks more appealing in the light of increased uncertainty in international geopolitics, climate and demographics. It opens up the possibility of compliant hedge accounting to more firms—and it allows more of our businesses to protect themselves, their shareholders and their customers from the consequences of that global uncertainty. The only question for those businesses is this: is taking advantage of IFRS 9 on your list of New Year's resolutions?

Roman Scheller is principal consultant, strategic client services, for Openlink.

TREASURY ESSENTIALS

MakeYour CHOOSING AN OPTIMAL TRANSPORT

PAUL BRAMWELL, CTP

echnology is an incredible enabler, allowing the end user to solve the ageless conundrum of how to do more with less. Most of us have been instructed to achieve the more-with-less goal at some point in our careers, and this imperative has driven the advance of technologies in all areas of business, especially in treasury.



TREASURY ESSENTIALS continued

Treasury management systems (TMS) started to emerge back in the late 1980s, with a few software companies creating powerful systems that would track a corporation's cash position, payments, foreign exchange commitments and forecasts, loan obligations and investment positions. Those early days saw a rapid increase in the functionalities offered to the treasury group, allowing them to focus on the strategic rather than the operational—but it came at a cost. Such a system was prohibitive to the majority of smaller companies, due to upfront costs, initial implementation and an IT footprint that was off limits to most.

Fast forward to 2017 and we have seen significant changes in the TMS world—a plethora of systems that all seem to do the same thing, and a choice of deployment technologies ranging from the classic selfinstalled and self-maintained to multitenant hosted solutions on one of the seemingly ubiquitous clouds. Over the decades, there have been solutions that stood the test of time and still exist (albeit newer iterations), and there have been many systems that have come and gone—some that created an almost iconic status for a period of time.

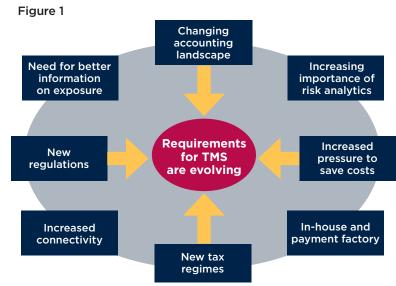
Selecting a system

Given the complexity of building, supporting and developing these systems, and the constant drive to be competitive in the marketplace, there also has been significant vendor consolidation, resulting in a few vendors owning a sizable proportion of the available technology solutions. The disappearance of certain systems, along with vendor consolidation and the number of new technologies and partnerships, has increased the importance of making the right choice when selecting treasury technologies to take you through the next decade. Most seasoned treasury professionals have gone through at least one treasury system implementation, and the vast majority are keen not to repeat the exercise on a regular basis.

When embarking on a system selection or implementation, it is important to tap into your previous experience or seek out a resource in treasury who is seasoned in this process to help you select a system that helps achieve, and even exceed, your goals for a TMS.

What type of buyer are you?

The optimal path to selecting the right TMS depends, to some extent, on the type of buyer.



Source: EY

The **first-time buyer** typically is migrating from spreadsheets and manual processes or banking platforms that offer rudimentary functionalities. For this buyer, it is important to understand what is possible within a holistic TMS.

The **second type of buyer** may use a platform that has been in place for many years that has become increasingly difficult and expensive to support. Factors driving this type of buyer may be outside of the treasury group's control and driven by IT or a lack of support from the vendor.

The third type of buyer is one who uses a TMS but has become disaffected with the solution vendor or has found the platform to be short of critical functionalities that are becoming increasingly necessary. For example, this buyer may use a multitude of spreadsheets that proliferate around the treasury department to achieve what was once the promise of the TMS. While functional deficiencies may be overcome, it may be difficult to overlook a lack of or a poor relationship with the vendor. However, it's critical to note here that very often functional deficiencies are actually perceived functional deficiencies and, in this case, perception may not be reality.

The **next type of buyer** may have gone or is going through a corporate transaction, such as a merger, acquisition or carve-out. The treasury group may find itself with two systems in the event of a merger or a choice of replicating the current environment (*lift and shift*) in the event of a spin-off. Usually, groups going through this type of transaction are pressed for time, and the path of least resistance often is proscribed, even if it's not preferred. In either case, there are pros and cons, and with adequate planning and advice, making a decision should be straightforward.

The final type of buyer is one who may be subject to a corporate initiative or mandate to move everything to one single solution. That single solution is very often the existing enterprise resource planning (ERP) system, which likely will have a built-in treasury functionality. This area of the TMS market is replete with apocryphal stories and urban myths, and it is important to map out objectives, a path to achieving those objectives, and perform and complete an analysis of the truth behind the myths.

60% 30% **23% 18% 6%** 0% Very Rather Rather Very dissatisfied

Figure 2: 76 percent were satisfied with their current TMS

Source: TMS Survey 2014: Survey on Treasury Management System Satisfaction, EYGM Limited

What you should consider

Functional requirements

Before thinking about talking to vendors and analyzing the TMS landscape to find the optimal solution, you should answer the question, "What am I trying to achieve?" If you can't answer that question succinctly and with a clear set of objectives, you may not be ready.

A precursor to any successful project is a clearly defined understanding of the current state and target state. A treasury group's current state may be manually intensive, replete with inefficiencies and control issues, and wholly suboptimal. A target state objective is usually to remove these inefficiencies, control issues and dysfunctional operating procedures and replace them with leading practices, where possible. The biggest single problem, however, can be the fact that most companies don't know what they don't know. This is where attendance and participation in conferences, such as AFP, along with local chapters and thought leadership, are critical. Treasury professionals should become familiar with the art of the possible in terms of leading practices, novel ideas, creative solutions and learning from those who have been there before. Consider:

- What types of transactions and what volume are you likely to have in the future?
- What would be nice to have rather than a must-have?
- Are you willing to be flexible?
- Do you want to be leading-class or have the best in cost?

Factors to consider in technology include:

- Do you have the availability of a supportive IT group?
- Does your company have an appetite for public or private cloud-based solutions?
- How stringent are your security and control requirements?
- Do you desire the ability to customize a solution or integrate it into a broader digital environment within your organization?

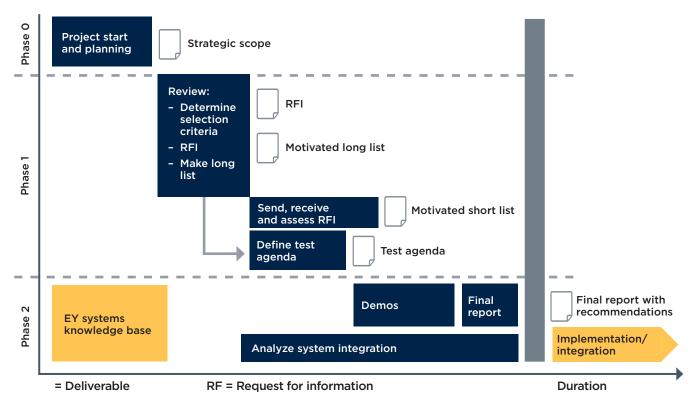
Your ability to answer these questions may start to narrow the choice of solutions available, and agreeing on these ahead of time should prove beneficial.

Vendor analysis

Caveat emptor is a wise adage to bear in mind when selecting both a vendor and a system. There are both good and bad stories surrounding nearly every vendor, and it's important to select a system based on fact rather than myth. Just like buying anything, you need to be able to do the research to be sure you are making the right choice. Keep in mind that a request for proposal likely will be returned with "yes" as the most

TREASURY ESSENTIALS continued

Figure 3



common response from vendors, regardless of the question. While the responses may truthfully be yes, it's important to understand what that yes answer really means. It is also important to forge a relationship with a level of trust and mutual respect that will carry on into the future and get a clear understanding of a vendor's vision for its products.

Getting the right people involved from the beginning will smooth the path to a successful selection, contract process and delivery. Consider involving your entire treasury team, both domestic and international (if appropriate); IT; procurement; the project management office team (if applicable); accounting representatives; the ERP team; a dedicated group within treasury that will be responsible for the project; and, importantly, trustworthy advisors.

Where will you go from here?

Once you have selected your optimal TMS and deployment methodology and achieved your goals, it is important to protect your investment. You can do this in a number of ways, such as:

• Documenting your implementation, including all of the key decisions and considerations

- Creating a user guide or manual for new staff
- Creating training guides for certain modules, such as frequently asked questions, setup guides, recorded video sessions, etc.
- · Setting aside a budget for training every year
- Getting involved with the vendor's user groups and being invested
- Being open to change and adapting.

It was mentioned earlier that certain buyers are in the market due to perceived system deficiencies. These deficiencies very often are only perceived deficiencies, which can be readily overcome and potentially even avoided by implementing the six steps above. Once you have a path marked out to achieve those things, you should be well set up to select and implement your TMS.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

Paul Bramwell, CTP, is principal of the Global Treasury Services practice at EY.

AFP RESEARCH: 2018 RISK SURVEY



Survey: 32 percent of treasury and finance execs are unprepared for new technology risks

Treasury and finance executives have many concerns but preparing for technology risk seemingly is not one of them.

The 2018 AFP Risk Survey, supported by Marsh & McLennan Companies' Global Risk Center, polled 614 senior-level treasury and finance executives. Though a majority of respondents to the annual survey cite artificial intelligence, robotic process automation and data engineering as technologies that could expose their companies to some risks, a mere 14 percent say they are "significantly prepared" to manage them effectively. More than half (54 percent) say they are only "moderately prepared." Nearly a third (32 percent) admit they are not prepared and are taking steps to prepare—or not taking steps at all.

