

treasurytoday

research | insight | analysis

ASIA



The road ahead

A new year brings with it new opportunities and new challenges. What then will be the dominant issues on the treasury agenda in the year ahead?



The Corporate View

Wan Chun Shong

Group Treasurer
Tan Chong Group



Executive Interview

Mark Evans

Managing Director, Transaction Banking
ANZ

Adam Smith Awards Asia

A moment in the spotlight

Trade

Making a case for trade centres

Financing

A closer look at Panda bonds

Back to Basics

Syndicated loans



Voice of Corporate Treasury

in association with

Bank of America
Merrill Lynch



GLOBAL STUDY 2017

Opens 1st February

treasurytoday
group

treasurytodayasia.com
Volume 5/Issue 1
January/February 2017

Director and Group Publisher
Angela Berry

Associate Group Publisher
Sophie Jackson

Associate Publisher EMEA and Americas
Meg Coates

Associate Editor
James Hayward

Head of Operations
Samantha Collings

Research Director
John Nicholas

Global Head of Events
Lisa Bigley

Head of Circulation
Sarah Arter

Circulation Manager
Kerry Stamp

Head of Technology
Luke Scammell

Digital Designer
Joanna Smith-Burnnell

Creative Designer
Robert Murray

Managing Director
Richard Parkinson

Switchboard	+44 (0)13 0462 9000
Publishing	+44 (0)13 0462 9005 +852 8199 0351
Memberships	+44 (0)13 0462 9013
Advertising	+44 (0)13 0462 9018
Editorial	+44 (0)13 0462 9003
Production	+44 (0)13 0462 9019
Fax	+44 (0)13 0462 9010

Annual Membership Rate £285
memberservices@treasurytoday.com

© Treasury Today ISSN 2053-9398

Treasury Today Asia is published bi-monthly
(6 issues) by Treasury Today Limited
Courtyard Offices • Harnet Street
Sandwich • CT13 9ES • UK

The entire content of this publication is protected by copyright. All rights reserved.
No part of this publication may be reproduced, stored in a retrieval system or
transmitted in any form or by any means mechanical, electronic, photocopying,
recording or otherwise, without the prior written consent of the copyright holders.
Every effort has been made to ensure the accuracy of the information contained
in this publication. Treasury Today Limited cannot accept liability for inaccuracies
that may occur. Where opinion is expressed it is that of the authors and does
not necessarily coincide with the editorial views of the publisher or Treasury
Today. All information in this magazine is verified to the best of the author's and
the publisher's ability. However, Treasury Today does not accept responsibility
for any loss arising from reliance on it. No statement is to be considered as a
recommendation or solicitation to buy or sell securities or other instruments, or
to provide investment, tax or legal advice. Readers should be aware that this
publication is not intended to replace the need to obtain professional advice in
relation to any topic discussed. Printed by: Buckland Media Group Ltd.

Treasury Today USPS: (USPS 023-387) is published monthly except August
and December by Treasury Today Limited, Courtyard Offices, Harnet Street,
Sandwich, CT13 9ES.

The 2013 US annual subscription price is \$588.00. Airfreight and mailing
in the USA by agent named Air Business Ltd, c/o Worldnet Shipping Inc.,
156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

Periodicals postage paid at Jamaica NY 11431.

US Postmaster: Send address changes to
Treasury Today, Air Business Ltd,
c/o Worldnet Shipping Inc.,
156-15, 146th Avenue, 2nd Floor,
Jamaica, NY 11434, USA.

Subscription records are maintained at
Treasury Today Limited, Courtyard Offices,
Harnet Street, Sandwich, CT13 9ES.

Air Business Ltd is acting as our mailing agent.

The paper used
in the production
of this magazine
is sourced from
protected forests
and sustainable
raw materials.



Coming home to roost?

As 2016 passes we welcome in the Year of the Rooster. 2016 was certainly a year to remember and the reverberations of its events are being felt around the world.

As we enter 2017 with this issue, we begin with a positive bang, looking at the triumphs of 2016's Adam Smith Awards Asia winners in what was a fantastic year of achievement and excellence. In the busy arena of corporate life, outstanding achievement can often be overlooked. Shifting business needs and an ever-changing and increasingly complex macroeconomic environment mean that once one project finishes another one (or more) begins. The time to celebrate success is short. But in a world defined by increasing demands on the treasury department and limited resources, it is important to shine a spotlight on the achievements of treasury practitioners and how they have not only managed to improve their own department, but also driven value across the entire organisation.

The Treasury Today Asia Adam Smith Awards, proudly supported by ANZ, ensures that extraordinary achievement is celebrated. Now in its third year, the Adam Smith Awards Asia has already established itself as the pre-eminent awards programme in the region and a highly sought after prize. In 2016 we received 203 nominations from companies of different sizes operating in the Asia Pacific region, ranging from multinationals to emerging local champions.

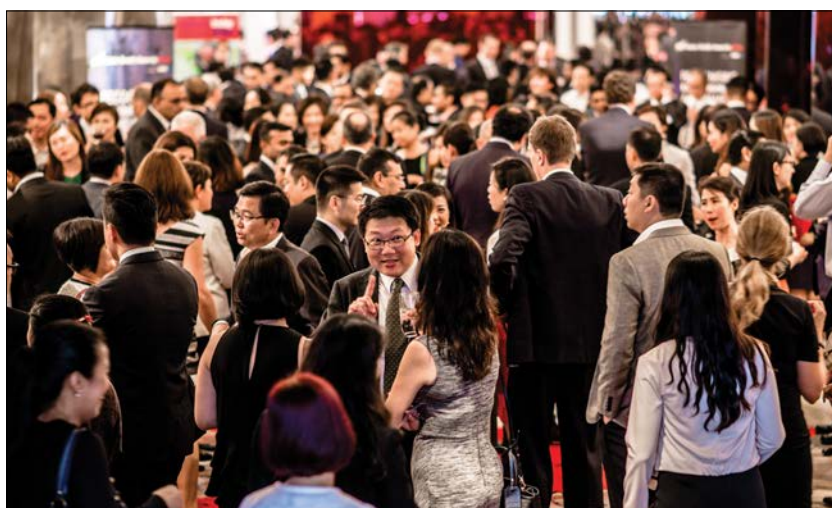
The Overall and Highly Commended Winners highlight the very best and brightest in the industry, and each solution demonstrates a high degree of strategic planning, collaboration and innovation. Our judging panel commented on the calibre of each nomination and the difficulty in selecting the winners. In their view, this is the best set of nominations they have seen to date.

Whatever this year delivers, we wish all our readers a very happy, prosperous and healthy new year and look forward to servicing the community throughout 2017.



ADAM SMITH AWARDS ASIA 2016

4



A moment in the spotlight

Celebrating the success of the region's leading treasury teams was on the agenda at the recent Treasury Today Asia Adam Smith Award Gala Presentation Lunch in Singapore. Here are the highlights of the day and some details of the winning solutions.

2017: expecting the unexpected

Following last year's dramatic events, treasurers will be monitoring the impact of recent and upcoming changes on everything from funding to investments. Meanwhile, topics such as the trade finance gap, regulatory change and technological innovation will continue to shape the treasury landscape in 2017.

SMARTER TREASURY

11

Driving e-commerce across industries

Citi's Treasury and Trade Solutions team discuss the growth opportunities for companies within the expanding e-commerce space.



SMARTER TREASURY

22

A solution to the challenge of foreign currency receipts

Managing receivables has always been a challenging piece of the accounts payables/accounts receivables jigsaw. In this article, Deutsche Bank explains how it has looked to solve this challenge for its clients.



EXECUTIVE INTERVIEW

30



Banking on long-term relationships

Mark Evans

Managing Director, Transaction Banking



Mark Evans, Managing Director, Transaction Banking at ANZ discusses how ANZ prides itself on the deep and lasting relationships it has with its clients and how its unique strengths can add value.



TRADE

16

Supply chain centres

While the concept of a supply chain centre is not new, some companies are seeking further efficiency by setting up global supply chain centres which can centralise both procurement and treasury activities. What are the benefits of this approach – and what challenges should companies be aware of?



FINANCING

19

Panda bonds come to life

The first Panda bonds were issued in October 2005 to much fanfare, but since then there has been little progress. Last year, however, the Chinese onshore bond market began to show early signs that it may soon live up to its potential. We take a close look at the history of the Panda bond market and its growing appeal to corporate borrowers.

TREASURY ESSENTIALS

Question Answered	36
Point of View	38

FINTECH FOCUS

28

Invoice financing reimaged

In the first of our new series profiling some of the world's most exciting fintech companies we speak to Kush Patel, CEO and Co-Founder at Tallysticks to hear how the company is looking to transform the trade finance space with blockchain and smart contracts.



25 The Corporate View

Wan Chun Shong
Treasurer



TAN CHONG GROUP

Wan Chun Shong, Treasurer at Tan Chong Group has lofty ambitions to run the company one day. In his view, the increasingly strategic nature of treasury combined with its acute financial acumen means that treasurers are well placed to do so. In this interview, he outlines how he looked to build his own profile in the company, as well as that of the treasury department itself.

BACK TO BASICS

33

Welcome to the syndicate

A syndicated loan is often part of a wider financing strategy and unlike bilateral loans, they allow a company direct access to both banks and institutional investors. But why might a corporate use a syndicated loan and how are these arranged and managed? We go back to basics to find out.





Adam Smith Awards **ASIA 2016**

sponsored by 

A moment in the spotlight

Excellence, innovation and the desire to continuously improve is par for the course in treasury departments across Asia Pacific. Those treasury teams that receive a Treasury Today Asia Adam Smith Award are truly special and their success deserves to be celebrated.

In the busy world of corporate life, outstanding achievement can often be overlooked. Shifting business needs and an ever-changing and increasingly complex macroeconomic environment means that once one project finishes another one (or more) begins. The time to celebrate success is short.

But in an arena defined by increasing demands on the treasury department and limited resources, it is important to shine a spotlight on the achievements of treasury practitioners and how they have not only managed to improve their own department, but also driven value across the entire organisation.

The Treasury Today Asia Adam Smith Awards, proudly supported by ANZ, ensures that extraordinary achievement is celebrated. Now in its third year, the Adam Smith Awards Asia has already established itself as the pre-eminent awards programme in the region and a highly sought after prize. In 2016 we received 203 nominations from companies of different sizes operating in the Asia Pacific region, ranging from multinationals to emerging local champions.

The Overall and Highly Commended Winners highlight the very best and brightest in the industry, and each solution demonstrates a high degree of strategic planning,

collaboration and innovation. Our judging panel commented on the calibre of each nomination and the difficulty in selecting the winners. In their view, this is the best set of nominations they have seen to date.

Commenting on the importance of the awards and the success of all the winners, Mark Evans, Managing Director, Transaction Banking at ANZ says: "In a relatively short time, these awards have become a benchmark by which we can track developments in corporate treasury in the region. It was impressive to see the high number of submissions this year, as well as the calibre of solutions you have been working on. I know the judging panel had a particularly difficult job selecting the winners."

A day to remember

To celebrate their success all winning corporates and their banking and technology partners were invited to The South Beach, Singapore for the 2016 Adam Smith Awards Asia Presentation Lunch on Thursday November 17th.

It was an event that will no doubt live long in the memories of all who were present. With such a diverse mix of treasurers, bankers and technology vendor executives coming together



for one day to share ideas and experiences, the Adam Smith Awards Asia Presentation Lunch always has a special buzz about it. And this year was no different.

The day began with a networking reception that saw many familiar faces reconnect and share stories of what has been an eventful and exciting year. Angela Berry, Managing Director and Group Publisher at the Treasury Today Group formally opened the event by welcoming all attendees and commenting on the great work of the corporate winners and also the growing levels of collaboration across the industry.

"This year's nominations are quite simply stunning examples of how corporate treasurers across the region are responding to the evolving challenges they face," she said. "I would like to comment on the continued levels of collaboration demonstrated by many of you between you and your banking and technology partners."

Following lunch, it was time for the crystal awards to be presented by Associate Group Publisher, Sophie Jackson, and Editor for Asia Pacific, James Hayward. The pride that accompanies such recognition was clearly visible on the face of each winner and images of their awards were quickly being shared with colleagues, friends and family via social media.

Reflections on success

"We have done a lot of work bringing treasury to the forefront of the organisation. We give ourselves a lot of high-fives for doing so, but it is fantastic to get external recognition in receiving such a prestigious award," says Vincent Liu, Asia Treasurer, Managing Director at General Electric Capital, Treasury Today Asia's Top Treasury Team 2016.

This was a point reflected on by Lawrence Chang, China Treasury Manager at Honeywell. "Receiving such a prestigious award acknowledges the innovation and resourcefulness of the Honeywell treasury team," he says. "But more importantly it endorses our efforts and provides us with an extra incentive to continue improving our operation by pushing the limits of innovation."

The winners also acknowledged that their success could not be achieved in isolation. Randy Ou, Treasury VP at Alibaba commented on how the treasury's success was achieved not simply because of the high degree of teamwork within the department itself, but also its cross-functional work. "For our award-winning project we worked very closely with the information platform department and would not have been able to achieve what we have done without them," he says. "There are many business partners that are needed to help



We have done a lot of work bringing treasury to the forefront of the organisation. We give ourselves a lot of high-fives for doing so, but it is fantastic to get external recognition in receiving such a prestigious award.

Vincent Liu, Asia Treasurer, Managing Director, General Electric Capital

treasury achieve its goals and that must always be remembered as the profession evolves."

Receiving an award was also seen by winning teams as being a fantastic chance to further push the treasury agenda within their organisations. "In the last few years we have been working intimately with other departments to achieve our goals," explains Patrick Tai, Finance Director at CNOOC and Shell Petrochemicals. "Receiving this award will give us the opportunity to further validate to other business units and shareholders that we are doing good work and that should give us the ability to continue to develop more innovative solutions."

The award may also help the voice of treasury carry beyond the company itself. "Externally, with this validation, I hope we can further strengthen connectivity with government agencies and regulatory bodies to move the treasury agenda forward," says GE Capital's Liu.

Receiving an Adam Smith Award can be used as a source of information. At least this was the view of Treasury Today Asia's Woman of the Year, Sonam Donkar, Associate Director Head of Treasury at PepsiCo India. "I feel incredible and really proud to represent PepsiCo, a company that gives wings to women leaders to fly," she says. "I also feel very honoured to



“

I feel incredible and really proud to represent PepsiCo, a company that gives wings to women leaders to fly. I also feel very honoured to represent India, which is at the cusp of a paradigm change in many ways.

Sonam Donkar, Associate Director
Head of Treasury, PepsiCo India

represent India, which is at the cusp of a paradigm change in many ways. Historically we have seen that the gender ratio in the country is skewed and that gender bias exists, meaning opportunities for women are very limited. This is beginning to change though and I will carry this award and message back to fellow female professionals in India and hopefully it can inspire them to continue to chase their dreams.”

Wall of fame

Treasury Today Asia will be presenting the individual case studies in detail as part of the forthcoming Adam Smith Awards Asia Yearbook. In the meantime, here is a taster of what will be included.

The headline category is the Top Treasury Team Asia award, which is open to any treasury team who has developed solutions to tackle a multitude of challenges, added real value to the overall organisation and raised the bar for treasury operations globally. The winner of this prestigious award in 2016 is the General Electric Capital Asia treasury team based in Hong Kong, Delhi, Singapore and Shanghai.

General Electric has always been amongst the leaders in treasury management practices, covering a large franchise in

Asia with diversified business requirements and geographies. With presence in five countries across eight cities in Asia, the regional corporate treasury team has been providing critical support in assisting General Electric's businesses overcome complex cross-border rules and regulatory challenges in this part of the world.

However, with the recent divestment of a significant portion of the General Electric Capital business and the strategic acquisition of Alstom's thermal, renewables and grid businesses, the company has had to relook at simplifying their treasury management practices and embark on a transformation journey in 2015 through 2016 and beyond. The goals: enhance cash planning, forecasting and reporting; simplify banking through consolidating partners and enhancing bank infrastructure; streamline collections and disbursements.

To achieve these aims, the treasury team has worked on a range of big projects that included building a new Asia shared services centre (SSC) in Shanghai, developing pioneering cross-border liquidity structures, creating an automated single platform solution for FX payments, driving greater working capital efficiency, centralising the transaction processing centre and more broadly helping the company thrive in a period of restructuring.

The work of the General Electric team is truly at the forefront of innovation through the use of market-leading solutions, logical execution and business ownership. The company's new multi-faceted treasury structure also paves the way for a more robust, nimble, and agile treasury function to support the wider General Electric enterprise on an ongoing basis.

Technological revolution

Another notable winning solution was that of Alibaba in the Harnessing the Power of Technology category. Much has been made of how many treasury operations in Asia still rely on spreadsheets to manage operations. But, with rapid business expansion, a complex treasury infrastructure, resource constraints and the need to be agile, Alibaba could no longer rely on such primitive technology.

The Alibaba treasury team therefore decided to develop a treasury management platform in-house. The treasury management intelligence (TMI) platform is a web-based treasury management solution which provides cash visibility, transaction based liquidity, investment and financing management systems, with standardised operation process controls in place and support for management decision-making.



