flow Insights from Deutsche Bank Corporate Bank

Issue 10 | H1 2020

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Inside this issue:

A healthy approach

Merck's Jörg Bermüller explains how treasury innovation is helping to drive growth at the science and technology giant

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Most Innovative Bank

GTR Best Deals 2020 (April 2020)
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TXF Deals of the Year Perfect 10 Awards 2020 (April 2020)
India: Nayara Energy Ltd.

Euromoney Trade Finance Survey 2020 (January 2020)
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The Asset Triple A Treasury, Trade, SSC and Risk Management Awards 2020 (May 2020, partially announced at the time of print)
Best Banks South Asia/MENA
Best in Treasury and Cash Management for South Asia
Best in Treasury and Working Capital for MNCs in India
Best Service Provider for Cash Management in India
Best Service E-Solutions Partner in India
Best in Treasury and Working Capital for MNCs and LLCs in India
Best in Treasury and Working Capital for MNCs and LLCs in Sri Lanka

Best ESG Solutions
For Payoneer Inc. (in India) and Cargill Inc. (in Indonesia)

Best Digital Solutions – payments and collection solutions
Hailiang Group (Industrials) in China
BASF (Industrials) in Hong Kong
Allianz (Financial Services) in Indonesia
Philip Morris Trading (Consumer Goods) in Thailand

Greenwich Associates 2020 Awards (March 2020)
Greenwich Quality Leader 2020
European Large Corporate Cash Management Quality: Germany

Treasury Management International (TMI) Awards for Innovation & Excellence 2019 (January 2020)
Best Bank for Cash & Liquidity Management, Europe (3rd consecutive year)

Euromoney Cash Management Survey (Corporates) 2019 (September 2019)
Market Leader for Corporates
No.1 in Western Europe (8th consecutive year)
No.1 in Germany (8th consecutive year)
No.1 in Portugal (2nd consecutive year)
No.1 in Spain (2nd consecutive year)

Euromoney Cash Management Survey (Financial Institutions) 2019 (September 2019)
Market Leader for Financial Institutions Globally
Leading EUR Provider for Financial Institutions Western Europe, No.1 for EUR, No.1 for USD

Foreign Exchange/Risk Management

Profit & Loss Digital FX Awards 2020 (April 2020)
Awards for e-FX Excellence: Market Colour 2.0, Autobahn OTC Structures, Autobahn Mobile
Winner 2020 Profit & Loss Innovation Award

EMEA Finance Treasury Services Awards 2019 (September 2019)
Best FX Services in Europe (2nd consecutive year)

Asia Risk Awards 2019 (September 2019)
RMB House of the Year
Deal of the Year: Deal contingent interest rate swap for WPD

Securities Services

Global Investor/ISF Beneficial Owners Survey 2020 (Feb 2020)
Best Lending Agent (weighted) EMEA (3rd consecutive year)

Global Custodian Agent Banks in Emerging Markets Survey 2019 (Jan 2020)
Winner of 47 outperformer rankings across, global, market and category service areas

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Infrastructure Investor Awards (September 2019)
Global Corporate Trust Provider of the Decade

flow

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Hold the celebration

Deutsche Bank celebrates its 150th anniversary this year, having been founded in Berlin on 22 January 1870 to "transact banking business of all kinds, in particular to promote and facilitate trade relations with other European countries and overseas markets." We would have wished to mark the occasion in happier circumstances. However, the speed and ferocity with which the Covid-19 pandemic has spread worldwide since January imposes a duty on us all to focus our efforts on supporting clients and staff in developing the best possible solutions to their current challenges.

Our Chief Executive Christian Sewing has spoken candidly about the scale of the challenge, yet we remain undaunted. Together with our industry peers, Deutsche Bank is dedicated to being part of the solution in cushioning the macroeconomic shock, repairing the damage to broken supply chains and maintaining the liquidity of our corporate customers – who in most cases cannot look to insurance to cover them for losses resulting from the slump in demand.

With well-targeted support from both banks and governments, fundamentally strong businesses will survive what will be a sharp – but hopefully temporary – shock and be well positioned to benefit from the ensuing recovery. It's appropriate that the subject of *flow*'s cover story in this issue, science and technology company Merck, has more experience than almost any other business in surmounting geopolitical and economic shocks since its incorporation in 1668. And it's one of the most distinguished names in an industry dedicated to solving the world's current crisis.

We hope, as ever, that this edition provides a wealth of insights.

Stefan Hoops
Head of Corporate Bank

To learn more, visit
db.com/flow

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"Merck helps to bring tangible benefits to people – such as combatting diseases – through our products"

Jörg Bermüller, Head of Cash and Risk Management in Group Treasury, Merck
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flow is published by Deutsche Bank Corporate Bank

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flow is printed on Nova Tech Matt paper, which is sourced from responsible sources

Cover photography: Karsten Thormaehlen

The majority of the content for this issue of flow *was produced before Covid-19 became a pandemic. While some articles address the implications and effects of the virus, others were written pre-Covid-19 and should be read within that context*

"Ten years ago, if I told people about renewable energy, they'd look blank. Today, everyone has an opinion about it"

Dr Alexandra von Bernstorff, Founder and Senior Managing Partner, Luxcara
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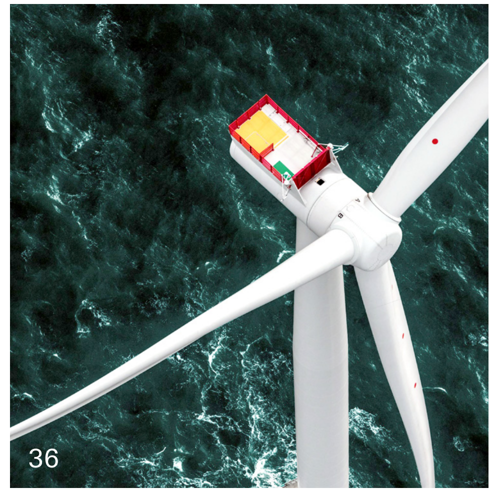

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Covid-19 briefing

As Covid-19 rearranges the world order on many levels, situational data and regional responses change on a daily basis. This article summarises the early impact on households, businesses and governments, with analysis drawn from in-depth research by Deutsche Bank

The impact of the Covid-19 pandemic on the global economy and financial markets is unprecedented within the past 50 years in terms of its direct effects on global supply and demand. The timing of Covid-19 is particularly challenging following the US–China trade war and the ongoing decoupling between the two countries, the forthcoming US election, and the collapse in the oil price (a new low was reached on 20 April when the May contract for West Texas Intermediate briefly traded at US$-39.55/bbl).[1]

Given that the virus started in Asia, moved through Europe and then on to the US, the damage left in its wake varies significantly regarding case numbers and economic impact, with the latter depending on a country's reliance on exports, tourism and service sectors, and vulnerability to changes in global trade patterns.

Case development and contracting economies

In less than three months, the Covid-19 virus has spread to more than 200 countries.[2] By mid-April 2020, case numbers had hit two million and they surpassed three million at the end of that month. A number of countries had surged past their peak for new cases reported daily (see Figure 1). Kristalina Georgieva, Managing Director of the International Monetary Fund, has predicted that more than 170 of its 189 member countries will suffer falling output per head in 2020. "The bleak outlook applies to advanced and developing economies alike. This crisis knows no boundaries. Everybody hurts," she said.[3]

The Organisation for Economic Co-operation and Development (OECD) has said that the lockdowns imposed in many regions of the world will directly affect sectors; amounting to up to one-third of GDP in major economies. The OECD also predicts that each month of containment means a loss of two percentage points in annual GDP growth. Even once these measures begin to be eased, it adds, "the extent of any subsequent recovery in output will depend on the effectiveness of the policy actions taken to support workers and companies through the downturn and the extent to which confidence returns."[4]

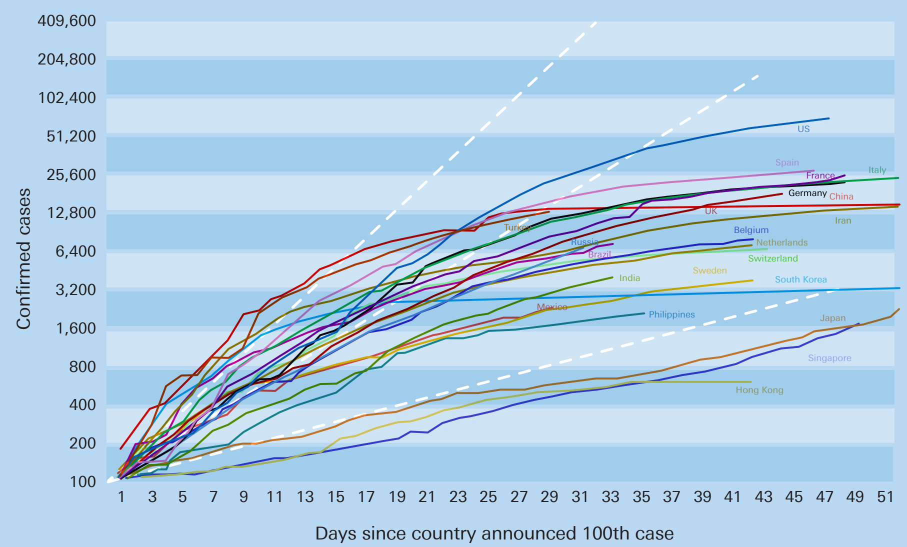
Not only has the pandemic transformed the economic outlook, with a deep global recession for 2020 regarded by most as inevitable,[5] but the policy landscape has changed as well. The problem, noted Deutsche Bank's market strategists Oliver Harvey and Robin Winkler on 20 March 2020, is not one of demand shock but rather supply shock that is now spilling over into demand.

"Consumers did not initially stay away from shops and restaurants because they were worried about their future economic prospects, but because governments told them to stay at home," they reflect. "Holidays are not being cancelled to shore up household finances but because countries have closed their borders. Workers have not been furloughed from factories because of insufficient orders, but because employers are worried about the risk of spreading disease." Their point is that the mass unemployment arising from the social distancing and lockdown measures lowers aggregate demand and the fiscal responses of the various stimulus packages coming from governments could drive up inflation while not being particularly effective.[6]

"The extent of economic impairment is broadly of the same order of magnitude for all regions," explain the authors of Deutsche

Images: iStock, Getty

Figure 1: Covid-19 case growth after 100 confirmed cases



Source: Deutsche Bank, WHO, CDC, Worldometer

Information sources:

Publication	URL
Deutsche Bank Research: Corona Crisis Daily	dbresearch.com
Deutsche Bank Wealth Management: *From Monetary Magic to Fiscal Faith*	https://bit.ly/2VuZFIq, deutschewealth.com
flow: Covid-19 Dossier	db.com/flow/COVID-19
Center for Systems Science and Engineering at John Hopkins University: Coronavirus Covid-19 Global Cases	coronavirus.jhu.edu/map
ICC Banking Commission support	https://bit.ly/3adFzrt, iccwbo.org

Bank Wealth Management's report, *From Monetary Magic to Fiscal Faith*, which was published on 8 April 2020. They continue: "As a rule of thumb we estimate that around 1.5% of a country's annual gross domestic product can be subtracted per month of lockdown. Hence, we expect a severe and sharp contraction around the world followed by a recovery in H2 once the measures fade, and a subsequent more muted expansion as the consequences of the crises need to be digested, including rising debt levels across all regions as the consequence of massive fiscal stimulus."

Fiscal responses

When doors are closed and plants mothballed, the corporate sector has much lower revenue and workers have much lower incomes. As a result, a government has to step in and replace that income by giving grants or loans to companies and workers, explains Torsten Sløk, Chief Economist at Deutsche Bank Securities.[7] This rescue, he adds, has to be financed and the result is more government debt issuance, which further increases an already significant amount of government debt outstanding in a number of countries, most prominently the US.

An alternative way to raise money is for corporates to issue bonds that raise cash to keep them afloat through an extended lockdown. This option heightens the level of debt in the corporate sector. Similarly, households may have to increase debt levels; for example, if workers lose their jobs because of the virus.

Examples of major stimulus packages include the US's landmark US$2.4trn Coronavirus Aid, Relief, and Economic Security Act, which comprises credit facilities for smaller firms as well as loans and grants to larger ones. Germany's supplementary budget of €156bn (4.5% of GDP) is the biggest package among the major EU countries, with most of the money going towards emergency relief for small companies and the self-employed, along with easing access to basic security benefits and additional healthcare spending. Introducing short-time working, which eases the salary burden for companies without making employees redundant, is a key element and was already heavily used during the global financial crisis. France has agreed on an emergency fiscal spending of €45bn (1.9% of GDP), which includes measures for partial unemployment and simplification of unemployment schemes. The aim here too is that companies do not have to lay off staff who they will need after the crisis. In order to provide companies with cash flow, the state will give a guarantee of up to €300bn for new bank loans.

Exit strategies and recovery

As the Deutsche Bank Research team notes in its 30 March report, *Impact of Covid-19 on the Global Economy: Beyond the Abyss*, the timing and shape of the recovery will be determined by several factors, including:

- The course of the pandemic and effectiveness of efforts to contain it;
- Depth of the initial decline in activity; and
- Magnitude, timing and effectiveness of macro policy responses.

Predictably, the city of Wuhan in China – the location of the first reported cases of Covid-19 – was also the first to end its lockdown, and after 76 days it reopened for business. Other Asian economies such as South Korea and Singapore have shown how early containment and proactive tracking and tracing policies – via the deploying of mobile phone and personal data technology – have been important elements of those countries' exit strategies, while vaccine research continues.

Sources

[1] See https://bit.ly/2Y61KO1 at db.com/flow
[2] See coronavirus.jhu.edu/map
[3] See https://bit.ly/2xzCCUT at imf.org
[4] See https://bit.ly/2xslINw at db.com/flow
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[6] See https://bit.ly/3etSfxV at db.com/flow
[7] See endnote 4

Regional update

Europe, Middle East and Africa

European issues such as the Brexit aftermath and threatened US tariffs have been set aside in the wake of the Covid-19 pandemic, which UN Secretary-General António Guterres said on 1 April 2020 threatens a recession "that probably has no parallel in the recent past". While the crisis is global, the epicentre moved within weeks from China to Europe, with quickly assembled multi-billion financial lifelines set up to help companies through a prolonged period of closures and lockdowns

Decisions such as agreeing the EU budget to 2027 were shelved as the virus spread, although analysts note that "Brexit leaves a sizeable gap of around €60 to €75bn in the €1trn budget". A special European Council meeting concluded on 21 February; as leaders left Brussels with no agreement reached and no timetable for further talks.

By then, Covid-19 dominated the agenda, with emergency rescue packages launched as business activity ground to a halt. The impact of restrictions, including nationwide lockdowns, was dramatic. By the start of Q2, analysts reported that household spending on non-essential items or experiences was "down around 35% to 40% compared to normal", with households "also expressing concern about both their near-term cash flows and the ability of their governments to contain the spread of the virus".

While small firms "can be more flexible in shifting their production to changing consumer preferences [they] may also have more difficulties in accessing credit and could face greater liquidity issues". Employment conservation measures range from prohibiting lay-offs in the near term, to reintroducing short-term schemes that preserve jobs and brand-new furlough initiatives to limit job losses.

With most lockdowns introduced in late Q1 and activity disrupted even earlier, analysts expected euro area GDP to contract 3.4% in Q1 2020 and 11.4% in Q2, assuming that "non-essential activity will cease…from late March into mid-April, leaving activity broadly speaking about 75% of normal levels at the low point about two weeks after the start of lockdown". While Q3 should witness a sharp rebound, the longer term promises only "a very gradual return to pre-crisis levels of activity".

For the Central and Eastern Europe, Middle East and Africa (CEEMEA) economies, in mid-April analysts wrote: "We lower our estimate for average real GDP growth by 2.6 percentage points (pp) to -0.9% year on year (yoy) in 2020. We expect the Gulf Cooperation Council (GCC) region, barring Bahrain, to continue to print positive growth this year, due to rising oil GDP. Average CEEMEA growth, excluding GCC growth, looks set to transpire at -3% yoy. This is 3.2 pp lower than our previous estimate, and also represents a 5.9 pp decline from last year."

United Kingdom

Even before Covid-19, analysts noted that "the wettest February on record" had brought economic growth to a halt. In response to the pandemic, the authorities introduced full lockdown measures from 23 March, further contracting the economy. "We now see UK GDP shrinking by 6.5% with Q1 dropping by 1.9% quarter on quarter (qoq) and Q2 plummeting by a record 13% qoq…making this potentially the worst recession for a century," analysts stated in early April.

Turkey's central bank has directly intervened in the secondary bond market to provide liquidity

Analysts expect Germany's GDP to decline by 4–5% in 2020, although this could be offset by a recovery in H2

The South African Reserve Bank has begun to flex its muscles in a significant way

Images: iStock

Assuming quarantine measures lift before Q3, the economy is expected to rebound, although the "scarring effects on both businesses and households" are likely to be longer term, with the UK's jobless rate predicted to rise to 7–8% in the coming months.

Germany

The government's 'protective shield' launched in March focuses on "emergency liquidity measures to support corporates facing severe liquidity shortages". Measures include broadening existing liquidity programmes – through potentially unlimited state guarantees – to facilitate firms' access to affordable loans; easing firms' access to a moratorium of tax payments, which could mean a temporary loss of billions in tax revenue; and easing conditions for short-time allowances (*Kurzarbeitergeld*), which cover 60% of a crisis-driven shortfall in employees' working hours/compensation. Analysts note that due to "high uncertainty" the government set no upper limit for its liquidity support, but "pointed towards a guarantee volume of €460bn" (13.15% of GDP forecast for 2020).

Despite these measures, they still expect GDP to decline by 4–5% in 2020, although this could be offset by a recovery in H2. German companies are better placed than at the start of the 2008–2009 global financial crisis. Within manufacturing, those seen as highest risk are SMEs in mostly traditional industries that are turning over less than €10m.

Ukraine

The pandemic is badly timed for Ukraine, which saw Q4 2019 GDP growth slow to 1.5% yoy against an expected 2.4%; its slowest in four years and down from 4.1% in Q3 2019. The decline took 2019 annual growth to 3.2% and analysts predicted that "continued strong consumption and gradual external improvement" would see an uptick to 3.5% in 2020. Final approval for a US$5.5bn three-year International Monetary Fund support deal agreed in December 2019 remains uncertain, as the deal is contingent on "key pieces of legislation [that] have faced delays".

Saudi Arabia

Analysts note that the failure of the Organization of the Petroleum Exporting Countries members to reach a deal on oil production and the subsequent Saudi price war with Russia upset global energy markets and beyond, even before the pandemic, which "occurred at a time when the extent of oil demand shock, along with depressed oil prices, were expected to give rise to further macroeconomic imbalances throughout 2020". All countries are expected to follow the Saudi lead in increasing output and introducing large fiscal expenditure cuts.

"The Saudi finance ministry has reportedly requested that public agencies revise their expenditures downwards by 20–25% for the current year. Furthermore, we expect the government to increase the ratio of oil revenues entering the budget, as it did in Q1 2019 or during previous episodes of oil price shocks," say analysts. "Since we see the fiscal contraction to be limited to this year, we expect a significant deterioration in the fiscal balance in 2021, widening to 8.6% of GDP."

South Africa

The South African Reserve Bank (SARB) "has begun to flex its muscles in a significant way" analysts note. It confirmed on 25 March that it will buy government securities in the secondary market. This contrasts with the previously "orthodox approach to policy", although "tightening global financial conditions, alongside the significant re-rating of domestic yields, could have financial stability consequences down the line". SARB's move comes as "the government's funding burden is rising at a substantial clip", yields having "re-rated on average by some 300–400 bps since the start of Covid-19".

Turkey

Measures taken in response to the pandemic saw the Central Bank of the Republic of Turkey join fellow central banks by directly intervening in the secondary bond market to provide liquidity. The move, analysts say, represents "de facto quantitative easing, in its contemporary definition, which was previously unimaginable due to [Turkey's] history of entrenched (and malign) interaction between monetary and fiscal policy in the period leading up to the 2001 crisis".

Note: Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis, which may prove to be incorrect

Sources

Deutsche Bank Research reports: *Focus CEEMA* (21 February 2020); *Europe Talking Point* (25 February 2020); *Focus Germany* (18 March 2020); *CEEMA Macro Notes* (25 March and 3 April 2020); *Germany: Flash* report (19 March 2020); *UK Economic Notes* (1 April and 6 April 2020); *Focus Europe* survey (3 April 2020); *Focus CEEMEA* (9 April 2020); *Europe Blog* (14 April 2020); *EM Special Publication* (15 April 2020)

Regional update
Asia Pacific

For Asia Pacific, Covid-19 "adds to the growing list of reasons to be concerned about the longer-term outlook for the region's manufacturing model". Coming as the US–China trade dispute appeared near resolution, "this crisis could be a deciding factor leading to a significant change in the region's supply chain"

The stop-start nature of pandemic containment policies has generated an unprecedented flux in commodity market fundamentals so far. Analysts note that the current phase (as at mid-April 2020) is dominated by a sharp contraction in ex-China demand conditions, albeit partly offset by related supply side disruptions and a more advanced recovery stage in China.

China
The pandemic diverted attention from the signing of the 'phase one' US–China trade agreement on 15 January, which could "bring sizeable benefits to China and the world economy" according to analysts. How effectively it is implemented over the next two years "will determine when and how the phase two discussion will start". China's -6.8% GDP contraction in Q1 is expected "to be followed by a gradual recovery aided by banks across the region cutting rates and expansionary fiscal policy from the government". For 2020 as a whole, analysts see the economy contracting by only 1.4% and predict, "given the depth of the recession in the first half of this year, a return to close-to-potential growth [that will] create an artificial boost in 2021, reaching 11.9% for the year".

Australia and New Zealand
Analysts remain relatively upbeat on the outlook, with both countries imposing tighter lockdowns earlier along the pandemic curve. That means "a bigger short-term impact on activity", but potentially a "relatively more rapid recovery than elsewhere". The baseline is further supported by Australia's total economic stimulus of AUD320bn (16.4% of GDP), including a AUD130bn wage subsidy for workers. GDP contractions in 2020 are estimated at -3.2% for Australia and -3.8% for New Zealand. Australia's superannuation assets hit US$2.5trn at end-2019, up 16% yoy and around 126% of GDP. Analysts estimate around 10% was subsequently wiped off that total by the market sell-off, and note that annual inflows are around US$80bn, having dropped in recent years.

India
India's economic growth slowed even before a temporary nationwide lockdown on 24 March, falling in Q4 2019 to 4.7%, the lowest figure in more than six years. This was expected to halve to 2.4% in Q1 2020. Asian central banks show reluctance to follow their counterparts in developed markets and "engage in direct markets-style formal quantitative easing" note analysts, with the Reserve Bank of India (RBI) a prime example, although it has undertaken significant open market operation programmes. Analysts predict that the government's US$22.6bn economic stimulus plan – which was announced on 26 March and is equivalent to 0.8% of GDP – will "end up widening the deficit to 5% of GDP, versus 3.54% in the [1 February] Budget", when added to the growth/revenue shock. However, "the RBI is denying for now the possibility of directly buying bonds from the government".

Indonesia
Analysts highlight a major shift in policy, with Indonesia "in the process of overturning years of fiscal deficit caps, and moving towards allowing direct central bank purchases of government debt in primary markets". As part of the government's US$25bn stimulus package (2.4% of GDP), which was announced on 31 March, planned regulation would overturn a 2003 law capping the fiscal deficit at 3% of GDP. Instead, it "would then be allowed to breach this level for three years until 2023, and the deficit for this year would be set at a sharply higher 5.07%, from the initially budgeted 1.76% of GDP". The regulation "will also allow the central bank to purchase bonds in the primary market (which is currently not allowed) and the creation of a new class of 'recovery bonds'". Noting that the budget ceiling is suspended "for not one, but three years", analysts add; "so much for expecting a V-shaped recovery!"

South Korean industries have faced demand and supply shocks due to Covid-19

Singapore is heading for recession according to analysts

China's -6.8% GDP contraction in Q1 is expected to be followed by a gradual recovery

Images: iStock

Malaysia
Covid-19 underscores what the US–China trade war highlighted – the need for value chain diversification beyond China. The pandemic has further focused minds on the 'just-in-time' production model's shortcomings, say analysts. The Association of Southeast Asian Nations region is seen as a major beneficiary, with Malaysia, the Philippines and Vietnam already witnessing a pick-up in foreign direct investment commitments. "There is a clear diversification advantage to be had by doubling down on expanding value chains in Malaysia".

Singapore
The city state is heading for recession, with a -2.5% contraction in GDP for 2020 reflecting a 4% yoy decline in H1 output, say analysts. One silver lining, for now, is that "the attendant negative output gap is likely to be nearly half that during the global financial crisis", with Singapore slower than Malaysia and the Philippines to enforce lockdown. Although substantial monetary easing is expected, core consumer price index inflation should decline in 2020 by 0.2%, "leaving the door open to further actions from the Monetary Authority of Singapore later in the year". Noting that wage growth has steadily declined since a late-2017 peak to just 2.5% in H2 2019, analysts add that "the impact on tradable inflation from the ongoing commodity price collapse is clear". Indeed, "even non-tradable inflation is likely to be substantially pressured" as unemployment rises and wage growth collapses.

South Korea
In 2019, foreign investors repatriated 57% of their dividends out of the country, against a usual figure of around 40%. Analysts expect the rate to stay relatively high in 2020 "despite cheap equity valuations". These sizeable equity outflows are largely why the KRW has been among the region's weakest currencies, and "rising corporate credit risk could add to the outflows dynamic". Due to Covid-19, South Korea's industries "have faced demand and supply shocks and it could take months before corporate earnings rebound". The pandemic has also seen widening corporate credit spread across various grades. While Korean authorities have responded with various measures, including reactivating the bond stabilisation fund with an increase to KRW20trn (US$16.3bn), this "might not be sufficient to cap the widening credit spread – particularly among low-rated credit bonds". On 7 April, the government announced another stimulus package worth US$44bn, targeting exports and domestic consumption.

Thailand
The qoq impact of Covid-19 on Thailand's Q1 2020 growth is, say analysts, akin to the 2011 floods, but "economic activities this time around are unlikely to reverse sharply one quarter after". The shock is expected to be more like that of the Asian financial crisis, "with GDP contracting at around mid-6% – not only due to depressed exports, but also as harsher measures are rolled out". The government has announced two stimulus packages. The first, worth THB400bn (US$12.2bn), is "in the form of soft loans, credit relief, withholding tax reductions and tax deductions, among other things", while the second, worth THB117bn, includes THB45bn in cash handouts. A third, worth THB500bn, is expected. The Bank of Thailand has delivered two 25bps rate cuts, the second on 20 March to a record low of 0.75%, and "has room for one more 25bps rate cut while it ensures financial stability with liquidity injection". Analysts believe greater financial support may still be needed "to maintain the country's production capacity intact, so that the economy can quickly normalise".

Note: Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis, which may prove to be incorrect

Sources
Deutsche Bank Research reports: *Emerging Markets Quarterly* (12 March 2020); *Macro Notes: Australia and New Zealand* (1 April 2020); *Aussie Macro Insights* (2 April 2020); *Macro Notes: India, Indonesia, Malaysia* (1 April 2020); *Asia Local Markets Weekly* (3 April 2020); *Asia Economic Notes* (20 March, 26 March, 2 April and 6 April 2020); *Commodities Quarterly: Navigating the Virus Trough* (15 April 2020)

Regional update
Americas

Funding the fiscal response to Covid-19 has been a theme of analyst reports, as the virus has penetrated emerging economies weighed down with high levels of debt

Covid-19 represents "an unprecedented threat to emerging market [EM] economies and societies" and, for Latin American economies, which were hit almost three months after Asia, "the worst is still to come" warned analysts in mid-April. A pandemic "threatens the very fabric of society with potentially devastating loss of life and catastrophic economic and financial losses". On the positive side, "EM assets have cheapened somewhat, deleveraging has advanced, and reserves adequacy ratios and macro frameworks are – for the most part – supportive," analysts note. However, currencies including the Brazilian real (BRL) and Mexican peso already hover "near the weakest levels in 30–40 years".

United States

Even before Covid-19, there were signs of the long era of US economic expansion nearing a close. The pandemic has hit hard, making inroads outside major population centres and causing the highest number of cases worldwide, although analysts note "the US's epidemic curve is in line with Western European countries". They warn that "having mass testing in place will be crucial before any efforts to 'open' the economy will be ultimately successful".

Deutsche Bank's US *Economic Perspectives* report, which was published on 16 April, noted "more than five million initial jobless claims were filed last week. This brings the total new claims filed over the past four weeks to about 22 million, over eight times the prior worst four-week period in the last 50-plus years." Coupled with record numbers of benefit applications, April's unemployment rate approached 17%; a new post-World War II high. The sudden ending of economic growth triggered a "remarkable announcement" by the Federal Reserve on 9 April regarding steps to support the economy via deployment of the US$2.4trn Coronavirus Aid, Relief, and Economic Security Act. "The Fed delivered on three critical fronts," commented analysts. "The corporate credit facilities would support lending for large businesses, the Main Street Lending Program would boost liquidity for loans to small and medium-sized businesses, and the Fed would further support the municipal bond market."

Argentina

The crisis makes Argentina more vulnerable and the government must print money to finance the deficit, analysts warn, with monetary expansion in turn leading to higher inflation and a larger foreign exchange (FX) gap. The pandemic will also "make traditional disequilibria more challenging and harder to revert".

Before Covid-19, preparations were under way for debt restructuring after years of anaemic growth and pervasive imbalances. The Fernández administration planned a demand stimulus programme in the context of an exchange rate policy mix aimed at accumulating FX reserves to pay external debt. "The Argentine government had hoped – in a best-case scenario – to couple this programme with substantial debt relief from private bondholders and an eventual grace period arrangement according with the International Monetary Fund [IMF]," note analysts. However, the pandemic has reduced Argentina's chances of succeeding given the new sovereign debt crisis.

Brazil

Brazil's proposed fiscal bailout to support local governments, which was approved on

Mexico is the weakest link in the region according to analysts

The level of Colombia's contraction will depend on how quickly its economy returns to normal

Analysts are pessimistic about Brazil's "dark fiscal future"

Images: iStock

13 April, "seems half-baked" say analysts and was "largely perceived by markets as an irresponsible and opportunistic initiative". They add: "The government has been cautious, but the initiatives in Congress and the temporary breach of the spending cap raise serious concerns. It is crucial that this remains a 'war budget', rather than a recurrent draw on public funds if left up to Congress. The headline numbers announced so far – already close to BRL600bn (or 7.5% of GDP) – can be deceiving, as most of the measures encompass advancement in payments to corporates, individuals and local administrations rather than new disbursements."

Analysts remain pessimistic regarding "Brazil's dark fiscal future" and the bailout of the public sector, and their projection is now for the primary deficit to surge by six percentage points of GDP to 7.1% in 2020. "However, with additional transfers to states that could cost BRL80–100bn (US$15–19bn) this could easily increase to 8.5% of GDP."