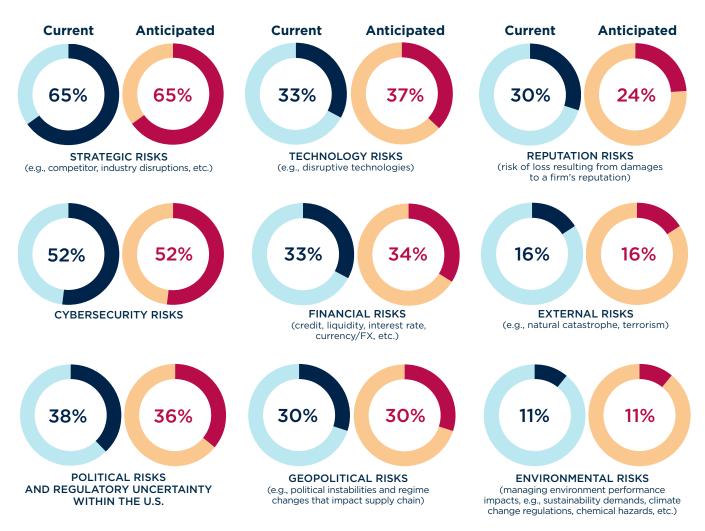
Cybersecurity risk is among the various risks cited as a consequence of using new technologies. Three quarters of survey respondents report that new cybersecurity risks have emerged at their companies as a result of increased use of new technologies. Operational risks and business continuity risks also are cited as consequences of the introduction of new technologies to the treasury and finance function.

"Treasury and finance executives may not be adequately focused on risks stemming from emerging technologies that could affect the very existence of their organizations," said AFP President and CEO Jim Kaitz. "Today's risks center less around traditional finance and more on new technology like artificial intelligence, blockchain, robotic processes and malware. To meet these challenges, treasury and finance executives must acquire new skills and knowledge—even a new mindset."

When asked to list the top three risks that will impact their organizations, nearly two thirds (65 percent) of respondents said their greatest concern was strategic risks such as industry disruption and competition. Cybersecurity risk came in second at 52 percent, and political risks and regulatory uncertainty ranked third at 38 percent.

Current Risks and Anticipated Concerns for Risks Over Next Three Years

(Percent of Respondents Who Rank Risks in Top Three)



Source: 2018 AFP Risk Survey

Forecasting risk

Forecasting risk continues to be a challenge for a majority of finance professionals. Seventyone percent of survey respondents report that forecasting risk is either as difficult or more difficult as it was three years ago. That percentage is lower than the 84 percent who held the same view last year. At the other end of the spectrum, 29 percent of survey respondents indicate that forecasting risk is easier than it was three years ago, significantly more than the 17 percent who held the same view in last year's survey. Fiftyfour percent of survey respondents anticipate forecasting risk will be more difficult in three years; only 16 percent believe it will be easier.

Significant concerns

The majority of respondents, 65 percent, ranks strategic risks (which include competitor and industry disruptions, among others) as the top risks impacting their organizations. Over half (52 percent) report that cybersecurity risks need to be watched closely. Ranked a distant third is political risks and regulatory uncertainty within the United States.

Looking ahead

Survey respondents reveal that strategic, disruptive technology and cyber risks remain the top areas of concern for the next three years. In addition to these risks noted by survey respondents, we anticipate that in the future, financial risks will also be on the radar of treasury and finance professionals, suggesting the presence of risk in organizations' strategies, from the business environment, and possible regulatory risk resulting from any new reforms implemented.

New technology fallout

Three guarters of corporate practitioners report that cybersecurity risks have surfaced at their companies as a result of the increased use of new technologies. Slightly less than half cites operational risk as a concern (47 percent), followed by business continuation (41 percent). The adoption of new technologies has resulted in treasury and finance practitioners managing cyberrisks almost twice as much as business continuation and errors and omissions risks. Prudent expectations are clearly evident, as treasury professionals believe that cyberrisk or the connectivity to the external environment will be of concern as organizations connect extensively to artificial intelligence, robotic process automation and data engineering technologies. Over a third of survey respondents report they are managing risks from errors and omissions, suggesting that there are some flaws in new technologies being implemented.

What's ahead

Research findings reveal that strategic risks are of significant concern to finance leaders at organizations and they will continue to be a top concern in the next three years. Regardless of how aware finance professionals are of strategic risks, those risks are difficult to plan for and challenging to control.

Strategic goals and decisions implemented by organizations may not be able to withstand a disruption in the industry or market in which they operate. Cybersecurity risks are also considered significant; these risks are not only important today—they will continue to be top of mind three years from now. Technology disruptions are also being noted by practitioners, as over one-third of them feel such disruptions will be a significant risk over the next three years.

Treasury and finance professionals anticipate that artificial intelligence will increase risk exposure to some extent, as will spreadsheets. Most companies have revised control processes

AWOL: Formal Risk Appetite Statement

As organizations navigate both the risks and opportunities in a shifting risk landscape, management face the question: Should we take this risk? Yet many organizations have not defined their risk appetite to provide clear guideposts to decision making. Risk appetite, as defined by the Institute of Risk Management, is "the amount and type of risk that an organization is willing to take in order to meet their strategic objectives." Although 54 percent of organizations currently lack a formal risk appetite statement, 17 percent are in the process of developing one. Slightly less than half (46 percent) indicates their companies have a risk appetite statement, and only a quarter of those respondents indicates their organization's risk appetite statement is both qualitative and quantitative.

Treasury and finance professionals often ARE perceived as the risk managers at their organizations. They need to consider implied methodologies that come from the CFO in terms of applying hurdle rates and internal measures. Managing cash is one example: the majority of cash balances in money funds in 2016 shifted from prime to government money market funds as a result of the floating NAV which primarily increased the risk of principal loss. The risk appetite statement can be applied in the calculation to make acquisitions, spend cap ex, and develop Weighted Average Cost of Capital (WACC) calculations. This can be further quantified by the utilization of currency/country risk for business, credit ratings for company subsidiaries, following specific risk methodologies and employing insurance related products as well.

to manage cybersecurity risk as a result of increased use of technology.

Treasury and finance professionals are well aware that risks will occur with an increased use of technologies. Over half of practitioners believe their companies are moderately prepared. But only 14 percent of organizations are significantly prepared to manage these risks. To alleviate the impact of risks resulting from technology disruptions, a greater share of treasury and finance professionals need to be confident their organizations are significantly prepared to manage these risks.

8

JOHN DRZIK

Finding opportunity in a shifting risk landscape

positive outlook for the global economy shouldn't engender complacency. While new growth opportunities for businesses are emerging, so are new vulnerabilities. Resilience needs to be a priority in a rapidly shifting global risks landscape that's being driven by a confluence of disruptive technology, major shifts in geopolitical imperatives and an increasingly polarized society.

The average time companies spend in the S&P 500 index has already decreased from approximately 60 years in the 1950s to 12 years today. The velocity of change and range of potential shocks in today's environment are putting further pressure on business leaders to increase their internal pace of organizational response to maintain or grow their market position.



"The survey revealed deep pessimism about the direction of international relations. Fully 93 percent of survey respondents from across the global risk community expect that political and economic confrontations between major powers will increase in 2018."

Biggest concerns

The *Global Risks Report 2018*, prepared by the World Economic Forum with the support of Marsh & McLennan Companies and other partners, evaluates the major threats facing the world over the next decade. It draws on survey data provided by nearly 1,000 members of the risk community, spanning business, government, academia and non-governmental organizations.

The survey revealed deep pessimism about the direction of international relations. Fully 93 percent of survey respondents from across the global risk community expect that political and economic confrontations between major powers will increase in 2018. There were high levels of concern about an increase in state-onstate conflicts that may draw in other countries. Western respondents also highlighted growing concern about economic protectionism. Technological risks are seen as a rising global threat. Business leaders in advanced economies rated large cyber attacks to be the top risk for doing business in their respective countries, and respondents in most parts of the world anticipate these attacks will intensify in 2018. Societal risk emanating from the increase in media echo chambers and fake news is also expected to grow.

On a longer-term horizon, environmental risks ranked highest in both likelihood and impact. Extreme weather and failure to adapt to climate change showed the greatest leap in concern since last year's report, perhaps reflecting the hurricanes, earthquakes and wildfires suffered during September when the survey was open. However, even before the devastating events of 2017, apprehension in this area was strongly reflected in the survey results.



Source: World Economic Forum, Global Risks Report 2018

Cyber threats

Cyber breaches recorded by businesses are escalating, having nearly doubled since 2012. Attackers have become more sophisticated and persistent, and more incidents have had systemic ripple effects. Adding to the challenge, cyber exposure is growing sharply as companies become more dependent on technology. For example, the explosive growth in interconnected devices, from 8.6 billion today to an estimated 20 billion by 2020, and the increasing use of artificial intelligence expand the attack surface significantly. And the potential for state-sponsored attacks is escalating given the heightened friction in the geopolitical climate. Awareness of this challenge is growing and investment in cyber risk management is increasing. However, cyber is still underresourced in comparison to the potential scale of the threat, especially when considered in the context of a more familiar issue — natural catastrophes.

Analysis suggests the takedown of a single cloud provider could cause as much economic loss as Hurricane Katrina. And while it's not exactly apples to apples, the annual economic cost of cyber crime is now estimated at more than \$1 trillion, a multiple of 2017's record-year aggregate cost of approximately \$300 billion from natural disasters. Although cyber risk management is improving, organizations need to invest far more in resilience efforts to prevent the same "protection gap" between economic and insured losses that we see for natural catastrophes. Businesses also generally need to rebalance their initiatives from prevention toward response. Research suggests that only one third of companies have prepared an incident response plan for a major cyberattack.

Economic risks

One clear takeaway from this year's *Global Risks Report* is there's a wide array of potential shocks that could emerge at this time of rapid technological, political and societal change. With firms more leveraged that they were a few years ago—the debt-to-equity ratio has nearly doubled since 2010 for the median S&P 1500 company they are even more vulnerable to these potential shocks and surprises.

Adding to the economic fragility, global debt has risen to a record \$233 trillion, and at 318 percent, the global debt/GDP ratio remains near its all-time high. Asset prices in some sectors are at historically high levels and persistent low commodity prices continue to rattle exporter countries and their neighbors, with political and societal implications. Structural issues such as income inequality, rising health care costs and diminishing long-term retirement security also show little sign of being resolved.

Against this backdrop, how will investor and corporate confidence fare in the event of a major geopolitical altercation, an aggravated trade stand-off or a technological catastrophe—none of which are implausible?

Businesses should devote more resources to evaluating—and planning as best they can for emerging threats. This doesn't mean attempting to predict the future. Instead, it's more about using a range of plausible future scenarios to challenge prevailing corporate assumptions and inform senior management decision.

