treasury today research insight analysis March/April 2018



Brexit: the countdown is on

On 29th March 2019, the UK will no longer be part of the European Union and there are still many questions remaining about the final form that the UK's departure will take. What then are the possible outcomes – and how should treasurers be preparing for Brexit?



The Corporate View
Helen Hanby
Director, International Treasury
Biogen



Treasury Practice

When the whole organisation understands the importance of cash, it becomes easier to harvest more diverse, accurate and timely data to drive stronger working capital performance. How then can treasury build a cash culture?

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Calculating the cyber-threat

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Trump and the Davos dream

When President Trump took to the stage to deliver his 16-minute speech on the closing day of the 2018 World Economic Forum (WEF) in Davos, was there a feeling that his hitherto hard-boiled "America First" manifesto had softened?

More than one pundit commented that his uncontroversial tone sounded like one crafted to be more palatable to foreign leaders.

WEF is of course all about celebrating globalisation. Temporarily deaf to his own criticism of "the false song of globalism", perhaps President Trump sat up the night before and read the WEF publication, "Strategic Brief on Misconceptions around Trade Balances", leading him to reason that a more mollifying approach would yield better results

According to the Washington Post and Reuters, the Strategic Brief argues against the views espoused by certain countries that trade policies developed over the last couple of decades have led to large trade deficits and a decline in manufacturing employment.

These anti-globalisation narratives have, says the Brief's co-authors, Harvard professor Robert Lawrence and Princeton fellow Yeling Tan, recently emerged in "the United States as well as elsewhere" (it didn't name the other countries).

President Trump's constant displeasure with "unfair" and "bad trade deals" has seen him take or seek action on multilateral deals such as the Trans-Pacific Partnership (which he has pulled out of) and the North American Free Trade Agreement (in which he has tried to get Canada and Mexico to renegotiate on his terms). It is no secret too that the US's major trade deficit with China is a constant source of irritation for the Trump administration.

The perceived unfairness to the US of such trade imbalances is viewed by the WEF pair as a "misconception". They argue that if such a free trade agreement allows a country to meet more of its needs by importing at lower costs from a particular partner, it will benefit, regardless of the imbalance.

President Trump's America First mantra that trade deficits mean job losses is thus refuted. The authors argue that "rapid import growth and larger trade deficits have been associated with faster employment growth". Manufacturers can buy in cheap parts to make their goods, which they can sell for less, so people buy more, so more jobs are created. New barriers to trade, on the other hand, "could disrupt production and reduce rather than increase domestic employment in both the protected industries and those that use their outputs".

With President Trump now considering the imposition of restrictions on the import of steel and aluminium as a measure aimed principally at China (but likely to hit the EU too), 'America First' it seems is alive and well. For global businesses, Trump's stance poses several issues, most notably increasing the risk of a trade war. This could be very disruptive to today's highly integrated global economy and something businesses will want to avoid at all costs.

Whether a trade war materialises or not, Trump's stance requires all corporates to take a close look at their supply chains and how they are doing business to evaluate if this will still be cost effective going forward. The skills of the treasurer will undoubtedly be called into action here to help manage this process and any undue risk.

INSIGHT & ANALYSIS



Brexit: the countdown

With only a year to go before the UK leaves the European Union, much remains unclear about the final form that Brexit will take. In the meantime, there is plenty that treasurers should be doing to help prepare their businesses for the challenges ahead. Treasury Today explores some of the areas that treasurers should be looking at in 2018.

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Automating treasury: taking a fresh look

In every industry, technology is making possible things that once seemed impossible. Terry Dennis, EMEA Cash Management Sales Head, Corporate and Public Sector, Treasury and Trade Solutions at Citi, explores how new technology is accelerating change and creating new opportunities within corporate treasury.



MMF reform: a to-do list

With Europe's money market fund reform now under way, fund managers have plenty to do this year as they adjust their offerings in line with the new rules. Meanwhile, treasurers should take the opportunity to review the new fund structures, update their investment policies and check that their cash and treasury management systems are able to cater for the changes.

TREASURY PRACTICE 16



Cash first: how changing company cash culture can improve forecasting

The importance of cash and accurate forecasting should be understood by the whole company if stronger working capital performance is to be delivered. Here's how to start the conversation.



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Held to ransom

Cyber-risk continues to be a focus for businesses around the world and is increasingly becoming an area of focus for corporate treasurers. How then can treasurers go about quantifying the risks they face - and how can these risks best be managed?



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Pool party

Notional or physical pooling? The basics of both forms of this popular liquidity management tool are explored.



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Market View

Helen Hanby Director, International Treasury



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For Helen Hanby, Director, International Treasury at Biogen, the attraction of treasury comes from the fact that it is "real". By this she means that it has a direct impact on the business, looking at the present and future rather than historical data. Read about Hanby's career and how she has looked to add value to the US multinational biotechnology company, Biogen.

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How technology is helping treasurers deliver strategic advantage

The essence of strategic treasury is that it is an integral part of business decisionmaking. This means full and timely visibility over all financial flows is critical. Forward-thinking regional or deputy treasurers can sow the seeds of change.



Better collections management

For every company on the planet, receiving payments is an everyday occurrence. Yet it is an area fraught with challenges. Two senior product executives from BNP Paribas discuss why this is the case and how to solve the issue.





Who's making trade easier and who's not?

Make trade easier because it costs less and enables growth. This is the simple tenet explored by the most recent Global Survey on 'Trade Facilitation and Paperless Trade Implementation' published by United Nations.

This is the second such survey (the first was released in 2015) to be jointly conducted by the five United Nations Regional Commissions, for Africa, Asia and the Pacific, Europe, Latin America and Caribbean, and West Asia. Although each commission is set to publish its own detailed paper for download, the global view presents a clear view of progress, highlighting how different countries and regions tackle non-tariff based sources of trade costs, addressing unwieldly regulatory procedures and documentation requirements across 120 economies.

Making it easier

Trade facilitation is defined by the UN as "the simplification and harmonisation of import, export and transit procedures". A key element is the concept of 'paperless trade' which it describes as "innovative, technology-driven measures aimed at enabling trade using electronic rather than paper-based data and documentation".

With WTO Trade Facilitation Agreement (TFA) having come into force in February 2017, and a growing number of regional and sub-regional initiatives being established to encourage the electronic exchange of information along international supply chains, the world is waking up to a huge opportunity for growth and efficiency. Indeed, WTO estimates show that the full implementation of the TFA could reduce trade costs by an average of 14.3% and boost global trade by up to US\$1trn per year, with the biggest gains in the poorest countries.

To date, the global average implementation rate of both the FTA and paperless trade measures is about 60%, according to the UN survey. There is clearly room for improvement.

The paper chase continues

The global average implementation rate of paperless trade measures is around 50%. Measures such as electronic customs systems, the full availability of internet connection to customs and other trade control agencies, and the electronic submission of customs declarations have been either fully or partially implemented in most countries surveyed. However, the report advises that implementation of more advanced paperless trade measures remains low.

Whilst nearly 60% of the economies studied have engaged to some extent in creating an electronic single window for processing trade documents, very few have fully operational systems in place.

The global average implementation level of cross-border paperless trade is just 33%. Although the average implementation level of legal and regulatory processes for electronic transactions exceeds 60%, steps to enable the cross-border electronic exchange and recognition of regulatory documents – such as certificates of origin and sanitary and phytosanitary certificates – have been adopted in less than 30% of the represented economies.

More work, more help

The report concludes that across all surveyed countries there is "strong momentum" towards the implementation of trade facilitation and paperless trade measures. Countries, it notes, "should continue to apply modern information and communication technologies and develop paperless trade to simplify trade procedures and enable electronic exchange of data and documents, not only between stakeholders domestically, but with all the actors along the international supply chain".

Help is at hand. Policy recommendations and technical standards have been developed by United Nations Economic Commission for Europe (UNECE) through the UN Centre for Trade Facilitation and Electronic Business (UN/CEFACT). In Asia and the Pacific, for example, the 2016 Framework Agreement on Facilitation of Cross-Border Paperless Trade provides the ground rules for member states to cooperate and make progress in this area.



Are you really who you say you are?

What could possibly go wrong? The rise of digital payments is almost universally celebrated. The 13th January 2018 deadline by which all EU member states will have implemented the reworked Payment Services Directive 2 (PSD2) into their national regulations ensures a firm grip will be taken on matters of online security and customer protection. Companies will see faster payments and collections for which the working capital benefits have been made clear to all.

But all is not entirely satisfactory, says Jonathan Williams, Principal of payments, identity and fraud prevention firm, MK2 Consulting. Where populations have shifted to largely managing financial activities online, it is becoming increasingly difficult to prove who you are. "How does an individual assert their identity without a process which creates a lot of additional friction?" he asks. "And how does a financial services provider know for sure that the authenticated individual really is who they say they are?"

Outmoded

The challenge for FIs is that they have historically had only money laundering guidelines to follow, notes Williams. These require the provision of documentation, such as a passport – these documents commonly being trusted as authentic.

But it may not be apparent to a UK bank employee checking a foreign passport that it is genuine, or indeed that it is even being presented by its legitimate owner. Where official verification documents can be forged or the real document falls into the wrong hands, the current process falls short, argues Williams. "If I'm proving my identity, how does the bank know I am the right Jonathan Williams? A document with my name on it does not necessarily have a clear relationship to the right individual. This is one of the weaknesses in the current system."

Criminals take advantage of weaknesses. The fact that they may not have exploited this one yet is merely indicative of the fact that there are other weaknesses they find easier to exploit. The link to the cardholder in 'card-not-present' transactions is weak, for example. There is proof someone has possession of the card via the three-digit Card Verification Value, name and long number, but there are rarely checks to ensure this is the legitimate cardholder. Even with biometrics, which are strong authentication measures in themselves, unless the identity of the provider of biometric data is also strongly known, the authentication process is flawed.

A new way of checking

"With PSD2 acting on strong authentication and linked to identity verification, it will tighten up some of the existing security mechanisms. This will shift the focus of criminal intent to other weaknesses." notes Williams.

Action needs to be taken to highlight these weaknesses so organisations do not put too much faith in one system. There also needs to be guidance on what measures are suitable for their specific needs.

To try to address such issues, the British Standards Institute (BSI) has been facilitating multi-agency discussions on the Publicly Available Specification (PAS) 499, Digital Identification & Authentication Code of Practice. This was in public consultation until 9th November and is now moving to the next phase.

In offering principles by which to operate, PAS 499 should be of interest to any organisation (FI or corporate) with an interest in knowing who they are dealing with. This could be when initially signing up an account and in subsequent use, suggests Williams. "It is one approach that will definitely raise the bar around digital identification and authentication."

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Brexit: the countdown

With 12 months remaining before Brexit becomes a reality, what are the possible outcomes – and how should treasurers be preparing?



THE UK
WILL LEAVE
THE EU ON
29TH MARCH
2019

BREXIT VOTE

HAS ALREADY INFLICTED

A HIT OF ALMOST

£ 20 B N

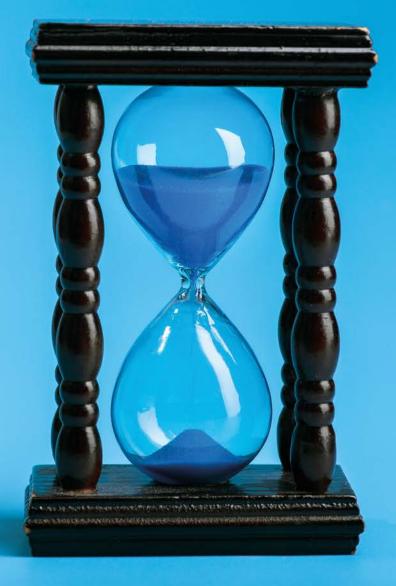
ON THE UK ECONOMY



25% DECREASE
IN UK BUSINESS INVESTMENT
EXPECTED BY 2019

THE UK IS EXPECTED TO HAVE LOST

10,500
FINANCE JOBS
BY DAY ONE OF BREXIT



With only a year to go before the UK leaves the European Union – the departure is scheduled for 11pm UK time on 29th March 2019 – much remains unclear about the final form that Brexit will take. While some agreement has been reached on issues such as the rights of EU citizens living in the UK and UK citizens in the EU and the status of the Northern Ireland border, there is plenty yet to be decided.

More should become clear in the coming months. Negotiations are due to take place in March about the proposed transition period, with the UK aiming for a two-year period following the departure date. The next stage of talks will focus on negotiating a trade agreement, the outcome of which will have lasting implications for companies in the UK and Europe.

In the meantime, there is plenty that treasurers should be doing to help prepare their businesses for the challenges ahead. From understanding changes to the business model to carrying out quantitative analysis, Treasury Today explores some of the areas that treasurers should be looking at in 2018.

Hard or soft Brexit?

There may be only a year left before Brexit becomes reality, but there are still many questions remaining about the final form that the UK's departure will take. At this stage, given the continuing uncertainties, there are three possible scenarios to consider, says David Farrow, Head of Global Transaction Banking, Barclays Corporate Banking.

"At one end of the scale, a 'soft' Brexit with the status quo largely maintained and a transition phase for EU businesses to adapt; at the other end a 'hard' Brexit with the UK taking a full exit from the EU/EEA with no passporting rights or transitional arrangements," he explains. "In the middle is what we're calling the 'Flavours of Brexit', essentially a blend or patchwork quilt from both ends of the scenario scale."

The still-wide range of possible outcomes makes it challenging for treasurers to predict what the outcomes of Brexit will be for their businesses – but that doesn't mean they shouldn't be examining these. As Farrow notes, "The lack of clarity means treasurers should ensure they have given thought to what a 'no deal' Brexit would mean for them and how they would ensure continued UK-EU access in the absence of a deal."

Understanding the impact

As a result, treasurers should consider the impact of the different possible Brexit outcomes. For example, Farrow says that a 'hard' Brexit could mean treasurers face material impacts on core activities. "Impacts could be felt across the spectrum of treasury activities, with many facing increased costs, increased friction or inefficiencies and potentially increased tax liabilities," he says. "While the impacts are conceptually no greater than the complexities of doing business cross-border in other markets, treasurers used to a coherent single market with relatively low costs will need to restructure their treasury operations to mitigate these impacts."