Chile

The Treasury responded to the pandemic with a US$16.7bn fiscal package (6.7% of GDP), while the Banco Central de Chile signalled that the monetary policy rate, or TPM, will remain low for an extended period at 0.5%, report analysts. "We expect the central bank will continue easing monetary conditions by purchasing more bank bonds and providing additional liquidity," they add. "While the primary deficit will be near 8.6% of GDP in 2020…the Treasury has additional fiscal space to implement more measures if required."

With President Piñera's administration applying quarantine measures in selected cities rather than lockdown, analysts also cite reports that the authorities expect commerce to progressively reinitiate economic activities. They now forecast that the Chilean economy will contract by 2.7% this year and expand by 3.8% in 2021. Based on economic activity normalising by H2 2020, the announced stimulus will "be enough to support firms and boost the economic recovery, and social violence will not reappear which means that the constitutional reform will resume without major inconveniences".

Colombia

The year began strongly, as a 13.2% yoy increase in retail sales surpassed the expected 6.9% and the economy expanded by more than 4% in February. So the subsequent contraction may be less than the -2% fall predicted by the World Bank, or the -2.4% forecast by the IMF, say analysts. "We estimate the economy will contract 1.5%, but…the risks are to downside, and the degree of contraction will depend on how fast the economy will be able to return fully back to normal."

Colombia's finance minister Alberto Carrasquilla estimates tax revenue will fall by around COP10trn (US$2.5bn) this year, while he predicts that the fiscal deficit will drop by 2.5 percentage points of GDP to -4.7% of GDP, instead of the -2.2% of GDP previously estimated. Although the government appears reluctant to address tax reform, analysts predict "they will eventually discuss it as key in keeping the country's investment grade – S&P and Fitch have left Colombia's sovereign rating one notch above investment grade." In the interim, to increase funding for its Covid-19 response, the government is forcing local banks to acquire COP9.8trn in 'solidarity bonds', which mature next year.

Mexico

"Without a doubt, Mexico is the weakest link in the [Latin American] region," suggest analysts; being late to respond to the pandemic and hampered by limited hospital capacity. "Also, room for fiscal policies is limited and President López Obrador has insisted on staying the course in terms of its current economic programme", although on 17 April he pledged to inject US$2.5bn into the economy in May.

Analysts also note that oil represents around 12% of fiscal revenues and tourism accounts for roughly 12% of GDP, which, "together with Mexico's dependence on the US economy and world trade volumes more generally, just exacerbates the risks of a very deep and lasting recession". They now expect a -6.4% yoy or 19% seasonally adjusted annual rate contraction of GDP in Q2 2020, and predict output in 2020 will contract by at least 6.1%.

Note: Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis, which may prove to be incorrect

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The five trillion dollar challenge

As India grapples with Covid-19, how ready will the country be to achieve its potential once the pandemic is over? Clarissa Dann reviews its post-independence growth and measures taken to improve the ease of doing business

The Bandra-Worli Sea Link bridge, Mumbai

When India's Finance Minister, Nirmala Sitharaman, tabled her Union Budget on 1 February 2020, she declared: "We are now the fifth-largest economy of the world. India's foreign direct investment got elevated to the level of US$284bn during 2014–19 from US$190bn that came in during the years 2009–14. The Central Government debt that has been the bane of our economy got reduced, in March 2019, to 48.7% of GDP from a level of 52.2% in March 2014."[1]

She added: "Between 2006–16, India was able to raise 271 million people out of poverty, which we all should be proud of." India's ambition to become a US$5trn economy by the mid-2020s through wealth creation and improved ease of doing business is enshrined in the *Economic Survey 2019–2020*, published on the Ministry of Finance website.[2]

However, Sitharaman's remarks were made more than six weeks before Prime Minister Narendra Modi locked down the country's 1.349 billion citizens, a quarter of whom live below the poverty line, for 54 days, from 25 March to 17 May 2020, in an attempt to contain the spread of Covid-19. Modi pointed out that the lockdown was necessary to slow the spread of the virus, and a US$22.6bn fiscal relief package (around 0.8% of India's GDP) was announced a day later. "The unprecedented lockdown has stung millions of poor in the world's second most populous country, leaving many hungry and forcing jobless migrant labourers to flee cities and walk hundreds of kilometres to their native villages," reported Al Jazeera on 29 March.[3]

How will India recover from this economic shock? "Even in the pre-lockdown stage, India's economic momentum remained significantly weak compared to its potential, with a negative output gap of 2–2.5%," noted Deutsche Bank's Chief Economist for India, Kaushik Das, on 24 March 2020. Das believes monetary stimulus may have to "move far beyond traditional rate cuts to provide support to the economy". He adds, "Also, it is worth noting that the services sector in India contributes more than 60% to overall GDP; therefore the damage to the overall growth dynamic arising out of the 54-day nationwide lockdown is expected to be substantial." This article takes a look at India's longer-term potential beyond this current external shock, and at its underlying fundamentals.

Infrastructure uplift

With strengthening of India's supply chain infrastructure gaining momentum from five years of significant investment on roads, railways, water, irrigation and urban projects, the next five years will, according to Reuters' reports on Sitharaman's announcements, see further funding of INR100trn (US$1.39trn) in the sector.[4]

The World Bank maintains that "India's ability to achieve rapid, sustainable development will have profound implications for the world" and its success "will be central to the world's collective ambition of ending extreme poverty and promoting shared prosperity, as well as for achieving the 2030 Sustainable Development Goals".[5]

"In past decades, India has never managed to work at its full potential, yet we have a large young population ready to go, we have good natural resources and entrepreneurship, and we have some long-term enabling work done by the government," reflects Mumbai-based Kaushik Shaparia, Deutsche Bank's Chief Country Officer in India. He believes that even if the government only achieves a third of its planned US$1.4trn infrastructure investment in the next five years, "this will still go a long way".

Foreign investment and capitalisation

A turning point was 1991, when US$2.2bn of emergency assistance from the International Monetary Fund came with certain conditions attached: the country had to open up to foreign investment, cut red tape and remove trade barriers.[6] "Many saw this as the start of India's reintegration into the global economy, and over the last 20 years liberalisation has connected its young, vibrant workforce with firms around the world," noted the BBC in April 2019, as 900 million Indian citizens prepared to vote in the general elections held over five weeks. Today, its business reporter added, India is one of the world's top outsourcing destinations, with many of its workers powering back-end IT systems, call centres and software development.[7]

Levels of foreign direct investment (FDI) have risen in line with investor optimism about India's economy; the United Nations Conference on Trade and Development posted US$49bn of FDI inflows for 2019, with most of them bound for the service and information technology industries.[8] "The opening up of FDI has given a fair amount of opportunity to overseas investors," says Shaparia. He adds that, in 2019, Deutsche Bank put €450m into India, bringing the total capital invested to more than €2bn. This made it the fourth-largest foreign bank in the country, with securities services as one of the bank's strongest Indian businesses. Assets under custody for December 2019 topped €267bn, with 57% pertaining to cross-border clients and the remaining 43% to domestic clients.

With investor appetite at this level, Deutsche Bank is well placed to structure deals and sell down participation to like-minded investors, Shaparia explains. However, he notes, "In the short term we have to be careful if things don't move fast, which means watching exposures while not losing out."

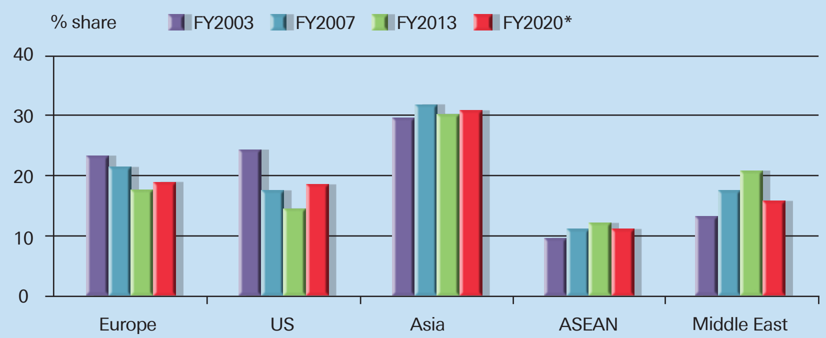
Trade trends

India decided in November 2019 to opt out of the Regional Comprehensive Economic Partnership (RCEP) after seven years of negotiations, citing inadequate safeguards to protect Indian farmers. However, some observers believe there is a strong case for India getting back into the RCEP. Why? Because manufactured goods once imported from China are now being produced in Association of Southeast Asian Nations (ASEAN) country locations. If India does not have free trade agreements with those countries "then we will be stuck with high import costs", said Shailesh Haribhakti, a Mumbai-based independent non-executive director and chartered accountant, at GTR India 2020.[9] Noting that India's share of global export volumes is just 1.67%, reflecting "decades of insularity" following independence in 1947, he advocates staying away from protectionism.

Deutsche Bank's Kaushik Das points out that Asian countries (including ASEAN and the Middle East) now account for almost 47% of India's exports, up from around 39% in 2001, with shares of exports to North America and Europe forecast to dip in 2020 to 19% and 19.4% respectively (see Figure 1, below).

Das explains that a quick look at India's top 10 items for export shows that five key categories – engineering goods, petroleum products, gems and jewellery, chemicals, and drugs and pharmaceuticals – account for almost 65% of total exports, with the US and China being India's key export destinations. India's key imports include crude oil, electronic goods, machinery, gold and coal. Some of these are used as intermediary products for re-export, while others are used as finished goods for capital-intensive investment in the domestic economy. Again, China and the US are the key countries from which India imports.

Figure 1: India's exports by region



Source: CEIC, Ministry of Commerce, Deutsche Bank Research
*FY2020 data refers to April 2019 to January 2020

"We have a large young population ready to go, and we have good natural resources and entrepreneurship

Kaushik Shaparia, Chief Country Officer, Deutsche Bank India

Another measure that could help raise India's export output is the increased support for its export credit agency (ECA), Export-Import Bank of India (EXIM Bank) – one of the largest bond issuers on India's stock exchange, India INX. In January 2020, it raised US$1bn under its US$10bn medium-term note programme established on the Global Securities Market Index on India INX. It has already listed US$5.6bn bonds under the programme. EXIM Bank lends for exports from India, including supporting overseas buyers and Indian suppliers for exports of developmental and infrastructure projects, equipment and goods from India. Post Covid-19 this ECA, along with others around the world, will be a critical force in helping India rebuild its trade corridors.

Digitalisation

Although India set about its digitalisation journey somewhat later than other Asian advanced economies, there has been a determined push since the first main initiative in 2014. This saw the launch of the Unique Identification Authority of India, whose role was to assign every one of the country's 1.2 billion citizens an Aadhaar – a 12-digit unique identification number based on biometric and demographic data connected to the individual's mobile phone and bank account.

Another area of focus is India's ports and terminals (private and public) as an opportunity for productivity improvement. The government launched the Port Community System, a digital collaboration platform known as PCS 1x, in December 2018. With 15,874 registered users by March 2020, this connects marine terminals, transport service providers such as shipping lines, freight forwarders, haulage companies and freight rail networks, and related intermediaries such as customs brokers. PCS 1x makes it possible to electronically process delivery orders, transport orders and delivery gate schedules, and to track containers.[10]

In an effort to improve connectivity for banks, the Reserve Bank of India developed the Export Data Processing and Monitoring System. Launched in 2014, this streamlines the flow of export data, capturing information relating to shipping bills issued by customs and enabling banks to report realisation and settlement of these shipping bills against inward remittance received by their clients. This, in turn, enhances the tracking and monitoring mechanism of cross-border trade and reduces the flow of data. Its internal equivalent, the Internal Data Processing and Monitoring System, followed in 2016. This has been cited as an example of improved foreign trade operations achieved by India, and as a contributor to the country's improved score in the World Bank's *Doing Business* index (India rose 14 places to 63rd out of 190 nations in the 2020 index). However, it puts responsibility on the banks – importers and exporters do not have access to the system.[11]

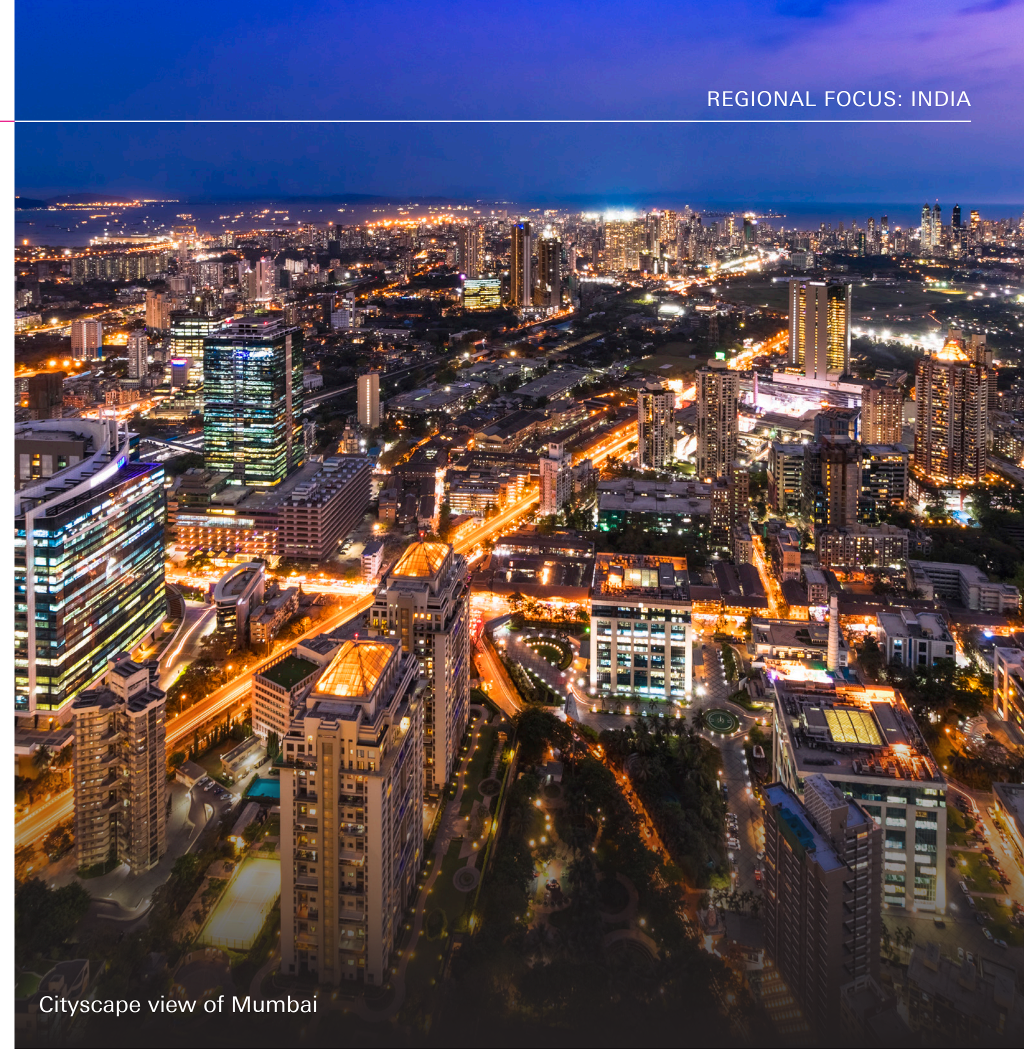
Images: iStock

India's 'smart cities'

Launched in 2015, India's Smart Cities Mission is administered by the government's Ministry of Housing and Urban Affairs. Its objective is to promote cities that provide core infrastructure (such as adequate water and power supplies, sanitation and waste management, urban mobility and public transport) and "give a decent quality of life to its citizens, [and] a clean and sustainable environment", thus acting as a beacon to inspire other cities.

Initially, state governments nominated cities to take part in the scheme and the administrative bodies of those cities were then asked to submit 'smart city' plans for urban renewal. One hundred cities were chosen to receive funding to implement their plans and the deadline for project completion was set between 2019 and 2023. In September 2019, the 10,000-acre Aurangabad Industrial City was inaugurated as the first smart city.

In addition, the scheme has promoted cooperation between the EU and India. A Joint Action Plan announced in New Delhi on 19 September 2019 to step this up stated that the next phase of implementation would see further cooperation between the two regions, with the European Investment Bank aiming to invest €1bn in urban transport to follow existing metro projects of €1.6bn in India.[12] In 2016, the Obama administration in the US signed memorandums of understanding to develop three smart cities in Allahabad, Ajmer and Visakhapatnam, providing project planning, infrastructure development, feasibility studies and capacity building.[13]



Cityscape view of Mumbai

Regulatory changes

India's Goods and Services Tax (GST) reform has been in place since July 2017 and e-invoicing became mandatory as at 1 April 2020 in a bid to improve transactional transparency and reduce tax evasion. No country of the size of India has attempted tax reform of this magnitude. Goods and services not rated zero are now taxed under four basic rates: 5%, 12%, 18% and 28%.

The reform was hailed as a success by the Confederation of Indian Industry. "GST is not just a tax change but a business change. It impacted business processes and businesses needed support from government for this change," said its Director General, Chandrajit Banerjee. "And government did that well – it reached out to industry through training by its officers across the country. Indian industry was also really flexible in its approach and that helped in the successful roll out of GST."[14]

In an e-invoicing environment, the moment an invoice is created, it has to be uploaded onto the Goods and Services Tax Network portal for pre-validation and assignment of an invoice reference number. Once this is issued, the tax invoice is shared with the recipient. At the time of writing, given the business interruption caused by Covid-19, and the slow take-up of voluntary trials, the Ministry of Finance was considering deferring e-invoicing implementation to July 2020.

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A healthy approach

German science and technology giant Merck has been developing healthcare solutions for 350 years, and remains at the leading edge of biotechnology. Graham Buck finds out how the spirit of innovation underpins its corporate treasury team

Nestling some 35 kilometres south of Germany's financial centre of Frankfurt is Darmstadt, bearer of the official title 'City of Science' or 'Wissenschaftsstadt' and home to a range of scientific institutions, universities and high-tech companies.

One of its corporate inhabitants is Merck, the multinational science and technology group whose proclaimed mission is to "make a positive difference to millions of people's lives every day". Today's multi-billion-euro company has evolved over more than 350 years, dating back to when the Engel-Apotheke (Angel Pharmacy) in Darmstadt was acquired in 1668 by Friedrich Jacob Merck.

Its subsequent history includes the formation in 1891 of an American subsidiary in New Jersey which, as a result of the First World War, became a separate US entity called Merck & Co, which today is known as MSD outside the US and Canada.

Darmstadt-headquartered Merck survived and thrived despite this setback, adopting its present title in 1995 when its shares began trading on the stock market. However, even today only around 30% of the shares are publicly traded and the Merck family retains the remaining 70%.

Healthcare industry

The pharmaceutical and medical device industry is one of the most powerful and influential sectors in the world, with global revenues estimated, according to the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), to reach US$1.43trn in 2020 (see panel 2 on page 24). The industry plays an essential role in providing access to medicines and support to the world's overall healthcare structure.

The Engel-Apotheke (Angel Pharmacy) in Darmstadt, 1668

Barriers to market entry are prohibitively high, because of the huge amounts invested in research and development (R&D) of a drug before compounds can be developed into safe and effective medicines. As the IFPMA puts it, once researchers identify a promising compound, having screened between 5,000 and 10,000, R&D begins – a process that can take 10 to 15 years. Companies will often experience lost R&D investment because of systemically high failure rates. The marketing of drugs is subject to intense regulation and sales are dependent on the decisions of large purchasing entities such as government health departments, so this is not an industry that can easily be disrupted by new entrants.

With such a market position comes responsibility, which Merck takes very seriously. "We think in generations instead of quarters", the company declares on its website, adding that "this commitment is the foundation of our lasting economic success."

At the company's 350th anniversary ceremony in May 2018, which included Germany's Chancellor Angela Merkel among the 900 guests, the company's values were described in the following terms: "Curiosity fuels us, research is our passion, and responsibility is a core value that shapes our daily actions."

Merck added: "We are currently at a crucial point. Many of the technologies at our disposal today have an entirely new dimension. They raise fundamental ethical questions. Think of examples such as big data, artificial intelligence (AI), or genome editing. We need these technologies because they can help us, for instance, to find new therapies for serious diseases. Yet apart from all these opportunities, we must never lose sight of the tremendous responsibility that their applications involve."

The words 'curiosity' and 'responsibility' resonate throughout the company's many touchpoints with its consumers, and these are also centrally placed in Merck's recent advertising campaign that uses the phrase 'Turn The World On Its Head'. It invites individuals to "explore how a more curious society can change our planet for the better". A graphic of smokestack industries, polluting vehicles and traditional logistics is mirrored by a future world of solar energy, electric cars and bicycles, and deliveries by drone.

A Merck employee transfers a solution in an application lab in Shanghai, China

Images: Merck, Karsten Thormaehlen

Growth trajectory

"Merck is still a family-owned business, but one that is science and technology-based and that helps to bring tangible benefits to people – such as combatting diseases – through our products," confirms Jörg Bermüller, Head of Merck's Cash and Risk Management in Group Treasury.

"Over the years, the company has regularly added to its portfolio and, helped by technology, is rapidly growing and changing thanks to a combination of strategic mergers and acquisitions (M&As) coupled with high organic growth rates," explains Bermüller.

Merck is well placed to achieve further sustainable and profitable growth. Net sales in 2019 rose 9% year-on-year to €16.15bn and earnings before interest, tax, depreciation and amortisation were 15% higher over the same period at €4.385bn. Its products and markets turn in margins of 30%, but its scale and success have not eroded its DNA of innovation and entrepreneurial behaviour. An important milestone was the October 2015 launch of the company's €69m 7,100-metre Innovation Center in Darmstadt that aims to "develop entirely new businesses and technologies beyond our current scope, bringing people, technologies and skills together from different areas under one roof".[1] More recently, an Innovation Center in Shanghai was opened in October 2019.

Merck's three main businesses are healthcare, which accounts for nearly 40% of its revenues, life science and performance materials. "They share several basic characteristics, among which each is research-intensive, as we want all the products that we produce to be top of their field," says Bermüller.

In recent years, sizeable acquisitions have included the 2015 purchase of US life science company Sigma-Aldrich, a specialist in laboratory testing materials, for €13.1bn and last year's €5.8bn addition of Versum Materials, also a US-based

US$1.43trn
Size of global pharmaceutical market in 2020
(IFPMA)

multinational, which is known for its process chemicals, gases and equipment used in semiconductor manufacturing. As part of a move to focus more on innovation-driven businesses, Merck also disposed of its consumer health business, which in 2018 was sold to Procter & Gamble in a €3.4bn cash deal.

Treasury tiller

Bermüller and his treasury team helped steer through each of these transactions. Bermüller arrived at Merck back in 2008, three years after colleague Rando Bruns had joined the company as its Head of Cash and Risk Management. Bruns took up the post of Group Treasurer on Bermüller's arrival, with Merck's total treasury team at that time no more than 11 individuals.

> Curiosity fuels us, research is our passion, and responsibility is a core value
>
> Merck's company values

"For both of us, it's crucial that financial risks can be identified immediately, and Rando was wholly supportive in providing me with the financial means to meet this target," says Bermüller. "Right from the outset, we shared a joint approach on the need for centralisation and standardisation and recognised the efficiencies possible through the establishment of an in-house bank.

"The treasury team members consider themselves as service providers; we do not narrow our focus solely on bank services, we go beyond – for example by providing enriched account statements for automatic reconciliation in order to ease the work of our shared service centre colleagues. Likewise, we do not believe in the so-called 80/20 rule. To see only 80% of the account balances is not an option – I want to see 100% of Merck's accounts on a daily

Panoramic view inside the Innovation Center in Darmstadt

basis, not 80%. So we're unique in considering 100% as perfectly possible. As a consequence, it means that we need treasury systems that can deal with a heterogeneous enterprise resource planning (ERP) landscape throughout the group."

This insistence on high standards is not surprising; Bruns has spoken of how each individual in his team is there when needed and ready to do more than meet the basic requirements of each task by going the extra mile.

"It's also important to us to see all foreign currency positions in our internal systems – running daily foreign exchange (FX) rates enables us to see gains and losses at the end of each business day," adds Bermüller. "The power of our treasury IT landscape is such that we have the capability of working with any ERP system or file format, both inbound and outbound."

Robust structure

In common with many treasury professionals, Bermüller began his career in a different role. "I started my professional career as a banker while studying economics at Frankfurt School of Finance & Management at the same time, so theory and real work were combined," he recalls. "Initially I was with HypoVereinsbank (aka UniCredit Bank AG) as a clerk. After some years in the foreign trade and credit departments, I became a relationship manager for multinational corporations. Following several years with DZ Bank AG my entry into treasury came in 2002, when I moved to the glass and ceramics group Schott AG as Head of Corporate Finance."

In 2006, he joined DyStar Group – the Singapore-headquartered chemicals company that became world market leader for the textile dye businesses by acquiring several former producers such as Bayer, Hoechst, BASF and ICI/Zeneca – as Head of Treasury, before moving to his present role two years later. "The big difference working for a corporate is the freedom to shape the department and the ability to introduce new products," he notes. "For example, introducing intercompany clearing throughout the group gives you the ability to shape treasury processes, creating efficiencies within the financial supply chain as well as centralising the FX risk."

Although the global financial crisis was rapidly unfolding as Bermüller joined Merck, the impact on the company and its divisions was relatively light. "The business was – and is – financially healthy in terms of its equity, earnings and cash flows. On top of this, our turnover has doubled over the period since the crisis," he reveals.

His first project on joining Merck was to further shockproof the company against the tremors rocking the financial services industry by restructuring its global cash management programme. "We established Merck Financial Services GmbH – which became our primary in-house bank – as a legal entity, so that all our financial services were separated from the operating business," explains Bermüller.

At the start of 2010, Merck set about rationalising its cash management framework; multiple USD, EUR, GBP, CHF and other currency cash pooling structures needed to be restructured, resulting in 18 newly established cash pools. The given complexity and time-consuming tasks at that time were partly a legacy of two major acquisitions: a €10bn deal in 2006 to buy Swiss biotech Serono and the addition in 2010 of Millipore, a US producer of biomedical research products, for US$7.2bn.

The challenge of integration

Another priority task was the introduction of a treasury management system (TMS). "While we already had a good cash management system, we needed to supplement it with a TMS for additional

> Introducing intercompany clearing throughout the group gives you the ability to shape treasury processes, creating efficiencies within the financial supply chain as well as centralising the FX risk

Jörg Bermüller, Head of Cash and Risk Management in Group Treasury, Merck

Merck at a glance

Founded:
1668 by Friedrich Jacob Merck, making Merck the world's oldest operating chemical and pharmaceutical company

Industry sectors:
Healthcare, life science and performance materials

Headquarters:
Darmstadt, Germany

R&D centres:
Darmstadt, Boston, Tokyo and Beijing

Workforce:
57,071 in 66 countries: Europe 46.8%, North America 22.5%, Asia Pacific 22.3%, Latin America 6%, Middle East and Africa 2.4%

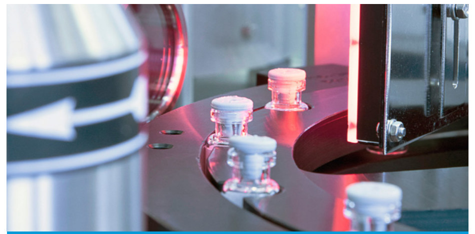
Revenue:
€16.152bn (2019)

R&D investment:
€2.3bn (2019)

Major acquisitions:
2006 Serono (Switzerland) – healthcare, €10.3bn; 2010 Millipore Corporation (US) – life science, €5.1bn; 2014 AZ Electronics (UK) – electronic devices, €1.9bn; 2015 Sigma-Aldrich (US) – life science, €13.1bn; 2019 Versum Materials (US) – performance materials, €5.8bn

Major divestitures:
2007 Merck Generics Division – €4.9bn; 2018 Consumer Health Business – healthcare, €3.4bn

Source: www.merckgroup.com



Key facts of the pharmaceutical industry

- The global pharmaceutical market will reach nearly US$1.43trn by 2020
- The US share of the global market will be 41% in 2020, with the EU's share at 13.1%
- It generally takes 10–15 years to develop a medicine or a vaccine, but there are some faster developments
- The research-based pharmaceutical industry currently spends more than US$150bn on R&D a year
- In 2015, 56 new pharmaceuticals were launched out of more than 7,000 in development
- The drugs in development included 208 for HIV/AIDs; 1,919 for cancer; 401 for diabetes; and 563 for cardiovascular diseases
- Vaccines save the lives of more than 2.5 million children each year

Source: *The Pharmaceutical Industry and Global Health: Facts and Figures 2017*, IFPMA

tasks such as ad hoc risk reporting," says Bermüller. "After the successful implementation of the TMS, the next priority was the rollout of the payment factory across the countries in order to establish standardised processes for payments and collections.

"In parallel we introduced a web-based guarantee tool for all our subsidiaries, with all sharing the same targets: standardisation, efficiency and savings. Not to mention the go-live of the Single Euro Payments Area, which had to be managed on top of this. All this took place against the backdrop of several further major acquisitions by the company, resulting in intensive integration projects."

Bermüller agrees that integrating a new business following a merger or acquisition is a very complex process, but he highlights that the company has gained plenty of experience over the past decade. "This experience has helped us in adopting the best solution, which is recognising that acquired entities can also be a source of good processes and ideas and can shape the way in which we work."

For him, the process of integration that follows any major M&A deal is among the most exciting challenges for treasury. "The Sigma-Aldrich deal was particularly demanding. There was considerable variety within the company's treasury operations – while it had a number of great processes, other parts were only semi-automated and some were still greenfield. We had to find a different solution for each of them. Taking into account these various stages, the challenge was to make them fit into our overarching standard process."

Treasury re-engineered

The cash management restructure also reached a further milestone when the company's cash management service provider withdrew its product from the market. "We had to implement an entirely new treasury management landscape from scratch while running the existing one," recalls Bermüller. "This project wasn't restricted to just one system but across Merck's entire set-up. After digesting the shock, we took it as a great opportunity to remove several obstacles that were holding us back. We created a new treasury IT landscape with the clear aim of taking it to the next level. But it was a major undertaking that took no less than five years from inception to completion."

The organisational structure of the Merck treasury team has also evolved. After two years' work, the highly centralised department is about to establish regional treasury centres in the Philippines and Uruguay – based in their respective capitals of Manila and Montevideo – to be closer to the shared service centres, the business and the local country organisations in general.

In addition to the company's expansion in the world's emerging markets, Merck has also been adding to and developing its research facilities in China and offering support to its pharmaceutical start-ups there.