A thorough characterization of the top emerging risks involves assessing what's shaping each risk, its likely trajectory and One clear takeaway from this year's Global Risks Report is there's a wide array of potential shocks that could emerge at this time of rapid technological, political and societal change.

its potential consequences—with a view to determining where it might affect the firm, the nature of the impact and the time profile of the damage. This helps clarify the materiality of each risk, and provides an initial steer for which strategic plans should be reviewed more extensively and the actions that should be taken to mitigate the risk in these plans. Better resilience can be achieved with a dual focus on risk prevention and risk response.

The path forward

More than ever, leadership teams need to chart a course for their companies with bold strategic ambition to capture emerging opportunities and rigorous resilience planning that matches up against the complex set of risks in the current global landscape. Indeed, the need to focus on strategic risks over the near term is high on the minds of financial executives.

The 2018 AFP Risk Survey showed that strategic risks are overwhelmingly ranked as the top risks facing companies—with cyber risk ranked second. Companies that work to understand these risks and other potential future shocks will be best positioned to find sustainable growth opportunities in today's dynamic business environment.

John Drzik is the president of Marsh Global Risk and Digital. He is also chairman of Marsh & McLennan Companies' Global Risk Center. Prior to this role, John was CEO of Oliver Wyman.



Hedging is changing

Hedging is changing dramatically. Tony Capozzoli of Deutsche Bank explains how he keeps up.

IRA APFEL

here is so much going on in the world of hedging these days—perhaps more than there has ever been. Fiat currencies are more prone to uncertainty and radical swings than ever, and now there are new hedge accounting standards, a new voluntary code of conduct and, of course, cryptocurrencies like blockchain and Ethereum.

Tony Capozzoli, a director with Deutsche Bank, deals with these challenges every day. Capozzoli provides quantitative risk analysis and hedge optimization for Deutsche Bank's corporate clients. He holds a PhD in mathematics from the University of Chicago, where he also teaches a course on hedging. He recently spoke to AFP Conversations podcast.

Ira Apfel: You quantify risk for corporate clients. What are some things that you're looking at to quantify? How do you arrive at those figures?

Tony Capozzoli: I'd like to say the easy part is looking at the market and assessing how much volatility is in each currency. I'm going to stop there for a second on that side of it, and we'll pretend for a second that that's easy. Then the hard part is turning around and saying, "Well, what is that going to actually do to a company?" You know, if the euro goes down 10 percent, 20 percent, how does that impact the firm?

Now, companies themselves really have to work through how they think about that and how they think about that specific question of, if we have a certain FX scenario, a certain FX movement, they really need to ask questions like, "Will we have competitive pressures that'll stop us from repricing? Will we be able to pass through some of that FX risk onto the client base, or can we absorb it somehow," by maybe changing their sourcing, changing something about their operations? I like to say that that's the hard part.

Ira Apfel: I think, to your point, it's probably easier to assess the risks of currencies, because there's no outside influences. Whereas if you're working with a company there are all these other human components in there that can make it a lot more difficult to quantify.

Tony Capozzoli: It does. It makes it very difficult. On one level, that is what treasury management and senior management, to be blunt, get paid to do, is to understand how to operate the firm, how to deal with these external forces. The same way that businesses deal with their operational risks, which the way I look at it is there's a certain amount of necessary compartmentalizing, sort of divide and conquer, and I think you see the same thing with a difficult question like how does currency impact our firm. Well, how does currency impact our firm? For a big multinational, it impacts it in almost every way, in almost all the operations. "The easy part is looking at the market and assessing how much volatility is in each currency. Then the hard part is turning around and saying, 'Well, what is that going to actually do to a company?"

Ira Apfel: Do you like delving into the minutiae with the treasury staff who's really charged with this, or do you prefer the big-picture talk with the CFO and the treasurer about it?

Tony Capozzoli: The answer to your question, kind of what my favorite part of it is or what I get the most engaged in on an intellectual level, it's the questions we were talking about a second ago. You know, how these currency movement impact the firm, and then specifically how the firm deals with it. I like to think of myself as a kind of closet investment banker or closet corporate finance person.

The one other thing I'll say about it ... and this is the hardest question of all, and I don't think really has a right answer, but the academic side of me is pretty interested in this: From a very big-picture, firm valuation point of view, there's a fundamental debate over how much currency impact can investors themselves manage. If you run an international portfolio, you buy a company that has a lot of euro sales.

On one level, you kind of know that if the euro goes down, it'll impact the value of that firm, but then there's the question of wait a minute, there's lots of exposures and lots of detail that only the firm management itself has details on, proprietary information. You might publish the geography of your sales, but you typically don't publish or disclose the geography of all of your expenses and all of your sourcing, and you certainly don't disclose a bottom line, this is exactly the exposures that we have, on the detail. That's a real competitive, proprietary type thing.

Ira Apfel: You spoke at AFP 2017 about cost-benefit analysis for FX risk management and evaluating alternatives. What alternatives are you talking about?

Tony Capozzoli: Usually what we talk about is how to do the hedging, how you make that decision, that kind of thing. What I did with



this session is I tried to take a little bit of a different view, so that the quick answer to your question is, "Well, you know what, I actually did not talk about any alternatives." What I really mean by that is it can be a framework that you apply to real high-level stuff. Like your CFO says, "We have a current hedging policy, currencies that we hedge, amounts that we hedge, a process for when we do the hedging. Maybe we should change that." You have an alternative policy, and then there's the question of, "Well, how do we decide whether one policy's better than the other?"

One really extreme example, what if the CFO says, "Well, maybe we should just get rid of the program and just go to not hedging at all," which I think of as yet another alternative policy? This framework is a way of measuring, as you saw in the title, costs and benefits. How do you measure the costs and benefits of in this case two different hedging policies, but the framework can also be applied to a more tactical thing. In the big picture these are actually pretty simple. They're more adjustments to the hedge accounting rules. The language of hedge accounting really stays the same, and what the Financial Accounting Standards Board tried to do is make certain aspects of hedge accounting easier.

Ira Apfel: There are new hedge accounting standards coming in 2019. You can already opt into it right now. What are they, and what do they mean for treasury and finance?

Tony Capozzoli: In the big picture these are actually pretty simple. They're more adjustments to the hedge accounting rules. The language of hedge accounting really stays the same, and what the Financial Accounting Standards Board tried to do is make certain aspects of hedge accounting easier. To be specific, with currencies there's one thing that's very, very annoying. A lot of clients have to deal with this idea of, if we have let's say revenues coming in in a particular month, and they go ahead and hedge out to that month, then there's a question of do we pick a specific day that we hedge to? Do we have to do more than one hedge to cover a certain month?

What's happened over the years is there's been a need to actually do some quantitative testing and then some documentation on something that, to be frank, is kind of silly enough, of am I getting this receivable on the 15th of the month or the 20th of the month. The FASB has seen that and said, "You know what, you can aggregate all your exposures, your currency exposures for a given month, and treat them all as one block," so that's easier.

There's also an effectiveness testing that needs to be done whenever you don't have one of these perfect match or critical terms match situations. Basically what the FASB has done is made that testing easier, made certain circumstances where you actually don't have to do it at all. You might just do it once at the beginning and then apply more of a principles-based approach, and not have to run quantitative testing. An additional thing they've done which is the concept of, I have a hedge that's a good economic hedge, and my accountants agree it's a good economic hedge, but there's sort of a little slippage or what they used to call a little ineffectiveness in it. That was something you used to have to break out separately and report on a separate line, so kind of do a mea culpa and say, "Oh, there's some P&L, some profit and loss from my hedge, that didn't quite match my underlying."

Now what the FASB is saying is, "If you can establish it's a good economic hedge, comply with these hedge accounting rules, then that's that. The entire gain or loss of your hedge, of your derivative, will go in the same place as the underlying." It really makes the hedge accounting rules much simpler.

Ira Apfel: What have you learned from your students that you've put into play when you're talking to your corporate clients?

Tony Capozzoli: My students in particular ask lots and lots of questions about the characteristics of the FX market, and really the thing they ask the most about has a little bit to do with sort of the type of training and the type of program that I teach in. They want to know where currency rates are going, and I'll kind of explain that a little bit.

A lot of these folks, some of them are very interested in getting into risk management, and their training is to learn the quantitative techniques to do that, but some of them want to risk-manage in the sense of running an investment fund or running a hedge fund. What they're looking for ... and I'll say some of them may be a little naive when they're starting out ... is " how do I predict currencies?"

Now, when I started doing this thing ... and it's six or seven years I've been teaching this course ... I have to say I'd just really roll my eyes and give what's a pretty standard remark that we give in the foreign exchange business, at least from the bank side of it. "If I knew how to predict currencies, I probably wouldn't have the job that I have. I probably would be running a hedge fund myself." Having said that, I think that persistency, combined with a certain amount of optimism.

To hear the full conversation, and more AFP Conversations with treasury and finance executives visit www.AFPonline.org/Conversations. The gig economy part 1: employers

BRYAN LAPIDUS, FP&A

Would you outsource yourself? Hedge funds do.

At the annual Battle of the Quants conference, hedge funds invite freelance developers to write algorithmic trading programs, then back-test them against actual data to simulate performance. The funds can choose to buy the best algorithms and then share in the profits generated in the open market.

The so-called gig economy has come to asset management—and likely finance too. To some extent, there have always been temps, contractors, consultants and seasonal employees. The difference is that the gig economy has given birth to the development of numerous online market sites to aggregate supply and demand and lowering transaction costs where workers and employers can meet, interview and hire.

By 2020, Intuit forecasts that 80 percent of large companies will substantially increase the use of a "flexible" workforce, and LinkedIn expects that 43 percent of the U.S. workforce will consist of freelancers, up from 6 percent in 1989. PWC launched its own site in 2016 because they could not retain the specialized, in-demand skills they required to satisfy their comments.