Comprised of several key modules including a management dashboard, liquidity and cash forecasting, investments, financing, transaction and auto accounting and a mobile approval function, the solution is all-encompassing. Also, through offering multi-banking, automation, real time based data analytics, secure and reliable technical infrastructure, and a user-friendly interface, the solution perfectly fits the ever-changing needs of the treasury.

Innovation agenda

The One to Watch category aims to highlight those that may shape the future of treasury. Quite often these are at the cutting edge of innovation and highlight real ingenuity. This year was no different and Intel's Asia treasury team based in Penang, Malaysia have created something very special.

Intel historically, for numerous reasons, had a low take-up of its early payment programme. The company, however, was sitting on large pools of liquidity earning low interest yield due to the market interest rate environment. Intel therefore wanted to implement a more flexible and attractive early payment solution that suppliers would want to participate in and which would generate higher returns on Intel's excess cash without taking additional risks.

To achieve this the treasury has re-engineered its early payment discount programme. The key to this has been the use of an innovative digital marketplace that has enabled Intel to provide liquidity support to their supply chain whilst driving significant returns on excess capital without any credit risk.

The real significance of Intel's early payment programme is in the results. Intel approved pilot suppliers' bid for invoices at discount rates which were approved for payment early by Intel and still generated an average return several multiples higher than the heritage in-house programme during the first pilot launch.

Facilitating growth

Treasury is now much more than a back office processing centre. The function has become truly engaged in how the business operates and in facilitating further growth. The winning Best Foreign Exchange Solution from Hong Kong-based airline Cathay Pacific perhaps highlights this best.

The airlines' solution is all about giving Cathay Pacific's customers choice when paying for bookings in a currency other than Hong Kong dollars, the airlines' home currency. It saw Cathay Pacific review its existing global payments processes, which resulted in the implementation of cheque

outsourcing and lockbox solutions across suitable geographies. This has enabled the treasury to automate the high volume of online currency conversions from its customers.

The project is part of a three-phase, multi-year deliverables roadmap to prioritise the implementation of solutions for treasury management enhancements, payment outsourcing and online payment card needs.

Pushing the boundaries

As these few short case studies highlight, winning an Adam Smith Award comes from challenging the status quo and pushing the limits of the treasury profession. But it can also come from pushing the limits of societal norms and breaking glass ceilings. This is epitomised by the 2016 Treasury Today Asia Woman of the Year, Sonam Donkar, Associate Director Head of Treasury at PepsiCo India.

Sonam is living proof of how perseverance, drive and passion can break down barriers and remove glass ceilings. Her journey has been a roller-coaster ride from growing up in difficult conditions to becoming a teacher at the tender age of 14 and graduating from the University of Delhi, despite facing real financial difficulties. She joined PepsiCo in May 2013 and in less than 18 months was promoted to Associate Director – Treasury Head where she has led numerous regional treasury initiatives and cross-functional projects to enhance efficiencies and improve visibility.

Professionally, Sonam has mentored trainees, management and summer interns and trained her young managers into well-rounded treasury professionals, nurturing potential candidates and ensuring they consistently exceed in their performance. Over two years, her team has been recognised with at least eight awards for their performance excellence.

Are you at the cutting edge?

The class of 2016 has set a high bar and we challenge you to do better. This is what the Adam Smith Awards are all about: recognising the creativity and ingenuity of the treasury community, and in doing so, inspiring treasurers (and their banking and technology partners) to think creatively and develop even better and more innovative solutions.

Treasury Today Asia will again be running the Adam Smith Awards Asia in 2017 and nominations open in mid-June this year. We look forward to receiving your submissions and seeing once again the very best the region has to offer.

2017: expecting the unexpected

Last year was characterised by dramatic world events and considerable uncertainty – and these themes could continue to dominate the treasurer's agenda in 2017. From political events to plugging the trade finance gap, what will treasurers be focusing on in the coming 12 months?

It's fair to say that 2016 was something of a rollercoaster ride for treasurers around the world. As such, when asked to predict what shape 2017 will take, the word that first springs to mind is uncertainty. The events of 2016 will certainly lead to an adjustment for many in the year ahead. Treasurers will be keen to understand the impact of last year's political and other developments, while monitoring new events with renewed caution.

At the same time, however, the core priorities of corporate treasurers are the same as they have always been. A recent survey by Ovum found that treasurers' priorities in 2017 included managing liquidity (a priority for 50% of respondents), cash visibility (27%), managing FX and credit risk (39% and 31% respectively) and data analysis to improve decision making (36%).

While the repercussions of recent and upcoming world events will loom large in the coming year, treasurers will continue to focus on the fundamental components of the job – and to ask how developments in technology can support them in increasing efficiency, reducing costs and making effective decisions.

Changing political landscape

Where politics is concerned, the last year has been nothing if not surprising. On June 23rd, the world was shocked by the UK's decision to exit the European Union. More was to follow with Donald Trump's election victory in November, as well as the resignation of Italian prime minister Matteo Renzi in December, following the resounding defeat of his referendum on constitutional reforms. Following this wave of political upheaval, treasurers around the world will be watching events closely in 2017 – particularly the upcoming elections in France, Germany and the Netherlands.

"With the geopolitical changes that are happening, we see that trade agreements that are being proposed will have an important impact on what 2017 – and beyond – is going to look like," says Venkatesh Somanathan, Global Head, Supplier Finance Solutions at Deutsche Bank. "We are living in a period of slower economic growth, with some headwinds on the horizon, which means that some of these trade agreements may take some time to batten down. There may be a recalibration or a pivoting of some of these countries into different blocs of agreements."

Interest rates

Recent political events have the potential to impact treasurers in a number of different ways. Speaking after the US election, Daniel Jefferies, Group Treasurer of Equiniti Group, said he will be watching the rates environment closely in 2017, particularly in light of Brexit and uncertainty in other

economies around the world. "About six weeks ago, before the US election, we were looking at the scenario where base rate was looking to be bumping along the bottom at a few basis points out to 2020 and beyond," he explained. "But even in the last six weeks, we've seen that rate kind of flatten out, and there's more speculation now about rates potentially going up rather than down."

Rick Martin, Group Treasurer at GasLog, is similarly interested in the impact of political events on interest rates in the coming year. "My prediction is that President Trump is going to do a 'Nixon to China' on domestic policy," he says. "Meaning? Just like it could only be an ardent anti-communist like Nixon to welcome China back to the family of nations, it will take a Republican president to push through Congress the sort of fiscal stimulus that President Obama could only dream of. And with that, US rates head up, even a bit more than they already have."

Any such developments in interest rates would be of considerable interest to corporate treasurers. "In the US, with rising interest rates, treasurers will be looking at their cost of funds and when is the right time to tap the market for funding, from banks or through bonds," notes Matt Tuck, Head of Global Transaction Banking at Barclays Corporate Banking. "The as yet unknown impact of Trump is also hampering clear decision making."

In Europe, meanwhile, Tuck says that investment decisions are becoming harder to make in light of forthcoming elections in Germany, France and the Netherlands, alongside the impact of the UK's approach to Brexit on the wider economy and trade flows. "Whilst low interest rates in Europe seem to be here for the foreseeable future, the volatility created by unknown political outcomes will be weighing on treasurers' minds, with continued uncertainty around FX post-Brexit," he adds.

Funding

The changing political environment may also affect companies' funding decisions. While different companies have different priorities, Tuck says that a common theme has been to renew banking credit facilities early – in some cases very early – in order to lock in funding/backup at favourable margins and attractive structures.

"Issuing debt in the capital markets will also be at the forefront of treasurers' minds; despite higher USD rates, long-term debt is still historically very cheap," he says. "Treasurers are also very interested in new digital applications to improve processes and automation of cash management and trade. Part of this has been driven by some organisations employing smaller treasury staffs, with treasurers (like professionals in many industries) trying to do more with less."

The treasurer's view

An Asia-based treasurer identified the following topics as areas of concern in 2017:

- **Europe.** “Europe has several elections which have the potential to cause significant disruption to Europe and the euro,” the treasurer said. “What impact would Marine Le Pen have as French president? What if the Netherlands votes for the anti-EU candidate? What about Germany?”
- **Hedging.** The treasurer pointed out that there are many risks to hedge in the current environment – a task which may be made more challenging as a result of the move towards central clearing, as well as the higher costs and reduced availability of risk management tools.
- **Funding.** In this environment, ensuring an adequate supply of funding will be key – a task that may present some challenges due to regulatory changes which make lending too expensive for banks. The treasurer also noted that “the rising interest rate environment (if, indeed, that is the consequence of Mr Trump’s election) will make bond financing more expensive and scarcer.”
- **Market turbulence.** The treasurer commented, “With all the changes in the markets due to regulations, we are likely to see more cases of markets failing. The sterling flash crash a few weeks ago was potentially the first sign of a – potentially worrying – trend. If, in fact, it was caused by banks withdrawing liquidity from the FX market and being replaced by hedge funds as providers of liquidity, then we can expect more cases of markets ceasing to function as algo traders dominate and abandon markets at the first sign of stress.”
- **Cash management.** The treasurer also noted that cash management may have to be rethought. “The prospect of being charged for the privilege of leaving our cash with a bank changes one of the most fundamental parameters of cash management. The potential death of tools such as notional pooling does not help. At the same time, however, fintech may finally deliver alternative ways of paying suppliers and moving cash.”

Managing political risk

After the events of 2016, treasurers will be unlikely to make any assumptions about the outcome of upcoming elections and other political events. Nevertheless, predicting and mitigating political risk is a considerable challenge.

Paul Taylor, Managing Director, Regional Sales Head, GTS EMEA at Bank of America Merrill Lynch, points out that companies have different levels of exposure. “Multinationals with a broad exposure across multiple national, legal and tax jurisdictions have been reviewing their banking arrangements,” he says. “They are probably less keen on dealing with large numbers of counterparties now, because that’s more risk to manage. So they are looking at consolidating banking providers. They want very certain statements from their providers that those banks still plan to be there, and that they have a strategy in place to cover any sort of dramatic political challenge.”

Supporting trade

The trade finance gap is likely to be an important consideration this year: the Asian Development Bank (ADB’s) 2016 Trade Finance Gaps Survey identified a trade finance gap of \$692bn in developing Asia, including India and China.

Somanathan points out that this gap slows down trade growth. “You can attribute this to various things – the commodity cycle is one, but we also see that regulatory expectations applying to financial institutions increasingly require them to do a lot more in order to continue to do trade finance.

“While some banks address this by investing in technology and people, some others find it easier to limit their presence. Rather than being present in more countries, they find it profitable to get back to their home markets and focus on a

smaller number of countries. This kind of response could further accentuate the problems which are slowing down trade growth.”

As such, Somanathan says that 2017 could be a crucial year in seeing how these trends play out. “The supply of trade finance to support trade might be something that we need to watch out for during 2017 – how it pans out, and how the market players are responding to these changes, will determine how we come out of this downward cycle.”

Automation, security and technology

Mark Smith, Global Head of Liquidity Management Services at Citi, says that investing in automation and security will be another priority for treasurers in 2017 – not only as a means of achieving efficiency gains, but also to increase the security of treasury operations. Last year’s high profile cyber-attacks have not gone unnoticed by treasurers, and many will be putting measures in place to minimise the risk of similar attacks on their own businesses.

“Automating manual processes brings a number of different benefits,” says Smith. “These include reducing errors and achieving a consistency of approach, as well as greater security compared to manual intervention. Automation also frees up different members of the corporate treasury team to focus on other areas, such as risk management and regulatory change.”

Meanwhile, treasurers will be monitoring developments in technology and gauging which opportunities can be leveraged. “There is major awareness of disruptors such as fintech and blockchain, and appetite to learn more, but resource and funding is limited,” says Mitko Iankov, Head of Market Development – GTM Europe, Thomson Reuters. “We expect corporates to embrace big data in a much more

2017: what's on the agenda?

Bank of America Merrill Lynch has noticed five broad themes emerging from their client discussions around the world. Here, Paul Taylor, Managing Director, Regional Sales Head, GTS EMEA, Bank of America Merrill Lynch summarises what these are:

1. **Back to business.** I feel that for many corporate treasurers, the last few years have been about regulation, responding to change and addressing financial risk. A lot of people are saying that they have realised this is the new reality: the world is constantly changing, and the changes can be quite dramatic, as we've seen this year. But they are realising that they can't live in obedience of that and are focusing on new projects.
2. **Staying alive.** Treasurers want to make sure they are managing compliance risk, political risk, regulatory risk, technology risk and counterparty risk. For example, they have seen several of their banking counterparties exit markets, products and clients this year. As such, they want to ensure that their banks will still exist – and that they will still want to continue serving them as clients.
3. **Increasing efficiency and reducing cost.** In the last few years, we've seen a lot of treasuries centralising and adopting payment factories, shared service centres and in-house banks. We've people looking at the working capital cycle and figuring out how their companies can become more efficient. We've also seen more use of solutions such as e-procurement, virtual account management and supply chain finance. These are rapidly becoming core solutions, and increasingly, treasurers are proactive about using them.
4. **Supporting growth.** With companies getting back to business, we have seen a big pick up in the M&A cycle in 2016. We've had a lot of conversations in the pre- and post-M&A integration space around treasury, with companies which are looking at acquisitions asking how they can get the maximum benefit from that integration.

At the same time, companies are moving into new markets and are dealing with increasingly global client bases. As such, they want a treasury set up which is geared towards easy market entry and easy treasury integration. This is an element of the treasurer's life which might have seemed somewhat exotic five or ten years ago, but which is now very much part of the job.

5. **Predicting the future.** Treasurers are deluged with buzz terms such as fintech, blockchain, bitcoin and dematerialisation. But they are concerned about investing too early because, as yet, there is no interoperability between these solutions and no industry standard. They don't want to back Betamax in a world of VHS; and on the other hand, they don't want to miss out completely when others may be benefitting. The challenge is to be able to predict the future, and we find many clients coming to us for our insights, for validation, and, increasingly, to adopt or pilot those solutions.

comprehensive manner, by tagging and organising internal data, sourcing data externally to complete the picture, and by recruiting data scientists that can help take the corporate to the next stage of their digital evolution (Industrial 4.0)."

Other areas to watch

Aside from the changing political landscape and developments in technology, the following trends and topics are also likely to be significant in 2017:

Regulatory change. In keeping with the last few years, regulatory change continues to be a major area of focus – and this is set to continue in the coming 12 months. "One key theme for 2017 is managing regulatory change – and within that, tax changes," comments Smith.

"This includes changes such as BEPS, the anti-tax avoidance directive and Brexit, as well as potential changes to the North American Free Trade Agreement (NAFTA) following the election of Donald Trump in the US. It also includes regulatory changes around capital controls, including changing capital restrictions in China."

Relationships. Jefferies says that in the current low rate environment, both banks and corporates are looking to get the most out of their relationships. "Certainly that's what we do as well. We're trying to align ourselves to the way that the banks are operating in order to develop the deepest

relationships we can in areas such as operational efficiency, rates environment and foreign exchange."

Role of the treasurer. According to Smith, treasurers are continuing to be more engaged in driving business decisions on topics such as how and where best to set up working capital frameworks and liquidity pools. "I certainly sense there is more engagement at a very early stage of setting up a growing business," he says. "The treasurer, in many cases, is one of the first people sitting around the table and talking about the foundation in setting up the business, which is an exciting place for treasurers to be."

Conclusion

While the core priorities of treasurers continue to be on managing cash, liquidity and risk effectively, the events of 2016 mean that treasurers are likely to be entering January with a greater sense of caution about the coming year. If treasurers took just one message from last year, it would be to expect the unexpected.

As Smith concludes, "There is an element of continuation in many of these themes. A number of new risks have come up over the last year, prompting companies to make sure that day-to-day activities are as automated as possible, and that their processes, controls and governance are fully bedded down. As different focus areas come along in 2017, it will be up to treasurers to make sure they are best placed to handle these."

Driving e-commerce across industries

Global e-commerce continues to grow, revealing new opportunities for businesses and their treasury departments across the world. Asia Pacific is now the largest e-commerce market globally, offering a diverse mix of economies each with an enormous amount of e-commerce potential. In this article, Citi's Treasury and Trade Solutions team in the region discuss the growth opportunities for companies within the expanding e-commerce space and how they are helping clients to leverage the reach of the internet and build more modern and efficient treasury operations.



Munir Nanji
Asia Pacific Sales Head,
Treasury and Trade
Solutions, Citi

There has never been a better or more necessary time for treasurers in Asia Pacific to start thinking about e-commerce. The region is already the largest e-commerce marketplace in the world and according to Munir Nanji, Asia Pacific Sales Head, Treasury and Trade Solutions at Citi, it could in many markets be described as the next frontier.

Today the fastest rates of digital adoption are seen in Asia's emerging markets, where the falling cost of internet access and mobile devices are now driving exponential growth in all forms of e-commerce. Just over 20 years after US internet giant Amazon delivered its very first parcel, the world's largest e-commerce business is no longer headquartered in Silicon Valley, but is another company based in Hangzhou, China.

"In China the biggest company in this space is Alibaba – and that business alone is bigger than the entire value of US e-commerce," says Nanji. "India has also just surpassed the US for the number of people with internet access. So I think you have got to be in Asia if you are in e-commerce – otherwise you are not on the map at all."