"We have a good track record in successfully adapting very fast to deregulation," says Bermüller. "For example, Merck was one of the first companies introducing CNY intercompany invoicing right after the Chinese government gave permission. In light of this, we were the first corporate to open a CNH account with Deutsche Bank in Hong Kong and accordingly when allowed in Germany.

"With this move we've been able to centralise the currency risk, manage our businesses in China better and generate savings, as the offshore hedging was much cheaper compared to the onshore spot trades. It's all about getting closer to the local markets and having treasury experts on the ground, although we do have a need for more expertise in several countries. We're addressing this by establishing our regional treasury centres."

Technology transfer

While Merck's treasury team has steadily expanded since the arrival of Bruns and Bermüller – it numbers 32 financial professionals currently – it remains a relatively small department within a company of nearly 55,000 employees.

"I'd say that treasury today is far more about dealing with the company's internal projects and processes than dealing with banks and other financial market participants. The former now accounts for around 80% of my time," adds Bermüller.

He reflects on how the IT part of the business also "occupies a growing part of my working day and that of the team" as they all look to make the most effective use of big data, IT processes and standardisation. In line with its peers, Merck is assessing how best to deploy new emerging technologies over the coming decade.

"We're already employing robotics in our treasury operations and AI will increasingly be a driver over the years ahead," predicts Bermüller. "At the same time, it's not the solution to everything. As it undergoes further refinement, AI can be the replacement for repetitive tasks that follow certain rules. It isn't yet there for the more complex solutions, although that will come over time."

Left to right at the 2019 TMI Awards for Innovation & Excellence: Thomas Eberle (Deutsche Bank); Jörg Bermüller; and Konrad Haunit (Deutsche Bank) collecting the Best Cash & Liquidity Management Project award

The treasury team uses application programming interfaces in reaching out to Merck's relationship banks to gain more data and have a deeper analysis in areas such as payment types. But ultimately, the company wants the ability to own its own digital boardroom. "For the time being though, I'm more of a believer in big data management and analytics," Bermüller says. "This is the route that is leading to the day when we can employ process mining to identify where all treasury's roadblocks are."

Although consumer habits are steadily fuelling demand for instant payments and penetrating the B2B sector, this is one area where Merck has been less proactive. "They [instant payments] have yet to play a major role within our business outside of the life sciences division, where instant payments are sometimes connected to logistics and mostly when the delivery of goods is expected within 24 or 48 hours," confirms Bermüller. "It's something we're looking into for this particular business, but it's not a top priority as we're not a retailer. We also recognise the risk of fraud when a payment is made instantly and it's then too late to be retracted. So a payment period of, say, 30 days does have certain advantages.

"We have to be vigilant about preventing fraud, which is increasingly a risk for all businesses. The starting point of fraud is the human interface, so as well as making sure your people are aware you have to ensure that all of your systems are secure. We see the roll-out of our payment factory as a means of combatting fraud. It's all about awareness and keeping one step ahead of the criminal – even voice recognition is no longer a foolproof system."

A win-win proposition

A recent accolade for Merck's treasury team was winning the *Treasury Today*'s Adam Smith Awards Asia 2019 for Best Cash Management, as well as a highly commended award for Best Liquidity Management Solution. "We're very happy with this latest award, while the cash pooling solution has also been recognised by *Treasury Management International* (*TMI*) magazine," enthuses Bermüller.[2]

The transaction that caught the eye of the judges was one where Merck was performing a bank service request for proposals in Korea. "One out of many specialities of our Korea business is our huge local USD cash flows. We targeted to centralise the trapped cash besides managing the FX risk better. Therefore we searched for a holistic solution.

"Together with Deutsche Bank, we approached the Korean central bank authorities to gain approval for an automated cross-border solution," adds Bermüller. "We now have a multi-bank sweep from local Korean banks pooled to our master account in Korea, and from there cross-border to our in-house bank in Germany. This is processed each evening Korean time. The same amount is then pooled back to Korea the following morning – the so-called 'Cinderella sweep' – to ensure that Korea remains liquid."

He points out that this is the first fully automated cross-border USD cash-pooling structure in the Korean market and with its implementation "a critical treasury process for Korea was changed to Merck's global standard, resulting in financial savings through lower hedging costs".

It would appear the Merck spirit of curiosity, collaboration, problem solving and innovation is not just confined to the company's business divisions, but is thriving in Group Treasury as well.

Sources
[1] See https://bit.ly/38MFDOi at merckgroup.com
[2] See https://bit.ly/2W7sBbf, treasury-management.com

Regchecker

Deutsche Bank's regulatory experts across Cash Management, Securities Services, Trust & Agency Services and Trade Finance provide an update on regulatory changes under way and on the horizon

CASH MANAGEMENT

Globally, following several regulatory updates in recent years, the payments landscape has entered a phase where efforts focus on collective, but not necessarily legally mandated, initiatives. Driven primarily by industry bodies, central banks and other market infrastructure providers, these look to build upon the foundations laid by regulations such as the Revised Payment Services Directive (PSD2), the Funds Transfer Regulation and instant payments systems to bring greater speed, efficiency and security to payments services.

Market infrastructures

Market infrastructures worldwide are being updated to meet evolving market and client demands. The European Central Bank (ECB) is currently uniting and centralising its instant payments, real-time gross settlement and securities settlement systems under the 'TARGET Services' banner, with the new, consolidated platform due to launch in November 2021.[1] Meanwhile, the underlying infrastructures behind the US Fedwire and the Clearing House Automated Payment System, which clear dollar and sterling payments respectively, are also being modernised. More widely, the ongoing rollout of instant and real-time payment market infrastructures worldwide means that, as market infrastructures improve and become compatible with instant payments, they combine with innovative, client-driven solutions, such as request to pay.[2]

Digital currencies

Reports suggest that in early 2020, at least 18 central banks worldwide were developing digital currencies. The ECB Working Paper No. 2351, *Tiered CBDC and the Financial System*, suggests that central bank digital currencies (CBDCs) could offer value as a means of processing fast and efficient retail payments, particularly if cash usage continues to decline. However, it also examines the risk of structural disintermediation of banks and centralisation of the credit allocation process within the central bank, as well as the risk of facilitating systemic runs on banks in a crisis situation.[3]

On 21 January 2020, the ECB, with the Bank of Canada, the Bank of England, the Bank of Japan, the Sveriges Riksbank, the Swiss National Bank and the Bank for International Settlements (BIS), launched a group to assess the potential cases for CBDCs in home jurisdictions. The review includes CBDC use cases; economic, functional and technical design choices, including cross-border interoperability; and knowledge sharing on emerging technologies.[4]

The People's Bank of China has, according to the *Financial Times* (12 February 2020), filed more than 80 patents related to plans to digitise the renminbi. These include "proposals related to the issuance and supply of a central bank digital currency, a system for interbank settlements that uses the currency, and the integration of digital currency wallets into existing retail bank accounts".[5]

Facebook is reportedly rethinking plans for its Libra cryptocurrency. The social media giant's initial targeted launch of late 2020 became questionable when Vodafone announced its withdrawal from the project in January 2020, citing redirection of efforts towards its own mobile money payments service, M-Pesa, to promote financial inclusion.[6] Libra also still faces regulatory obstacles from government agencies worldwide.

Strong Customer Authentication (SCA)

On 14 September 2019, firms authorised under PSD2 were subjected to new requirements for authenticating online payments based on SCA, as specified by the European Banking Authority (EBA) Regulatory Technical Standards. The standards will come into force by 31 December 2020 and will regulate the manner and degree of access to customer payment account data held at payment service providers.[7]

ISO 20022

The transition to the ISO 20022 messaging format reflects a payments landscape operating around the clock on a near-instant basis, and the industry's aim to improve the richness and quality of data contained in payment messages. In February 2020, US clearing house Nacha announced that it is building an online platform, Phixius, based on ISO 20022 and incorporating blockchain technology to assist the exchange of payment-related information between companies.

ISO 20022, billed as the new global standard for payments messaging, introduces new data components enabling far richer information to be transmitted alongside the transaction compared with other formats. Benefits include greater transparency, fewer false positives, less manual intervention and better business controls, as well as helping to support faster end-to-end delivery.[8]

Ahead of the Eurosystem's November 2021 'big bang' deadline, which will see banks lose access to central bank money if they fail to transition smoothly, the majority of banks should now be well advanced with their implementation efforts.

Winding down Libor

By the end of 2021, the UK's Financial Conduct Authority (FCA) plans to phase out publication of the London Interbank Offered Rate (Libor) in favour of risk-free rates based on overnight transactions. This will have an impact on the value of millions of contracts, worth in excess of US$370trn.[9]

In January 2020, the Bank of England and the FCA announced their target to "cease issuance of cash products linked to sterling Libor by the end of Q3 2020", to encourage the transition to alternatives such as the Sterling Overnight Index Average (SONIA).[10] Priorities include pushing a further shift of volumes from Libor to SONIA in derivative markets; establishing a framework for the transition of legacy Libor products; and deciding how best to address Libor legacy contracts. The Financial Stability Board warns that "regulated firms should expect increasing scrutiny of their transition efforts as the end of 2021 approaches".

Strengthening cybersecurity

The increasing speed and frequency of payment execution, which requires more robust cybersecurity measures, has seen SWIFT's mandatory Customer Security Programme being periodically updated since its 2016 launch to leverage security controls, and to enhance security features and information-sharing initiatives to detect and prevent fraudulent activity. In 2018, the ECB launched the European Framework for Threat Intelligence-based Ethical Red Teaming – a tool for controlled cyber hacking to test the resilience of financial market entities.

In January 2020, the European Council (EC) endorsed the joint toolbox of mitigating measures agreed by EU member states to address security risks related to the rollout of 5G, the fifth generation of mobile networks. The toolbox commits EU member states to jointly move forward based on an objective assessment of identified risks and proportionate mitigating measures. The EC called for key measures to be put in place by 30 April 2020.[11]

> "The payments landscape has entered a phase where efforts focus on collective, but not necessarily legally mandated, initiatives

SECURITIES SERVICES

The European regulatory focus has been on harmonisation, transparency, asset safety and market discipline. Other markets are following this approach, although Asia is treading a slightly different path, looking to foster greater market integration and the use of new technologies to drive efficiencies across its diverse spectrum of currencies, jurisdictions, laws and regulations.

Post-trade harmonisation in the EU

The Eurosystem Collateral Management System (ECMS) – planned for go-live in November 2022 – provides a single system for managing collateral assets, and replaces central banks' legacy systems.[12] It aims to contribute to the integration objective of the European Capital Markets Union (CMU) – see page 29 – by reducing market fragmentation and allowing easy and efficient mobilisation of collateral.

Its success relies upon further standardisation, and the current proposal is for the ECMS to use ISO 20022 messaging for corporate actions. This has its advantages and disadvantages. Standardisation is normally seen as beneficial for all, although, in this case, it would impose mandatory changes upon some markets that will ultimately not connect to ECMS, such as the UK, Norway and Switzerland.

While market participants will need to dedicate IT budgets to meet and adapt to this change, it is not without its opportunities, especially those related to tri-party collateral management and corporate actions.

Shareholder Rights Directive (SRD) II

By early September 2020, SRD II is scheduled to become effective in EU member states.[13] The Directive, which replaces the original SRD introduced in 2007, requires transposition into each EU member state's national law, so could potentially involve up to 28 variations and interpretations. The national law transposition date was 10 June 2019. Although the differences might be minor, knock-on effects could be greater for any global institution undertaking cross-country and cross-central securities depository trading and portfolio management. SRD II aims to strengthen the position of shareholders and ensure that decisions are made for the long-term stability of a company. Its requirements impact on intermediaries, proxy advisers, institutional investors, asset managers and issuers.

Germany implemented the relevant SRD II changes into national law through an implementation act (called ARUG II), which came into effect on 1 January 2020. ARUG II amends the German Stock Corporation Act and the rules on director remuneration have been adapted to the two-tier board system in Germany, where companies have a management board and a supervisory board.

Changing tides in Asia

Following nearly three years of post-trade capital markets infrastructure upgrades in Asia, the majority of the region's markets have now transitioned to a T+2 settlement cycle (except for the Philippines, which will move soon, and Vietnam, which is still to confirm when it will go to T+2).

This has been lauded as a significant achievement. The focus is now on greater efficiency and, specifically, the use of innovations such as distributed ledger technology (DLT) in capital markets. Singapore, Hong Kong and Thailand are leading the way in assessing how DLT can be used for trade allocation and matching, as well as for forging common data definitions and business processes.

Cryptoassets

There has been a shift from soft guidance – such as that issued by the BIS in early 2019 – to hard regulation, which could drive a major change in the industry's perception of cryptoassets.

In November 2019, the German legislator made changes to the German Banking

Act – as part of the implementation of the fifth Anti-Money Laundering Directive (AMLD5), which now qualifies cryptoassets as financial instruments – requiring a licence for trading cryptoassets and offering custody of cryptoassets as a service for others.

This is playing out similarly in Singapore, where the new Payment Services Act, which came into force in January 2020, expands the scope of the Monetary Authority of Singapore to include cryptoassets – or what it refers to as "digital payment token services".

TRADE

Some of the headline regulatory issues of the past few years are moving towards a relatively settled state as we move forward in 2020. Know your customer, anti-money laundering (AML) and Brexit all have some way to go before the dust fully settles, but the major impacts now appear to have been absorbed and the focus is shifting from compliance to effectiveness of execution. On the regulatory capital side, however, both Basel IV (see page 31) and IFRS 9/non-performing loans (NPLs) are set to have a more significant impact – though banks hope for some smoothening refinements.

Brexit

The UK left the EU on 31 January 2020. The current rules on trade, travel and business for the UK and EU will continue to apply during the transition period agreed in the EU-UK Withdrawal Agreement, during which the UK is no longer a member of the EU but continues to be subject to EU rules and remains a member of the single market and customs union. New rules will take effect from 1 January 2021.

Greater loss provisions required under IFRS 9/NPLs

Banks are still adjusting to IFRS 9, the amended accounting standard for banks, which changes the requirements for viewing and managing loss exposures. IFRS 9 requires that banks hold provisions much earlier for NPLs, rather than booking them after the loss has occurred, as the previous standard allowed.[14]

The impacts of this may still not be felt for some time, since the according NPL regulation, which came in under CRR II in 2019, requires banks to hold provisions or, in case they do not have enough, extra capital, two years after the default. From 2022 onwards, the picture will become clearer.

One area of contention is that the NPL regulation also requires provisions for loans covered by an export credit agency (ECA), where banks will need to book additional provisions or hold extra capital seven years after the loan defaulted. Despite these loans being covered by ECAs – meaning payment is guaranteed even in the case of default – from year eight after default, a bank would have to cover the losses by 100%.

TRUST & AGENCY SERVICES

Securitisation Regulation – one year on

The EU Securitisation Regulation came into force on 17 January 2018 and applied generally from 1 January 2019, with certain measures relating to the new disclosure and reporting requirements delayed. The final disclosure templates of Article 7 of the regulation have still not been released at the time of publication, but they are expected to come into effect shortly. The provisions impose a direct regulatory obligation of compliance on EU-established originators, sponsors and securitisation special purpose entities. During this transitional period, Deutsche Bank has been working closely with the industry to advocate and establish ongoing dialogue with the European Securities and Markets Authority, in order to provide further clarity on the new requirements and ensure greater harmonisation of standardised loan level information and investor reporting data.

The securitisation regime also expands the due diligence requirements for EU investors when investing into a securitisation. Both EU and non-EU companies will need to be aware of these requirements if the transaction is likely to be placed with European-regulated investors. The next watching brief is the introduction of the new regulatory framework on securitisation repositories, which is expected to take place by Q4 2020.

Capital Markets Union

The CMU, an EU initiative in development since 2015, aims to deepen and further integrate the capital markets of member states and includes diversifying business sources of funding and improving the quality and quantity of funding accessible to SMEs.[15]

Although it was originally due for completion at the end of 2019, the full scope and remit of the CMU is still unclear. The UK's departure from the EU has complicated matters by putting Europe's major hub of non-bank capital outside the EU's regulatory scope. The EC, the body for the bloc's member states, has suggested that the European Commission consider developing a European non-financial reporting standard as one of several proposals it is advocating for the next stage of the CMU project.

Ultimately, it is hoped that the CMU will lead to more cohesive legal governance, with greater alignment between countries on issues such as regulation and insolvency.

With thanks to Deutsche Bank's regulatory experts:

- *Cash Management: Christian Westerhaus, Paula Roels*
- *Securities Services: Boon Hiong-Chan, Emma Johnson and Britta Woernle*
- *Trade Finance: Monika Jacob-Schnitzius, Alexandra Winkler*
- *Trust & Agency Services: Rochelle Hsu*

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[2] See https://bit.ly/2R3oPfM at db.com/flow
[3] See https://bit.ly/2X17ibQ at ecb.europa.eu
[4] See https://bit.ly/2R7rULM at ecb.europa.eu
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[13] See https://bit.ly/3bJ9I2E at db.com/flow
[14] See bis.org/fsi/fsisummaries/ifrs9.htm
[15] See https://bit.ly/346ZVB7 at ec.europa.eu

Regulating securities settlement

The settlement discipline regime, a key element of the Central Securities Depositories Regulation, has been delayed until 1 February 2021. Emma Johnson explains the changes required of market participants to meet their new post-trade obligations

The settlement discipline regime (SDR) binds together trade and post-trade by imposing penalties on market participants for poor settlement performance. It seeks to improve the safety and efficiency of securities settlement, in particular for cross-border transactions, by ensuring that buyers and sellers receive their securities and money on time and without risk.

To achieve this, the regulation provides a set of measures to prevent and address failures in the settlement of securities transactions in Europe. These include: new requirements for allocation and confirmation; cash penalties; mandatory buy-ins; and monitoring and reporting measures to be taken by the central securities depositories (CSDs).[1] Market participants should be aware of their obligations and treat these as a 'call to action' to be operationally more efficient. From timely and accurate trade bookings through to allocation, confirmation, settlement and inventory management, front, middle and back offices are impacted.

Protecting the market

The European Securities and Markets Authority (ESMA) requested that the European Commission delay SDR for the following reasons:

- The development and industry testing of the penalty mechanism for TARGET2-Securities (T2S), the European Central Bank platform for pan-European securities settlement in participating markets, is due to go live from 21–22 November 2020. Since a fully functioning penalty mechanism underpins SDR, it necessitates a delay of the regime implementation to February of the following year.
- The annual SWIFT ISO messaging standard release, which includes new messaging to support the SDR, is also due over the weekend of 21–22 November. SWIFT requires time to implement these new messaging standards.
- The mandatory buy-in regime requires time to implement changes to current market practice, contractual arrangements and technical development, including new ISO messaging.

Implementing safeguards

Given the delay, participants have more time to make the extensive IT system changes at a market level – including at the CSDs, central counterparties and trading venues, and at a messaging and reporting level including SWIFT – and conclude adjustments to legal arrangements between all parties. The delay – SDR was originally due to come into force in September 2020 – lends more time for the front, middle and back offices to implement their new procedures, including heightened trade fails management and the implementation of the buy-in regime.

Since the Central Securities Depositories Regulation (CSDR) will call out and penalise poor processes, steps towards prevention should be started now. The requirement for mandated discipline at the trade and pre-settlement level solidifies the dependency on trade booking efficiency, timeliness and accuracy. The inclusion of standard settlement instructions and the total cash amount – both common matching and settlement points of failure – in the allocation and confirmation process is a step towards eliminating trade date inefficiency and ensuring cohesion between trade, post-trade and the often siloed operational processes that occur between trading and settlement.

Penalising poor performance

Settlement instructions that are matched either before, on or after the intended settlement date (ISD), and fail to settle on and after the ISD in a CSD subject to CSDR, will be hit with cash penalties. This will apply to all failed settlement instructions, including cleared transactions with the assumed exemption of corporate actions and T2S realignments (subject to confirmation by ESMA). CSDs will impose a penalty by debiting the CSD participant who causes the fail and crediting the CSD participant affected by the fail. This process, which is detailed in the European Central Securities Depositories Association's CSDR Penalties Framework, is still subject to clarification from ESMA, the CSDs and the central counterparties.

Buy-ins are slightly different. The Level 2 text of the regulation makes reference to the "failing trading party" and the "receiving trading party" as the participants in the transaction.

Ringing in the changes

Given CSDR will drive settlement performance, Deutsche Bank is offering real-time data and settlement analytics to provide participants with a risk view of their settlement horizon, including a view of trades at risk of penalty and buy-in. These dashboards will provide performance-related insights – such as where and why trades are failing – and suggest remedial action.

Emma Johnson is Head of Securities Services Market Advocacy at Deutsche Bank

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[1] See https://bit.ly/2Pe5846 at ec.europa.eu

Heavyweight assets?

The latest adjustment to the Basel framework overhauls the calculation of how much capital banks need to hold against each exposure. What impact will this have on their clients? Koen Holdtgrefe provides an update

European banks and European corporates have a very close and long relationship. The latest prudential regulatory package from the Basel Committee on Banking Supervision (BCBS) could well change all of that.

The BCBS, as the leading global standard setter for the prudential regulation of banks, has issued a series of recommendations (standards) over the years – known as the Basel Accords – with the aim of ensuring banks' resilience to crises.

These standards prescribe how much capital and liquidity banks need to hold against all their exposures.[1] The first Basel framework was published in 1988 and, via multiple reviews, the fourth version (Basel IV) will be adopted in Europe over the next couple of years.[2]

With this latest version, the framework for how banks calculate the amount of capital they need to hold against each exposure is completely overhauled. One of the biggest changes comes from the introduction of the output floor. This will lead to banks focusing more on the use of the standardised approach when calculating their risk-weighted assets (RWAs) instead of applying internal models. The risk weights under the standardised approach are in general much higher than under the internal model approaches, and will therefore lead to an increase in the amount of capital banks need to hold.

Most of the larger European banks use internal models, so having to use the prescribed standardised approach will lead to a significant increase in RWAs. The European Banking Authority has estimated this increase at 28% on average, which translates into a total capital shortfall of €135bn for European banks. The banks will need to absorb this shortfall in one form or other, either by increasing pricing or by stepping out of certain businesses or products.

Corporate impact

Eighty percent of all European corporates turn to their relationship banks for their funding needs. This means that any increase banks see in RWAs would directly impact their clients in terms of pricing and availability of funding.

More concretely – and again, this is very Europe-specific – all exposures to corporates that do not have an external credit rating will see significant RWA increases: from the current levels of 20–50% to 100% under the new framework. Being externally rated is not the norm in Europe, as corporates traditionally have good relationships with their banks. To give a sense of the scale of the problem, 80% of European corporates are unrated.

Another issue arising from the limitations that Basel IV puts on the use of internal models is the calculated maturity of transactions under the foundation internal ratings-based (FIRB) approach, a simplified internal model. Under the FIRB, the maturity is fixed at 2.5 years, so the final figures do not differentiate maturity. This could be a cause for concern. For instance, when calculating RWA, the input for a 10-year loan would be the same as that for a short-term trade finance product (which would typically have a maturity of less than 12 months).

Lastly, due to changes in how banks need to calculate exposures to derivatives, it will become far more expensive for corporates themselves to use derivatives to hedge their own foreign exchange and interest rate risks. Again, this can be traced back to the difference between internal models and the need to apply standardised approaches.

Europe at a crossroads

As the global Basel standards are not directly applicable in each jurisdiction, they need to be transposed into European law. The European Commission is currently working on these proposals, which will be published via the Capital Requirements Regulation III.

Many elements of the impact of the Basel package for European banks and European corporates can be traced back to Europe-specific characteristics: the lack of a culture of having external ratings, and the dominance of the dollar in global trade translating to higher hedging needs for EU corporates. The Commission, the member states and the European Parliament are therefore carefully assessing exactly how they will implement the package. In this respect, the BCBS announced on 27 March 2020 that it would delay the implementation of the package by one year because of Covid-19.[3] This is to allow banks and supervisors to focus on more urgent tasks, such as providing critical services to the real economy. It will also allow for more time to assess how to implement the package in Europe.

Koen Holdtgrefe is Head of Prudential Regulatory Affairs at Deutsche Bank

[1] See BCBS consolidated Basel Framework and tutorial video at bis.org/baselframework/background.htm

[2] See 'Basel yesterday, today and tomorrow' in flow, April 2017, https://bit.ly/2xAE88P, db.com/flow

[3] See Bank for International Settlements press release at bis.org/press/p200327.htm

On the bright side

Caught in the slipstream, or powering ahead? Dr Rebecca Harding examines ASEAN's trade momentum in the context of wider geopolitical disruption

While the US and China have agreed not to escalate the trade war in a 'phase one' deal signed in January 2020,[1] tariffs on each other's goods remain in place. But to what extent are the Association of Southeast Asian Nations (ASEAN) countries caught up in the trade war crossfire?

Tariffs imposed on China by the US have undoubtedly affected the bilateral relationship between the two countries. The UN estimates that in the first half of 2019, US tariffs caused a 25% drop in exports from China to the US – an equivalent value of around US$35bn to the Chinese economy.[2] Despite the recent de-escalation of tensions, China's economy has slowed to its lowest level of growth in 26 years, with 2019 growth at a mere 6.1%.[3]

> The most interesting sector with growth is a region called 'Asia NIE', or 'Asia not indicated elsewhere'

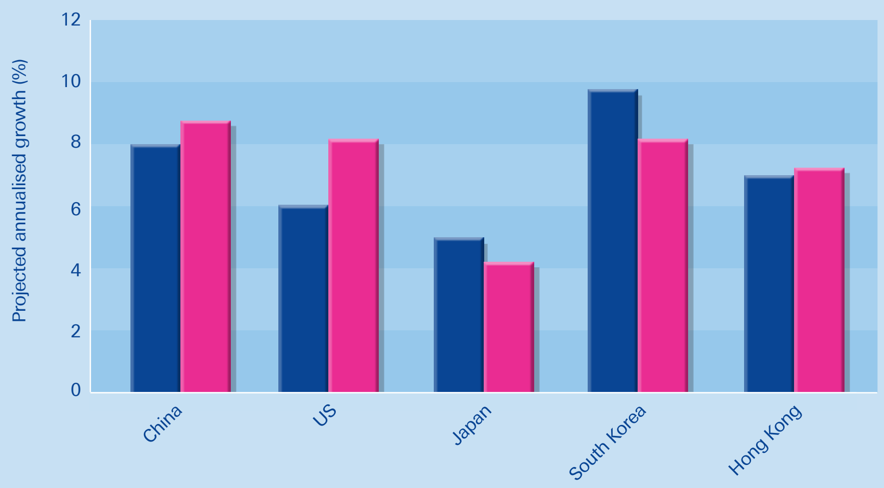
There are many reasons for this, but the material point for ASEAN countries is this: China is its second major export partner after the US, with a value worth more than US$280bn to the region. So how does China's slowing growth on the one hand, and the impact of the trade war on the other, affect the region's trade prospects? Are these effects purely negative, or will the reallocation of supply chains to avoid US tariffs actually accelerate a trend of intra-regional trade and boost the region's economy?

Regional strength

The region as a whole has a trade surplus and extra-regional exports to the rest of the world over the past five years have grown in value at an annualised rate of 3.4%, compared to imports, which have grown at 1.5%. Intra-regional trade has grown at a rate of just 0.3%. This suggests that the region's strength is as an extension to Chinese and South Korean supply chains in particular (see Figure 1 on page 34).

Figure 1 ranks each of the top five import partners of the region by size of country from left to right, so China is the largest and Hong Kong the smallest. Annualised growth over the past three years, since the onset of tensions between China and the US, has

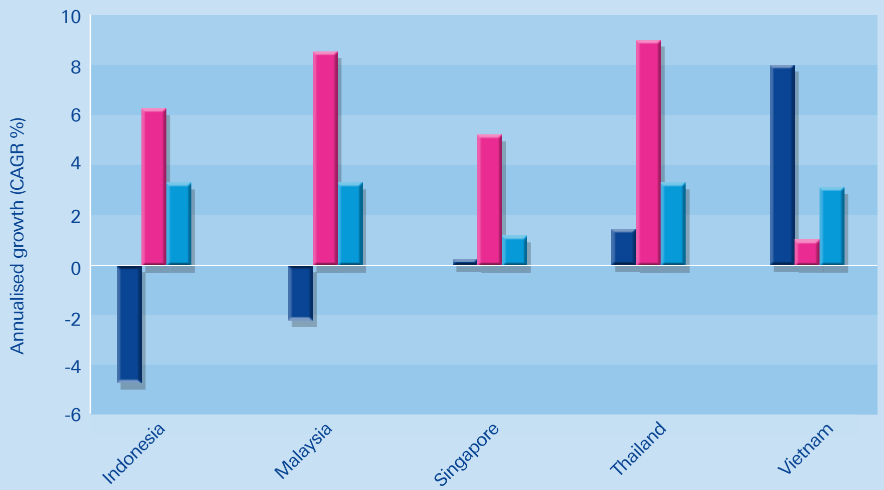
Figure 1: ASEAN extra-regional trade to key partners, 2017–20
(projected annualised growth, %)



2017–2020 import growth
2017–2020 export growth

Source
Coriolis Technologies (2019)

Figure 2: ASEAN intra-regional trade growth for its top five intra-regional exporters, 2017–20 and 2020–23 (projected annualised growth, %)



Intra-regional exports, 2013–2018
Intra-regional export growth, 2017–2020
Intra-regional export growth, 2020–2023

Source
Coriolis Technologies (2019)

been substantial in import and export terms. Imports from China are projected to have grown at an annualised rate of 8% by the end of 2020 and exports back to China by nearly 9%. South Korean import growth over the past three years appears to be the largest at nearly 10%, while export growth is 8%.

The rate of growth in trade with China is significant, but the most interesting sector with regards to growth is a region called 'Asia not indicated elsewhere', or 'Asia NIE'. This is the ASEAN region's second largest import and fifth largest export partner, although it is excluded from the chart because it is a collection of countries that are too small, or do not report regularly. Asia NIE is therefore not included in the UN Comtrade trade data as a partner.

3.4%

ASEAN extra-regional exports growth to rest of the world, 2014–2019

(Coriolis Technologies)

However, countries within Asia do trade with Asia NIE and, because Coriolis Technologies mirrors that data on the basis of the bilateral flow, we pick it up as a valid partner 'country'. Since 2017, its trade with ASEAN has increased by 9.8% in import value terms and by 8.8% in export value terms. The top three sectors are electrical products and equipment, oil and gas, and machinery and components; all of which have had either tariffs or restrictions placed on them. It is a logical conclusion that trade is being diverted via this partner across the region to limit the impact of the trade war.

Intra-regional trade growth

Intra-regional trade is projected to grow into 2020 over the same period from 2017 (see Figure 2, left). Figure 2 illustrates that not everything can be attributed to trade diversion as a result of the trade war. By the end of 2020, Singapore's trade growth with ASEAN is set to increase by 5.2%, Malaysia's by 8.6% and Thailand's by 9.1%, for example. This is faster growth in the past three years than over the 2013–2018 period, when annualised growth was 0.2% for Singapore, and negative for Malaysia and Indonesia at -2.2% and -4.7% respectively. This is largely accounted for by the weakness in oil prices during that time. As a result, the more recent growth cannot be attributed to the trade war as such because it is, to a large extent, recovery from the collapse of oil and gas prices between 2014 and 2016.