At the other end of the spectrum, he says that in the case of a 'soft' Brexit, "we believe the status quo will be largely maintained and corporates will continue to be able to access financial markets across the EU and UK without material changes". Nevertheless, Farrow also points out that there are many possible permutations within the 'hard' and 'soft' scenarios – "including the possibility that the UK could be granted continued SEPA membership even in a 'hard' Brexit".

Profit growth at the UK's largest companies is expected to fall by more than half in 2018.

Planning for the worst-case scenario

While the final details of Brexit will become clearer in the coming months, treasurers should not be tempted to wait and see how things progress. Farrow says there is a risk that the time between an agreement being reached and the point of Brexit will be shorter than the time needed to implement mitigating strategies. As a result, "companies need to plan for the worst-case scenario and start exploring contingencies now and implement any 'no regret' moves".

Staying informed

It goes without saying that treasurers need to make sure they are well informed about the implications that the UK's departure from the EU will have on their businesses. David Stebbings, Director, Head of Treasury Advisory at PwC, says that a key consideration is how business models may change as a result of Brexit.

"Treasury is there because the business is there, and not the other way around," he comments. "So if the business is amending the way it does business, your policies might not change – but the way that you do things might have to change." He adds that changes to the business model could alter the nature of a company's FX exposures or cash flows, meaning that FX hedging will need to be amended and cash management adjusted to take account of the new business environment.

"Our greatest focus is on regulatory developments, to which end we stay in close touch with a range of contacts at financial institutions and external counsel," says Rick Martin, Group Treasurer at GasLog, an owner, operator and manager of liquefied natural gas carriers. "At a more general level, we monitor developments that could impact international trade, given the nature of the shipping business." Martin notes that while there is considerable uncertainty, "we are maintaining a high degree of flexibility in our operational treasury 'tool kit', such that as the way forward becomes clearer, we nonetheless maximise our ability to continue operating at a high level of efficiency".

Understanding the risks

As Brexit approaches, treasurers will need to understand the full range of possible risks and impacts. From trade tariffs to FX volatility, here are some of the areas which treasurers should be monitoring in the months ahead:

Supply chains and labour

According to Farrow of Barclays Corporate Banking, "The biggest potential impact of Brexit will be on physical supply chains, where new tariffs or restrictions could create costs or delays, and on the labour market where some employment practices may no longer be viable." However, not all of the possible impacts are disadvantageous. As Farrow explains,

"Businesses may benefit from new trade deals, a more favourable regulatory environment in the UK and the nearterm benefits of sterling depreciation for UK exporters."

FX and interest rate volatility

Eric Peterson, Director and corporate treasury services lead at KPMG UK, notes that the main issue for corporate treasurers is how to deal with the volatility which has arisen in the currency market and interest rate market from the uncertainty about how exactly Brexit will play out.

"The key aspect when we're speaking with corporate treasurers is that they really understand their cash flows," he says. "When you're dealing with some of the volatility in the FX market, a lot of the outflows in your purchases are in pounds, but actually your transactions might be linked to other currencies like dollars. So if I'm buying energy, I'm probably paying pounds for energy – but that energy price is very much dependent on another currency. Commodities are similar. Then you might have outbound expenses in other currencies."

Once treasurers have mapped their exposures and inflows, Peterson says the next step is to use value at risk (VaR) or cash flow at risk (CFaR) quantitative models to test whether a company has the flexible liquidity and the tools needed to make it through any adverse shocks. This might involve modelling a range of different scenarios to test what specific shocks could mean to the business, from losing 20% of revenue to being unable to access commercial paper.

Peterson says that that the use of quantitative analysis is a notable development. "Far more treasurers are using quantitative analysis instead of 'back of the envelope' types of calculation," he says. "So they are looking at their FX risk, what that means from a CFaR perspective and what mitigations they can take – Should I enter into derivatives? Should I get additional liquidity? Do I have the right balance to make it through a period of instability?"

Cash management

Treasurers should also be monitoring the impact on their companies' cash management arrangements. Andrew Marshall, Managing Partner of Covarius, notes the importance of engaging with banks to discuss the impact of Brexit on cash pooling and sweeping structures, "in particular where eurozone cash pool structures may be swept/centralised to a London-based account".

According to Marshall, there may be possible disruption to the normal operations of the sweeping structure. "Exactly how disruptive is unclear but the discussions need to begin with your banking partners to better clarify and understand the risks, and to start formulating a 'Plan B' – which may ultimately mean moving/relocating cash pool centres away from London-based accounts," he says.

Certainty of contracts

Joe Cassidy, Partner and Brexit lead for Financial Services at KPMG UK, says that another issue relates to the certainty of contracts such as commercial contracts, insurance contracts and derivative contracts. "The only thing we've got any certainty on is the consumer side of insurance contracts – everything else is up in the air," he says.

For derivative contracts used to hedge the interest rate risk and inflation risk associated with long dated bond issuance, Cassidy says that a key question will be about the basis for that contract going forward. "If you talk to regulators, our own view is that's not a bilateral discussion about the certainty of that contract," he says. "It's an industry-wide global challenge, with interested parties including the reserve currency banks as well as the various jurisdictions under which the contract has been papered."

Certainty of counterparty

Meanwhile, Cassidy says that another concern is certainty of counterparty, given that banks may be subject to "significant reconfiguration". "They may have to get reauthorised in terms of their branches," he says. "In a bad situation, they may need to create new subsidiaries, which may affect the quality of the counterparty you're facing in terms of its credit risk."

Market access

A further concern is the issue of market access. Farrow warns that in the event of a 'hard' Brexit, treasurers may need to make fundamental changes to their treasury models to ensure continued access to European markets, and to mitigate the increased costs of doing business. "At the extreme, some firms may even choose to relocate European treasury centres from the UK to the EU to ensure continued access," he says.

Market access may be more problematic for some companies than for others. "The irony is that UK domiciled institutions with treasury, funding and even FCA-regulated entities domiciled in the UK are going to be the least impacted," says Cassidy. "Those who will be most impacted are the regional corporates. If they need to access FX markets and interest rate hedging, or do some form of securitisation, those markets, on a cross-border basis, tend to be anchored in the UK." In a worst-case scenario, Cassidy says that regional corporates could be inhibited from accessing these markets, meaning that access becomes far more expensive.

However, Cassidy also points out that corporates which have FCA-regulated entities in the UK, such as car manufacturers with consumer finance and banking capabilities, may have an advantage where market access is concerned. "This provides them with a platform to almost bypass the worst of Brexit in terms of their means of accessing capital markets, liquidity, hedging and funding," he explains. "If you have entities in London which are regulated, you don't have to worry about facing a weaker banking entity in continental Europe to access London markets."

Beyond Brexit

As talks continue it is important to remember that Brexit is not taking place in a vacuum – and treasurers should be monitoring a number of other geopolitical risks and developments alongside the issues specifically relating to Brexit.

"Beyond Brexit, it is clear that US politics will have a disproportionate impact on decisions for corporate treasurers," says Farrow. "Legislatively, the recent tax changes will have a real impact on firms with US exposures, whilst politically, the Trump twitter handle will continue to shape important geopolitical issues from North Korea to the prospects for US trade and relationship with China."

Likewise, Farrow notes that political risks in Europe include the upcoming Italian elections, as well as increasing tension in Poland. "Finally, the Middle East will always remain a focal point but particularly, the ongoing proxy war between Saudi Arabia and Iran," he concludes.

MMF reform: a to-do list

With Europe's money market fund reform now under way, fund managers have plenty to do this year as they adjust their offerings in line with the new rules. Meanwhile, treasurers should take the opportunity to review the new fund structures, update their investment policies and check that their cash and treasury management systems are able to cater for the changes.

Europe's money market fund reform has been in the pipeline for so many years that few are likely to be taken by surprise by the upcoming changes. With existing MMFs required to comply by 21st January 2019 – and new funds launched after 21st July 2017 already subject to the new rules – the time to act is now.

For fund managers, the new rules should not present undue challenges. "As MMF regulation has been a topic discussed within our industry for nearly a decade, I think there has been ample time to align the required resources and prepare for the forthcoming year," comments James Finch, Head of Liquidity Management, EMEA at UBS.

Nevertheless, there is plenty of work for both fund managers and treasurers to do over the course of 2018. "We are getting ready operationally," says Kerrie Mitchener-Nissen, Head of Product Development, International for Global Liquidity, J.P. Morgan Asset Management. "We're also staying closely connected with our clients, ensuring they are aware of the options open to them and have updated their investment policies, looked at any changes required to their treasury workstations and trading portals, reviewed their reporting capabilities, and consulted with their tax and accounting advisers. Corporate treasurers have just under a year to get ready, but that time will pass quickly."

What fund managers are doing

For fund managers, this year will see considerable activity as providers work to convert existing CNAV funds to the LVNAV model. Hugo Parry-Wingfield, EMEA Head of Liquidity Product, HSBC Global Asset Management, outlines three key areas of change that fund managers should be focusing on:

structuring the project, developing the new fund range and communicating with clients.

Structuring the project

Where the project structure is concerned, Parry-Wingfield points out that fund managers are accustomed to carrying out major formal regulatory change projects and as such are likely to have the right resources already in place.

"We launched a formal project last year specifically for this regulatory change," he explains. "We have a dedicated project manager and team around them, and accountable executives across the different functions of the business that are responsible for the various elements within that project plan."

Finch, meanwhile, explains that UBS has a dedicated regulatory team which "has been working closely with our Global Liquidity Management business to prepare for this year and ensure the project is scoped and resourced correctly". He adds, "Work streams on the various reform components are already in progress and we are working towards making all our existing MMFs fully compliant with the new rules."

Developing the fund range

For HSBC Global Asset Management, Parry-Wingfield says the key focus on the product side is the conversion of the bank's current CNAV money market fund to the new LVNAV product. "Consistent with most providers, we believe that the LVNAV product is the most credible alternative to what investors use today," he comments. "We also believe that is where most clients will have their preference after the rules come into place."

The new rules

European money market fund reform was first proposed by the European Commission in September 2013, with the final rules agreed by the European Commission, European Parliament and European Council on 14th November 2016.

Three types of short-term money market fund will be available under the new rules:

- VNAV MMFs calculate NAV using mark-to-market or mark-to-model prices.
- Public debt CNAV MMFs will be required to invest at least 99.5% of their assets in public debt, while maintaining a
 constant NAV.
- LVNAV funds, seen as the successor to existing CNAV funds, will use amortised cost accounting for assets with a
 residual maturity of up to 75 days. They will be required to maintain minimum weekly liquidity of 30%, with liquidity
 fees and redemption gates applicable if liquidity drops below 30% and daily net redemptions rise above 10% of the
 fund's total assets.

The new rules also include one category for standard MMFs, the Standard VNAV MMF.

At the same time, Parry-Wingfield says that HSBC Global Asset Management will be prepared for having other options available – such as CNAV government-only funds and VNAV funds. "Whilst not our base case, we would respond if there was increased demand for some of those alternatives which may be shelf-registered in the meantime," he notes.

Communicating with clients

Also crucial for fund managers is the need to communicate the implications of the changes to investors. "I think corporate treasurers are probably as informed about the new MMF rules as the asset managers!" says Finch. "Given treasurers have always been significant users of MMFs, often using a number of providers, they have no doubt received multiple updates from each provider along the way. In addition, the rating agencies, Institutional Money Market Funds Association (IMMFA) and the press have all played their part in helping ensure that MMF reform is in focus."

What treasurers should be doing

For corporate treasurers, likewise, there is plenty to do to prepare for the changes, from understanding the changes to reviewing investment policies and systems.

Engage with providers

Firstly, treasurers should engage with fund managers in order to gauge how prepared their fund providers are for the changes and what approach they are planning to take. "We are speaking to our funds and understanding what changes they will make and how this will affect our return," says Auna Dunlevy, Head of Liquidity and Investments at Royal Mail. "It seems like most of the funds we deal with as CNAV will become LVNAV, although we haven't got 'official' confirmation yet. It also seems that as the funds we deal with are at the high end of the quality scale, the impact should not be significant."

Review available fund structures

Likewise, treasurers should take the time to understand the types of structure available under the new rules. "The new regulation offers great optionality for cash investors," says Jim Fuell, Head of Global Liquidity Sales, International, J.P. Morgan Asset Management. "But to minimise any disruption, corporate treasurers will need to look closely at the fund structures available to them, and carefully consider the implications of each option." Fuell notes that certain fund structures have the ability to offer a more attractive return – "but what level of risk are those managers taking in order to deliver additional yield?"

Review investment policies

Treasurers will also need to review and update their investment policies and risk policies. "Obviously a lot of these policies get approved by boards and have to fit into the relevant approval cycles, so this should not be left to the last minute," says Parry-Wingfield. "Corporates should be thinking about timings and working backwards from when they need to submit papers or make decisions."

François Masquelier, Vice Chairman of EACT agrees that it may be useful for treasurers to revisit their asset management policies to make sure they are compliant with the reform. "Furthermore, it is important to get validated by treasury committees the types of products we will be authorised to invest in," he says.

Update systems

Technology is another consideration. Parry-Wingfield points out that treasurers may need to update their cash and treasury management systems and processes. "Treasurers need to ensure that whatever systems they are using, including investment platforms and portals, cater for any new features in the products and any changes that will take place," he says.

Engage with auditors

Treasurers will also need to engage with their auditors about the treatment of LVNAV funds from a cash equivalent point of view. "We expect the new LVNAV product to continue to be cash and cash equivalent from an auditor's point of view in most cases – however, it's for individual auditors to evaluate that and give the relevant advice," says Parry-Wingfield. "And like everything else, the sooner the better."

Bigger picture

Aside from these practical considerations, treasurers may be asking whether they should take the opportunity to consider other investment options. "I feel this is a good opportunity to look again at the wider range of MMF solutions available, understanding if in addition to LVNAV MMFs, Variable NAV MMFs could also be used as part of a tiered liquidity management strategy," says Finch.