Yet, Nanji believes that despite the advanced state of e-commerce penetration in the region, there is still plenty of room for growth in emerging markets and even in Asia's more affluent economies. "E-commerce in India has an incredible amount of potential, but also faces a lot of challenges." In other parts of Asia meanwhile, e-commerce is hampered not by infrastructure but by the continued prevalence of cash as a payment method. However, one by one these barriers are beginning to break down across the region.

| "E-commerce in India has an incredible amount of potential, but also faces a lot of challenges."

"In India we see a lot of issues around regulation," Nanji says "and there is a lack of fibre optic connectivity in some places too; while logistics can be a nightmare. But the way we pay is also an area of evolution here. In the US and Europe the use of credit and debit cards is widespread, but in Asia this is still growing in acceptance."

"But internet access and mobile technology are big drivers of e-commerce, and it is forecast that there will be 117 smartphones per 100 people in Asia by 2017. That is going to drive online purchasing; it is going to drive greater use of e-wallets and the use of other mobile payment methods by consumers."

The growth of e-commerce and the digitisation of business processes to support it present a myriad of opportunities for corporate treasurers. At a high level, digitisation offers a means to improve the way payments are made, received and reconciled by the treasury department, driving better management of working capital and liquidity. With more commercial activities shifting into digital channels, treasurers also have the chance to begin leveraging analytical tools such as big data.

However, Nanji emphasises, the opportunities – and challenges – that e-commerce presents to treasurers in Asia Pacific will not be the same at every company. The e-commerce trading model can be subdivided into a number of spheres, he points out. There are companies creating digital marketplaces, payment tools, online games; companies providing telecom and web hosting services; and companies investing in fintech. Across these spheres, the bank often sees quite different demands from its clients.

"Payment reconciliation and foreign exchange are key for online travel companies like Ctrip or Traveloka for example, and so we see a lot of demand for things like virtual card solutions from companies in this space. But then you also have retailers in China, meanwhile, who are seeing increased demand from consumers to be able to pay using mobile messaging apps like WeChat, and so they often require back-end solutions so that they can support these new consumer payment methods."

This is where Citi's expertise becomes a useful resource for many of the bank's corporate clients. As e-commerce evolves into all-commerce – or all areas of commerce, at least – companies need partners that are able to understand, not only the digitisation and e-commerce opportunities within each country or market, but also within their particular business sector.

Across key sectors like industrials, healthcare and consumer goods, non-bank financial institutions (NBFI), technology, media and telecommunications, and consumer and healthcare, Citi can offer specialist advice and tailored solutions to clients. These are services that might make all the difference for those looking to leverage the financial and operational efficiencies afforded by e-commerce.



Deborah Mur
Asia Pacific Industrials,
Energy, Power and
Chemicals Sector Head,
Treasury and Trade
Solutions, Citi

A new frontier

One example of the transformative impact e-commerce is having on Asia Pacific businesses and the treasuries that support them can be found in the industrials sector. The companies operating in this space are a diverse bunch. Some, like the airlines and hospitality and services companies, are not new to e-commerce, having conducted a majority of sales made through electronic channels for many years now. But for many other business types – shipping companies, aviation suppliers – buying and selling online is something that is only just now beginning to take off.

“It is relatively new, but e-commerce is a growing channel for these companies,” says Deborah Mur, Asia Pacific Industrials, Energy, Power and Chemicals Sector Head, Treasury and Trade Solutions at Citi. “We are seeing emerging B2B online purchasing by companies; we are seeing companies setting up procurement websites with their suppliers and, in some instances, third parties – and we are being asked for solutions.”

More and more of these companies are finding that e-commerce can be just as much of an enabler for business-to-business (B2B) transactions as it is in the business-to-consumer (B2C) world. Utilising web channels for procurement, for instance, promises similar operational efficiencies B2C enjoy: the ability to reach more customers faster and at a lower cost.

Greater operational efficiency is also being seen in the financial operations of these industrial e-pioneers, notes Mur. The industrial aviation supplier selling goods to suppliers online, for example, often boasts a faster payments cycle, better days sales outstanding (DSO) metrics, and higher rates of automation in the processing and reconciliation of payment transactions. Treasurers at these types of companies have an important role to play in assisting the procurement department. For example, they will want to ensure, first and foremost, that the payment methods being offered through e-commerce channels are the most appropriate methods for customers and the business. And how that is perceived still tends to vary market-by-market and company-by-company, Mur says.

“In some cases, companies will have an online B2B marketplace, but are settling transactions offline using traditional payment methods,” she says. “Is that the most efficient way for these companies to operate? We think we can help our clients do better.”



Rohit Jamwal
Asia Pacific Consumer
and Healthcare Sector
Head, Treasury and Trade
Solutions, Citi

The next one billion

In the consumer goods sector, e-commerce has been a disruptive force for some time and across Asia it is becoming a ubiquitous feature of the landscape. Indeed, for many of Citi's clients this sector is now the primary focus of their growth plans. “E-commerce is centre of our clients' Asia expansion strategy and, as a channel, it has experienced the highest growth in the last five years,” explains Rohit Jamwal, Asia Pacific Consumer and Healthcare Sector Head, Treasury and Trade Solutions at Citi.

“E-commerce is centre of our clients' Asia expansion strategy and, as a channel, it has experienced the highest growth in the last five years.”

The segment that has seen the highest adoption of e-commerce is the fast-moving consumer goods (FMCG) sector, in particular the food and fashion industries. Increasingly e-commerce is taking a greater share of the overall market. In the largest markets in Asia FMCG online retail now accounts for between 7-10% of overall sales, and is growing between 25-40% year on year.

Jamwal says that there is a lot of talk in the sector today about the ‘Next One Billion’, a metaphor for the future of the internet – both the exponential growth in connectivity in emerging markets and the growth of next-level technology in mature markets. This trend raises a number of issues for businesses, says Jamwal. “For example, how to approach online content versus distribution in rural areas, the need to invest in partnerships with distributors to provide “last mile connectivity” and support the business – in respect to stretched DSO and days inventory outstanding (DIO) – by providing digital methods of collections.”

India, for instance, still sees 75% of e-commerce payments conducted through “cash on delivery”, something that presents significant logistical problems for businesses, not to mention collection inefficiencies. Many companies in this sector are therefore looking to the growing uptake of digital wallets in these markets as an opportunity to eliminate such inefficiencies and provide impetus to growth of e-commerce in India.

Citi is partner to corporate treasury for a “go to market” strategy, says Jamwal. “We advise clients on best in class solutions in the consumer sector,” he says. “We show them what works and what does not, what are challenges and risks embedded in each e-commerce model, what is possible in each regulatory environment. Citi leads in offering advice for best in class solutions as well as helping our clients managing risks around their online channels, cyber security in tandem with the business' growth.”

This includes providing treasurers with solutions for handling collections online and in-store, legal entity and account structuring, reconciliation using Citi's Working Capital Analytics and FX and Risk advisory solutions.



Nick Howden
Asia Pacific Technology,
Media and Telecoms
Sector Head, Treasury and
Trade Solutions, Citi

Disruption and growth opportunities

In contrast to the nascent trends seen in the industrial sectors, e-commerce has long been a disrupter for Asia's technology, media and telecommunications businesses. "The change e-commerce is driving across businesses in these industries shows no sign of abating soon," says Nick Howden, Asia Pacific Technology, Media and Telecoms Sector Head, Treasury and Trade Solutions at Citi.

"It is forecasted that the gross merchandise value (GMV) of goods and services purchased online will increase five-fold over the next ten years," he says. "Technology, media and telecom businesses will be major driving forces underpinning this growth story. We see digital services including content streaming, cloud and data as being pivot growth areas. Not only is the overall value of e-commerce growing significantly, but high growth disrupters demonstrate the proportion of sales made online is gaining pace faster than offline channels."

In Asia, companies have been driven to diversify models in established markets to capture more sales and continue to be relevant to customers, whilst emerging markets are a key focus for expansion and as testing grounds to try new products. Many are interested in the possibilities of stored value solutions including e-wallets which can have a range of potential applications and a number are branching out into point of sale (POS) and fintech payment solutions as well.

Howden says that enabling a smooth checkout process for a mobile application is one of the hottest growth areas to increase sales for his clients. In China, he points out, m-commerce is growing at an astonishing rate of 70% year-on-year. Much of this growth across Asia is driven by generational "leap frogging" as people move onto the internet for the first time through their mobile phone, as opposed to a desktop, due to the falling cost of smartphones, lower cost of data, and growing connectivity of such devices.

Cash application, reconciliation and using standardised technology interfaces with bank partners are probably the most important areas for treasurers respond to business growth opportunities quickly. A primary challenge for treasurers, he says, is access to and analytics of data. "For example knowing a customer's payment preference in a particular country can help the business grow but the payment data generated will influence cash application, credit control and reconciliation processes. Companies are asking for standardised data in order to automate order fulfillment processes in as close to real-time as possible."

There have been some significant developments in this area in recent years. One example is faster payment schemes, such as Singapore's Immediate Payments G3 scheme, which was launched in 2014 and supports credit transfers and direct debits with a mainly C2C retail application at the moment. Similar payment infrastructure initiatives have also been seen in Australia and India.

On top of upgrades to ageing payment infrastructures, treasurers in this sector have also been driving standardisation. Lean treasury teams in the tech sector are always facing pressures to centralise, consolidate and standardise systems and processes.

However, geographic expansion can sometimes result in a high degree of inefficiency as banking relationships and the different processes associated with each relationship threaten to multiply.

One thing Howden says his clients really value from their relationship with Citi, is the ability to roll-out new businesses to new markets in a relatively short space of time. Advances in bank-to-corporate communication processes, like the industry's adoption of the ISO 20022 XML standard for payments and reporting is certainly an important facilitator of this trend. But treasurers also want to feel confident they will get a consistent user experience and data set however they choose to access services and in whatever market they operate in.

This, explains Howden, is of crucial importance for the big billers in the technology, media and telecom sector. "Very lean organisations are focused on the next thing: they don't want to spend time and IT resources connecting with different banks using different standards," he says. "Choosing a bank with a broad footprint, and consistent network, enables standardisation. The use of virtual accounts for cash application and reconciliation is common. Whilst for outgoing payments, if I send an XML payment file and something goes wrong e.g. the beneficiary account number was incorrectly entered during an online registration process, then I need a standardised report explaining what went wrong. E-commerce companies typically have huge volumes of payments so reject rates can be a huge operational issue. Standardisation helps to identify what went wrong faster and with less manual intervention."



Damian Macinante
Asia Pacific Non-Bank
Financial Institutions Sector
Head, Treasury and Trade
Solutions, Citi

The rise of fintech

Given the speed and ease with which financial information can now be transmitted digitally it is perhaps little surprise that another of the key sectors in Asia Pacific where Citi is seeing e-commerce taking a very strong hold is financial services.

Damian Macinante, Asia Pacific Non-Bank Financial Institutions Sector Head, Treasury and Trade Solutions at Citi, says that Citi's clients in the non-bank financial sector have adopted e-commerce business models across the board in recent years. It is a trend that has afforded many different types of financial services companies the ability to re-align processes that would otherwise be hampered by manual processes.

"It really started with the fund managers and brokers," he says. "They were the ones who first saw how digitisation was going to change the game. They saw an opportunity to reach a far bigger market, and the readiness of their customers to move to trading or investing online rather than of picking up a telephone, for example."

If you look at trading trends we see continued electronification of trading across all asset classes and as a result as electronic trading increases, average trade size decreases and number of trades per day increases,” he adds. This does however vary depending on the sophistication. At present, approximately 90% of global equity trades are executed electronically versus 20% of OTC derivatives. Citi expect this to increase to 75% by 2020.

For these types of companies, it also provides an avenue for reducing costs for the same service usually offered via direct contact or intermediaries. The online products of insurers, for example, can be made available at a substantially lower cost, especially when agents or brokers are disintermediated. This in turn can popularise householders’ insurance, health and accident policies etc. “If available online and at a lower cost, people may start buying cover they traditionally didn’t have or thought was unaffordable or excessive,” says Macinante.

“We support our clients in this space by doing a lot of work on analytics, helping them to get a clear view of all the transactions coming through our system.”

“Take fund managers, for instance,” he says. “They are now able to articulate immediately what their products’ performance is for their funds. That allows investors to configure their portfolios to local regulations through the platforms themselves where historically they would have had to have spoken to an advisor who is abreast of all the new regulations. Now they have the ability to do it themselves.”

Of course, in order to leverage all the increased flows and additional information obtainable today through digital channels, companies require sophisticated analytical tools without jeopardising governance and controls. To meet this need, Citi offers analytical tools that deliver enhanced visibility across banking processes, helping treasurers to achieve greater operational efficiencies through the conversion of manual processes and greater end-to-end automation.

“We support our clients in this space by doing a lot of work on analytics, helping them to get a clear view of all the transactions coming through our system. This then helps clients to operate straight through and see how they are represented in multiple countries and from a cash management perspective, for example, conduct comparisons between payment mechanisms.”

Citi also provides risk management tools. “A monetary transaction is taking place and our clients need to have control over that,” he says. “It is important then to offer clients the ability to have oversight on the transactions they are generating and enable them to use our system to automatically identify payments that are not part of their normal transaction flows. This allows them to have a second line of defense in case there are internal breaches.”

Citi Treasury and Trade Solutions (TTS), provides integrated cash management and trade finance services to multinational corporations, financial institutions and public sector organizations across the globe. With a full range of digital and mobile enabled platforms, tools and analytics, TTS continues to lead the way in delivering innovative and tailored solutions to its clients. It offers the industry’s most comprehensive suite of treasury and trade solutions including cash management, payments, receivables, liquidity management and investment services, working capital solutions, commercial and prepaid card programs, trade finance and services.





Congratulations to Our Winning Clients!

Citi Clients Winner List:

Overall Winner

- Top Treasury Team with General Electric
- Best Liquidity Management Solution with Sanofi
- Best Trade Solution with Lenovo
- Best Card Solution with Hanson
- Best AR/AP Solution with General Electric
- Best in Class Benchmarking with Mars
- Best Solution in China with Amway China
- One to Watch with Intel
- Judges Choice with Amway India
- Woman of the Year with PepsiCo

Highly Commended

- Top Treasury Team with Procter & Gamble
- Best Liquidity Management Solution with Parker Hannifin
- Best FX Solution with General Electric
- First Class Relationship Management with Lenovo
- Best SWIFT Solution with Wilhelmsen Ship Management
- Best in Class Benchmarking with Fonterra
- One to Watch with Nan Shan Life Insurance
- Judges Choice with Mahindra and Mahindra
- Woman of the Year with Hewlett Packard Enterprise

Supply chain centres

Optimising supply chain activities is a priority for many companies in Asia. As well as centralising procurement processes, some companies are seeking further efficiency by setting up global supply chain centres which can centralise both procurement and treasury activities.

For companies in Asia, managing supply chain activities effectively is an essential component of a business' success. Companies which do not perform well in this area can be at a considerable disadvantage when it comes to reducing costs, minimising risk and ensuring the quality of goods.

"Companies increasingly recognise their supply chain as a competitive advantage and acknowledge that failure to optimise its performance can lead to extra costs such as lead time, flexibility, quality, lost sales and added risk in a global environment," comments Hari Janakiraman, Head of Core Trade at ANZ. He notes that there is "increasing recognition of the relationship between optimised supply chain management and financial performance".

In order to manage this area effectively, companies are adopting different approaches tailored to their industry profile, customer needs and size, Janakiraman says. "There's no longer a one-sized approach to supply chain management, as product positioning and distribution is becoming more decentralised into multiple local or regional centres," he adds. "Adoption of this model enables global synergies, while also remaining sensitive to local requirements."

Locations

While the concept of supply chain centres or hubs is nothing new, the way in which companies approach this area is evolving – as are the geographical locations being chosen for centres. Supply chain centres tend to be closely associated with global manufacturing locations.

"Typically many of these manufacturing locations are in Asia – especially in countries such as China, Vietnam, India, Thailand, Malaysia and Indonesia," says Venkatesh Somanathan, Global Head, Supplier Finance Solutions at Deutsche Bank. "We are also seeing a lot of new manufacturing companies coming up in Eastern Europe, while agreements like NAFTA have created significant manufacturing bases in Mexico. The architecture and the formulation of global supply chain centres have basically been to map this location out."

Somanathan says that in addition to existing supply chain hubs and logistic centres, newer centres are also emerging in other locations. "We've seen the emergence of Dubai within the MENA region, while in Asia, Sri Lanka is positioning itself as the critical supply chain hub between the Middle East, Europe and Africa on one side, and the Asian bloc on the other."

Somanathan says that companies need to locate their supply chain centres in jurisdictions which have open economies and which are relatively close to the relevant supplier communities.

"For example, many of the largest industries around the world have suppliers based in China," he says. "As well as controlling the quality and quantity of output, it is also essential to speak to suppliers in their local languages in order to understand their challenges and concerns and avoid any shocks being transmitted into the supply chain."

This doesn't mean that centres are needed in every country, however. Somanathan says that a global supply chain centre based in Hong Kong can be used to talk to suppliers in Korea, Japan, China and Taiwan in the same time zone and in the relevant languages. "If there are any issues or bottlenecks downstream, companies can be quick to react and do their part in addressing those issues," he explains.