However, the three countries (Vietnam, Thailand and Singapore) where trade growth was positive between 2013 and 2018 tell us where the internal growth is coming from within the region. These are countries that are net oil importers, thus their trade growth

is driven by goods produced rather than commodities and, as a result, they are less vulnerable to the oil price. Vietnam's top export partners are China, Japan and South Korea, and over the five years to the end of 2018, annualised growth in trade to those countries was nearly 28%, 8.6% and 22% respectively. In other words, the pattern of shifting supply chains out of China – but also from Japan and South Korea as well – started in 2013, not 2017 when tensions with the US began.

Similarly, Thailand imports the most from Japan but growth slowed over the five years to 2018, while export growth was at an annualised rate of nearly 3%. Thailand's imports from China grew at an annualised rate of 4% and its exports at 3%; again suggesting that there was a longer-term pattern of relocation of supply chains, as China became more expensive in terms of wages after the financial crisis.[4]

Onward trajectory

In summary, there are some noticeable effects in the ASEAN data that suggest some impact of the conflict between the US and China. For example, the region's external and internal trade is increasing and trade is being pushed through partners like Asia NIE, which suggests a more direct attempt to relocate supply chains, for example, to countries that fall outside normal trade reporting protocols. The compliance risks of this are apparent – trade with Asia NIE is worth more than US$800bn in import and export terms, but runs the risk of being insufficiently transparent to comply with tighter sanctions and tariff rules.

However, much of the growth in Singapore, Malaysia or Indonesia's intra-regional trade is equally attributable to the aftermath of the collapse in oil prices and a small catch-up effect with Vietnam and Thailand, where the effects of supply chain reallocation have been evident for a while. ASEAN as a region is fuelling its own growth, but taking advantage of any positive fallout from the US–China trade war.

Dr Rebecca Harding is CEO of Coriolis Technologies

This article was completed in January 2020 as a review of overall ASEAN trends before the full impact of Covid-19 became clear. While the historical data to 2019 remains accurate, the 2020 projection element of the data is subject to downward revision. A full picture of how Covid-19 has impacted global trade will be published in the H2 2020 issue of flow

Sources
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[3] See https://on.wsj.com/2vT4FNQ at wsj.com
[4] Wages have grown from an average of CNY37,147 in 2010 to CNY82,461 in 2019, see tradingeconomics.com/china/wages. Annualised real wage growth was above 9% between 2008 and 2014, see https://bit.ly/32mUuxm at ilo.org

The Deutsche Bank view

Deutsche Bank has designated the ASEAN region as our third pillar of growth in Asia, next to India and China. This reflects the enormous growth and potential of the region and the fact that ASEAN represents the third-largest market for the bank after India and China. ASEAN, which has a population of 650 million (one-ninth of the world's population), also boasts the world's third-largest labour force of 350 million people. Given that half of the population is under 30 years of age, this will drive consumer demand across the region. With all of this buzz, we expect ASEAN to be the world's fourth-largest economy by 2030, particularly if the region continues to outpace the rest of the world in economic growth in GDP per capital, which it has done since the late 1970s.

Across the region we have been investing consistently in our platform and are currently focusing on rolling out instant payment solutions, allowing our clients to reach remote islands in Indonesia or the Philippines for payments or collections. In addition, we are providing trade finance and account receivables solutions across the region to help our clients fund their expansion plans. Finally, our securities services solutions provide investors with seamless access to very diverse markets that have diverse regulations.

Burkhard Ziegenhorn
Head of South-East Asia (ASEAN countries)
GTB & Corporate Bank Coverage
Deutsche Bank

Wind energy: SPOTLIGHT ON SIEMENS GAMESA

Siemens Gamesa is one of the largest manufacturers of wind turbines worldwide

Total power of installed turbines	101 gigawatts
Total value of orders	€28bn
Countries present in	90+

Source: Siemens Gamesa

A SWT-6.0-154 turbine in the UK's Race Bank offshore wind farm. Race Bank has 91 SWT-6.0-154 turbines with a capacity of 573 megawatts

Image: Siemens Gamesa

A new era for Indian energy

With India's energy consumption poised to grow at almost 5% annually over the next decade, its refineries are systemically important. Clarissa Dann talks to the leadership team at the Mumbai headquarters of Nayara Energy about realising potential – 20 million metric tonnes per year of it and growing

When Indian Prime Minister Narendra Modi and Russian President Vladimir Putin took their strategic partnership to a new level in October 2016, during the eighth BRICS summit in Goa, it produced 16 signed agreements across multiple sectors.

One was for the Russian energy giant Rosneft Oil Company and Kesani Enterprises Company Ltd (a consortium comprising commodities trader Trafigura and private investment group United Capital Partners) to acquire India's second-largest private sector refinery, which was owned by what used to be called Essar Oil Limited and is now Nayara Energy.[1]

When *flow* met Anup Vikal, Nayara Energy's CFO, at the company's headquarters in Mumbai, he talked through the ensuing due diligence process and the deal, concluded on 18 August 2017 for US$12.9bn. Jewels in Essar's asset crown included the 20 million metric tonnes per annum (MTPA) Vadinar refinery and the Vadinar Port in Gujarat. This infrastructure had formed the country's second-largest private oil refinery, producing ca. 8% of domestic refining output, India's largest network of private petrol pumps (5,700 and rising) and a 1,010 megawatts electric multi-fuel power plant. In May 2018, the company was renamed Nayara Energy – combining the Hindi word 'naya' (new) and the English word 'era'.[2]

To ensure expertise and a balanced shareholding representation, Vikal says, "we constituted a new board and robust governance structure. And to ensure we are an independent board-managed company, there were four seats for Rosneft and four for the Kesani representatives." One Kesani seat went to the Executive Chair, Tony Fountain, who has 34 years of experience working with BP and Reliance Industries, India's largest conglomerate. "Tony brought a unique perspective and helped us kick-start our journey towards optimised and efficient crude slate. He had ambitious asset development plans, with a strong focus on safety, sustainability and social responsibility," Vikal reflects. The board was balanced further with the recruitment of well-known strong independents such as Deepak Kapoor, former Chair of PwC India, and Naina Lal Kidwai, former Country Head of HSBC India.

Energy demand dynamics

"The global oil market is experiencing renewed uncertainty and volatility due to complex geopolitical and macroeconomic factors," stated Nayara Energy CEO B. Anand in the company's 2018–19 annual report, aptly entitled *Realizing Potential*. Fast-growing developing economies such as India have, in turn, fuelled energy demand. According to the International Energy Agency (IEA), India is the world's third-largest consumer of oil, the fourth-largest oil refiner and a net exporter of refined products. "The rate of growth of India's oil consumption is expected to surpass that of the People's Republic of China in the mid-2020s, making India a very attractive market for refinery investment," notes the IEA.[3]

So it is an understatement that Nayara Energy is systemically important. India's Minister for Petroleum and Natural Gas,

The Vadinar refinery in Devbhumi Dwarka district, Gujarat

Vadinar Oil Terminal, Gujarat

Dharmendra Pradhan, has commented that the country's energy consumption is projected to grow at 4.2% per annum until 2035.[4] This will require almost doubling its existing hydrocarbon refining capacity to meet fuel demand. Speaking in July 2019 at the Council on Energy, Environment and Water's Energy Horizons 2019 conference in New Delhi, Pradhan said: "In India, we have current domestic refining capacity of 250 million MTPA. Recent studies have pointed out that, even with an aggressive electric vehicle roll-out plan, India would need 450 million MTPA of refining capacity." This steady growth augurs well for Nayara Energy's high-complexity refinery.

By March 2019, the Indian oil industry saw overall year-on-year growth of 2.7% in the consumption of petroleum products, prompted by sales of passenger vehicles, two-wheelers and commercial vehicles. Diesel oil accounted for around 40% of total petroleum production, followed by gasoline. Bitumen consumption grew 8.7% over the same period, reflecting the government's push to improve road networks; India builds around 40 kilometres of highways per day and the IEA forecasts that the country will, by 2040, have eight times more passenger cars and four times more commercial vehicles than in 2017. To improve air quality, India is moving to Bharat Stage VI (BS VI) emission standards from April 2020, which, in addition to low-emission vehicles, require high-quality, cleaner gasoline and gasoil – something Nayara Energy is already positioned to deliver.

New beginning

Once the acquisition was completed, Nayara Energy's next challenge, Vikal explains, was to shake off its debt-ridden Essar legacy and stamp the new organisation's identity on the market with a brand embedded in a matrix of key values: Energetic, Xtraordinary, Courageous, Ethical, Lead (EXCEL). The values, explains Shweta Munjal, Vice-President of Brand and Corporate Communications, "keep curiosity, innovation and energy at the heart of everything we do".

According to Vikal, the balance sheet had "substantial challenges"; old dues of US$3.5bn to be settled straightaway and a current and non-current liability profile that required alignment with the asset profile. Much of the US$5bn debt portfolio was held by Indian public sector banks and was expensive. Additionally, financial and operational controls needed improvement, along with the required focus on corporate social responsibility. "We refinanced our entire debt more than twice over and raised US$11bn in the past 18 to 24 months. This saved around US$170m per annum of interest costs, and converted short-term liabilities into long-term debt," says Vikal.

The first full post-acquisition results, for the financial year that ended 31 March 2019, saw revenues of around US$13.7bn and year-on-year growth of 15% – the bottom line reflecting the investment made into the new business.

Legacy accounting and treasury systems were migrated to a new enterprise resource planning system, SAP HANA, enabling checking of end-of-day positions in real time. Both Fountain's industry experience and Anand's business and operational perspective were "invaluable", and saw the overhaul of strategic operations, while initiating Nayara Energy's corporate social responsibility (CSR) journey, says Vikal.

Long-term prepayments

Prepayment, a popular technique in the oil industry, was an important element of the overall capital structure strategy. Nayara Energy's innovative approach took it to a whole new level with a long-term structure, backed by a consortium of international banks, never previously attempted in this part of the world. Deutsche Bank was mandated by Nayara Energy's two offtakers, BP and Trafigura, as the sole coordinating mandated lead arranger (MLA) for a four-year US$750m facility. The transaction, signed in April 2019, was structured into two tranches of US$375m each, backed by separate commercial contracts and prepayment agreements between Nayara Energy and the respective buyers. This in turn was supported by back-to-back offtake contracts with the two offtakers. The deployment of a special purpose vehicle in the structuring provides the flexibility to change the offtakers if needed. Anand hailed the deal as "truly a benchmark transaction and yet another milestone in our journey towards achieving financial excellence".

Seasoned commodity finance structurers Christian Muchery, Charles Leung and Bernhard Koppold of Deutsche Bank, who led the bank's MLA team, noted that "to get a structure like this across the finishing line, you need the support of many stakeholders," and praised Nayara Energy's team for their patience and "answering all our questions".

Nayara Energy's Head of Finance Strategy and Projects, Vineet Srivastava, explains that the main challenges included working with 15 sets of stakeholders while they got comfortable with the Nayara brand – most were dealing with the company for the first time – and the aftermath of Iran crude supplies being halted following the reimposition of US sanctions. "Iran was a preferred supplier because it extended us 90 days' credit for the crude – the norm being 30 days," he says. "Once this flexibility had gone, we had to fill the working capital hole." And this was at a time when the company was still in the process of optimising its capital structure and balance sheet considerations.

Asset development

Quite apart from the company's network of 5,700 regional fuel stations which, explains Vikal, deliver "a great margin", the refinery site at Vadinar was long overdue a turnaround. With a capacity of 20 million MTPA, it is India's second-largest single-location refinery and among the world's most complex.

Complexity is measured by comparing the secondary conversion capacity of a petroleum refinery with the primary distillation capacity. The indicator, known as the Nelson Complexity Index (NCI), reflects both the investment intensity and the refinery's potential value addition. The higher the index number, the greater the cost of the refinery and the higher the value of its products. The Nayara Energy refinery has an NCI of 11.8 – among the world's highest. It is capable of processing some of the toughest crudes while also producing high-quality Euro IV and Euro VI grade products. The refinery has been providing higher-quality BS IV compliant fuels to international standards for the past 12 months.

"To ensure business sustainability and asset reliability, in 2018 we scheduled a 33-day major turnaround," says Vikal. This was subsequently undertaken in 30.5 days, 2.5 days ahead of schedule, with no lost time from injuries. Key activities addressed during this process included maintenance and inspection of all processing units, utilities, products and intermediates tankage, the crude oil tank, the jetty and the single point mooring system. Once the project was completed, the refinery's capacity to intake higher total acid number and high-sulphur crude increased, enabling Nayara Energy to produce cleaner products with very low sulphur levels. "We took the opportunity to make improvements in reliability, efficiency and other structural changes to the refinery so we could ship low-sulphur cargoes compliant with IMO 2020 and BS VI to our retail outlets and customers," Vikal explains.

> India is a very attractive market for refinery investment
>
> International Energy Agency

Since January 2020, ships must use marine fuel with a sulphur content not exceeding 0.5% by mass, and it is unclear whether the global refining sector will be able to produce enough low-sulphur marine fuels to meet demand. At any rate, Nayara Energy has ensured it is ready to produce it.

"We have a unique opportunity to leverage on the existing integrated infrastructure of land, port, power and storage and we are well positioned to harness the demand/supply gap and build on the momentum. But we are very mindful of our commitment to maintain a healthy balance sheet and meet the deleveraging targets we have set," says Vikal, adding that the tax breaks to enter this industry were welcome, given the focus on keeping leverage low and reducing debt.

On 18 January 2019, Nayara Energy signed two memorandums of understanding (MoUs) with the Government of Gujarat, committing investment of US$850m towards Phase 1 of an expansion plan for the new refinery and petrochemical units, contributing towards developing Devbhumi Dwarka district as a petrochemical hub in India.

Another significant investment was a depot at Wardha in Maharashtra. Strategically positioned in central India, the depot is equipped with a vapour recovery system driven by hybrid technology, and a 300 kilo-volt-amperes solar power plant generating 450,000 kilowatts of power a year. "The addition of Wardha is in line with our commitment to create world-class assets in a sustainable manner," says Anand. "This, being our first rail-fed depot, will

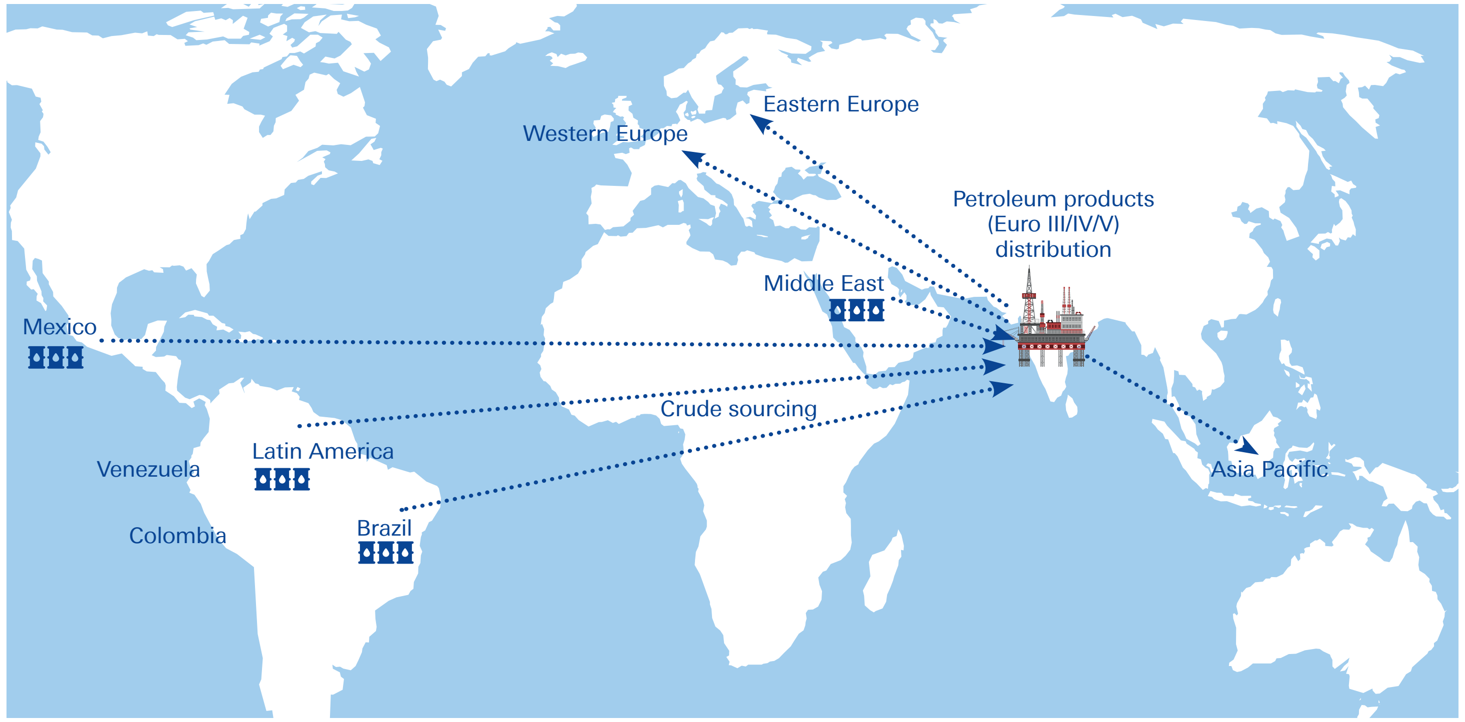
Figure 1: Financial performance snapshot

Rs (in million)	FY 2018–19	FY 2017–18	% change
Revenue from operations	987,129	855,618	15%
Total revenue including other income	1,004,316	867,704	15%
EBITDA	44,977	70,228	-35%
Profit before exceptional items, discontinued operations and tax	7,159	27,633	-74%
Exceptional items	1,773	17,223	-90%
Tax	1,944	3,244	-40%
Net profit/(loss) after tax	3,442	5,320	-35%

(Financial year ends 31 March)

Source: Nayara Energy annual report 2018–19

Figure 2: How a strategic location enables wide geographic reach



> We refinanced our entire debt more than twice over and saved ourselves around US$170m per annum in interest costs

Anup Vikal, CFO, Nayara Energy

be an important step towards enhancing our supply infrastructure in the region."

Location and reach

India's dependency on oil imports is, notes the IEA, expected to continue increasing. "With an oil import bill of around 4% of GDP today, and 65% of imports coming from the Middle East through the Strait of Hormuz, the Indian economy is, and will become even more, exposed to risks of supply disruptions, geopolitical uncertainties and the volatility of oil prices," says the agency.

However, Nayara Energy is confident of its supply sources and has strong relationships with national oil companies. Although Rosneft and Trafigura are shareholders, they receive no special treatment when sourcing crude or supplying products. "We don't do guaranteed deals with shareholders. Each crude and product deal has its own transparent evolution process, where shareholders' entities are also treated at par with other bidders," notes Vikal. Srivastava confirms that the pool of crude suppliers mainly consists of global oil majors, large traders and state-owned companies. This ensures the company gets the optimum pricing. Procurement employs a mix of open credit and short-term trade finance such as letters of credit, he adds.

Another factor is the variation in what types of crude are available. A complex refinery such as Nayara Energy needs uninterrupted access to heavy/sour crude (containing higher levels of sulphur) as well as high-quality low-sulphur sweet crude oil, in order to operate at capacity. Sour crude oil, needed for the production of diesel, marine fuels and bitumen, had been imported from Iran and Venezuela. At one stage, 40% of Nayara Energy's crude came from Iran, but once that source was shut off by sanctions, more supplies were sourced from alternative suppliers in Latin America and Canada. The lighter, sweeter crude – sourced mainly from the US – is commonly used for processing into gasoline and kerosene.

Corporate social responsibility

Vikal's other job – and his particular passion – is overseeing the company's CSR strategy. "Performance and sustainable development have been central pillars of our growth journey. We see the 15 villages in and around our refinery as key stakeholders," he explains.

In other words, the company's land acquisition immediately turned it into a resident of the villages – which, between them, have around 50,000 people who make a living there. "We are part of the family," he smiles. While Gujarat is a prosperous region, nutrition is often poor, and wealth is concentrated in the top ca. 1% of the population.

"Our attempt has been to drive inclusive growth and we are therefore partnering with the community through various sustainable development projects to improve people's quality of life," says Vikal. "Tobacco addiction and unhealthy food habits are a real problem."

The solution, he suggests, is to work with the region's women. "When women get more money in their hands, they use it for the purposes of nutrition and their social standing increases." Micro-enterprises facilitated and supported by Nayara Energy empower the community's women to make financial decisions for their households. For example, the stitching centre in Vadinar has transformed into a fully fledged garment manufacturing enterprise.

The company has invested in local community programmes to improve health and sanitation (including the installation of public toilets), to support villagers – particularly women – in earning their livelihood, and to double farmers' incomes through climate-smart agriculture techniques, effective livestock management and water resource management. There's also a special focus on education and skill development; absence from school is addressed, and students are trained on programmes to prepare them for the workforce.

Nayara Energy also signed a MoU with the Gujarat government to make the Devbhumi Dwarka district malnutrition-free. Together with the Indian Institute of Public Health, Gujarat's capital city Gandhinagar, and health solutions developer JSI India, it is implementing Project Tushti to strengthen nutrition indicators in the district's 249 villages.

Realising potential

The combination of a corporate turnaround story, a transformational landmark deal, and bringing nutrition and skills to Gujarati villagers demonstrates that this company has already realised many of the potential benefits that were mere aspirations when the Indian and Russian leaders signed the MoU in 2016.

But, like all good businesses, Nayara Energy does not rest on its laurels and has applied to the environment ministry to add a single point mooring facility at Vadinar Port to handle additional crude deliveries, increasing capacity to 46 million MTPA. The estimated total cost of the expansion is around US$20bn and the investment aims to serve India's growing demand for petroleum products.

And, in line with India's progress towards meeting Goal Seven (delivering energy access) of the United Nations Sustainable Development Goals while reducing emissions, Nayara has led the way in producing BS VI and IMO 2020 compliant clean fuels for the past 18 months – while certain other providers are still talking about it. "We have been doing our bit," Srivastava concludes.

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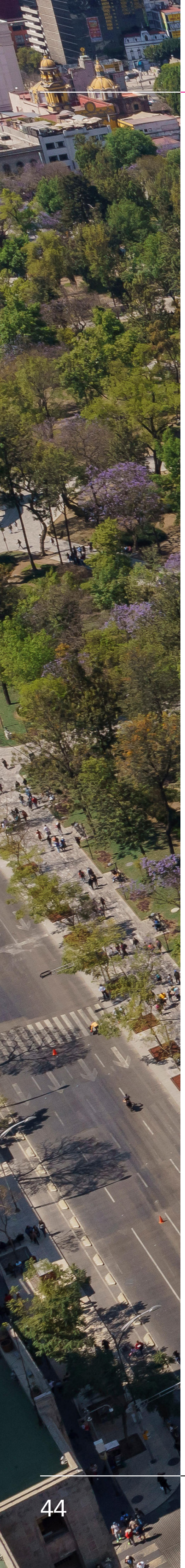
Nayara Energy supports micro-enterprises that empower the women of the Gujarat region



Under the rainbow

Floods, political upheaval and investor caution have created infrastructure shortfalls in much of Latin America. Ivan Castano Freeman reviews project progress, re-routed trade flows, and opportunities for banks and export credit agencies

After a 2019 that saw an average of nil economic growth across South America, market observers note that the region is poised for a cyclical recovery, with its two largest economies – Brazil and Mexico – offsetting the impact of further potential political turmoil with stronger exports and ambitious infrastructure expansion.

Prospects for the region's other members are a little less upbeat. "Activity in the rest of Latin America will also accelerate, but idiosyncratic events remain more relevant than cyclical considerations," commented Deutsche Bank's Emerging Markets Monthly team at the end of 2019.[1] Examples of these events thus far have included civilian unrest, natural disasters and corruption scandals. Will the new decade offer more of the same, or greater stability? Either way, it could well be something of a turning point.

This article takes a closer look at what is driving the supply and demand of trade finance in the main regions, and what governments are doing to attract lenders.

Construction resurgence

"Mexico is launching an infrastructure plan that will need international banks and boost trade finance operations," says Ignacio Méndez, Vice President of Structured Trade and Export Finance (STEF) at Deutsche Bank. The country has seen many foreign construction firms moving to participate in the initiative, which has helped to fuel Mexico's GDP to a projected 1.2% for 2020 from the zero growth seen last year.

The five-year scheme's first phase will see private investors team up with Mexico's government to plough MXN859bn (US$46bn) into 147 projects spread across the energy, transportation, tourism and telecommunications sectors.

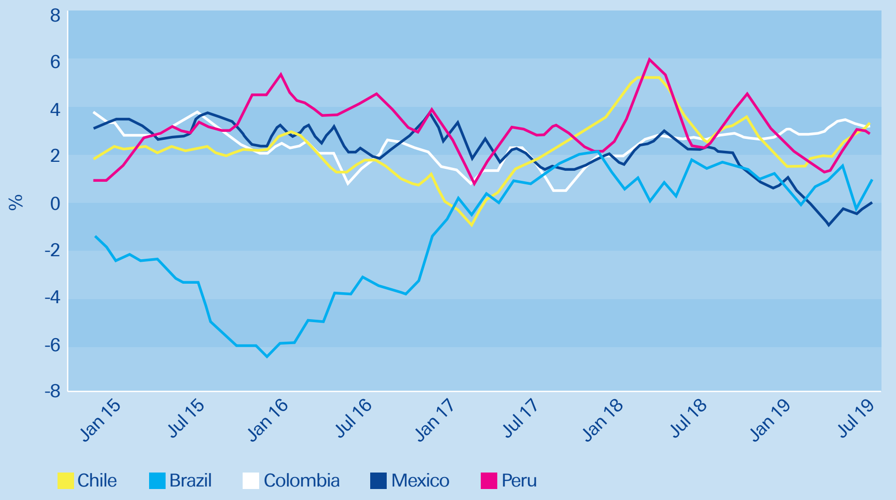
The plan "won't come right out of the budget," explains colleague Ignacio Ramiro, the bank's Head of STEF Iberia. "These companies will need financing solutions and we are constantly receiving proposals from different clients to pursue different opportunities within the plan."

By way of context, Mexico's contraction in public expenditure, along with the impact of transitory shocks such as gasoline shortages and strikes, helped to push the economy into technical recession in the first half of 2019, noted the authors of a Deloitte Insights report published in December 2019.[2] However, international trade has remained, the report explains, "another positive sign for the Mexican economy". The United Nations Conference on Trade and Development stated that the US–China conflict has helped Mexico to the tune of US$3.5bn from additional exports to the US market – specifically in the agro-industry, transportation equipment and electrical machinery sectors.

The recent United States–Mexico–Canada Agreement (USMCA), which has upended the US$1.2trn free-trade corridor between the US, Canada and Mexico, is fuelling demand for transaction banking services and is set to keep trade banks busy. The

Aerial view of the Palace of Fine Arts in Mexico City

Figure 1: Activity poised to rebound



Source: Emerging Markets Outlook 2020 (4 December 2019), Deutsche Bank Research

boost comes after many lenders suffered from anaemic revenue growth in 2019 when President Andrés Manuel López Obrador scrapped plans for a glitzy US$13bn airport for Mexico City, spooking global investors.

As clients assess projects, Méndez says demand for risk-mitigating products such as factoring or invoice discounting is growing sharply. "Exporters are extending payment terms to their clients to gain competitive advantage," he explains, adding that this activity is poised to gain traction in 2020. "Trade finance houses are engaged to buy these receivables, so exporters reduce their overall exposure to buyers and provide more attractive conditions without affecting their liquidity."

Meanwhile, Mexico's state-owned Banco Nacional de Comercio Exterior (Bancomext) expects the infrastructure drive, coupled with rising Mexican shipments north of the border, to ramp up demand for its guarantee and other export-financing products.

"We expect this infrastructure spending to be a big detonator of economic growth, helping both large and small companies grow by enabling them to do more trade and demand trade finance products," enthuses Héctor Gómez, Vice President of International Factoring at Bancomext. He forecasts that Bancomext will likely grow its credit guarantees to MXN560m (US$30m) this year, up 2.7% from 2019, as a string of companies leap into new US markets, boosting Mexican shipments to 6% from 4.7% in 2019.

Overall, Bancomext hopes to grow its export financing activity by 6% to US$4.3m as it acts to support 22 industrial sectors ranging from automotive and auto-parts (expected to benefit from the USMCA) to energy, electrical equipment, renewable energy and aircraft engines, both on its own and in partnership with financial institutions such as Deutsche Bank, Wells Fargo and Citi, Gómez reveals.

Colombia's construction market is also heating up. Bogotá is reportedly set to auction at least 10 new highway concessions worth US$4bn in the second half of 2020, which is drawing strong interest from British, US and Chinese players looking to participate in major highway and airport concessions. In common with Mexico, the initiatives will fuel Colombia's GDP expansion, which is forecast to reach 3.6% this year; one of the fastest rates in Latin America.

> In Peru it is rare that one form of financing or structure solves everything
>
> Piers Constable, Head of STEF, Americas, Deutsche Bank

Aerial view of irrigated soya fields in Goiás, Brazil

Hungry China

Brazil will also drive transactions growth this year. Latin America's largest economy is expected to gain 2%, versus 1.1% in 2019, when a sharp fall in exports saw Brazil's trade surplus shrink by 20% to a four-year low, impacting on GDP and dragging the region's aggregate to -2%.

Already, farmers are upbeat about an expected surge in pork and chicken exports to China, as a worsening African swine fever outbreak lifts demand for meat. "Some 40% of Chinese pigs – hundreds of millions of animals – have now been lost, and the result has been a chronic shortage of pork and rocketing prices," reported *The Guardian* in November 2019.[3]

According to the Brazilian Animal Protein Association, pork and chicken sales to China and Hong Kong, as well as to Vietnam, Russia and Chile, will gain 15% and 7% respectively this year – although the coronavirus outbreak could necessitate major revisions to a host of projections.

Zooming out to the whole region, initial forecasts are for exports to increase by 2–5% amid a recovery in key commodity prices such as oil and copper, which could partially offset falling soybean sales to China as the 'phase one' deal to end the trade war[4] redirects purchases to the US, hurting suppliers in Brazil and Argentina.

"We have to see what the phase one deal does to Brazil soybean exports, which are a big deal for the country," says Capital Economics' Chief Emerging Markets Economist William Jackson, who adds that soybean shipments hover at US$27bn, or 1% of GDP. Rising beef exports (though this is still a small category), higher crude prices and a ramp-up of iron ore shipments could help offset those losses, however, boosting overall exports by 1% to 2%, he adds.