However, Finch adds that he doesn't really see the new rules fundamentally changing the way that corporate treasurers use MMFs. "Over the years, treasurers have become very familiar with the use of MMFs, valuing their liquidity, security, yield and operational simplicity and I don't believe the new rules fundamentally alter any of these benefits," he explains. "In addition, with banks continually looking to reduce the amount of short term deposits they take onto the balance sheet, traditional alternatives are become more limited."

Parry-Wingfield says that the new rules are designed to improve the security and consistency of the products concerned. "We believe that the fundamental reasons why corporates have used money funds as a short-term cash product in the past will not change specifically because of these new regulations," he says. "Coupled with our confidence that LVNAV is a very credible alternative to the existing CNAV product, it's reasonable to think investors will continue to value these kinds of products. Investors may separately evaluate alternatives – but should not lose focus on the fundamental benefits money market funds can provide for the element of the cash that is short-term in nature."

Interest rates

Nevertheless, it's worth noting that the regulatory reform is not the only issue affecting money market funds in Europe. Masquelier comments, "I am more worried about the potential longer-term period of negative EURIBOR rates than the reform itself." He adds that treasurers may be tempted to propose other longer duration products to their CFOs in order to avoid booking losses with negative returns, or to mitigate negative impacts on the P&L: "It is a perfect opportunity to at least try to suggest to management to open doors to alternative products with higher volatility, longer time horizon but potentially better return." he says.

Looking further ahead, Masquelier says that the current situation could push MMF providers towards another stage of

Preparing for the new rules



Alex Fiott, Assistant Treasurer, Front Office Jack Davies, Treasury Analyst

What steps will you be taking this year to prepare for the new MMF regulations?

The protracted discussions on European MMF Reform and the associated uncertainty led us to make a number of changes to our investment policy ahead of the Final Regulation being published. We challenged ourselves to segment our cash more, and diversify our cash investments to include other investments, such as tri-party repos. It is our continued intention to use MMFs for our core liquidity needs. In order to prepare specifically for the new MMF regulations, we will seek approval from the Risk Committee to invest in the LVNAV.

Are there any particular challenges that you will need to overcome?

We will write a detailed paper outlining the key changes, including the need for the NAV to be within 20 basis points, and the potential for fee and redemption gates. We expect to be challenged on how such funds would behave under times of market stress, and therefore will need to present back testing on how a CNAV and their shadow funds would have performed during the 2008/09 financial crisis. It will be important to highlight the subtle differences between a CNAV and LVNAV that should reduce the LVNAV's volatility.

We are also aware that a LVNAV may not be viable in a negative yield environment, but fortunately we currently only invest in USD funds. Determining whether a LVNAV will be classified as cash and cash equivalents will be an important consideration, particularly as we are looking to use LVNAVs for our core liquidity. As we currently hold investment grade securities directly, our investment policy already allows us to invest in securities that need to be marked-to-market.

Do you expect to replace CNAV funds with LVNAV funds, or will you be considering other options? We expect to be investing into LVNAV funds so long as the back testing analysis and investment profile seems in line with expectations. As mentioned above, our investment policy and current infrastructure has enabled us to switch into alternatives if required. We have in the past used government-only MMFs, and will continue to have this as our risk-averse option. We acknowledge that the regulations surrounding the percentage of overnight and one-week paper on LVNAVs

How effectively are fund managers communicating with you about the new rules?

may lower the yield compared to previously, but these still earn in excess of the CNAV government funds.

All our managers maintain a good line of communication with us, particularly when there are any developments surrounding the reforms. We have started to see some back-testing analysis now, with accompanying seminars and workshops on the issues.

consolidation in the industry. "I would not be surprised to see fewer players but at a larger scale," he says. "We could end up with few very large players, and small specific boutiques, like the French funds."

In light of these changes, Masquelier predicts that corporates will "adapt their strategies, slice their excess cash into layers with different time horizons in order to adjust product to each bucket and all-in try to limit as far as possible negative impacts/results".

MMFs in Switzerland

Finch argues that the domestic Swiss cash market will be interesting for MMFs going forward. "Historically, there has been a preference for Swiss treasurers to use bank deposits for cash management, with MMFs not gaining significant market share," he says. "However, given low and negative interest rates, combined with the pressure on banks to reduce their short-term deposit books, off-balance sheet alternatives such as MMF are starting to gain traction with corporate treasurers."

Finch says there are currently a limited number of Swiss domiciled MMFs focused on institutional investors (he notes

that investing in a Lux or Irish domiciled MMFs can attract a stamp tax for Swiss investors). However, he adds, "we expect this to change and are actively working on developing and expanding our existing range of Swiss domestic MMFs to cater for an institutional client base."

He notes that from a regulatory perspective, Swiss domiciled MMFs are not directly impacted by the new EU rules. "But we could see the Swiss regulator look to adopt certain, if not all of the new EU MMF rules."

Conclusion

With the new rules already coming into effect, treasurers should expect to see plenty of communications from their fund providers over the course of this year. However, it's important to note that fund providers aren't the only ones who will need to make changes. From updating investment policies to engaging with auditors, treasurers will also need to make sure they are ready for the new funds – while keeping an eye on the impact of wider market conditions on this type of investment.



Automating treasury: taking a fresh look

In every industry, technology is making possible things that once seemed impossible. Terry Dennis, EMEA Cash Management Sales Head, Corporate and Public Sector, Treasury and Trade Solutions at Citi, explores how new technology is accelerating change and creating new opportunities within corporate treasury.



Terry Dennis

EMEA Cash Management Sales Head, Corporate and Public Sector, Treasury and Trade Solutions, Citi

The speed with which new technology services and solutions are being developed is increasing dramatically. One explanation frequently cited as a driver for the rise in new technologies is Moore's Law which, in its simplified form, states that overall processing power for computers doubles every two years.

This exponential growth in processing power is changing the world around us. Today, smartphones, 3D printing, universal translation, drones, robotics, self-driving cars and the internet of things are a reality; just a decade ago they were science fiction.

Within financial services and corporate treasury the same is true. The industry is abuzz with talk about the transformational impact of technologies such as Robotic Process Automation (RPA), Machine Learning, Artificial Intelligence (AI) and Application Programming Interfaces (APIs), as well as market reforms such as Payment Services Directive 2 (PSD2) and Open Banking. The most exciting thing for treasury teams is that there is no need to wait to begin benefiting from these technologies: many are already available today.

The question then is: "How can these technologies be applied to positively impact my treasury operation?"

Digital cash management Accounts payables

Depending on where and how technology is applied there is ample opportunity for treasury teams to significantly improve existing processes – even when that process already has a high degree of automation. Take accounts payable (AP), for example. Whilst many of Citi's clients are already benefiting from impressive levels of automation and straight through processing (STP), the sheer volume of payments, along with the fact that many of the payments are generated by teams outside of central treasury, mean it is difficult for treasury to identify payments that fall outside the usual payment behaviour.

New technology can help address this issue. For example, at Citi, investments in sophisticated machine learning and AI technology

have led to the development of our Payment Outlier Detection Service which is now in active pilot. This advanced data analytics tool assesses all transactions that flow through our system against a client-specific behaviour profile. It then triggers real-time alerts for transactions that do not conform to the routine patterns and behaviours of the specific organisation. It also constantly updates the client-specific profile to better detect future erroneous payment.

Similar technology is also being applied to enhance security and protection on several other fronts. For instance, many banks, including Citi, are incorporating Al and pattern/behavioural recognition functionality into the security layers of their electronic banking systems. These tools can be used to check a user's computer for known malware infections - as well as using behavioural biometrics and user pattern recognition techniques to assign risk scores to user activity and perform additional control steps for high-risk actions.

These developments are significant for our clients, given the substantial growth in payment volumes. The additional controls and real-time alerts help treasury teams to target payment outliers that deviate from their past characteristics.

Multi-currency flows

Treasurers are also seeing a positive impact from new technology when it comes to managing multi-currency flows. Traditionally, this process has presented several challenges: i) the need to obtain competitive pricing, ii) the need for active FX execution, iii) the need for hedging and iv) the use of expansive account structures through which to manage these flows.

Whilst active FX execution continues to be beneficial for strategic 'big-ticket' items – along with associated hedging – we now see that treasury teams are becoming more comfortable leveraging technology to execute transactional FX. Where historically there may have been a relatively low threshold for automated/passive FX set out in the treasury policy (eg US\$10,000 equivalent), we now see that with the use of transparent benchmarks, preagreed spreads and enhanced real-time reporting, clients are becoming much more comfortable and are revisiting the treasury



policy, increasing the threshold (in some cases to a US\$1m equivalent) in order to reduce the time and effort spent on active dealing, in favour of automation benefits.

Coupled with the increased automation of transactional FX flows, we also see a rising trend for rationalised account structures. These reduce the use of dedicated foreign currency accounts for marginal currencies, integrating that flow through existing core currency accounts.

Furthermore, with the emergence of more advanced payer ID and virtual account offerings, banks are now able to provide clients with customised 'sub-ledger' virtual accounts that are linked to a real-world physical account. This helps to segregate and manage incoming receipts, optimise outgoing payments and simplify the journey for corporate treasury to adopt 'in-house bank' and 'on-behalf-of' structures.

Accounts receivables

New technology is also positively impacting another core cash management activity: accounts receivables (AR). Indeed, accurate and timely cash application remains a challenge for many corporates – especially when direct debit "pull of funds" is not possible. This is in spite of significant effort around improving invoicing practices and communication of correctly formatted payment instructions.

This is because when the AR process relies on the buyer to initiate a payment, there is a lack of control over the way invoices are paid. As such it is common for the amounts received to vary from the amount outstanding on the AR ledger. This can be due to discounts being applied, multiple invoices being grouped, payments being made in a different currency than the invoice/AR item, deductions to the principle by correspondent banks, or simply because the payment does not carry sufficient reference information to identify the remitter or invoice. Because of this, it is still common to find many people employed to manage the AR process – albeit they may be in a low-cost location.

However, in this area, we are now seeing the application of new technology that leverages matching algorithms to understand historical matching patterns and machine learning to 'watch' the steps taken by experienced matching clerks and 'learn' to apply incoming funds – even when discounts, bulking or crosscurrency challenges feature in the payment practices. This new technology can yield significant savings and efficiency gains in an area that is widely considered challenging to automate.

Not only can this solution reduce the cost associated with a labour-intensive process, the timely reconciliation and application of cash delivers further benefits in terms of improving day sales outstanding (DSO) metrics and free cash flow. It can also positively impact sales growth as customer credit lines are updated in near real-time.

Financial messaging

Another area undergoing rapid change is financial messaging, promoting both increased transparency and speed of information flow. For a long time, the connectivity landscape has remained relatively unchanged with three main choices of channel:

- Electronic banking system.
- Host-to-host connection directly with the bank.
- SWIFT.

Over the past decade – we have seen a move towards global consistency - driven largely by the adoption of ISO 20022 XML messaging. Today, we see several new developments in this space driven by investments in new technology. For example, the SWIFT global payments innovation (gpi) provides live status updates on payments through the end-to-end payment chain. Coupled with this, the opening up of bank APIs is promoting the use of real-time messaging for a wide variety of services, from the basic account balance enquiry and initiation of a payment, through to a whole host of value added services such as FX rate quotes, reporting, investments and user management. This list of services is expected to expand as new technology will connect into and overlay the traditional banking infrastructure. Furthermore, as markets go live with instant payment and collection capabilities, and banks open up a broad range of services through APIs – the journey towards real-time cash management will become possible.

Thinking big and bringing it all together

That said, despite so much new technology now being available, many treasuries are yet to take full advantage – joining together key components and new technologies to create a digital treasury ecosystem.

Herein then lies the major difference between the adoption of new technology in our daily lives and the challenge for large organisations. When an individual decides that the time is right to upgrade to a new technology, the transition is usually very straightforward – as it is a straight swap, old for new.

For the treasurer, the adoption of new technology presents several complications. Most notable is the sheer number of existing systems, processes and interfaces that need to be considered and tested as part of the transition, whilst ensuring that operations continue as normal at the same time.

This means that rather than a single swap 'old to new', treasury needs to make changes component by component. This will require key elements to be upgraded with re-engineering projects that run in parallel to the daily operation. By taking this approach, treasurers can take on a strategic business optimisation role to continually refine, upgrade and improve treasury performance.

Act now

Assessing new technologies, and whether or how best to incorporate them, will form an increasingly important part of the treasury function. When done correctly, one can see significant gains across many dimensions, including cost, control, efficiency, scalability and support for new business activities.

At Citi we have set up Innovation Labs around the world, which partner with clients and third parties to accelerate innovation. For our clients, this is a great way to see the end-to-end innovation lifecycle and engage in collaboration and co-creation activities.

Given the increasing focus that banks are placing on their technology offering, we recommend that treasurers have regular engagement with their banking partners. This will allow treasurers to explore what's new and how innovations are becoming established best practices that can drive value for the business.

Cash first

How changing company cash culture can improve forecasting

If the whole organisation understands the importance of cash, it becomes easier to harvest more diverse, accurate and timely data. From here, better forecasting can drive stronger working capital performance. It's what most stakeholders expect, so how can it be delivered?

Cash is King, maybe; it's hard to tell as the power that this particular monarch carries has not always been appreciated. However, since the global economy tanked and then started on its long road to recovery, the value of understanding cash basics – such as how much, where and in which currencies – has been rising higher up the agenda.

An accurate picture of current and future cash needs is only possible if every function that affects the ebb and flow of cash understands its importance. Indeed, every touchpoint needs to be able to report its cash position to treasury, with equal accuracy and timeliness, if an enterprise-wide viewpoint is to be achieved.

However, rallying the troops has not always been easy. The list of key protagonists required to achieve this in an industrial context, for example, includes departments as diverse as sales, procurement, finance, production and logistics; each will harbour their own private drivers and agendas.

