



ASPAC LIBOR Readiness Report

Includes appendix on Hong Kong market readiness

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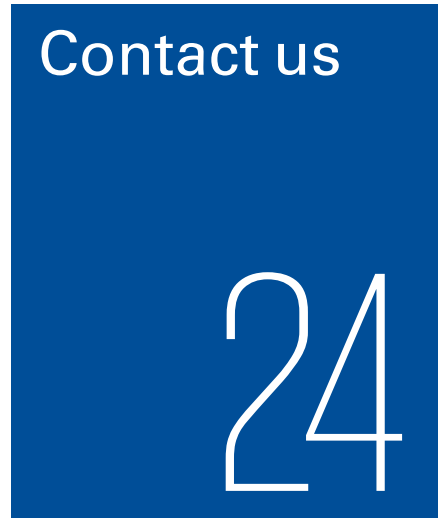
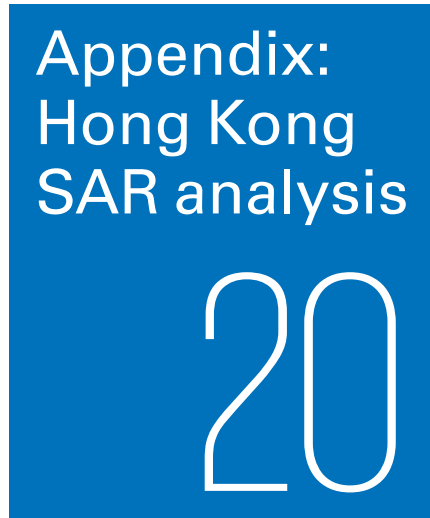
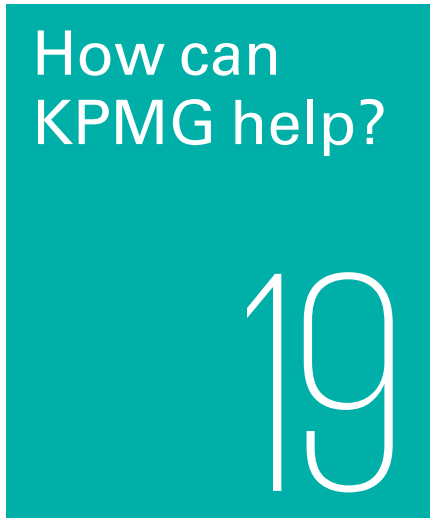
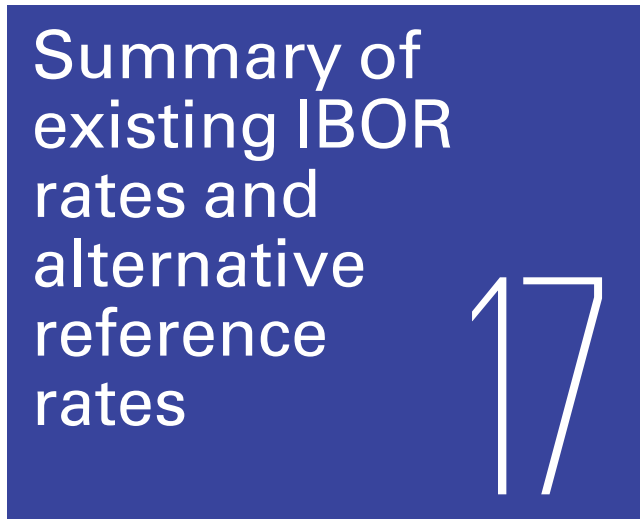
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Overview

In 2011, it emerged that certain banks had manipulated LIBOR and colluded on the determination of the rate, raising concerns over the future of LIBOR. The current basis for the LIBOR calculation runs counter to recommendations made by the International Organization of Securities Commissions (IOSCO) to strengthen a number of benchmark rates, including LIBOR and other reference rates, by having them underpinned by actual transactional data.

Despite the size of the market and the use of LIBOR by market participants in numerous products, the Financial Conduct Authority (FCA) in the UK announced that it will not compel or persuade LIBOR panel banks to continue to submit quotes after 2021. Market participants should therefore not rely on LIBOR being available after 2021. Planning for this transition away from LIBOR is currently underway, and is expected to be completed by the end of 2021.

This report provides an overview – as at the end of September 2019 – of the readiness of banking systems in the Asia Pacific region to transition away from LIBOR, and it offers a detailed plan for how banks can prepare for the end-2021 deadline (outlined in Page 18).

Overview of banks' readiness in Asia Pacific

Banking systems in many parts of Asia Pacific have yet to begin their IBOR transition in earnest. KPMG member firms across the region recently surveyed more than 20 large banks in Hong Kong, Indonesia, Malaysia, the Philippines and Singapore on their readiness for the LIBOR transition. KPMG professionals have also been speaking regularly with banks in Australia, New Zealand, Japan, Korea, mainland China, Taiwan and Thailand, as well as with senior central bankers in the region. The findings from the survey and discussions with banks in the region indicate that banks are not yet ready for the IBOR transition: impact assessments have not been conducted, exposures have not been quantified, system readiness has not been gauged, and the re-working of contracts – and the associated client outreach – has yet to begin.

This is slow progress, and it is concerning for two reasons. First, the cessation of major interest rate benchmarks is a 'ready-or-not' proposition for individual banks, and in developed markets – even those which are not reforming local benchmarks – planning is generally much more advanced than in the surveyed sample. Second, exposures to LIBOR are likely to be substantial after years of steady growth in foreign currency exposure across the region. Failure to keep pace with the rest of the world may become a systemic risk.

So why the delay? Many survey respondents and market participants cited a lack of guidance from their central banks. Although some of these banks have already driven a wave of local benchmark reform, the "Dear CEO" letters dispatched in the UK, EU and elsewhere have not yet been circulated in much of the region. Commercial bankers may be reluctant to overhaul their systems for managing foreign interest rates without sufficient guidance from their supervisors.

Hesitation on the part of central banks is understandable. Uncertainty still hangs over the endgame for the transition in major currencies, and other priorities in emerging markets could trump interest rate reform for foreign currency exposure.

In some cases, such as in the Philippines and Indonesia, the appetite for change may have been muted by the local benchmark reform that has already been carried out. In addition, it seems unlikely that many banks in the region will want to restructure their front books aggressively. If they are not seeking a leading role in the development of products for the new reference rates, they (and their central banks) may indeed have a little more breathing room.

But the window in which to act is closing fast, and failure to keep up will eventually prove disruptive. Developing economies in Asia are trade-dependent, and foreign currencies feature heavily in their trade finance and funding operations. They may already be exposed to legal risk if they are selling long-dated IBOR products to customers with the knowledge that the rates will soon change. Their counterparties will also soon be wanting them to discuss re-papering of ISDA agreements and other legal instruments. These considerations increase the urgency of the transition.