In addition, Somanathan says that different industry sectors may have different requirements when it comes to setting up global supply chain centres. For example, many garment and textile companies based in the US and Europe have suppliers located in Vietnam or Bangladesh.

"It is essential for them to have somebody on the ground to assess the quality and quantity," Somanathan says. "In order to have that capability, global buyers have inspectors or agents who ensure the quality and quantity and supervise the purchase. It is essential for companies to be close to suppliers – but they don't have to be located in each of these locations."

Combining treasury and procurement

Companies have long been developing techniques and structures to centralise their procurement processes in order to operate more efficiently. Likewise, many companies have taken steps to centralise some of their treasury activities. While these activities have tended to be managed separately, some companies have now developed structures which can be used to centralise both the treasury function and the procurement and sales function.

Michael Vrontamitis, Global Head of Trade, Product Management at Standard Chartered, says that global supply chain centres can combine both the treasury function and the procurement and sales function. "We are increasingly seeing that companies have centralised procurement, they have centralised sales – and they are now moving into these centres which manage not just the treasury piece of it, but also the logistics of the whole supply chain."

Aziz Parvez, Head of Asia Pacific Trade and Supply Chain Finance at Bank of America Merrill Lynch adds, "In some cases, we have seen supply chain hubs develop very closely with the treasury. While treasury may not be involved in the logistics side, treasury is very closely involved in working

capital.” Parvez points out that procurement and treasury can have competing goals in some cases: the treasury might see the benefit of increasing DPO in order to improve working capital, whereas procurement may be focused on getting early payment discounts from suppliers. As such, hubs which combine treasury and procurement can support a more consistent approach.

Benefits of a combined approach

Vrontamitis says that where supply chain management is concerned, the benefits are about optimising the gross profit margin. “Then you get the treasury benefits, which are around managing FX risk,” he explains. “If you are doing all the purchasing and selling into the local market, you sell in local currency and buy in whatever currency is most appropriate, depending on your inputs. You can therefore do all the basic treasury techniques to eliminate and reduce FX risk.”

Vrontamitis notes that companies using global supply chain centres can also manage the leading and lagging in order to take control of the working capital side, as well as building liquidity management structures and structures such as receivables finance or supply chain finance.

Parvez adds that cost savings are a key goal when setting up a supply chain hub. “The more decentralised the set-up is, the higher the cost in terms of both infrastructure and people,

so bringing it all together in one location means saving on the cost,” he says. “This model also increases efficiency: if people are more aligned, there is a more standardised approach in terms of both procurement and financing. Combined with this, companies can then link procurement with the financial part of the supply chain.”

Integration and centralisation

While more companies are reportedly bringing treasury and procurement together in supply chain hubs, in practice this can mean different things to different companies.

Vrontamitis says that such centres can operate using different models where treasury is concerned. “One is a fully integrated model, where the global supply chain centre runs the treasury as well. Then you see centres which see treasury as a functional service alongside.” According to Vrontamitis, companies which have a decentralised treasury tend to opt for the integrated treasury model, whereas companies with a more centralised treasury team may choose to keep treasury as a centralised function.

Parvez says that companies with suppliers in multiple locations may prefer to use the hub model in order to bring in more standardisation and cost control. However, companies with fewer suppliers in fewer locations may continue to use a semi-decentralised model – such as having a hub in China to

Reconfiguring global supply chains

Hari Janakiraman, Head of Core Trade at ANZ, says that the following six trends are driving the reconfiguration of global supply chains across various industries:

1. **Emerging markets as an economic opportunity with simultaneous rising labour costs.** Janakiraman says that emerging markets have had the dual effect of becoming increasingly attractive distribution locations in their own right, while being affected by rising labour costs. “Global dynamics can change the relative attractiveness of these countries as manufacturing locations, but also necessitate the development of distribution capability,” he adds.
2. **Near-shoring and re-shoring supply chain operations.** Janakiraman comments, “A report by the Global Supply Chain Institute found that focusing on short-term cost reductions can neglect the hidden costs associated with an offshoring decision. Hidden costs identified include: (in)flexibility, cost to quality, cost of lost sales and added risks. Optimising the customer service offering and rapid response times by locating near home markets is an important consideration for organisations today.”
3. **Trade agreements focusing on trade facilitation.** With increasing numbers of trade agreements being negotiated globally, Janakiraman says that companies should consider multiple opportunities and challenges. “These include duty expenses, compliance costs and harmonised trade finance (including supply chain finance) procedures between markets to maximise the efficiency of their supply chain.”
4. **Supply chain risk.** According to Janakiraman, the changing nature of supply chain risks includes reputational risk quality and safety, supply disruption/shortages, legal issues, security challenges and regulatory and environmental compliance requirements. “Each company considers its unique footprint and exposure to these risks in the design of their supply chain,” he says.
5. **Digital supply chain evolution.** “Increasing adoption of technology such as RFID, GPS and sensors have enabled business process automation, greater organisational flexibility and enhanced visibility into supply chain and opportunities for data analysis,” Janakiraman says.
6. **Advances in supply chain finance (SCF).** Janakiraman points out that in March 2016, a set of standard definitions were launched for terminology, nomenclature and techniques related to SCF (the Standard Definitions for Techniques of Supply Chain Finance), which was released by a joint initiative of the International Chamber of Commerce (ICC) Banking Commission, BAFT, the Euro Banking Association (EBA), Factors Chain International (FCI) and the International Trade and Forfeiting Association (ITFA).

“This was a joint initiative amongst major bodies in the trade finance community and is an enabling framework for SCF,” explains Janakiraman. “These standardised definitions are intended to support the use of SCF in international and domestic supply chains by creating a consistent understanding of SCF.”

Bridging the trade finance gap with supply chain finance

The adoption of supply chain finance has become increasingly widespread in recent years, with more companies choosing to set up structures in order to benefit suppliers. This is a particularly relevant topic in Asia: the Asian Development Bank (ADB) has identified a global trade finance gap of \$1.6trn, with developing Asia accounting for \$692trn of the gap. The report also found that small and medium-sized enterprises (SMEs) face the greatest obstacles when it comes to accessing affordable trade financing.

Supply chain finance is one type of arrangement which can give SMEs access to the finance they need. Somanathan says that a few years ago, the companies typically adopting supply chain finance structures were in sectors such as garments, textiles, retail and consumer durables. “Increasingly, what we are seeing is that newer industries are also adopting supply chain finance solutions,” he says. “In the last 12 to 18 months, we have seen the entry of companies in mining, tyres, fertilisers, agro-chemicals and aerospace for example.”

Somanathan adds, “Many of these suppliers are SMEs, which are typically also the industries that help create job opportunities, so there is a social angle to it. There is a lot of support from governments and regulators to give further impetus to supply chain financing which will help suppliers’ viability. To further support this, there have been various initiatives from multilateral agencies and even global financial institutions.”

cover Chinese suppliers, as well as a hub in Hong Kong to cover the rest of Asia.

“The biggest obstacle is to understand the regulations around this as multiple countries are involved,” he notes. “Once you move to a centralised location, there could be certain regulations governing the entire process, how the information flow, and how the financing aspect can work.”

Vrontamitis says that while this can be a very effective model from a corporate point of view, it is also extremely hard to execute. He adds, “These centres tend to be in pretty developed locations, with good infrastructure, telecommunications, tax regimes and transparent governments – and in locations which are fairly core and central to the company.”

Challenges

It is also important to note that integrating treasury and procurement can be challenging. “I have a pretty simple view on this, which is it has to be strategic to the company, and has to be recognised as strategic to the company,” says Vrontamitis. “This means that you need senior sponsorship. This isn’t a situation where one day the treasury guy can say to the procurement guy, ‘Why don’t we work together?’ If you want to have a fully integrated global supply chain centre, or a centralised one, you’ve really got to have this sponsored from the top.”

Janakiraman adds that companies setting up global supply chain centres “need to consider tax and transfer pricing mechanisms, given the increasing regulatory sensitivity around these areas.” He also says that companies should consider both direct and indirect costs incurred within the supply chain. “For example, impact on customer service, lead times, potential for lost sales, added risk, quality levels, etc should also be considered in this decision.”

Future developments

As this model matures, companies are continuing to achieve greater levels of efficiency. “One key thing that seems to be improving over time is the technology part of it,” says Parvez. “Companies tend to have a higher amount of integration across their processes, and are moving away from manual processes.”

But despite the work that some companies are doing to unify procurement and financial processes, there continues to be a disparity in the level of automation available in the physical and financial supply chains. Vrontamitis explains, “Some large global corporates are talking about using mass customisation robotics in the factories, which means you can order something online it goes straight to the machine that makes the product without any human intervention, before being shipped to the end buyer and potentially delivered by a drone. That’s what the future could look like for some of these products. In contrast, the data in the supply chain is completely underutilised.”

Nevertheless, Vrontamitis says the bank is improving its analytics capability in order to help clients as part of its ‘Banking the ecosystem’ strategy. “If we can analyse data to improve risk management, and how we extend credit within the supply chain, we think that our clients can benefit from the same kind of information and data. It’s about taking the information you have and creating data pools, being able to merge data well and then use machine-based analytics to improve on it and understand what’s happening with your supply chains.”

This may, in turn, enable companies to gain a clearer view of who they are selling to and buying from, the terms on offer and whether there is scope to work with banks to offer finance. Vrontamitis adds that this involves banks shifting the way in which they think about credit from a backward-looking approach to real-time monitoring and understanding.

Janakiraman says that new challenges and opportunities may emerge in the future for companies designing their supply chains. He notes that the ability to adopt and leverage new technologies such as RFID, GPS and sensors may lead to improvements in areas such as supply chain visibility, analytics and process optimisation. Meanwhile, increasing the harmonisation of definitions related to supply chain finance will enable companies to optimise their working capital positions.

As Janakiraman concludes, “The most effective supply chain strategies support the business strategy. Whether this is product differentiation, price leadership, exceptional customer service or focused markets – the design of the supply chain is what ultimately delivers value for the customer.”



Panda bonds come to life

China is home to the world's third largest bond market, but for international corporations, it has traditionally been underutilised as a source of financing, despite its great potential. This is beginning to change. Here we take a look at the history of the Panda bond market and its growing appeal to corporate borrowers.

It was hard to find many good news stories concerning China in 2016. The economy is, of course, undergoing a significant shift and growth has slowed somewhat as a result.

A consequence of this has been Chinese policy makers clamping down on some of the regulatory progress made in recent years, most notably, the introduction of 'window guidance' to limit corporates' cross-border cash flow.

However, at the same time, there have been significant developments in other parts of the economy. Most notably, the growing attractiveness of the Chinese onshore debt market to foreign companies. Indeed, in 2016 the Chinese Panda bond market exceeded the offshore RMB dim sum market for the first time, with US\$8.39bn raised onshore in the first seven months of the year alone. It is good progress, but there remains some way to go for it to live up to its full potential.

Young shoots

The first Panda bonds were issued in October 2005 by the IFC and the Asian Development Bank to much fanfare. This followed years of discussions with Chinese government officials, who were worried about the potential impact of the bonds on its currency peg.

Yet the nascent market failed to live up to the initial hype with very few foreign corporates issuing bonds. "Before 2014, only international financial firms and a limited number of corporates were allowed to enter the Panda bond market," explains Ying Gu, Emerging Markets Asia Rates & FX Strategist at J.P. Morgan. "But since last year, the regulators have loosened

policies to allow overseas non-financial corporates and banks, as well as foreign governments to issue Panda bonds. This can go some way to explaining the recent boost in issuance."

Typically, the companies who have issued since the market has opened up can be split into two buckets, says Keith Pogson, Senior Partner at EY Asia Pacific Financial Services. "First are those who want to prove it can be done to encourage others to do so. A lot of the banks who have issued, fit into this tranche as they want to advertise this to their clients." The other group, he says, are those international non-financial corporates that have had a pressing need to raise large volumes of capital in the mainland – but these remain few and far between.

That doesn't mean there isn't a lot of corporate activity in the market. J.P. Morgan research has highlighted that 65% of issuances, weighted by market value, are made by corporates. "Many of these issuers are actually overseas incorporated Chinese companies, 'real' foreign borrowers are still yet to fully embrace the market," says Gu.

German multinational automotive company, Daimler, is the most well-known 'real' foreign company to do so, issuing a one-year RMB500m bond at an interest rate of 5.2% in March 2014. The issuance was seen as a success and Daimler revisited the market in 2015 with a one-year RMB3bn bond to diversify its refinancing base and fund its expansion in China. The company has since also issued a private placement worth RMB4bn this year – the largest single Panda bond for a non-financial business.

The French multinational joins a small number of foreign corporates that have tapped the nascent Chinese onshore bond market.

In early September 2016, French multinational, Veolia, issued its first Panda Bond. Worth RMB1bn (€135m) the deal was the first foray into the market by any French company. Issued via a private placement, the paper bears an interest rate of 3.5% for a three-year maturity and was issued to both Chinese and international investors. Despite the relative low-value of the deal, it presents another significant milestone in the development of the nascent market and highlights that it is increasingly becoming a viable option for companies looking to raise RMB debt.

It is also a significant transaction for Veolia. The company has been looking at numerous ways to raise RMB funds for some time as it looks to satisfy its policy of matching its borrowing currencies to that of its assets.

Claire Bechaux, Director of Treasury at Veolia explains how the company's traditional approach has been to issue Eurobonds and swap the proceeds into RMB. But the company has always had sights on the onshore market and towards the end of last year, the stars began to align. "A lot of our partner banks were talking to us about the Panda bond market and how this was beginning to open up," she says. "At the same time, there were increasing levels of volatility in the offshore RMB market. It, therefore, seemed logical to explore the possibility of issuing a Panda bond further.

"We knew that it wouldn't be an easy process, however, and we made this clear to the CFO when pitching the idea," adds Bechaux. "Yet the benefits of doing this issuance far outweighed the negatives."

Open discussions

To begin the process, Veolia entered into discussions with the Chinese regulator alongside the Bank of China, who had been selected as the Global Coordinator and Lead Underwriter. "It was a very open and transparent discussion and we found the Chinese regulators very willing to hear our concerns and then see how they could help solve these by flexing the rules," says Bechaux.

Most notably, Veolia had questions around certain legal clauses and documentation, as well as the use of proceeds. "We spent quite a lot of time working on this area because the regulators are very keen for the proceeds of any Panda bond transaction to be used to support the real economy," she explains. "If you are looking to take the proceeds offshore then you have to present a strong case as to how this helps the real economy – they want to avoid companies taking advantage of currency arbitrage." In Veolia's case, the proceeds were used to refinance offshore debt that had been used to finance the Group's investments in mainland China.

Bechaux also notes how the fact Veolia issued a private placement simplified the process somewhat and removed some of the hurdles that have put other companies off issuing thus far. "We could use our European IFRS accounts if we issued this way, for instance, and thus removing the need to translate these into Chinese GaaP," she says. "This saved time and reduced the complexity of the transaction and given that this was our first foray into the market we wanted to be successful so it made sense to take this approach and I would recommend it to other companies as well."

The need to obtain a credit rating from a local rating agency can also prove a stumbling block for corporates. However, Veolia found this to be a relatively straightforward process. "We obtained a rating in four weeks and the process was very similar to obtaining a rating from an international agency – albeit with a greater focus on activity in China," notes Bechaux. "And just like the regulators we found them to be extremely professional and very keen to make life as simple as possible."

A worthwhile project

Having issued the bond, Bechaux says that Veolia is very happy with the outcome. "It has been a worthwhile project and we are now in a position to issue in the mainland again by simply drawing down on our existing programme," she says. "This provides us with a lot of flexibility. What is more, the pricing was very good."

Indeed, Bechaux admits that whilst not the most important factor, the pricing certainly gave the treasury extra incentive to issue a Panda bond. "We have options to raise RMB, so we didn't need to go through this intensive process to issue onshore and if the pricing wasn't as favourable we probably wouldn't have at this moment in time. It was the last push."

For Scott Barton, Head of Corporate & Institutional Banking, Europe, Standard Chartered – a key financial advisor on the transaction – this deal will "open up the window to access the Panda market for all corporates around the world". He does note, however, that "Panda bond issuance is in its nascent stage so the process naturally comes in shades of grey and involves elements of careful negotiations. At the end of the day, the cost savings it brings is well worth the efforts to get a programme set up."

An attractive proposition?

Given the markets historical lethargy, what then is driving the recent boost in issuance? In the view of J.P. Morgan's Gu, cheap funding is the primary reason. "Issuing Panda bonds and then swapping CNY into USD using USD/CNH CSS provides more attractive funding costs compared with issuing USD bonds directly." Panda bonds are also now cheaper than Hong Kong's Dim-Sum bond and Taiwan's Formosa bond – typically more favourable options for issuers wishing to raise funds in RMB.

China also offers bond issuers a new and extremely large investor base. "For those corporates looking to diversify their portfolio, Panda bonds could provide a useful tool," says Gu. "China is, after all, the world's third largest bond market and provides ample liquidity to issuers."

Despite these benefits, and the recent surge in issuance the Panda bond market only accounts for a tiny fraction of China's US\$3bn onshore debt market, meaning that there is plenty of room for it to grow. However, there are a number of hurdles that need to be removed before the Panda bond becomes a truly attractive proposition to the international corporate community.

Do you need RMB?