China's economic growth (as well as a possible deterioration of its trade relationship with the US) will be closely watched. The latest World Bank statistics pin expansion at 5.9%, down from 6.1% in 2019, a year that saw the world's second-largest economy expand at its slowest pace in three decades. The coronavirus pandemic suggests further downward revisions will follow.

Argentina and Chile

Deutsche Bank's Méndez also sees growth perking up in Argentina, despite the country's debt and economic crisis – although this is contingent on a successful revamp of its debt load, including US$100bn of bond restructuring.

"The first 100 days of President Alberto Fernández's mandate will be crucial to see whether Argentina will grow," says Méndez, adding that if the process yields a satisfactory conclusion, the nation could see a resurrection of its massive Vaca Muerta shale gas project.

Vaca Muerta (literally meaning 'dead cow' in Spanish) has the potential to export US$20bn worth of shale oil and gas by 2024, if Argentina can garner enough investment to complete the project, analysts say. Because Vaca Muerta is located in the Neuquén Basin deep in Argentina's Patagonia region, ferrying its output will require big investments in distribution and transmission infrastructure, boosting deal flows for trade banks.

"Talks on infrastructure projects around Vaca Muerta have been ongoing for several years," Méndez reveals. "These are focused on exploiting the area's potential and guaranteeing its output has access to international markets." To make this happen, banks will likely partner with multilaterals to import equipment and technology, using custom-made financing solutions involving bonds, commercial credits, supply chain finance and ECA- (export credit agency) backed solutions, he adds.

Meanwhile, in neighbouring Chile, the outcome of a referendum scheduled for 26 April could help build a fairer and more equitable nation, and alleviate tensions related to the violent protests of 2019, which were sparked by demands for social reform and constitutional change. If peace returns, funding demand to ramp up staples of copper ore, refined copper and forestry exports, as well as to maintain commodity houses' business operations, should continue to increase, Méndez notes.

Social infrastructure

Despite the upheaval surrounding the protests, which have engulfed other Latin American countries, governments are working to improve their social infrastructure and services, with plans afoot to build new schools and hospitals.

Piers Constable, Managing Director, Head of the Americas at Deutsche Bank's STEF division, says his team is helping to finance such projects in Argentina and Ecuador this year[5] and expects similar initiatives to emerge in the future.

"In Argentina and Ecuador, there is a very strong focus on the governments improving social welfare," says Constable. "These are not projects with

> We have a constant flow of small and mid-size businesses looking for bonds or working capital

Beatriz Reguero, State Account Director, CESCE

which it's easy to generate private sector financing, as they don't generate hard currency income."

In other countries, Deutsche Bank remains active in funding public–private partnership infrastructure projects, working with administrations and corporate borrowers to hammer out different types of financing solutions.

Depending on the country or client's liquidity profile, executing these deals brings its own set of challenges, according to Constable. Some local markets are awash with liquidity (Brazil, for instance, boasts a strong domestic fixed-income market), making it difficult for the bank and other foreign peers to provide competitively priced, long-tenor financing. "We don't have a significant local currency deposit base, so when we see clients issuing 20 to 25-year local debentures, our structured finance team struggles to be relevant in that landscape," Constable reflects.

Structuring deals

As the private financial sector navigates projects in Peru, which is pursuing a US$7.8bn reconstruction programme following the devastating floods in early 2017, banks are working to launch creative financing structures that often bring development banks or ECAs into the fold.

A copper mine in Chile

Woodchip stockpile for export to Japan in Puerto Montt, Chile

An aerial view of floods in northern Peru, 2017

The Peruvian government implemented its 'Preliminary Plan for Reconstruction con Cambios' in June 2017 in response to the floods crisis, and announced a three-year period of reconstruction. A Zurich Flood Resilience Alliance 'Post-Event Review Capability' study observed that "too often, disaster reconstruction is done hastily in an effort to return things to 'normal'", and that reconstruction should be used as an opportunity to "build back better", developing systems and services to address core weaknesses at their foundation.[6]

In September 2019, President Martín Vizcarra said that Peru had 52 infrastructure projects under way involving around US$30bn up to 2025, 24 of which were under construction at the time. The then finance minister Carlos Oliva added that Peru had recalculated its infrastructure shortfall at 363bn soles; almost half of its GDP (US$109bn).[7]

"In Peru, which has one of the largest infrastructure systems in the region, it is rare that one form of financing or structure solves everything," says Constable. Jumbo projects often require structured finance solutions splitting financing into tranches.

"For the US$2bn, US$3bn and/or US$4bn petrochemical, liquefied natural gas or gas sectors, for example, we often see tranche financing," Constable notes. "Say there is only liquidity in the capital markets for US$1bn to US$2bn, but there is another US$1bn or US$2bn in the export credit market or trade finance market. We can bring all of that into the project to diversify our client funding sources," he explains.

The ECA-backed US$1.3bn financing of state-owned Petroperú's overall US$5.4bn Talara refinery upgrade is a good example of such a structure, Constable recalls. In this deal, Deutsche Bank acted as facility agent for a syndicate involving CESCE, Spain's ECA – which made its largest ever commitment in the project – together with BBVA, BNP Paribas, Citi, HSBC and JP Morgan. The Talara expansion project is due for completion by the end of 2020.

Images: Alamy, istockphoto, Getty

According to CESCE, this deal is quite exceptional because, for more than a decade, deals in Latin America have tended to be small or medium in size, and solid infrastructure ECA exposure in Peru was almost non-existent until about three years ago.

Pipeline extension

CESCE intends to swing into action in Latin America, but with much smaller deals than Petroperú typically accommodates, reports Beatriz Reguero, Chief Operating Officer of State Account Business at CESCE. "This year, we could grow a little," she says, adding that despite the outlook, CESCE remains open in all main Latin America markets and is willing to increase exposure in them. So far, however, the Madrid-based institution hopes to close two hospital projects in Argentina worth roughly €80m.

US$7.8bn

Size of Peru's reconstruction programme after the 2017 floods

The rest of the deal pipeline could come from Spanish corporates looking to grow their franchises across the pond. Increasingly, firms are contacting their banks for an 'aval' or guarantee. To hedge its lending capabilities, the bank then goes to CESCE for a counter-guarantee.

"We have a constant flow of small and mid-size businesses looking for bonds or working capital for road construction, renewable energy and many other projects in Mexico, Panama or Paraguay," Reguero observes, citing a few examples of the types of deal coming across her desk.

For firms looking to invest in the region, CESCE can help. "With our bonds or working capital cover, a bank can take 50% more client risk. So if they have a US$100m credit line, for example, they can increase it to US$200m," Reguero concludes. That should lend wind to the sails of companies looking to take advantage of Latin America's massive infrastructure spend, with their incursions coming at a particularly poignant time in the region's history.

Ivan Castano Freeman is a freelance financial journalist based in Mexico City

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Saving trade

As the Covid-19 pandemic wreaks havoc on economies and communities – and ultimately global trade, what is the impact on trade finance and supply chains? Geoffrey Wynne explains

At the moment it is difficult to gauge the full extent of the impact of Covid-19 (coronavirus) on trade and commodity finance, although it is clear that the pandemic is both severe and widespread, particularly in Organisation for Economic Co-operation and Development (OECD) countries.[1] Many millions of people have already been affected and more will follow, while Italy's decision to impose a nationwide lockdown was soon replicated by many other countries. Economists, who initially projected that global economic growth would slow sharply, quickly adjusted their forecasts to a sharp recession.[2] Having said all this, in assessing the impact of coronavirus it is worth trying to define what the scope of trade and commodity finance is. That way it is possible to consider the likely effects.[3]

End to end

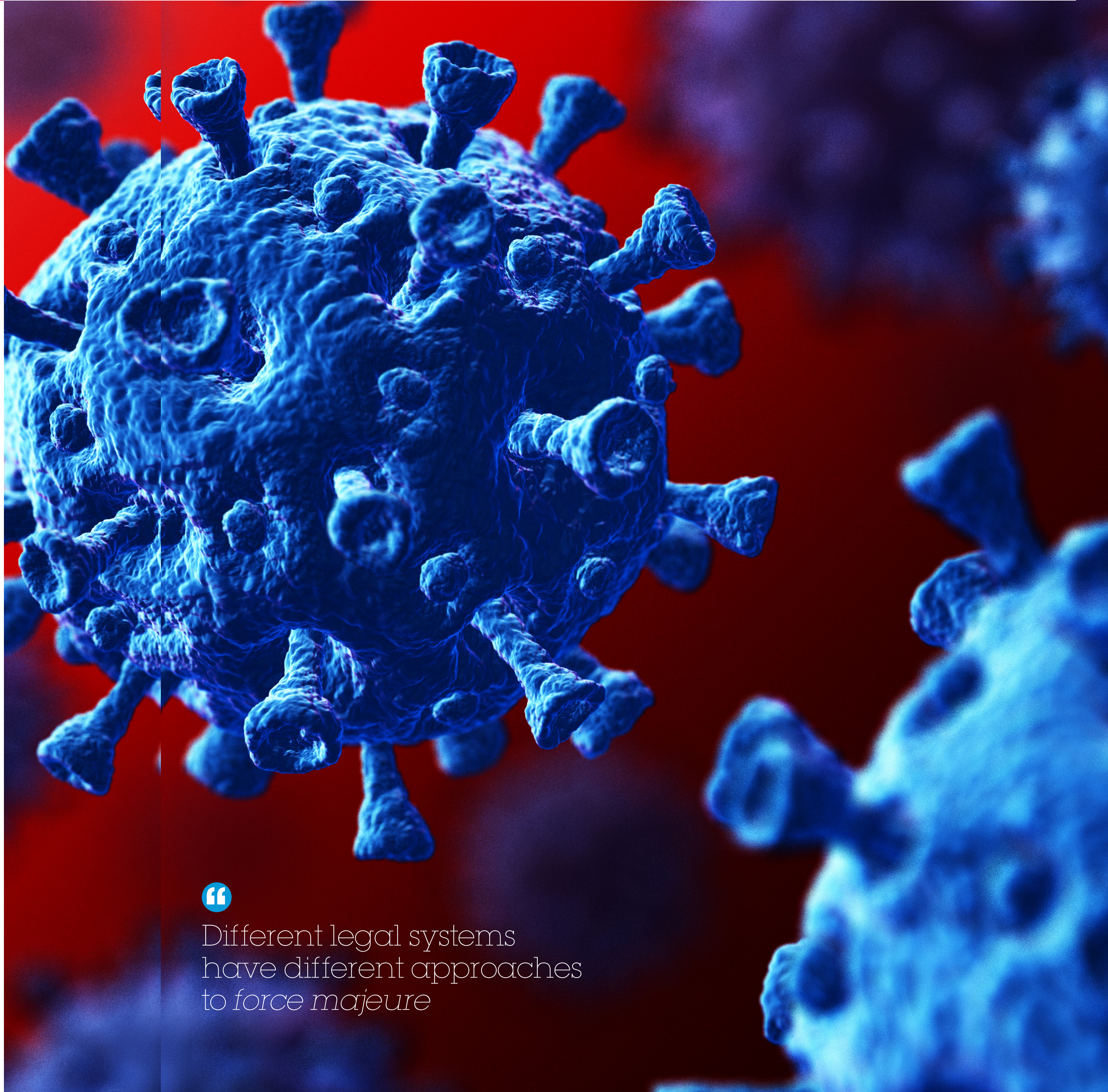
Trade and commodity finance comes in different shapes and sizes. It can provide finance to the whole of the physical supply chain; extending from growers and producers through to processors, exporters, storers and transporters, right through to wholesalers, retailers and, ultimately, consumers. The more adventurous financiers will make funds available to producers by way of pre-export and prepayment finance, which takes production and performance risk on those parties. There is no commodity at this point.

Perhaps a little less adventurous are those who will finance emerging market commodities that are already at the warehouse, on board vessels, or in store at their final destinations. One issue here is whether the commodity can be sold, delivered and paid for. Some look only to the end of the physical supply chain and provide finance (by way of loan or receivables purchase) to the strong buyers who act as importers, wholesalers and retailers in OECD countries. Here, the arrangements can benefit a supplier who is pressed for cash while their buyer negotiates longer payment terms. This is called supply chain finance.

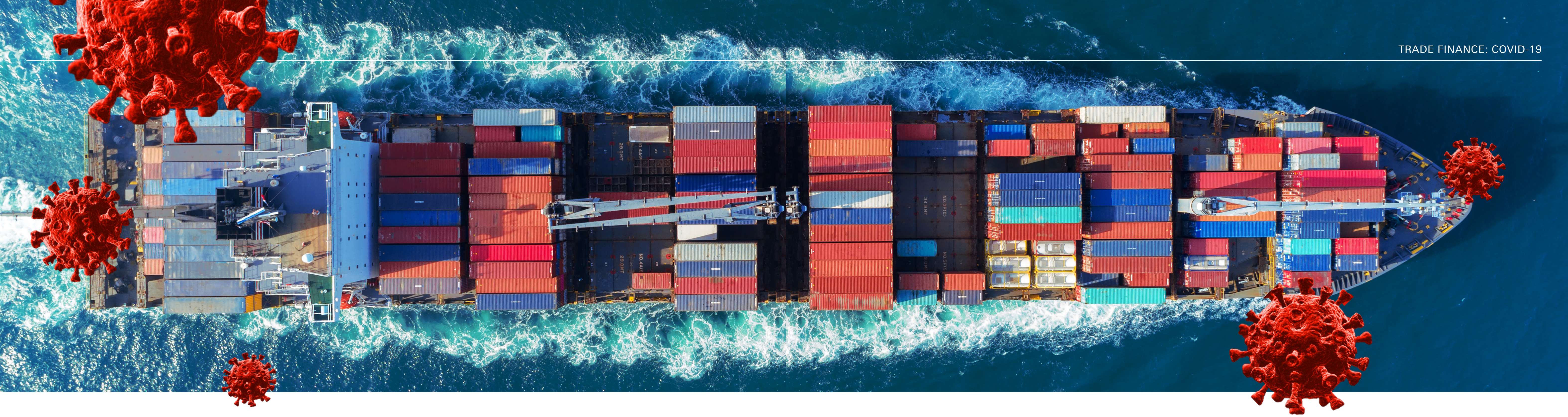
What types of trade finance are most impacted by coronavirus?

Ironically, supply chain finance could be affected first. The business depends on buyers continuing to buy from suppliers. The more committed the buyer is (will they irrevocably agree to pay?) the better the finance possibilities. Thus, the supplier has sold the commodity and has a receivable to sell. Supply chain finance means the financier will pay the supplier as early as possible, so long as the buyer has agreed to pay. However, we are now seeing cases of buyers not wanting to buy, as they may be unable to sell the product they have committed to purchase. Some are even claiming that coronavirus is a *force majeure* event, which relieves them from the obligation to buy. If this situation becomes more widespread, then the supply chain market could well slow down.

There are arguments on either side as to whether this is a reasonable position to take, and much may depend on the wording of



> Different legal systems have different approaches to *force majeure*



the *force majeure* clause. Reviewing these provisions in purchase agreements where financiers are funding the payable will be more important. Financers will need to ensure that they only agree to purchase and meet payables that have the commitment of the buyer.

Turning to the other end of the physical supply chain, the answer may be different. The world needs commodities, especially in the agricultural sector, and those grown and processed will be a useful area to finance. If a financier can be satisfied that the commodity is being grown – and the other parties involved in the physical supply chain can perform so that the commodity is produced, processed, transported and delivered – then this would remain a good area for trade and commodity finance.

A successful financing requires people or machines that can work across the whole physical supply chain. That being the case, what stops the financiers? The answer is risk appetite. There is a different view taken of risk than there once was. If one could mitigate the performance risk of the various parties in the transaction, then the financing could be secure.

However, many financial institutions cannot – or will not – consider SMEs in emerging markets. This is because their compliance departments do not allow for onboarding of these companies, which has meant that major banks are not exploiting these opportunities. Should they change their minds and if regulators help them, there is much to finance.

Indeed this huge, unfinanced trade gap, an estimated US$1.5trn,[4] would provide fertile ground for financing. It is strange but true that if the regulator releases banks from compliance requirements then trade and commodity finance could increase, rather than reduce.

Others in this space, such as smaller banks, non-bank financial institutions and funds, have found good opportunities. These transactions could well continue and indeed increase, although the attendant risks could yet intensify in the current environment. An issue then will be to assess those potential risks and how to deal with them.

Before looking at how to increase trade and commodity finance it is worth exploring what to do with existing transactions that might be adversely affected. This would also help in considering how to participate in new transactions.

Force majeure and coronavirus

Force majeure provisions come in all shapes and sizes. Different legal systems have specific approaches; in some, *force majeure* and contract frustration – meaning the contract is impossible to perform – get confused. Under English law, it is unlikely that the coronavirus would constitute contract frustration, resulting in a need to explore what has been provided for in the contract. Civil law jurisdictions may well have *force majeure* determined within their commercial code. China, where claims of *force majeure* started as the outbreak gathered pace, simply closed factories and ports. This means *de facto* non-performance, which would have to be addressed.

English law requires *force majeure* to be spelled out in order to rely on it. Coronavirus may well not constitute an event in itself. However, more importantly, the question is better framed in the following terms: if performance must be excused because of an outside event, then what happens? The provisions should be checked to see if performance is suspended or cancelled. The former is a better solution for a financier relying on a contract to secure performance and then payment.

Banks that issue documentary letters of credit evidencing payment and standby letters of credit covering non-performance will be examining the rules governing their issue. Coronavirus is not likely of itself to render any of these documents frustrated, nor would the provisions in rules like Uniform Customs and Practice for Documentary Credits and International Standby Practices necessarily be capable of stopping payment. That means that banks that issue or confirm letters of credit will need to consider carefully if they are having to pay, and how they might be reimbursed. The practical problems of delivering documents to an issuing bank or an applicant to be reimbursed will be a growing problem if lockdowns continue.

The law and interpretation of it may have to try to run to catch up with the practical problems of delivering documents in a lockdown. Indeed, how to execute and deliver documents where the population is working from home will again be challenging. *Force majeure* may be a reality in the sense that this pandemic will stop what is needed without parties agreeing to change how they can process transactions. At the same time, trade and commodity finance is a physical world. Goods can still be produced and delivered. Whether they can also be accepted and paid for are challenges to come. A flexible approach to dealing with how to evidence payment obligations will also be important.

There is another related area to consider in documentation and that is the material adverse change clause. It generally refers to a material adverse change affecting performance by an obligor. The remedies in the hands of a financier are to stop further utilisations and/or to require an obligor to repay the financing. This may not be helpful; in a similar way to a nuclear weapon it sits in the armoury, but threatens utter devastation. It is not necessarily useful to use in these circumstances, should it apply. Requiring someone to pay – or withholding finance at a time when tolerance is needed – are arguably not the best solutions.

Practicalities

The first step should be to look at current documentation and transactions – which are still running, and will they be affected by any of the issues outlined above? If they are potentially affected, then what could happen, and are the provisions in the documents resilient enough to cover the scenario?

This is the time to calmly review and seek to preserve the structure of the transaction. That might mean flexibility on when payment or performance is expected. There seems no point in simply terminating the transaction and making claims that cannot be met. Restructuring any existing transaction offers a better approach.

Flexibility in dealing with issues, such as accepting satisfactory documents and the signing of documents, is paramount. That may be challenging, given legal constraints such as what could be difficulties in the signing and delivery of documents. Imaginative legal solutions may be needed. This need will continue if lockdowns and working from home persist. It remains relevant assuming that the physical supply chain can still deliver.

The challenge would then be to keep transactions going where there is to be further utilisation, and indeed to create new transactions where there needs to be signing of documents. In each case, the question will be how to achieve performance. Where possible, it would be useful to amend documentation to allow for electronic signature and delivery of what might technically only be copies, but treating them as originals. This approach can keep transactions running and allow for new transactions to be concluded.

Assuming there remains physical trade and commodity business then there is every reason for that to be financed. There should be no reason to stop entering into, or allowing, performance of trade and commodity finance transactions. Performance may have to change, and financiers may need to be more flexible to enable transactions to continue. Coronavirus will affect certain transactions and documentation will have to be reviewed and, in some cases, amended.

Adapt and survive

The fundamental message is that we should not allow this potentially lethal virus to kill trade and commodity finance, which has always been able to adapt to changed circumstances. This is an opportunity to reconfirm that ability. Have a detailed look at how best to enter into and maintain transactions and how to carry them out, but do not stop them.

Geoffrey Wynne is Partner and Head of the Trade and Export Finance practice at international law firm Sullivan

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Currency care

Dan Barnes explains how targeted use of derivatives can create more efficient hedging for FX risk, and provide treasurers with an alternative to incurring overnight deposit charges

Despite ongoing concern around the US–China trade war, overall volatility in the foreign exchange (FX) space has declined over the past year. This pattern can be seen in Deutsche Bank's Currency Volatility Index (CVIX) – the historical volatility index of the major G7 currencies (see Figure 1 on page 57).

The CVIX has not gone past 9% since April 2019, helped by range-bound interest rates in the world's major economies and low inflation, thereby reducing incentives to move money from one country to another.

Deutsche Bank's CVIX provides a daily measure of volatility in the FX market, showing how suddenly volatility can spike and fall and providing a benchmark for currency market participants.

Low volatility is often correlated with tight spreads, lowering the cost of moving between currencies. Companies also often reduce hedging activity in periods of low volatility, as the risk of an adverse movement is reduced.

These circumstances in foreign exchange markets create both opportunities and risks for corporate treasurers. Despite low volatility, during 2019 the euro fell 2.37% against the US dollar and 3.34% against the pound, according to data from market information provider Refinitiv (formerly Thomson Reuters Financial & Risk).[1]

Research from the Bank for International Settlements (BIS), as part of its September 2019 *Triennial Survey* of the FX market, found that in April 2019, cross-border FX trading activity had reached its lowest level since 2001. While trading in FX markets had reached US$6.6trn per day – up from US$5.1trn three years earlier – trading between banks and non-financial institutions remained at 7% of total turnover, as had been the case in the 2016 survey. Some of that activity can be explained by the levels of market volatility.[2]

The findings involved collecting data from around 1,300 banks and other dealers in 53 jurisdictions, with national aggregates reported to the BIS, which then calculated the global aggregates.

Cost and opportunity

For firms within highly export-focused economies, managing FX and currency risk is paramount to supporting profitability.

For example, Germany runs a monthly €35bn current account surplus, which needs to be converted by the businesses that are bringing those revenues home. If hedging is reduced in periods of low volatility, companies can be caught out as volatility rises and they suddenly face higher hedging costs.

Both they and more domestically focused firms also need to consider the cost of holding euros, given that the European Central Bank's (ECB's) policy of negative interest rates on deposits has persisted since 2014. In its November 2019 *Monthly Report*, Deutsche Bundesbank found that 58% of respondent banks were charging a negative volume-weighted average interest rate on overnight deposits held by business clients in September 2019, with those institutions making up 79% of the total volume of overnight deposits of enterprises within the German banking industry.[3]

Corporate treasurers need to engage with their financial partners to develop strategies that will support their revenues by both minimising costs associated with FX and cash management, and by looking for opportunities to optimise interest expense/income and reduce FX volatility.

Hedging risk

Cash flow exposure is the simplest form of FX exposure, with products built in one country sold overseas, creating the need to exchange the foreign currency for the domestic currency.

Increasingly, the globalised industrial structure seen within corporates leads to production and service provision being based overseas from the headquartered location, with products also being distributed overseas. That means the company no longer has cash flow exposure, but instead has earnings exposure. This model has been encouraged by both the shaking up of existing trade and free-trade agreements, and also the drive by firms to be closer to their consumers.

The most common hedge used is an FX forward contract, which sets the price at which the foreign currency is sold in the future. However, there are many variables that might create a demand for more flexibility, at which point options become the preferable tool for hedging.

Firstly, the level of exposure that a firm incurs will differ significantly, based upon its industry sector, the transaction certainty it enjoys and its profitability margin. "If one transaction has a 5% profit margin and another has a 50% margin, the business with the 50% margin has much more leeway on hedging the exposure," says Konrad Haunit, Head of FX, Institutional and Treasury Coverage at Deutsche Bank.

Another consideration is the price flexibility of a product, as that can allow responsiveness to currency changes. Digital and small unit product providers can change their prices rapidly, but hardware, machinery and vehicle manufacturers cannot.

Developing a skillset

Hedging against FX risk is more complex when product unit sales are less certain. For example, manufacturers need to develop programmes for anticipated exposure, as these are so large they cannot wait for clients to buy a product and then trigger the FX hedge. Instead, they have to anticipate that they will sell a certain amount of stock in a given geography and also assess how quickly they can adjust their supply chains/cost base relative to forecast length.

For single items, the buyer may have a credit event and be unable to complete the transaction. In the example of manufacturers supporting a large number of volume sales, the exact sales figures are an unknown, and so the hedge must reflect estimates. This is where FX options come in. "A manufacturer may be confident of selling US$500m, and see US$700m as likely," says Haunit. "They layer their hedges, and the size of the exposure, and then if the exposures become too unlikely and too big they would then start using options as a hedging tool."

While these dynamics are all reflective of the business itself, corporate treasurers must also consider their own skillsets and those of their partners. Psychology plays an important part in the level of sophistication of hedging tools that firms may be comfortable with.

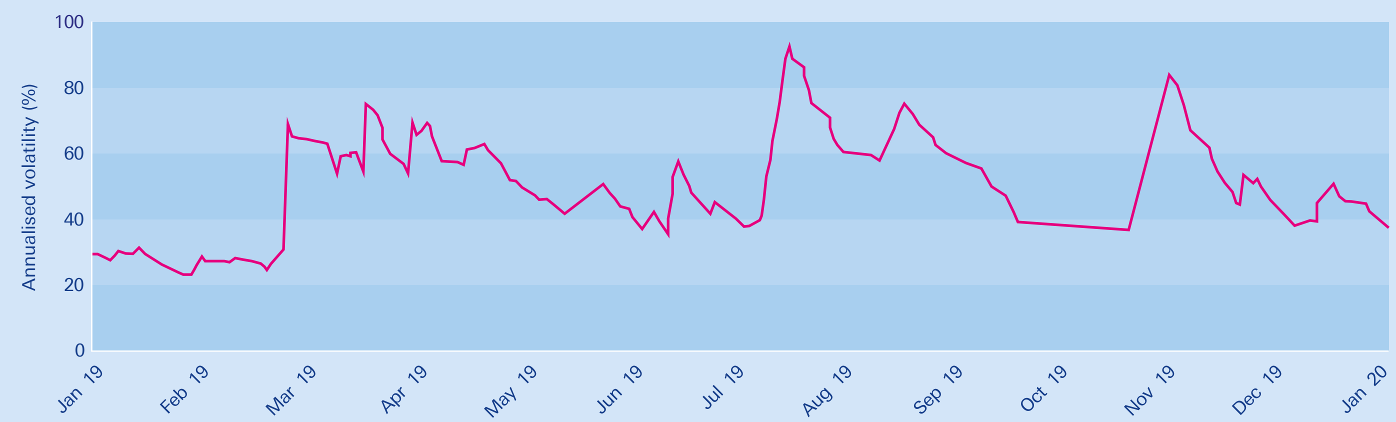
This comfort level is typically influenced by positive and negative experiences or by an absence of experience, tempered with the level of professional support that can be provided by partner organisations such as banks. Inexperience and negative experiences can both limit the appetite of a firm's treasury team to use new products or services. However, that can lead to the business missing out on realised profits due to sub-optimal FX hedging. Looking at the decision objectively, cost is a major factor, but so is complexity.

Haunit says: "The product needs to be simple, effective and the treasurer needs to be able to explain it; it also needs to be at a reasonable cost. The accounting treatment needs to be working, so their use of the hedge can't cause a lot of volatility, for example. Then there is also the question of profitability."

Yet the cost of hedging is often misunderstood, due to a focus on the explicit costs without an understanding of the implicit costs that might be included.

"Businesses often work with the perceived cost, which is not necessarily the analytically correct level of cost in my view," says Haunit. "So for example, suppose a client wants to sell US$100m and buy euros. They might go onto a price comparison website such as 360T or FXall and ask 10 banks at the same time for a price. As they make that request, the price will start moving, so most of the time they have the cheapest price those 10 banks can offer, but only after the market has moved against them."

Figure 1: Deutsche Bank's Currency Volatility Index



Source: Deutsche Bank

> If one transaction has a 5% profit margin and another a 50% margin, the 50% margin one has much more leeway on hedging the exposure
>
> Konrad Haunit, Head of FX, Institutional and Treasury Coverage, Deutsche Bank

Left holding the euro

FX management should also be used to mitigate risk in local currency, where it carries a burden. Since banks are increasingly passing on Europe's negative interest rates – as set by the ECB – to their corporate clients, the optimal strategy for managing cash can change.

When rates were artificially high relative to the ECB rate, the effective savings generated by holding cash within current accounts made other ways of managing that cash uneconomical. Now that savings are being eroded, or have turned into costs, corporates – many of which have International Swaps and Derivatives Association (ISDA) Master Agreements with their banks – are able to use derivatives to temporarily move cash between currencies, as a fully hedged transaction, then bring it back into the domestic currency.

"This allows clients to unlock other potential subsidies or risk premiums," says Yannick Marchal, Director for Automated FX Solutions and Services, Foreign Exchange Trading at Deutsche Bank. "Some banks put a premium on their dollar deposit rate relative to their euro deposit rate because they want to attract dollar deposits, and will provide reasonably beneficial rates for long-term deposits in dollars."

To access those beneficial foreign currency rates, corporate treasurers can use FX swaps to reduce, alleviate or eliminate the cost of holding euros. "Automated programmes can allow that seamless temporary transition from euros into dollars," says Marchal. "It can range from doing it on an overnight basis, which requires limited derivatives documentation, to longer dated agreements; for example, a three-month time deposit, partnered with a three-month FX swap."

> Typically, between five and 15 basis points over the benchmark is not unreasonable
>
> Yannick Marchal, Director for Automated FX Solutions and Services, Foreign Exchange Trading, Deutsche Bank

The impact of MiFID II

In addition to ISDA Agreements, corporates working with derivatives need to be aware of their obligations under MiFID II, the legislative framework brought in by the EU to regulate financial markets in its bloc.[4]

However, there are exceptions and exemptions, which many corporates will be able to apply to their own business. FX transactions related to payments transactions are out of scope for MiFID II, although these must fulfil a range of criteria, including being a physically settled means of payment, and entered to support payments for goods, services or direct investment.

"To use derivatives effectively, firms need an understanding of the accounting associated with it, and the systems to manage transactions with straight-through-processing," Marchal observes. "Running overnight swaps every day involves a volume of transactions to process, although in most cases clients' treasury management systems and enterprise resource planning tools should be able to handle this."

