

TPP rises from the ashes

The TPP looked dead in the water after the US pulled out of the pact but the remaining members regrouped around its successor CPTPP and remain intent on championing free trade.



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Group Treasury Director

JD.com



Country Focus

The outlook for the Philippines is promising with investors attracted by its growth prospects and a huge infrastructure programme.

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Impact of technology on treasurers



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"The Asian Century" will be about much more than just China

Evidence continues to mount that China's economy is faltering, though it is uncertain as yet how serious its retreat will turn out to be. With hindsight, it was surely unrealistic to expect that after two decades of stunning growth that has propelled it to the second largest economy in the world, China could continue to grow three times faster than advanced nations.

The slowdown will have global repercussions, certainly, and present yet another challenge for corporate treasurers to manage, but its impact is unlikely to alter the shape of the future to come. For there is a growing consensus that by around 2030 China will succeed the US economy as the world's largest economy. It's an expectation that ensures China is more often than not foremost in mind whenever discussions turn to the proposition of "The Asian Century", the projected 21st century global domination by Asian economies.

Yet, as the recently published and widely acclaimed book, *The Future is Asian* by Parag Khanna, stresses, Asia is far more than just China – 3.5bn of the region's 5bn strong population are not Chinese. It's the whole of Asia that needs to be factored in when assessing its potential future economic status.

The region, which Singapore-based Khanna sees ranging all the way from the Arabian Peninsula and Turkey in the west, to Japan and New Zealand in the east, and from Russia in the north to Australia in the south, already accounts for 50% of global gross GDP and over 60% of global economic growth.

The rather bright prospects for the South East sub-region of Asia, the ASEAN group of countries in particular, underline the fact that "The Asian Century", if there is to be one, will be about more than just the heavyweights, China and India, the latter itself tipped to overtake Japan, Germany, UK and France to become the world's number three by 2030.

Even as global foreign direct investment has slumped due to the US tax reforms, South East Asian countries have continued to see healthy levels of FDI inflows and are forecast to grow annually by more than 5% on average over the medium term. The Philippines is a case in point, as we report in this issue. With proactive policies aimed at attracting foreign corporate investment; a US\$180bn five-year public infrastructure programme in train; a 107m strong population with a median age of just 24; and expectations of more than 6% growth annually over the next few years, the Philippines is making corporate executives more than just sit up and take notice.

According to Khanna, of an estimated US\$30trn in global middle-class consumption growth between 2015 and 2030, only US\$1trn is expected to come from today's western economies, with most of the rest coming from Asia. Such an outturn would amount to a colossal global reorientation in wealth generation and consumption and inevitably, dramatically impact corporate investment decision making.

INSIGHT & ANALYSIS



TPP is dead, long live CPTPP!

The US pull-out from the TPP was a particularly high-profile instance of the global drift towards protectionism but its remaining members are looking to buck the trend through a new agreement, the CPTPP.

INVESTING



Money market fund reform: could Asia be next?

Following major reforms to money market funds in the US and Europe, what is the impact of these changes for treasurers in Asia? And could similar changes be introduced in the region in the coming years?

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Investor interest in the Philippines grows on upbeat outlook for its economy

A relatively young population, healthy economic growth prospects and a giant, high priority infrastructure programme are helping the Philippines to attract foreign corporate investment.

Innovative solutions to cash investing

A review of its investment process, and the appointment of a new custodian, led Singapore-based insurance provider NTUC Income to adopt an innovative cash management option.







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Computer says no: the role of AI in detecting financial crime

The AI revolution is gathering pace and fraud detection and regulatory compliance are among areas where the technology is destined to have a major impact.



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Jeff Yu Group Treasury Director



Jeff Yu, Group Treasury Director at Chinese e-commerce giant JD.com, has restructured his department to better support the wider group. He talks to Treasury Today Asia about how his previous experience in traditional industries helped him fulfil that task and the novel challenges new economy companies like JD.com present for treasurers.

BACK TO BASICS 2

Treasurers urged to head to the cloud

Cloud computing has been making inroads into finance departments in recent years and its increasing integration with new technologies like Al and big data is likely to make it an even more compelling proposition for treasuries.





Meng Kei Sou is Chief of Staff in the Regional CEO's Office at Hong Kong-based Chida Estates Limited and is focused on treasury, transaction and cash management, and strategic asset investment projects management. He recently presented to the regional executive committee of the company his thoughts on what the Year of the Pig holds in store. He shares his opinions here with Treasury Today Group.

"Against the backdrop of a synchronised global economic slowdown, escalating Sino-American trade and growing geopolitical conflicts, 2018 - the Year of the Dog - ended with a plethora of bombshell news that created a new wave of concerns on the economic vitality of the Greater China region.

Understandably, the bleak market sentiment was also due to China's disappointing GDP growth figures and its earlier surprising contraction in M2 money supply (the 'M' series is a measure of money supply, from 0-4; typically, M2 is 'broad' money, including hard cash and short-term deposits plus assets that are highly liquid but not cash)."

The major game changers for the Year of the Pig are, I believe, as follows:

Firstly, PBOC's potential regulatory relaxation will allow a more liberal and sophisticated cash pooling and in-house bank account structuring approach across different corporate entities. Similar to the experience of RMB internalisation ten years ago, PBOC is likely to issue a broad-based notification after the New Year, in order to initiate market discussion which would shape how the actual guidelines and qualifications are drafted. The (Chida Estates Limited) Corporate Treasury Steering Committee should engage bankers - both onshore and offshore - and external legal counsel, to correctly analyse the operating guidelines and the potential value added to the balance sheet, per various set-up scenarios.

Next is the Guangdong, Hong Kong, Macau Greater Bay Area (GBA) integration strategy. Promulgated by the PRC government last year, the GBA strategy aims at creating production and financial synergies through the establishment of major cooperation platforms amongst the 11 cities in the Pearl River area, where they share a similar social background but different comparative advantages. Underlying the GBA strategy is the integration and optimisation of human capital, physical and financial value chains that would speed up the transformation of Greater China's economy into a world class technology and financial power house.

In terms of the yield curve and interest rate outlook, the earlier concerns on the successive US rate hikes, and asymmetric yield that put pressure on short duration liquidities, has already impacted North American banks, which saw their stock prices fall by an average of -8% since the half of 2018. Although the risk of further US rate hikes is somewhat reduced after Fed Chairman Powell's recent dovish comments, uncertainty in the US and Greater China liquidity beta, and their macroeconomic performance, would pose a challenge to the asset liability management of banks and corporates.

We also still have Trump versus Xi over 'global domination'. Given that the economic growth in the Greater China region has shown signs of weakness, the threat of an economic hard-landing increases, should the geopolitical disputes between the US and China further intensify.

Country credit ratings are a concern too. With comparable asset yields, the US's AAA has absolute advantage over China's A+ and Hong Kong's AA+ S&P country credit ratings. Downward revision is not entirely unlikely, and should always be considered in a company's financial forecast, as well as its liquidity risk management planning.

To conclude, in the Year of the Pig, global and regional economies will be interlaced with exogenous and endogenous challenges and supportive policy changes. "To succeed, we (Chida Estates Limited) must keep abreast with the development of the game-changers and reposition the treasury function as an integral part of corporate competitive strategy in the long run."



J.P. Morgan's global M&A review says consolidation activity remained strong in 2018, with US tax reforms a notable new driver for the market. The investment bank expects that strong performance will spill over into 2019, with action in the US\$1bn-US\$10bn segment especially robust.

After strong global M&A activity in 2018, with transaction volumes reaching US\$4.1tm, company consolidation over the year ahead is expected to remain buoyant, with the market driven by continuing pressure on companies to review their business structures and unlock value, according to J.P. Morgan.

According to the investment bank's 2019 Global M&A Outlook, 2018 panned out to be the third-highest year ever for M&A volumes, with activity largely driven by "megadeals" (greater than US\$10bn in size). Thirty megadeals were announced in the first six months of 2018 alone – the highest first-half megadeal count on record – compared with 14 deals in the first half of 2017.

While megadeals were a large driver of M&A in 2018, the count for deals greater than US\$250m also increased by 7% from 2017, with activity remaining robust across all deal types. Activity was brisk across domestic and international deals, strategic and private equity, and across all sectors, with technology (17%) and healthcare (12%) representing the largest contributors to global volume in 2018. Cross-border M&A volume remained strong, accounting for 30% of the total M&A market.

Several of the key drivers and catalysts of M&A in 2018 spilled over from prior years, namely positive global growth, improving cash flows, strengthening balance sheets, low cost of debt, investor support and CEO confidence. The study says the biggest new tailwind this year was the implementation of tax reform in the US, which helped generate incremental cash flows and provided access to overseas funds.

While geopolitical uncertainty was prominent throughout the year and created many headlines, it had limited effect on deal volumes in the first half of the year but may have contributed to the deceleration of activity toward the end of 2018.

The regulatory environment remained challenging as large deals took longer to close, including Monsanto/Bayer (746 days), Linde AG/Praxair (681 days) and Time Warner/AT&T (601 days), or were withdrawn entirely in the case of Qualcomm/Broadcom, NXP/Qualcomm and Ant Financial/MoneyGram.

Shareholder activism here to stay

For the year ahead, J.P. Morgan sees "corporate clarity" being one of the key themes driving M&A activity, with pressure remaining on companies to review their business structures and unlock value. While many of the effects of US tax reform and repatriated cash were used for share repurchases and dividends in 2018, the investment bank anticipates that boards will also deploy extra cash for acquisition-driven growth.

While regulatory and geopolitical headwinds and macroeconomic uncertainties are likely to persist in 2019, J.P. Morgan expects M&A activity over 2019 will remain strong, with activity in the US\$1bn-US\$10bn segment continuing to be especially robust.

Shareholder activism has become increasingly prevalent in recent years and J.P. Morgan believes it has now "solidified itself as a permanent investment strategy in the international financial markets and is expected to drive further focus on core operations across companies globally".

The study adds: "We have seen activists disrupt traditional businesses in the US and Europe and expect similar strategies to take on a more global scale. Alternative sources of capital, including sovereign wealth funds and family offices, will continue to raise funds at a rapid pace. This new money can be deployed in unconventional ways to facilitate M&A transactions, leading to more options for both buyers and sellers in 2019."

TPP is dead, long live CPTPP!

President Donald Trump's protectionist leanings led to the US pulling out of the Trans-Pacific Partnership, forcing the remaining 11 members of the unfulfilled pact to forge ahead with a new agreement, the Comprehensive and Progressive Trans-Pacific Partnership. With multilateralism under threat globally, many are looking to the newly minted CPTPP to help champion an open, liberal, rules-based trading system.

With Donald Trump as President-Elect having promised to pull the US out of the Trans-Pacific Partnership (TPP) on taking office, the writing was on the wall for what at the time had the potential to become the biggest regional free trade pact in history, one that would have accounted for nearly 40% of the global economy.

The 12-nation trade deal, the TPP, was the centrepiece of former President Barack Obama's strategic pivot to Asia policy but Trump, after signing an executive order pulling out of the deal soon after taking office in January 2017, made clear his view that the pact posed a big threat to US jobs: "It's a great thing for the American worker what we just did."

And it wasn't just Trump that had deep misgivings about the TPP – unions in the US as well Hillary Clinton and Bernie Sanders, the two Democrats who lost to Trump in the race to the White House, were also set against it. Like Trump, they too feared the deal would accelerate US decline in manufacturing, lead to lower wages and increase inequality.

Despite the clear heads-up Trump had given, and equally clear evidence of wider anti-TPP sentiment in the US, the reality of being dumped by the stroke of Trump's pen was still a massive body blow for the other 11 TPP partners, comprising Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. Japan's Prime Minister Shinzō Abe, for instance, had already warned that a TPP without the US – and its market of 250m consumers – would be "meaningless".

The TPP-11, however, have picked themselves up and dusted themselves down, forging ahead without the US. The US-light bloc, now snappily called the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), officially came into being in December 2018. Soon after, the revised agreement was implemented by six of the TPP-11: Canada, Australia, Mexico, New Zealand, Japan and Singapore. In January, Vietnam also formally implemented the deal.

Also in January, the CPTPP members held their first ministerial-level talks in Tokyo and promptly opened the doors for wider membership: "There is a temptation toward protectionism, but we must not rewind the clock," Shinzō Abe said. "For all countries that resonate with our philosophy and are ready to accept the TPP-11's high standards, the door is open. I expect participation from many countries seeking free and fair trade." Countries and regions ranging from Thailand and Taiwan to Colombia and the Brexit-challenged UK have already expressed interest in joining the CPTPP.