A solution for these banks is to decouple the processes of domestic and international benchmark reform and to urgently begin working on the latter. There is much that they can already be doing to prepare for the LIBOR transition, even without prompting from their prudential supervisors. Exposure identification and the re-papering of contracts in major IBOR currencies can begin. So too can a comprehensive mapping of systems and planning for inevitable model changes and accounting adjustments. For those that have not already done so, it is time to launch the process.

Key survey findings and analysis

In 2019, KPMG firms in the Asia Pacific region launched a LIBOR transition roadshow and conducted a number of meetings with banks and other financial institutions in the region. KPMG professionals spoke to more than 30 banks to understand the status and extent of their preparation, and how they are planning for one of the most complicated transformations in the financial market in recent years.

In addition, during the third quarter of 2019, KPMG firms in the Asia Pacific region conducted a survey of more than 20 banks operating in the region, including in Hong Kong, Indonesia, Malaysia, the Philippines and Singapore. The results of the survey align with the view of KPMG firms that banks in the region need to act now to accelerate their transition work, or risk being left behind and being saddled with higher costs of transition due to severely compressed timelines.

Local banks

Key findings from the surveyed locally-headquartered banks:

- All are aware of the LIBOR transition, but only one has formed a project plan.
- Only three out of eleven banks indicated that they have been in discussions with their regulator, and only three indicated that their progress had reached the point where it could be considered a work in progress.
- None of the banks indicated that they were ready for an assessment by the regulator.
- Loan repricing was the most frequently cited business line of concern.
- Respondents in Hong Kong and Singapore are more advanced than most of their peers in other jurisdictions. They are either working on, or have completed, the quantification of their exposure. None of the other locally-incorporated banks in the survey claim to have progressed this far. Hong Kong and Singapore are also the only jurisdictions with banks that are working on detailed project plans.
- Only one of the banks has considered litigation risk if renegotiations with clients were unsuccessful.
- Most banks highlighted several concerns as high priorities – common among them are the various transition scenarios that might arise, as well as the valuation and legal aspects of the transition. About half of the banks claimed to be actively planning for alternative scenarios.

Foreign bank branches

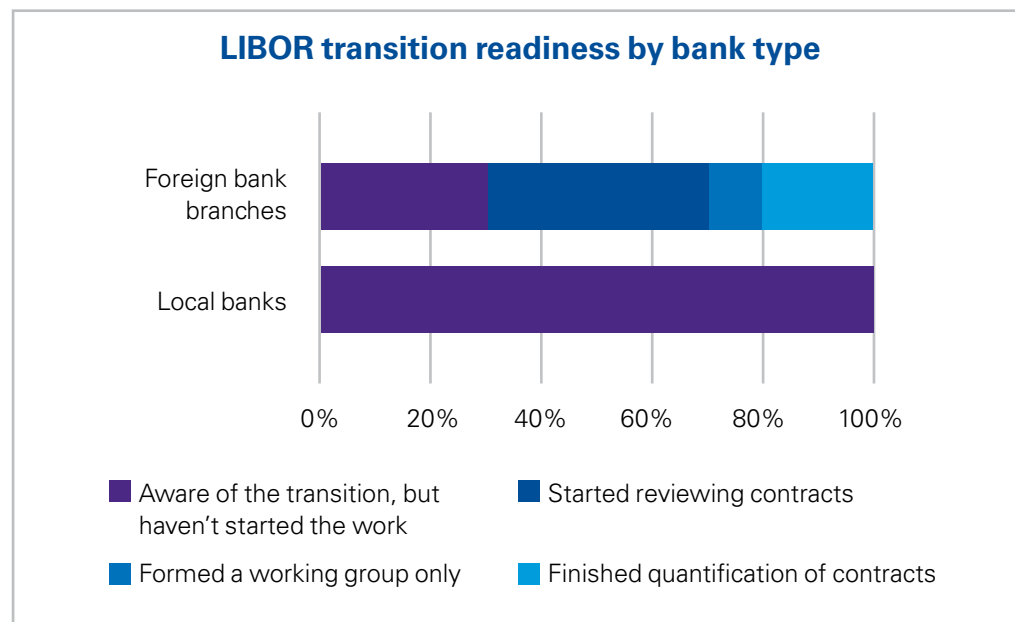
Among the wider group of surveyed banks, foreign subsidiaries and branches in Asia Pacific reported greater progress with transition planning.

This progress is unlikely to be due to a perception of greater LIBOR exposure, since there is little difference between the proportions of banks across the two groups which recognise the existence of LIBOR exposure in their portfolios. A more likely explanation for the disparity in readiness is that foreign banks tend to be concentrated in the financial hubs of Hong Kong and Singapore, where regulators have been more active on the topic. It may also be due to pressure from head offices in jurisdictions where the transition has a higher profile, such as in the US and the UK.

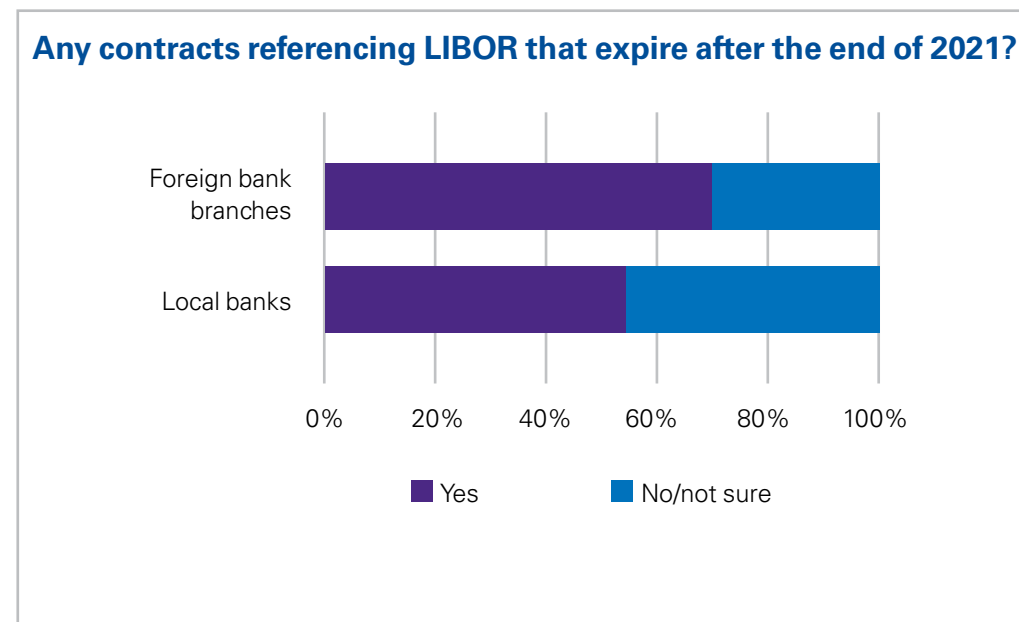
In any case, differences in the responses of local and international banks are important because they indicate a threat to the competitiveness of local banks in their own markets.