Regardless of how many functions commune with the King, the importance of building a sustainable cash culture cannot be overstated. It is the driver of accurate forecasting, which is used primarily as a tool to help improve accuracy in investment and borrowing decision-making by identifying in advance potential surplus cash or gaps in cash flow.



Forecasting matters

Producing today's cash position is relatively easy compared to accurate forecasting weeks or months ahead. The further out treasury goes, the harder it becomes to offer anything beyond an educated guess. Nonetheless, the ability to deliver accurate cash predictions can be the difference between running out of money and not running out of money, says Tim Bartlett, Senior Liquidity Commercialisation Manager, HSBC. Indeed, he comments, no matter how much a company is valued on paper, without accurate cash flow forecasting, running out of day-to-day cash is a potentially fatal risk.

There is no one correct method of creating a forecast; it depends upon factors such as the nature of the business or sector, the type of forecast sought, its purpose and format. This may sound somewhat unscientific, but with so many unknowns with which to contend, not least macro-economic 'events', forecasting is very difficult to optimise, notes Bartlett.

Of course, there will be some regular and predictable incomings and outgoings which make forecasting a little easier: predictability is the friend of the forecaster. Nonetheless, delivering detailed forecast data with a high degree of accuracy remains a challenge.

Actuals are used to validate forecasts, giving the opportunity to adjust and improve the margins of error in light of any variances identified (and any targets set through KPIs). These validations may be made daily, weekly, monthly or on a longer timescale, according to appetite and ability to monitor, extract, analyse and respond to the data. The more frequently a forecast is updated with real numbers, the more accurate it will be but there comes a point where the effort outstrips the return.

Methods and tools

There are many different forecasting methodologies – the distribution method, regression analysis, and time series trends and seasonal variances, for example – most relying on analysis of historic cash flow data. Because there is no guarantee that patterns identified using historical data will reoccur, these techniques will generate a forecast probability which is commonly weighting, in the form of an accepted margin of error. As the actuals are made available, the degree of 'wrongness' can be fine-tuned with each set of actuals.

The use of technology can take some of the hard work out of this process. Off-the-shelf solutions, from third-party providers such as Kyriba, CashAnalytics and FiREapps use analytical algorithms written with the benefit of the wider industry experience of each vendor. These can offer complex mathematical responses to common scenarios which will be tuneable to more closely represent a company's individual circumstances and strategic approach.

Indeed, such systems can improve forecasting accuracy, for example, by incorporating a computer-based understanding of the behaviours of clients in terms of incoming revenues, and the expectations of suppliers in terms of outgoings.

Of course, many businesses use spreadsheet calculations, adding their own margins of error and iterating each set of results to reach the next waypoint. With output from bank reporting tools having become more sophisticated in recent times there is no suggestion that companies cannot produce sufficiently accurate forecasts using their own tools.

However, the nature of forecasting is such that there is always room to increase accuracy, driving stronger working capital performance.

The cutting edge

One area in which advancement is being made is in the adoption of pre-cognitive technology that borders on the realms of artificial intelligence. This is widely used in fraud detection, enabling the recognition of complex patterns of flow and the predictability of certain activities. This, argues, Bartlett, is the kind of solution from which forecasting can and will benefit.

The encouragement of open banking (largely through regulatory measures such as PSD2 in Europe), where institutions share data flows through API-led connectivity could also bring a more easily aggregated view of flows across a multi-banking environment.

Regardless of technological advances applied to any aspect of treasury or finance, Bartlett comments that "these are only ever tools, and tools by definition are something people use to help get the job done". Of course, the treasurer must know how to use these tools but Bartlett notes a fine line between using them simply as a means of looking for or proving a preconceived notion, and accepting what these tools deliver as the absolute truth.

Higher expectations

Is there appetite for change? Achieving 100% accuracy every time is an unrealistic goal. However, although some businesses do let cash flow drift to the point of becoming technically insolvent, many do not. This suggests that today's forecasting measures are, by and large, adequate.

But with many treasuries having become P&L centres in their own right in recent years, Bartlett argues that there may be expectations of increased return overall for the company, itself demanding higher expectations of forecasting precision.

We know specialist software can bring about a greater degree of accuracy and this may in turn bring about greater working capital efficiencies. But it is clear that to achieve sustainably positive results, not only is the treasurer's input vital but also cash has to be given a commanding position by all parts of the business.

Spread the word

There is an essential "anecdotal" component that must be applied to sharpen the cold logic of technology. Treasurers must have a real feel for, and understanding of, their own business, customers and suppliers. The human element is in part based on the treasurer's own experience and professionalism but this can be enhanced when allied to a strong communicative approach to the role.

This is where the enterprise-wide promotion and support of a corporate cash culture plays out. Indeed, the ability to reach out to other functions – such as sales, procurement and production – and to incorporate their accurate, function-specific data into the forecast in a timely manner, will deliver the greatest level of forecasting accuracy. For treasurers and other stakeholders such as the board, the investors and the analyst community, this is highly beneficial.



Cash generation is the clearest measure of success for an enterprise and this is why we have decided to place such an emphasis on working capital.

Todd McElhatton, CFO, SAP North America

The practical power of cash

One company that has spotted the power of putting cash front and centre of every part of the business, is global tech giant, SAP. "Cash generation is the clearest measure of success for an enterprise and this is why we have decided to place such an emphasis on working capital," says Todd McElhatton, CFO at SAP North America.

Developing a culture of cash across an organisation as vast as SAP has been a challenge, with some fundamental changes required at an operational level. One of the keystones of project success has been the incentivisation of employees to see cash in this new light, shifting KPIs to reflect first-class working capital management principles and practices.

By developing a creative new set of KPIs for SAP's sales team, for example, it was able to evolve that function into an effective cash collection team. In the spirit of the old adage that 'it's not sold until its paid for', the sales reps now receive their commission payment for a sale once payment has been received from the customer, explains McElhatton. "Through linking cash collection and commission in this way, our sales reps are now engaged with finance to understand who has and hasn't paid and chasing up any late payments."

It was readily acknowledged that such a fundamental change to the day-to-day working practices of the sales team had potential to create resentment; without their buy-in, and that of other teams, the project to drive working capital performance would never work.

For SAP, the natural solution was to leverage technology. "At the same time that we have focused on working capital management, we have also focused on building a world-class finance department to support these efforts," he explains. Core to this has been the adoption of new technology that has created efficiencies and provided enhanced visibility and analytics, allowing the company to better align the goals of the different departments within the business.

In one practical example, this has seen cash collections benefit from machine learning and AI technology. The approach, says McElhatton, has allowed the finance and sales teams to collaborate closely, focusing only on problematical non-payments. Where finance has a real-time and historical overview of customer payments performance, it can better understand the nature of non-payment, working

with the sales team who can reach out to customers only where necessary to begin resolving the issues.

Through the clever application of technology and the adoption of considerate change management techniques, SAP has been able to progressively transform its cash culture across the whole organisation. It has delivered on its initial working capital improvement objectives but will remain focused for some time, says McElhatton who adds that real-time information provides many more opportunities for improving working capital performance.

Taking off with automation

Another example of where an analytical approach has yielded results is with India's low-fare airline, IndiGo. As the Overall Winner of the 2017 Adam Smith Awards Asia Best Cash Flow Forecasting Solution, the company demonstrated how automation of its entire cash forecasting mechanism could offer a huge payback on several levels.

Not least of the benefits has been the realisation that it can bolster its institutional placement funding with its own optimised cash reserves to purchase rather than lease most of its planes as a more cost-effective option.

IndiGo is one of the largest airlines in India with almost 40% market share. With over 20 banking relationships and more than 40 accounts, its treasury team was having to tackle numerous cash management challenges on a daily basis.

Lacking full visibility into many of its accounts, it was troubled by a liquidity management model that it felt was fraught with manual administrative exercises. The lack of visibility also meant it was susceptible to various financial and operational risks.

Shveta Kapur, Associate Director, Treasury, Finance, recalls that its treasury model "lacked much needed scalability". It was realised that existing processes needed "an immediate re-engineering" to manage treasury operations more effectively. In partnership with its principal bank, IndiGo carried out an end-to-end review of its liquidity management processes. This set it on a path towards a number of core objectives.

To give it accurate cash positioning and risk mitigation, it wanted real-time and actionable visibility on all its cash positions and flows. From here, automated rules-based movements could facilitate "easy cash mobilisation", providing centralised access and control. As a third goal, treasury wanted to apply automation to its daily investment programme. This, it was felt, would enable IndiGo to put a major portion of its significant (and growing) daily collections immediately to work, enabling it to earn better interest.

The key to success was a multi-bank cash pooling platform. By automating its entire cash forecasting mechanism, Kapur says the solution was able to eliminate all manual intervention in the IndiGo's liquidity analysis and interbank fund management.

The project also enabled it to reduce manpower and improve productivity, affording it annual savings of around 2,000 man-hours. In creating a single consolidated view, process automation also introduced enhanced analytics and the kind of cash forecasting accuracy and liquidity yield that treasurers often strive for.





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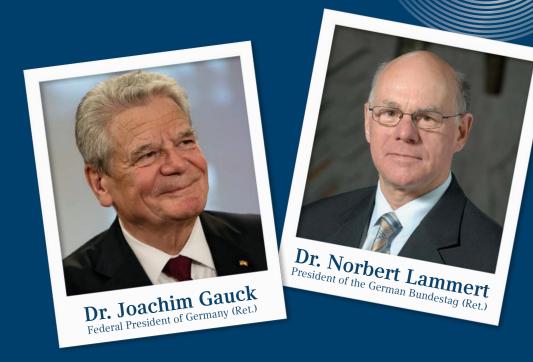
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Never say never

Helen Hanby

Director, International Treasury, ACMA, AMCT



When life presents opportunities, take them. This is the unofficial motto by which Helen Hanby, Director, International Treasury at Biogen, lives. We discover how this has translated into an award-winning career – and a mammoth cycling challenge.

Biogen Inc is a US\$11bn US multinational biotechnology company headquartered in Boston, Massachusetts. It develops, markets and manufactures therapies for people living with serious neurological, autoimmune and rare diseases. The business employs over 7,000 people in locations across the Americas, Europe and Asia.

"I love working in treasury," says Helen Hanby, Director of International Treasury for US multinational, Biogen. It's a bold statement. But it's one that, once the reasons for it are revealed, becomes abundantly clear.

Today, Hanby, supported by one treasury analyst, has treasury responsibility for all Biogen entities outside North America (which itself has just three treasury personnel). With a geographic remit that stretches from Europe to Asia to Latin America, the UK-based function, under her leadership, covers all aspects of treasury including cash and liquidity

management, FX trading, balance sheet hedging, bank relationship management, pension plan governance and the company's ex US corporate cards programme.

Despite the depth of responsibility placed under Hanby's control, her arrival in treasury was never part of a detailed long-term plan. Instead, she describes her whole career as "opportunistic".

This may sound like events have been left to chance. In reality, her progress has always been about grabbing



I love the fact that it's 'real'; it has an impact on the business, looking at present and future rather than historical data. I love the interactions with external stakeholders, meeting with banks, investment companies and other providers – and the interactions with the many internal stakeholders, across different functions and geographies.

opportunities when they are presented, regardless of any misgivings she may have had.

It has all worked out well.

Travel options

Unsure that she wanted to go to university, she left school mid-way through A-Levels, to work for a bank. She then switched jobs when a chance to considerably increase her pay arose, in the employ of a national newspaper publisher, where she qualified as a management accountant. She then moved to a manufacturing organisation to gain experience of working in a different industry. After a couple of years, alongside her then husband-to-be, the chance to live and work in Germany came up with her employer, an opportunity she seized, albeit nervously.

On the journey to Germany – where she had secured the opportunity to run the finance and administration functions of the German sales company, she admitted to herself that she had "not thought it out fully", even describing the decision as "rash", having effectively sold up and moved out on a whim. But she also knew it was the right thing to do.

The three-year experience saw Hanby running the team as the only woman manager amongst a group of men. "I was a bit of a shock to them and they were a bit of a shock to me," she recalls. With only school-girl German language skills to support her endeavours, this was truly a bold move. But it was also one which was to prove pivotal in the development of her career.

Indeed, the "brilliant couple of years" she spent there proved to be the life-changing experience upon which she would build once she returned to the UK. But first, within four months of returning, and driven by a taste for life-experiences, Hanby and her by-then husband and one-year old son were off again, this time spending 18 months in the frozen wilderness of Arctic Norway.

Following her permanent return to the UK, Hanby began laying the solid foundations upon which she would build her successful career to date. It was at this stage that she first encountered Biogen, at that time a relatively small business that was rapidly expanding its international operations.

The company was looking for someone to take on both UK management accounts and international treasury. Hanby believes that the company looked beyond her lack of treasury experience, seeing her transferable skills, openness to new experiences, her language skills (she speaks German and French) and professional qualifications which together

"unlocked the door to treasury" for her. Shortly after joining, Biogen realised that the two roles would be more successfully managed separately, eventually dividing them. This presented Hanby, who had clearly demonstrated a capacity for both disciplines, with a choice. She immediately opted for treasury. "I much preferred it from the outset," she states.

Love the job

Internal progress via the positions of manager, senior manager, associate director and, since December 2017, director, has seen Hanby arrive in a place that few achieve and most desire: a job she genuinely loves.

"I love the fact that it's 'real'; it has an impact on the business, looking at present and future rather than historical data," she explains. "I love the interactions with external stakeholders, meeting with banks, investment companies and other providers – and the interactions with the many internal stakeholders, across different functions and geographies."

It's a role, Hanby says, that allows her to meet with a diverse range of people, nourishing her natural interpersonal skills and offering variety and opportunity at every turn.

Growing together

Having never worked in treasury prior to joining Biogen, Hanby's professional skills and experience have naturally grown over time, indeed, as the company has grown. Studying for her ACT exams with Biogen – something that she chose to do, with the full support of the company – has helped create a solid career platform, alongside her CIMA qualifications. She admits the return to learning "was a bit of a slog at times" but now looks back acknowledging the benefits. Indeed, she adds that it is relatively rare for a treasurer to hold both CIMA and ACT qualifications, amply demonstrating a balance of skills and understanding from across the corporate financial spectrum.