Counting the cost of US blowout

While the CPTPP has some way to go before it can match the potential of the original TPP – it will account for 13.4% or US\$10.2trn of the world's GDP versus the original TPP's combined 36% or US\$29trn – it still amounts to a huge new trading bloc covering 500m people, one that will ultimately see the removal of 95% of the pre-agreement tariffs on trade between participating countries. The first six nations to ratify the agreement alone represent 90% of the group's total output and 322m people.

The CPTPP agreement itself is largely the same as for the TPP with the exception of some provisions relating to intellectual property and investor-state dispute settlement, which were previously important demands for US participation in the TPP.

One widely cited analysis of CPTPP by the Peterson Institute for International Economics (PIIE) indicates that every current member of the CPTPP deal will be a net beneficiary in economic terms. Once fully ratified and implemented, PIIE estimates CPTPP could boost trade for members by around 6%, adding 1% cent to their real incomes by 2030.

At the same time, in terms of trade metrics at least, the US looks to the biggest loser, with PIIE estimating that its real income under the original TPP would have increased by US\$131bn annually, or 0.5% of GDP. Furthermore, under the new CPTPP deal, the US not only forgoes these gains but also loses an additional US\$2bn in income because US firms will be disadvantaged in the TPP markets.

With the Asia region responsible for the bulk of its profits, HSBC has kept a close eye on TPP and its morphing to CPTPP. Douglas Lippoldt, Chief Trade Economist, HSBC, says CPTPP is "a big deal" even without the US, not only due to its scale but also its open architecture, one designed to accommodate additional members, periodic reviews and updates.

He adds: "The CPTPP's 30 chapters deliver deep liberalisation in goods, services and trade-related investment. Services are liberalised and investors assured national and most-favoured nation treatment. This leading-edge agreement addresses 21st century challenges in areas such as e-commerce, telecommunication and data issues, including privacy and free flow of data. It also tackles social concerns including the environment, labour, inclusive trade and unfair competition."

Lippoldt says developing countries such as Vietnam, Peru and Malaysia stand to gain most from the pact in terms of growth, with exports increasing by more than 8.5%, while

developed members such as Canada, Australia and New Zealand are likely to see exports rise by between 4% and 5.8%. Developing countries can also look forward to the greatest proportional real-income gains.

He believes the improved competitiveness from increased market openness under the CPTPP framework may also help the members to benefit more fully from engagement in other trade initiatives in the region, such as China's Belt & Road Initiative or the Regional Comprehensive Economic Partnership under negotiation between ASEAN and six of its free-trade agreement partners.

Indeed, at the regional level, Asia Pacific seems especially intent on keeping the free trade banner flying high, with several other free trade agreements concluded or under negotiation including the Indonesia-Australia Comprehensive Economic Partnership Agreement; the Australia-Hong Kong Free Trade Agreement; and the China-Japan-Korea Free Trade Agreement. And earlier this year both Japan and Singapore signed bilateral deals with the European Union, the largest trade bloc in the world. Vietnam, Australia, Indonesia and New Zealand are all also looking to strike a deal with the EU on bilateral basis.

Lippoldt says that, as it stands, it is not only the US that stands to face net losses, albeit modest ones, by not p\articipating in CPTPP. Non-members like China, Korea, Taiwan and Thailand also stand exposed to losses, as some trade is diverted to bloc members. Still, there is the real possibility that at some point in the future some of these countries, including China and Thailand, will reconsider membership. Recently there have even been noises from Washington that President Trump would reconsider joining if there was a better deal to be had.

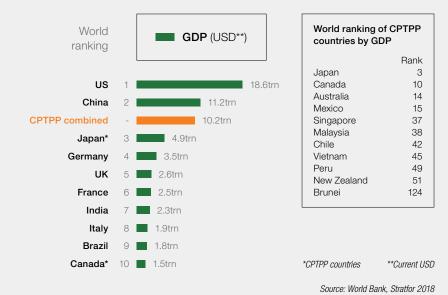
He says: "In the face of rising protectionist sentiment, CPTPP sends a positive signal in favour of market openness and trade liberalisation. The economic rewards reaped by its members may yet entice other countries in the neighbourhood to join rather than face losses by staying out."

Open for business

Stuart Tait, Regional Head of Commercial Banking, Asia Pacific at HSBC, is also certain about the importance of the deal for global trading and the real-world value of the agreement for firms. While the world awaits the outcome of the trade talks between the US and China, "the CPTPP's entry into force signals that the desire for an

The world's top GDPs and the CPTPP

The combined gross domestic product of the 11 Comprehensive and Progressive Trans-Pacific Partnership (CPTPP) members rivals that of China and equates to more than half of the United States' GDP. Canada, Japan, Australia and Mexico account for nearly 90% of this. The CPTPP will not necessarily change the shape of global trade patterns, but its sheer size makes it a formidable bloc.



CPTPP trade with United States and China

As major economies, the United States and China will trade heavily with members of the CPTPP. The US already has free trade agreements with five of the 11 CPTPP members and is hoping to forge more deals. Japan and Australia, on the other hand, hope that the United States will return to join the CPTPP.

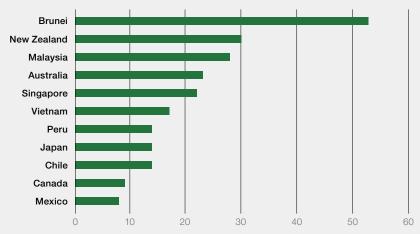


Trade within the CPTPP

The 11 members of the CPTPP hope to increase trade with in the bloc. Among the leading members, this is particularly important for Australia which which thrives on regional trade and hopes to diversify beyond China.

Trade with other CPTPP countries

Percent of country's world trade



Source: Trade Map, Stratfor 2018

open, liberal and rules-based trading system is very much still alive. Businesses are certain to benefit from greater clarity at a time of trade-policy turbulence – as well as from improved access to 500m consumers," he says.

Tait says that free trade agreements (FTAs) such as the CPTPP simplify import and export procedures for companies and reduce the cost to trade. For instance, the CPTPP provides for 'full cumulation', meaning that businesses in CPTPP markets can use inputs sourced from other CPTPP markets to qualify for preferential treatment within the region.

"With the CPTPP now in effect, there is no better time for businesses to raise their awareness and maximise the benefits that are on offer," says Tait, pointing to a recent HSBC Navigator survey showing that nearly four in ten (39%) companies in CPTPP member countries believe that the agreement will directly or indirectly help their businesses.

For Lippoldt and his colleague, Shanella Rajanayagam, trade economist at HSBC, a crucial feature of FTAs such as CPTPP is that they help to provide companies with visibility by improving trade policy certainty – a highly attractive feature given ongoing uncertainly and turbulence across the international trading system.

In a co-authored analysis of FTAs – there are 369 in force across the globe – they say that while Brexit, rising protectionist rhetoric and measures by the US, and US-China trade tensions have led to growing uncertainty in the trade outlook, the use of FTAs by firms can help to assure they benefit from preferential or easier access into partner markets, which in turn can help reduce trade costs and boost their business overseas.

And on the face of it, despite the current trade headwinds, businesses globally generally agree with that analysis. A recent HSBC Trade Navigator survey found the vast majority (78%) of businesses across the globe remain positive about the outlook for trade, with over half (51%) of respondents claiming that FTAs will positively impact their business in the coming years. Just over a quarter of respondents do not expect FTAs to impact their business in the medium term, suggesting to Lippoldt and Rajanayagam that there is still significant room for improvement in relaying to firms globally the positive difference FTAs can make to their businesses.

At the regional level, the Navigator survey found that firms in Asia were amongst the most positive about FTAs, although variations exist between countries. Around 60% of ASEAN businesses collectively; 67% of Indian respondents; and 66% of Chinese businesses viewed relevant FTAs as having a positive impact on their business, whilst fewer than 40% of businesses in Japan, Indonesia and Bangladesh considered FTAs helpful to their firms. In Europe, 47% of businesses considered FTAs as beneficial to their business, although UK respondents had a more favourable view (51%), perhaps suggesting some confidence in the UK's ability to secure trade agreements with non-EU countries post-Brexit.

More specifically, Lippoldt and Rajanayagam note that while FTAs allow businesses to achieve cost savings from reduced or no tariffs and trade facilitation, many eligible firms fail to make use of tariff relief due to low preference margins, high compliance costs, or lack of awareness. They advise that prior to engaging with an FTA, businesses should determine whether their goods or services are eligible for preferences and how to claim them.



The voices of the people who did not benefit or who were left out have steered governments across the globe to a 'go-at-it-alone' unilateral track.

Jelle Goossens, Regional Treasurer, Barry Callebaut Asia Pacific

They strongly advise firms to make use of a range of publicly available resources that could help businesses improve FTA usage. Most of these resources are provided by governments or inter-governmental organisations such as the WTO or OECD: "These resources are not only helpful in providing traders with detailed market information or information on customs procedures and how to comply with FTA requirements, but can also be helpful in providing firms with bespoke trade assistance or funding via state-supported trade advisers and trade promotion agencies. In general, most national trade departments provide a good first port of call for any trade-or customs-related enquiries."

Price to pay

Like Tait and Lippoldt, Jelle Goossens, Regional Treasurer, Barry Callebaut Asia Pacific, hails the CPTPP agreement but is concerned about the absence of the US from the agreement and general global drift away from multilateralism and rise of protectionism.

Goossens says: "While it should still prove a material boost to global trade, and as such a means to improve the livelihood of millions in emerging markets, the fact that we have the CPTPP coming into effect without the United States as a signatory is both a missed opportunity as well as a worrying sign.

"The creation of the world's third largest free trade area is certainly a feat to be celebrated. Nevertheless, at the start of 2019, it is clear that the overarching theme of the end of multilateralism which we are witnessing on many a front, be it global trade or climate change, is grounds for uneasiness."

Goossens believes that after little over two decades of globalisation characterised by multilateral platforms, "the voices of the people who did not benefit or who were left out have steered governments across the globe to a 'go-at-it-alone' unilateral track". He says it is inevitable that such an approach is prone to confrontation: it favours the strong, leading to an unbalanced outcome that will always result in one party feeling disenfranchised.

And while such an approach might bring short-term gains for some corporates, Goossens warns it holds dangers for the longer-term and comes at a cost: "Some businesses might capitalise on some opportunities it brings but, overall, the heightened insecurity and increase of friction in trade relationships is a negative and does not add to meaningful economic growth. Even though risk managers, like treasury professionals, might derive recognition for their role in safeguarding the company's cash flows, it steers them away from the more meaningful added-value tasks they are called upon to fulfil."

Money market fund reform: could Asia be next?

In recent years, money market fund (MMF) reform has brought major changes for the industry in the US and Europe. What do these changes mean for treasurers in Asia – and could the region's money market funds be subject to similar reform in the coming years?

MMFs present an attractive alternative to bank deposits, with many offering liquidity, security and – in some case – competitive yield. As such, money market funds are an important cash management tool, used extensively by corporate treasurers around the world.

"Money market funds (MMFs) are safe places to store cash with a good stable return," explains Christopher Emslie, Asian Regional Treasurer at General Mills. "They take risk out of your investing strategy, and in many instances give a better return than just having your money in the bank."

In Asia, money market funds are less established than in the US and Europe – but recent years have seen considerable growth, particularly in China where Yu'e Bao has rapidly become the world's largest money market fund following its launch in 2013. For many investors, money market funds are seen as an area of opportunity: the 2017 J.P. Morgan Global Liquidity Investment PeerViewSM survey found that 53% of firms in Asia Pacific planned to add stable net asset value (NAV) money market funds to their investment policies.

In other regions, however, regulatory reform has been a major focus for money market funds for the last few years. Following major rule changes in the US and Europe, what is the impact of these changes for treasurers in Asia – and could similar changes be introduced in the region in the future?

Reform in the US and Europe

At a global level, money market funds have been something of a moving target of late. First came reform in the US. The financial crisis, which saw the Reserve Primary Fund 'breaking the buck', resulted in a run on US money market funds. In 2016, this led to a programme of reform by the Securities and Exchange Commission (SEC), with constant net asset value (CNAV) funds required to move to a variable net asset value (VNAV) model.

The impact of the changes was substantial: prime fund investors in the US withdrew over US\$1trn in assets ahead of the reform, with funds flowing into treasury funds and government funds. Subsequently, J.P. Morgan's 2017 PeerViewSM survey found that only 37% of US-based respondents were invested in a prime money market fund, compared to 63% in 2015. While prime fund volumes have improved in the last couple of years, progress has been slow: SEC figures show that volumes stood at US\$764bn at the end of 2018, compared to US\$1.7trn before the reform.