For example, some foreign branches are aware of the litigation risk associated with having LIBOR on their front books, and have been actively planning to address this risk; locally-headquartered institutions have been less active and consequently, they are more exposed.

Foreign banks may also eventually find themselves better placed to use new and emerging instruments that are based on the new reference rates. If local banks do not innovate as quickly, they may risk losing market share.



Source: ASPAC LIBOR Readiness Survey, KPMG International, 2019



Source: ASPAC LIBOR Readiness Survey, KPMG International, 2019



AJU	1,822	12,349,000
EJK	3,450	238,481,000
HPL	1,042	85,478,000
KCE	489	-8,349,000
NAN	8,569	189,301,000
QOP	6,402	102,478,000
TIR	890	24,697,000
WV3	6,280	74,000,000
AHD	2,434	97,410,000

Regional update

KPMG professionals have been closely monitoring industry developments across the region. Based on discussions with a number of key banks, coupled with the survey results, we have provided a summary of the Asia Pacific LIBOR transition landscape and general market readiness for each of the following jurisdictions.

Australia and New Zealand

	Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
Australia	Reformed BBSW	AONIA (also known as Interbank Overnight Cash Rate)	No further change
New Zealand	BKBM	OCR (Official Cash Rate)	No further change

International exposure

Australia's economy is financially open, and its currency is the world's fifth most heavily traded, even though its nominal GDP is only the world's 13th largest. Its large wealth management sector generates a substantial appetite for foreign currency, as do the funding requirements of the major banks.

Australian authorities have been actively progressing LIBOR transformation. The corporate regulator issued a "Dear CEO" letter to large financial firms in May 2019, and the Reserve Bank of Australia has repeatedly encouraged market participants to accelerate their transformation programmes.

Many major banks now have LIBOR programmes underway, and the process of quantification is well advanced at some banks. Interest is growing in how to develop the front book, with a number of banks considering how they might take advantage of new risk-free rates (RFRs) in other currencies for a range of purposes.

On the buy side of the market, although the corporate regulator's letter to financial firms includes large wealth managers, progress with reform has been noticeably slower than in the banking sector.

New Zealand's situation is quite similar to Australia's in terms of exposure to LIBOR. The country has an advanced financial system, and its currency is the 13th most heavily traded

in the world. As in Australia, this generates substantial exposure to offshore IBORs, through both bank funding and via wealth management.

With Australian banks maintaining large stakes in New Zealand's largest banks, the two countries are likely to respond to global developments according to a similar timeframe.

Domestic IBORs

In Australia, change to the local benchmark rate, BBSW, has been relatively minor. This rate is IOSCO-compliant, and questions surrounding its integrity have already been addressed with some changes to the rate-setting process. Some BBSW tenors are exhibiting a degree of illiquidity and the Reserve Bank has encouraged participants to ensure that fallbacks are in order.¹ There is also speculation among market participants as to the durability of BBSW – on the basis that it is an unsecured rate – but further changes seem unlikely for the time being.

In New Zealand, the Financial Markets Association announced in July an investigation into suitable models for administering the local benchmark rate, BKBM. The benchmark rate itself is based on observable transactions and therefore has strong claims to benchmark status. New Zealand lacks the variety of alternative rates observable in other markets, so the Official Cash Rate has emerged as the fallback benchmark.

¹ The standardised fallback is AONIA.



Hong Kong SAR

Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
HIBOR	HONIA	Multiple-rate approach indicated

The Hong Kong Monetary Authority (HKMA) has been encouraging Hong Kong banks to perform impact assessments, and in March 2019, it directed banks to undertake risk assessments and make preparations for the necessary transition. There has not been a formal “Dear CEO” process in Hong Kong as yet, though we expect regulators to ramp up specific questioning of banks in relation to LIBOR shortly. Likewise, Bank of China (Hong Kong) becoming the first financial institution in Hong Kong to issue securities linked to SOFR is a promising development.²

The effect of the transition is likely to be considerable. LIBOR is widely referenced in the local banking sector, with local LIBOR-based assets amounting to HK\$3.8 trillion (US\$488 billion) at the end of 2018.³ The fixed exchange rate regime also means that Hong Kong maintains high levels of international reserves, and the value of many of these assets will depend directly or indirectly on IBOR.

Meanwhile, the HKMA has explicitly said that it has no plans to discontinue HIBOR, the Hong Kong interbank reference rate calculated on a similar basis to LIBOR. Nevertheless, it wishes to accelerate the use of alternative reference rates and has been working closely with the Treasury Markets Association (TMA), the benchmark operator for HIBOR in Hong Kong, to encourage the adoption of HONIA as an alternative reference rate. The TMA has yet to publish conclusions from the consultation; in parallel to putting the relevant enhancements in place, the TMA is also working with the industry to promote the development and trading of HONIA-based financial products. ISDA has also been running consultations in relation to the Hong Kong dollar.

Hong Kong captured the most responses in the survey, which varied from local banks headquartered in Hong Kong to branches or subsidiaries of foreign financial institutions with operations in Asia, Europe or the US. While they all agreed that the transition from LIBOR to alternative reference rates is going to be complex, multi-faceted and require tremendous amounts of preparatory work to ensure a smooth transition, only three out of 10 banks said they have completed a quantification of their LIBOR exposures, and two of them are yet to start such an analysis. The top three exposures identified so far are: OTC derivatives, credit agreements, and repo and financing transactions.

From discussions with a number of mainland Chinese banks in Hong Kong, most of them expect to drive the LIBOR transition programme in Hong Kong rather than from mainland China. This is mainly driven by the need to meet the regulator’s expectations in Hong Kong.

Our Hong Kong Supplement presents a more in-depth analysis into these survey responses (Page 20).

² ‘Bank of China pioneers SOFR lending in Asia’, Risk.net, September 2019

³ HKMA, March 2019



Indonesia

Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
JIBOR	IndONIA	N/A

Domestic markets

Indonesia is represented on the Official Sector Steering Group of the Basel Committee. Its central bank is therefore, in some senses, closer to the IBOR process than the central banks of many other jurisdictions in the region.

Yet Indonesia starts its IBOR transition from a position that is more challenging in other respects. The domestic interest rate swap market lacks liquidity, and term interbank rates need to be inferred from foreign exchange markets. Exchange trading of derivatives does not yet extend to interest rate products.