However, Hanby feels that it has been the hard-won hands-on experiences of "several major international events" (not least the global financial crisis and some extreme rate volatility) that have really served to sharpen her capacity to deliver as a treasurer, and with it, her professional standing.

She takes such events in her stride, believing not only that "the longer you are around, the more likely you are to face these situations" but also that, even if these events seem at the time like grave challenges, "the world does not end". She remains similarly sanguine about the furore that is Brexit.



I think more than ever it is imperative to have strong professional relationships in order to stay abreast of developments.

The company's international treasury was previously located in Paris before switching to the UK, in part to exploit proximity to the global banking infrastructure. This may suggest that the UK's exit from the EU could be an issue for Biogen. But with the US global institution, Bank of America Merrill Lynch as its main relationship bank, Hanby believes the separation will, in reality, have minimal impact on her international duties. She adds that her role is one that does not rely on her being geographically tied to one region or another, declaring that "I can do this almost anywhere".

In any case, although a cash-rich company, Biogen does not tend to hold a lot of cash internationally. Its aim is to try to repatriate to the US whenever possible. Treasury delivers support to around 50 entities across 25 currencies through a purposefully lean technology infrastructure. Where cash is trapped in certain jurisdictions it may, for example, deploy an internal dividend approach to move cash.

The structure of its treasury today is such that it can rapidly optimise decision-making. With the company's corporate tax department in the US literally sitting next to treasury, both can collaborate easily on the most efficient cash management structure. And now, in light of the Trump administration's recent tax reforms, repatriation is likely to be of even more interest, says Hanby.

Collaborate for success

Whilst Biogen's international treasury function is not directly involved in corporate treasury policy-making, the effects of HQ decisions require it to be up to speed on core matters such as financial product development, regulation and technology. Says Hanby: "I think more than ever it is imperative to have strong professional relationships in order to stay abreast of developments."

With people playing such an important role in Biogen, she feels interpersonal skills should now be to the fore; in fact, she believes every treasurer should be able to demonstrate strong communication skills as the role becomes more connected with the business.

"With so much change in the world, it is important for us, as treasurers, not only to build a network of other treasury professionals but also to develop strong relationships with our banks," she says. By communicating effectively, the banks can be aware of what is going on in Biogen's business world, enabling them to better serve the company's needs. It is, she notes, very much a two-way street.

A winning approach

The corporate card programme put in place by Biogen's bank is a good example of how this collaborative approach works. Where once corporate cards were outside of treasury, many different programmes had been set up. In conversation with

treasury's main relationship bank, Hanby, armed with her understanding of the bank's cash management footprint, was able to build a new consolidated programme.

Starting from the UK and rolling out to the rest of Europe, the programme's success eventually won support in the US too. "We've gone from a fragmented programme to a fully global approach," she says. This started with T&E and has now expanded into other corporate card products include a standardised lodge card. The implementation is such a success that it won a Highly Commended Winner award in the Adam Smith Awards 2017.

"I have previously won internal company awards but was thrilled to be externally recognised and to be a Highly Commended Winner in the Adam Smith Awards 2017," says Hanby. "It was the first time I had ever applied. I know the competition is strong, so the resulting sense of achievement is tangible. I'm proud of it, and it was internally appreciated too."

The best advice

Where young professionals are starting a career in finance, Hanby is happy to impart her wisdom. "I would suggest embracing all the opportunities that come your way, even if they don't seem obvious at the time." Indeed, she adds, "had I not rather nervously accepted the overseas position it would never have led me to where I am now."

However, although she acknowledges she speaks from a position of advantage - in that she loves what she does - Hanby is keen to promote the idea that young professionals try to move towards things they enjoy doing. "We spend so much time at work that it would be a shame not to."

Taking the challenge

Of course, it's not all about treasury. "I enjoy spending time with friends and family. I love holidays to warm climates, and I practice yoga - it's good for the mind and body," Hanby comments. She also enjoys a challenge.

As a keen supporter of charitable causes close to her heart, this November will see her cycle 450km in five days in Rajasthan, India. As a self-confessed "non-cyclist", she says she had signed up in "the post-ride euphoric madness" of last year's challenge that was the 100k Women V Cancer Ride the Night. True to form, Hanby is looking forward to her forthcoming venture. "It will probably be awful at times but at the end we will have a great sense of achievement. It's all about what is possible if you put your mind to it."

If all of this suggests Hanby has achieved an ideal work/life balance then she is in agreement. "I feel very blessed to have a job that I love, working in a fascinating industry for a very supportive and flexible company and manager," she reports. "After 14 years I still get up in the morning, and look forward to coming in to work. There is a lot to be said for that."



Cyber-risk continues to be a focus for businesses around the world. The World Economic Forum's Global Risks Report 2018 stated that cyber attacks against businesses have almost doubled in the last five years, noting the cost of cybercrime to businesses is expected to be US\$8trn over the next five.

While 2016 saw US\$81m stolen from Bangladesh Bank, 2017 was characterised by a proliferation of high profile ransomware attacks – the most serious of which affected hundreds of thousands of computers around the world and cost some corporations hundreds of thousands of dollars to address. Against this backdrop, how can treasurers go about quantifying the risks they face – and how can these risks best be managed?

Current trends

Cyber-risk is one of the main business risks currently affecting the corporate landscape. It's also an issue which is constantly developing. Carl Sharman, a Director in Deloitte's Treasury Advisory practice, explains that the landscape is continuing to evolve: "It's becoming more mainstream in terms of organised crime," he says. "Criminals are increasingly able to perpetrate very lucrative crimes without leaving their homes or offices."

That said, Sharman differentiates between different types of cyber-risk. The first, he explains, is where highly skilled individuals are trying to hack into systems and extract value through technological means. According to Sharman, some clients are taking action against this type of risk by inviting hackers to test their systems for weaknesses.

"The flipside is the low-technology targeting," he adds. "Although this is very technologically focused, the greatest

successes are caused by testing the weakest link in the chain, which tends to be the human link."

Changing profile

While cyber-risk includes a variety of different approaches and techniques, Fenton Burgin, Head of Deloitte's UK Debt Advisory team, observes that the risk profile of cybercriminals has changed markedly over the last 18 to 24 months. "More companies are concerned about being targeted by an organisation, rather than a lone wolf individual," he says. "This fundamentally means that a broader range of companies now have to have this on their agenda."

Shirley Inscoe, Senior Analyst at Aite Group, agrees that attacks are becoming more sophisticated. "Originally, many threats were from hackers and young people who just wanted to show how smart they were by breaking into systems," she says. "Today, threats are much more serious. Many are backed by unfriendly nations, and they often are directed against key infrastructure."

At the same time, the cost of individual attacks is rising. Accenture's 2017 Cost of Cyber Crime Study found that the average cost of cybercrime has increased from US\$9.5m per organisation in 2016 to US\$11.7m in 2017.

The rise of ransomware

One major trend is the rise of ransomware attacks, many of which have been directed at government units and hospitals as well as businesses. Such attacks typically lock users out of their computers, demanding payment in return for restoring access. These attacks are increasingly commonplace: the

The average cost of cybercrime has increased from US\$9.5m per organisation in 2016 to US\$11.7m in 2017.

Global Risks Report noted that ransomware attacks accounted for 64% of all malicious emails in 2017.

Particularly notable was last year's WannaCry ransomware attack, which affected hundreds of thousands of computers across 150 countries. The attack wreaked havoc for the UK's National Health Service (NHS), resulting in frozen files and cancelled appointments. The ransomware, which attempted to extract payments of around US\$300 in bitcoin from victims, also affected Spanish utilities, caused factories to halt production and attacked 1,000 computers in the Russian Interior Ministry. In China, meanwhile, the organisations affected by the attack included 4,300 educational institutions and 20,000 petrol stations.

Wiper malware

Not all ransomware is alike. Shannan Fort, cyber-risk expert at Aon, notes that another trend involves malware which "appears to be ransomware but is actually designed to do nothing but destroy". Last year's NotPetya attack, for example, was first believed to be ransomware but was later identified as a 'wiper' which simply destroys data without enabling victims to regain access to their files. The attack caused considerable disruption in Ukraine and Russia. It also resulted in costs of around US\$200-300m for large corporations such as Merck, FedEx and Maersk.

"NotPetya appeared to be Petya at first, which was ransomware, but what it turned out to be was essentially malicious code or malware," says Fort. "The purpose was to wreak havoc by wiping systems and corrupting data."

Counting the costs

The impact of such attacks is set to rise even further. Research published last year by Cybersecurity Ventures estimated that the global cost of ransomware would be US\$5bn in 2017, up from US\$325m in 2015.

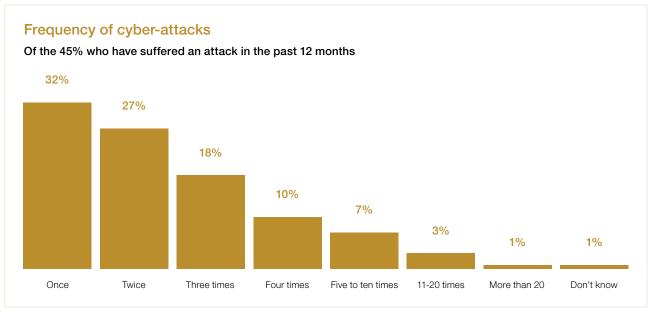
While the costs can include ransom payments, ransomware attacks can also bring a variety of other costs as a result of enforced downtime, loss of data, productivity losses and additional employee training. Accenture's 2017 Cost of Cyber Crime Study noted that the average time taken to resolve a ransomware attack is 23 days.

Businesses are often advised not to pay ransom in the event of a ransomware attack: for one thing, there is no guarantee that cybercriminals will actually restore systems once a payment has been received. In practice, however, it is largely suspected that many companies do opt to comply with demands for ransom – not least because they are keen to avoid adverse publicity. "It is very possible that corporates in this situation are choosing to pay, rather than bring this out into the public eye," comments Sharman. "This would then distort the public's view of the extent of the problem."

Beyond financial loss

It's also important to note that the damage incurred by businesses is not limited to the financial. "Financial losses are certainly important, and often include ancillary losses such as productivity losses and other hard-to-measure categories," says Inscoe. "Other losses – such as loss of life when key systems are disrupted in hospitals, or when transportation systems are disrupted resulting in accidents – are more critical."

Reputational damage is another concern, although as Inscoe notes, this may be more costly in the case of large-scale attacks and when consumers' financial accounts and personal information are breached. "There are so many small data breaches in the news that consumers seem to be tuning them out (due to the sheer volume) except when they are personally impacted," she adds.



Source: survey conducted by Forrester Consulting on behalf of Hiscox

Combatting cyber-risk: the treasurer's role

As cyber-risk becomes a more pressing concern, treasurers are playing a more important role in managing this area. Steve Wiley, Vice President, Treasury Solutions at FIS, explains that treasurers have historically relied upon the IT organisation or a corporate security function as it related to the management of treasury-related risks.

"Most organisations have shifted away from this approach over the past several years, with the treasurer taking on more of a shared responsibility, working closely with IT to mitigate cyber-risk," he says. "This has really frustrated that generation of treasurers which isn't deeply educated or trained in technology. Additionally, treasurers have been challenged in accelerating the cyber security learning curve for all core treasury, non-technologically specialised, employees."

As such, Wiley says that treasurers and CTOs are looking for third-party technology providers to play a more active role in mitigating cyber-risk, "through hosting and other managed application and data protection services". Consequently, treasurers "are re-evaluating relationships with all mission-critical service providers, including banks, specialised treasury technology providers, and consultancies providing guidance in technology related areas."

In other cases, linkages between the IT and treasury department are becoming closer than in the past. "Historically the IT and treasury department would have been in separate floors of the building – but increasingly you're seeing IT departments and the treasury function merging," says Deloitte's Burgin. "It's not untypical for the CFO of a large Fortune 500 company to have a range of technology people embedded into their treasury function across all levels".

Quantifying the financial impact

In practice there are a number of reasons why companies may not take action to protect themselves from cyber-risk. According to Inscoe, these may include competing priorities for limited budget dollars, as well as "a naïve belief that it can't happen to your company". But as Inscoe points out, "As the ongoing data breaches and ransomware attacks in the news make clear, it can happen to any company at any time, and the cost of handling the crisis probably far outweighs the cost of avoiding it."

In light of the growing threats, it's important for companies to understand just how much a cyber-attack could cost them. For one thing, quantifying the risks can play an important role when it comes to moving forward with the purchase of new systems. "Quantifying the implications of a potential attack is extremely important in order to justify technology investments to protect companies," comments Inscoe.

It can also help with risk transfer decisions when companies are considering taking out cyber insurance, a relatively recent development. "This is still a very young and new cover, and the data behind it is still developing," says Fort. "We don't have 300 years of property losses and incredibly accurate predictive modelling to rely on to help us understand the likelihood of a loss and the amount that a company is likely to suffer following that loss."

As such, Fort says it's critical that companies take steps to quantify the risks they face. "If the maximum loss you're likely to suffer is less than £10m, and you're buying £300m of insurance, you may not be making a prudent decision when it comes to your risk transfer," she points out.

Paying the price

However, assessing the risks may not be straightforward. On the on hand, a minority of attacks can and do cost businesses hundreds of millions of dollars – but on the other, the cost of most cyber breaches is considerably less. Consequently, treasurers may face a dilemma when considering whether to spend money protecting their businesses using insurance, or whether to spend the money on strengthening their IT defences.

In practice, the nature and scale of attacks can vary considerably. As Deloitte's Burgin points out, "At one end of the spectrum, it could mean turning the lights out." It's therefore important to look broadly at the possible risks and consider a variety of different scenarios.

"Examples of such attacks should be varied, such as losing system access (eg Sony Pictures), a ransomware attack or a major data breach," says Inscoe. "For each scenario, all the negative ramifications should be defined, and an attempt to quantify the potential negative impacts should be attempted."