In Europe, regulatory reform took a slightly different path and almost seven years of discussion. With numerous different options on the table, regulators eventually opted to introduce a new low volatility net asset value (LVNAV) model which would largely replace the previous CNAV model. Final rules were agreed in November 2016 by the European Commission, European Parliament and European Council, coming into effect on July 21st 2018 for new funds, and on January 21st 2019 for existing funds. Unlike the US reform, the new EU rules are not expected to bring a major exodus of cash.

Reform in the US

- Funds required to adopt a VNAV model in other words, the value of the investment is no longer fixed at US\$1 per share.
- Ability to impose liquidity fees of up to 2% if the percentage of a fund's assets that can be liquidated within one week drops below 30%.
- A 1% redemption fee to be imposed if weekly liquidity drops below 10%.
- Introduction of redemption gates which temporarily prevent redemptions if weekly liquid assets fall below 30% of the fund's total assets.

Reform in Europe

- Three types of short-term money market fund now available: VNAV MMFs, public debt CNAV MMFs and LVNAV MMFs.
- LVNAV funds able to use amortised cost accounting for assets with a residual maturity of up to 75 days, with mark-to-market or mark-to-model valuations required for longer dated instruments.
- Funds required to maintain a minimum weekly liquidity of 30%.
- Liquidity fees, redemption gates and suspension of redemptions may be adopted if liquidity falls below 30% and daily net redemptions exceed 10% of the fund's total assets.
- Mandatory fees and gates apply if weekly liquidity falls below 10%.



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Christopher Emslie, Asian Regional Treasurer, General Mills.

MMFs in Asia

In Asia, the regulatory environment for MMFs is more diverse: the region includes many different countries, some of which have currency restrictions and capital controls.

"MMF regulations vary significantly across the Asia Pacific region, from countries with very detailed and prescriptive rules to other countries with no rules at all," comments Aidan Shevlin, Head of Asia Pacific Liquidity Fund Management at J.P. Morgan Asset Management. "Compared to the well-established MMF industries in the US and Europe, MMFs are relatively young in Asia." He adds that this is particularly the case for MMFs with an institutional focus, which are designed to meet the demands of corporate investors who focus on liquidity and security as their key goals.

Michael Larsen, Asia-Pacific Head of Liquidity Product at HSBC Global Asset Management, draws a distinction between MMFs in the region's restricted and unrestricted markets. "The restricted markets usually require an MMF to be domiciled in the country and follow the local rules, which can vary significantly from country to country," he comments. "What is an MMF in one country is not an MMF in another country." He adds that representative countries include China, Indonesia, Thailand, Malaysia and India.

Unrestricted markets – which include Hong Kong, Singapore, Australia and to a lesser extent Japan – are more open and usually allow for selling of offshore fund products to locally domiciled companies. "These markets also usually have a local MMF industry as well," Larsen explains.

In light of these variations, Larsen says there are few pan-Asia MMF providers that can cater to a regional treasury with operations in multiple countries. "Finding the right asset management partner to navigate these restrictions and help institute a consistent cash management strategy is key."

Impact of US and European MMF reforms in Asia

While the recent reforms have affected treasurers in Asia less than their counterparts in the US and Europe, there have nevertheless been some changes. As Shevlin points out, "Only Asian corporate treasurers holding MMFs which are domiciled in the US or Europe have been directly affected by the recent MMF reforms. The US SEC reforms have impacted domestic USD MMFs, while the EU reforms have impacted any funds domiciled in Europe – including several Asia-Pacific currency funds."

Larsen adds that for treasurers in Asia, MMF reforms in the US have only had a material impact on companies with large US subsidiaries. "The US funds are primarily available and sold to US residents/corporations with a very low adoption

rate from Asian multinationals," he explains. "So most treasurers were not really aware of the exact rules or reforms."

However, Larsen says that the EU MMF rules are having an impact on Asian treasurers – including treasurers of US and EU multinationals based in Asia as well as local treasurers using MMFs. "The majority of MMFs sold in the unrestricted markets are EMEA-based MMFs," he says. "While most asset managers have been communicating to their customers, it is still somewhat foreign for many Asian treasurers to be impacted so directly by non-Asian rules."

As such, Larsen says the experience has been something of a learning process for treasurers in Asia. "As most EU-based treasurers are living and breathing the rules on a daily basis, it is something of a non-event for them," he says. "For Asian treasurers, it has taken more time to get comfortable with the new concepts of LVNAV funds and how they still deliver the same risk profile to a treasurer." Despite the challenges, he notes that so far there has been no across-the-market move of investors from the new LVNAV structure to CNAV government funds as was seen during the US MMF reform.

Shevlin says that while the reforms did create a degree of disruption and required changes in terms of how funds are used and managed, "overall they have been positive – offering investors more choice, liquidity and security." He also points out the indirect impact of reforms in Europe and the US, which have impacted short-term interest rates markets across the world, "changing the demand and supply for different instruments and maturities".

Regulatory change in Asia

Could similar reforms be seen in Asia at some point? Shevlin says that while money market funds have been relatively static across the region for many years, "recent regulatory changes in the US and Europe have triggered discussions in some markets about whether local MMF rules are still fit for purpose" – although, as he notes, any changes will take some time to implement.

He also points out that while the types of changes adopted in the US and Europe could theoretically be adopted in Asia, caveats apply. "While the ultimate goals of all MMF regulations are similar – to make funds more liquid, safe and robust – US and EU MMF rules and standards are based on the unique characteristics of their markets," he says. "Asia-Pacific markets vary in depth, liquidity and the range of investment opportunities available – and these need to be considered before any significant changes can be made." Shevlin adds that while having safe and liquid funds is a key priority, "ensuring cash is investible and funds can achieve a competitive level of return is also important".



In Asia ex China the adoption rates of money market funds are in the low single digit percentages. This compares to about 20% of corporate cash in the US and 10-15% of corporate cash in Europe that makes its way into MMFs.

Aidan Shevlin, Head of Asia Pacific Liquidity Fund Management, J.P. Morgan Asset Management

Larsen agrees that for many restricted markets, such changes would be many years off, "and would take a significant modernisation of the regulatory environment in those countries." However, he notes that China is an exception: the country, in an effort to liberalise the market and attract offshore investment, "is already on a convergence path". Hong Kong, likewise, could see greater convergence with EMEA rules in the future. Developments in both markets include the following:

- China. "MMF rules were originally established in 2004 and remained broadly unchanged for several years," says Shevlin. "But the popularity, rapid growth and current size of RMB MMFs have made them systemically important and increased regulatory scrutiny." As such, he says that the China Securities Regulatory Commission (CSRC) has introduced several major changes to MMF regulations in the last few years. These changes "have significantly tightened the rules, de-risking the industry while bringing RMB fund guidelines closer to their western counterparts".
- Hong Kong. Larsen says that for Hong Kong there is an expectation that the SFC will issue new rules more in line with EMEA standards. "Several new hires into the regulator are from EMEA-based regulatory bodies and bring with them the knowledge and mindset to standardise the rules towards international standards," he says. "Hong Kong is also pushing to be a major fund domicile and if they want to market their funds across Asia and into EMEA and the US they will have to adopt similar rules."

For other unrestricted Asian markets, Larsen says there is less of a push to be a major fund domicile for institutional MMFs – and consequently, less of a focus on specifically aligning local rules with those in Europe. "They will probably be content with allowing EU product to be distributed into their countries by locally licensed entities and sales people, rather than trying to compete as a full-fledged fund domicile location," he adds. "Effectively this means EU rules may be adopted in-country by default."

Other market developments

Regulatory reform is not the only factor affecting the direction of travel for money market funds. Shevlin notes that Asia – particularly China – "has been at the forefront of new and innovative MMF distribution methods", adding that moving to digital platforms has given clients more choice and flexibility. "While these innovations have primarily targeted retail investors, corporate investors can also benefit from some of these improvements," he says.

Larson notes that MMF portals that previously only operated in the US or EU are now setting up outposts in Asia.

"These MMF supermarkets allow clients to invest in multiple funds via one interface, and often automatically integrate with a client's bank accounts," he says. "In that same vein, most banks and custody providers are not offering automated sweeps into their own, and third party, money market funds – essentially automating a large piece of a treasurer's cash management responsibilities."

In addition, Larson says there is a growing trend within the treasury management system (TMS) provider space to allow for direct investment into funds integrated with their accounting and other modules – a development which Larson says "has potential to greatly simplify a treasurer's life".

Other developments include several cases where MMFs have been launched as ETFs, which Larson says is consistent with moves in other asset classes. "To date the adoption rates have been low, but it does seem to be a growing trend," he says. "It remains to be seen if the costs of running these funds are lower than the existing fund approach – and if treasurers can add ETFs as an asset class within their cash management investment guidelines – but it is a space to watch."

Alongside these developments and opportunities, treasurers should also be aware of potential challenges – not least of which is the issue of low or even negative interest rates in markets such as Hong Kong, Singapore and Japan. "When rates are negative, even an MMF cannot make that a positive return without taking undue risk, so the launching of new funds is in most cases not commercially viable," comments Larsen.

MMFs in the year ahead

Looking forward, Shevlin predicts that the use of MMFs will continue to grow over the coming year, particularly among treasurers of local corporates. "As the implications of credit and counterparty risk become more important, the benefits of MMF to improve diversification due to their restrictive guidelines and disciplined investment methodologies should help treasurers achieve their goals of a competitive yield balanced against good security and high levels of liquidity," he says.

Larsen likewise predicts that the use of money market funds will grow fairly significantly as treasury departments in Asia become more sophisticated, generate more free cash flow and run up against counterparty limits. "In Asia ex China the adoption rates of MMFs are in the low single digit percentages," he concludes. "This compares to about 20% of corporate cash in the US and 10-15% of corporate cash in Europe that makes its way into MMFs. If those figures are the benchmark, then Asia has a long growth period ahead of it in the MMF space."

Investor interest in the Philippines grows on upbeat outlook for its economy

Foreign direct investment flows into the Philippines remain robust, with the country's promising economic prospects, relatively young population and a mammoth infrastructure programme proving to be major attractions.

Even as China battles against a slowdown and uncertainty looms over the US and European countries, some other regions look to be bucking the trend, with the medium-term outlook for India and South East Asian economies – particularly the ASEAN five of Indonesia, Malaysia, Philippines, Thailand and Vietnam – looking especially promising.

The OECD, for instance, is projecting average annual growth of 5.2% for South East Asia overall for the period 2019-2023, slightly faster than the rate posted by the region over 2012-2016. By comparison China is forecast to have an average growth of 5.9% in 2019-2023, slower than its 2012-2016 average of 7.3%. India's medium-term growth is forecast to be 7.3%, surpassing the average of 6.9% in 2012-2016.

While markets have been active in factoring the outlook for China and India – upcoming elections in the latter notwithstanding – it is the outlook for the ASEAN five countries that is arguably surprising investors on the upside. And among them the Philippines, which delivered growth of 6.2% in 2018 and, as of January, 79 consecutive quarters of growth, certainly stands out. The OECD forecasts the Philippine economy will grow by 6.5% over 2019, second only to the 6.7% growth seen for Vietnam this year. Moreover, the organisation reckons that over 2019-2023, the Philippines will experience average annual GDP growth of 6.6% – the highest among the ASEAN five for the five-year period.

Foreign direct investment (FDI) metrics for the Philippines and, more broadly, South East Asia certainly provide support for the upbeat projections for the country and region. According to United Nations Trade and Development Agency (UNCTAD), global FDI volumes during 2018 slumped by 20% to US\$1.2trn, with the body blaming the fall primarily on US tax reforms having encouraged big firms there to bring home earnings from abroad – mainly from western European countries.

Trade disputes, notably the US-China tariff war, proved to be another drag on global FDI flows, with the accompanying anti-trade rhetoric and protectionist stances further undermining investor confidence and forcing companies affected to review their investment strategies and locations of their operations.

Yet while Europe and the US suffered heavy falls in FDI inflows (by 73% and 18% respectively), flows into Asia were generally resilient, with the region seeing them rise by 5%. Indeed,

UNCTAD says, East and South Asia, which experienced inflow increases of 2% and 11% respectively, took the lion's share of foreign investment, accounting for one-third of global FDI in 2018 and almost all growth in FDI to developed economies. That prompted James Zhan, Director of Investment and Enterprise at UNCTAD to proclaim South East Asia as now "the main FDI growth engine".