The local interbank rate, JIBOR, relies on quotes from 17 contributor banks. It has one-week, one-month, three-month, six-month and twelve-month tenors, and is administered by the central bank. As is common in quote-based systems, individual quotes are averaged, after the exclusion of outliers.

To meet the requirements of IOSCO compliance, Indonesia has developed a new alternative reference rate, IndONIA. This rate is unsecured and based on a bid-offer system that involves 102 banks. It has already replaced the overnight JIBOR rate, and Bank Indonesia aims to develop liquidity in the longer tenors currently covered by JIBOR, with a view to aligning interbank rates with the policy rate (a seven-day reverse repo rate).

External exposure

With respect to the replacement of benchmarks in other currencies, the authorities have not yet run a formal consultative process with the banks. However, exposure is growing quickly. According to Bank for International Settlement (BIS) data, Indonesia's banks are distinguished by having rapid growth in foreign currency liabilities offshore and fast-growing onshore foreign currency exposure.

In relation to their overall readiness, Indonesian banks are not yet as advanced as their peers in more developed financial markets. The survey responses included four large, locally-headquartered institutions, with none of them stating that they have developed scoping approaches and outreach strategies.



Japan



Korea

Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
JPY LIBOR, JPY TIBOR, Euroyen TIBOR	TONAR (also known as TONA)	Multiple-rate approach indicated

In response to broader interest rate benchmark reform, TIBOR reform was implemented in July 2017, and the uncollateralised overnight call rate (TONAR) was identified as the Japanese Yen risk-free rate in December 2016. To address issues related to the transition in preparation for the discontinuation of JPY LIBOR, the “Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks” was established in August 2018, consisting of major Japanese financial institutions, investors, non-financial corporates and regulators. The Committee launched a public consultation on the appropriate choice and usage of Japanese Yen interest rate benchmarks.

The issues subject to public comment included requirements of the alternative benchmark options such as overnight risk-free rate compounding (i.e., fixing in advance or in arrears), term reference rates, and TIBOR, and the direction of fallback approaches for bonds and loans. Since term reference rates for the new benchmarks have not yet been developed in Japan, temporary use of other options will need to be explored until their development for the transition. Term rates are expected to be developed by around mid-2021 and the Tokyo Financial Exchange is considering resumption of trading of Overnight Call Rate Futures in 2020.

The public consultation concluded on 30 September 2019. Based on the responses to this consultation, the Committee plans to publish the conclusions of the consultation in the last quarter of 2019.

In preparation for the transition and fallbacks, major Japanese banks have initiated detailed planning and impact analysis, and local banks are starting their preliminary analysis. However, most buy-side financial institutions and non-financial corporates in Japan will likely wait for the development of market conventions, infrastructure and term rates through the public consultation.

Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
CD rate, KORIBOR	N/A	FSC and BOK are yet to propose alternatives to CD rates

The current benchmark interest rate in Korea is the certificate of deposit rate. However, as with LIBOR rates, certificate of deposit rates have fundamental limitations as the issuance of certificates of deposit is not sufficient (i.e. lack of liquidity) and is based on quotes instead of actual transactions.

In June 2019, the Financial Services Commission (FSC) and Bank of Korea (BOK) jointly launched a taskforce to develop a new benchmark interest rate, which aims to replace the current benchmark interest rate of certificates of deposit by 2021. Meanwhile, the taskforce will also introduce measures this year to boost the issuance of certificates of deposit to improve the current method of calculating the rates.

Malaysia

Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
KLIBOR	AOIR	N/A

International borrowing and investment in Malaysia is dominated by five large banks. These institutions are exposed to local domestic interest rate swaps and corporate bonds in local currency, as well as wealth management products.

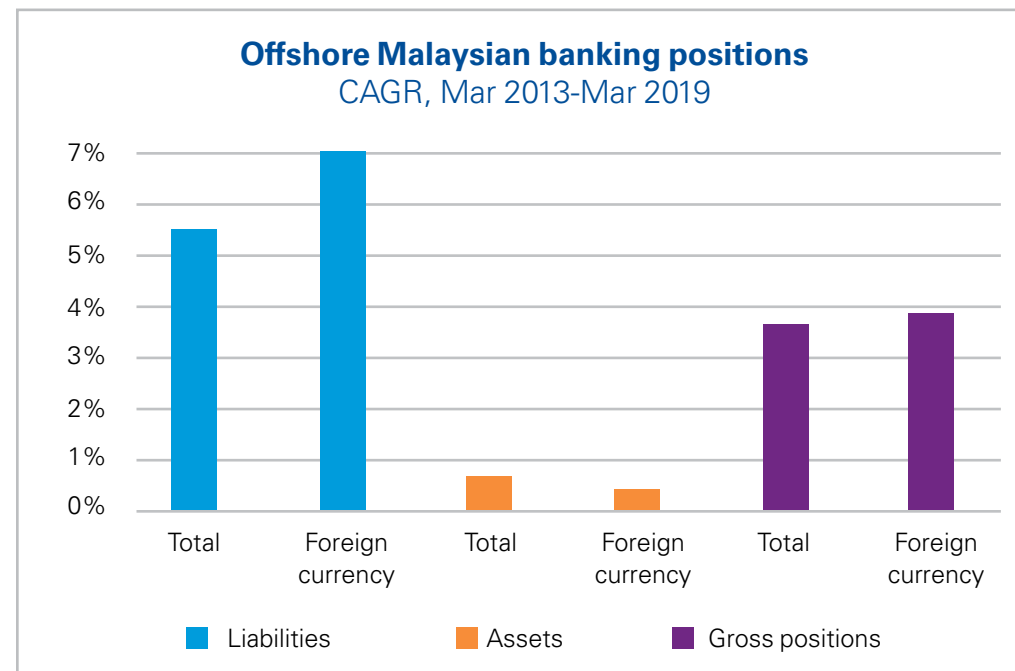
The exposure of Malaysia's banking system to foreign currencies is significant and growing. Foreign exchange turnover has been growing at a Compound Annual Growth Rate (CAGR) of around 10 percent.

According to BIS data, around 70 percent of the cross-border positions of Malaysian banks are foreign currency denominated. In very approximate terms, BIS-reporting banks in Malaysia now have gross cross-border positions of around US\$169 billion, or slightly less than half of Malaysian GDP. A high proportion of this exposure is expected to be IBOR-affected.

The most common instruments that generate this exposure and that are subject to IBOR reform – IRS, cross-currency swaps, currency swaps and forwards – are not complex from a valuation perspective, but they will require adjustments to the systems of the banks.