The trade is fully collateralised, so once the accounting data entry is sorted out, the operational aspect is, in Marchal's view, painless. The potential savings are a function of the instruments that are made available to that particular firm and how much time they are willing to lock their money in for.

"For a year-long time deposit, the bank offering the time deposit will provide some uplift on the market rate, because it wants to borrow those dollars, or other currency," Marchal concludes. "Typically, between five and 15 basis points over the benchmark is not unreasonable and, in certain cases, you could probably get a fair bit higher."

Dan Barnes is Editor of The DESK, *presenter of www.tradertv.net and a freelance FX writer*

Sources
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Going against gravity

Over the past four decades, corporate tax rates have been on a downward trajectory. Graham Buck examines why 2020 could mark a watershed when that trend starts to reverse

Those of the baby boomer and Generation X eras might remember 'The Only Way Is Up', a strident anthem from the late 1980s by the singer Yazz. It reflected hedonistic times when the price of everything from property to works of art such as Van Gogh's *Sunflowers* was heading steadily higher.

One notable exception was corporate tax rates, which were already heading in the opposite direction. 'The Only Way is Down' more appropriately describes their trajectory over the past four decades. In September 2019, the International Monetary Fund (IMF) reported in *Tackling Tax Havens* that average corporate global tax rates have halved since 1985, from 49% to 24%.[1]

Contributing to the decrease was the introduction of the US Tax Cuts and Jobs Act (TCJA) in 2017. Signed by US President Donald Trump three days before Christmas, it reduced the US corporate tax rate from 35% to 21%.

However, the TCJA might prove to be the last shout, as increasingly the steady downward trend in corporate tax rates shows signs of halting – and even reversing. When campaigning for re-election in November 2019, UK Prime Minister Boris Johnson announced that planned cuts to the UK corporate tax rate from 19% to 17% in early 2020 had been put on hold and the estimated £6bn cost would instead be diverted to "national priorities", such as the health service.

In January 2020, an open letter from more than 120 wealthy individuals spanning celebrities to business leaders lamented a "precipitous" decline in tax receipts from both corporations and the ultra-rich, fuelled by tax avoidance reaching "epidemic proportions".[2]

Advocating international tax reform and releasing their letter to coincide with the World Economic Forum (WEF) in Davos, the group dubbed themselves the Patriotic Millionaires and cited a 2018 IMF report that found US$12trn of investment by multinationals is "completely artificial" and resides in empty corporate shells around the globe. This had contributed to "extreme, destabilising inequality" and the resulting tensions had reached crisis point, according to the letter. "Low social trust and a pervasive sense of unfairness are diminishing basic social cohesion," the group warned.

Drivers for change

A pre-Covid-19 report by Jim Reid and Luke Templeman of Deutsche Bank Research, *2020: An Inflection Point in Global Corporate Tax?*,[3] suggests that this could be the year that marks a watershed, when the drive towards global tax coordination starts to gain traction. Reid and Templeman note the following:

- State finances are precarious, yet companies are in great shape thanks to the steady decline in corporate tax rates. Prominent US and European politicians have made higher corporate taxes over the medium term a key part of their election platforms.
- More than 100 countries are working on the Organisation for Economic Co-operation and Development's (OECD's) proposals for a globally coordinated model of corporate taxation. In future, corporates may have to pay tax in each country where they have sales, regardless of the level of activity on

> Taxes are the best and only appropriate way to ensure adequate investment in the things our societies need
>
> January 2020 letter to the WEF from the Patriotic Millionaires

The WEF annual meeting in January 2020 marked the institution's 50th anniversary

the ground, and minimum tax rates may apply. The OECD issued a more specific set of guidelines at the end of January 2020 in response to feedback.

- To prepare for higher taxes in the medium term, corporates should consider their strategies around decentralisation, capital expenditure, mergers and acquisitions, and changing performance metrics to prioritise return on assets.

There has been a definite shift in mood, agrees Graham Robinson, Leader of PwC UK's Finance and Treasury Tax specialist team and a qualified treasurer who acts as an adviser to the Association of Corporate Treasurers (ACT). "Territories now want to collect tax and don't want revenues disappearing," he adds. "Straightforward tax rate cuts for business are increasingly hard to justify."

According to Robinson, the OECD, the G20 and their combined Base Erosion and Profit Shifting (BEPS) project all maintain that corporates shouldn't be avoiding their responsibility to pay tax via re-domiciling or restructuring, and that they should pay tax in the locations where they conduct their business.

He explains that this is currently a particular issue with the big internet/platform companies; hence the plans by the UK government to levy a digital tax. This is likely to be a precursor to a wider international initiative on profits of internet-based business models. It also points to greater revenue-raising efforts by governments in the years ahead.

Winners and losers

Many commentators suggest that as reallocating taxes will involve gains by some countries at the expense of others, efforts to implement globally coordinated tax policies and a common tax regime will be thwarted. However, Reid and Templeman believe this view is overly pessimistic for three reasons:

- The new tax regime won't necessarily be a "zero-sum game"; some companies will simply need to dig deeper and many larger countries stand to benefit.
- Low-tax countries that stand to lose tax revenue may find that resistance is futile if larger, richer countries lend the initiative their support. Some of the companies that stand to be impacted by the change nonetheless support it and Amazon has called the initiative "an important step forward".
- The new regime will ease competitive pressures on countries to reduce their corporate tax rates. As profits will be taxed in the country where its business activity takes place, the location of a company's headquarters or legal domicile should no longer matter.

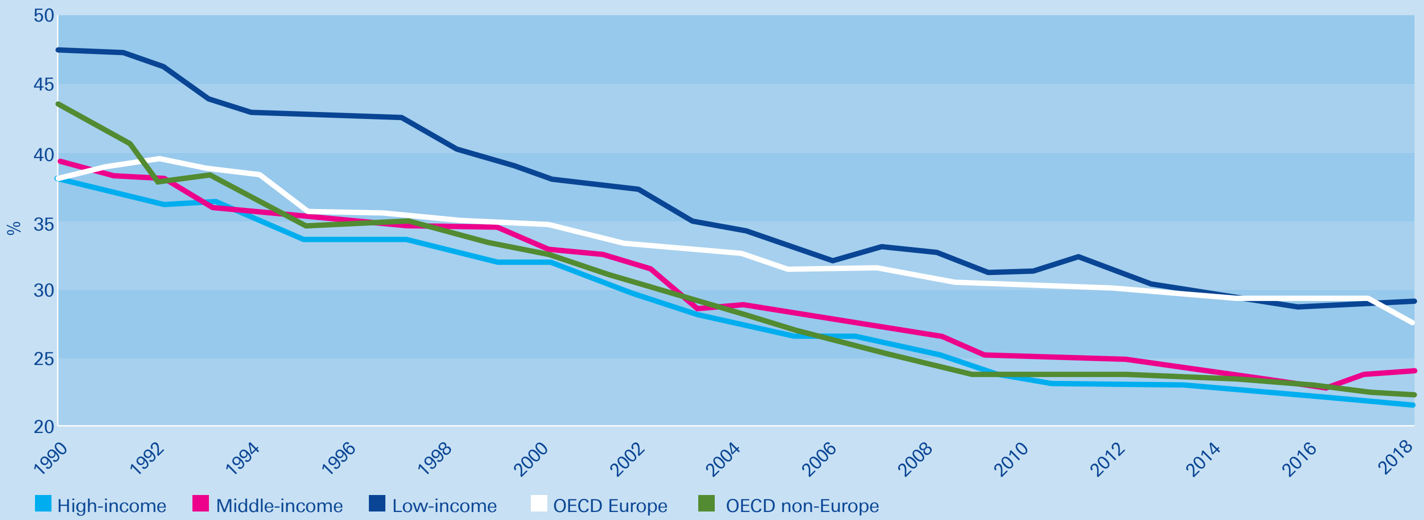
"One effect of BEPS has been to manage the exploitation of low-tax territories and stipulate that taxable profits reflect actual substance, which means the location where the company pays tax is also one where it has a significant presence and people who are its decision takers," says Robinson. This is because it has reduced the extent to which taxable profit can be avoided by corporates by having a token presence – such as a couple of individuals – located in a low-tax territory.

As a result, the model for companies using locations such as Ireland and Luxembourg as effective vehicles for managing tax has changed. The new focus on where the organisation's management teams and main offices are located puts a much greater emphasis than before on the location of the treasury function.

"It raises the question of whether companies that have set up a light-touch operation in a location such as the Cayman Islands need to increase their local staffing levels or migrate their activities to other locations," reflects Robinson. "They certainly need to reassess such operations following the introduction of these local 'substance' requirements that need to be met. Any organisation that fails to do so faces extra tax bills globally, and the risk of fines or other penalties in the low-tax territory."

Naresh Aggarwal, Associate Director Policy & Technical for the ACT, points

Figure 1: Race to the bottom: corporate income tax rates have fallen significantly over the past three decades (figure shows combined corporate income tax rates by country group, in percent)



Source: IMF, Global Financial Data, Deutsche Bank

The Cayman Islands – companies may need to rethink light-touch operations in the territory

The makeup of a 'robot tax' has yet to be clarified

out that for many treasurers implementing the necessary outcomes can require significant effort. Key actions can include restructuring existing internal and external funding arrangements, talking with investors, managing any associated derivatives (including those whose hedge effectiveness may be affected), and changes to internal and external reporting. Additional considerations will include access to appropriately skilled staff who can support the various treasury activities.

Taxing digital

The follow-ups to BEPS, Pillar One and Pillar Two focus on a global minimum tax for business, with particular attention devoted to the digital economy and those active in online business that may not necessarily have a formal company presence. Again, the issue is taxing the profits accruing from transactions in the location where the company's decision makers are situated.

Given that one of the direct implications for treasury is the need to decide where the organisation's treasury centre and

24%

Average corporate global tax rates in 2019, against 49% in 1985

(International Monetary Fund)

its funding vehicle is located, a London-based online company that deals with a large number of users in another country could have a taxable presence in that non-UK location. It would then need to comply with local tax laws and make local tax payments.

The success of platform businesses such as Facebook and Uber, which have multiple customers, has also raised further questions regarding the application of a digital tax.

"The concept is that the company has a taxable presence, through the many users of its service who are creating value," says Robinson. "At the same time, it's fairly nebulous and hard to define – particularly for online marketplaces or online gambling. The question is, at what point do such operations become taxable? There's still no unanimity between countries on the issue, as a variety of differing interests reflect their particular economic base."

Robinson explains that the US opposes any digital tax, which it regards as an opportunity by other territories to take away money for US operations. This sensitivity was evident in January 2020, when France backtracked on plans to levy a 3% digital services tax on the annual revenue generated by major digital companies in providing services to French users. Claiming that the tax was aimed solely at its tech giants, the US threatened retaliatory tariffs on French goods.

"At the same time, the UK and the EU all want to see the introduction of a consistent system that ensures harmonisation, so that multinationals no longer take advantage of low-tax territories to accrue profits," Robinson reflects.

Images: Getty

Targeted incentives

The US corporate tax cuts in 2018,[4] which brought the US in line with other territories, also lessened the incentive for multinational corporations (MNCs) to move profit out of the US to an overseas location. While the rate was reduced, the corporate tax base was broadened and a new rule introduced the sweeping up of any unrepatriated profits of MNCs, while dividends were made tax-exempt. Under the global intangible low-taxed income regulations, aka the GILTI rules, unrepatriated profits are taxed as they accrue.

Robinson says the future of corporate tax in the UK is currently up in the air, as the country finally exiting the EU at the end of January has not removed many of the uncertainties created by Brexit. As with other areas of law, there is a tension between the benefits of alignment with the EU and the suggestion that the UK should create its own laws. In tax terms, this

> The new focus on where the organisation's management teams and main offices are located changes the dynamics by which corporate treasury needs to operate

Graham Robinson, Leader of PwC UK's Finance and Treasury Tax specialist team

applies to questions such as the extent to which the tax system can offer incentives without this being 'state aid', and whether the UK should follow EU-driven anti-avoidance initiatives.

"There's a wish for the UK to continue to be an attractive investment location, so the government can be expected to continue along that path," Robinson adds. "However, the big headline-grabbing tax rate cuts are likely to be replaced by more targeted incentives and a flexing of the corporate tax base. There are already incentives to attract research and development."

Further ahead

Another issue to be addressed in the 2020s is whether new forms of taxation will either be added to or replace old ones. For example, will tax regimes be used to ensure that the growing use of robots is matched by the retraining of those directly impacted? "An evolving tax regime will reflect where value is added, although quite what a 'robot tax' would look like has yet to be clarified," Robinson says. "This regime will very likely include a rise in indirect taxes, including sales tax, VAT, financial transactions tax and stamp duty, which are all easier to identify and value."

As Aggarwal notes, further challenges are likely to arise from the rapid growth of real-time payments and growth in the associated payment data. Tax authorities are looking at opportunities to reduce any tax leakages, and this includes the potential for expecting taxes to be paid across to the authorities at the point of sale. With connectivity between various companies increasing all the time, the real-time collection of tax on transactions and continuous visibility of tax liabilities will have a significant impact on cash management activities.

"The UK government's Making Tax Digital initiative[5] makes the e-filing of VAT mandatory," Robinson says. "What has happened in some countries such as Brazil – although not yet the UK – has been direct systems access between the tax authorities and the taxpayer.

"We can also expect greater coordination between territories and the increased use of profiling and analytics to access taxpayer behaviour. More automation will extend from routine compliance functions to others; for example, using analysis in deciding which tax returns should be subject to enquiry."

Finally, a further corporate tax-related issue of specific interest to treasury arises from the premise that the tax applicable to a corporate should reflect where its main people and functions are located. This, suggests Robinson, is steadily being blurred by the increasing mobility of key individuals within an organisation, who may move between locations regularly or work from home. So there will be more questioning of the "taxable presence", and when a key individual regularly travels abroad the taxable presence will arise of just where the taxable presence is created.

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Hello SONIA

As the deadline for the cessation of Libor as the most widely used benchmark for financial products looms ever closer, Graham Buck reports on how SONIA, the Bank of England's preferred successor, is gaining traction

In *flow*'s 'Leaving Libor', Helen Sanders documents how managing the transition from the London Interbank Offered Rate as the touchstone for financial instruments by the end of 2021 is a global challenge.[1] Working groups are focused on finding the most appropriate solution for the move from a reference rate regime based on interbank offered rates (IBORs) to one based on a new set of overnight risk-free rates (RFRs).

Solutions available include the Bank of England (BoE) Sterling Overnight Index Average, better known as SONIA, as well as the US Secured Overnight Financing Rate (SOFR), Europe's Euro Short-term Rate (€STR), Switzerland's Swiss Average Rate Overnight (SARON) and Japan's Tokyo Overnight Average Rate (TONAR); each of them with its own nuances, unique characteristics and underlying methodology.

SONIA is a backward-looking overnight reference rate, lacking a credit element that measures the average of rates paid on overnight unsecured wholesale funds denominated in sterling. Established in 1997, SONIA's strengths include compliance with international best practice for financial benchmarks and having the BoE as administrator, making it a preferred benchmark for the transition from Libor to a sterling RFR.

In April 2017, the BoE's Working Group on Sterling Risk-Free Reference Rates confirmed SONIA as the chosen successor, in preference to FTSE Russell's newly launched Sterling Secured Overnight Executed Transactions (£SONET) and the Sterling Repo Index Rate (£RIR).[2] In July 2019, BoE Governor Andrew Bailey (then CEO of the Financial Conduct Authority) reported that SONIA had become the cash market's norm for new issues of sterling floating rate notes.

SONIA as the solution

As part of the move from unsecured financing to the new observable regime, in January 2020 the Working Group published its priorities for the Libor to SONIA transition.[3] They included:

- No issuance after Q3 2020 of cash products linked to GBP Libor;
- A material reduction in GBP Libor inventory by Q1 2021;
- A further shift of volumes from Libor to SONIA in derivative markets;
- Setting a framework for transition of legacy Libor products; and
- Addressing Libor legacy contracts.

Complicating the task is the fact that not all products can simply transition from Libor to SONIA. Several major structural differences mean the latter is not a like-for-like replacement.

This has not prevented SONIA's rapid progress in the derivatives market; by H1 2019 it represented just over 45% of notional swaps trading in sterling and it will soon become the most common benchmark.[4] However, it had not made any impact in the cash market until June 2019, when Associated British Ports became the first bond issuer to move to a SONIA-based coupon from a Libor-based coupon on an existing bond; a £65m floating rate note due 2022 that switched to compounded daily SONIA.[5]

It was quickly followed by UK transport group National Express, which in July completed a SONIA-benchmarked corporate loan "using daily compounding, with a five-day reset lag to give a more transparent, data-led benchmark".[6]

Biting the bullet

In November, Deutsche Bank's European Commercial Real Estate (CRE) Group completed its first compound SONIA-based loan for real estate group Kennedy Wilson, to refinance its €46.5m acquisition last summer of Ditton Park, a 200-acre office park located near Heathrow Airport and the M25 motorway.

"We knew for some time that Libor would go at the end of 2021, which meant opening up an economic discussion with borrowers," says CRE Director Clive Bull. "That creates a burden in terms of resources – time that could be spent negotiating a new loan must be directed to renegotiating an existing one instead. It's also expensive, as it requires paying for counsel."

Bull explains that rolling into 2021 with a number of Libor loans was "unappetising, to say the least". In late 2018, his team began reviewing the possibility of SONIA transitions – although they expected the clearing banks, "which have by far the biggest problem", to be the first to make the move.

"But it soon became clear that no one was keen to be the pioneer," says Bull. By mid-2019, with little sign of action, the CRE team bit the bullet from Q3 and started making the switch to SONIA where possible for UK lending.

Tougher challenges

What could prove more problematic are highly syndicated and leveraged loans, as well as Libor-based corporate loans where the borrower has the ability to change the period – for example, from one month to three months and back again – fairly easily. "Changing the period is a much bigger issue for systems under a SONIA loan," Bull explains.

The more challenging area of the market is leveraged finance loans that are both syndicated and actively traded; under compound SONIA, this presents the challenge of keeping track of accrued interest and ensuring that the loan's bidder receives the correct amount. It's not something that can be done manually and needs to be embedded into the system.

The call for action from UK regulatory bodies, to ensure that Libor-based issuance of new cash products ends in Q3 2020, provides the impetus for borrowers and lenders to make the move and accelerate the pace of transition over the months ahead.

However, issues still remain. "Systems and controls implementation is a critical part of being ready and represents the biggest stumbling block, particularly for syndicated lending," says David McNally, IBOR Transition Director for Corporate Banking at Deutsche Bank. "The onus is both on technology vendors to upgrade software and on lenders to consume, test and implement those changes in time."

To address the challenge resulting from the market infrastructure to support SONIA not yet being ready, the BoE has published a discussion paper to assist in the acceleration for its adoption. It is also seeking views on the publication of two indexes, a SONIA Compounded Index and a SONIA Period Average.[7]

"The publication of an index is a catalyst to accelerate the operational transformation that is needed," says McNally. "However, only once questions relating to the outstanding market and pricing conventions are settled will the door be opened to full-scale product development and deployment.

"Once we reach that inflexion point, I expect to see a paradigm shift in engagement with clients where we move away from broadening market awareness into transition and the widespread adoption of contracts referencing the new benchmark."

Figure 1: Options for transition from Libor*

Current benchmarks			Alternative risk-free rates (RFRs)							
Jurisdiction	Benchmark interest rate	Administrator (admin)	Alternative RFR	Alternative RFR admin	Transaction based?	Overnight rate?	Secured/ unsecured	Underlying transactions	Rates published	Transition date
Japan	JBA TIBOR	JBA TIBOR Administration	TONAR	Bank of Japan	Yes	Yes	Unsecured	Money Markets	July 1985	Dec 2021
	EUROYEN TIBOR	Bank of England			Yes					
	JPY Libor									
EU	EONIA/EUR Libor	European Money Markets Institute	€STR	European Central Bank	Yes	Yes (€STR)	Unsecured	Money Markets	October 2019 (€STR)	
	EURIBOR		Reformed EURIBOR		Partly					
UK	GBP Libor	Bank of England	SONIA	Bank of England	Yes	Yes	Unsecured	Money Markets	23 April 2018	
US	USD Libor	Bank of England	SOFR	Federal Reserve Bank of New York	Yes	Yes	Secured	Repo Transactions	3 April 2018	
Switzerland	CHF Libor	Bank of England	SARON	Swiss National Bank and SIX Swiss Exchange	Yes	Yes	Secured	Repo Transactions	25 August 2009	

*These are the main five transition rates, but the transition from IBOR to RFRs could bring additional benchmark rates in scope that are indirectly linked to IBOR or use IBOR in the methodology.

Source: Global Financial Markets Association

"Systems and controls implementation is a critical part of being ready"

David McNally, IBOR Transition Director for Corporate Banking, Deutsche Bank

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3 See https://bit.ly/2TN0xZh at bankofengland.co.uk
4 See https://bit.ly/3cXDqms at fca.org.uk
5 See https://bit.ly/33gVbbU at cms-lawnow.com
6 See https://reut.rs/2Qa7ZeY at reuters.com
7 See https://bit.ly/38JCWwZ at bankofengland.co.uk

Renewable energy comes of age

Changing dynamics of renewable energy in Europe have upended the market in the past decade as new buyers, investors and technology enter the fray. Janet Du Chenne reports on investor enthusiasm, and forecasts what to expect from the next 10 years

When technology giant Google signed a 12-year contract with Norway's Tellenes Vind Park in 2016, following its 2015 pledge to purchase 781 megawatts (MW) worth of renewable energy output, it set a trend that is gathering momentum. In May 2018, social media platform Facebook signed for the whole output and environmental attributes of the Bjerkreim Cluster, which consists of three contiguous wind projects and has a capacity of 294MW. The energy forming part of the purchase power agreement (PPA) is enough to offset the power used by the company's massive data centres in the Nordic region.[1]

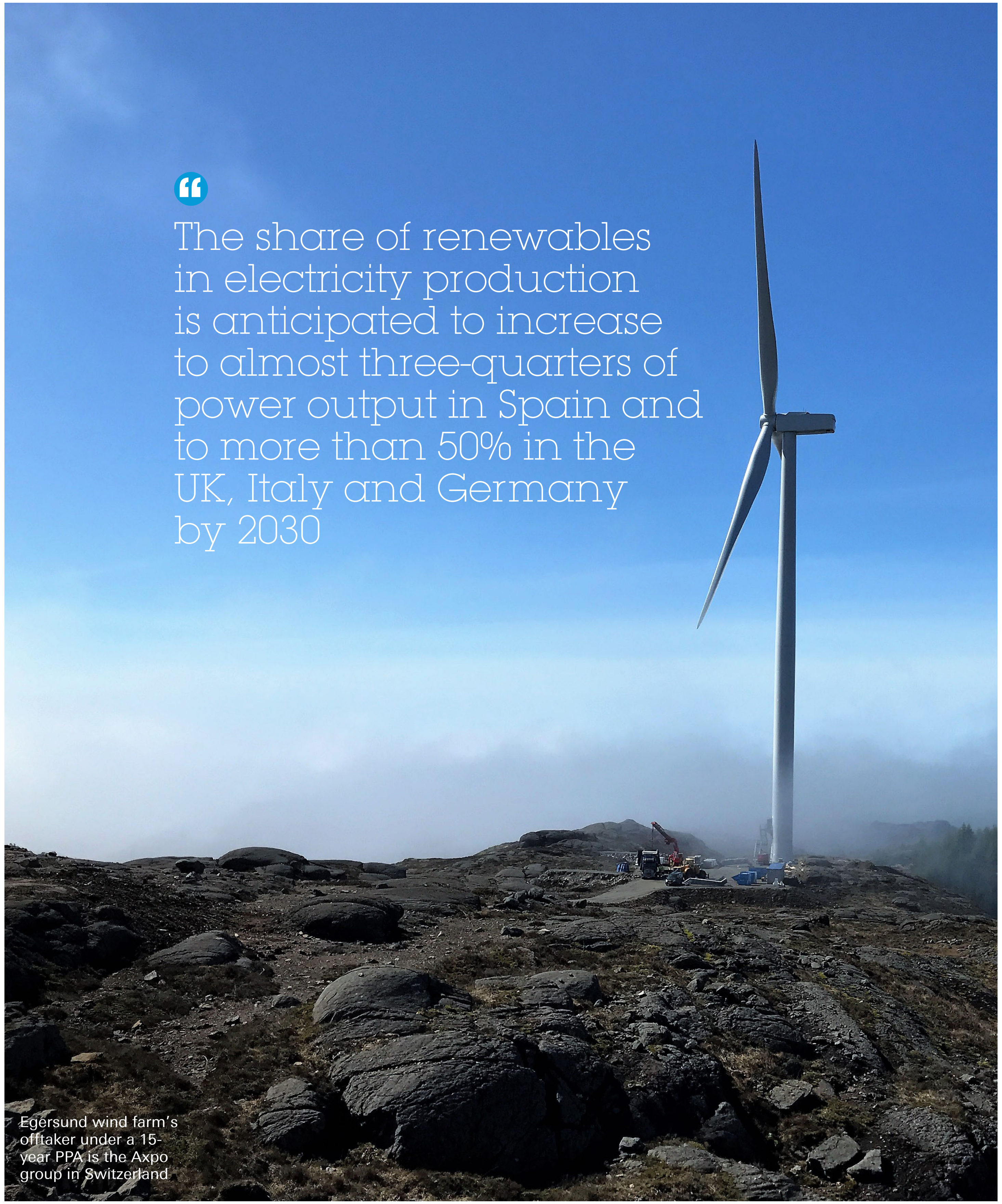
The deal closed as European governments and regulators began to step up the pressure on corporates to behave in a more sustainable manner, in line with a global decarbonisation agenda that looks set to ramp up the level of renewable replacements with ambitious capacity targets.

According to Deutsche Bank Research, the largest European countries are targeting a doubling of renewable capacity by 2030, and analysts note that there is "scope for continued attractive investment-driven growth in this area". In particular, analysts say that this rapid pace of development means the share of renewables in electricity production is anticipated to increase to almost three-quarters of power output in Spain and to more than 50% in the UK, Italy and Germany by 2030.[2]

An increasing number of global firms have secured power directly from a renewable source for data centres or production facilities under PPAs, instead of from a supplier or traditional utility. These developments signal a change in the European energy landscape, with new buyers, new investors and new technologies facilitating energy transition from fossil fuels.

Dr Alexandra von Bernstorff, Founder and Senior Managing Partner of Luxcara, a Germany-based asset manager that owns, structures, finances and operates renewable energy projects (and also manages the sale of energy from the Bjerkreim Cluster of wind farms to Facebook), notes that the renewable energy market has gathered pace over the past few years. "Ten years ago, if I told people about renewable energy, they'd look blank," she says. "Today, everyone has an opinion about it. We are currently in the middle of one of the most significant, and fastest-moving, periods of the energy

The Egersund wind farm, which has 33 turbines, lies in Rogaland county, Norway



"The share of renewables in electricity production is anticipated to increase to almost three-quarters of power output in Spain and to more than 50% in the UK, Italy and Germany by 2030

Egersund wind farm's offtaker under a 15-year PPA is the Axpo group in Switzerland

Images: Luxcara

"Alternative energy sources have reached grid parity

Dr Alexandra von Bernstorff, Founder and Senior Managing Partner, Luxcara

transition. Alternative energy sources have reached grid parity, and there have been profound changes in market dynamics and the public perception of energy topics."

Attracting more institutional investment

Given these dynamics, Luxcara adjusted its investment strategy in 2015 and, since then, has been investing exclusively in renewable PPA-backed projects on behalf of institutional investors. It is joined in the market by a swathe of asset managers who have forged long-term offtake agreements with corporates.[3] The asset manager sells the energy from the renewable energy source to a corporate offtaker for long-term periods, often of 10 years or more (based on recent European corporate PPA deals). This meets the objectives of investors seeking projects whose duration and steady revenue stream match their long-term liabilities.

In the case of the 294MW Bjerkreim Cluster, Luxcara and MEAG, the asset manager of Munich Re and ERGO, initiated and structured two project bonds to finance the wind farms. The project bonds were privately placed with investors of the Munich Re group, the Austrian insurance company UNIQA and one further European insurance group. Deutsche Bank's Corporate Trust team within Trust & Agency Services acts as financing agent and security agent to facilitate the needs of borrowers and bond investors.

Financing projects in a post-subsidy world

Renewable energy assets have, until recently, been protected from variable power prices by generous subsidies. However, the withdrawal of government incentives for renewables in countries such as Spain and Portugal, and a huge backlog of wind and solar plants to be developed over the next decade, should herald a profound change in the way clean technologies are funded.

PPAs are being touted as the solution to financing projects in a post-subsidy world. And, for Silicon Valley behemoths such as Facebook and Google, which increasingly want to identify as users of clean energy, PPAs provide a mechanism for buying energy directly from a wind farm, while enabling project developers to have the security to build renewable schemes knowing there is a commitment from an end customer. Other PPAs include technologies such as carbon capture and storage, geothermal energy, hydropower and solar power.

US$15trn

Investment needed in European renewable energy infrastructure to meet 2030 targets

(Global Infrastructure Hub)

These PPAs underpin the transition of energy from fossil fuels to renewable energy, and the private sector is making an increasingly important contribution to the process. As an asset manager, Luxcara offers investors the chance of returns through long-term investment in this growing market as energy transition gathers greater pace. Energy demand is increasing worldwide. The question is, asks von Bernstorff, where is energy going to come from when European countries are shutting down nuclear and coal? "It's going to be the most prominent topic on the infrastructure agenda for the next five to 10 years worldwide," she reflects.

As corporate offtake agreements grow in number and businesses increasingly adopt a sustainable agenda, investors will play a significant part in meeting the estimated US$15trn needed[4] in investments for European infrastructure to meet current sustainability targets. Christian Andersson, Managing Partner at placement agent Worthwhile Capital Partners, noted in an Inspiratia-hosted panel discussion that these investors will find greater comfort in their forays into renewable energy if the projects they are involved in are backed by a PPA. "Many of the infrastructure mandates in these portfolios, across state pension funds, occupational pension funds and life insurers, are constructed to have stable returns," he said. "So PPAs are absolutely crucial for them to be in a position to invest in these types of direct assets."

Fears that these agreements may render utilities obsolete are unwarranted, says von Bernstorff. “Only investment grade companies providing very good warranties can buy energy directly from the source,” she explains. “So the majority of companies have to continue to buy the power from a utility, which then buys from a wind farm or solar park.”

Embracing sustainability

Investors have many different strategic reasons for investing in renewables. For Luxcara, which was founded a year after the 2008 financial crisis, its strategy was based on long-term sustainable investing. With dwindling leverage post-crisis, the asset manager, which was bought out from its previous owners, decided to approach investments that earn their return by operation, and not market valuation. “Some invest in renewables mainly for marketing purposes, others want to make profits by buying cheap and selling the asset at a high price,” says von Bernstorff. “We follow a buy-and-hold approach and are really into our assets for the long term. Our investors can rely on us optimising the asset in every possible way, because we will hold it for its lifetime.”