And the Philippines has been doing its bit to justify Zhan's conclusion. The country's central bank, Bangko Sentral ng Pilipinas (BSP), expects investment inflow in 2018 to reach US\$10.4bn, well ahead of its original projection of US\$8.2bn, and up from US\$10.05bn in 2017 – the previous all-time high – and US\$8.28bn in 2016.

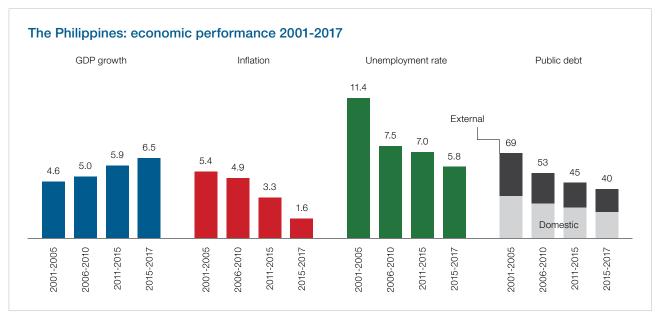
In a further indication of the Philippine government's confidence in its policies for ensuring the country remains a favourable destination for hard investment, the BSP sees 2019 FDI inflows easing a little but still totalling a robust US\$10.2bn.

BSP's assistant governor, Francisco Dakila says the FDI flows remain "very strong", with investors attracted by the country's strong macroeconomic fundamentals and high growth prospects. Corporate investor interest in the Philippines is especially strong in Singapore, Hong Kong, the US, Japan and China, with capital from these countries being targeted at a host of sectors including manufacturing, financial and insurance sectors, energy, real estate and arts and entertainment.

Build, Build to drive growth

The BSP's bullish outlook is backed up by the Joint Foreign Chambers (JFC) of the Philippines, a coalition of the US, Australia-New Zealand, Canadian, European, Japanese and South Korean chambers and the association of multinationals (PAMURI). The body, which represents over 3,000 member-companies engaged in more than US\$100bn worth of trade in goods and services and some US\$30bn in investment in the Philippines is also predicting that FDI over 2018 will once more top the US\$10bn level. Furthermore, it believes that "prospects are high that, with continuing political and economic stability, FDI will be above US\$10bn in 2019 as well".

The JFC says the creative, infrastructure, manufacturing and tourism sectors will be the key drivers underpinning FDI inflow over 2019. Creative industries – which include media and publishing – "are the country's newest sunrise sector", it says.



Source: Haver Analytics, Philippines, Department of Finance; and IMF staff

The body praises the Duterte administration's giant "Build, Build, Build" infrastructure programme which, it says, has achieved much higher levels of public sector spending on infrastructure and is proving a key factor in supporting economic growth and encouraging foreign corporate investment: "Without it the economy would regress," says the JFC.

Designed to modernise the country's infrastructure backbone, the Build, Build, Build programme has been budgeted at US\$160-180bn over 2017 to 2022 and, along with education, is a major priority for the Duterte administration. Indeed, the government believes the programme can help push annual economic growth over the next few years to 7-8%, well above analyst expectations.

The infrastructure programme features 75 flagship projects, including six airports, nine railways, three bus rapid transits, 32 roads and bridges and four seaports to help bring down the costs of production, improve rural incomes, encourage countryside investments, make the movement of goods and people more efficient, and create more jobs.

The enormous scheme also includes four new energy facilities to help ensure stable power supply at lower prices; ten water resource and irrigation systems to help raise agricultural output; and five flood control facilities that will help protect vulnerable communities against the impact of climate change.

Such is the scale of the Build, Build, Build programme that Fitch Solutions, the research arm of Fitch Ratings, sees it driving growth of 10.9% for the Philippines' construction sector in 2019. As well as the healthy project pipeline, the growth will be aided by rising foreign direct investments in the sector, says Fitch Solutions. The growth in FDI inflows into construction are being supported by the administration's efforts to ease ownership restrictions for foreign contractors in selected construction projects from 25% to 40%. Fitch believes such efforts to attract foreign capital will have long-term benefits for the country in terms of plugging the financing gap in its transport sector.

Japan has historically been one of the Philippines' largest sources of foreign direct investment but Fitch Solutions

expects that going forwards more Chinese capital will flow into the country to support the growth of its overall infrastructure sector.

Elsewhere, the JFC sees opportunities for the Philippines manufacturing sector to emerge from the US-China trade dispute, as companies divert investment or relocate facilities to other countries to avoid the fallout from the spat. To ensure the Philippines is attractive to such companies and beats off competition from elsewhere across South East Asia, the administration should offer "a menu of tax incentives that compensate for the country's currently lagging basic infrastructure".

The Philippines would also benefit considerably by broadening access to foreign markets, says the JFC. It urges the administration to continue talks with the European Union aimed at securing a free trade agreement and begin negotiations to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). It would also like to see the Philippines secure a trade and investment agreement with the US.

The potential, additional boost for the Philippine economy from the Build, Build, Build programme and access to foreign markets on favourable terms are clearly enormous but for the short term the JFC is "hopeful that with continued politico-economic and regulatory stability, 2019 will be a year of more high growth, tempering inflation, and high FDI for the Philippines".

Ranking demotion rankles

More broadly, the JFC is keen to see a rapid improvement in the Philippines' international competitive rankings, including the World Bank's Ease of Doing Business rankings. The bank's assessment of the Philippines for 2018 saw the country improve its score slightly but its rank slipped, as welcomed reforms by the Duterte administration, such as streamlining transactions and strengthening shareholder rights to better protect minority stakeholders, were offset by a drop in "Getting Credit" metrics, increased layers for import inspection and higher tax registration costs.

The World Bank's Doing Business 2019 report ended up ranking the Philippines at 124th out of the 190 economies tracked, down 11 places from 113th in 2017. The demotion in rankings, however, deeply rankled the Philippine government, with the Department of Finance and the Department of Trade and Industry expressing "strong objections" to the bank's assessment and methodology. They insisted the bank's report, published in October 2018, was inaccurate, as it did not take into account a larger dataset in gauging individuals' and firms' access to credit and demanded a correction.

The fallout appears to have had little impact on institutional assessments of the country's outlook and investment credentials, however. Like the OECD and IMF, Citi too is upbeat on growth prospects for the Philippines, predicting 6.5% in 2019 as inflation declines to moderate levels. "Household consumption remains supported by overseas remittances and wage growth. Fiscal spending is expected to remain strong, especially with a good pipeline of infrastructure projects, while more memoranda of understanding signed with Japan and China suggest further improvement of economic ties and sustained momentum of the government's Build, Build, Build infrastructure plan," says Nalin Chutchotitham, Thailand and Philippines economist at Citi Research.

Singapore's United Overseas Bank expects growth of the Philippine economy to hold up at 6.5% in 2019 compared to 2018's 6.2%. Domestic demand remains the key growth engine, anchored by the sizeable infrastructure and education spending programmes, it says. HSBC's Chief Market Strategist for Asia, Cheuk Wan Fan, meanwhile, is less bullish and sees GDP moderating to 6% this year, which it describes as still "relatively resilient" and in line with the synchronised global slowdown scenario that is taking shape.

And in January Moody's reiterated its "Baa2" rating, a peg above minimum investment grade, with a "stable" outlook. The ratings agency expects growth to top 6% this year and points to the country's reserve buffers, among the strongest in global emerging markets, as among its positive features.

Young country

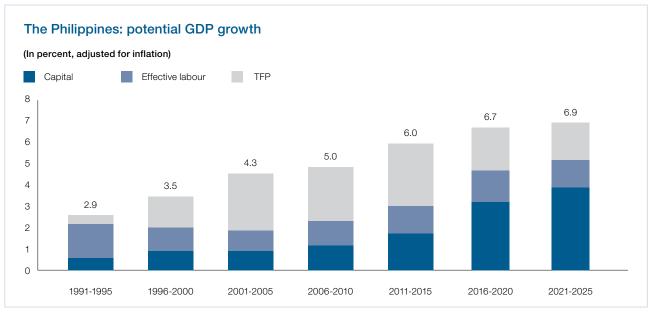
Another major factor driving both domestic economic dynamics and foreign corporate investment interest is the highly supportive labour market. According to the United Nations, the population of the Philippines, where poverty has been declining over recent years but is still very high, stands at 107m and the country boasts a median age of just 24 years. The huge, relatively young population, coupled with bright economic prospects and the mammoth infrastructure programme, is proving very attractive to corporates.

In February, Jean Francois Laval, Airbus Executive Vice President for Sales in Asia, hailed the economic performance of the Philippines, citing the positive outlook and population growth as major factors that are now making the country the best place to invest in Asia as far as the aviation industry is concerned.

Airbus is forecasting that air traffic growth over the next 20 years in the Philippines will be 6.1% per annum, primarily driven by domestic traffic as its population swells to 135m by 2037, outpacing the aircraft maker's traffic growth forecast for Asia overall. Such metrics place the Philippines at the forefront of aviation, Laval said.

As if on cue, ANA Holdings, the parent firm of Japan's biggest airline, All Nippon Airways, announced in January it is acquiring a minority stake in the country's largest airline, Philippine Airlines, for US\$95m.

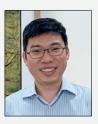
Other sectors to have enjoyed positive investment news recently include energy, with Indonesian oil and natural gas company Pertamina announcing it is planning to invest US\$1bn in a regasification hub project in the country. In November 2018, private US-based commodities giant Cargill revealed it will be spending US\$235m in the Philippines over the next two years to expand its animal feed and nutrition business and poultry processing operation. At the country level, China was the top foreign investor in the Philippines over 2018, funnelling US\$930m into the country, with funds focused on manufacturing and agricultural sectors.



Source: Barro and Lee (2016) Educational Attainment Data set and IMF staff estimates



Philip Pang
Head of Investment,
NTUC Income



Koon Wei Goh Manager, Asset Allocation NTUC Income



NTUC Income (Income) is an insurance cooperative in Singapore, established in 1970 as a National Trades Union Congress (NTUC) social enterprise providing affordable insurance for workers. Today, Income is the top composite insurer in Singapore and one of the country's largest general insurers and health insurance providers, serving over two million customers.

Innovative solutions to cash investing

Singapore-based insurance provider NTUC Income had always handled its investments entirely through its internal portfolio management team. However, a review of its investment process and the appointment of a new custodian resulted in the adoption of an innovative option for managing its cash.

Problem...

As an insurance company, Income receives premiums in the form of cash and invests them in private and public assets, as stipulated in its strategic asset allocation. "Given our size and stature, we have an enormous responsibility to efficiently generate long-term, sustainable returns to meet policyholders' and shareholders' reasonable expectations," said Philip Pang, Head of Investment at Income.

Income is committed to meeting those expectations by diversifying its sources of return, actively managing its assets and harvesting the illiquidity premium embedded in its long duration assets and illiquid holdings. The insurer recognised that efficiency and optimal returns on the liquid, short end of the spectrum were critical as well.

Cash management was traditionally the responsibility of Income's internal portfolio management team. In early 2018, the firm appointed a new investment manager to manage a significant portfolio of its assets. To ensure continuity in managing the assets by both sides, relevant Income portfolio management personnel, including cash managers, joined the external investment management company. Income also appointed a new custodian in mid-2018.

As part of the change, a wider reassessment of its portfolio and cash management processes was performed, where Income executives made several critical changes. "As a result of appointing a new investment manager, we felt that a holistic look at our cash management process was warranted so as to yield both operational efficiencies and improved returns," said Pang.

...Solved

When it comes to enhancing the efficiency of cash management, Income worked with the custodian and potential cash solutions providers in the market. In this regard, the firm reviewed portfolio managers, compared track records, credit and investment processes, commitment, client service and more. The process led to what Income regards as a viable solution: an auto-sweep into JPMorgan SGD and USD Liquidity Strategies via the custodian. This highly liquid overnight cash parking solution offered diversification into high-grade counterparties as well as a potential yield pickup over cash.

Throughout the adoption process, the J.P. Morgan Global Liquidity team worked closely with Income's investment team to ensure a thorough due diligence process was completed and that they fully understood and were comfortable with the investment strategy and risk management process.

"Our due diligence efforts paid off: the auto-sweep facility, with the JPMorgan Liquidity Strategies at its core, is a solution that checks the boxes for us," said Koon Wei Goh, Manager, Asset Allocation at NTUC Income.

Key benefits

- Operational ease.
- Same-day liquidity.
- Enhanced diversification, credit quality evaluation and risk control.
- A potential yield pickup over cash.
- Timely investment holding reports to meet regulatory requirements.

"In our view, all that adds up to less risk, greater reward and better value for our policyholders and shareholders," said Goh.