So far, Malaysian banks have not been aggressively pursuing IBOR reform. This may be partly due to the uncertainty about the future of the local benchmark KLIBOR rate. KLIBOR is administered by the central bank (Bank Negara Malaysia or BNM), and it remains fundamental to the pricing of retail and commercial loans, as well as shorter-dated interbank exposures.

BNM has yet to outline its intentions with respect to KLIBOR, and there is a case for change. The existing method for collecting rates is survey-based and arguably not IOSCO-compliant. BNM has strengthened requirements for KLIBOR rate setting and introduced a Code of Conduct for the Malaysian Wholesale Financial Markets. In addition, there are doubts about the reliability of KLIBOR at longer maturities. Illiquidity in some derivatives – as highlighted by a sustained drop in turnover in the benchmark 3-month futures contract – also suggest weakness in KLIBOR.



Source: BIS data

Philippines

Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
PHIBOR	N/A	N/A

Local reform

Significant changes have been made in the Philippine money market in recent years. PHIBOR was discontinued in 2013. The calculation of the Philippine Dealing System Treasury (PDST) reference rates, the Treasury reference benchmarks, were revised in 2014 and subsequently replaced by PHP BVAL reference rates in October 2018. The Bankers Association of the Philippines (the benchmark administrator) engaged Bloomberg to calculate the new benchmark reference rates.

These changes represent significant enhancements to benchmarks, and the remaining challenge for banks in the Philippines is most likely to involve adapting to the changes in the benchmark rates of other jurisdictions.

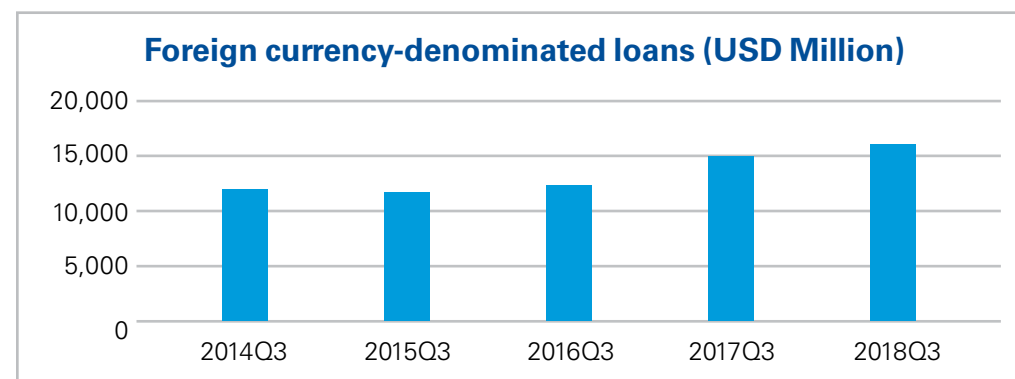
Foreign currency exposure

The Philippine banking system has 77 banks with authority to engage in foreign currency-denominated transactions. Foreign currency loans are typically denominated in LIBOR currencies, and they have been growing. Overall foreign currency denominated loans outstanding at the end of the third quarter of 2018 were approximately US\$16.1 billion.



In the derivative markets, exposure tends to involve relatively standardised contracts or agreements. Currency swaps and forwards account for more than half of overall derivative exposures by notional value, and they should be relatively easy to modify.

The Philippines-based responses in the KPMG surveys suggest that banks are at a relatively early stage in their preparations. Three of the banks indicated that they have not yet begun their client outreach. All indicated that they have very few models in play, and none had developed a project plan for the transition.



Source: Bangko Sentral ng Pilipinas (BSP) data

Singapore

Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
SIBOR, SOR	SORA	Multiple-rate approach indicated

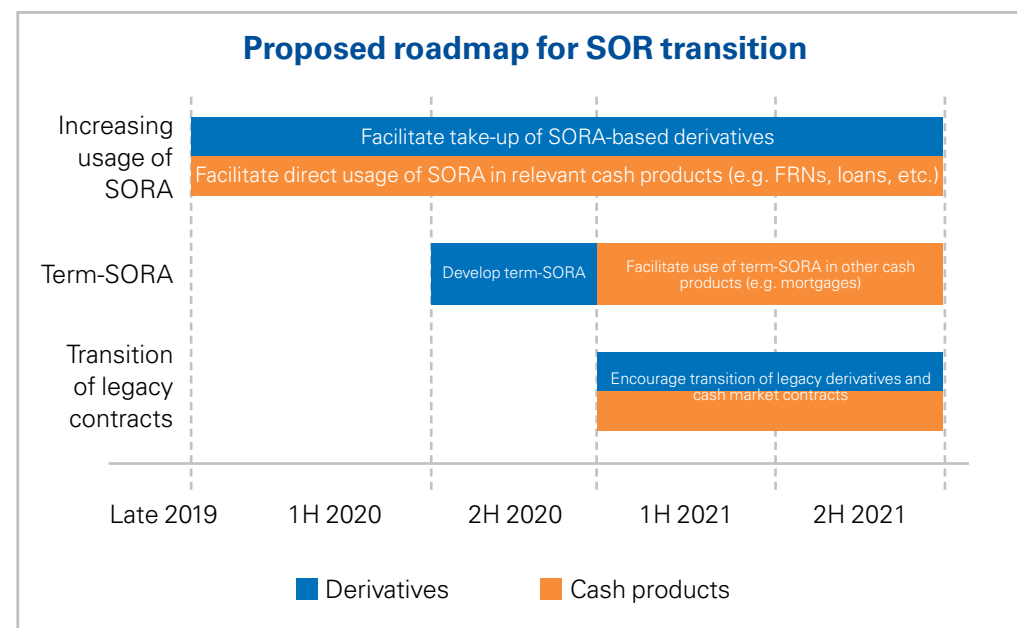
The Singapore interest rate benchmarks, SIBOR and SOR, are both administered by the Association of Banks in Singapore (ABS). SIBOR is used heavily in cash products and is being enhanced steadily. The main benchmark rate for derivatives (and certain cash products) is SOR, a rate derived from FX swaps, which takes USD LIBOR as an input.

The mechanical dependence of SOR on USD LIBOR made it untenable as a benchmark over the long-run, and in September, the ABS and Singapore Foreign Exchange Market Committee (SFEMC) flagged the Singapore Overnight Rate Average (SORA) as the likely replacement. SORA has a substantial history, and the six-month rate has been used extensively in the pricing of Singapore dollar derivatives. The ABS expects to complete the transitional testing by the end of December 2019.

SIBOR is likely to remain as a reference rate for cash products in any future state, on account of its familiarity and its provision of forward-looking term rates in the cash market.

The replacement process is still open for consultation, but the suggested indicative timeframes for the transition features an end-point that coincides with the transition for major LIBOR currencies. The process suggested by the ABS/SFEMC indicates that the renegotiation of legacy contracts can be substantially back-loaded.