"Although the Panda bond market has developed rapidly in the past two years, there are still some technical obstacles preventing foreign issuers from entering this market," notes Gu.

Firstly, Panda bonds are reviewed on a case-by-case basis by the Chinese regulators, essentially meaning that there is a chance that the issuance will be rejected. For corporates wanting certainty, this is clearly a big issue. "What's more, there is very little transparency around this process and what makes a request successful," says Gu. "Some corporates may be put off at the first hurdle because of this."

If a corporate is successful in their issuance, there are further issues that can arise, chiefly because there is no official guidance on what can be done with the proceeds of a Panda bond issuance. "This is a particular issue for those companies who might want to raise cheap funding in the mainland and then move this cash offshore," notes Gu. "If issuers cannot shift the proceeds offshore and they have little to no CNY investment plans onshore, then there really is no benefit for them to enter this market."

Different standards

The documentary filing process is another area where corporates, especially those based in the US, find issue with the Panda bond. "Issuers must provide the past three years of financial statements under the Chinese Account Standards (CAS), Hong Kong Financial Reporting Standards (HKFRS), or International Financial Reporting Standards (IFRS)," says EY's Pogson.

"This has been a problem because a lot of bond issuance is made in USD and filed under US GAAP," he adds. "Issuing a Panda bond and changing your accounting standards to do so can, therefore, be too great a resource burden on many organisations, limiting the attractiveness of the market."

Another burden for international corporates seeking issuance can come from the fact that a local credit rating is needed, alongside one from an international agency. Again the process here is slightly different to what international



For those corporates looking to diversify their portfolio, Panda bonds could provide a useful tool. China is, after all, the world's third largest bond market and provides ample liquidity to issuers.

Ying Gu, Emerging Markets Asia Rates & FX Strategist, J.P. Morgan

corporates would be used to when issuing in other markets and, of course, creates further work for the organisation.

Creating a mature market

Combined, these factors show the hallmarks of an immature market and one not aligned with international standards. "At present, corporates don't have to push their domestic markets too hard to raise cash. This means that unless there is a genuine business need to take on RMB liabilities it doesn't make sense for international corporates to issue Panda bonds," states Pogson.

But he is philosophical in his outlook. "The market is setup this way deliberately, the Chinese regulators did not want to take a risk and loosely regulate the market, only to add further regulation later. This would dent the image of the market and also be quite difficult to do," he says. "This is why they evaluate issuance on a case-by-case basis at present, because it gives them a chance to bend the rules, without issuing formal regulation, to see what works and what doesn't – this will have big advantages in the long run.

And Pogson is already hearing positive noises coming from the Chinese regulators, who plan to make the Panda bond more attractive to international corporates, aligning it with international standards both in terms of how they access the market and the filing requirements.

But there is still more work to be done. In the near future, the issuance of Panda bonds will increase rapidly due to a low base," says J.P. Morgan's Gu. "But to ensure the sustainable development of the Panda bond, reforms are critical to resolve the discrepancies in accounting rules, as well as provide clear guidance on fund repatriation to offshore and simplify the approval process. In the long term, a fully liberalised capital account, free floating currencies and well-developed rates and FX hedging instruments are necessary to the success of this market.

I fully believe, however, that with the internationalisation of RMB and the openness of the onshore bond market, Panda bonds will become an important market for global issuers and investors and the market will reach its full potential," he concludes.

A solution to the challenge of foreign currency receipts

Managing receivables has always been a challenging piece of the Accounts Payables/Accounts Receivables jigsaw and when those receipts are in foreign currency, the problems are only compounded. In this article, Deutsche Bank's David J. Cooper, Head of the FX4Cash™ Product Specialist Team in Asia, discusses the opportunities for companies to address the issue and explains how Deutsche Bank has developed a solution to respond to the foreign currency receivables conundrum.

Where is the market today?

Recent bouts of volatility in the currency markets, fuelled in part by the Brexit vote and then the US presidential election result, is increasing the importance of prudent FX management among corporate treasury departments of all shapes and sizes. This is supported by the findings from Treasury Today's recent Voice of Corporate Treasury Study. When asked "What are you going to be prioritising over the next 12/18 months?" the findings from the universe, comprising over 350 corporates, revealed the number one area rated as very important was foreign exchange risk management/hedging. Furthermore, when asked to select from a list, currency volatility was cited as presenting the greatest risk by a clear margin.

The challenges corporate treasurers often face around transparency and control of foreign currency receipts further underline these risks as a focal point. When not being actively managed, corporates' FX receipts are typically processed by financial institutions utilising standard/board FX rates. Details including conversion rate, remitter and original amount are not known upfront, as the corporate is generally notified of the execution only after their account has been credited.

In an attempt to manage unhedged FX receipts, corporates typically take one of the two approaches, both of which have operational and commercial disadvantages:

- Approach one: clients hold multiple currency accounts in which they accumulate receipts.
- Approach two: clients ask their bank(s) to contact them for every foreign currency receipt which requires conversion in order to agree upon an FX rate.

As David J. Cooper, Head of the FX4Cash™ Product Specialist Team, Deutsche Bank in Asia remarks, "If clients have taken the first approach and manage FX receipts via multi-currency accounts, they could be holding unhedged FX exposure in non-core currencies, with balances only utilised on an ad-hoc basis. Furthermore, they face potential non-FX related costs and/or risks associated with managing multi-currency accounts, including operational, reconciliation and audit costs, as well as bank fees."

And for corporates following the second approach, the manually intensive process is both expensive and inefficient. The human element prevents immediate execution and exposes the client to FX risk on applicable receipts. Additionally, the process still lacks timely transparency of the flows, potentially impacting liquidity planning for their liabilities.

Innovating to meet market needs and challenges

It goes nearly without saying that banks and other service providers have been alert to many of the challenges faced by corporates. Spending a significant amount of time listening to clients and observing market trends, Deutsche Bank has paid particular focus to local currency invoicing, expansion of shared services centres (SSCs) and their growing demand for pan-regional solutions, as well as the rise of intra-Asian trade.

"This dialogue and analysis highlighted a market gap wherein a fully comprehensive foreign currency receipts offering was not available for the corporate client base," says Cooper. "Acknowledging the positive impact a solution could make for our clients, we focused on this opportunity area for investment."

In doing so, Deutsche Bank developed a solution to effectively manage clients' foreign currency receipts, without the need to hold currency accounts except in the core functional currency. Clients can issue a single settlement instruction to all their payors and direct all receipts to the required account.

Clients can engage with Deutsche Bank in two different ways:

1. Instructing Deutsche Bank to manage their foreign currency receipts through pre-defined conversion rules.
2. Interacting via the FX Payments App (on Deutsche Bank's Autobahn App Market) to manage foreign currency receipts.

Providing enhanced visibility and control over their foreign currency receipts, the solution allows clients to decide what receivables get converted, how they get converted (automatically or manually), when they get converted, and where they are credited to.

In giving optionality around these decision points, clients can determine their own level of engagement throughout the life-cycle of their FX receipts process. This flexibility is an integral piece of the bank's product strategy when it comes to providing self-service capabilities across a growing spectrum of cash and treasury management services.

Providing a strategic solution

Deutsche Bank offers this solution through its FX4Cash™ Receivables platform, which functions as follows in response to the what, how, when and where decision points:

What gets converted

- Clients can receive in up to 35 currencies (subject to market). The funds are converted and credited to a currency and an account of their choice.
- Clients can also choose to accumulate receipts and book a single FX trade against them. For example, companies in the travel industry might receive multiple small receipts in foreign currency. With this capability, the platform allows them to accumulate and execute larger conversions.

How they get converted

- Clients can choose to auto-convert below a certain threshold amount, at real time rates.
- Clients can manage large value payments (above a pre-defined amount) themselves; choosing to either override conversion rules and settle in the same currency or convert to the currency of their choice.

When they get converted

- Payments can be converted immediately upon receipt, the client can choose to defer the FX conversion (subject to local regulations) to meet future payment needs, or as mentioned above, receipts can be aggregated to book larger, single FX trades.
- Email alerts can be issued at various stages in the process, including reminder alerts for receivables pending action.

Where they get credited

- Funds can be converted and credited to the client's account with Deutsche Bank.
- Alternately, the client can choose to route funds to their preferred cash management bank post-conversion, subject to local market regulations and restrictions.

Providing corporate clients with additional transparency, a variety of reporting options are available. The solution offers standard reporting, dedicated reporting and online dashboard visibility – at summary and transactional level. Real-time and/or execution rates are evidenced per transaction by a date and time stamp.



Source: Deutsche Bank



Integration of cash management and FX capabilities to include receivables has meant we are able to engage with our clients across a number of facets of their business – helping to cross-functionally identify, analyse and draw upon areas of opportunity within their payment flows.

Some impressive benefits

By integrating their cash management and foreign exchange capabilities to deliver this targeted solution, Deutsche Bank is able to offer their client base a number of benefits:

- **Expansion into new markets:** Clients have the opportunity to expand their reach by offering invoicing in local currencies and being able to manage the flows efficiently.
- **Enhanced control:** By consolidating multi-currency flows clients can exercise greater control around which foreign currency positions are being held or get converted respectively.
- **Efficiency and account rationalisation:** Clients can consolidate accounts, enabling them to minimise reconciliation efforts, fees and idle balances. Additionally, clients can use Deutsche Bank to manage their foreign currency receivables while retaining flexibility over their overall cash management portfolio.
- **Transparency to reduce risk:** Dashboards, reporting options and alerts provide full visibility throughout the life cycle of the transaction, including payment and FX conversion details.

Cooper concludes, “Looking beyond current volatility, we expect that the forecasted growth of intra-Asian trade will magnify the need for corporates to manage their FX exposures more prudently, as volumes and potentially the number of currencies to manage both increase.”

The FX4Cash™ product suite is built upon a flexible, resilient platform to meet the unique needs of the bank’s diverse client base. Through integration with Deutsche Bank’s existing client access channels, extensive reach to global payment and clearing systems, as well as leading FX trading infrastructure, it provides its clients with a one stop solution for cross-border currency payments and receipts worldwide.

In a bid to help corporate treasurers meet their strategic objectives with regards to foreign exchange risk, Deutsche Bank continues to build upon the strong FX4Cash™ foundation with this comprehensive new foreign currency receipts product offering.



David J. Cooper
Head of the FX4Cash™ Product Specialist Team in Asia

Deutsche Bank 

This article is for information purposes only and is designed to serve as a general overview regarding the services of Deutsche Bank AG, any of its branches and affiliates. The general description in article relates to services offered by Global Transaction Banking of Deutsche Bank AG, any of its branches and affiliates to customers as of January 2017, which may be subject to change in the future. This article and the general description of the services are in their nature only illustrative, do neither explicitly nor implicitly make an offer and therefore do not contain or cannot result in any contractual or non-contractual obligation or liability of Deutsche Bank AG, any of its branches or affiliates.

Deutsche Bank AG is authorised under German Banking Law (competent authorities: European Central Bank and German Federal Financial Supervisory Authority (BaFin)) and, in the United Kingdom, by the Prudential Regulation Authority. It is subject to supervision by the European Central Bank and the BaFin, and to limited supervision in the United Kingdom by the Prudential Regulation Authority and the Financial Conduct Authority. Details about the extent of our authorisation and supervision by these authorities are available on request. This communication has been approved and/or communicated by Deutsche Bank Group. Products or services referenced in this communication are provided by Deutsche Bank AG or by its subsidiaries and/or affiliates in accordance with appropriate local legislation and regulation. For more information: www.db.com

Copyright © January 2017 Deutsche Bank AG. All rights reserved.



Shifting gears

Wan Chun Shong
Group Treasurer



TAN CHONG GROUP

Can a treasurer become a CEO? Wan Chun Shong, Treasurer at Tan Chong Group certainly believes so. In his view, corporate treasury professionals have the perfect balance of strategic insight and financial acumen that can allow them to rise to the very top of a company. In this profile, he outlines how he has worked to elevate the standing of the treasury function within his company and at the same time raise his hand as a business leader of the future.

Incorporated in October 1972, Tan Chong Motor Holdings has grown into one of Malaysia's largest national conglomerates. The company is involved in a myriad of business activities, from the assembly and marketing of motor vehicles and auto parts manufacturing to property development. Tan Chong Motor Holdings also trades in various heavy machineries, industrial equipment and consumer products – both locally and abroad.

"At its most basic level the role of corporate treasury is quite straightforward," says Wan Chun Shong, Group Treasurer at Tan Chong Motor Holdings. "Once you have the basic set of

tools and understand how the market works, you can perform the role to a suitable level. The complexity comes from having to translate treasury issues across the broader business, and

from working with a variety of people both within and outside of the company.”

It is in this complex environment that Wan thrives. As a result, he has worked hard in recent years to ensure that the voice of treasury is heard across the business. In doing so, he has focused on developing skills beyond ‘core treasury’ in order to become a business leader in his own right and somebody that can influence the strategic direction of the business.

His story is quite unique in Malaysia, where the treasury function remains in a nascent stage of development. By taking a lead, and by demonstrating the full value of the treasury function within Tan Chong, he aims to inspire the broader treasury community to follow suit.

Banking beginnings

Wan followed a less than traditional path to his current position. “I began my career in banking, working on the FX and derivatives desk for Bank of Tokyo Mitsubishi UFJ in Malaysia, providing hedging solutions to Japanese corporates operating in the country,” he says.

During his time working at the bank, Wan was able to gain a solid grounding in treasury and a good understanding of the function’s role within the company. “I quickly realised that the treasury is the heartbeat and profit centre of the organisation, and a career path I wanted to pursue,” he says.

But translating a banking skillset into the corporate sphere is not the easiest task, despite some similarities between the two. Wan notes that many great bankers have tried to move into the corporate space only to realise that it is not for them. “Being able to adapt my banking skillset to work in the corporate space is one of my proudest achievements,” he says. “It has also provided me with a unique advantage when dealing with banks because I know how they work internally and all their little tricks. I am then able to question them and hold them accountable when I feel they are not treating us fairly.”

He first put these skills to use when he joined Elken Group in Malaysia in a corporate treasury role before later moving to a similar role with Twin Wealth Group in Hong Kong – a change that he says allowed him to move out of his comfort zone and gain some corporate experience in a different environment.

Wan subsequently joined Tan Chong in his current role in 2010 and is presently responsible for managing the group treasury activities across Malaysia, Thailand, Vietnam, Cambodia, Laos and Myanmar.

An evolving function

Since his formative years working in corporate treasury, Wan notes that the profession has changed markedly. “In the 1990s, the landscape was a lot more simple and predictable,” he explains. “This is no longer the case. Markets are now much more volatile and the volume of regulatory change has added an extra layer of complexity to the role. The global financial crisis of 2007/8 has also placed a greater focus on liquidity and risk management.”

Whilst these developments have made the role more multifaceted and challenging, Wan believes that this has been more of a positive than a negative. “Treasury is no longer merely a function that manages cash, funding and hedging



Being able to adapt my banking skillset to work in the corporate space is one of my proudest achievements. It has also provided me with a unique advantage when dealing with banks because I know how they work internally and all their little tricks.

requirements,” he explains. “We are now a strategic function that is intimately involved in how the business operates.”

For Wan, the only way to be able to fulfil this role is for treasuries to throw themselves into the inner workings of the company and work with different business functions and units. Treasury can then show its value by understanding challenges across the business and developing solutions that help address these.

This is not straightforward, however. “Sometimes it can be difficult to convince people to change how they behave,” Wan explains. By way of example, Wan says that he has been working to move the company away from cheque collection and onto electronic channels. “This will clearly enable the company – not just treasury – to be more efficient and remove a lot of risk,” he notes. “But it has been hard to sell this idea, because we have teams of people whose job is to process cheques. It is hard for managers to follow strategies that will leave these teams redundant.”

It is here that best in class interpersonal skills come to the fore. “I have spent a lot of time talking to people within the business about this issue,” he says. “The government in Malaysia is mandating this switch and I have made a case around the benefits we could have by being part of the first group of companies to move. Treasury is well placed to lead these enterprise-wide projects.”

Wan says that the more treasury follows this path, the easier it will become for the department to get things done. “Once you convince the business that your strategy is sound, and they see that the project is successful, it is much easier to push your plans through next time,” he says. “It is about gaining the trust of senior management and the business.”

More to do

Despite his progressive approach to treasury and his successes in developing the function within the company, he admits that there is still a lot more to do. One main area of focus at present is looking at how best to leverage technology. “I believe this resonates with treasurers in Malaysia, and other markets around the world,” he says. “Technology continues to transform how the function operates. It is vital to stay ahead of the curve, otherwise you will fall behind.”

Tan Chong is at the start of this journey and Wan is currently exploring how treasury can best streamline the financial value

chain of the business. This includes analysing areas such as collections and promoting real-time electronic transfers and bank account auto reconciliation; improving visibility by replacing Excel worksheets with a treasury management system (TMS), and streamlining the payment process. “We have made great strides and have already brought in numerous efficiencies and greater control over core processes,” he says. “Nevertheless, it is a long-term project and we are aware that it will take many more years to complete.”

Core to this is installing a TMS. “This will help greatly with the visibility and control that we have over our cash,” Wan says. “But it comes at a cost. Culturally our organisation is very cost-conscious, as most family-owned businesses are. As a result, there is not a great incentive to invest unless something goes dramatically wrong. It takes time to sell the idea to the key stakeholders and we are currently making our case.”