Von Bernstorff and co-founder Kathrin Oechtering launched Luxcara in the belief that energy procurement could not continue in the same way as before and sustainability would become a driving force. “We still believe it,” says von Bernstorff. “Renewables are constantly evolving. It’s not just wind and solar; increasingly it’s grid technology, or batteries or electric car-charging stations. It’s going to be much bigger than it is today.”

Evolving merchant risk

With headwinds from political, regulatory, social and lifecycle risks spelling the end to support schemes for renewable projects in Europe, a renewables merchant risk ecosystem is beginning to take shape, notes a McKinsey report.[5]

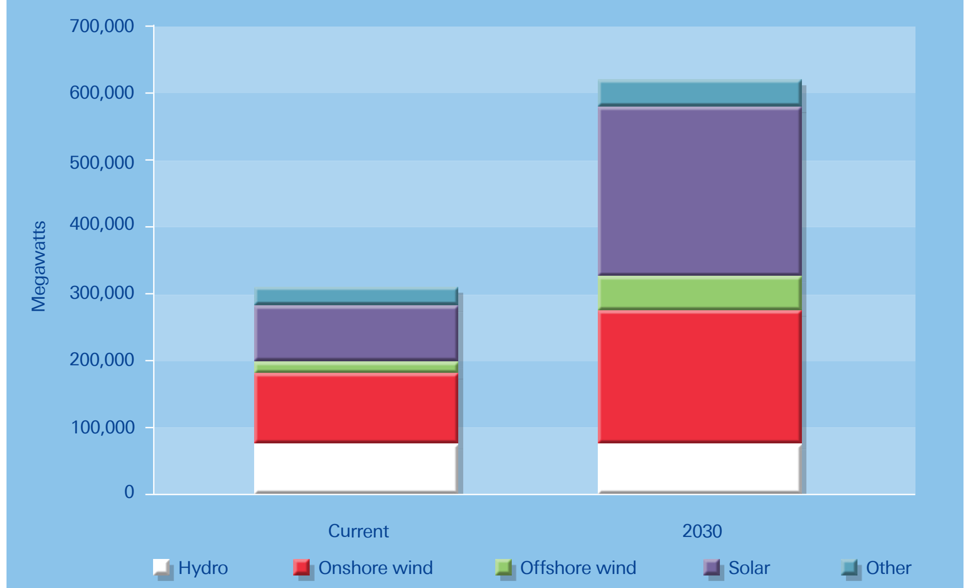
Several subsidy-free projects, such as solar photovoltaic (PV) and onshore projects in Spain and multiple offshore projects in Germany, have been announced and are under development (see page 73). While these projects have benefited from favourable site conditions and economies of scale, this change in the renewables marketplace indicates that the industry is transitioning into the next phase of market integration. Governments will phase out schemes – such as the UK’s Feed-in Tariff subsidy that followed the Energy Act 2008 – which were brought in to promote green technologies. Auction systems are taking their place, driving tariffs down, while asset owners will be fully exposed to wholesale prices.

> Merchant is the way the market should be

With the progressive reduction of subsidies and introduction of auction systems driving guaranteed tariffs down, private PPAs, which offer a fixed long-term price for some or all of the energy produced by a project, are becoming more important for managing merchant risk exposure and financing renewable energy in Europe.

According to von Bernstorff, embracing merchant risk will be important for the long-term success and independence of the renewables sector. “Subsidies should have been abolished a few years ago,” she asserts. “By reaching grid parity some time ago, renewable energy has proven to be competitive to traditional energy sources in all aspects, including costs. Merchant is the way the market should be. Fully merchant projects will not depend on auction schemes, and markets where prices are not tied to subsidies are also healthier.”

Figure 1: Rise of renewable capacity in five focus markets



Source: Deutsche Bank estimates: France, Germany, Italy, Spain, UK (October 2019)

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Renewable energy projects in Europe – the highlights

GERMANY

Solar outshines wind

In October 2019, Germany’s Federal Network Agency received bids for a total of 852MW worth of projects in its latest onshore wind and solar auctions. Germany has seen a declining interest in onshore wind tenders, and only 25 bids were received. The sector is already facing a slowdown in deployment thanks to planned ‘Windausbau-Bremse’ – slowing down wind – legislation.

Meanwhile, the solar auction was highly oversubscribed, attracting 153 bids – totalling 648MW – for the 150MW on offer. The agency reported that a follow-up tender in November allocated 37 solar projects with a total generation capacity of 202MW, after the receipt of 103 bids that proposed 514MW of capacity.[6]

NORDICS

Surviving without subsidies

Sweden is ending its support programme for onshore wind projects at the same time as its neighbour Norway, which is planning to end the scheme in 2021. The two countries’ programmes award 15-year contracts to any eligible new projects. The Swedish government will seek to encourage continued investment in the sector by expanding the existing framework that maps the best conditions for onshore wind development.

In Sweden and Norway el-certificates, or elcerts, were introduced in January 2012 to provide additional revenue for projects. These mimic contract-for-difference or feed-in tariff schemes, which are financed through a dedicated tax charged to the final electricity consumer. The elcert scheme is technology-neutral, which means that all forms of renewable energy production – including hydropower, wind power and bioenergy – qualify for certification.[7]

PORTUGAL

New year, new rules

The Portuguese government has announced a raft of new initiatives to boost the development of small and medium-sized solar projects in the country. The rules surrounding the development of smaller solar projects will be redrafted to be more favourable towards developers. Notably, the new rules, which came into force at the start of 2020, allow excess power from solar projects to be sold to the spot market or via bilateral PPAs.

The new rules are an attempt to make the country carbon neutral by 2050, and ministers want to see 80% of the country’s electricity produced by renewables by 2030.[8]

SPAIN

Renewables make a comeback

The financing of Spanish renewable energy projects has been gaining in momentum, despite a lack of subsidy support. Spain announced a moratorium on renewables subsidies in 2012 that for many years halted new developments. The 2013 reform of Spanish electricity regulation resulted in retroactive cuts to green energy subsidies.[9]

To accelerate the pace of renewable project development, the Spanish government launched three rounds of auctions in January 2016, May 2017 and July 2017 respectively, accounting for more than 8 gigawatts of solar PV and onshore wind projects. Among these projects is the unsubsidised 300MW Talasol PV plant, which closed in 2019, two years after Israeli-based investor Ellomay Capital bought the project from its original developer in May 2017.

The project, which received government approval in July 2017, was not procured in national auction. It will sell its output on the open market, with revenue certainty provided by a 10-year power swap PPA. An undisclosed energy company will hedge 80% of the power sold by the solar plant. Talasol will pay the hedging provider the difference between the market price and the underpinned price.

The €228m project capex was €131m debt-financed by a consortium of lenders including Deutsche Bank. The bank’s Corporate Trust team also acted as financing agent, providing guarantees to investors in the project.

The road to sustainability

Europe's Green Deal is a new stage in the region's evolving regulatory regime for greater sustainability and tougher targets to reduce greenhouse gases, *flow* reports

In December 2015, 196 countries signed the Paris Agreement, the first universal climate deal to adapt and build resilience to climate change and limit the increase in global warming to under 2˚C.[1] Signatories to the Agreement and the United Nations (UN) 2030 Agenda for Sustainable Development committed their governments to "a more sustainable path for our planet and our economy".[2]

"Over the next 15 years, the goals set in the UN 2030 Agenda will guide us in preparing for a future that ensures stability, a healthy planet, fair, inclusive and resilient societies and prosperous economies," the signatories announced.

A little more than four years on, awareness is dawning within society that more needs to be done. Extreme weather events signal that continuing profligacy with the world's resources carries huge environmental costs.

Pressure on companies to improve the sustainability of their business is growing. Combined with individual and collective activism, this reflects the impact of a number of industry- and regulatory-driven initiatives that have emerged over the past decade.

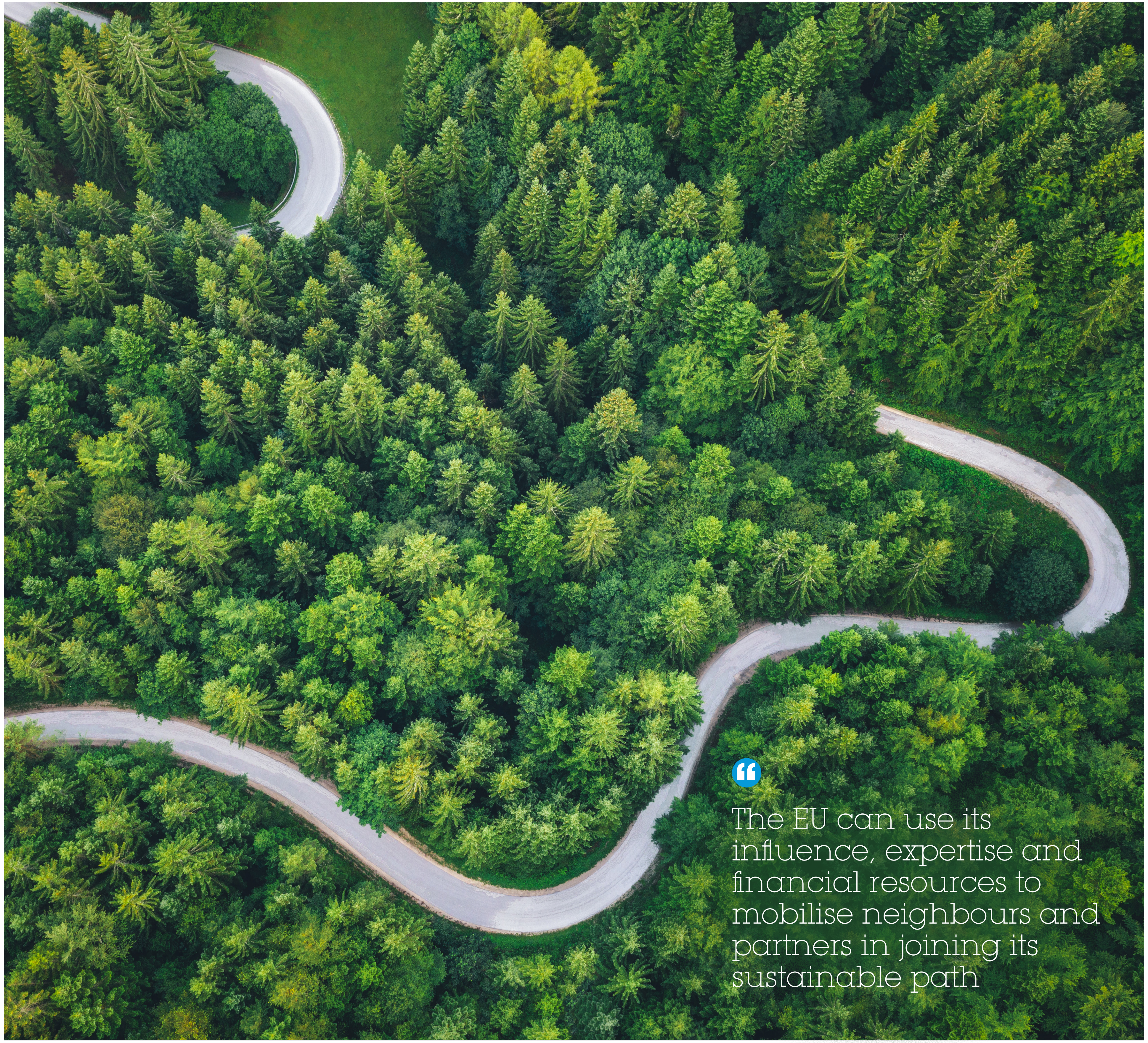
More and more businesses are facing demands from their investors to be more proactive in adopting environmental, social and governance (ESG) policies and put sustainability at the heart of their operations. Norway's Government Pension Fund Global, a major sovereign wealth fund, was an early adopter of an ethical policy that bans investment in businesses that produce nuclear weapons or tobacco, or cause environmental damage.[3] Sweden's central bank, the Riksbank, has headed in the same direction. In November 2019, it announced the sale of its securities in Australian and Canadian states whose greenhouse gas emissions it deemed to be unacceptably high.[4]

But it is not only government-related investors that have such concerns. The private sector also has this topic on its radar. Climate Action 100+ is an investor initiative, launched in late 2017, that lobbies the world's major corporate greenhouse gas emitters to accelerate their efforts to combat climate change. One of its members is BlackRock, whose CEO, Larry Fink, warned in his annual letter to chief executives in January this year that the firm was withdrawing investment in companies that "present a high sustainability-related risk".

The European Green Deal

Taking the initiative for specific actions in ESG to the next level, the European Commission (EC) released the European Green Deal in December 2019.[5] Soon after she took office, the EC's new President, Ursula von der Leyen, dubbed it "Europe's man-on-the-moon moment". The Green Deal is an integral part of the EC's strategy to implement the UN 2030 Agenda and its Sustainable Development Goals.

This "resets the Commission's commitment to tackling climate and environmental-related challenges", declaring the target for "no net emissions of greenhouse gases in 2050 and economic growth decoupled from resource use".



"The EU can use its influence, expertise and financial resources to mobilise neighbours and partners in joining its sustainable path

To ensure the Green Deal is more than aspirational, the EC outlines various policies, including the first European 'Climate Law'. The proposal for this was published on 4 March 2020,[6] with legally binding targets towards making Europe carbon-neutral by 2050 while ensuring that EU policies contribute to the climate neutrality target and that each sector plays its part.

In addition, the Green Deal suggests the revision, where necessary, of relevant energy legislation by June 2021 to support decarbonisation of the energy system, including the 2013 Trans-European Networks for Energy policy. This would aim to foster the deployment of innovative technologies and infrastructure – including smart grids; hydrogen networks; carbon capture; storage and utilisation; and energy storage – and sector integration. Complementing the changes in the energy system, the EU Industrial Strategy,[7] published on 10 March this year, aims to further leverage digital transformation as a key enabler for reaching Green Deal objectives, and "to address the twin challenge of the green and digital transformation".

Sustainable finance and investment

The Green Deal projects a figure of €260bn of additional annual investment (about 1.5% of Europe's GDP) as the cost of achieving 2030 climate and energy targets. The European Green Deal Investment Plan – also known as the Sustainable Europe Investment Plan[8] – proposed by the EC in January 2020 would provide at least €1trn of sustainable investments over the next decade.

To ensure sustainable investments become mainstream across Europe's financial system, in September 2020 the EC will present a renewed sustainable finance strategy based on three pillars:

- Strengthening the foundations for sustainable investment, with the European Parliament and Council adopting the taxonomy for classifying environmentally sustainable activities.
- Improving opportunities for investors and companies to identify sustainable investments, and ensuring they are credible. This could be done via clear labels for retail investment products, and by developing an EU green bond standard.
- Better integration of climate and environmental risks within the EU financial system. This would particularly focus on integrating such risks into the prudential framework, and assessing whether existing capital requirements are suitable for green assets.

Representatives of 196 countries approved a sweeping environmental agreement – known as the Paris Agreement – at COP 21 on 12 December 2015


EU Commission President Ursula von der Leyen

Images: iStock, Alamy

Europe's main predecessor to the Green Deal in the financial sector is the March 2018 EU Action Plan: Financing Sustainable Growth (Action Plan),[9] an update of which is envisaged later this year. This is a blueprint for incorporating ESG issues into the EU's financial policy framework.

The Action Plan's three basic aims were: to reorient capital flows towards sustainable investments; to manage financial risks stemming from climate change, environmental degradation and social issues; and to encourage transparency and long-termism in financial and economic activity.

After its publication there was a series of legislative proposals, which include the following:

1. EU taxonomy for determining whether an economic activity or investment qualifies as environmentally sustainable. The consistency for labelling a product as 'green' will allow for improved reliability and avoid unsubstantiated claims, or 'greenwashing'. Political agreement was only reached in December 2019, so it is unclear when this measure will become effective. The EC has signalled that the EU should work towards establishing the taxonomy by the end of 2021, with full application by the end of 2022. Many other initiatives within the Action Plan will rely on this taxonomy.
2. The Disclosure Regulation – adopted in December 2019, and with most of its provisions to apply from 10 March 2021 – establishes a set of rules on how financial market participants inform investors on the integration of ESG risks and opportunities. This addresses the widely documented problem of inconsistent reporting of ESG issues to date.
3. The introduction of a new category of low-carbon benchmarks in the EU Benchmarks Regulation,[10] driving greater uniformity among existing low-carbon indices.
4. Amending the MiFID II Delegated Acts and the Insurance Distribution Directive (IDD) to help investment firms and insurance distributors incorporate ESG factors into the advice process. From 24 May to 21 June 2018, the EC sought feedback on amendments to delegated acts under MiFID II and IDD to include ESG considerations into the advice that investment firms and insurance distributors offer to individual clients. Following this, on 30 April 2019, the European Securities and Markets Authority (ESMA) published technical advice to the EC on integrating sustainability risks and factors in MiFID II,[11] and on 3 May 2019, the European Insurance and Occupational Pensions Authority published technical advice on the integration of sustainability risks and factors in the delegated acts under Solvency II and IDD.[12]

To further support the EU Action Plan, in December 2019 the European Banking Authority (EBA) set out its own action plan on sustainable finance.[13] In addition to addressing risk management, the EBA will develop a dedicated climate change stress test and explore the prudential treatment of green exposures. The latter, although yet to be seen, could potentially lead to more favourable capital treatment of sustainable investments.

Gerald Podobnik, CFO of Deutsche Bank and a long-term advocate of greater sustainable finance practices,[14] notes: "The industry has only recently come to terms with the fact that sustainable finance will transform more of its business model than just the product offering. Exposure management, disclosure, risk management and capital allocation are all getting impacted by the megatrend and these are the areas where we have seen industry activity picking up substantially.

"Generally, there is substantial demand in the industry for definitions and standardisation – areas where the EU Action Plan is delivering clear progress," he adds. "The elephant in the room is the question of regulatory incentives for banks to re-channel substantial parts of their loan books within a short period of time towards sustainable assets.

"Conference rooms can get quite emotional when this topic comes up, both on the proponents' and opponents' sides, which is showing how important it is to answer that question for the banking industry in particular."

Podobnik is nonetheless hopeful on the prospects for progress over the decade ahead: "I am convinced that we will witness the mainstreaming of sustainable finance. In 10 years, we will most likely not clearly segregate sustainable finance from brown (carbon-intensive) finance any more, but look back on a decade where sustainability aspects were engrained in almost all areas of finance."

Green incentives

Whatever the means – be it regulation, investment policy or simple persuasion – the overall goal is to protect the planet and minimise the damage inflicted on it. That ambition will be helped, but not fully achieved, by individual acts, as the Green Deal stresses at the outset.

The environmental target of the Green Deal will not be attained by Europe acting alone. Persistent divergence from the EU's ambitions illuminates the risk of carbon leakage. The drivers of climate change and biodiversity loss are global and not limited by borders. Should this risk materialise, there will be no reduction in global emissions, which will frustrate the efforts of the EU and its industries to meet the Paris Agreement climate objectives.

The EU can use its influence, expertise and financial resources to mobilise neighbours and partners in joining its sustainable path, continue to lead international efforts and look to build unions with like-minded allies. But in the grand scheme of things, to stand any chance of success, any measures targeting carbon neutrality must be more than aspirations and have the buy-in of the global community. There will be no second opportunity – and no second Earth to decamp to – if these efforts do not succeed.

This article was completed on 10 March 2020 and does not cover subsequent developments

It started in Paris...

September 2015:	The UN issues the 2030 Agenda for Sustainable Development
December 2015:	Representatives from 196 countries reach sweeping environmental agreement (the Paris Agreement)
June 2017:	The Financial Stability Board's Task Force on Climate-related Financial Disclosures report details the information companies should disclose
March 2018:	The European Commission issues its sustainable finance Action Plan
April 2019:	The ESMA issues technical advice to the EC on integrating sustainability risks and factors in MiFID II
September 2019:	The UN and 130 banks from 49 countries launch the UN Principles for Responsible Banking
December 2019:	The EU's Green Deal pledges to enshrine into law the target of carbon neutrality by 2050

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[13] See https://bit.ly/39kNSkW at eba.europa.eu
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Planning for the people

The Indian government has pledged to make the country a US$5trn economy by 2024. Janet Du Chenne talks to Sundeep Sikka about Nippon Life India Asset Management's plans to capitalise on the growth story by offering long-term savings plans and leveraging education and new technologies

In secondary cities and towns in India, the number of Google searches for systematic investment plans (SIPs) on mobile phones increased by 1,600% between 2015 and 2018. This compares with just a twofold increase for the same search in India's top 15 cities.

Using the wealth of information easily accessible on a smartphone, Indians in these Tier-2 cities are currently seeking new channels for their household savings, beyond physical assets such as real estate. SIPs offer them opportunities to grow investment amounts over the long term by investing as little as 100 rupees (Rs), equivalent to US$1.40 per month, based on the principles of compounding to help wealth grow at an increased rate. And, with the country aiming to become a US$5trn economy by 2024,[1] these instruments are likely to be a good fit for people looking to enter long-term private savings markets as their wealth increases.

This projection excites Sundeep Sikka, Executive Director and CEO of Nippon Life India Asset Management (NAM India), who notes the potential to reach more people in secondary cities, where 90% of Indian households are located. "The fact that, as a country, we sell around 17.5 million two-wheelers and motorcycles every year, and yet there are only 20 million investors, tells you there is clearly a long way to go to further educate the population about mutual funds," he says.

> "The fact that there are only 20 million investors tells you there is clearly a long way to go to further educate the population about mutual funds
>
> Sundeep Sikka, Executive Director and CEO, Nippon Life India Asset Management

Sikka plans to extend the company's distribution network further into Tier-2 cities and towns and with the backing of Japan's Nippon Life Insurance Company, along with application programming interface (API) partnerships with Deutsche Bank, he believes the company has the right ingredients to succeed.

Dawn breaks for NAM India

When Nippon Life Insurance Company bought a 75% stake in Reliance Nippon Life Asset Management from India's Reliance Capital in September 2019, the fund management industry looked on sceptically. India has a reputation as a graveyard for foreign fund houses that have tried to penetrate an already saturated investment market. Naysayers expected that it would not be long before the Japanese group met the same fate.

However, by increasing the stake it already had in the company (26%, acquired in 2012) and renaming and rebranding Reliance Mutual Fund as Nippon India Mutual Fund in October 2019, the 130-year old conglomerate, which manages total assets worth more than US$700bn,[2] set out to prove to the market that it meant business. With the acquisition completed back in September 2019, Nippon is now focusing on ascending the ranks of mutual funds in India (see Figure 1, below left).

Sikka reports that the rebrand and renaming of the company have already had a positive impact. "The transition has gone well and we have received positive feedback from corporate investors, high-net-worth individuals and retail investors," he says. "After losing market share in the domestic mutual fund market for the last four quarters, since the brand change there has been very positive growth of approximately 10% and we activated more than 170 institutional investors during this quarter."

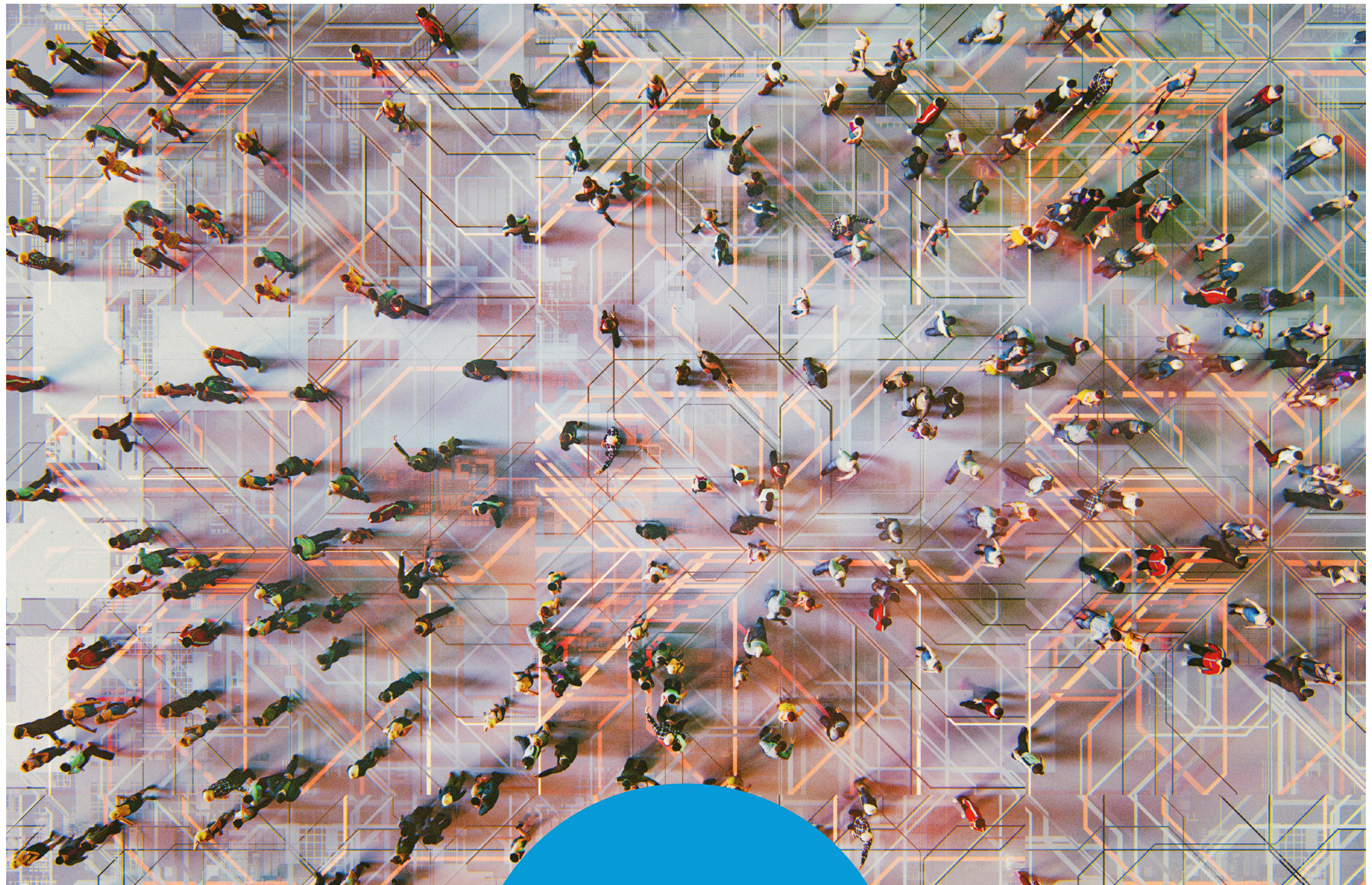
This revival has begun to be reflected in the performance of NAM India, with its latest quarterly results in March 2020 showing all-round improvement. The asset management company reported assets under management (AUM) of Rs2.6 lakh crore (US34.0bn) as of 31 March 2020.* After the transaction, the company witnessed a recovery in AUM growth after four quarters of decline. AUM during Q4 2019 rose to Rs2.04 lakh crore, compared with Rs2.03 lakh crore as of 30 September 2019, an increase of 0.8%.[3]

With this change of ownership, NAM India is also emulating the risk management habits of its new parent, which has weathered several ups and downs, including minimal or zero interest rates in Japan for more than 20 years. "Given we are now owned by a Japanese company, investors

Figure 1: Top 10 mutual funds in India

Mutual fund	Q1 2020 Jan–Mar AAUM* (Rs. in lakh)
1. SBI Mutual Fund	3,73,537
2. HDFC Mutual Fund	3,69,783
3. ICICI Prudential Mutual Fund	3,50,743
4. Aditya Birla Sun Life Mutual Fund	2,47,522
5. Nippon India Mutual Fund	2,04,884
6. Kotak Mahindra Mutual Fund	1,86,088
7. UTI Mutual Fund	1,51,513
8. Axis Mutual Fund	1,38,402
9. Franklin Templeton Mutual Fund	1,16,323
10. DSP Mutual Fund	80,422

Source: AMFI
*Average assets under management



US$650m

Asset base of Indian fund houses (44 players)

Source: AMFI

expect a lot more," says Sikka. "In India, managing chaos is always very important and you cannot plan to perfection every time. In Japan, long-term planning and risk management are hugely important and I think we can learn a lot from this." For example, Sikka notes that some planning appointments for 2021 are already in the calendar, which has not happened before.

Adopting a loyal team

Nippon has adopted a loyal management team from Reliance and worked closely with its members to guide the transition. "The entire team has stuck together, having had the comfort of doing so for the past eight years," says Sikka, who has himself been with Reliance for 18 years. The management team also brings an entrepreneurial flair to the new structure. "We manage it like it's our own company. So the passion with which we run the company and the passion with which Japanese people run theirs is very similar."

In addition, Nippon has gained a firm foothold in the market with the most untapped potential in the world. Since 2011–2012, household savings in financial assets have hovered around 7% of GDP.[4] However, average savings, which amount to 20–30 lakh crore (according to 2018 data),[5] are set to increase in line with the country's growth ambitions. As the economy expands it will also become more complex, triggering further demand for banking and other financial products.

Seizing the opportunity

The Indian mutual fund industry has already grown in leaps and bounds; its AUM increased by over 40% in barely two years, from Rs17.5 lakh crore in March 2017 to Rs24.5 lakh crore in July 2019. During the same period, contributions per month to SIPs almost doubled, from 4,335 crore to 8,324 crore, according to the Association of Mutual Funds in India (AMFI).[6]

While this is remarkable, in the global context it is still miniscule. India is ranked seventh in terms of nominal GDP, yet in terms of mutual fund AUM it ranks 17th. In a country of 1.3 billion people, fewer than 2% invest in mutual funds. "For a country that does not have a social security system and where a very small percentage of the population is covered by organised pension schemes, that number is low," says Sikka. "We believe the mutual fund industry in India has great potential and has a long way to go."

Tapping into India's potential

Sikka's enthusiasm is in line with a mutual fund vision document, prepared by the Boston Consulting Group for the AMFI, that aims to set up "guardrails and give the industry focused direction to work towards" in increasing the size of the population invested in mutual funds. The report, titled *Unlocking the Rs100 trillion opportunity*,[7] reveals that nearly 90% of Indian households are located in its Tier-2 cities and beyond. It concludes that increasing the reach of mutual funds beyond the metro and Tier-1 cities will be critical in expanding the investor base fivefold, from 2% to 10%.

Images: iStock

To tap into this potential, Nippon is focused on local execution and on distributing its products in Tier-2 cities and towns. "We believe that with our track record and distribution platform, we are in a very strong position to capitalise on this opportunity in the near future," asserts Sikka.

Increasing awareness in mutual funds

In extending its reach into Tier-2 cities and beyond, NAM India is contributing to an industry-wide financial inclusion effort to introduce middle-income households (those with a household income of Rs3–10 lakh) into the mutual fund ambit via a diversified product proposition to suit diverse financial needs, and by simplifying technical jargon and enhancing investor awareness.