Car maker Ford's recent woes – in January it revealed full year 2018 profits halved and announced thousands of job losses across Europe to cut costs – will have more than drawn the attention of Jeff Yu, Group Treasury Director of JD.com, the Chinese e-commerce giant.

For ten years ago, amidst the worst financial fallout since the Great Depression, the American auto industry's famed "Big Three", comprising GM, Ford and Chrysler, faced an unprecedented crisis that threatened their survival. And Yu, who joined Ford as Shanghai-based Treasury Manager in 2012, was mightily inspired by how the auto heavyweight's global treasury team had battled frantically throughout the crisis to help save the company. The experience of working with such seasoned treasury professionals and being immersed in their philosophy, has left an indelible impression on Yu, profoundly shaping his views on the role and responsibility of a treasurer.

Yu recalls that when he joined Ford, he felt himself to be "very lucky"; the car maker is, after all, a multinational company with more than 100 years history and a highly respected treasury pedigree to go with it: "Ford's treasury is very famous for its experience and not just because of the very important role it played in the survival of the company during the financial crisis. It has been influential in the car industry and across the treasury profession for a long, long time. Those years at Ford were ones where I gained great experience and knowledge, learnt how to handle treasury in a multinational company with a global view."

"Expertise in treasury and focus", Yu says without hesitating when asked to highlight the most valuable lessons learnt at Ford. "Those are vital elements for treasurers. Another is learning how to be prepared for all possibilities. As treasurers, we need to prepare for every situation, every environment a company can find itself in, and know how to go about handling it, which is what the nature of the job demands on a daily basis."

To illustrate the value JD.com itself places on preparation, Yu points to the work carried out by the company's treasury analysis team, created by him when he joined the company as Group Treasurer. "Treasury analysis at JD.com is basically all about forecasts. And those forecasts give rise to many scenarios. We have to know how to handle those scenarios, make plans for all of them based on pre-determined investment strategies. If a scenario implies a cash rich environment, we can immediately choose suitable investment products from the product pools based on the daily quotation from different bank partners or other institutions."

Another scenario might imply the need for financing to support new investments, which in turn will require treasury to ensure plans are in place for financing, both long term and short term: "We need, for instance, to look at the partnerships we have with financial institutions. With financing, daily communication and cooperation with institutions are important. How we handle those relationships as a corporation over the long term is therefore key and also needs planning."

Driving treasury transformation

The impact Yu's experience at Ford has had on his work at JD.com, however, has been much more far reaching than the creation of a treasury analysis team. He recalls that when he arrived at the e-commerce group its treasury function was largely focused on essential daily operations. Yu launched an

overhaul of the department, one that over the last three years has resulted in a complete revamp of its structure and the creation of a host of new strategic treasury units. The prime objective of the overhaul has been to generate more value from treasury for the group, especially with regards to supporting its strategic objectives.

As well as the treasury analysis team, the new structure includes a treasury control team: "As a US listed company we are fully aware that JD.com's treasury must be fully compliant with regulations across its entire structure and across all its procedures. The task for the treasury control team is to act as an internal auditor focused on treasury procedures, to make sure they are all fit for purpose."

There is a dedicated financing team to handle JD.com's relationships with financial institutions, manage the setting up of new project finance facilities, and provide support for JD.com's monster-sized promotional events. A banking team, meanwhile, handles all daily operations relating to, for example, account opening and closure and the safeguarding of all the transactions.

"There are a lot of operational aspects that are very important for us in treasury as we look to provide support for the wider group. We have even set up a treasury shared service centre to help further centralise the treasury operation at the group level," says Yu.

Technology and logistics

There is certainly no doubt the operational and transactional scale of JD.com merits such a carefully structured and extensive treasury operation. The Nasdaq-listed company and Fortune Global 500 constituent is valued at US\$34bn, one of the largest e-commerce companies by revenue in China. In 2017 JD.com posted total revenues of RMB362bn (40% ahead year-on-year) according to SEC filings.

One of JD.com's big strengths is delivering goods bought from its platform to consumers all over China. That means it has had to invest very heavily in a nationwide system of fulfilment warehouses and delivery centres. As such it owns the complete delivery chain, from long-haul shipping to last-mile delivery, including now by drone, to 99% of China's 1.34bn population. Over 90% of direct orders can be delivered same-day or next-day.

According to its annual report for 2017, at the end of that year JD.com operated nearly 500 warehouses with an aggregate gross floor area of approximately ten million square metres in 78 cities in China. The operation employed 84,790 delivery personnel, 33,153 warehouse staff and 12,760 customer service personnel and provided same-day and next-day delivery in 1,752 counties and districts. As of September 2018, it had approximately 200,000 merchants on its online marketplace, and a total of 175,366 full-time employees.

Technology has been a critical factor in enabling JD.com to successfully execute its business model and it invests heavily in ensuring it remains leading-edge by employing 12,000 engineers. Based in China and Silicon Valley, the engineers are focused on researching areas that include data science, artificial intelligence, virtual and augmented reality, robotics and autonomous vehicle systems. The fruits of their labour are used by JD.com for everything from intelligent pricing to inventory management and fraud detection.

Transactional challenge

If the scope and scale of JD.com's logistics operation are breathtaking then so are its transactional metrics, with annual volume now at a treasury-challenging "trillion RMB" scale. "That is a very large transaction volume and it means that we have to, in some ways operate, as if we had an internal bank that helps us to manage all the transactions, handle the cash flow, make sure the liquidity is always available in the right places at the right time," says Yu.

JD.com's epic promotional events are a major consideration for Yu and his team as they assess the outlook and preparation for liquidity. The company's 11 day "Double 11" sales event in November 2018, for instance, generated a record transaction volume of RMB159.8bn (approximately US\$23bn).

The company's 18-day annual anniversary sale in June 2018, meanwhile, saw transaction volume during the event hit a record US\$24.7bn, up 50% on the previous year.

Very big and very fast

While Yu is effusive in acknowledging the huge help that his experiences and skills gained in other industries and sectors have been to him at JD.com, he is also keen to stress the very different opportunities, challenges and risks that confront treasurers in new economy companies compared with traditional industries.

"It's quite a different situation here at JD.com compared to my previous experiences. Ford is a typical multinational company in a traditional industry. JD.com is part of a much more recently established industry, e-commerce, one that is still developing very fast. You cannot handle the treasury here, and in new economy companies generally, I think, based on just the skills or abilities gained from traditional industries.

"The biggest challenge at JD.com for me and my team is its enormous size and the speed at which it operates: it's very big, and very fast. That is often the major difference between the traditional company and new economy company. And it is the speed at which developments can take place at JD.com in terms of volumes and scale across all operational aspects that makes treasury management here very different from that at Ford or other traditional companies."

Astonishingly, despite the gargantuan scale of the JD.com operation, Yu's global treasury team is only 70-strong. "How can we handle the "trillion RMB" transaction volume annually, the speed and scale of JD.com, with just 70 people? The answer is to make full use of the technology. One thing we are really lucky in is we are a very able high-tech company as well."

Not surprisingly given his determination to ensure all bases are covered, Yu has even set up a treasury unit, called the system analysis team, to ensure his treasury department as a whole makes full use of technology. Part of the treasury analysis team, this team is constantly looking at ways to build up the treasury management system, upgrade its functions to better align it with the growth of the business. Last year, for instance, the department expanded its host-to-host connectivity to some foreign banks in countries including Japan and Singapore, so enabling treasury to handle more transactions through its system instead of manually. "The solution for us in coping with the size and speed challenge certainly involved a change in our mindset but the core aspect has been technology," he says.

Efficient use of technology and the creation of a treasury structure fit for purpose have been key in supporting JD.com's internationalisation, which has picked up a real head of steam over the last few years and exposed the company to new challenges. The company, which listed in New York in 2014, has been on steep learning curve for instance in developing the skills and infrastructure to handle capital markets. "Previously, the treasury's focus was heavily biased towards the mainland market but for financing and investment requirements, if you have foreign market opportunities, that can really enrich treasury strategy. We now have a very global view for handling all the treasury activities, especially the investment and financing aspects."

Vivid experience

While Ford looms large in his career history, Yu points to his preceding and initial career in banking as having been instrumental in encouraging him to move into corporate treasury. As a banker, he specialised in providing services such as financing and treasury solutions to corporate clients. The post gave him exposure to a number of industries including real estate, retail and the car industry.

After five years in banking, however, he decided to switch to the corporate world: "As a banker I was just looking into the corporate world from the outside. I felt I needed a more vivid experience of companies and organisations."

His first corporate treasury post was at Metro AG, the German food wholesaler. As with Ford, Yu counts himself as fortunate in having joined a retail company as the experience he gained there was a big help to him in getting to grips with the JD.com e-commerce business. After working as Treasury Manager for Metro AG with responsibility for the Greater China market, Yu came to the conclusion that he needed yet "more vision, more international exposure, and a knowledge upgrade".

After graduating with an MBA in Hong Kong Yu took a position as Deputy Treasury Director at Hang Seng-listed Fosun, one of China's largest private industrial and investment conglomerates. "Hong Kong is a very international financial centre so I had the opportunity to connect with the global market and gain knowledge of and experience in strategic treasury deals, for example, M&A and syndicated loans. It was excellent exposure and very helpful in expanding my vision, which was my initial goal when I went there."

After Fosun came Yu's posting at Ford in 2012, by which time the company was finally on the mend after the tumultuous years of the Great Crisis and busy looking to leverage opportunities presented by the auto market in China which by then was booming.

Reflecting on his journey he says: "When I consider the treasury structure we have put in place at JD.com over the last three years, I can see now that it really makes full use of all my personal experience. I've had the opportunity to transform treasury practice here, create a new structure and make full use of banking technology. But there is a basic philosophy I have used here and it is based on time-tested elements such as ensuring we have a global view, treasury expertise, professional communication, prudent procedures in place... all the essential elements that I saw work so well and experienced at those decent companies such as Ford, Fosun and METRO. Those basic treasury qualities are the same whether one is working in the new economy or a traditional industry."



Computer says no: the role of AI in detecting financial crime

We look at how AI can be used to drive greater efficiency and accuracy in fraud detection and sanctions compliance and probe the issues that its adoption may present.

The world is awash with data. When it comes to matters of compliance monitoring, especially around sanctions screening and fraud detection, the traditional 'human operative' approach to analysis looks increasingly difficult and yet is still very much in evidence.

This means that in a progressively real-time world, businesses and banks face a direct and indirect threat from real-time crime. The answer to the problem of too much data, and too many actors with bad intent, in this environment is to fight fire with fire, deploying yet more technology.

Certainly, the world's major banks think so. A global study of 400 bank executives conducted in March 2018 by The Economist found that 71% of executives are focusing their digital investments on cyber-security. And for good reason. According to a Javelin study, major banks lost US\$16.8bn to cybercriminals in 2017. This figure, notes Forbes' analysis of the study, includes regulatory fines, litigation, additional

cyber-security following the breach, the need to respond to negative media coverage, identity theft protection and credit monitoring services to customers affected by breach and lost business due to reputational damage.

It is interesting to note that The Economist's study also revealed that around 30% of respondents saw Al platforms as a key part of their digital investment. But then the capacity for Al to sift through, analyse and report on vast and disparate data sources goes hand-in-hand with the rising threat of financial crime.

Just an algorithm

A simple definition of Al can reduce it to an algorithm or a set of rules that are followed to form an outcome. It may then be seen as having a 'narrow' purpose, where it is used for a specific use case (such as online shopping assistants), or as a

'general' solution where it exhibits so-called 'deep learning' capabilities more akin to humans (such as the Deep Blue and Watson supercomputers).

Al in a fraud and compliance application is narrow in scope, albeit both a simple data-crunching exercise across a vast data pool, and a fairly complex, long-term pattern-recognition system. At some stage it could become part of a general 'neural network', capable of predicting the behaviours of and making decisions about multiple actors within the broadranging financial sector.

For now, it is only feasible to deploy Al to detect changes in activity where perhaps a new beneficiary is being paid or an account number has changed on a regular payment. But here it can flag anomalies (sometimes referred to as outliers) over a huge set of transactions and an extended period, that no human could ever match. These unusual values could be a single data point or a general trend or behaviour observed in that data set.

For Emma Loftus, Global Head of Payments, J.P. Morgan, Al has an increasingly important role to play in financial services. And for good reason. "With wire business, while it is easy to use standard rules to filter everything out that does not conform, it is a blunt instrument. Al allows more nuanced filtering," she explains.