SOURC

If you don't believe gigs are coming to finance, here are some projects posted from one professional freelancer site that show what is being sought and sourced:

- FP&A Best Practice Process Analysis, posted by Leading Consumer Goods Company
 - Global FP&A company at leading multinational consumer goods company is looking for a "best practice" process analysis for its global accounting processes
 - The consultant is meant to analyze the current balance sheet review process
- Senior FP&A Resource Needed, posted by Global PE Fund
 - We are PE backed retail business that needs a senior FP&A resource to help with clean up data and help us think about creating dashboards.
- Retail Financial Modeling & Planning, posted by Fortune 500 Bev/Food Company
- We are looking for an experienced financial modeler

and skilled project manager to help us part time for 3-4 months...enhance an existing multi-country master financial model focused on operations & P&L's... create financial and performance tracking reports... capture data from internal markets to populate and update reports...conduct analysis and produce PPT recommendations and summaries to guide our new business unit through the financial planning cycle (1 year plan)

- *Immediate need* Building an IT business case for CPG company, posted by Leading Beverage Company
 - We are a leading consumer goods company looking for assistance in making an internal business case for a new IT implementation.

From the corporate point of view, there are two benefits. First, you can hire the exact skill set that you need. Second, the on-demand workforce allows employers to on-board (and off-board) contractors quickly, renting the capacity they need with reduced finders fees or consulting overhead premiums built in. It is like software as a service, but with people. Busy periods, such as budgeting time or ad hoc projects that overload staff, can be outsourced. This may happen today with contractors or temps, but the increased ease, lower cost, and wider net for specialized talent facilitate all these aspects to make them more prevalent.

Of course, there are challenges to this. First is risk; hiring someone through a web portal is akin to online dating. It could be great, or it could be a bust. How do you hire a good freelancer? Here are a few recommendations:

- Find someone who is passionate about what you are hiring them for. Ideally, you will have many people bidding on your project, so find someone who loves the challenge you are putting in front of them: building financial models, data mining, web design, and visualization. I knew I met an Excellover when he told me that he made a pointillism picture of his fiancé in Excel by coloring cells.
- Hire them for their best skill. Freelancers may have a long list of things they do well, but you want them for the things for which they are GREAT. These will be near the top (and will coincide with the point on passion).
- Evaluation communication skills. Key to success in any project, and even more so when the person is remote or a new, is the ability to communicate expectations, progress, work, challenges, and questions. Define the format of communication—

text, phone, email, Slack, other—and set your expectations.

- Look for a history of good work. As for referrals, examples of past work, or rankings on gig platforms.
- **Develop a broad network** for sourcing freelance talent so that you do not need to hire strangers.

A second challenge is the signal that it sends to existing staff, who may feel threatened to learn that competing talent is only a click away, or that growth opportunities are sent outside the company rather than being given to existing full time employees.

- Manage the potential anxiety of your existing team by introducing gig work to your staff as a positive, roll it in slowly as auxiliary staff during busy times or for rote work, and if it is a matter of hiring expertise, then pair the freelancer with existing staff in order to transfer knowledge to your team. Make your current staff a part of the process to ensure their buy in.
- **Develop project management skills** among your full time employees as the future of work is around collaboration on specific projects.
- **Explain freelance versus FTE roles.** To the extent possible, develop a policy (or at least an explanation) of why certain roles go to freelancers so they do not feel that it is job replacement—rote work, seasonality, expertise, experimental projects. Try to avoid replacing FTEs with freelancers.

A third challenging is having the freelancer deliver on the work itself.

- Focus on the specific piece of work rather than the overall job, and make sure the project is tightly defined in terms of deliverables, process, location, and timing.
- **Develop a rapport.** Think about questions of teamwork and culture adapted to this virtual work. Initial face-to-face meetings will ease future conversations. Supplement with video conferencing, hang-outs, and even water cooler chatter, such as a chat space on Facebook where the team can talk about non-work related items. Talk about culture and communications more than you normally would, and then live up to your own expectations.
- Treat freelancers like the future of work, because likely it is.

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BRYAN LAPIDUS, FP&A

The gig economy part 2: FP&A employees

Would you outsource yourself?

On page 35 I wrote about the future of gig workers (or freelancers) as a growing part of the economy from the perspective of employers who are hiring gig workers at an increasing rate across all types of professions. As with all markets, if there are buyers, then there need to be sellers of services; in this case, the individuals offering themselves either in addition to or as an alternative to traditional employment.

If you are considering joining the gig economy as a finance professional, start by thinking about you can position yourself for this work environment ahead. The first question to ask is whether your freelancing effort is a replacement for full-time employment or a supplement to your day job? There are lots of benefits to being on staff as a full-time employee (FTE), that generally include a steady paycheck, paid sick days and vacation days, health benefits, and the employer paying half the employment tax. Of course, the attraction of freelancing is to choose your work, manage your schedule be your own boss, get the upside of all your efforts, and maybe start your own company.

Freelancing as your full-time gig

This becomes a lifestyle, as you are now in business for yourself. That means you are always marketing and selling business, even while you are completing the work. It is critical to build a pipeline of work, and to make sure that your personal life can handle the ups and downs of periods of slack and business.

• Try the electronic platforms. Applying for positions on the common job platforms is a bit like looking for jobs through online sites—there seems like there is a lot out there, the effort to search and apply is low, but the success rate is very low. In addition, these marketplaces lead to increased competition which drives prices down. Good for companies, bad for freelancers. Certain professions "sell well" such as banking and consulting; other backgrounds may be harder to sell. There are several large platforms, including Upwork and Catalant; PWC launched its own site in 2016. "As an individual seeking a gig, the hardest part is getting the first one that you can list on your resume and get positive referrals."

- Network. A lot. I know several independent consultants with great expertise who have never gotten work on the boards, but do better with referrals and long-term clients. The relationship also represents lower risk for employers and may allow you to charge slightly more than you could otherwise.
- **Design your e-commerce strategy.** Develop a website, write a blog, tweet yourself, write content marketing for associations or vendors, just get out there in a way that demonstrates expertise.
- Get that first job under your belt. As an individual seeking a gig, the hardest part is getting the first one that you can list on your resume and get positive referrals. Prospective employers are hesitant to take that risk on someone who is not reviewed, so it is important to build a profile that shows expertise.
- Be specific about what you can do. Companies are not looking to hire generalists; they want a specific skill set for specific project. One consultant remarked that is hard to use these sites to get a project that expands your skill or transfers across industries. "With a large pool of talent, companies can find that unicorn, the perfect fit of skills, experience and industry vertical. Why would they take a risk on skill transference?" he asked. This includes finance skills as well as software tools. Employers want to plug you into their existing software, not invest in training you on their tools for the long term.
- **Keep building your toolbox.** The more tools you have (skills, software packages), the more hirable you become.

Freelancing as a side hustle

All of the above items are true if you are looking to freelance while keeping your day job. The question for this avenue is how to you manage the relationship with your current employer? First, know whether your freelancing is allowed within the parameters of your current your current work agreement. An excellent article appears here and frames the question well: How to Avoid Getting Fired (and Sued) When Starting a Side Business. Here are the salient points:

- **Know your company policy.** Some companies have explicit policies about what you can or cannot due; others fall into the "don't ask, don't tell" category. Review the employment agreements, non-disclosure agreements, and non-compete agreements. Also ask Human Resources.
- Do not take advantage of your current employer. This means do not use proprietary information, property, software, or other resources. This includes company time—assume that your gig work takes place on your time and your dime unless explicitly agreed upon.
- **Consider informing your current employer.** This is touchy subject. Is your side-hustle going to make you a better employee, through expansion of skills, marketing yourself and the capabilities of your firm, or creating a channel/product/service that your current is averse to pursue? Does your employer generally support this type of freelancing? Some do, and may even back your venture or allow for flexibility in scheduling; others may feel hurt, like you are cheating on them.

The second factor to consider when pursuing the sidehustle route is that you need still be the model employee who delivers on work and commitments. You need to be mentally present at work, make sure your body language shows that you are engaged, and generally excel at your day job. That way, you keep the benefits of the full time job and, when you do need some flexibility for your gig, you have a bank of good-will upon which to draw.

Also, remember to be considerate of your co-workers who do not have side hustle. Do not judge them for not pursuing the same entrepreneurial efforts that you are. They may be happy with their work and their work-life balance. Or they may be working their own freelance hustles that you do not know about.

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KEY TAKEAWAYS

- Before talking to technology vendors, document your business requirements and prioritize what the "must haves" are for your organization.
- Leverage technology experts and their evaluations of financial systems before making a purchase decision that will impact your financial planning.
- When you make a systems purchase, you are putting yourself on the line. Ensure the vendor's sales and services teams will be there to support you.

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How FP&A can lead a system deployment

MEREDITH HOBIK

ike all employees, sometimes financial planning and analysis (FP&A) professionals are assigned a task that is not in our typical job description, nor is it something we were trained to handle. A prime example of this is when we are tapped to lead the selection and installation of a technology system.



"If you are tapped by management, will you be ready to lead a systems deployment?"

Systems such as enterprise resource planning (ERP), enterprise performance management (EPM), business intelligence (BI), and human capital management (HCM), house data and calculations that impact how FP&A teams plan and analyze to make business decisions. Most FP&A professionals are not prepared to evaluate technology systems, as this is not often taught in finance programs at undergraduate or graduate schools. Also, with the increased adoption of cloud technologies that result in faster deployments and lower total cost of ownership, more responsibility of technology selection is shifting from information technology (IT) professionals to FP&A teams.

If you are tapped by management, will you be ready to lead a systems deployment?

Making decisions on systems

Here are six guidelines to ensure you are doing right by your organization and finance team when making a systems decision that can have massive implications to your business performance in terms of speed, accuracy, and productivity.

What features and functionality do you really need?

If you show up at the car dealership with a set budget and expectations of a car that will get you from point A to point B with efficient gas mileage for a family of four, why get distracted by additional features like heated seats, chrome rims, and panoramic sunroofs? It is important before talking to technology vendors to have documented your business requirements and prioritized what the "must haves" are for your organization. No technology provider can meet all your requirements within your budget.

Features like machine learning, configurable calculations, and customized color palettes will

cost more than predictive analytics, run-rate formulas, and standard color schemas. Who wouldn't want machine learning? But does your organization really need machine learning at this time, and how much will it cost? While it is important to ensure you do not quickly outgrow your systems purchase, the purchase you are making is to meet today's needs.