Singapore's exposures to IBOR rates are likely to be very substantial, with BIS data indicating that all cross-border positions are held in foreign currency. This would suggest that the migration of foreign exchange positions could begin as soon as practicable, even if this means delaying the migration of domestic SOR exposures until a later phase.



Source: ABS, SFEMC



Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
BIBOR, THBFIX	Private repo market rates	N/A

Market participants in Thailand are well aware of the transition, since the end of LIBOR submission will directly affect the calculation of the Thai Baht Interest Rate Fixing (THBFIX), a transaction-based benchmark rate implied from the USDTHB FX swap. In addition, the global transition may steer the Bank of Thailand (BOT) towards reforming the Bangkok Interbank Offered Rate (BIBOR), which is still a survey-based benchmark rate. Impacts from the reform might be material for Thailand since THBFIX is predominantly used as the reference rate in various products, including loans, and interest rate and currency derivatives.

The Thai regulators have kept abreast of this change – the BOT has published a series of articles to summarise key changes, advise the market on implications, and provide policy recommendations based on survey results from a regional cooperative of central banks. Major banks have been requested to identify the level of risk exposure and to assess the impact. Also, a market survey is in the pipeline to take stock of Thai banks' progress on the transition plans.

With the Overnight Index Swap (OIS) market still in its infancy, interest rate futures that could be used to construct the term structure are also illiquid. The repo market is a prime candidate for the new domestic RFRs, within which the BOT has promoted transparency by making the private repo market rates available on its website. The rates are reported by counterparties entering repo transactions and grouped into seven tenors, comprising Overnight, 1-week, 2-week, 1-month, 2-month, 3-month, and Over-3-month. Market participants in Thailand are not yet referencing new financial contracts to the RFRs developed in major economies.

Summary of existing IBOR rates and alternative reference rates

Jurisdiction	Existing IBOR rate(s)	Alternative reference rate(s)	Status of the replacement
Australia	Reformed BBSW	AONIA (also known as Interbank Overnight Cash Rate)	No further change
New Zealand	BKBM	OCR (Official Cash Rate)	No further change
Hong Kong SAR	HIBOR	HONIA	Multiple-rate approach indicated
Indonesia	JIBOR	IndONIA	N/A
Japan	JPY LIBOR, JPY TIBOR, Euroyen TIBOR	TONAR (also known as TONA)	Multiple-rate approach indicated
Korea	CD rate, KORIBOR	N/A	FSC and BOK are yet to propose alternatives to CD rates
Malaysia	KLIBOR	AOIR	N/A
Philippines	PHIREF	N/A	N/A
Singapore	SIBOR, SOR	SORA	Multiple-rate approach indicated
Taiwan	TAIBOR	TAIBIR (Taiwan Bill Interest Rate)	No further change for TAIBOR
Thailand	BIBOR, THBFIX	Private repo market rates	N/A
Vietnam	VNIBOR	N/A	N/A

Key focus areas for banks in the next six months

Despite an increasing amount of regulatory and industry body dialogue across various jurisdictions in Asia Pacific, the findings from the survey and discussions with banks in the region suggest that banks are not yet ready for the IBOR transition. Banks in the region need to be proactive and accelerate their preparatory work, with a particular focus on the following key areas in the next six months.

1. Governance and oversight

A transition plan cannot be successfully executed without a robust programme structure and appropriate governance and oversight. An effective programme structure has the right level of top-down influence and bottom-up transparency, while allowing for flexibility, autonomy and efficiency for the cross-bank workstreams to focus on delivering results. While we are getting close to the end of 2019, banks should have already mobilised a transition programme which includes all relevant stakeholders within the bank, both horizontally and vertically, as well as appointed a programme leader to drive and monitor the transition effort.

2. Transition strategy

Although the details of the transition approach and timing have not been fully fleshed out by the regulators and industry bodies, banks should no longer take a “sit-and-wait” approach in developing different transition scenarios. They should instead take a proactive role in monitoring the evolution of the marketplace, and providing guidance to cross-bank workstreams on process change, remediation actions and timing, and risk management.

3. Impact assessment

Undoubtedly, the phasing out of LIBOR will have a significant impact on bank operations. Based on conversations with a number of banks, it takes at least six months to execute a full-scope assessment to identify LIBOR impacts from five different perspectives: exposure, contracts, models, systems and processes. Knowing the magnitude of the impact would allow banks to plan for remediation and transition before the end of 2021.

4. Client and internal communication

An effective communication plan should facilitate the identification, development and execution of key communication and training activities in each of the main stakeholder groups to mobilise the organisation and to minimise the impact on customers, along with operational, reputational and conduct risks.

OTHER KEY AREAS OF FOCUS IN 2020



Contract change management



Operations and technology remediation



Modelling remediation



Accounting and tax adjustments

How can KPMG help?

The LIBOR transition will require a cross-functional and geographic team with a detailed plan to successfully execute multiple changes. Many of the activities must be performed on an iterative basis. The end-to-end approach employed by KPMG firms supports banks from impact analysis and the establishment of governance, communication and execution strategies through to implementation of operational changes and ongoing monitoring of market and regulatory developments. KPMG firms combine their enterprise programme experience, industry experience, and KPMG tools and accelerators to bring a strong, cross-disciplinary team to support your bank's LIBOR transition programme.

KPMG professionals can help banks develop a 180-day plan containing assessment and planning objectives while laying the foundation for the multi-year journey. The 180-day plan typically includes the following:

Governance and ongoing monitoring

- Establishing a scalable governance framework that enables effective oversight and control across the programme.
- Designing a programme structure and governance framework.
- Designing programme management templates, including KPI / KRI dashboards.
- Designing and implementing data-driven project management dashboards and tracking tools, including execution tracking, engagement tracking and inventory tracking.
- Providing on-the-ground PMO and stakeholder management support.

Transition strategy

- Identifying possible transition scenarios for benchmark rate reforms in your jurisdictions.
- Evaluating key risks arising from, and considerations for, each of the transition scenarios and the respective transition strategy, and prioritising based on the risk assessment for each transition scenario.
- Developing a multiple-phase roadmap to outline key activities, high level timeline and responsible functional areas with reference to the risk assessment results.

Impact assessment

- Leveraging off KPMG professionals' deep subject matter expertise, analytical tools, templates and a strong PMO team, performing LIBOR exposure current status analysis for the five key areas: exposures, contracts, models, systems and processes.
- Utilising the KPMG Artificial Intelligence work flow tool, KPMG Ignite, to process a large volume of contracts, identify the impacted LIBOR contracts and propose contract amendments without extensive manual involvement.
- Designing the aggregated system map, data flows and data collection templates across the bank based on the current status analysis to show a full picture of LIBOR exposure.