Looking across 12 months of payments activity, it may be possible for AI to see that what at first appears to be abnormal, is in fact a regular but low frequency transaction that exceeds the norm. This, Loftus says, enables the bank to give the client a lot more context on why it has called out a specific instruction, or to process it unhindered.

Status quo

In terms of its 'traditional' general cyber defence, a major banking institution will commonly deploy at least a three-tier approach, says Loftus. In this context, it has to protect its perimeter, erecting internal levels of control around money movement and augmenting this with a strong education programme with its clients to encourage digital security best practice.

The second layer, where controls around payments operations are supported, sees a number of systems in place. The bank has to detect, for example, when client computing and credentials have been compromised, ensuring any access attempts that do not conform to expectations can be managed with a high degree of precision.

Where uncharacteristic account activity is spotted, the bank's proactive response to such findings has, for example, seen it close down unused SWIFT Relationship Management Applications (RMAs) with institutions. It has also enforced its own payment access limitations where there is no longer a reason for an individual to have that permission.

Loftus adds that clients are encouraged to review their own auto-procedures and authorised transaction initiators and signatories. The bank supports this with internal controls around, for instance, transaction limits where bank contact is mandated to seek verification beyond a certain transaction level or where a new beneficiary is detected. Indeed, as she notes, "first-time beneficiaries are often where risk is heightened and a simple call-back would stop a lot of fraud".

Artificial assistant

So far so good, but a reminder that banks lost US\$16.8bn to cyber-criminals in 2017 brings us to the deployment of new weapons in the war against cyber. Here, Al has a role to play in protecting banks and their clients.

With the move gathering pace (certainly in the consumer space) towards real-time payments and the credit 'push' model, Loftus says the idea that fraudsters can navigate rapidly across the consumer space, using 'mule' accounts spanning multiple institutions, is driving greater interest in Al. Indeed, she believes that Al is becoming "necessary" to properly secure clients' money movements because only this type of technology is able to effectively and efficiently collect, collate and analyse data across vast numbers of remitters and beneficiaries.

In action

Basic AI is already being used to enhance the efficiency and seamlessness of processes in fraud detection and sanctions compliance, says Kristian Luoma, Head of OP Lab, OP Financial Group (one of the largest financial companies in Finland, consisting of 156 cooperative banks). For him, AI is only just at the stage of "intelligent assistant", augmenting the work of its human counterparts. "It may be a while, if ever, before an algorithm is trusted fully in this context,"

However, he recognises that the advance of new digital channels and the exponential growth of data is driving deeper interest in Al. As Loftus says, it has to. Indeed, Luoma believes that it is the greater degree of accuracy promised by Al, and the understanding that machines are better at executing certain tasks – such as the detection of long-term patterns of behaviour – that will encourage its uptake.

The reasons for not adopting Al as a superior mitigation of financial crime are beginning to melt away. But there are pure commercial reasons for its uptake too, says Luoma. "We can already see that the entire finance landscape is being reshaped by competitors that do not necessarily share the physical challenges of traditional banks," he comments. "Almost by definition, offering a digital-only interface potentially gives these players the upper-hand on cost structure. As incumbents, unless we are ready to use technology to help drive down costs, there is a real possibility that we won't be as competitive in terms of our pricing to customers."

Advancing Al

Financial institutions have been increasingly incorporating unstructured data from external sources, such as news feeds and social media, into their financial crime and compliance investigations, says Leonardo Orlando, an executive in Accenture's Finance and Risk practice. But this approach, he notes, has always proven costly in terms of resources. Some institutions have therefore sought to embed into their systems intelligent web crawlers, capable of automatically retrieving such data.

But as tackling financial crime takes on a new urgency, banks are looking for ever more accurate and efficient solutions. Orlando says some banks are beginning to deploy more advanced AI, in the form of machine learning technology. The ability to analyse existing transactions to detect outliers, and

extrapolate patterns to form a structured future view, means these systems offer a clear advantage over basic Al.

These systems can begin to make self-directed decisions as the algorithm learns the mapping functions, from input to output. Accuracy improves as more and more relevant variables are embedded in the rules, even when using data from unstructured sources such as social media. This 'supervised' form of AI, where humans 'train' the model step-by-step, is sometimes referred to as intelligent automation.

At the cutting edge of Al in this context is network analytics. This, explains Orlando, is designed to seek out all the knowable connections of a business or individual. Where one otherwise above-board organisation seems to be connecting with another that, although itself clean, has some questionable associates further down the line, investigation may be triggered. This might especially be the case if the first organisation is generating unexplained transactions within its own network. This level of depth and breadth of analysis would not be possible using traditional models. Some may find this intrusive.

No takeover

Whilst Luoma is not predicting a machine takeover, as a technologist, he is not prepared to say there are elements of cyber that Al can never learn. That said, he suggests that few if any organisations are anywhere close to letting it "fly solo". Even if in most cases Al can produce a better result than a human, he accepts that there may be circumstances where human intervention is necessary; humans having a far broader set of experiences and knowledge upon which to draw.

The unending race between those engaged in malicious acts, and those seeking to detect and prevent is a case in point. Al can learn but currently an algorithm is "only as skilled as its training data allows it to be", Luoma notes. It is not yet configurable to recognise new types of fraud; it can only see anomalous effects after the fact. For this reason, for now at least, he argues that human involvement is essential.

In fact, despite the adaptive and resourceful nature of those who seek to commit financial crime, banks and businesses are not scrambling to implement Al out of fear for what may happen at the hands of criminals. Instead, says Luoma, organisations that are adopting it are doing so as a measured and rational response to 'normal' business challenges. In short, some are already seeing the commercial opportunities.

"I don't see fear of the existence of this new technology, nor do I see the pledging of blind allegiance to it," he says. "From our own perspective, if there is a tool to help mitigate risk and help increase the value that we are able to produce for our customers, then that is an opportunity we should take. It is an opportunity to be more efficient with less resources through the use of humans and AI."

Recognised issues

It's a given that where the Al opportunity is taken, the biggest issue will always be the quality of the data being analysed. However, another concern with Al is calibration of an algorithm to create an appropriate feedback loop. Traditional rules-based systems lack the nuanced capabilities of Al, but poorly calibrated Al is at best unhelpful.

An algorithm must be calibrated to avoid too many false positives or false negatives, Loftus explains. Here, transactions are unnecessarily stopped or allowed because the algorithm is either over- or under-sensitive. At best it annoys clients when their transactions are stopped unnecessarily. At worst it allows criminal activity to pass undetected. It is a difficult balance to achieve but one that nonetheless must be tackled.

Moreover, an algorithm that incorporates bias – usually unintended but incorporated in its decision processes as a result of historical or cultural norms – can detract, to similar effect, from an otherwise successful system.

Treasurers get ready

Fraud detection, anti-money laundering, and sanctions and watchlists screening form an essential part of every bank's ongoing processes. These actions have not traditionally been part of the treasury remit. However, suggests Orlando, treasury has a unique view over every transaction of the business. As such it is in a position, even before any transaction has been settled with a counterparty, to assess if there is any fraud or compliance risk.

Al technology is now being deployed by some TMS providers, Loftus notes, helping treasury departments become a "first line of defence" in detecting anomalous internal activity. But, says Orlando, it may be time to go further.

Treasurers could, for example, use Al to better understand multiple counterparties in hitherto unseen depth. Knowing where a counterparty is winning or losing contracts, its investment in strategic activities such as M&A or R&D, current and historical investor sentiment, and even ongoing legal cases, can paint a picture of an organisation in ascent or decline.

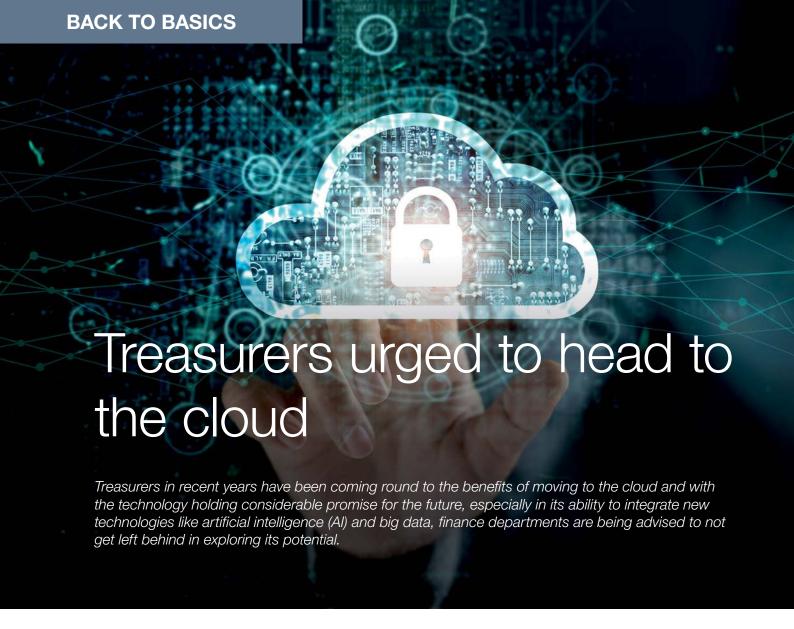
As a risk management tool, he argues, this surely is valuable data. As a means of improving forecasting accuracy, where customer payments can be predicted far in advance, he suggests that it has a ready-made strong business case for treasuries seeking to optimise liquidity and capital.

Time to jump?

Where Al is being adopted, for it to gain acceptance and trust, the business needs to be confident that its algorithms are working as intended. Orlando advises initially limiting the scope of what is trying to be achieved. "Start small and work on elements that can be monitored and controlled. Get comfortable with it first. Understand how it works and where the value exists. From there you can try to expand the scope in an organic and structured way."

Regardless of how AI is approached, Orlando insists that planning is essential and that it is therefore vital to "connect the dots between the right data, technology and solution". Jumping to the conclusion that AI is the answer to every problem, he warns, is a recipe for failure.

Of course, organisations that are exposed to the increasing risk of financial crime, are in no way obliged to adopt Al just to meet regulatory requirements. On the other side, the enormous potential of a well-balanced Al solution is something that should be considered, and treasurers have many reasons to be at the cutting edge.



The history of cloud computing dates back to the 1960s but only in the last ten years has it gathered momentum, and only in the last five has its power begun to be leveraged for managing treasury operations. As a relatively recent phenomenon, its take-up by treasurers has naturally been cautious and measured – the cloud-based treasury remains far from being a ubiquitous feature across finance departments globally. Still, the signs are that it is only a matter of time.

According to studies by the respected industry analyst IDC, adoption of cloud-based services by firms and evolution of solutions has picked up significantly within the last five years and will continue to do so. IDC reckons 35% of businesses in the midmarket are expected to invest in Cloud ERP in the next 12 months, with 70% of ClOs expected to embrace a cloud-first strategy in 2019. Looking further ahead, it predicts 70% of enterprise IT spending will be cloud-related by 2020.

That certainly suggests a bright outlook for cloud-based treasury solutions, though a survey of over 100 major firms in the US and Europe last year by one leading provider, Kyriba, shows it could be tricky to wean many corporates off their beloved spreadsheets. According to the US-based firm, which boasts more than 2,000 treasury clients globally and is a leader in its space, global treasury teams are wasting an average of 4,812 hours per year – more than 600 days of full

work – by using traditional spreadsheets to manage their cash, payments and accounting operations.

The biggest Excel time-waster, according to survey participants, was getting the daily global cash position, which takes up an average of 1,296 hours per year, followed by treasury-related accounting tasks (1,176 hours); payment fund transfers (960 hours); cash forecast generation (792 hours); and 588 hours per year for other key tasks.

"The lost productivity due to spreadsheets is a huge opportunity cost for organisations," says Dory Malouf, Treasury Operation Value Engineer at Kyriba. "Instead of focusing on value-adding initiatives that help drive the business, treasurers and their teams, along with cash accounting managers, are stuck spending literally thousands of hours updating and manipulating spreadsheets."

Kyriba's survey of treasurers and senior finance professionals spanned multiple categories, including real estate and construction, retail, technology, manufacturing and financial services. In each case, participants were asked to estimate in detail how much time they spent using traditional spreadsheets to manage various key tasks. Their estimates were compared to the time required to complete the same task with Kyriba's solution, which automates and streamlines manual reports, locks down data, and offers services beyond data crunching.

Kyriba believes the survey findings put a new spin on the perennial debate over whether finance professionals are overly dependent on traditional, labour-intensive spreadsheets to accomplish modern duties. "There is no question that finance professionals will not stop using spreadsheets in isolation, but what our numbers show, rather dramatically, is the cost of over-relying on spreadsheets to manage an entire finance function, like treasury," Malouf says. "Spreadsheets are only effective to a certain extent, and cannot be counted on to scale to global requirements."