Business requirements captured in a request for proposal (RFP) that is shared with each technology vendor will not only keep sales teams honest in what they demo to you, but it also will serve as a reminder to you and your team what you really need for your finance organization. Before engaging with any technology provider, lock down your business requirements and priorities in an RFP.

Did you do your research?

It is a good idea to leverage technology experts and their evaluations of financial systems before making a purchase decision that will impact your financial planning. Gartner and Forrester Research, for a nominal fee, each have an abundance of literature on different technology vendors. Check out Gartner's Magic Quadrant reports for your desired technology solution, or Forrester's Wave reports. Also, both Gartner Peer Insights and TrustRadius collect online feedback from customers on various technology vendors. Finally, you can solicit FP&A professionals on AFP Collaborate for candid feedback.

Do you trust the sales team?

A financial controller at a Fortune 500 technology company once told me, "While I am buying technology, I am also building a relationship with the technology provider. If I do not trust the sales team, as much as I may like the technology, I want to buy from a sales team I trust." This financial controller had been burned by a previous planning vendor who overpromised and under-delivered.

When you make a systems purchase, you are putting your badge on the line. Ensure the vendor's sales and services teams will be there to support you. If you feel like the relationship is rocky, do not hesitate to let a technology vendor know you want a new sales team. Your sales team should make you comfortable that the technology can meet your RFP requirements, and the services team has the subject matter expertise to deploy what your organization needs. The people behind the technology are as important as the system itself.

Did you look under the hood?

Your CFO will ask you if you are confident you made the best decision for your organization. To ensure this, you must look under the hood when buying a technology solution. Here's why: Sales teams often rely on what the industry calls "click through demos". The demo is a simulated instance and limits your ability to envision how your organization would leverage the system. Proofs of concept (POCs), hands-on workshops, and trial access allow you to have confidence that the financial system will work for your organization.

I once led a vendor selection for a solution to help with workforce planning. Standard demos from the vendors all blended together, so POCs and hands-on workshops were critical in understanding how business requirements from the RFP would translate to our end-user experience. When one vendor balked at our request for a hands-on workshop, our FP&A team realized that this vendor was not confident it could meet our RFP requirements. If a technology vendor is unwilling or hesitant to accommodate a request to look under the hood, be wary that the technology may not meet the minimal requirements of your RFP.

Do you have all the stakeholders helping with your purchase decision?

Buying technology is a team sport. When evaluating financial system, there are two critical internal teams to involve: IT and procurement. The IT team has a technical expertise to ask questions you may not be equipped to ask. Data integration options, penetration testing scores, SOX compliance certifications, and provisioning governance are topics to leave to your IT team. The procurement team reduces the risk for the technology buyer and can review all the legal documents, including order schedules, master agreements, and pricing documents. Procurement also can step in to help negotiate a better deal based on prior negotiations with other vendors at your organization.

Also, don't forget to ask for customer references. Other companies have purchased this technology before. What do they like about the software? What could be improved? What would they have liked to have known before making the purchase? Customer references are key before making a purchase and signing a contract with a technology vendor for a financial system. Again, leverage your AFP network of FP&A professionals who have had to make similar systems purchases.

Do you understand the total operational costs?

Before you drive the car off the lot, you ask about ongoing maintenance because it is important to understand future costs. As an FP&A professional, you will need to budget for additional costs after your systems go live. Be sure to ask the sales team and customer references about those additional costs. Examples of hidden costs when purchasing financial systems include: integration tools, post go-live customer support, ongoing training and education costs, single sign-on capabilities, additional users or data, and diagnostic tests. Maintenance costs exist for financial systems and it's important to know what they are so you can manage those costs and plan for them in your annual budget. Some vendors will leverage a so-called "razor-blade" business model and charge very little for the razor to profit from selling you blades. Know what the hidden maintenance costs are to your financial system purchase before driving off the lot. Your CFO will not want any surprises!

Your first technology purchase may seem daunting. After all, FP&A professionals are not formally trained in purchasing technology. However, with the tips above, you will feel confident that you are driving off with a highperforming finance system that meets your budget and requirements, and not a lemon for your organization.

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The Informed How to become a better data consumer

BRYAN LAPIDUS, FP&A

e are all both producers and consumers of data, personally and professionally. We ingest data, analyze and interpret it, then apply our business savvy to make it more useful, and then deliver that to the next person. But are we doing this well? A Harvard Business Review article defined a problem faced by enterprises: "Investments in analytics can be useless, even harmful, unless employees can incorporate that data into complex decision making. [In fact,] there's an odds-on chance that someone in your organization is making a poor decision on the basis of information that was enormously expensive to collect."

HBR's research of global companies found that employees' ability to find and analyze relevant information could be aligned on a spectrum. At one end of the spectrum, "unquestioning empiricists" would choose the cold, hard data over judgment. At the other end, "visceral decision makers" go with their gut instinct and will choose judgment and experience over the facts presented to them. The "informed skeptics" balance analysis and judgment and are the desirable group; however, they were 38 percent of employees and 50 percent of managers.

What can we do to be better consumers of data and more informed skeptics?

Think about your role when you interact with data. In formal environments, there are different roles and access granted to maintain integrity. While the formality is not necessary in all instances, knowing where you are in the supply chain of decisions, and what to expect from others, will help you to handle your role and make the others better as well. And if you are playing multiple roles, it is still important to think through what needs to be accomplished:

- An administrator prepares and makes the data accessible to others. Data security requires that you protect sensitive information, sharing what is necessary without exposing too much. Also protecting source data, preventing version errors, and maintaining integrity are central to this role.
- A writer has the authority to reformat, change, and interpret data. In practice, since source data is rarely changed, the writer may create an intermediate copy or version to work from, and this will be the basis of analysis, dashboards, reports, text or presentations.
- An explorer looks at the data or many different data sets to create insights and connect different dots.
- An editor will scrutinize the information, try to poke holes in the data or inferences drawn to test its veracity. This is a key data validation step, and you may want to have a peer editor before taking it to the boss-editor.
- A viewer is often a senior person who is on the senior end of the data (or related information) and is going to take action based on it.

Give yourself time to understand the data. Slowing down is hard to do, but getting to know your data is like building a solid foundation for your house—everything else rests upon it. If the data is going to be recurring, know (and

verify) the common dimensions to ensure integrity and your understanding, such as the level of aggregation/atomization, date and time, frequency of collection, unit, business unit level, etc. Recognize that data systems are often split into systems of record and systems of analysis. Is something lost in translation from one to another? Are your colleagues using different data than you are?

Check your biases at the door. With so much data out there, the human mind creates rubrics to simplify and understand the world, and we do not look at the data objectively. There are a host examples: we often suffer from a "confirmation bias" of seeking data that supports our existing ideas, a "recency bias" of overweighting recent experience, or any of several other cognitive biases.

Develop your company's analytic capabilities. Notice that I did not say self or FP&A team, but your entire company. We will be more effective in our roles and provide more value to the company if everyone has the common language and skills to talk and share information. Here are some ways to get moving on this goal:

- Take advantage of formal instruction in data management and data analysis, such as workshops in the office, online courses, or external classes.
- "Coach people up" during the normal course of business and make it a mission to include data in every decision and discussion so that you set the cultural tone of what is expected.
- Standardize the decision making process to include data and metrics that leverage existing data libraries and common definitions; be skeptical of newly created data sets and measurements. Enforce the "single source of truth" that comes from using standardized data.
- When rolling out new data tools, focus on the decisions they will support and not simply the mechanical workings of the tool.

Balance "good enough" versus "perfect" data. One challenge of data is that it can become a goal by itself— the perfected data set, the pretty chart, the purified chart. However, the world is messy, and it moves fast. Think of a cost-benefit analysis: What is the additional cost in time and resources, and what is the expected value? The goal of data is information that will inform actions.

In our roles as consumers of data, what is an informed skeptic? To use and modify a quote from Miles Kington, data may tell you that tomato is a fruit, judgment will tell you not to put it in a fruit salad. May the fruit of your (data) labors taste sweet!

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KEY TAKEAWAYS:

Conversion lime

- The annual median cash conversion cycle has been cut in half since 1975; corporations have become much more efficient in managing working capital over the past few decades.
- The shorter CCC is primarily attributable to improvements in inventory management and more lenient payables terms. While firms appear to have improved collection efficiencies, the gains are modest.

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A look at the downward trend in

corporate cash conversion cycles

MATTHEW HILL, CTP, FP&A AND JAMES WASHAM. CTP. FP&A

• Since a shorter CCC leads to increased operating cash flow and improved firm liquidity, a potential implication of the trend in the CCC is cash accumulation.

Since its introduction in the 1980s, the cash conversion cycle (CCC) has become a key performance indicator (KPI) for corporate working capital management (WCM). The CCC represents the net length of time that funds are tied up in operating working capital by accounting for the turnover periods of inventory, accounts receivable and accounts payable. The CCC is calculated as days' inventory held (DIH) plus days' sales outstanding (DSO), minus days' payables outstanding (DPO). All else equal, a shorter CCC results in increased operating cash flow and improved liquidity.

To determine the degree that corporate WCM has improved over the past four decades, we examined the trend in the CCC for a large sample of public firms. Our data analysis indicates significant reductions in the CCC over the sample period. Interestingly, most of the efficiency gains occurred between 1975 and 2001. From 2001 to 2016, the CCC exhibited only minor variability. This result may suggest that, in aggregate, there are fewer remaining areas in the working capital supply chain that will easily enable further reductions in the CCC. It is likely, however, that inefficiencies in WCM still exist in certain industries.