Dealing with volatility

A system such as this would greatly help Wan, especially given the complexity of the markets that Tan Chong is operating in. “Emerging markets (EMs), and particularly those that we work in with weak fundamentals like Vietnam, Malaysia and Indonesia, have experienced a fair degree of volatility lately,” he explains. “There are various reasons for this, most notably quantitative easing being unwound in the US, low oil prices and China’s slowdown.”

He notes that for corporates this volatility can create numerous risks including a significant impact on cash flow. “In my opinion, the best way to mitigate this risk is to use hedging solutions, enforced and controlled by a robust treasury policy,” he adds. “To ensure that the best results are obtained from hedging it is vital to work closely with your banking partners, as they have the expertise to help you find the optimum solution.”

Moreover, Wan leans on the banks to provide information about the regulatory changes occurring in various markets and the impact these have on hedging strategies and various other treasury activities. “I believe this is particularly important in the markets that we operate in, such as Vietnam, Myanmar, Cambodia and Laos, because regulations are frequently changing,” he says.

Specialised products

Although banks may be well placed to help with advice around regulatory change, Wan notes that their product suites could be better suited to the needs of corporates in Malaysia. “The foreign banks in the country are quite keen to push their products to the local corporates,” he says. “The problem is that quite often these products do not suit what we are trying to achieve. They are just products that have been successful elsewhere.”

Wan highlights off-balance sheet financing as one solution that banks have been talking to him about recently. “This is a sophisticated product and most corporates in Malaysia are not quite ready to use something like this yet,” he explains. “I believe that these banks need to take a step back and understand what the market really wants – and then either adjust existing solutions or build new solutions to meet these needs.”

However, he is sceptical that this will happen, due to the changes in the banking environment. He notes that pressures

from Basel III and other new regulations are forcing banks to make tough decisions regarding the markets in which they operate. “I am not convinced that some foreign banks operating in Malaysia will be here in the long run,” he says. “We have already seen a few begin to pull out of the market.”

His hopes are higher for the local and regional banks, however. “These banks are growing their product suites and talent within the banks, and that is making them more competitive,” he says. “But what is most crucial is that ASEAN is their home market and they have a deep understanding of the market. I foresee these banks dominating the region over the coming decade.”

The ASEAN factor

ASEAN is a region with immense potential for corporates as well. This is beginning to be realised with the integration of the ASEAN Economic Community (AEC) at the end of 2015. “The AEC is a similar project to the EU,” Wan explains. “It aims to create a highly competitive economic region with a single market and production base. This of course will have many benefits for businesses, such as higher productivity and cost efficiency through economies of scale as well as the elimination of tariffs in countries like Vietnam, Myanmar and Cambodia.”

For conglomerates operating in ASEAN, the free flow of goods and services can also boost competitiveness regionally and globally. But Wan believes this will lead to greater complexity in treasury because a greater volume of transactions will be made across multiple geographies. “This will place an even greater emphasis on treasury best practice, automation and control,” he says.

Recognising this challenge, Wan has worked to centralise the function after being granted Treasury Management Centre status by Malaysian Industrial Development Authority (MIDA) – a programme that offers a number of incentives to companies who base their treasury operations out of Malaysia.

“As a result of this, we have been able to utilise an in-house bank structure enabling us to better manage our internal cash flows, reduce float and transaction fees, and subsequently bring down the operating costs of working across such a large market,” he explains. “I expect to see many more companies in Malaysia and across ASEAN replicate this structure going forward.”

Aiming for the top

Looking ahead, Wan has big plans not only to continue to develop the treasury function within the company, but also to raise his own profile and become a business leader in his own right. “Working in treasury gives you a great chance to immerse yourself in the business and how it operates and I am looking to take full advantage of this opportunity,” he says.

“My ambition is to lead the business as CEO. This is not a typical aim for most treasury professionals, but I believe it makes a lot of sense when you combine the financial knowledge that we have alongside the increasing knowledge of how the company operates.”

With such ambition, Wan has fully dedicated himself to his career and achieving his ambitions. “The phone is always on and I am always there to tackle whatever situation is needed at any time,” he explains. “Don’t forget, money never sleeps.”

Invoice financing reimaged

In the first of our new series profiling some of the world's most exciting fintech companies we speak to Kush Patel, CEO and Co-Founder at Tallysticks to hear how the company is looking to transform the trade finance space with blockchain and smart contacts.



Kush Patel
CEO and Co-Founder



Tell us a bit about yourself and your background. How did you get into fintech?

I began my career in finance and I got into a fintech because of Tallysticks. Specifically, after a successful career on Wall Street as an emerging markets strategist, and as a diplomat with the US Government, I decided to venture out on my own. I have start-up experience in a range of industries, including: investments, pharmaceuticals and, now, financial technology. According to a few, I'm an outside-the-box thinker with a talent for crafting efficient business strategies.

Where did the idea for your company come from?

The idea started with simply matching a payment to an invoice. In other words, it was to be an invoicing solution on the blockchain. Then a major European bank asked if we ever thought about integrating an invoice financing solution with our invoicing platform. We designed and presented the process flow a week later. With positive interest from the bank, we built a light solution. Meanwhile, we were asked to enter a hackathon which was sponsored by Barclays. Between winning the hackathon with our invoice financing app and getting there through our own merit, we ended up in the finals of the Barclays Techstars Accelerator programme. That, of course, sent us on our way.

What makes fintech such an exciting space and what do you find most interesting about it?

Banking is an industry in transformation, a change that was brought about with the 2008/2009 financial crisis. Having previously worked with financial markets, I've learned that any

time there is turmoil, there is an opportunity. As a result, I wouldn't want to be anywhere other than in the front-seat of a fintech company during this period of revolution.

Banks, of course, are friends to the fintech community, but they remain too slow to adapt to the rapidly innovating financial technology landscape. As a result, fintech companies are being forced (in part by investor demands) to go it on their own and build robust proprietary platforms. Eventually, the circumstance will be such that banks will find it cheaper to outsource various services to the fintech companies than continue to operate them in-house.

Think of how Amazon disrupted retailers. Post the dot.com crash, bricks and mortar retailers built online stores, thinking that they timed their strategy correctly. In truth, they didn't understand how to leverage their online presence to reduce the existing cost overheads or simultaneously offer better service with things like home delivery.

Today, with Amazon eating into retailer profits, retailers are looking to leverage Amazon's site and infrastructure to service customers. Similarly, various payment, lending, and even account management platforms are beginning to create global frameworks, or marketplaces in the case of lenders.

So eventually, much like with retailers, it will be cheaper for banks to plug into those platforms than to continue offering those services with legacy in-house systems. Put differently, banks will channel their customers directly to outsourced platforms through white-labelled interfaces and in some cases even provide the supporting compliance buffer as well as balance sheet.

What are the challenges for fintech currently?

Banks remain too slow to adopt innovative fintech solutions or work with fintech companies. In part, this is because banks are saddled with legacy systems and are afraid of disrupting peers or cannibalising their own profits.

As a result, fintech companies are starting to ignore the banks and sell their solutions directly to corporates: we included. Eventually, banks will take notice. Whether banks respond in time for fintech companies to agree to work with banks will be a question best answered by time, however.

Company timeline

July 2015

The idea to connect invoicing to blockchain is born.

September 2015

System design and development ramps up.

October 2015

Tallysticks announced at Rise New York. POC completed and Techstars application submitted.

November 2015

A major continental bank contacts Tallysticks to build a blockchain-based supply chain finance solution. Tallysticks later integrates the solution to a mobile payments API to win the Barclays hackathon.

A dynamic offering

Tallysticks is an invoicing software solution that leverages the functionality of blockchain to share a common record of immutable invoice-related data for all parties to transparently edit and update. The shared information thread, together with software automation can help to streamline the purchase order-to-invoice-to-payment workflow processes.

Due to its invoice-related focus and nature of the underlying technology, Tallysticks sees itself as an ideal solution for multi-party interactive workflows such as post-trade settlement of OTC commodity trades and more relevant, dynamic discounting of invoices.

Plugging the funding gap

The main challenge that the solution aims to solve is the US\$2trn SME funding gap that largely results from a working capital shortfall. "SMEs account for over 60% of all employment and nearly 60% of GDP output," highlights Patel. "Yet SMEs receive less than 30% of all lending."

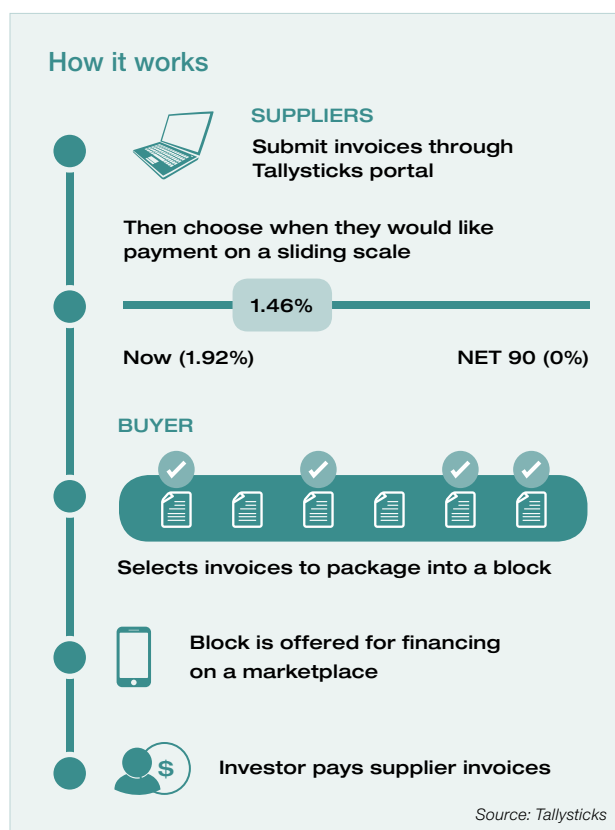
In Patel's view, this funding gap exists because of the mismatch in payment cycles between large corporates and SMEs. "Large corporates pay bills on 90-day payment cycles and SMEs are often required to pay bills on 30-day payment cycles, sometimes even less," he explains. "As a result, SMEs supplying to corporates are net 60 days short in terms of cash flows."

The banks have looked to address this need through invoice financing solutions. Typically banks offer financing directly to the supplier in the expectation that the buyer will pay the invoice. "This requires three parties to engage in the transaction – the lender, the borrower (the supplier) and the debtor (the buyer)," says Patel. "With three different parties involved – one of which has no vested interest in the arrangement between the other two, traditional invoice financing is clumsy. To manage the risk of this three-party transaction, banks impose harsh measures on borrowers which SMEs don't like and so, they turn down the capital they desperately need."

It is ensuring that SMEs are able to access this capital that the Tallystick's solution looks to solve. "In contrast to traditional bank invoice financing, Tallysticks offers financing to suppliers via the buyer through an invoice portal," outlines Patel. "This is called dynamic discounting and is much more efficient than supplier finance because the borrower and the debtor are the same party."

Blockchain: a game changer

Patel notes that dynamic discounting is offered by a few other software platforms. What he believes makes the Tallysticks solution stand out, however, is that it is underpinned by



blockchain technology. This enables businesses to potentially borrow through a marketplace at more affordable rates with a high degree of automation.

"More specifically, since reducing cost is the goal of any marketplace, the aim of our marketplace is to reduce the cost of capital," he adds. "With our marketplace SMEs are able to access capital at lower rates with flexible financing terms whilst companies using dynamic discounting can expect to earn a healthy risk-free rate of return."

Tallysticks are already in discussions with several corporates about deploying the solution and the invoice financing solution will be ready in Q317 with financing initially offered through a special purpose vehicle. The corporate treasury dynamic discounting solution should also be ready around the same time with the invoice financing marketplace operational in 2018.

"As long as we deliver our vision, help corporates achieve a better return on equity, offer a more stable supply chain, a streamlined payables process, a simplified supplier management process and more efficient invoice capture, I believe corporate treasurers and corporate finance departments should be quite interested and pleased with our solution," concludes Patel.

Source: tallysticks.io

December 2015

Filed four patented processes, including automated custodial transfer and automated transaction settlement. Tallysticks selected into the Barclays Accelerator powered by Techstars from a pool of nearly 700.

January 2016

The company completes its first round of funding with investors valuing the company at more than £1m.

April 2016

Tallysticks gets voted to be a top 100 European Fintech start-up.

September 2016

The company gets chosen to participate as one of only six start-ups in the EY Start-up Challenge in October 2016.



Banking on long-term relationships

Mark Evans

Managing Director, Transaction Banking



In what can only be described as a challenging time for the region's banks, corporate treasurers are looking for banking partners that are committed to them and the region for the long term. In this interview, Mark Evans, Managing Director, Transaction Banking at ANZ, outlines how the bank intends to continue to forge deep and lasting relationships with its corporate and financial institution clients and leverage its unique strengths to ensure treasurers are able to tackle the challenges of today and tomorrow.

What makes transaction banking and ANZ's business in Asia Pacific a vital part of the bank's ongoing strategy?

Asia Pacific remains a critical part of our strategy because that's where our customers want to do business. The region is vital to the future of our customers in our home markets:

Australia and New Zealand export about US\$165bn to Asia and import about US\$125bn from Asia every year. And by 2050 Asia will account for 50% of global GDP so it goes without saying the region is vital to our future plans.

Our presence in Asia Pacific remains a differentiator for us, especially compared to the other Australasian banks. And when

compared to Asian banks, we have an unrivalled connection back to our home markets of Australia and New Zealand.

Within transaction banking specifically, we have seen major changes in the competitive landscape in recent years, with banks adapting and refining their strategies. Indeed, all banks have had to seriously consider whether they are committed to this business, especially as regulatory and compliance costs have increased.

We have decided that Transaction Banking, which sits within the Institutional division at ANZ, is a business that we are committed to and an area of the bank that is key going forward. The recent consolidation in some areas of the bank, such as the sale of our retail and wealth business in Singapore, Hong Kong, China, Taiwan and Indonesia to DBS, has initially no impact on our Institutional and Transaction Banking customers. We are very much open for business and committed to transaction banking in the region.

In what areas, in particular, does the bank have strength and what differentiates ANZ from its competitors?

Like all banks in this capital-constrained environment, we had to make tough decisions and be clear on where our strengths are. We have gone through a period of adjustment and are confident in our strengths and where we can best serve our customers.

Ultimately, transaction banking remains a relationship business and it is underpinned by trust. In fact, the whole financial system is effectively built on trust. We build our relationships and gain trust by being responsive to our customers, and having the knowledge and expertise to advise them appropriately. Trust and relationship are most critically tested during a crisis. Through the recent financial uncertainties and market turmoils we have demonstrated to our customers that we can be relied on when it really matters and can respond swiftly and effectively.

Focusing on forging trusted relationships has proved successful and in 2015 we maintained our top four Corporate Bank in Asia ranking in the Greenwich Associates Asian Large Corporate Banking Study, a rank we have held for the last four years. We also ranked first for relationship quality and achieved the top spot for overall service for the first time. Our relationship manager quality outperformed our rivals, and I believe we did this because we focus on the solutions rather than simply selling products to our customers.

Also, as previously mentioned, our geographical network – connecting Australia and New Zealand to Asia and the Pacific – is a major differentiator. We have experts on the ground in 15 Asian markets who can provide invaluable insights. We are well versed in the complexities of the markets and can advise customers how best to structure transactions to mitigate risk and ensure a successful outcome for all parties.

For instance, in the Mekong, if you are operating in countries like Cambodia, Laos, Myanmar, Thailand or Vietnam, it can be difficult to navigate the local nuances and regulations. And when it comes to avoiding exposure to financial crime, such as money laundering or terrorist financing, you need to have a banking partner you can rely on that operates to international standards.

In addition, we are especially strong and able to provide leading industry insights in sectors such as natural resources, agricultural business, infrastructure, financial institutions, and, in our home markets, property.

What plans do you have to build on these strengths and offer further value to your clients?

In terms of our product capability, we have always been known as a strong trade bank – trade is in our DNA. In recent years we have been steadily building our cash capabilities so we can now be known as a strong bank both for Trade and Cash. That is why we are investing so that customers can access the bank at a single point and seamlessly pick and choose the solutions they need regardless of what product set they fall into.

This is part of our significant investment in our digital capabilities. This will result in an improved customer experience, a consistent look and feel no matter what products or services our customers use or where in the world they choose to transact.

How does digitisation fit into the bank's strategy and what areas, in particular, does ANZ believe that innovative technology can benefit its clients?

Digital is a core part of the bank's overall strategy and the initiative is coming from the top, from our CEO Shayne Elliott, who outlined it as a key pillar when he began his new role in early 2016. Maile Carnegie, Group Executive – Digital Banking, joined ANZ in July 2016 from Google and has been challenging how we think about digitisation. The digital agenda is at the heart of our transformation and something every corner of the bank is working on.

In terms of trials that we can talk about publicly, we had a successful proof of concept using distributed ledger technology in cross-border payments. Although it is early days, we believe this kind of technology will play an important role in improving efficiency, transparency and security for our customers. Trade finance is another area where we are exploring the use of various new technologies to achieve better outcomes for industry participants.