Fort says that companies should factor in a number of different considerations when quantifying possible loss – including the company's existing controls. "You have to look at compensating controls as well as the risk that you're facing to understand how a particular incident could impact you, and then what kind of cost you'd be looking at thereafter," she explains. "For example, a company which specialises in forensic investigations has a team available – so your cost around identifying an incident, controlling it and making sure the impact is minimal will likely be less than for a company which has no experience there."

Taking action

Whatever a company's chosen approach, it's clear that cyber-risk is an issue that needs to be managed carefully. Inscoe advises that companies should "define various threats to their environment, envision the impacts of each type of attack, define roles and responsibilities in the event of an attack, add all this data to their business continuity plan and test it periodically". She adds that an evaluation should also be performed of security gaps and a timeline developed to address all gaps noted.

Finally, Burgin notes the importance of having cyber-risk squarely on the agenda of the Board. "It's about having the right resource on your executive team to be able to lead and measure that risk," he concludes. "Going forward, our view is that you're going to see more companies having to have IT experienced professionals sitting at that board table, rather than the CFO having IT as part of his remit."



How technology is helping treasurers deliver strategic advantage

The age of the strategic treasurer is here; the global financial crisis made sure of that. However, for corporate treasuries to achieve their full strategic potential, support from the right kind of technology is essential, especially when it comes to achieving full visibility over financial flows and the broad sweep of commercial risk. Here, Treasury Today and Openlink explore the ways in which treasurers can deliver strategic advantage to the organisation.

The essence of strategic treasury is that it is an integral part of business decision-making. This means full and timely visibility over all financial flows is critical. There is no other way of effectively mitigating risks and facilitating growth. Arguably, anything less will limit the usefulness of treasury in the eyes of the C-Suite and the board. This is especially true if it leads to lost opportunities in a fiercely competitive and volatile world.

A changed world

A clean balance sheet has become a crucial element for companies seeking to achieve the right level of funding postcrisis. To achieve this, treasurers must align their understanding of FX and interest rate positions with those of derivatives and, through these, their exposure to raw materials and commodities trades. With boards calling upon Group Treasurers to provide the necessary clarity, the more proactive and aspirational players within the rank and file of treasury are demonstrating their business acumen by driving the agenda for change upwards.

Looking at this in practical terms, we can see an immediate case for change. In an (albeit simplified) manufacturing context, procurement requests cash to buy raw materials, treasury will review and provide the funding. The materials are turned into a finished product which is sold, the cash is collected and eventually returned to treasury's control for onward dispersal.

The problem is that quite often these processes and their respective data streams are disjointed. For efficiency to reign, they need to be part of a natural continuum. How can this be achieved? A system that offers complete visibility across the organisation can effectively reintegrate the workflow. Suddenly, enterprise-wide visibility of cash positions, FX and commodity exposures on one system is achievable. Spurred on by this notion, the most receptive treasuries are actively banishing fragmentation and re-engineering their outlook. They are using technology as their enabler.

Integration, and the insight it can deliver, makes for a far more 'on point' treasury. This is treasury capable of engaging with company financials at an operational and strategic level. In doing so, treasury is empowered to provide far more value and insight to the whole organisation than ever before.

Sharpening hedging strategies

When seeking cost savings, the traditional procurement process has often relied on pure negotiation skills on spot commodity deals. Today, spot deals are commonly eschewed for longer-term contracts. But these necessitate a higher degree of cash exposure than for spots. In such a volatile global market place, being able to confidently lock-in forecasts for extended periods demands that purchases are made with far greater market acuity.

Treasury must be involved in managing that exposure. Why? Because it will be treasury guaranteeing the availability of any

Etihad Airways: no more fragmentation

The treasury of global airline Etihad is divided into front, middle and back office. The airline has many leasing contracts and loans to manage, as well as cash flow typical of modern major aviation business. In the past it had managed leases, fuel hedging, FX and interest rates and cash flow in individual systems.

In a highly competitive market, being able to make informed business decisions quickly is vital. With a fragmented system architecture, aside from the operational risk of separate manual input errors, the airline found rapid response was increasingly difficult. By bringing disparate systems and data sources together, the creation of a 'single source of truth' delivered treasury speed and agility at both an operational and strategic level, helping to take the business to the next level.

Read more on the Etihad story: openlink.com

shortfall if the company is locked into a high price and the price falls significantly, just as it will be if the reverse happens and huge 'savings' disrupt the forecasting mode.

The same is true when hedging currency exposures. In stressed market conditions, increased collateral calls can put pressure on corporate cash flows. Treasury must know how to manage the cash flow around procurement processes and what the hedging costs will be.

Attaining such a detailed understanding is only achievable when the data is held in one system. Treasury can then rapidly respond to any market event in near-real time. This is all about transforming what once were complex decisions into relatively simple choices.

All technologies are not the same

Of course, there is a world of difference between standard treasury technology that is used simply to manage cash, and the more sophisticated modern product that brings analytical power to a wider range of functionality such as FX and interest rates. Openlink's unified treasury cash and risk management solution takes the idea of integration several steps further, without complicating the process.

In the UK, one leading supermarket chain has deployed Openlink's Findur to give it a derivative trading platform. This is combined with comprehensive cash management and trade finance functionality. Within the system, it is possible for treasury to create full what-if scenario analysis. By doing so, treasury is building an intelligent and rapid response to anticipated market events, whenever and wherever they may occur.



The holistic view from treasury: a strategic advantage

The questions treasury can quickly and easily answer with accurate, centralised data.



Procurement

How is each buyer performing?

Is this a good time to lock in prices?

Which vendors are my buyers

dealing with?
What are they paying in commission?



Leadership

How much capital will be required for next quarter procurement?

How are regional procurement groups doing?

How much are the component costs and where can we save?

Are we hedged?

How is spend trending and why?

What are our top ten grossing finished goods?



Risk

How many contracts do we need to buy to hedge company-wide exposure?

How effective is our hedging programme?

How should we allocate hedges to local business units?

Indeed, where a business has geographically dispersed subsidiaries, the capacity of a single system to deliver full visibility, as and when required, across the enterprise is a powerful addition. For a purely operational perspective, it enables teams around the world to work more agilely from one system that provides a single source of truth. This negates the need for continuous meetings to be had across time zones and means that teams do not have to wait for reports to be manually sent over before making decisions, allowing them to work in near real-time.

Hosting this system on the cloud also provides accessibility for all users, removing the high financial and resource costs associated with the implementation and ongoing maintenance of in-house systems.

Adding value

The effective use of technology can transform treasury from a cost-centre to a profit centre. For example, for any business collecting large volumes of cash on a daily basis, it will not typically see that cash in its bank for weeks. For the duration, this is effectively dead cash. However, if that business has full visibility of its cash position any time it chooses, it can begin to exploit overnight money market investments. When treasury is potentially making a return, to all intents and purposes, it is also adding a revenue boost.

Cost savings

With access to real-time cash positions as part of its everyday business, the treasury of one of the world's largest shipping firms has been able to establish an in-house bank to which all subsidiaries are connected. Instead of those subsidiaries settling invoices from shipping terminals around the world in a multitude of local currencies, the in-house bank settles centrally. This saves a huge amount in bank fees alone.

Moreover, immediate access to a single enterprise-wide view of all actual treasury positions and up-to-the-minute forecast data is a quick route to the efficient use of credit lines and limits with banks. A treasurer armed with wide-ranging accurate and timely data knows precisely how much funding is needed, when, for how long and in which currency.

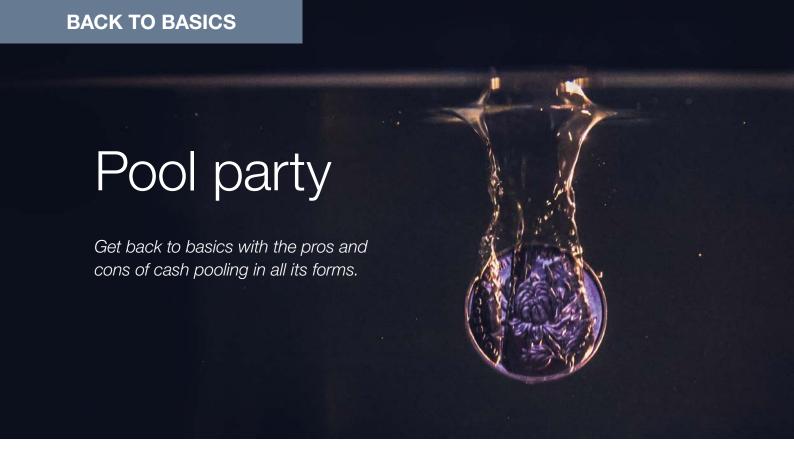
In a segregated architecture, it can be difficult to know when limits are being approached at group level. In affording a real-time view of current and projected limits, the single system helps to maximise use of credit lines, flagging up limit concerns, enabling treasury to spread the debt more appropriately.

Furthermore, with risk analytics embedded in Openlink, treasurers open to more sophisticated modelling can begin to understand bank fees around more complex structured products. Running credit value analytics, for example, can enable treasury to challenge its banks on the spreads it is being charged. With every calculation and process being audited in-system, when sending out Requests for Quote, it becomes easier to track and trace fee structures over time, assisting with any pricing discussions.

Champion of champions

As businesses become more complex in a competitive and volatile world, a comprehensive treasury cash and risk management solution adds value. It can provide treasurers with the visibility and understanding needed to move to the next level. This will see the role treasury plays in the business transform, becoming more proactive as a value-added advisor to the board.

Forward-thinking regional or deputy treasurers can sow the seeds of change. However, high-level support from individuals with strong vision and direction are needed to bring about significant transformations in any business. Where the will is shown from the top down to ring the changes, it becomes entirely possible to break down those siloes. Once this has been achieved, treasury can truly step up as the key strategic business partner.



According to the ECB, pooling cash within a group represents a "significant opportunity to ensure that the use of internal funds is maximised and the cost of capital is minimised". It is perhaps unsurprising then that cash pooling increased in popularity in certain locations following the onset of the financial crisis. Indeed, the source of this quote – the ECB's July 2016 Statistics Paper – noted that increased adoption was driven by limited access to capital markets, reduced bank lending, low returns and higher risks on banks' deposits with corporates intent on maximising their use of internal sources of financing.

The basics

Cash pooling is an essential liquidity management technique. It brings together a number of individual bank accounts to pool balances, optimise interest and improve an organisation's liquidity management. This could be across multiple jurisdictions, currencies and entities, depending on the type of cash pool in place.

Cash pooling falls into two main types: physical and notional.

Physical pooling

This is often referred to as physical cash concentration, target or zero balancing (ZBA) or sweeping. Balances are physically swept to a header or master account on a periodic basis and may have certain parameters, for example a minimum or maximum balance, a percentage sweep, target balance and a variety of other parameters depending on the provider capabilities. Physical pooling is available on a domestic, cross-border, cross-region and multi-bank basis and is also dependent on the provider capabilities.

The acceptance of pooling structures is not clear cut in every jurisdiction. Because direct inter-company lending in China, for example, is not permitted, physical cash pooling cannot be practiced using the traditional techniques, since this sort of arrangement generates inter-company loans. In order to

achieve physical cash concentration, an entrusted loan structure must be used.

Notional pooling

This is primarily a tool for interest enhancement. Notional pooling structures are typically overlay structures. Debit and credit balances on a series of accounts owned by the same or different entities and domiciled in the same country are notionally netted for interest calculation purposes, without a physical movement of cash. Multicurrency notional pooling offers the ability to achieve a net notional position in a single currency without the need to perform traditional FX or swaps, and extends the benefit of further interest savings as a result of compensating balances in different currencies.

Additionally, an **overlay cash pool** can be provided by an international bank offering physical or notional pooling on a multinational, multi-entity company level in country, in region or globally. Overlay cash pools allow changes to existing bank relationships when necessary without disrupting the operation of the cash pool and allow changes to the cash pool to take place without disrupting the underlying banking structure.

Regulatory impact

Under Basel III the cost structures of notional pooling solutions have come into question where some banks have increased their pricing for operating deposits to help meet liquidity coverage ratio requirements.

Corporate global or regional liquidity and funding structures such as notional pooling may be impacted by the OECD's Base Erosion and Profit Shifting (BEPS) Action Plan in the countries where such structures operate.

Where International Financial Reporting Standards (IFRS) and International Accounting Standards (IAS 32) apply, bank account balances are seen as financial instruments that must be disclosed and presented individually. However, US GAAP allows banks to net the balance sheet.

Digging deeper: physical pooling/ cash concentration

Main benefits

Control funds centrally. The concentration of all of a company's surplus cash into one account, generally managed by the group treasury, will improve its control over cash. If the net balance of the cash pool is positive, this aggregated balance can be used to invest in overnight or short-term deposits, such as money funds. Indeed, companies with large treasuries often have dedicated staff managing these investments.

The establishment of a physical cash pool enables treasuries to exercise greater control over cash flows. Ideally, all subsidiaries should participate in the cash pool, as this provides the centre with more information about the daily cash flows that exist throughout the company.

Reduce credit facility requirements. Establishing a physical cash pool means that the treasurer need only negotiate one credit limit for the entire group. This avoids the need for separate credit arrangements to be set up for each subsidiary participating in the cash pool.

The treasury has a high level of visibility over the balances of subsidiaries' accounts in this type of arrangement and can thus control the disbursement of cash. A subsidiary experiencing cash shortfalls can be funded from the master account at a cheaper rate than could be arranged locally. The treasury should be able to reduce borrowing costs significantly by using the balance aggregation to arrange inter-company funding.

Disadvantages

Inter-company loans created. The physical movement of cash between accounts creates a series of inter-company loans between the master and participant accounts.

This can have complex implications, particularly with regard to:

Withholding tax. In some countries, withholding tax may be levied on inter-company loan interest. This is because tax authorities regard the payment of interest on inter-company loans as an inter-company payment rather than as a bank payment.

Thin capitalisation. In some countries thin capitalisation rules apply – these restrict the level of financing a subsidiary can receive from its parent/major shareholder. Companies are often able to offset the cost of such loans by deducting the interest charged as an expense for income tax purposes. In order to prevent abuse of this advantage, many countries have introduced thin capitalisation rules.