Composition of the sample and calculations

Our sample consists of publicly-traded firms incorporated in North America that are covered by S&P's Compustat database over the period 1975 to 2016. This database is commonly used by academic researchers and industry analysts as a data source for financial statement variables. The sample of firms belong to a number of different industries; however, we drop firms in the banking and utility industries because of their unique regulatory environments. Our sample consists of 247,273 corporate observations spread throughout the 42-year sample period.¹

We used the financial statement information from Compustat to calculate the CCC and its components for each firm-year in the sample.² To summarize the thousands of annual data points, we calculate and present the median value for the CCC for each sample year. From a statistical perspective, the median represents the 50th percentile for a given variable. For example, a median CCC value of 45 days would indicate that 50 percent of the sample values have a CCC above/below 45 days. A benefit of using median values in data analysis is that they are less sensitive to extreme values (relative to the mean). Subsequently, we use annual median values to describe the typical CCC observed during a given year. Despite our focus on annual median values, we should point out that the CCC and its components vary tremendously across firms and industries.

Findings: A significant decrease in the CCC

For ease of presentation, we show the annual median CCC over the sample period using a time trend chart (Exhibit 1). This chart indicates substantial variation in the CCC over the sample period. In 1975, the median CCC was 101.66 days. That is, a firm at the 50th percentile of the CCC in 1975 had funds tied up in operating working capital on a net basis for 101.66 days. From 1975 throughout the 1980s, the median value for the CCC dropped in a fairly steady fashion, reaching a value of 78.68 days in 1989. The dramatic decrease in the CCC continued throughout the 1990s and into the 2000s.

By 2001, the annual median CCC dropped to 50.05 days. Other than a slight spike in 2006 and 2007 (likely due to the financial crisis), the annual median CCC displayed little variability between 2001 and 2016. The distribution of the annual median CCC values over the sample period indicates that most of the incremental improvements in working capital efficiency occurred between 1975 and 2001.

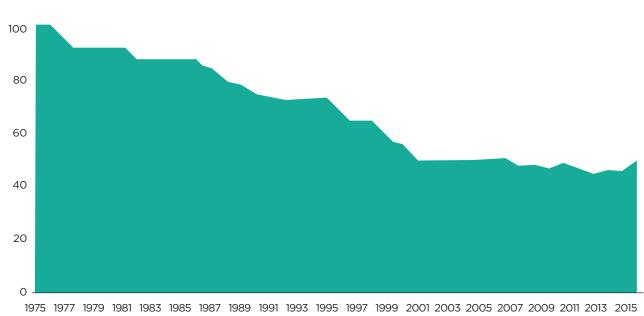


Exhibit 1

Source: Hill and Washam

TREASURY MANAGEMENT continued

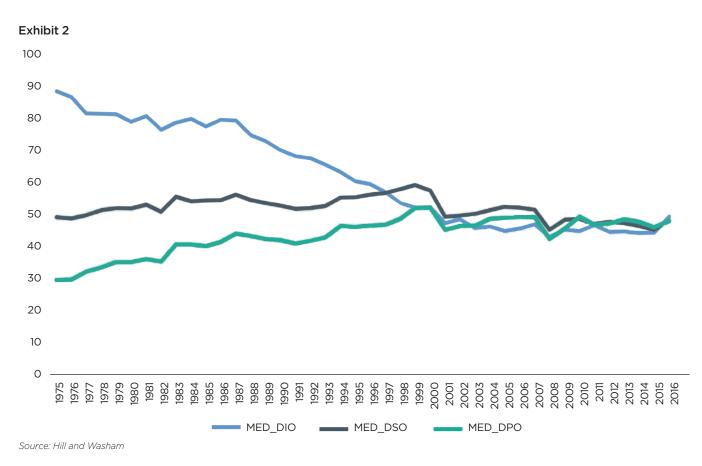


Table 1. Annual Median Values for the CCC by Endpoints of the Sample		
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Sample Yea	r Median CCC	Median DIO	Median DSO	Median DPO	Median DCH
1975	101.66 days	88.07 days	50.25 days	31.39 days	99.47 days
2016	49.98 days	50.40 days	49.22 days	49.15 days	197.56 days

To provide further insights, we next compared the annual median CCC over the endpoints of the sample period. This comparison is shown in Table 1. Ignoring interim movements, the median CCC dropped from 101.66 days in 1975 to 49.98 days in 2016. The 51.68 day reduction in the CCC is significant at all conventional statistical significance levels. This reduction indicates a 50.84 percent decrease, which translates to an annualized decrease of -1.78 percent per year over the 42-year sample period.³

Findings: Which components of the CCC drive the observed decrease?

Given the dramatic downward trend in the CCC, the drivers influencing this KPI are of interest. Exhibit 2 provides the annual median

values for the DIO, DSO and DPO, while columns three through five of Table 1 show the medians for the sample endpoints. From Exhibit 2, a declining trend in the DIO is apparent over the sample period. Between 2001 and 2016, the median value for DIO ranged between 44.3 days (2008) and 50.4 days (2016). Comparing the endpoints of the sample period (column 3 of Table 1), we observe that the median DIO dropped markedly from 88.07 days in 1975 to 50.40 days in 2016. This drop is consistent with improvements in inventory management techniques and in supply chain management that have reduced inefficiencies in filling orders.

Another factor contributing to the downward trend in the CCC is the change in trade credit use. Over the endpoints of the sample period, the median DSO dropped by 1.03 days. The observed decrease in the DSO is consistent with efficiencies in corporate collections made during the sample period (e.g., regulatory changes and the development and implementation of new payment technologies). Exhibit 2 shows substantial variation in the DSO in between the endpoints of the sample. Unlike the DSO, the median DPO increased substantially from a median of 31.39 days in 1975 to 49.15 days in 2016. These findings indicate that firms have reduced their collection periods while simultaneously increasing their time to pay. The net result is a shorter CCC.

Overall, the data analysis indicates that the shorter CCC is primarily attributable to improvements in inventory management and more lenient payables terms. While firms appear to have improved collection efficiencies, the gains are modest.

Implications: Cash accumulation

Since a shorter CCC leads to increased operating cash flow and improved firm liquidity, a potential implication of the trend in the CCC is cash accumulation. We examine this by comparing the temporal change in the sample firms' days' cash held (DCH), which is calculated as cash and equivalents divided by average daily operating expenses. The last column of Table 1 shows the median DCH values for the sample endpoint years. From 1975 to 2016, the median DCH almost doubled from 99.47 days to 197.56 days. The latter suggests that the median sample firm in 2016 carried enough cash to cover roughly 198 days of operating expenses.

The observed accumulation of cash is consistent with the aforementioned shortening of the corporate CCC, which has freed up vast sums of cash flow from operating working capital. It appears that managers have retained a substantial proportion of operating cash flow in the form of cash and equivalents. To be clear, the increased cash flow resulting from the shorter CCC has likely led to other uses of cash, beyond simply cash accumulation. Examples include corporate payouts (e.g., dividends and share repurchases), mergers and acquisitions activity, and the repayment of debt.

Implications: What does the future hold for the CCC?

Our data analysis clearly shows that corporations have become much more efficient in managing working capital over the past few decades. This is likely due to treasury managers squeezing blatant inefficiencies (i.e., low hanging fruit) out of the working capital supply chain. Despite this dramatic improvement, future trends in the CCC remain an open question.

One of the allures of data analysis is to use historical values to make projections about the future. For example, one can use the observed annualized rate at which the CCC dropped over the sample period to project future values for the CCC. Despite its simplicity, we caution against using this approach, since the results in the exhibits suggest that improvements in the CCC have somewhat plateaued over the last fifteen years. A more reasonable assumption is that future values for the CCC will be similar to current values, possibly because firms are operating at the minimum level of net operating working capital required (i.e., permanent current assets) to support revenues. If this is the case, then treasury managers will be forced to become even more creative to further reduce the CCC. Perhaps higher future interest rates will provide the motivation to produce further innovations in working capital management.

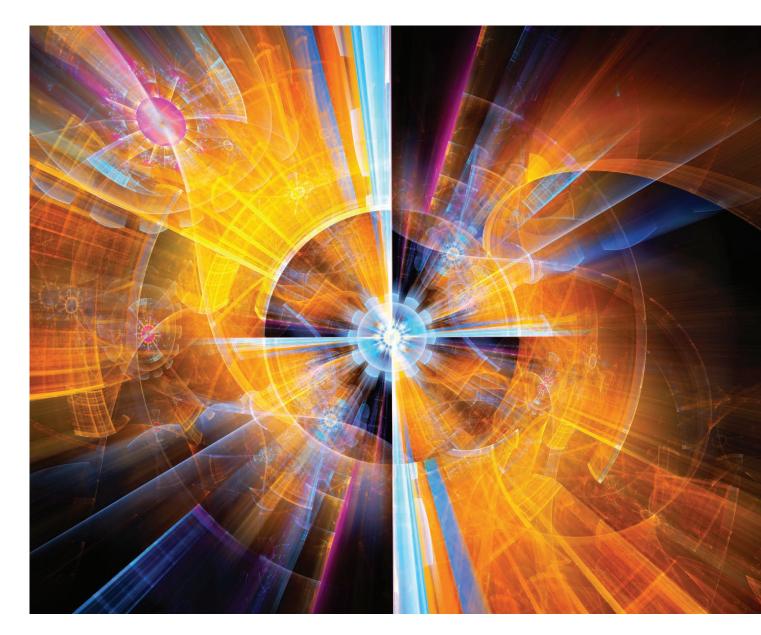
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- 1. The sample does not include every North American firm that is publicly-traded over the sample period. Some firms are dropped from the sample due to missing financial information or due to data collection errors.
- 2. We calculate Days' Inventory Held (DIH) as [Inventory/ CGS)*365], Days' Sales Outstanding (DSO) as [Accounts Receivable/Revenues)*365], and Days' Payable Outstanding (DPO) as [Accounts Payable/ CGS)*365].
- 3. The aggregate decrease of 50.84 percent is calculated as (49.98-101.66)/101.66. The annualized decrease of -1.78 percent is calculated as (49.98/101.66)/142 1.

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Are finance professionals prepared for machine learning?



Big Data. Artificial intelligence. Machine learning. These are some pretty big buzzwords in our industry right now. Before we can decide if finance professionals are ready for machine learning (ML), we need to first make sure that we understand what ML is.

This is especially true because people sometimes use artificial intelligence (AI) and machine learning (ML) interchangeably, and they are definitely not the same thing. AI is the creation of computer systems that are able to perform human-like activities such as voice and pattern recognition. ML leverages massive amounts of data to make useful predictions, integrating statistical reasoning to help businesses make repeatable, actionable insights.