Last November, we opened an innovation lab in Singapore called ANZ BlueSpace. The facility is dedicated to innovation for institutional clients, and it has been set up as a place for us to collaborate with partners – including participants from industry, academia and government – who are also part of the fintech ecosystem.

Is collaboration the way forward when it comes to developing solutions and new ways of doing things that can benefit the industry as a whole?

I think it is important to acknowledge that no one can do everything alone, and no organisation can innovate in a vacuum. This was demonstrated when we held the ANZ-NUS Financial Services Innovation Challenge in September. The event challenged students from the National University of Singapore to apply technologies such as blockchain, data analytics and APIs to solve the inefficiencies in trade finance.

IBM, Thomson Reuters and GitHub were supporting partners of the event, with EY, UN Women and DXMarkets providing mentoring and coaching to the students.



We have always been known as a strong trade bank – trade is in our DNA. And in recent years we have been steadily building our cash capabilities so we can now be known as a strong trade bank and a strong cash bank.

We, along with our partners, were able to educate the students about the real-world problems of trade finance, and IBM, for example, introduced them to the tools available in their apps and services platform Bluemix. This event demonstrated collaboration in action and was a vibrant meeting place for the various partners to put their minds together. The solutions the students came up with were impressive, and the quality of their work was outstanding. Many honed in on ways to use blockchain to reduce fraud in trade finance, something that we are also looking at. We believe it is important to include students in our thinking – they, after all, are our future. We are currently exploring with the students how we can develop the solutions they came up with.

With the distributed ledger proof of concept I mentioned, we saw some very tangible results in how the technology can be used for cross-border payments to address the inefficiencies in the correspondent banking system.

Looking to the next 12 months and beyond, what do you believe will be the mega-trends that shape the region and what impact might these have on treasury professionals here in the region?

I would anticipate that political instability will be a major issue in the next 12 months. We've seen some unexpected outcomes in recent months like Brexit, the election of Donald Trump, and the impeachment of President Park Geun-hye in

South Korea. What we have learned is that predictions can easily be proved incorrect and that we should come to expect uncertainty. These kinds of events will likely continue in 2017, which could impact treasurers in terms of the value of the US dollar and the need to hedge their strategies effectively.

I expect there will be a continuing focus on compliance, particularly in the context of financial crime, capital and liquidity so banks and customers need to be aware and work together on embedding compliance into their business as usual.

Also, emerging technologies will continue to be a trend. Banks and corporates will need to be alert and agile so they can maximise the opportunities of the latest technologies while also managing increasing cyber-security risks.

You have mentioned cyber security and the risk of fraud. This is something our readers show a lot of interest in. How does ANZ help its clients to mitigate such risks?

Cyber criminals are becoming more sophisticated and cyber security is something our customers are increasingly asking us about. Previously cybercrime used to be a discussion for the largest corporates, and for chief technology officers or chief information and security officers, but in this digital age it is everybody's problem. In an organisation, it is everybody's responsibility to prevent it. Humans are the weak link – usually a cyber-attack happens because someone somewhere in the organisation did something they shouldn't have.

Awareness is the first step in mitigating these risks. We embarked on a client education program, and have hosted a number of events for our customers where they heard from experts in the field and were in an environment where they felt comfortable asking any questions.

The issue of cybercrime can be overwhelming for corporates. Although mitigating the risks effectively requires significant investment, there are still some simple steps corporates can take to improve their people, systems, and processes. Internally, corporates first need to understand their exposures, educate themselves about the risks of cybercrime, and have a response process in place. Externally, they can leverage experts, look to best practices, and share and seek intelligence.

We are all stronger if we – our customers, financial institutions and other stakeholders – fight cybercrime together. It is a rising threat, but it is also a natural consequence of all organisations adopting new technologies. Cyber-security goes hand in hand with becoming a digital organisation, and we have been proud to share our knowledge on the topic with our clients.

Mark Evans is the Managing Director, Transaction Banking, at ANZ. He is responsible for end-to-end transaction banking services – including payments, cash management, trade finance and supply chain finance solutions – across ANZ's home markets of Australia and New Zealand and the bank's footprint globally.

Mark joined ANZ in July 2009 as the Global Head of Trade and Supply Chain, responsible for managing and growing the Group's international trade finance related activities. Prior to his current appointment in June 2016, Mark was ANZ's Chief Compliance Officer from 2013, developing and implementing a global compliance framework and ensuring high compliance standards in all the jurisdictions in which ANZ operates. Before ANZ, Mark spent five years at HSBC, initially as Head of Trade and Supply Chain for Australia and New Zealand based in Sydney and then three years in Hong Kong where he was responsible for the Trade and Supply Chain business across Asia Pacific.



Welcome to the syndicate

A syndicated loan is often part of a wider financing strategy, allowing a company direct access to both banks and institutional investors. But why might a corporate use a syndicated loan and how are these arranged and managed? We go back to basics to find out.

A problem shared is a problem halved, or so the adage goes. This certainly rings true when corporates need an amount of funding which cannot be supplied by one bank. In cases such as this, a syndicated loan can be used effectively to share the financing burden between banks – and, increasingly, other institutional investors such as hedge funds and pension funds.

Corporates certainly noticed the value of the product pre-crisis. Indeed, global deal values peaked at just under US\$5trn from over 9,000 issuances in 2007, according to Thomson Reuters data. While the market contracted significantly during the financial crisis, it has picked up in recent years: total global deal value reached US\$4.2trn in 2013, up 29% from 2012. In 2014, global syndicated lending reached US\$4.8trn, although this figure was slightly lower in 2015 at US\$4.7trn.

As of Q216 (the latest figures available at the time of writing), syndicated lending is down 9% compared to the first six months of 2015. From a regional perspective, the Americas are leading the way with 2,127 deals totalling US\$1.2trn.

Elsewhere, Europe accounted for US\$439.7bn of the global total whilst Asia Pacific (APAC) accounted for US\$202.3bn.

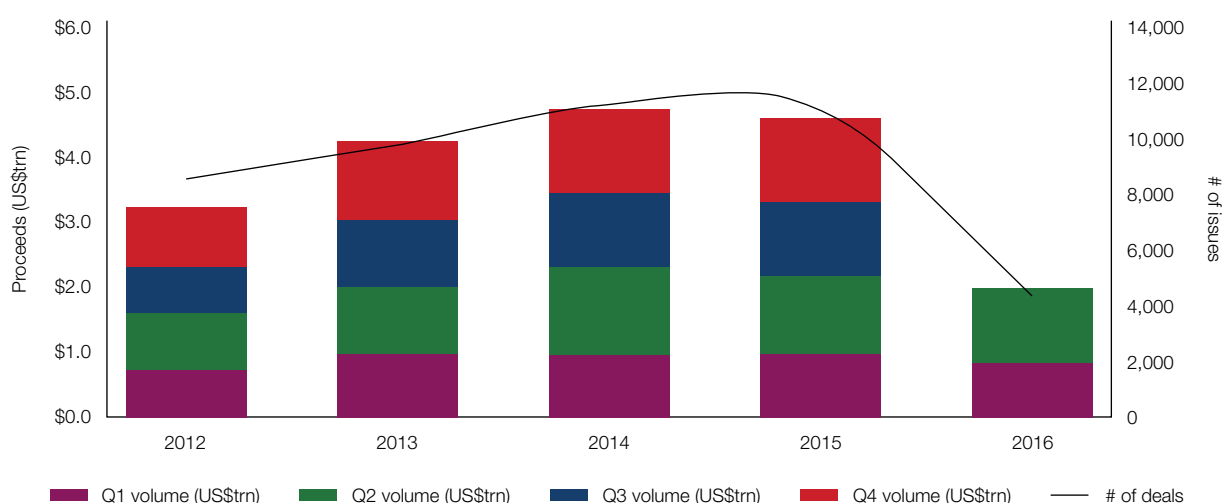
The purpose of the loan

Companies obtain syndicated loans for different reasons. Some, for instance, may use this as a key tenet of their core funding portfolio. This could be a typical strategy for corporates with a lower credit rating which are unable to access funding readily through the bond markets.

Syndication may be a good option for these companies because investors are able to limit their exposure to the corporate's risk. To account for the increased risk, companies in this situation are likely to have to pay higher margins for the loan. Investors may also put covenants in place as further protection.

For companies that have a higher credit rating, and thus more financing options available to them, syndication may be used more strategically and as a backup to other sources of finance. For example, companies may use the loan to finance

Chart 1: Global syndicated loans volume



Source: Thomson Reuters

gaps in funding between the maturity of one loan and the receipt of funds after a divestment.

With a higher credit rating the margin payable to the investors tends to be lower and few, if any, covenants restrict the way the company operates. The existence of the facility may also reassure investors holding other instruments issued by the company, such as commercial paper, allowing the company to benefit from a lower overall cost of funds.

Types of loan

Syndicated loans primarily come in two forms:

- **Term loan.** A term loan is a more traditional type of loan. The full amount is drawn either initially or in pre-determined instalments. The principal is either repaid over the term of the loan or at maturity.
- **Revolving syndicated loan.** This will have a specified term limit, but, in contrast to a term loan, the borrower can draw down funds and repay them as necessary, as long as the terms and conditions of the loan are met. This style of loan is more suited to companies which view the syndicated loan as a secondary source of finance or have a periodic need for funding.

Corporates also have a choice regarding how the loan is structured. For instance, some companies may wish their syndicated loans to comprise both a term loan and a revolving loan. This is most common if the company is a lower rated issuer. Investment grade credits are more likely to structure their loans into different revolving tranches, however. One tranche will be repayable in under a year whilst the other will have a longer maturity (typically three to five years). This provides the company with a longer-term source of funding, which is particularly useful as a backup to a commercial paper programme.

The maturity of the loan can also be designed to reflect the borrower's needs. For instance, if a loan is sought by a shipping company to finance the purchase of a new fleet of its ships, the company may want to delay repayments until these are fully operational and bringing in revenue.

Relationship management

Before any bank is consulted about arranging the loan, the treasury needs to have a clear understanding of the role the loan will play in the company's wider funding strategy. This will provide a crucial focal point when the company states its case to investors. A repayment strategy will also have to be outlined.

With a strong case built, treasury can appoint one or more arranging banks. This is typically completed through a tender process and, as with any selection procedure, can be difficult without prior experience.

In particular, treasurers need to be aware of the relationship implications of syndication. Appointing a bank to arrange a syndicated loan can be an effective way of rewarding a bank – or banks – which already provide the company with credit. However, the selection should take into account the entire relationship, how long it has existed and the company's future plans.

To avoid this issue, a company can arrange a club loan – when no arranging bank is appointed and the loan is instead arranged by the company. However, this will result in a more labour-intensive process for the treasury.

A second consideration when selecting an arranging bank(s) is its geographic footprint. The selected bank(s) will need to have coverage in all the appropriate markets, particularly if the aim is to attract institutional investors.

Further considerations

The company will also need to work with the arranging bank to decide if the loan will be underwritten. If this is the case, the borrower will receive the full amount of the loan, irrespective of whether the arranger has successfully syndicated the deal. If the loan is to be underwritten, the arranger will usually try to involve other banks as underwriters as part of the syndication process – particularly for very large deals.

A 'best effort' understanding exists if the loan is not underwritten, meaning that the arrangers do not have to meet

The art of negotiation

Negotiation takes place at all steps of the syndicated loan process. It is therefore important to understand what the other side wants. Treasurers need to identify each potential bank's approach to, and appetite for, syndicated loans. Considerations include:

- The type and size of banks and whether they will sell their participation right away, or take a longer-term view.
- The importance of the relationship.
- The arrangement fee. If smaller syndications are divided between arranging banks, they may be dissatisfied with the reduced fee.

At the same time, it is important that the company gets what it needs from the syndication. In particular, the treasurer needs to identify any potential covenants or other restrictions which the company cannot accept.

Syndicated loans are increasingly popular because of the variety of ways they can be structured and the funds used. However, the treasurer does need to be aware of the company's future funding requirements before the negotiations start so that appropriate terms and conditions can be agreed.

any shortfall if the syndication is not fully successful, with the borrower receiving the reduced amount. This type of arrangement is typically found when the aim of the loan is to provide backup financing.

Treasury must also be fully aware of the fees associated with the loan, which can include the following:

- **Margin.** The lenders will charge a margin over an agreed market benchmark.
- **Commitment fee.** Where a loan is not fully drawn, borrowers will be charged a commitment fee.
- **Utilisation fee.** In some cases, banks may be able to charge a small additional fee if a high proportion of the loan is drawn.
- **Arrangement fee.** The arranging bank or banks will normally receive a fee once the syndication has been successfully completed. This will be determined by the size of the syndication and the associated credit risk. In some cases, other lenders will receive an upfront fee (of only a few basis points) for participation in the syndicate.
- **Legal fees.** Companies will have to meet the costs of their legal advisors.

Send and receive

The final step before the syndication is closed is to appoint a bank to act as administration agent. The primary role of this bank is to collect interest payments from the borrower and distribute these among the lenders.

This bank will also administer any interim drawdown notices. Under the terms of a revolving credit, the borrower is entitled

to call for a drawdown of funds at any time. Ensuring that all participants meet their obligations is a key determinant of the success of the syndicated loan.

Secondary market

For lenders, an important factor is the secondary market, where exposure to the syndicated loan can be managed by selling on part or all of a bank's participation in a syndicated deal. The exact terms and conditions for this are set out in the loan documentation. Most transfers are made 'by novation', in which case the new lender becomes a 'lender of record'. In these circumstances, the new lender simply replaces the original lender. The original terms and conditions apply, with the only change relating to which bank receives the interest payments.

The key factor in all cases is that the bank's ability to sell loans in the secondary market reduces the counterparty risk associated with the decision to participate in the syndication. As a result, the secondary market enhances liquidity in the syndicated market.

What is sometimes less well understood, however, is the importance of the secondary market for borrowers. Indeed, the transferability of loans is an important component in the growth of the market. For the corporate borrower, the development of the secondary market has also enhanced liquidity in the primary market, arguably bringing down margins for all borrowers.

Digital disruption

Arranging and managing a syndicated loan can be an inefficient, labour intensive and lengthy process. While the various loan market associations around the world have made great strides in simplifying this process through the creation of standardised loan documentation and championing best practices, complexities remain.

The syndicated loan industry is, therefore, ripe for digital disruption, and a number of parties are already looking to digitise this space. In September 2016, for example, a group of banks including Credit Suisse, the R3 blockchain consortium, and fintech start-up Symbiont announced that they had taken steps to improve the process. The trial loan, arranged by Credit Suisse, employed smart-contract technology that sees contracts exchanged on the blockchain to quicken and increase the efficiency of loan trade settlements. Using this type of solution, paperwork can be reduced dramatically, as can the hurdles and inefficiencies that any trade market routinely sees.

"This project demonstrates the potential for blockchain technology to fundamentally reshape the syndicated loan market and the capital markets more broadly," said Emmanuel Aidoo, head of the distributed ledger and blockchain effort at Credit Suisse following the announcement of the trial. "This demonstration sets us on a path to increase efficiency and reduce costs, which will benefit banks and clients alike. By connecting a network of agent banks through blockchain, we can achieve faster and more certain settlements in the loan market."

It remains to be seen how long it will be until solutions such as these are fully implemented. But one thing is for sure: disruption in the syndicated loan market is coming, and will hopefully benefit the whole ecosystem.

ASEAN

“ Since AEC integration at the end of 2015 what have been the most significant developments across the ASEAN region and what opportunities or challenges have these developments created for corporate treasury departments? ”



Rohit Joshi
Managing Director and
Head of Global Liquidity and
Cash Management
HSBC Singapore

The AEC effectively spells the free movement of goods, services, skilled labour and investment – and our clients have been responding with gusto. It has triggered regional homogeneity in trade and investment. The implementation of the Prioritised Key Deliverables under the Phnom Penh Agenda has resulted in tariff elimination on exports of ASEAN-originating products and the elimination of trade barriers between member states.

Intra-ASEAN investment is outpacing investment from Europe and Japan at US\$22bn as of 2015, amounting to almost 20% of all FDI. At the same time, ASEAN GDP is set to more than triple by 2030, ranking it the world's 3rd largest economy.

We are seeing increasing interest from corporates investing in markets like Vietnam and Cambodia. Despite the uncertainty in the ratification of the Trans-Pacific Partnership, Vietnam and Cambodia will continue to be attractive to manufacturers, especially with China's operational costs becoming increasingly expensive.

Undoubtedly, ASEAN presents glittering prizes for corporates; however, traversing the complex financial regulations and conditions does pose challenges.

Firstly, while national clearing infrastructure within ASEAN is fast developing – including Myanmar and Cambodia developing real-time gross settlement system, and Singapore and Malaysia having already established real-time low value settlement with FAST and FPX – cash and paper instruments are still commonly used in developing markets like Indonesia and Vietnam. Effectively, this means that many companies paying wages in developing markets are handing out cash.

There is a digital financial inclusion agenda under the ASEAN Connectivity Masterplan 2025, but it will take some time before we have a homogenous pan-ASEAN payment system like the Single Euro Payments Area (SEPA).

Secondly, foreign exchange regulations can pose roadblocks. Within ASEAN, treasurers need to contend with ten different currencies and its different exchange control regulations. A number of the currencies are non-tradable outside of their home market, and banks are required to ensure that corporates provide supporting documentation with purpose of payments for all foreign exchange transactions.