Malouf believes the time treasurers save by embracing cloud-based automation via a treasury management system can be put to better use, for instance focusing more on working capital optimisation and strategic transformation initiatives generally. He points to other past surveys of Kyriba clients, showing that they recouped up to 80% of time spent on spreadsheets by employing cloud-based solutions.

"In the end, the debate is not so much about Excel as it is about freeing up finance staff from the shackles of burdensome data assembly and validation," said Cheik Daddah, Global Vice President of Value Engineering at Kyriba. "The most valuable asset for finance is time. Freeing up time enables finance professionals to focus on strategic analysis to uncover data and insights that help drive decision making."

Future proofing

The broader, positive growth trajectory for cloud-based treasury solutions cannot be denied however. Over at SAP, the German-based market leader in enterprise application software, Christian Mnich, SAP Head of Solution Management, Treasury and Working Capital Management, says several key drivers underpin prospects.

"There is no doubt cloud computing holds enormous benefits for finance and treasury organisations," says Mnich. "Its speed, efficiency and economy are widely acknowledged. Finance and treasury organisations also benefit from a shorter time spent in initial implementation projects; user interfaces are intuitive, allowing business users to get up and running faster and easier.

"The entry ticket cost to adopt cloud applications is also much lower than establishing large, complex systems inside the organisation. This smooths out IT investment over a longer period of time, with no yearly maintenance costs incurred, like in an on-demand set up."

Mnich is also keen to stress the importance to finance departments of engaging with cloud if they want to leverage new technologies such as Al and big data. "With cloud they can access the latest technology innovations in finance faster than ever before, without any business disruption."

Drilling down into the types of cloud solution, he explains that two types have evolved to become the most adopted globally: the public cloud, also called software-as-a-service (SaaS), and the private cloud.

In a public cloud set up, applications like financial management run on shared servers at the provider's data centres. While each instance of the SaaS application and related data are made available only to the intended recipient, the system resources in the background are shared, providing economies of scale. Whenever an application is updated by

the provider, all the end-users benefit from the same update instantly.

A private cloud set up is, in general, also located at the provider's data centres, but the servers on which the applications run are not shared. That allows for more customisation and better control of systems upgrades.

Mnich says cloud deployments help to reduce the total cost of ownership and that those deployments in turn help drive faster innovations because they are easy to scale and consume. Corporates investing in cloud solutions also benefit from a lower dependency on IT resources, shorter upgrade cycles, and they get rid of associated hardware costs and challenges. And with public cloud, business processes are standardised following industry best practices, and individual customisations are mostly prevented, leading to a much more simplified environment.

When talking to treasurers considering a move to cloud, SAP's initial priority, Mnich says, is to ascertain their specific requirements, look at their current technical IT infrastructure and organisational set up: "To evaluate the best solution for them, it is important to understand their broader system landscape. Many treasury organisations have a fragmented system landscape, in which data is spread across various sources. That is a big challenge as the fragmentation means firms don't get a unified vision – what we call a "single source of truth" – and therefore are hindered in their ability to make fast and informed decisions."

Consolidation of all the relevant data needed to make informed decisions can consume a lot of time using legacy techniques. As a result, Mnich says, organisations face the risk of not having the right information at hand to steer and control the business. The absence of relevant data when it is needed can affect their business results such as margin targets. "For such clients, a flexible cloud solution that helps to centralise certain treasury processes such as cash management, payment operations and exposure management, can provide significant business value. However, the biggest challenge for those systems, independent of the deployment option, is the level of integration. In short, everything within the system must work seamlessly with everything else."

Security fears

Corporate treasuries seriously considering deploying cloud may well be persuaded by its merits. Yet at the same time, having previously had total control over commercially confidential data and operations via in-house IT teams and systems, they will likely be concerned about its security.

Mnich says cloud security used to be "a prime concern" for finance departments but such worries have eased over time: "In the past, treasurers were certainly sceptical about the cloud's security credentials. That fear has largely fallen away as security today is virtually embedded in cloud and its applications. Today, cloud solutions are every bit as secure as those connected to a network and to the outside world. In fact, today, a trusted cloud solution provider has the resources and expertise to invest in the security of global data centres at a higher level than each individual client could achieve for a relatively small business function like treasury."

Another drawback that might concern some treasury departments is that the high level of standardisation and

relatively limited flexibility a public cloud solution offers may mean they have to live with certain limitations and challenges. For example, large companies, which have complex use cases or specific reporting capabilities needs, may find public cloud solutions to be too restrictive. Other companies, meanwhile, may still want to keep full control over their systems, without being tied to automated upgrades. "To cover those requirements, a private cloud infrastructure could be the solution," says Mnich. "In such scenarios, customers – certainly SAP customers – can get the same benefits offered by public cloud, but in a dedicated, privately managed cloud environment. This deployment option is best suited for organisations with highly-customised requirements."

He adds: "Many treasury organisations have been using cloud services for some time, such as online trading systems, e-banking systems or other cloud-based platforms. The opportunity ahead of us is to integrate those systems into the organisation's finance landscape so they can provide a seamless experience for the users with a single source of truth."

SAP itself provides an integration either via application programming interfaces (APIs) in some instances, or natively built integration within the treasury applications that run on its cloud platform. A few services that have been recently made available on its cloud platform include bank and SWIFT connectivity, trading platforms and market data integration.

Much more to come

Looking at the state of play with treasury in the cloud and the kinds of advances corporates can expect going forwards, Mnich firstly notes that, currently, many of SAP's own customers are consolidating their scattered data into an integrated digital platform. "That can help them unlock new potential in the day-to-day work; users get more transparency and real-time information. They also enjoy increased automation, improved security standards and are able to get rid of legacy systems. They are able to make better business predictions based on existing knowledge in real time."

More specifically, Mnich says SAP remains focused on a number of areas to enhance its offerings for treasurers. They include increasing straight through processing (STP) by further automating processes, including via better analytics and provision of business-critical information in real-time. One example here is the SAP Cash Application, which provides reconciliation optimisations and uses machine learning capabilities.

Other major focal points for SAP include predictive analytics to help businesses get instant visibility into every aspect of their operation and so enable them "to move beyond automation to intelligent, predictive decisions".

The provider is also committed to the integration of increasingly sophisticated machine learning and Al processes. These aim to help businesses not only gain access to next-generation innovations and eliminate low-value and redundant legacy processes, but also enable users to quickly identify areas requiring attention and action, for instance irregularities that could help signal and prevent fraud.

Mnich says the area that probably holds the "highest potential" for treasury in the cloud going forwards relates to the prediction of operational developments in areas such as

cash forecasting; automated exposure management; and the generation of deal proposals that respect the treasury policy in place and can be traded automatically via the cloud-based platform. "Our key objective is to help businesses become intelligent enterprises with optimum visibility so that they can use their data assets effectively to achieve their desired outcomes faster and with less risk," he says.

The message from cloud solution providers then seems clear: as well as offering immediate benefits such as speed, cost savings and productivity, migration to the cloud is fast becoming a strategic necessity as without it finance departments will be without the infrastructure needed for them to be agile, leaving them unable to benefit from real-time insights to inform decision-making.

Mixed messages

Yet, as a survey of 300 senior corporate treasury executives last year by the Economist Intelligence Unit on behalf of EY shows, firms have a lot more on their minds than just new technologies and cloud when it comes to assessing the drivers of change in their finance departments.

Although 39% of survey respondents identified disruption due to new technologies as a major consideration for them, they do not deem it to be the clearest reason for change. Changing business models along the supply chain (38%), changing internal business models (38%), digitisation (36%) and regulation (35%) were also considered as drivers of change, suggesting to the researchers that treasurers may be regarding the notion of change as a "chicken and egg scenario".

Moreover, the survey results suggest that treasurers are having difficulty in understanding what the "unknown unknowns" may be. When asked "What will be the most useful technology system for treasury?", 36% of respondents did not even say "upgraded ERP systems", believing instead that existing systems would suffice. It is therefore not surprising to the authors that 35% also said the same for "existing" rather than "upgraded" TMS systems.

The study, titled The Future is Now: How Ready is Treasury?, says: "The fact that moving to cloud-based solutions (cited by 30% of respondents as key) was seen as less useful to treasury than either existing or upgraded ERP and TMS systems implies either that these respondents view cloud as simply a place to move existing functionality for cost reasons rather than a technology that can provide fundamentally improved and new functionality; or that they have security concerns over using the cloud."

The report authors echo Mnich at SAP, however, in arguing that moving to cloud ERP or TMS systems should be much more than a cost-based outsourcing decision, as cloud applications are developed continuously, responding to advances in hardware, software, the regulatory environment and new techniques, like Al. The net effect of that is it allows companies to create operational agility, freeing up resources for other areas.

"Although it is encouraging that a third of treasurers are interested in moving to the cloud, more should be considering it given the evident pace of technological change inside and outside business. Otherwise treasury risks not being able to fully benefit from technological innovations that could give it higher influence within the organisation," says the study.

No holding back rise of technology

How might technology impact your work and treasurers generally over the next few years?



Jelle Goossens Regional Treasurer Barry Callebaut Asia Pacific

It is obvious that the continued advance of technological innovation is enabling the treasury function to capitalise on operational efficiencies when it comes down to the day-to-day risk management activities and ancillary operations. Time currently dedicated to more menial tasks like the various data reconciliation processes will be cut down further, decreasing costs and allowing for more added-value engagements to support the company's core business objectives.

In particular, savings can be expected concerning the payment process, starting from the typically painful KYC-process related to the opening of a bank account (or the establishment of any product relationship for that matter), to the vetting of payment details, as the liquidity associated with the cash management process itself. This will undoubtedly have a positive impact on the financial expenses as liquidity-utilisation should be more efficient and the need for buffers lower. I believe we are bound to see even more tangible improvements as to security as well as a reduction of the impact of sanction-related regulatory checks.

Furthermore, improvements across the financial supply chain (for instance with respect to the processing of accounts receivables and accounts payables as well as the customer credit control activities), will also support the effectiveness of supply chain financing structures, receivable and inventory monetisation programmes. Especially in the food and agricultural industry, I am hopeful that sustainability efforts, and also sustainability-linked financing as a corollary, will be better supported, as technology helps to achieve the necessary transparency and creates seamless links between the various players along the value chain, starting from the smallholder producer of raw materials all the way down to the consumer. While this visibility enables efficient financing along the chain, it can also reward the companies focusing on sustainable practices by exposing these efforts to an ever more value-conscious consumer.

As a result, all of these developments should assist in a company's funding sources to become increasingly diverse, which again should have a positive effect on financial expenses.

Finally, further centralisation within, but also across, regions can be expected, as transparency takes leaps forward and tools reduce the need for an expansive local footprint as to treasury staff. Then again, complete automation of the function is unlikely, as market imperfections (for instance

created by the various local regulations) as well as the translation, and interpretation, of the commercial business requirements into fitting risk management strategies, will continue to necessitate a human touch.

There is, however, one element which is not unequivocally positive. As these technological advances require huge capital investments by the financial services sector, further consolidation in this space is likely. While scale has its advantage as to cost efficiencies, which can further trickle down in the so-called real economy, the well-known risks of too-big-to-fail and concentration could be a negative force, ultimately leading to monopolies and hence stymie further innovation.



Amit Baraskar Vice President & Head – Treasury Thomas Cook (India) Ltd Group

If technology has been the handmaiden of progress throughout human history then it is clear it is poised to force through another radical shift in commerce, culture and society. As treasurers we will not be immune to the rise nor the attractions of new generation technologies like AI, big data and blockchain. Such new technologies may have had a limited or indeed no discernible impact on many treasurers so far but sooner or later they will, and in so doing demand we elevate our profession to another, different level.

That technology will have such a profound impact on treasurers is certainly nothing to fear. After all, the success of treasurers has always been linked to and fast tracked by technology, and today's new generation offerings will help us eradicate a number of stubborn, persistent bottlenecks that have conspired to make our lives.

The future will see us using less and less paper, the white material that haunts us from time immemorial. The classic combo of 'Excel' and 'email' that many of us have relied on for so long will hold fewer attractions going forwards. The growing availability of increasingly sophisticated, large cloud and Al driven CRMs and other such solutions will make managing customer relations far more efficient and effective.

Domestic and day transaction banking, viewing and reconciling will continue to become more and more transparent and efficient. Already SWIFT, one of the most robust platforms globally, has integration capabilities where a single integration can automate payments, collections, reconciling and trade transactions while also giving a single sign-on to view all transactions as well as account balances at one go. The solution is currency and geography agnostic.