The ratio of debt to equity a company is allowed before it is classed as being thinly capitalised varies considerably from country to country. Thin capitalisation levels need to be closely observed when running a physical cash pool to ensure that the redistribution of funds from the header account amongst the subsidiary accounts does not breach these rules. This is of particular concern when cross-border cash pooling is implemented.

Legal issues. The transfer of monies between a company's subsidiaries creates legal issues due to the co-mingling of funds. Care must therefore be taken with the structuring of inter-company loans to ensure that they are legal. Often separate credit agreements will need to be put in place for each loan.

Higher banking costs. The physical transfer of cash between accounts will incur high banking costs, particularly if a large number of movements takes place and/or crossborder transfers are involved.

Cash flow forecasting. The master account will fund any cash shortfalls and invest in surpluses on a daily basis. Some degree of cash flow forecasting will therefore be required to manage these positions effectively.

Concentrated banking arrangements. Most cash pooling arrangements require that all participant accounts are held with the same bank. This may cause problems for companies with operations in many countries – a bank which is strong in one country may offer a more limited service, or indeed no service, in another.

Variations on the theme

Zero balancing. Cash movements into and out of the header account are structured so that all subsidiary accounts are left with a balance of zero. Typically, zero balancing cash pools operate on an intraday basis, with sweeps occurring daily (usually at the end of the working day). The net balance in the header account is therefore available for overnight investment.

Target balancing. In this arrangement, cash sweeps are arranged so that accounts in the pool are left with a predetermined target balance after the sweep. Different target balances can be set for the constituent accounts in the pool. In fact, it is often possible for the treasurer to set negative target balances (ie an overdraft facility) on some of the participant accounts.

Interest reallocation. Some banks allow the interest payable to the cash pool to be redistributed between the participant accounts. The bank calculates the interest payable after balances have been swept from the participant accounts to the header account. Central treasury can, if the net balance of the cash pool is positive, benefit from a 'turn' (the difference between the credit and debit rates) which may be shared with the operating subsidiaries.

Mirror accounts. Some banks offer a service whereby mirror accounts can be set up for the participating accounts in a cash pool. Sweeps on the participant accounts would be booked through the mirror accounts, leaving the operating accounts to function as if they were not part of the cash pool. Each participant account and its mirror account will net to zero after the sweep has been performed. This arrangement can help operating subsidiaries to reconcile their account balances and track the inter-company loans created by the cash concentration.

Digging deeper: notional pooling

Main benefits

Subsidiaries maintain autonomy. As no physical concentration of cash occurs, subsidiaries participating in a

notional pooling arrangement maintain autonomy over their bank accounts and retain their cash balances. The group however achieves similar economic benefits as it would with a physical cash pool.

Less administration. As balances remain with each legal entity (ie no inter-company loans are created), notional pooling requires far less administration than physical pooling.

Lower banking costs. Notional pooling incurs lower fees than physical pooling as the bank operating the pool is not required to transfer cash between accounts.

Disadvantages

Balance sheet enlargement. The balance sheet of both the bank and the company involved in a notional pool can become unnecessarily large. This is because there are no physical cash transfers occurring between the various accounts in the cash pool.

Specifically, a bank offering notional pooling services may find that it is unable to offset fully the debit and credit balances appearing on its balance sheet. This will affect the way in which the bank allocates capital, which will in turn affect the interest compensation paid to the pool. This can become a very important issue as banks have to allocate capital to all their lending. If the gross overdrafts on the participant accounts have to be carried on the banks' balance sheet, there will be a charge to reflect this, which may or may not be made explicitly. This will partially offset the gains that are made.

Legal issues. In some countries notional pooling is prohibited. Additionally, the way in which net interest is calculated may vary from country to country.

Credit facility requirements. Separate overdraft facilities and credit agreements will need to be negotiated for each account participating in the cash pool. This can make managing liquidity across a company more complex.

Main variations

Interest optimisation. This is a limited form of notional pooling whereby a bank offers a company preferential credit and debit rates (ie it returns to the company some of the 'turn' it would normally benefit from). This service is usually offered in jurisdictions where full notional pooling is not permitted.

Margin pooling. This arrangement is a variant of interest optimisation. In a margin pooling arrangement, a bank pays the company the benefit accrued by applying interest optimisation as a separate fee. The service allows for a bonus determined by the ratio between the debit balances and credit balances of the participating accounts. In effect, this operates as a sort of 'loyalty scheme' – the greater the offset between accounts, the larger the benefit paid to the company.

Other pooling arrangements

Single legal account pooling

A form of cash concentration, in this arrangement a company maintains only a master account with a bank. This master account – which is generally managed by the group treasury – contains all the company's cash and is effectively an in-house bank.

The bank maintains sub accounts for all the entities participating in the cash pool. These accounts are used by the group's operating subsidiaries as if they were not part of a cash pool (so they control their own balances). However, all transactions on the sub accounts are booked to the master account. The master account is thus a summary account for all activity occurring in the sub accounts. The bank calculates interest on the master account balance, although this can often be allocated to sub accounts.

Single legal account pooling is not especially widespread, being mainly offered by the Nordic (and some UK) banks.

Reference account structures

Reference account structures are a method of including the accounts of subsidiaries which are not officially a part of the cash pool in a pooling arrangement. Subsidiaries may be unable (eg for legal restrictions in place in their home country) or unwilling to participate in a cash pool. In this arrangement, each subsidiary has – in addition to its normal domestic operating account – a reference account in the central pooling location. Balances on the local operating accounts are manually or automatically transferred to the subsidiary's reference account in the central pooling location. These balances will then be notionally pooled, allowing for the full offset of debit and credit balances.

Overlay cash pool

An overlay cash pool isn't necessarily distinct from a notional, conventional target or ZBA cash pool, but could contain components of all three. It is a cash management service that facilitates the aggregation of liquidity from a series of multiple underlying banks or accounts into a single bank or banking structure. This could be within a single bank, but typically an overlay structure refers to a multi-bank structure.

Where balances are held at two different banks, the cash has to physically move from the local bank to the overlay bank. This can be done by the corporate instructing its local bank to push the funds to the overlay bank – where every day at a particular time the bank pushes excess cash into the overlay bank account structure. The alternative is for the overlay bank to pull the cash from the local bank at a predefined time and within certain parameters.

A virtual alternative

Given the potential for regulatory issues around the structure, an alternative to notional pooling is provided by virtual accounts. These have already been deployed for the streamlining of collections. By opening virtual accounts for each entity within a group and appending sub-level virtual accounts to these, clients of those entities can effectively remit to a central account (whether national, regional or global) using their own unique virtual account identifier. Like notional cash pooling, virtual accounts could enable corporates to allocate cash without segregating it physically.

By integrating virtual bank accounts with administrative sub-accounts called virtual ledger accounts (which populate a multi-bank cash management dashboard), a new type of liquidity management tool is created, allowing full cash concentration and visibility right across the group.



Better collections management

Collections are the foundation of treasury management. So why are many corporates still struggling in this area? In a recent webinar hosted by Treasury Today, senior product executives from BNP Paribas discussed why this is the case and what changes corporates can make to solve the issue.



Coralie van Zyl
Head of Product Development
Payments and Collections
BNP Paribas



Dennie ServranckxProduct Manager Collections
BNP Paribas

For every company on the planet, receiving payments is an everyday occurrence. Yet it is an area fraught with challenges. This may be because customers do not pay on time, requiring the seller to chase down payments, wasting valuable time and resources. Or it might be because incoming payments are not easily reconciled, leaving the seller unsure who has paid them and for what.

According to Coralie van Zyl, Head of Product Development Payments and Collections at BNP Paribas, the root of the problem is the friction that often exists in the invoicing and payments process. But it is friction that can, with a few changes, be removed.

Dennie Servranckx, Product Manager Collections at BNP Paribas advises that there are three key areas that corporate sellers can address to improve the buyer's payment experience, and the likelihood of them paying on time. These are:

- Communicate payment instructions clearly and consistently: this will prevent the buyer making mistakes and having to spend time re-entering payment details into their own system.
- Consider the payment culture of the payer and adapt to this: there are clear differences in the way corporates in certain countries pay.
- Offer the payer a range of payment methods: forcing a company to act in a certain way can delay payments and even damage the relationship. Analyse customer needs and offer their preferred payment methods.

Addressing these areas can not only ensure corporate sellers are paid on time, they can also help solve the issues sellers face once they have received the payment. For example, van Zyl notes that one of the biggest collections issues for corporates is reconciliation.

"Corporate sellers face challenges here because they are often reliant on the buyer inputting data about the payment in the payment file," she says. "Typically, this information is either incomplete or not completed at all, leaving the seller in the dark regarding what they have been paid for." As a result, it is not surprising that over 50% of invoices require some manual intervention, according to a recent client survey by BNP Paribas.



Making payments frictionless for the buyer can solve this issue. Indeed, BNP Paribas has found that there is a high level of correlation between frictionless payment methods and high levels of STP collections. Servranckx highlights the use of credit transfers – one of the most common forms of B2B payments – as an example. "These can be very easy to use for the buyer but when wrong or no information is included, there can be a lack of straight through reconciliation for the seller," he says. "To change this, the seller can start using products such as virtual accounts and begin achieving better reconciliation rates without impacting the buyer's processes."

Servranckx further suggests that corporates look at e-invoicing platforms as a way to make life truly frictionless for their customers. "All the payer then has to do is accept the invoice to generate a credit transfer, these are especially effective in the B2C space," he says. "For the seller, reconciliation is easy because all the information is there." Direct debit and the acceptance of cards can have the same effect.

To conclude, van Zyl recommends that corporates evaluate their current collections processes to highlight the problems. She then recommends that they put themselves in the shoes of their customers, to find out where the friction is being created. "If you operate in a market where you know credit transfers are popular, for example, then offer that method of payment to your clients," she says. "You can then supplement this with a virtual account solution to make sure that these payments can be easily reconciled."

Treasury in Africa

What are the current trends in treasury management in Africa?



Idrees Kolabhai Head, Cash Management, Transactional Products & Services, Standard Bank

Brendon Bouwer Head, Liquidity Management, Transactional Products & Services, Standard Bank



Corporates continue to focus on bolstering their balance sheets, increasingly so with the expectant increases in rates in the US and European markets. At Standard Bank, we have been strong advocates for corporates to better their cash conversion cycle, placing less reliance on term overdrafts and moving towards just-in-time funding to support their working capital lifecycle.

We continue to see consistent themes, but we are also seeing new themes emerging in the African context. Given the often slow and unreliable performance of correspondent banking models, having a single regional banking partner on the continent with a wide geographic footprint and extensive branch infrastructure and local clearing access has become critical.

Internal liquidity management has become a key source of funding, with companies looking to diversify their funding sources. Trapped cash is a reality for many businesses operating in Africa. Restrictive exchange control regimes mean that businesses can't move money between their various operations easily. This presents challenges for the operation of regional and global treasuries, especially the repatriation of funds to parent companies abroad. While it is legislatively possible to remit funds in many African markets, businesses often have long waiting periods when sourcing foreign exchange in the domestic market.

Cash forecasting remains a concern. As is the case in markets across the world, it is critical for treasurers to have sight of their cash balances in order to optimise their working capital balances and manage their liquidity risk. Given the real-time nature of modern business, treasurers need intra-day liquidity information, enabling the management of cash flows, credit facilities and working capital quickly and responsively across multiple accounts and subsidiaries. Despite the growth of mobile banking in Africa, the continent remains reliant on cash as both a medium of exchange and store of value.

Corporate centralised payment factories and treasury centres have evolved to regional treasury centres with local payment presence. Businesses setting up in Africa can't simply import the payment structure that they operate in their more developed markets. Instead, they need to understand what will work as a payment system in that particular country or region – and then be guided in terms of operating in these

cash-based trading environments. To be effective, the regional treasury centre needs to be located in the region it supports and close to the key business operations in that region. Direct access to regional trade blocs like Southern African Development Community (SADC), West African Monetary Union (WAMU) and East African Community (EAC) provide an invaluable advantage to treasuries located there.

The digitalisation of traditional business channels has brought about unprecedented levels of access, automation and optimisation to corporates and their treasuries. The demand for Africa to be part of the digital revolution is as strong, with treasurers demanding tools and services from African banks to support their own digital journeys.



Geoffrey Gursel Director - Citi Sub-Saharan Africa Treasury & Trade Solutions Sales and Implementations Head Citi

With the downgrade of South Africa, coupled with several bank failures over the past 18 months and wider geopolitical risk through major elections, comprehensive reviews of counterparty exposure limits will continue to be a major trend throughout 2018 in Africa. While there are brighter economic forecasts for core markets like Nigeria and into West Africa, continued close management of FX and commodity risks remain critical, with certain industries managing exposure to oil prices closely.

Centralisation and automation are not entirely new to Africa and will continue via rationalisation of banking partners and accounts, but the physical locations of where to structure centralised payment hubs or SSCs is changing to new locations like Senegal, Côte d'Ivoire and Kenya. Automation is no longer just about cost efficiencies, it is now an enabler to effectively manage liquidity and risks in locations previously not considered.

The increasing number of centralised payment structures in Africa will inevitably evolve in 2018, with XML V3 now a standard and simplification a core objective with treasury teams being asked to do more-with-less. These new emerging treasury hubs, coupled with improved Central Bank policies and 2020/2030 visions, are helping to ensure the corporate sector buys into the economic future of the country - and this ties directly in treasury decisions.

The specific pressures, and therefore risk management priorities of corporates working on the continent, will have to be aligned to the digital adoption of the market as well, of which Nigeria and Kenya are good examples of upgrading their payment infrastructure to true real-time and the working capital efficiencies that organisations can benefit from. How treasurers in Africa adapt and maximise those enhancements that will increase STP and automation will also raise further questions on the understanding and readiness of cyber fraud. What are the ongoing roadblocks to protect the corporation in Africa? What role does your bank need to play in your internal playbook in the event of an attack? These types of questions are becoming more commonplace in Africa as organisations begin to implement contingency planning for specific cyber take-overs.