This restricts the free movement of cash and limits the use of liquidity management solutions to utilise excess trapped cash. For example, in Vietnam, the basic task of taking surplus liquidity out of the market could be hampered at a time when US dollar liquidity is limited, as businesses need to convert their Vietnamese dong to US dollar.

Thirdly, there is no single regional or international bank that fully covers all ten ASEAN countries. Treasurers will probably need to use a number of banks to support the corporate cash management needs in ASEAN. Local banks may not provide SWIFT capabilities for account statement reporting or payments. Hence, certain business data might be missed out, limiting the overall visibility of cash and increasing the difficulty in managing working capital efficiently.



Ankur Kanwar
Executive Director,
Product Management,
Transaction Banking
Standard Chartered

With recent geo-political events (Brexit, USA election results), protectionism is clearly here to stay. However, selected regional organisations like ASEAN have been making steady progress since their foundation in 1967. 2015 was a key milestone for ASEAN with the formal establishment of the ASEAN Economic Community (AEC).

The region has now been transformed into a dynamic and creative platform for trade and commerce. ASEAN economy as well as population is now the 3rd largest in the world, with more than 50% of the population under 30 years old.

The single market is one of the core pillars of AEC, efforts of which are clearly visible in at least two areas. First is the aviation industry with implementation of the ASEAN open skies policy. The second area where significant advancements are visible is the financial services industry. AEC aims for gradual removal of restrictions for ASEAN financial institutions (banks and insurance companies) allowing them to provide services across member countries with a simplified operating framework.

Given market demographics, AEC framework creates significant potential for insurance companies. A well-developed, open and integrated insurance sector signifies competitive markets with greater quality and lower-cost services for the customers to choose from, particularly for catastrophe insurance which is relevant in many ASEAN markets.

With a significant rise in intra-regional, as well as external partner trade, AEC has also created significant opportunities for improved treasury and liquidity management. Cash centralisation in a treasury centre has always been a key objective for corporate treasurers. Of equal importance to insurance companies is the efficient management of its cash, including in the investment process. Whilst Singapore has been the pioneer for establishing treasury centres with open capital flows and FX policies, others such as Malaysia and Thailand are now pursuing similar policy reforms. Not every country in the region might be in a position to become a financial centre, but some are offering substantial incentives for setting up treasury centres in their home market. However, the ASEAN region is still hampered by a diverse set of regulations which inhibit the transfer of funds across markets. In fact, most markets still do not allow local currency to be held offshore which severely limits the ability for liquidity management structures.

Following the EU experience, without a stronger agenda on currency and regulatory co-operation and implementation of liberal policies, the ASEAN integration agenda will likely be overridden by complex processes and tedious execution.



Liew Nam Soon
Managing Partner,
EY ASEAN Financial Services

Almost a year after its formal establishment, there have been considerable and steady advances in applying key measures of the AEC Blueprint for economic integration, especially in the elimination of inter-regional tariffs. Unfortunately, there have been fewer tangible achievements around more challenging hurdles, particularly towards financial markets integration. The AEC still needs to strive for a more consistent set of operating rules across the region's markets in areas such as standards harmonisation, compliance, liberalisation of foreign investment, intellectual property and labour mobility.

To promote more active penetration of the ASEAN financial markets by regional banks, the ASEAN Banking Integration Framework (ABIF) was introduced to progressively remove restrictions to the provision of financial services by ASEAN financial service suppliers, and engender transparent supervision of Qualified ASEAN Banks (QABs) with single passports to operate in any ASEAN country.

However, the reality is that financial market and regulatory reforms have not lived up to the rhetoric.

This is not surprising given the differences in maturity of the financial systems of member nations. The nascent systems of Cambodia, Laos, Myanmar and Vietnam (CLMV) are ill-equipped to compete against the international standing of financial markets in neighbours like Singapore. These gaps also inevitably lead to some countries demanding more protectionism and time to develop and reform, resulting in different legal codes blocking major foreign participation and creating hurdles for financial integration. This is further exacerbated by ongoing global economic volatility and falling commodity prices that have made governments more defensive in protecting currencies and delaying foreign exchange liberalisation.

And while the freedom of capital to move across borders would bring about an increase in both out- and inbound FDIs and expand funding opportunities for corporates in emerging markets, ASEAN member states recognise that rapid capital account liberalisation could risk excess flows of capital. As such, restrictions around capital inflows and outflows between member countries remain to safeguard against potential macro instability and systemic risks.

Competition, rather than integration, also appears to resonate around certain aspects of corporate treasury. One such instance is the establishment of a shared regional treasury centre for MNCs that are expanding across borders and expecting to benefit from efficiencies with a singular ASEAN market. While Singapore is the premier regional treasury centre and should logically be promoted as ASEAN's corporate treasury hub, a number of other countries such as Malaysia, Brunei and the Philippines are competing to host regional treasury operations. This then delays the development of a primary ASEAN shared treasury centre if corporates are being encouraged by regulators to locate regional treasuries in different countries on different legal frameworks.

On the flipside, integration of AEC in an environment with global financial uncertainty and an incremental rate environment could be a boon. We are witnessing some treasurers already shifting from the US dollar to local bond markets as an alternative to bank financing for corporate expansion, bolstering cross-border flows and contributing to the maturity of regional bond markets. Additionally, challenging market conditions are compelling treasurers to transform businesses to differentiate against competition. Talent management is a key focus and greater ASEAN mobility can help smaller organisations find specialised treasury, cash, liquidity and risk management skills.

With government bodies attempting to protect domestic interest, full integration may not materialise for years as they focus first on national rather than regional market developments. Nonetheless, for corporates and banks to truly benefit, momentum for financial integration has to accelerate.

Next question:

"With corporates in Singapore allegedly facing a US\$12bn debt scramble this year as bonds fall due, what should treasurers at these companies be doing to refinance this debt?"

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

Blockchain for treasurers

Several conferences in 2016 have persuaded me that most treasurers (and most bankers) do not really understand distributed ledgers such as blockchain and their implications for the profession. Here I take a closer look at the key attributes of distributed ledgers and put these into perspective.

Blockchain has been associated with bitcoin, which in turn has been associated with many scandals. Fintech has, therefore, moved to the more neutral term 'distributed ledger'. But this term doesn't mean much – treasury management systems and general ledgers are normally distributed for resilience purposes. I prefer the term 'mutual distributed ledger (MDL)', which conveys the multi-owner aspect of the technology.

How it works

MDLs are composed of chains of data blocks containing records of some kind. Whenever a new block is added to the chain, a hash (an encrypted checksum that is unique to the underlying data) is added to the top of the chain, effectively "locking" the chain (any change in the records in any block would result in a different hash, making any tampering evident).

The records within each block can be encrypted so that only their owners can see the details. This means the network of nodes does not have to see the data within each record – it merely certifies through consensus on the hash what is stored in each block. This is why MDLs are used for medical records, KYC, and other sensitive information.

Every node (or server) in the MDL network has a full copy of the entire chain, and all the nodes must agree on the hash before a new block becomes part of the chain.

In summary, MDLs have four key attributes:

- **Ledger:** MDL is composed of blocks of records.
- **Distributed:** MDL is distributed across many nodes or servers.
- **Mutual:** MDL is spread across multiple entities and relies on consensus to validate the hashes.
- **Immutable:** MDL blocks are secured by the hashes that are cumulative including the latest block and all previous blocks.

Let's then take a look at these attributes in more detail and put them into perspective.

Ledger

Ledgers have existed for millennia. First sticks then clay tablets, then paper in its various forms, then punched cards, and now bits and bytes in different forms.

Ledgers are generally composed of records – such as journal entries in an accounting general ledger. They are commonly used to record transactions such as money flows or purchases and sales, and to record assets such as real estate, trade, and financial asset ownership. They can also be used to record data such as legal and individual documents (for KYC), medical records, institution membership, and so on.

In MDLs, the ledger is composed of blocks of records, which are analogous to pages of a paper ledger, arranged in a chain, which is analogous to the binding that holds the individual pages together in a paper ledger book.

Current generation ledgers are typically held on SQL databases, though other forms of database are used in different circumstances.

Distributed

MDLs are normally highly distributed. The bitcoin blockchain, for instance, runs on thousands of otherwise unrelated servers operated by "miners" who are paid for their efforts in bitcoins. Commercial MDLs tend to be run across a smaller group of interested parties – banks for payments, brokers for securities, etc.

Being distributed increases the resilience of the MDL. Since all nodes have a full copy of the MDL, when any node goes down the MDL continues to function.

This insight is not new to MDLs. Most SQL databases offer clustering, whereby the database is replicated across multiple servers in different locations. Apache – the open source organisation that drives most web servers – offers at least three distributed database solutions: Cassandra for NoSQL, CouchDB for JSON and Hadoop for big data.

Distributed databases are not just for cloud and the web. Most corporate ERPs and TMSs will have distributed databases in at least two locations to ensure sustainability.

Mutual

MDLs are typically shared across a number of participants. The industry talks about permissioned and permissionless MDLs. The bitcoin blockchain is permissionless – anyone can participate and no-one controls onboarding.

In fact, the bitcoin blockchain also provides an example of an ownerless MDL. Satoshi Nakamoto – whoever they are – wrote the original paper describing the bitcoin blockchain and has since left it to live its own life. Governance is purely baked into the algorithms themselves.

Permissioned MDLs have some kind of mutual or individual gatekeeper, so it's more like a private club. This is the kind of MDL envisioned by most banks and regulators. MDLs can also be private.

MDLs enable a kind of technical mutuality that is different from what can be achieved with traditional databases. But there are plenty of examples of shared data systems. Wikipedia is a huge example. SWIFT is a major example in finance. Most clearing systems are mutually owned by banks and/or government. But it is true that they all required human old school governance.

Immutable

Absent tricks like disappearing ink, the old paper ledgers were immutable. Think of shivering Bob Cratchit transcribing entries into Scrooge's ledger. Any mistakes have to be corrected with a reversal and new entry.

We have carried the same principal into our digital ledgers. For example, auditors routinely perform tests to ensure that general ledger entries cannot be tampered with after posting. This is routine with current accounting systems using old school SQL databases.

So 'immutable' is also not unique to MDLs.

What MDLs do change is the governance model. To trust an SQL database, you need to trust the governance of that database. Intrinsically, an SQL database is mutable using SQL's "UPDATE" and "DELETE" statements. We need to have digital and human controls in place to ensure that general ledger entries are not changed after posting. For our own general ledger, we trust our internal controls. For external ledgers like a bank account, we trust the service provider's control and verify with reconciliation.

The MDL governance model is different. In an MDL we trust the hashing of the blocks, cryptography, and the consensus mechanism. This tech governance is probably as good or better than traditional controls. What is significant is that we trust the technology rather than the institution. This can be a very powerful shift.

Some considerations

When considering financial technology, it is important to remember that there are many issues beyond technology per se at play. Capital and liquidity will always be critical – for example, instant payments reduce or eliminate counterparty and also bring possible liquidity issues (period net settlement in central bank money has the benefit of reducing liquidity tied up in payments).

Regulations will affect fintech feasibility. This is why progressive central banks like BoE and MAS have created regulatory sandboxes for fintech experimentation. While MDLs

have the potential to greatly smooth KYC, regulators will still want money flows to be controlled for fraud, AML and KYC.

In the end, humans have to trust the new systems if they are going to use them. Treasurers are for good reason very conservative. Current low tech, for all its frustrations, basically works (albeit slowly and expensively) and the problems are well known and generally mitigated. New tech may bring new risks – is it really secure, will it be sustainable, will there be liquidity in tight times?

These issues are not insurmountable, but we need to remember that non-tech issues may be critical to success. A good example is Ripple which has 45 banks doing sub-second cross-border payments; Ripple has addressed many of these problems by working with and through banks (and hiring experienced bankers).

Looking to the future

MDLs clearly offer many potential benefits. They will likely become very important in finance, and maybe even a key part of the internet itself. However, MDLs are not the only technology that provides those four key features:

- **Ledger:** there are many database technologies that work fine as ledgers.
- **Distributed:** most current databases are distributed.
- **Mutual:** mutual systems are prevalent throughout finance and work reasonably well and are well understood.
- **Immutable:** we have long experience with reliably locking down ledgers in current database technology.

MDLs per se and from a strictly technological perspective will not necessarily upend the treasurer's world. However, the threat of MDLs (and even the fashion for MDLs) will likely prompt banks et al to push forward with things they should have done years ago, like trade and KYC registries and fast, cheap, transparent cross-border payments. But for treasurers, it does not really matter whether they do it with MDLs or SQL or NoSQL.



David Blair, Managing Director

Twenty five years of management and treasury experience in global companies. David Blair was formerly Vice-President Treasury at Huawei where he drove a treasury transformation for this fast-growing Chinese infocomm equipment supplier. Before that Blair was Group Treasurer of Nokia, where he built one of the most respected treasury organisations in the world. He has previous experience with ABB, PriceWaterhouse and Cargill. Blair has extensive experience managing global and diverse treasury teams, as well as playing a leading role in e-commerce 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.

Clients located all over the world rely on the advice and expertise of Acarate to help improve corporate treasury performance. Acarate offers consultancy on all aspects of treasury from policy and practice to cash, risk and liquidity, and technology management. The company also provides leadership and team coaching as well as treasury training to make your organisation stronger and better performance oriented.

david.blair@acarate.com

www.acarate.com





INSIGHT & ANALYSIS

21st century payments

Disruption in the payments space is rife. Across both retail and corporate payments, numerous players including banks, industry consortiums, and fintechs are looking at ways to revolutionise how payments are made and the user experience when making them. What are the headline impacts for corporate treasury? Treasury Today Asia investigates.



TECHNOLOGY

UI and UX

Apple sparked a technological revolution, but what has been most crucial to the company's success has been its ability to make its technology very simple to use. The user interface (UI) and user experience (UX) that Apple offer is second to none. Now these concepts are being used by banks and treasury technology providers when designing their digital platforms. What does this mean for the treasury systems of the future?



RISK MANAGEMENT

Turning cyber-security into a business enabler

The risk posed to businesses by cyber-criminals is vast, that is without a doubt. It is also an issue that is not going to disappear anytime soon. What is often overlooked, however, is that best in class cyber-security practices may actually enable the business to perform better. In this article, we look beyond the risk and at how treasury can take a lead in turning cyber-security into a business enabler.

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

Scott Barton, Head of Corporate & Institutional Banking, Europe, Standard Chartered; Lawrence Chang, China Treasury Manager, Honeywell; Wan Chun Shong, Group Treasurer, Tan Chong Group; Claire Bechaux, Director of Treasury, Veolia; David J.Cooper, Head of FX4Cash™ Product Specialist Team Asia, Deutsche Bank; Sonam Donkar, Associate Director Head of Treasury, PepsiCo India; Mark Evans, Managing Director, Transaction Banking, ANZ; Ying Gu, Emerging Markets Asia Rates & FX Strategist, J.P. Morgan; Nick Howden, Asia Pacific Technology, Media and Telecoms Sector Head, Treasury and Trade Solutions, Citi; Mitko Iankov, Head of Market Development – GTM Europe, Thomson Reuters; Rohit Jamwal, Asia Pacific Consumer and Healthcare Sector Head, Treasury and Trade Solutions, Citi; Hari Janakiraman, Head of Core Trade, ANZ; Daniel Jefferies, Group Treasurer, Equiniti Group; Rohit Joshi, Managing Director and Head of Global Liquidity and Cash Management, HSBC Singapore; Ankur Kanwar, Executive Director, Product Management, Transaction Banking, Standard Chartered; Vincent Liu, Asia Treasurer, Managing Director, General Electric Capital; Damian Macinante, Asia Pacific Non-Bank Financial Institutions Sector Head, Treasury and Trade Solutions, Citi; Rick Martin, Group Treasurer, GasLog; Deborah Mur, Asia Pacific Industrials, Energy, Power and Chemicals Sector Head, Treasury and Trade Solutions, Citi; Liew Nam Soon, Managing Partner, ASEAN Financial Services, EY; Munir Nanji, Asia Pacific Sales Head, Treasury and Trade Solutions, Citi; Randy Ou, Treasury VP, Alibaba; Aziz Parvez, Head of Asia Pacific Trade and Supply Chain Finance, Bank of America Merrill Lynch; Kush Patel, CEO and Co-Founder, Tallysticks; Keith Pogson, Senior Partner, EY Asia Pacific Financial Services; Mark Smith, Global Head of Liquidity Management Services, Citi; Venkatesh Somanathan, Global Head, Supplier Finance Solutions, Deutsche Bank; Patrick Tai, Finance Director, CNOOC and Shell Petrochemicals; Paul Taylor, Managing Director, Regional Sales Head, GTS EMEA, Bank of America Merrill Lynch; Matt Tuck, Head of Global Transaction Banking, Barclays Corporate Banking; Michael Vrontamitis, Global Head of Trade, Product Management, Standard Chartered.

WHEN
THE BIG
ISSUES
SURFACE
ARE YOU
PREPARED?

New possibilities, here I come



You've surveyed the business market and staked your new territory. With a solid foundation in more than 40 countries, ING can help you break new ground. ING is your guide to connect around the world.

www.ingwb.com/asia

[World, here I come]