Anything which is routine and repetitive is nothing more than a cinch for our robot colleagues, specifically robotic process automation systems, which allow treasurers to conserve precious time and put it to more productive use and thus focus on core treasury aspects.

Technology is also coming to the rescue in risk management and compliance – there are now several tools which give out alerts (on credit downgrades and other relevant news) as well as help track remittances from a compliance perspective. Such developments make technology a trusted risk and compliance partner and that is a big relief for today's treasurers as they increasingly take on the responsibility of being a risk manager as well.

Linking vendor financing with (investment) yield management and cash flows is proving another area where technology holds considerable potential. Today, quite a lot of vendor financing solutions help to deploy the surplus funds to enhance yields while keeping the risks at bay. These solutions are also emerging as powerful cash flow management tools.

With time becoming the rarest of commodities for treasurers, it is essential that technology comes to the rescue and acts as a partner in their working life. In any case, going forwards, the treasurer will have to decide whether he or she wants to emerge as a successful tech savvy treasurer or take the risk of persisting with legacy tools and techniques and so perish under the burdens of inefficiently managed workloads.



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By and large, the growing momentum behind the treasurer's digital technology agenda is being driven by increasing consumer power as the wider demand for tech-driven solutions in all spheres of life impacts the corporate treasury space directly or indirectly. As a result, much of what the treasury function has aspired to over the past few years, specifically the need for a holistic and integrated approach to how treasury functions and delivers beyond operational requirements, looks now to be achievable.

As has been pointed out in research by Deloitte and PwC, treasury teams are collaborating more with other business functions, increasingly taking on strategic roles, and using automation, offshoring, and treasury centres to consolidate and standardise tactical areas. More than just the excitement of having or implementing the latest digital tools, this shift is about how treasury centres embed digital technology into their core – to be ready for partnering with businesses and meeting customer needs in an era of rapid digitalisation.

Traditionally, treasury organisations have been processdriven, with high reliance on data. With greater visibility around cash, and tools enabling forecasts, the funding and investment processes will become more efficient. The quality of real-time decision making will improve as organisations become more data driven. The planning processes around strategic financing and investment will improve, giving treasurers greater confidence as they fulfil their investment, liquidity and funding requirements.

Better transparency in the banking and financial industry landscape is also taking place, with regulations introduced by country governments as they plan ahead with digitalisation in mind. Such moves will enable treasury centres to deal with the markets with greater trust and better risk management.

Efficiencies will also improve treasury processes in the near term, as exciting digital suite applications such as blockchain, API and SWIFT GPI are taking shape. Open banking holds considerable potential, especially for the smaller treasury departments and firms, as it promises to provide them with capabilities previously affordable only by larger, better resourced corporates. Its use of APIs will enable faster fulfilment of transactions and generate enhanced customer experience and relationships. Such developments in turn with help ensure better controls and transparency for treasurers.

While it is becoming increasingly clear that technology will help treasurers to play a more strategic role within their companies, there will be limits to this. Technology in itself cannot replace strategic thinking, policy and procedure design, which are primarily the responsibility of corporate treasury departments but must be undertaken in consultation with colleagues and other departments. A careful blending of technology and human intelligence will therefore be critical in helping corporations remain on the front as the role of the corporate treasurer continues to evolve even further.

Overall, digitalisation should enable the treasury function to better align with organisational objectives. Organisations that have not yet made this push should begin, sooner rather than later. The trends that we are seeing now are just the tip of the iceberg, with much more to come.

Next question:

"In these volatile, uncertain times how can treasurers become more entrepreneurial and help firms explore and capture new growth and investment opportunities?"

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



Compliance's silver lining

Compliance looms ever larger in the treasury landscape. Accounting changes multiply. Regulators have cowed banks into compliance and are turning their attention to corporates from a sanctions and anti-money laundering perspective. Derivative regulation is making hedging increasingly complex and costly. Treasurers understand the need for regulation but attending to it distracts them from adding value to the business. Non-compliance is not optional, so is there any way to benefit from the so-called regulatory tsunami?

Drowning

Compliance keeps rising on the treasury agenda. The so-called regulatory tsunami seems more like a sharp clawed and razor toothed dragon with impenetrable scales and dark spells than a wall of water. Requirements come from different sides and in different forms.

Tightening accounting rules make derivatives more complicated and jeopardise hedging operations and certainly make hedging more expensive. New leasing rules limit a form of funding that can be important in many businesses.

Tax authorities around the world are trying to maximise their take with tighter transfer pricing rules under base erosion and profit shifting (BEPS) and like monikers. This would not be so bad if cross border tax initiatives were accompanied by rationalisation of complex tax codes, but if anything, tax codes are getting more complex even without additional cross border constraints.

Post crisis derivative regulation intended to limit banks' proprietary trading are causing collateral damage to corporate treasurers, both by requiring them to report (and possibly reconcile) trades and by making banks less eager to provide derivative services.

Bank regulation such as Basel III and related liquidity coverage ratio (LCR) and Net Stable Funding Ratio

(NSFR) are making it even harder for corporate treasurers to understand their bank financial providers and distorting markets for example in bank deposits, bank loans, and derivatives.

In the areas of know your customer (KYC) and anti-money laundering (AML), regulators have frightened the banks into paranoid regulatory creativity. In an attempt to protect themselves from vague regulations and the huge fines that have been agreed by many banks, institutions are dreaming up unique and heterogenous rules which present corporate treasurers with disparate but consistently large workloads.

Non-compliance is not an option and, in any case, corporate treasurers want to do their part to make the world and our economies safer. The problem is that most corporate treasuries are already understaffed and at best compliance detracts from their ability to keep up with changes in market infrastructures and markets and at worst compliance jeopardises existing daily operations, adding to operational risk.

Surviving

Since treasurers must comply, and since at the same time boards are pressuring them to add value to the business, they are in a difficult position. It will be hard to add headcount and there may even be pressure against buying new systems (which in practice need headcount anyway).

A knee jerk reaction may be to try to cover regulatory requirements in overtime. For many, this is challenging since even overtime is probably already busy with core treasury and business value added. And for all treasurers, handling compliance with overtime is not sustainable – the regulations will remain for the foreseeable future and, if anything, compliance will only become more arduous.

The only way to make this work is to automate the regulatory compliance, either with systems or maybe with outsourcing. Outsourcing can work in some areas – for example, getting banks to do derivative reporting on behalf of treasurers. This implies trust in the outsource provider since the penalties for non-compliance may be onerous.

Automation will generally be the most cost effective and sustainable solution to the resource challenge presented by most regulatory compliance requirements. In the past this might have been a scary prospect involving expensive software acquisition and even more expensive consulting to implement it. Happily, technology is evolving.

With current generation cloud and software-as-a-service (SaaS) offerings and more competitive markets, costs tend to be much lower than previous generation installed software, and implementation is much simpler – not least because from a technology perspective there is no implementation per se at all (assuming a reasonable browser is already installed on each laptop).

Solutions are available from software vendors and solution providers of various kinds to cover most of the new regulatory compliance requirements. eFX and confirmation platforms can handle derivative reporting, as can banks acting for example as prime brokers and CLS providers. The burgeoning regtech space is full of sanction screening and (AML solutions. The KYC space is overcrowded already with database and blockchain based solutions.

KYC provides a good example of how pragmatic treasurers streamline regulatory compliance without huge expensive software projects. Most KYC solutions are cloud based services, requiring no installation beyond appropriate security keys. Since most treasurers do not have integrated systems on the corporate side, there is no deep integration. This lightens implementation.

While integration with HR systems could potentially enhance automation, for most treasuries a manual interface still saves

time. KYC documents need only be handled and uploaded once which, depending on the number of banks, considerably reduces effort. By keeping the platform updated with a super set of their banks' requirements, platform users minimise the effort required for each KYC review or update. Such solutions may not cover 100% of bank requirements but in this space 80% coverage still brings big time and effort savings.

The added bonus is reduced operational risk and improved security compared with paper-based KYC compliance.

Thriving

The potential silver lining to the compliance challenge may be in resourcing. Compliance, being non-negotiable and potentially ruinously expensive, can change the discussion about treasury resources, especially technology resources.

Treasurers needing to implement or upgrade systems or otherwise invest in solutions to improve treasury performance, efficiency and safety often find it hard to convince boards and CFOs. Even the strongest business cases will be viewed with scepticism. And there are always bigger priorities within finance. Treasury can seem like a small obscure side show.

The requirement for regulatory compliance provides a very different basis for resourcing discussions. Boards and CFOs are familiar with the huge non-compliance fines that have hit banks so far, and they will have read that regulators are turning their attention to non-financial corporations. They will not want to be responsible for failing to manage potentially existential risks.

From this perspective, since automation and technology are the safest and most sustainable way to manage compliance risk, regulatory compliance provides a basis for treasurers to get their technology platforms in order – install or upgrade treasury management systems (TMS), build interfaces where needed, add discrete solutions like KYC where needed.

Conclusion

The regulatory tsunami may cripple or even drown treasurers who do not respond effectively. Technology and automation are the safest and most cost effective and sustainable way forward. The advent of potentially existential regulatory compliance risks provides treasurers with a strong argument to obtain the needed systems and solution resources.



David Blair, Managing Director

Twenty-five years of management and treasury experience in global companies. David Blair has extensive experience managing global and diverse treasury teams, as well as playing a leading role in eCommerce standard development and in professional associations. He has counselled corporations and banks as well as governments. He trains treasury teams around the world and serves as a preferred tutor to the EuroFinance treasury and risk management training curriculum.

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Managing trade in a protectionist world

The system of rules and regulations that has governed world trade for decades is facing serious opposition in both the US and Europe, with the US-China trade war representing the most high profile instance of growing protectionist tendencies. With this environment looking set to persist, global corporates and their treasurers are under pressure to ensure business models and strategies are fit for purpose.



INVESTING

Ensuring portfolio resistance in a turbulent world

Uncertainty and rising levels of risk make it impossible for companies to determine the future but are there strategies they can adopt that will help them to take full advantage of the best opportunities without taking unnecessary risks?



REGIONAL FOCUS

From BRICs to TICKS

The BRICs concept, which saw the quartet of Brazil, Russia, India and China spearheading an unprecedented wave of emerging markets-led economic growth at the turn of the century, failed to live up to its promise. Over the last few years the TICKS proposition has emerged, with Taiwan/Thailand, India, China, Korea and South Korea seen as the new champions of the cause. Can this grouping deliver where the BRIC quartet failed?

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

Dory Malouf, Treasury Operation Value Engineer, Kyriba; Cheik Daddah, Global Vice President of Value Engineering, Kyriba; Christian Mnich, Head of Solution Management, Treasury and Working Capital Management, SAP; Jeff Yu, Group Treasury Director, JD.com; Jelle Goossens, Regional Treasurer, Barry Callebaut Asia Pacific; Amit Baraskar, Vice President & Head — Treasury, Thomas Cook (India) Ltd Group; Manu Taneja, Director Regional Cash & Banking, APAC, GE Corporate Treasury; Jason Han, AVP — Liquidity and Banking, APAC, GE Corporate Treasury; Jean Francois Laval, Executive Vice President for Sales, Asia, Airbus; Nalin Chutchotitham, Thailand and Philippines Economist, Citi Research; Cheuk Wan Fan, Chief Market Strategist for Asia, HSBC; David Blair, Managing Director, Acarate; Stuart Tait, Regional Head of Commercial Banking, Asia Pacific, HSBC; Douglas Lippoldt, Chief Trade Economist, HSBC; Stuart Tait, Regional Head of Commercial Banking, Asia Pacific, HSBC; Meng Kei Sou, Chief of Staff, Regional CEO Office, Chida Estates Limited; Shanella Rajanayagam, Trade Economist, HSBC; Christopher Emslie, Asian Regional Treasurer, General Mills; Aidan Shevlin, Head of Asia Pacific Liquidity Fund Management, J.P. Morgan Asset Management; Michael Larsen, Asia-Pacific Head of Liquidity Product, HSBC Global Asset Management; James Zhan, Director of Investment and Enterprise, UNCTAD; Nalin Chutchotitham, Thailand and Philippines Economist, Citi Research; Jean Francois Laval, Executive Vice President for Sales in Asia, Airbus; Philip Pang, Head of Investment, NTUC Income; Koon Wei Goh, Manager, Asset Allocation, NTUC Income; Emma Loftus, Global Head of Payments, J.P. Morgan; Kristian Luoma, Head of OP Lab, OP Financial Group.

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