Where AI does not require human interaction, ML, in fact, depends on human interaction. Effective ML cannot be deployed without complete support from the financial planning and analysis (FP&A) team.

Back in 2016 at a conference I attended, a speaker named Michael Terenzoni of threat detection firm Sqrrl noted that, "ML is the tip of [the] spear, but you have to do a lot of curating to create a model that makes sense." Without clean data or a structured business model, ML results in "garbage in, garbage out" similar to a poorly constructed business model.

In 2017, ML continued to dominate technology trends for financial applications. According to Bloomberg's Buy-Side Week New York event, although only 16 percent of firms have deployed ML strategies, while 24 percent were researching how to do it and 26 percent want to learn how to do it. "These [ML] tools can learn, but that learning is bounded by the basic parameters introduced by the humans that made them," the report noted." ML cannot happen without human interaction.

Getting ready

What does this mean for FP&A professionals in 2018? As a finance professional, are you and your FP&A team prepared to solve your company's business problems leveraging ML? What must happen with your FP&A team and systems in order to leverage ML?

Here are some considerations for your FP&A organization before embracing ML technologies:

• What question(s) do you want to answer with ML? Before attempting a deployment leveraging ML, it is important to understand what question(s) you want to ask. Is your company trying to improve forecasting accuracy for an expense item that is slowing down the monthly close process? Does your organization want to optimize supply chain channels? Do you want to maximize operating profitability while driving growth for a new product? Or, does your company want to understand which combination of bundled products improves customer satisfaction and reduces attrition? The question (or questions) your enterprise is seeking to answer are important to identify before deploying a ML strategy. Meta-data will matter, so map out the questions you need to ask. The FP&A team should identify what questions the business wants answered through a ML strategy.

Bonus accruals, for example, could leverage ML to improve this FP&A planning process. FP&A teams are tasked with determining bonus accruals across thousands of employees at large organizations. Headcount, current salaries, bonus plans, KPIs, and other factors are needed to calculate the most accurate bonus accrual. By applying ML to this FP&A planning process, bonus accruals can become more automated and accurate, while allowing FP&A teams more time to focus on other critical activities during the monthly close process.

FINTECH continued

- What data is needed for your ML strategy? Now that you have identified what question (or questions) you want answered by your ML strategy, your company should seek to understand what data is needed. Every enterprise operates in data silos. To answer the questions your organization has identified, you will most likely need to access a combination of both financial and operational data. Your enterprise resource planning (ERP) and enterprise performance management (EPM) solutions will have actual and planned financial data to leverage. Operational systems like your customer relationship management (CRM) and supply chain solutions will have operational data to use such as product SKU information, sales pipeline conversions, customer counts, and deal win ratios. If your organization is more sophisticated, an enterprise data warehouse (EDW) may exist to access both the financial and operational data necessary to set up your ML deployment. Take a breath before bringing expensive outside consultants on-site and ensure your enterprise understands what data will be needed. Map the data needed back to the guestions being asked and understand how the data will be accessed.
- What role should FP&A play in deploying a ML strategy? A successful ML strategy requires data, a business model, and algorithms. FP&A will lead the charge in identifying, mapping, and structuring all of these critical elements. FP&A professionals also will be the ones who lead partnership with critical team members as identified below. Successfully deploying ML will be a team sport with FP&A quarterbacking the strategy.
- Can FP&A tackle ML without your IT team and data scientists? No, FP&A cannot tackle a ML deployment without partnership with both your IT team and data scientists. A successful ML strategy is going to require understanding your enterprise's data, identifying data model delivery for your enterprise (e.g., on-site, cloud, or hybrid), and unifying the data before any statistical reasoning algorithms can be run. While FP&A may be better suited to lead in identifying the questions that need to be answered and structuring the algorithms, the IT team and data scientists are required to structure, map, and understand the underlying data needed for the mathematical equations.
- Can a ML deployment be tackled without outside consultants? The answer to this question is more controversial. ML is in its early stages. Many chief financial officers may not want to spend on billable hours for outside consultants. However, if it is your company's first ML attempt, leveraging management

consultants who have deployed ML at previous companies may not be a bad idea. Ensure that your IT team, data scientists, and fellow FP&A professionals have faith in the outside consultants you select and that those consultants understand your data silos and integration for the questions you want to answer with respect to your industry. Your CFO will appreciate that you thought to leverage outside experts when deploying a new technology like ML, as long as they are cost effective and provide an investment return.

- Will ML replace current technology leveraged by my company? Chances are, ML will not replace any current system leveraged by your company. Your company will still need your accounting system, your enterprise data warehouse, your corporate planning solution, and your human resources system. What ML will eventually replace is the routine, transactional activities that can take up a lot of time from the FP&A team. As ML reduces these transactional tasks, FP&A teams will have an opportunity to become more strategic in redefining their roles and processes.
- How will the FP&A team operate ML? The FP&A team will own the ML deployment and impact to the FP&A function. Once ML is deployed for the desired use case, FP&A will be responsible for monitoring the ML deployment and making changes as needed. With any organization, processes, procedures, and desired outcomes will change over time. FP&A will be responsible for maintaining the ML strategy and with the support of the IT team and management consultants, adjusting any calculations to align with new business goals or procedures. Thus, as advanced technologies like ML continue to be embraced by the finance function, FP&A teams will need to become strategic thinkers with technology acumen. Digital transformation within the finance organization is going to require FP&A talent to educate and prepare themselves for operating advanced technologies like ML.

Where are all the machines in ML? In 2018, a successful ML deployment strategy cannot happen without humans—FP&A, IT, data scientists and, arguably, management consultants all working together. A common misconception is that ML is driven by machines. It is important to remember that it is the humans behind the machines, and especially FP&A, that will lead an organization to make useful predictions leveraging massive amounts of data.

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Less Than Advertised

Blockchain may have weaknesses that proponents overlook

JOHN HINTZE

he attribute blockchain proponents consistently emphasize is its immutability. Blockchain, they claim, cannot be cracked.

In reality, experts suggest, the technology is more mutable than advertised and carries unique risks. In fact, public and private versions of blockchain offer different strengths and weaknesses that, in some cases, may make conventional, permissionbased databases the better choice. "The loss of a private key is probably the biggest threat to blockchain systems. People have lost millions in bitcoin after losing their private keys."



The biggest threat to blockchain immutability, observers say, sounds similar to a common technology problem: losing a password—or, in blockchain's case, a key.

"The loss of a private key is probably the biggest threat to blockchain systems," said Allison Berke, executive director of the Stanford Cyber Initiative. "People have lost millions in bitcoin after losing their private keys."

Unlike conventional databases, public and private blockchains encrypt data onto a chain recorded in a digital ledger that is distributed among numerous servers, or nodes. Blockchain data is presumed to be immutable because the multiple nodes validating and monitoring transactions would recognize and prevent an attempted attack.

Bitcoin is the most widely known public blockchain. It has thousands of decentralized nodes that perpetually monitor one another for bad-actor activity, presumably making its blockchain highly secure. Users of bitcoin (or other public cryptocurrencies) hold private keys to access digital wallets that hold the coins. Likewise, users of services built on top of blockchains use such keys—similar to passwords to access conventional databases—to access their proprietary data.

Berke noted that conventional databases pose less risk in this regard because as a central authority they hold copies of users' passwords and/ or allow them to create new ones. "Anytime a use case doesn't strictly require using a blockchain, anytime you can trust a central authority such as Amazon or your bank, then I think you should not use a blockchain solution," Berke said.

In turn, she added, appropriate use cases of blockchain technology tend to have no central authority, such as government organizations in multiple states or countries that want to verify documents such as marriage licenses or birth certificates.

Another such use case may be major construction projects, such as a new power plant, since the many tens or even hundreds of companies participating in such a project may use different and incompatible planning software.

The SophiaTX initiative is building a platform to apply public blockchain technology to core business applications, including projectmanagement software. Blockchain technology would give project participants the ability to track the project's progress precisely and avoid timing snafus leading to unnecessary costs, while quickly reconciling any delays from weather or other unexpected events.

Loss of a layer

Steve Wilson, principal analyst at Constellation Research, noted that public and private blockchains eliminate the administration layer between parties in a transaction, increasing efficiency and reducing potential mischief. However, he said, private blockchains tend to be maintained more regularly and participants can generally expect service-level agreements over the software code. He advocates private blockchains to administer complicated systems such as corporate supply chains, especially for highly regulated businesses such as pharmaceuticals.

Nevertheless, private blockchains' immutability also is less than perfect, Wilson said. Many operate with as few as half a dozen nodes, at least conceptually making them less resilient to attacks than public blockchains.

"So what you get is a very distinct clawback of conventional security, whereas the big public blockchains don't care about the security of the individual nodes, because by design they don't trust one another," Wilson said. "With private blockchains, there's a need for trusted operators, and that's exactly what happens with IBM's initiative or [the R3 bank consortium building a distributed ledger platform specifically for financial services]"

From a security standpoint, private blockchains start to resemble today's conventional permission-based databases. Berke pointed out that private blockchains typically have some sort of gatekeeper functionality to determine who holds the distributed ledger and how nodes participate in the network. Assuming the gatekeeper(s) can be trusted, private blockchains may even be more secure than their public cousins, she said, since the latter are open-source networks and no one is vetting the software, so software developed for a malicious node could disrupt or divert the blockchain.

"Private blockchains typically put out one version of the node client software that everyone must use, so it's easier to vet when everyone is using the same, updated version," Berke said.

Even so, their relatively few nodes make private blockchains inherently more susceptible to a so-called 51-percent attack, in which an entity controlling more than half the nodes in a blockchain network could potentially disrupt it. Gaining control of more than 50 percent of a public blockchain's thousands of nodes should theoretically be more difficult, but that's already happened to bitcoin, when in 2014 the GHash bitcoin mining pool gained majority control on several occasions.

New vulnerabilities

More recent concerns have focused on the enormous technology and energy resources required today by mining nodes to solve the complex mathematical problems that encrypt data to the blockchain and earn new bitcoins. Not only has that resulted in a more concentrated pool of miners, but many of them appear to be located in northern China, where the government-subsidized energy and cool temperatures make mining profitable.