The continued evolution of the treasurer or treasury in Africa has to keep abreast with the new data-driven analytics that banks can offer now on the continent. Real-time visibility isn't enough. It is real industry benchmarking, with examples like applied machine learning techniques to analyse clients' payments data for outliers and enable clients to take action. Managing the associated risks with doing business in Africa will always be on the treasury KPI. But in Africa in 2018, if your bank isn't being your catalyst for treasury innovation, you need to act on that. And fast.



Andre Olivier
Treasurer – Rest of Africa, Multichoice

Andrew Mills
Group Treasury Manager, Multichoice



When one refers to or thinks of Africa, it is generally the great unknown of this 'dark continent' that causes one to lump it into a single homogenous land (country). The truth of course is that Africa is a continent with a populace of over 1.2bn people living in 54 countries, making it a truly diverse place. African economies are equally diverse. The largest 12 economies make up over 80% of the continent's GDP.

One of the great inhibitors to free trade and flow of cash in and out of many African states is exchange control - a mechanism which many countries use to manage the value of their currencies. Many central banks also still manage their currencies actively. However, the overdependency on foreign export proceeds, primarily from commodity-based revenue, to fund large import requirements has forced some fiscal and monetary challenges. Nigeria and Egypt are the most recent cases in this regard, with both having shown a positive effect of moving to free-floating or adopting a managed float, although Nigeria continues with a dual exchange rate. Foreign currency liquidity remains a key risk however, with forward cover often acting as a means of securing currency and not only a hedging method - and generally at a steep premium. The availability of effective hedge instruments, particularly in times of illiquidity, also remains a challenge, with treasurers often having to resort to quasi-hedges.

Nevertheless, these reforms have generally been well received from the investor community, resulting in increased foreign portfolio flows and foreign direct investment, enabling greater economic transformation, diversification and growth.

Nevertheless, undiversified revenue streams, generally low tax collections and political will to implement budgets effectively continue to hamper structural growth.

Despite this, there are many multi-national companies operating throughout Africa who bring the need for some level of sophistication in treasury management. Given the low GDP per-capita across Africa, many collections-based businesses use relatively low-tech solutions which are often cash-based. These require extensive branch banking networks in order to be close to the customer. The notable exception to this is Kenya, where the electronic wallet – m-Pesa – has flourished and very much revolutionised banking in that country.

For large businesses, there is a trade-off to be had between the use of local banks, which often have very weak credit ratings, if any rating at all, and the use of banks with a strong international reputation who also operate in Africa. The former may indeed offer a wider footprint compared to the latter but with elevated risk, particularly around capital security and visibility.

One of the most basic tenets of treasury management would be concentration of cash - ensuring that your cash can be controlled from a single point to extract maximum returns. Given the exchange controls in many African countries, cash pooling across regions is often not possible, but within countries there are banking solutions that enable cash sweeping across various banks so that cash can be concentrated to a single point. Sweeps can be automated or manual, zero-balance or target-balance, so the system can be as sophisticated as you want it to be. Using SWIFT messaging for payments and balance and transaction reporting is generally feasible but very market and bank dependent. Many still have a very underdeveloped banking infrastructure where simple operation execution may be a challenge, but others like South Africa are mature and conform to international standards. Increasingly though, the influence of international and regional banks and indeed cross-state collaboration, is contributing to the development of the financial sectors in the markets with increasing availability for products and services.

Corporate treasury on the continent has undoubtedly responded to the 'VUCA environment' it operates in by being a strategic partner to the executive and helping it navigate the often volatile and unpredictable markets. Leveraging technology to provide valued-add through treasury management systems is no longer considered a nice-to-have but seen as an essential part of treasury's armour.

From the 'Africa Rising' narratives at the turn of the decade to one of 'Rebalancing', the now seasoned treasuries across the continent are ready to embrace the next chapter of this exciting frontier, alive with possibilities.

Next question:

"How can treasury best define the company's optimal capital structure and what steps can it take to achieve this?"

Please send your comments and responses to qa@treasurytoday.com

The unintended consequences of US fiscal policy

The Trump government believe its economic policy will result in a growth rate of 3%; economists believe this is more likely to be 2% at best. What then will be the real impact of US fiscal policy and what will this mean for markets?

The US public deficit is likely to exceed 5% of GDP before too long as a result of tax cuts and higher expenditure on defence, infrastructure et cetera, in the absence of substantial cutbacks in other areas. This cannot be sustained for long. However, it will not get to this point according to Trump and the Republicans. They believe that their measures will result in far more investment activity, as a result of which productivity growth will accelerate in the future. This is expected to result in a growth rate of 3% or higher. It is believed that the resulting additional tax revenue would prevent the public deficit from rising substantially.

Most economists have a different view. To start with, they believe the point of full employment has virtually been reached in the US. They therefore envisage additional wage increases before long (there is more and more anecdotal evidence of this). This means that if US economic growth were to stay well above potential, imbalances would occur to the extent where a recession would soon ensue. In other words, growth would have to be pushed back to potential fairly quickly in order to prevent this.

This brings us to the question as to the exact level of potential growth. In this respect, the views of most economists differ from the optimistic outlook of the White House – said economists expect growth to end up at around 2% at best. However, the Fed prefers interest rates to rise to 3-4% in order to be able to absorb the impact of the next recession.

In the current circumstances, this would only be possible if inflation were to climb to this level as well. Hence, we believe the Fed will pursue a policy that will ensure growth still stays above potential for a while. However, the Fed would have to tread very carefully here because once the markets believe the Fed allows inflation to rise rapidly, the bond market will spin out of control – due to concerns about even higher inflation.

This would be a very risky development given the current soaring debts. Hence, we envisage the Fed setting the target for growth at 2.25-2.5% for the time being – it will therefore aim for a growth rate that is just above potential, as a result of which inflation would only rise slowly.

We therefore draw the following conclusion:

- The White House and the Republicans overestimate the growth rate with their assumption of 3% growth. We believe growth will be at 2.25-2.5% in the slightly longer term.
- It also remains to be seen whether the Fed will be able to fine-tune growth so that it reaches this level. It usually failed to do so in the past in any event. If the economy were to grow too fast for a while, with inflation rising too rapidly, a recession would definitely occur before too long. Importantly, the lower the level of productivity growth, the

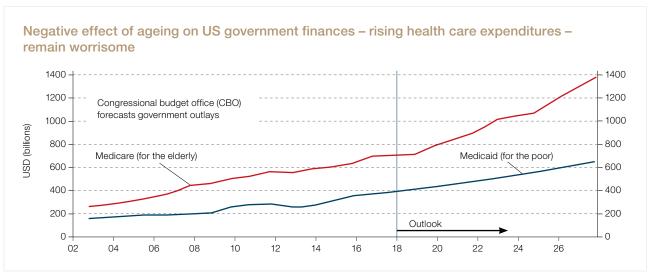
- sooner and faster inflation would rise. This is an important point, now growth seems to keep hovering at around 3% for the time being as a result of the tax cuts this would be well above potential.
- All leveraged parties in the US could soon be hit by far higher interest charges. In itself, an interest level of approximately 3.5% is still historically low. However, debts have exploded over the past decades because interest charges stayed at more or less the same level as a result of lower interest rates. If the interest level were to increase from 1% to 3.5% now, this would come down to roughly a tripling of interest charges over time.
- Wage increases will probably reach higher levels before inflation starts rising. In a situation where productivity growth lacks a distinct uptrend, this would soon result in higher unit labour costs. In conjunction with rapidly rising financing expenses, this could soon limit the increase in corporate profits considerably.

If we subsequently look at the consequences all this entails, our first assumption is that the US economy still receives substantial monetary stimulus, with fiscal stimulus coming on top of this now. In addition, fairly high growth in the rest of the world is a stimulating factor as well. This is why we believe US economic growth will amount to roughly 3% for the time being. This, in turn, means the Fed would have to pursue a tighter monetary policy. Both short-term and long-term interest rates would have to be driven to higher levels in order to gradually push back growth to 2.25-2.5%.

Longer-term interest rates will come under (far) more upward pressure anyway in the course of this year:

- The prospect of higher inflation as per the Fed's intention will drive up long-term interest rates.
- The Fed will downscale its bond portfolio increasingly rapidly in the course of this year. The central bank will consequently have to sell more and more bonds.
- The government will have to step up borrowing considerably in order to finance its deficits.
- China wants to invest more of its surpluses rather than saving them. This means China would have less demand for US bonds. Should Trump maintain his protectionist stance, this process would be accelerated and the same would apply to other countries as well.
- The US is developing major twin deficits (on public finances and the current account). Considering the low level of savings in the US, this requires foreign capital in the event of a well-performing economy. The fact that the dollar exchange rate has declined lately and long-term interest rates have risen shows that foreign capital holders believe the dollar exchange rate is too high and/or US





Source: Thomson Reuters Datastream/ECR Research

interest rates are too low for substantial investment in the US. This would probably first require monetary tightening. This would only get off the ground if wage increases and/or inflation were to reach distinctly higher levels. This is yet to happen and US monetary policy is still too loose to attract sufficient foreign capital. As long as this remains the case, there will be downward pressure on the dollar exchange rate and/or upward pressure on longer-term interest rates.

Share prices have been driven up enormously since 2009 by ever lower levels of interest rates and an increasing surplus of money as a result of quantitative easing, not just in the US but outside the country as well. However, this will change now – first of all in the US, where a turnaround will occur from quantitative easing to quantitative tightening and interest rates will rise.

As for Europe, policy will shift from quantitative easing to neutral, rising long-term interest rates are envisaged this year and the ECB is expected to start hiking its rates by next year. A similar policy is envisaged for the rest of the world in the

years to come. This therefore means that share prices were initially driven up to excessively high levels by massive monetary growth and artificially low interest rates, while they will now be faced with monetary tightening and higher interest rates to a far greater extent.

Such a transition normally occurs at a slow pace, but it will probably be faster now due to the US suddenly implementing far more fiscal stimulus than was foreseen – for a long time, it was believed the tax cuts would be offset by major cutbacks on expenditure. Germany seems to be heading in this direction too. Furthermore, growth in the rest of the world is better than expected as well, which has an accelerating impact on the process.

In combination with persistent high valuations, we certainly expect the above-mentioned turnaround in monetary policy to cause the S&P 500 index to decline towards 2,300 in the months or quarters ahead. However, as a decline below this mark would also affect US economic growth, this could moderate a further increase in interest rates.

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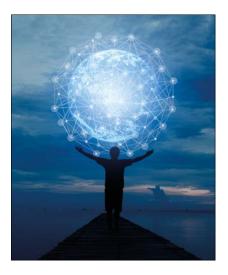




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The death of cash... again

Many experts have prophesied the death of cash for some time now. Yet, in 2018 paper notes and metal coins are used daily in every country in the world. In fact, statistics show that there is more cash in circulation today than ever before. Despite this, there is a clear drive from governments, banks, corporates and even individuals to move away from cash. Accelerating this is the wave of innovation sweeping over the payments space that is making storing and using digital cash cheaper and easier. And let's not forget about the cryptocurrency revolution.

Treasury on a budget

Every treasurer wants access to best in class technology to help them run their operations more efficiently and reduce risk. The problem is that this technology is not cheap, making it out of budget for treasury teams being asked to operate on a shoestring. This does not mean that these treasury teams cannot obtain many of the benefits offered by more advanced technology, however, it just requires a little more creativity. Treasury Today tells you how you can build a best in class treasury technology stack on a budget.

The rise of the treasurer/ change manager

Since the global financial crisis, the role of treasury has transformed. This transformation has seen it move beyond its departmental walls and start playing a greater role across the business. Some treasury departments have taken this a step further and become agents of change within their organisations adding values in areas previously out of sight of the treasury. In this article, Treasury Today hears from the treasurers doing this and highlights how you can become a change manager within your organisation.

We always speak to a number of industry figures for background research on our articles. Among them this issue:

Tim Bartlett, Senior Liquidity Commercialisation Manager, HSBC; Brendon Bouwer, Head, Liquidity Management, Transactional Products & Services, Standard Bank; Joe Cassidy, Partner, Brexit Lead for Financial Services, KPMG; Jack Davies, Treasury Analyst, AstraZeneca; Terry Dennis, EMEA Cash Management Sales Head, Corporate and Public Sector, Treasury and Trade Solutions, Citi; Auna Dunlevy, Head of Liquidity and Investments, Royal Mail; David Farrow, Head of Global Transaction Banking, Barclays Corporate Banking; James Finch, Head of Liquidity Management, EMEA, UBS; Alex Fiott, Head of Front Office, Treasury, AstraZeneca; Shannan Fort, Cyber Product Development Leader, Aon; Jim Fuell, Head of Global Liquidity Sales, International, J.P. Morgan Asset Management; Geoffery Gursel, Director - Citi Sub-Saharan Africa Treasury & Trade Solutions Sales and Implementations Head at Citi; Helen Hanby, Director, International Treasury, Biogen; Shirley Inscoe, Senior Analyst, Aite Group; Shveta Kapur, Associate Director, Treasury, IndiGo; Idrees Kolabhai, Head, Cash Management, Transactional Products & Services, Standard Bank; Andrew Marshall, Managing Partner, Covarius; Rick Martin, Group Treasurer of GasLog; François Masquelier, Vice Chairman, EACT; Todd McElhatton, CFO, SAP North America; Andrew Mills, Group Treasury Manager, Multichoice; Kerrie Mitchener-Nissen, Head of Product Development, International for Global Liquidity, J.P. Morgan Asset Management; Andre Olivier, Treasurer - Rest of Africa, Multichoice; Hugo Parry-Wingfield, EMEA Head of Liquidity Product, HSBC Global Asset Management; Eric Peterson, Director, Corporate Treasury Services Lead, KPMG; Carl Sharman, Director, Treasury Advisory, Deloitte; David Stebbings, Director, Head of Treasury Advisory at PwC; Steve Wiley, Vice President, Treasury Solutions, FIS.

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