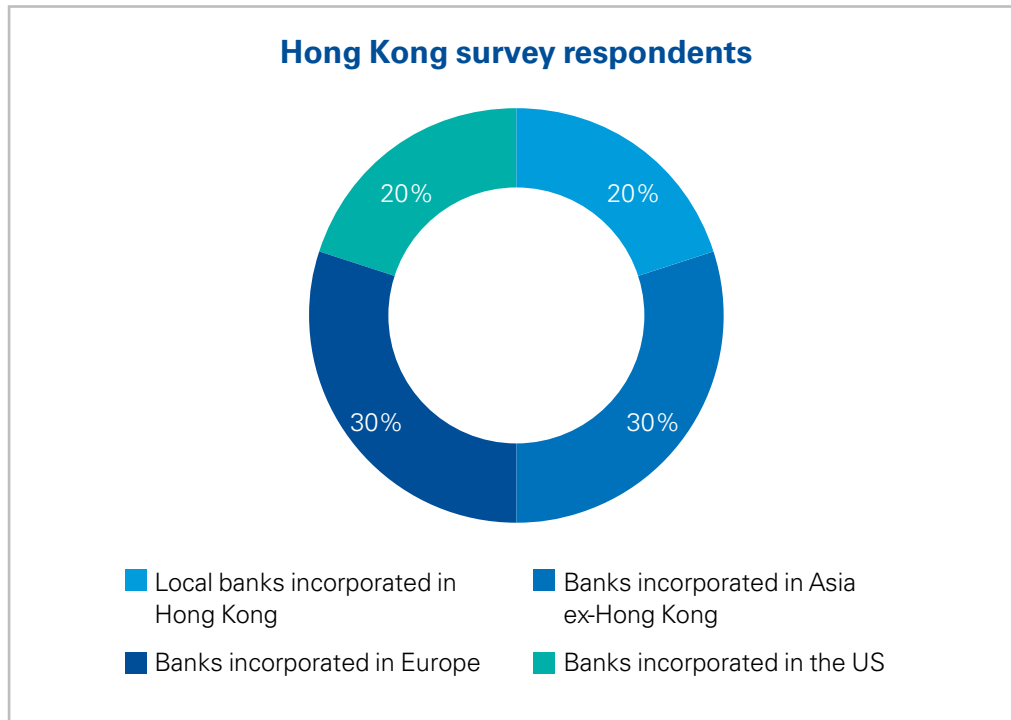
Client and internal communication

- Developing a detailed communication plan which includes deadlines for the identification, development and execution of key communication initiatives for the upcoming years.
- Designing client outreach materials for banks to secure client awareness in understanding key messages and ensuring alignment and a unified front for your organisation during the LIBOR transition.

Appendix: Hong Kong SAR analysis

Breakdown of respondents

There were a total of 10 responses from banks with operations in Hong Kong and in-scope for the LIBOR transition:

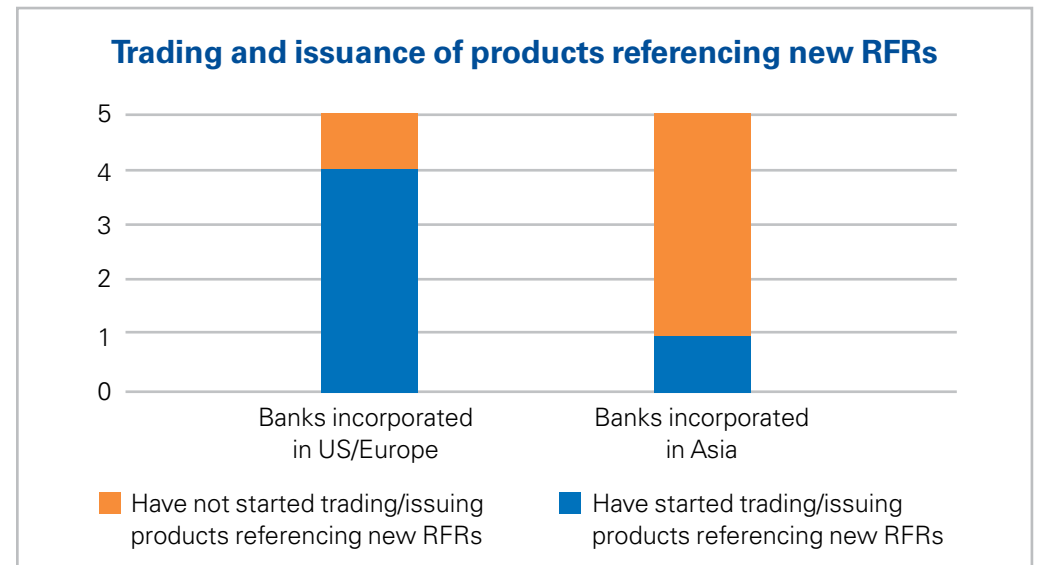


Source: ASPAC LIBOR Readiness Survey, KPMG International, 2019

Key survey findings

- In general, banks headquartered in the US/Europe are more advanced in terms of their readiness for the LIBOR transition. Possible reasons for this include:
 - Regulators in the US/Europe are more active in encouraging industry participants to prepare for the transition. International and regional banks tend to drive LIBOR transition preparation work for ASPAC from their head office. Four out of five banks headquartered in the US/Europe said they have had discussions with local regulators, while only one Asian bank – which is based in Singapore – has done so.
 - The discussions around new RFRs are mostly driven by the regulators and industry leaders in the US and Europe. Four out of five surveyed banks headquartered in the US/Europe indicated that they have started trading or issuing products referencing new RFRs, while only one bank in Asia has done so (see Figure 1).

Figure 1



Source: ASPAC LIBOR Readiness Survey, KPMG International, 2019

- Interestingly, none of the banks identified “quantification of exposures” as a key challenge in the LIBOR transition. In our view, some banks may have underestimated the effort and depth of the identification process. For example, some banks indicated that they have finished quantifying LIBOR exposure in the bank, but these banks also suggested that they are unsure about the approach for identifying the fallback language in the impacted contracts and/or systems affected by the transition.
- OTC derivatives, credit agreements and repos were cited as the financial products that will be impacted the most, which was consistent with previous survey responses from banks in the US and Europe.
- Seven banks have carried out internal awareness campaigns and education on the LIBOR transition.
- Litigation risk remains a key focus area for most banks. Six out of 10 respondents say that legal and litigation risk is their biggest concern around moving from LIBOR to the new RFRs. This is particularly important for banks whose clients have approached them to provide guidance on the transition. Banks should also continue to assess and manage conduct risk throughout the lifecycle to ensure that customers are treated fairly (see Figure 2).