Dr. Gideon Greenspan, founder and CEO of Coin Sciences, developer of the MultiChain platform to create private blockchains, wrote in a May 2017 blog titled "The Blockchain Immutability Myth" that while it would be enormously energy-intensive and expensive for a majority of nodes to change an earlier block and in turn the subsequent ones to hide the change, the cost is still "small change" for any "mid-size country." Greenspan adds that a less costly option for China, if it indeed is home to a majority of bitcoin nodes, would simply be to take the miners by force, enabling it to control which data blocks are validated and attached to the blockchain and which are not.

of dollars in ether, the blockchain network's cryptocurrency.

A majority of nodes agreed to fix the software bug that the attacker exploited and return the coins to their rightful owners. However, a minority of "purist" nodes opted to keep the original software, resulting in users of Ethereum, whether as a currency or a tool to manage other data, having to choose between the one version of the cryptocurrency or the other.

So much for the immutability. Berke suggested that private blockchains may be less susceptible to forks, given the nodes are likely to be vetted by the group that assembled it for a specific reason. Nodes, however, are controlled by human beings, between which disagreements can arise. Perhaps more insidiously, Greenspan notes, a group of hospitals aggregating data

In 2016, for example, an Ethereum smart contract, one of the public blockchain's several business features, was hacked and the perpetrator proceeded to drain millions of dollars in ether, the blockchain network's cryptocurrency.

News in early 2018 about Chinese regulators limiting the electricity supply to bitcoin miners and asking local governments to "guide" them to exit the business may allay some fears. However, the threat of a 51 percent attack remains. Should it occur, bitcoin participants would no doubt realize what has happened and may opt for taking the digital currency in another direction, resulting in a so-called fork. Forks may also occur when a significant minority of nodes disagree with the majority consensus and opt to go in a different direction, verifying a different progression of data blocks. In 2016, for example, an Ethereum smart contract, one of the public blockchain's several business features, was hacked and the perpetrator proceeded to drain millions

about infections on a blockchain could discover that one hospital has written erroneous data to the chain, decide to "rewind" their nodes back an hour to delete the problematic data, then allow the chain to continue as if nothing had happened.

"If all the hospitals agree to do this, who is going to stop them? Indeed, apart from the staff involved, who will even know that it happened? Greenspan said.

The lesson for treasury and finance professionals? As with all new technology, blockchain is not a magic bullet. It has potential weaknesses that can be exploited. It is up to treasury and finance to understand the risks and decide to move forward or forgo the new technology.

INVESTING

GONE for GOD

Corporate's trickle back into prime is unlikely to become a flood

JOHN HINTZE

orporate treasuries appear to be gradually warming up again to prime money market funds (MMFs), according to new data. And while recent tax reform may brighten MMF prospects further, the funds may have lost their status as a primary vehicle for corporates to stash cash.

The volume in prime funds plummeted as MMF reform approached its effective date in October 2016, while the volume of MMFs investing in government securities rose dramatically. Since then, according to Securities and Exchange Commission (SEC) statistics, the volume of prime funds have gradually crept upward, from a low of \$550 billion at the end of 2016 to \$666 billion at the end of 2017.

Government MMFs also increased slightly. The SEC's MMF reform required prime funds to be offered with floating net asset values (NAVs) instead of fixed, and it gave MMF boards the discretion, should weekly liquidity fall below 30 percent, to introduce redemption fees of up to 2 percent and/or apply gates for up to 10 days.

The SEC's numbers regarding cash allocated to prime MMFs reflect observations by market participants. In a recent NewGroup survey of treasury investment managers, 8 percent of respondents said they had started investing in prime funds again and 14 percent were considering it. The survey also revealed that 39 percent of respondents had moved away from prime funds and remained in government MMFs, while 19 percent had always been in government MMFs, 6 percent had opened a separately managed account to invest cash, and 14 percent allocated cash to other investment vehicles.

Barbara Shegog, director of the NeuGroup's Peer Knowledge Exchange, said the majority of the Neugroup's corporate members shifted to government funds around the time of MMF reform. Since then, she said, prime MMFs have remained stable, and in light of recent tax reform and the anticipated repatriation of corporate cash from overseas, more corporate asset managers are considering a return to them. However, she added, the exodus to government MMFs resulted in numerous prime MMFs closing or drastically shrinking.

"Now the problem is that no one wants to be the first big client back into a fund," Shegog said. "No one is going to lose their job by staying in lower yielding government MMFs, but they could lose it if they put money in a prime MMF that pays an additional 50 basis points and it blows up." "Now the problem is that no one wants to be the first big client back into a fund. No one is going to lose their job by staying in lower yielding government MMFs, but they could lose it if they put money in a prime MMF that pays an additional 50 basis points and it blows up." Capital Advisors has seen a few of its corporate separately managed account (SMA) clients direct their cash back into prime MMFs, representing about 1 percent of clients and roughly 2 percent of invested dollars. Lance Pan, director of investment research and strategy, said conversations with clients suggest those moving back to prime funds typically already invest in offshore funds with floating NAVs.

"So they're not adverse to the variable aspect because they've lived with that experience," Pan said.

Redemption gates

Pan said that the redemption gates imposed by MMF reform tend to be the biggest issue for corporate treasuries, and those that have moved back to prime funds have become comfortable with fund sponsors commitments not to impose gates in times of stress. For many corporate investment managers, the current yield pick up between prime and government MMFs—still less tan 25 bps simply doesn't warrant the effort.

"They've gone through the battle and don't want to go back to their boards to get approval to flip the switch back to prime funds, inviting questions about why the move is worthwhile and providing the necessary support documents," Pan said.

Treasury Strategies has concluded that a key impediment to corporates returning to prime funds is the lack of spread incentive between prime and government funds, according to Anthony Carfang, managing director at the Novantas consulting division. "Although wide by historical norms, it's simply not yet sufficient to overcome operational complexities.

"Our sense is that as rates go up and spreads widen, more corporates will wade back in," Carfang said. "Most corporates invest every day in assets that float, including bond funds and commercial paper ... Prime funds invest in the commercial paper of the strongest banks and corporates in the world, so concerns about NAV fluctuations are a bit far fetched."

Nevertheless, not all the money which has left prime funds can return. Investments through sweep accounts, for example, are mechanically impossible with a fluctuating NAV fund.

Even so, prime MMFs may never return to their illustrious status before the 2008 financial crisis, when the The Reserve Primary Fund failure and the Lehman Brothers bankruptcy resulted in heavy redemptions from prime institutional money market funds and a short-term funding squeeze. Pan said he believes prime funds are likely to one day become a more important vehicle for investing cash, but not the primary tool. In part, he added, that is because the longer prime balances remained stunted, the more likely former issuers of certificates of deposit—the main investment of prime MMFs will find other, reliable funding sources.

"That alone will alleviate pressure on the shortterm side, so the need to fund in the prime MMF space will be lessened," Pan said.

He said that to re-engage the prime MMF market even as a secondary vehicle to park cash, besides a wider spread difference between prime and government MMFs, will probably require some well-known institutional accounts to take "anchor" positions. He added it will be "probably a process of three-to-five years to reach significant balances."

A new trend

Another trend likely to stunt growth of the prime MMF market, Shegog said, is that corporate treasurers are aiming to be more strategic about their cash allocation, seeking to minimize the use of money market funds while investing more cash further out the yield curve.

"Instead of trying to find MMFs that yield more, investment managers are trying to hold as little as possible in those funds and instead be more efficient with how they bucket their cash, investing more in longer-term, higher yielding alternatives," she said.

Carfang said that the Consumer Financial Choice and Capital Markets Protection Act of 2017 was introduced last spring and has bipartisan cosponsors in both the House and Senate. It would keep the SEC reforms in place but allow fund companies to create MMFs with a fixed NAV on an opt-in basis. It would also require those funds to agree to not accept a government bailout in times of crisis, which Carfang said is already true of other corporate treasury investments.

Noting the likely significant amount of cash to be repatriated, Carfang said corporates will almost certainly have much more cash eligible for vehicles such as MMFs, particularly since many banks are currently flush with deposits.

"So from a corporate treasury standpoint, you probably want prime MMFs to be a viable product," Carfang said.



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THE BOTTOM LINE

Philly Phinance

IRA APFEL

A lthough I am a Philadelphia Eagles fan I did not write this article about the team to gloat. Really. Treasury and finance actually can learn from the Eagles and their head coach, Doug Pederson.

Pederson, as we saw during the Super Bowl and all season long, was very aggressive on fourth down, flagrantly flouting conventional wisdom and opting not to punt. Why take this risk?

Maybe it was not really risky, and the conventional wisdom was wrong. The Eagles enjoyed a 69 percent success rate when going for it on fourth down instead of punting. That aggression helped them win the title.

Crucially for treasury and finance, Pederson did not go with his gut, as many observers said. Rather, he worked with an analytics coach to calculate the probability of success in various scenarios based on field position, distance to first down, and strengths of the opposing team. The assistant informed Pederson during games of probability of success or failure. If the probability was about even, then Pederson had the discretion to choose.

We live in a time of new data and analytical techniques that can provide treasury and finance with advantages—if we know how to use them, and are brave enough to use them. What may seem counterintuitive may actually be less risky. The Eagles' effort to gather and analyze data showed that going for it on fourth down was, probabilistically, the best outcome for winning the game. Are there opportunities that your organization is missing because of inherent risk aversion? For example:

Are new products not approved because they threaten an existing product line, thereby giving rise to an outside competitor?

Are compensation and culture reinforcing conservatism rather than risk taking? What is the risk of waiting and missing?

The AFP Corporate Cash Indicators® survey shows that companies have increased their cash holdings over the past quarter-over-quarter and year-overyear. Is that appropriate at a time when every major economy is growing?

The lesson is clear: People and data make the best decisions. People alone are subject to many biases and fallacies; computers alone may be too formulaic and predictable. Coach Pederson showed the way for treasury and finance by leveraging data and personal judgment to take the organization new new heights.

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