The company conducts investor awareness programmes, seminars and workshops on mutual funds and other investment vehicles across targeted sectors of India's workforce, including army personnel, Central Industrial Security Force employees, police officers, doctors, bankers and chartered accountants.

Acknowledging the need for financial literacy and investor awareness, the Securities and Exchange Board of India (SEBI) has also mandated the allocation of a certain portion of a fund's total expense ratio towards investor education. However, more needs to be done to increase people's awareness of mutual funds, says Sikka.

"Increasing awareness will also require a shift in the mindset among the majority of Indians who have traditionally preferred to invest in real estate and gold," he adds. "Investing in financial assets is a relatively new phenomenon, particularly post-demonetisation in 2016, when high denomination notes were stripped of their legal tender to combat black market activity and counterfeit currency."

In order to help drive this transition in mindsets and to boost financial literacy, NAM India runs a learning academy called Edge, which is powered by a team of financial literacy trainers who conduct educational camps nationwide.

> As asset managers face continuing margin and cost pressures, our technologies enable them to focus on their core business and offer more products and services
>
> Michaela Ludbrook, Global Head of Securities Services, Deutsche Bank

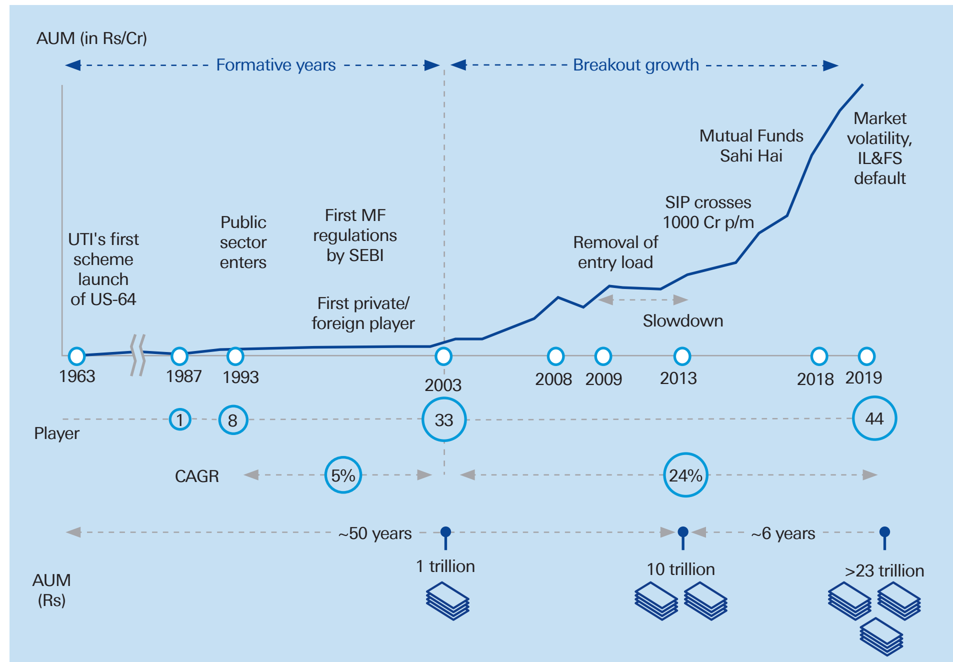
"We believe education is the key, not because it's important to sell, but because it's important for people to know why they need to invest, why beating inflation is necessary and how investing through mutual funds can help them achieve their financial goals," says Sikka. "They also need guidance on which type of products to invest in, and to understand risk, the importance of asset allocation and how to behave prudently during market volatility. So education remains a very important part of that journey, and as a company we remain committed to that."

Building on strong foundations

This journey is built on strong foundations established 25 years ago by the launch of the government's own mutual fund, UTI. Private sector mutual funds came into play in the mid-1990s and the industry saw a major upturn following the demonetisation of 2016 (see Figure 2 below).

A strong track record of performance has also helped the cause (see Figure 3 on page 84). "If you look at the data, mutual funds have done a good job in consistently delivering absolute returns over a longer period of time," says Sikka. "Again, it's a journey and we have a long way to go, but I am confident that in the next 15 to 20

Figure 2: Evolution of the mutual fund (MF) industry in India



Source: AMFI, industry research

Notes: AUM values correspond to financial year

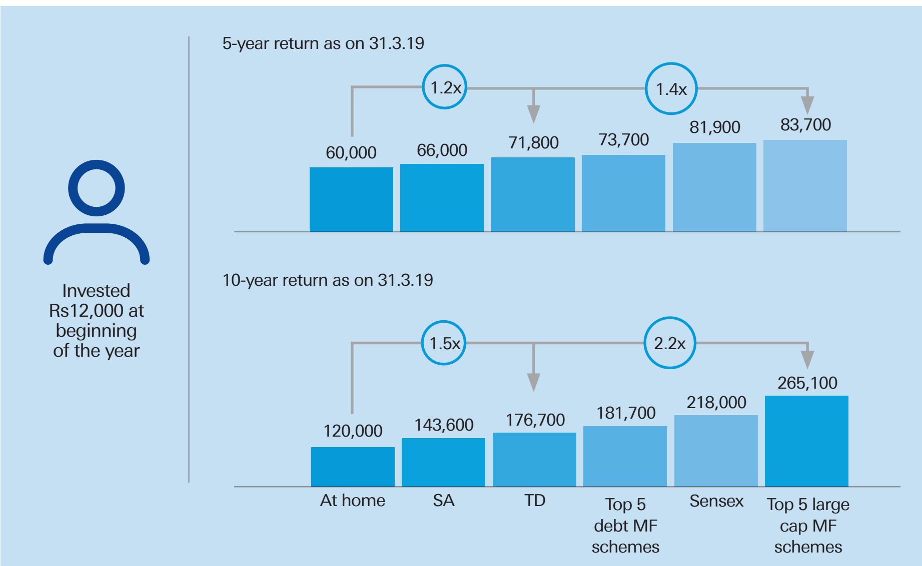
Sundeep Sikka and Hiroshi Shimizu, President of Nippon Life Insurance Company, at the announcement of the acquisition

years we will have every Indian household investing in mutual funds."

To support this goal, NAM India offers both value- and growth-style funds tailored to suit investors' needs and exchange-traded funds (ETFs) to deliver absolute returns to them. "We are a supermarket with multiple products and we will let the financial advisor decide the appropriate product for the investor based on their risk appetite," says Sikka.

SIPs complete NAM India's portfolio of products that are marketed to investors in 300+ locations (as of 31 March 2019) across the country. SIPs today constitute roughly US$1.2bn on a monthly basis,

Figure 3: Mutual funds (MFs) deliver consistent returns



Sources: Value Research, Moneycontrol, SBI, RBI, BSE

Notes: Tax rates for each instrument have been taken as follows: SA – 20.6%; TD – 20.6%; Sensex(LTCG) – 10%; Large cap MF(LTCG) – 10%; Debt MF (LTCG) – 20%; Tax on debt MF schemes adjusted for indexation benefit in return calculation; A constant return of 4% has been assumed for savings account (SA); Top 5 MF schemes considered basis AUM as on March 2019; Direct growth plans of top 5 MF schemes considered for return analysis; Medium to long duration schemes considered for debt MF schemes

and about US$15–20bn per annum. "We believe SIPs have the potential to multiply by three to four times over the next five years," says Sikka. To capture the market, SIP ticket sizes start from as low as US$20, and are designed to entice retail investment away from real estate and gold and into the capital markets, followed by gradual increases. "The idea is that investors enter the market evenly at different points of time, so that investing at intervals becomes a regular habit," he adds.

Completing the product basket

To complete its product basket, NAM India is also launching more ETFs and multi-asset allocation funds for retail investors and ultra-high-net-worth investors. "With retail investors we keep things simple, with products that are transparent and easy to understand," says Sikka. "Whereas with alternate investment funds, we will keep launching more and more exotic products."

Domestically, he predicts that mutual funds will become the preferred investment for retail investors. "Interest rates are coming down and Indians are reducing their investments in real estate and gold," he says. "We believe that with the entry barriers being as high as they are, it's not easy for new management companies from across the globe to come over and penetrate this market."

Leveraging technology

To support its distribution capability, NAM India embarked on a digital transformation, leveraging technology that fuelled retail investor access in these markets. With India boasting around 346 million smartphone users – outnumbered only by China – and the figure rapidly growing, it is not surprising that 41% of NAM India's new business transactions come from digital interfaces; every 20 seconds, the fund sells an online SIP through digital means. "Digital is a very important part of the industry now and we believe that, in India, you will need both physical and digital distribution, so we have been trying to build up both pillars," says Sikka.

While extending its distribution reach, NAM India has worked closely with Deutsche Bank, its custodian bank in India, to explore APIs that increase productivity by speeding up transactions in the mutual fund space. "In the asset management industry, cost is a key issue and the fees we charge to investors will always come under pressure," says Sikka. "It's important to

Images: iStock

keep leveraging technology, so that the cost per transaction reduces and efficiency and productivity keep going up.

"We're very happy with the APIs we are working on with Deutsche Bank. Not only do they help us with productivity, but they also enable us to be pioneers in the mutual fund industry by adopting an interface that helps us to focus on our core, which is fund management and distribution. Meanwhile, many of the other things are left to Deutsche Bank to support us and allow us to increase market share."

With its presence in India spanning 40 years, the bank is now leveraging these new technologies with clients, taking them to the next level of efficiency. "We're very excited to be partnering with NAM India on APIs to speed up its mutual fund transactions," says Michaela Ludbrook, Global Head of Securities Services at Deutsche Bank Corporate Bank. "As asset managers all over the world face continuing margin and cost pressures, our technologies enable them to focus on their core business and offer more products and services."

Learning from the NBFC crisis

While it is increasing market share, NAM India is at pains to learn lessons from India's non-bank financial company (NBFC) crisis, which was triggered in September 2018 by Mumbai's Infrastructure Leasing & Financial Services (IL&FS) defaulting on its high-yield products. When the company failed to meet its payment obligations, the industry sat up and took note, sparking rumours of a systemic liquidity problem in the NBFC space.[8]

"Whenever the industry tries to run the product on high yield there can be accidents," says Sikka. "I always maintain that the core for the asset management industry is not only fund management, but also risk management. It's critical for all of us to understand that it's not only about working on the risk that can be seen, but also to keep focusing on risks that cannot be foreseen. There will always be risk, but the core comes back to how you create a portfolio and what the risk framework is."

Future-proofing mutual funds

Going forward, NAM India will continue to focus on profitable growth, both domestic and international, using investments, penetration, reach and systems that together ensure they get a lot more operating leverage. With the asset base of mutual funds as a percentage of GDP at just 11%, compared with the world average of 62%, Sikka believes India offers a unique opportunity. "As we move towards a US$5trn economy, we are talking about a per capita income of US$2,000 increasing to US$5,000 as people save for the future, not only for themselves but also for the next generation."

And, with structural changes including demonetisation and the requirement for a unique identification number to cover the population who the government deems as those who should be paying taxes, these all bode well for India's growth story and the development of long-term savings. "Despite the recent slowdown we have seen, we will continue growing at 7–7.5% over the next five to 10 years," says Sikka. "And with more than 50% of the population below the age of 25 supporting growth, and increasing their wealth, we are very confident that these years ahead will be the best for India and its mutual funds industry."

**Note: Lakh, crore and lakh crore are commonly used terms within the Indian numbering system to express large numbers, in particular when referring to major monetary values of Indian rupees (Rs). Lakh is equivalent to 100,000 (100 thousand), crore is equivalent to 10,000,000 (10 million), while lakh crore is equivalent to 1,000,000,000,000 (1 trillion). For example: in India, Rs100,000 will often be referred to as 1 lakh rupees; Rs20,000,000 referred to as 2 crore rupees; and Rs5,500,000,000,000 (Rs5.5 trillion) as 5.5 lakh crore rupees.*

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Antibody builders

Following the success of the blockbuster anti-cancer drug DARZALEX (daratumumab), Genmab is developing a pipeline of proprietary antibodies. Anthony Pagano, the Danish firm's new CFO, tells *flow*'s Janet Du Chenne how the company's US capital raising fits that strategy

Across three core sites in Copenhagen, Utrecht and New Jersey, teams of scientists at Genmab are working to develop seven antibodies for the treatment of cancer.

Three of the Copenhagen-headquartered biotech company's antibodies are already on the market with partners. The first, DARZALEX (daratumumab), developed by Janssen Biotech, has become a blockbuster drug for the treatment of multiple myeloma, a type of bone marrow cancer that forms on white blood cells.[1] The second, ARZERRA (ofatumumab), developed by Novartis, treats chronic lymphocytic leukaemia.[2] The third, TEPEZZA (teprotumumab-trbw), developed by Horizon Therapeutics, was approved in January 2020 to treat thyroid eye disease.

DARZALEX data was first presented in June 2012, when encouraging preliminary results were reported from a clinical trial in relapsed multiple myeloma patients. It achieved international acclaim in August 2012, when Genmab granted Janssen Biotech, a subsidiary of US group

Genmab R&D Center in Utrecht

Johnson & Johnson, an exclusive worldwide licence to develop, manufacture and commercialise the drug in exchange for a royalty fee of 12–20% per net sales.[3] Following the license of worldwide commercialisation rights of the treatment, Genmab CEO Jan van de Winkel leveraged this success to build a strong foundation for the future, beyond DARZALEX.

A new strategy

Given that, on average, it takes at least 10 years for a new medicine to complete the journey from initial discovery to the marketplace, these foundations benefited from some forward planning, courtesy of the unveiling of Genmab's new strategy in 2010 (see panel, right). "We were looking to change our mindset from a world leader in antibodies, and doing all of the early stage development really well," explains Anthony Pagano, who joined the company in 2007 and was promoted from Senior Vice President, Finance and Corporate Development to Executive Vice President and CFO in March 2020. "We wanted to transition into a late stage development, commercial organisation where our own products, that we commercialise and develop ourselves, actually get to market."

With those aims in mind, over the past 10 years the company has been building

Genmab's three-pronged strategy

Focus on core competence:
- Identify the best disease targets
- Develop unique best-in-class or first-in-class antibodies
- Develop next generation technologies

Turn science into medicine – and then into real value:
- Generate differentiated antibody therapeutics with significant commercial potential

Build a profitable and successful biotech:
- Maintain a flexible and capital-efficient model
- Maximise relationships with partners
- Retain ownership of select products

Source: Genmab

a sustainable business with its own growing pipeline, while continuing to collaborate with pharmaceutical and biotech partners to develop a robust product pipeline beyond DARZALEX.[4] "The success of that product and the partnership with Janssen is

providing the overall foundation, both in terms of credibility and from a financial perspective, to grow our business," says Pagano. He continues: "As we build out our pipeline beyond DARZALEX, it's about us taking products further into development, and ultimately all the way to commercialisation."

Timing an IPO

In support of the strategy, Genmab decided to build on its presence in the US and further broaden the investor base there. It completed an IPO of American depositary shares (ADS) on the Nasdaq Global Select Market in July 2019,[5] raising US$582m, the largest IPO of ADS by a European healthcare company.

Pagano describes the capital raising as the right opportunity for Genmab, given its history and its strategy. "This was the right transaction at the right time for Genmab. The IPO fits with our thinking of building this company for the long haul. We were at a stage in the lifecycle of the company where we were executing on our strategy, and

we did not need to raise capital. Instead, we thought it made perfect sense for us to continue to increase our access to the US market and our pool of US-based investors."

With the confidence that the transaction would complement Genmab's increasing US presence and fit within the company's overall business trajectory, it found a window to list in July 2019. "We had thought about it for a few months and we were in a position to execute quickly," explains Pagano.

Raising US profile

With an existing US presence, and the company's New Jersey offices extending to a laboratory, Genmab was familiar with moving beyond its national borders. "Thinking beyond our immediate borders is part of the company's DNA," says Pagano. "In many respects we were just looking to make it easier for people to invest in us and, over a period of time, to increase our US shareholder base."

This aim was helped by the fact that Genmab was already a publicly traded company, which first listed on the Nasdaq Copenhagen Stock Exchange in 2000, soon after its formation. "Making the decision to add on to our Danish listing was an important one, but we were able to make that transition from an already solid foundation," Pagano explains.

Laying the groundwork

In preparation for the US listing, Genmab assembled a team of external and internal practitioners, including bankers and lawyers, who had experience of the regulatory and compliance aspects of transitioning to a US publicly traded company. This includes the requirement to comply with the Sarbanes–Oxley Act of 2002.[6]

The act obligates companies to make public disclosures and provide regular reporting. "Sarbanes–Oxley is something we had obviously taken very seriously as it relates to the requirement of being a publicly traded company in Denmark, so we had this solid foundation to start from," reflects Pagano.

Facilitating the deal

Deutsche Bank Trust Company Americas (DBTCA), acting as Genmab's existing American Depositary Receipt (ADR) bank for its sponsored Level I ADR programme, was reappointed for the new capital-raising Level III ADR programme. As part of the IPO and

Images: Genmab, Tuala Hjarnø, Torkil Stavdal

> This was the right transaction at the right time for Genmab
>
> Anthony Pagano, Chief Financial Officer, Genmab

listing on the Nasdaq Global Select Market, Genmab increased its share capital by issuing 3,277,500 ordinary shares with a nominal value of DKK1 per share in the form of 32,775,000 ADRs in the offering. Moving from a sponsored Level I to a sponsored Level III ADR programme brought Genmab under a new oversight regime and expedited its transition to a US publicly traded company.

Pagano reflects on this transition: "In moving from a Level I programme to a Level III, we already had strong foundations, having been a public company for almost 18 years and one that held itself to high standards of reporting. This was more of an incremental change for us, rather than a step change".

He also considers Deutsche Bank to be a logical partner for expanding Genmab's ADR programme in conjunction with executing the US IPO. "We've built a good relationship with Deutsche Bank over the years and look forward to a positive relationship moving forward."

Preparing the offering document

Preparation of the offering document was also made easier given that the move to the Level III ADR programme required minimal changes to the accounting treatment. The document included provisions for detailed reporting under the International Financial Reporting Standards. "This is a bit more incremental relative to what we've done historically," explains Pagano. "We are also required to provide a long-form description of our risk factors."

The overall allotment of the deal was exercised almost immediately, indicating an overall high demand, and benefited from strong investor outreach and stakeholder engagement both with existing investors pre-IPO and new investors who joined as part of the IPO.

Looking ahead

Going forward, Genmab is growing its capabilities in the US, as well as its operations at its core sites in Denmark, the Netherlands and Japan. These include a Research and Development (R&D) Center in Utrecht, the Netherlands, where discovery and pre-clinical research is conducted in state-of-the-art laboratories leveraging an advanced robotics lab, a modern auditorium, science café, and innovative brainstorm and meeting rooms. Its new accelerator building, which will contain both offices and laboratories and will be connected to the R&D Center, is expected in early 2022.

In addition, Genmab has opened its first translational medicine research laboratories in Princeton, New Jersey as part of the strategic growth of the company. These labs will be moved from the BioLabs Princeton Innovation Center to Genmab's own US office space in mid-2020. This expanded space, which is modelled on the open and collaborative spirit of the R&D Center in Utrecht, includes both offices and laboratories and allows Genmab to expand its translational pre-clinical and clinical drug development research expertise.

"As far as commercialising our assets and marketing and commercialising our products goes, our initial focus is likely going to be on the US," Pagano confirms.

The IPO bolsters that presence in the world's largest biotech market and has provided a foundation that aligns with Genmab's overall strategy to progress its business. "As we continue to invest in building out our pipeline, the IPO enables us to transition from a world-class leader in antibodies, technologies and early stage development, to also having the capabilities to execute late stage development, and ultimately commercialisation."

Anthony Pagano's advice to European biotechs considering a US IPO:

- It's not just about doing the deal. Align your company strategy with business rationale for an IPO offering
- Secure the right stakeholder engagement and buy-in early on
- Construct the right team to be in place early, and have a person internally to run with the project and execute the deal

With seven assets in clinical development,[7] the pipeline will continue to drive the growth of the business. "We've also never been stronger from a technology perspective and what I'm really excited about now is the team we've put in place to maximise these very exciting clinical stage products," enthuses Pagano.

In addition to these proprietary products in the pipeline, Genmab plans to add two more investigational new drugs in 2020, progressing from 2018 when the company only had four products in its pipeline. This, concludes Pagano, underlines the successful discovering machine that Genmab has become and will continue to be in the long term.

Sources

[1] DARZALEX binds to CD38, a glycoprotein found on the surface of many immune cells including white blood cells, which multiple myeloma cells overexpress

[2] See https://bit.ly/34ocrN0 at labiotech.eu

[3] See https://reut.rs/3c8AlyK at reuters.com

[4] See https://bit.ly/2VkYOd4 at biospace.com

[5] See https://bit.ly/34qYb5V at ir.genmab.com

[6] See soxlaw.com

[7] See https://bit.ly/34sCdzF at genmab.com

The third cohort of 20 inspiring businesses joined the WiST accelerator in January 2020

Balancing technology transfer

The We in Social Tech business accelerator, which was co-founded by Deutsche Bank's corporate social responsibility Made for Good programme, has powered a range of fledgling businesses headed by female tech founders. Neil Jensen reports on their journey

Technology as a global industry appears to grow broader and deeper by the year, as all kinds of 'tech' become part of the business lexicon; we have fintech, regtech, sportstech, femtech and social tech to name a few.

Social tech is a tool for using human, intellectual and digital resources to influence and improve social processes. It covers a variety of functions and disciplines, from easily recognisable elements such as apps to help autistic people self-manage anxiety, to innovations that address social challenges such as healthcare.

According to McKinsey research, corporates were early identifiers of the benefits of social tech and have refined their approach over time.[1] Governments were slower to recognise it as a cause for good, but are now launching funds and initiatives to raise awareness and facilitate investment; something that points to the growth of this sector. For example, in January 2019 the UK's Department for Digital, Culture, Media and Sport set up a Social Tech Venture Fund, administered by the Social Tech Trust, to establish a fund of up to £30m.[2]

A dearth of female talent

One feature of social tech, which it shares with both the technology and financial service industries generally, is an acute shortage of women working in the sector and a lack of female role models. Pay inequality is a further hurdle.

The imbalance is also evident in a lack of female investors – possibly as a result of the gender pay gap – and also where investments are generally made. "People tend to invest in a reflection of themselves, invariably men investing in men," notes Ghislaine Boddington, Co-founder of Women Shift Digital and Spokesperson for the We in Social Tech (WiST) business accelerator programme for women. "The numbers are way too low and very worrying given that, in today's digital world, most businesses and aspects of daily life are technology-orientated. The future has to be very different," she adds.

Made for Good and WiST

Back in 2016, as part of its corporate social responsibility (CSR) enterprise programme, Deutsche Bank launched Made for Good, an initiative to support pioneering ideas and business models with potential for driving positive social change.

WiST followed in November 2018 when Deutsche Bank partnered with Nwes, one of the UK's largest not-for-profit enterprise agencies, to introduce an accelerator programme specifically for female tech founders with a social mission. "We recognise the greater obstacles to success women entrepreneurs are facing, as well as the potential that technology and innovative business models have to solve some of the world's most pressing environmental and societal problems," says Amy Harris, CSR Manager at Deutsche Bank.

Images: WiST

> The challenges they are trying to overcome require innovation and great problem-solving ability
>
> Ghislaine Boddington, Spokesperson, WiST

Diverse goals

The initiative aims to reduce the gender imbalance in London's technology sector, and to date it has supported 60 ambitious female tech founders to start, grow or scale their businesses while bringing together innovative IT solutions, social projects and female empowerment. Furthermore, adds Boddington, it brings together a diverse range of people and organisations, including entrepreneurs, investors, tech companies, charities and social businesses. "The challenges they are trying to overcome are many and varied, requiring innovation and great problem-solving ability," she explains.

WiST was originally designed to run for two years with three six-month programme cycles, with continued demand for the programme leading to more funding confirmed from Deutsche Bank for two further cohorts. Each cohort supports 20 businesses from the Greater London area.[3] To qualify, a business had to be at least 50%-owned by women and demonstrate a clear aim or purpose, using technology to address social challenges.

Each WiST participant has access to the skills and experience of two mentors; a volunteer from Deutsche Bank and a paid representative from the industry related to their company needs. "The bank's employee mentors offer a rich diversity of skills and experience and play an important role in helping the businesses achieve their ambitions," says Harris. Participants have also accessed support, investment and consultancy services via workshops, business modelling, product analysis and advice on leadership.

The third cycle call for the latest tranche of 20 participants was issued in October 2019. All three cohorts have drawn businesses from diverse demographic groups, and founders come with backgrounds in social, mental and elderly care; health and wellness; occupational therapy; education and skills training; sustainable fashion; recycling; micro-financing; travel; arts and crafts; artificial intelligence bias; and special needs.

Major achievements

Cohorts one and two of the accelerator saw 2,600 hours of support provided and five ventures move from ideas to businesses. Over £750,000 of financing was raised by the businesses, including over £600,000 of equity investment.

Generation Medics[4] – a non-profit organisation that seeks to widen access to medical and healthcare careers – was among the 20 ventures selected for the first cohort. Founder Dr Hinnah Rafique comments: "We generated new employment opportunities, grew our programmes and impact, expanded our tech platform and – best of all – we have a realistic sustainability plan for our future."

Social tech still holds various challenges for entrepreneurs, not least with regards to building sustainable businesses that deliver user, social and financial value at scale. Like all sectors, gender equality is vital in building finely balanced, forward-looking businesses. The principles and sentiment of WiST can help to meet these challenges, and can be easily applied to any industry at any time.

For more details on the WiST initiative, contact weinsocialtech@nwes.org.uk

Neil Jensen is a freelance financial journalist and the former co-editor of flow

Examples of the social tech ventures supported by WiST

Curo: a digital employee benefit product that has ambitions to support the five million people in the UK who struggle to juggle caring responsibilities alongside their paid job
Etiq: a software solution to help companies identify and mitigate bias in their automated decisions, from policing and sentencing to recruitment and financial product selection
Fledglink: a service that bridges the gap between young people looking for work and organisations seeking diverse talent by proactively supporting socially disadvantaged and minority individuals
InChorus: a third-party platform to anonymously tag, measure and resolve incidents of bias and harassment within an organisation
Market without Borders: described as the world's first peer-to-peer (P2P) marketplace and fintech solution for the two billion people without bank accounts, it enables them to sell their products direct to the international marketplace
Money Pot: a micro-financing platform that supports individuals by offering access to a P2P short-term saving and lending instrument
Pamoja Care: a tech-based domiciliary care agency focused on reducing language and cultural barriers in the adult care sector, it connects elderly dependents to carefully matched caregivers
Quarter-Life: set up as a response to the rise of the 'quarter-life crisis' and the lack of personal and professional support that exists for young adults in their 20s
Turn: the company seeks to create a world where managing menstruation is sustainable, convenient and cheap

Source: www.weinsocialtech.co.uk

Sources
1 See https://mck.co/2I6NP10 at mckinsey.com
2 See https://bit.ly/2PvOUTS at thirdsector.co.uk
3 See https://bit.ly/38ebYNO at db.com
4 See https://bit.ly/2I0BEmi at weinsocialtech.co.uk

Call for Capacity

Trade finance shortages remain a barrier to developing world economic growth, as the gap between the perception and actual level of transaction risk widens. Tackling this is an ongoing priority, says the WTO's Marc Auboin

As global correspondent banks reassess their emerging market strategies, smaller countries with lower business potential have become increasingly vulnerable.

Before the 2007–2008 global financial crisis, there were around a million correspondent banking lines in place. However, post-crisis, one in five has disappeared, leaving 800,000, with most of the relationships that were terminated affecting developing countries, particularly the poorest.

Lack of access to trade finance is therefore curtailing the trade opportunities of small businesses in developing countries in particular, according to *Trade Finance and the Compliance Challenge: A Showcase of International Cooperation*, a co-publication launched by the World Trade Organization (WTO) and the International Finance Corporation on 3 July 2019 at the Global Review of Aid for Trade.[1]

Furthermore, given that up to 80% of trade is financed by credit or credit insurance, a diminution in trade finance represents a significant barrier to activity, particularly in developing economies.

The publication explores the reasons for the growing reluctance of the global financial sector to engage in this form of financing and presents case studies of capacity-building programmes organised by the international community to address the issue. Its findings are based on feedback from more than 300 professionals who took part in the seminars described in the case studies, which took place between the end of 2018 and early 2019. By the end of 2019, the programme of on-site seminars and online training for multilateral development banks reached close to 1,500 participants in priority countries, with the human and/or financial resources for the courses provided by the WTO, the International Monetary Fund and International Chamber of Commerce.

The cost of unmet demand

Trade finance is particularly vulnerable to de-risking, despite its very small loss history and high recovery rate. In addition, since the tightening of international guidelines and the hefty fines imposed by national authorities on banks for non-compliance, there has, observes the report, been a heightened perception of the anti-money laundering/combatting the financing of terrorism risk affecting trade finance. In other words, the gap between the perception and actual level of risk of the transaction is clearly one of the main causes of the lack of trade finance in several regions.

Part of the problem is that perceived regulatory requirements may lead banks to exceed guidance provided by international and national regulatory bodies. The effect is to reduce access to trade finance once costs of compliance exceed forecast revenues from the relationship. Instances of overcompliance with regulation by banks, either by choice or due to misinterpretation, can be minimised by enhancing the clarity of regulatory requirements, talking to regulatory authorities, developing tools and compliance utilities, and disseminating best compliance practices.

Capacity building

What is being done to address the problem? Mobilisation of capacity building in trade finance is crucial to help importers, exporters and their financial institutions adapt to the new regulatory environment. Activities include outreach events, industry dialogues and initiatives such as the Wolfsberg Group Correspondent Banking Due Diligence Questionnaire, which aims to establish an agreed standard for cross-border correspondent banking.[2]

The WTO, International Finance Corporation and the Financial Stability Board, along with the multilateral development banks, are working with the trade finance community to improve awareness of compliance requirements and turn the tide of reducing credit lines.

Capacity-building projects led by the European Bank for Reconstruction and Development, the Asian Development Bank and the International Islamic Trade Finance Corporation are helping trade finance providers in developing countries deal with regulatory requirements, which in turn might help them process trade financing requests from small businesses, instead of rejecting them.

Working together

Given the testing geopolitical climate, global trade needs to be more open and inclusive so that everyone benefits. This cannot happen without proper financial inclusion.

When trade finance lines dried up during the global financial crisis, it was cooperation between international institutions and regulators that got trade flowing again. Twelve years on, the collective responsibility remains.

Marc Auboin is the Counsellor for Trade and Finance at the World Trade Organization

Sources

[1] See https://bit.ly/2RMTJc5 at wto.org

[2] See https://bit.ly/30MaWq0 at wolfsberg-principles.com