Figure 2

Top concerns about the move from LIBOR to new RFRs*

Concern	Number of responses
Legal/litigation issues	6
New LIBOR replacement rates lacking liquidity	5
Client outreach	4
Transition scenario and timeline	4
Lack of industry consensus on transition approach and new RFRs	3

Source: ASPAC LIBOR Readiness Survey, KPMG International, 2019

*Respondents were asked to select all answers that apply

Governance and transition plan

While the responses represent a mix of banks incorporated in the US, Europe, Asia (ex-Hong Kong) and locally in Hong Kong, seven banks noted that they have decided to lead the regional transition out of their Hong Kong office.

70% of surveyed banks are leading the regional LIBOR transition out of their Hong Kong office.

However, out of the 10 responses, only one bank has finished forming a transition plan. The remaining banks are still in the process of, or are yet to start, forming a plan. That being said, six banks have already started planning for alternative scenarios for the LIBOR transition which is one of the expectations from the HKMA as indicated in their circular in March 2019.⁴

Five banks have started trading or writing products using the new RFR. Most of them are banks headquartered in the US or Europe, which is consistent with the more advanced market development of the new RFRs in those regions. Only one local bank, which is part of a large Chinese banking group, has issued new products with interest rate benchmarking to the RFRs.

⁴ <https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2019/20190305e1.pdf>

Impact analysis

The impact analysis on LIBOR exposure is currently a focus area for banks. The level of industry readiness is noticeably higher than in the first half of the year. Nine banks have defined a risk-based approach for exposure quantification, although only one bank plans to deploy artificial intelligence to conduct the analysis. Based on the initial quantification, the top three impacted exposures are OTC derivatives, credit agreements and repo transactions (see Figure 3). Most banks have contracts referencing LIBOR that expire after the end of 2021.

Figure 3

Top 3 exposures to LIBOR



Source: ASPAC LIBOR Readiness Survey, KPMG International, 2019

It is also promising to see that eight banks have put in place procedures to monitor impacted exposures over time, rather than simply at one single point of time. This echoes the FCA's expectation in its "Dear CEO" letter that banks should consider a range of quantitative and qualitative tools and metrics to monitor their exposure to LIBOR over time.

On the other hand, it is concerning to see that only three banks have considered the fallback language in existing contracts during the exposure identification exercise. Specifically, two banks indicated that they have finished quantifying LIBOR exposure in the bank, but these banks also suggested that they are unsure about the approach for identifying the fallback language in the impacted contracts and/or systems affected by the transition. It is important to note the different dimensions of identifying total LIBOR exposure. While contracts directly referencing LIBOR is one of them, it is also important and challenging to identify exposures indirectly referenced to LIBOR – and their fallback provisions – in order to determine the effective remediation approach.



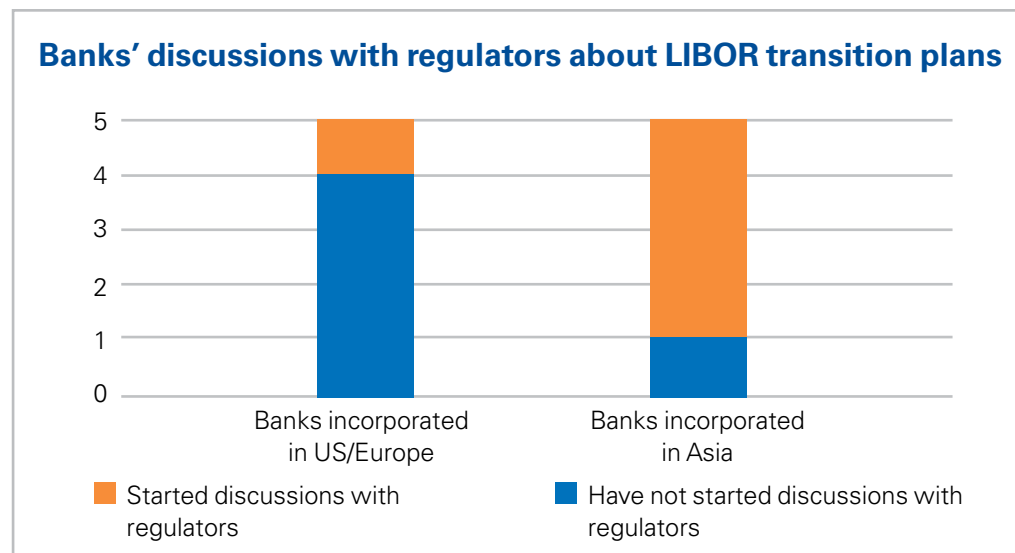
It is concerning to see that only three banks have considered the fallback language in existing contracts during the exposure identification exercise.



Internal, Client and Regulator Communication

Out of the five banks headquartered in the US and Europe, all but one have started discussing the LIBOR transition with their local regulators, partially due to regulator outreach, such as through their "Dear CEO" letters. At the time of the survey, only one bank in Asia – which has a regional base in Singapore – had done so (see Figure 4).

Figure 4



Source: ASPAC LIBOR Readiness Survey, KPMG International, 2019

Consistent with other markets, client outreach remains one of the biggest challenges for banks. Client outreach is closely associated with conduct risk, which is a key regulatory focus globally. Six out of 10 banks have not started developing their client outreach strategy. These banks may be exposed to higher conduct risk since they are yet to take action to communicate to their clients about the impact of the LIBOR transition. Only two banks, which are based in France and the US respectively, have reached out to their clients regarding the LIBOR transition.

With respect to internal communications, seven banks have conducted internal awareness and training sessions.

Contract remediation

All banks except one have involved their in-house legal department in the transition effort. Interestingly, four banks indicated that they have not considered litigation risk during the contract negotiation process. Litigation risk is generally considered lower for some products such as OTC derivatives which are governed by standard forms of documentation under ISDA. For certain other non-standardised products, they may involve a complex structural set-up and multiple classes of holders, which could make contract amendments challenging.



Interestingly, four banks indicated that they have not considered litigation risk during the contract negotiation process.



Model, system and accounting remediation

Undoubtedly, the phasing out of LIBOR has a tremendous impact on banks' models, systems and accounting. In many cases, these indirect exposures are embedded in the bank and the search adds an additional burden to a bank's transition effort. Centralised model and system documentation would facilitate a more effective impact analysis. Among the responses, four banks have centralised model documentation, with three of them expecting that more than 50 models will be impacted by the LIBOR transition.

From an accounting perspective, the Financial Accounting Standards Board issued multiple guidelines on the preparatory work arising from the LIBOR transition, particularly in hedge accounting. In our survey, four banks have begun assessing the financial impact.

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