Welcome to 2016’s first issue of ANZ Financial Institutions Group’s (FIG) Issues that Matter publication.

Heightened levels of volatility will likely remain a key feature of present market reality, creating a challenge to generate returns for investor portfolios. Further, ongoing regulations for “Systemically Important Financial Institutions” (SIFIs) are driving up potential compliance and capital costs of doing business for Financial Institutions. Combined with increasing expectations of investor clients driven by digitization of services, the current environment poses many challenges for Financial Institutions.

However, opportunities can arise when we try to understand the challenges and develop steps to tackle these. For example, ongoing bank regulatory reforms point towards increasing capital requirements: bail-inable debt (TLAC) is a key initiative with far reaching implications for banks. This will likely result in additional issuance requirements that expands the investment alternatives available to non-bank investors, e.g. insurance and funds, noting banks probably can’t and won’t hold these securities due to regulatory penalties. Further, given nascent nature of such TLAC and emerging asset classes such as Green Bonds, it will be important for investors to understand the benefits and risks, and how such assets could benefit their investment strategy and portfolios.

We are pleased to share a range of topical articles triggered by our discussions with Financial Institution clients over the last six months, particularly around performance of Asia Pacific currencies, emerging asset classes such as Green Bonds, evolving investor expectations and Bail-inable debt of SIFIs (TLAC).

We sincerely hope you enjoy the read and welcome your feedback.

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ASIA PACIFIC CURRENCIES IN A FED TIGHTENING CYCLE

BACKGROUND
In December, the United States Federal Reserve (the ‘Fed’) raised interest rates 25 basis points, marking the first time in nine years the central bank has hiked rates. The move was well-telegraphed and anticipated by the market leading ANZ Research to test a “buy-the-rumour, sell-the-fact” pattern around major currencies against the United States Dollar (USD).1

They found that, looking at past Fed tightening cycles, major currencies tend to weaken against USD heading into the start of a Fed hiking cycle, but rebound following the first rate increase. However, the pattern is more varied against a basket of Asian currencies.

A CLOSER LOOK
ANZ’s financial institutions clients predominantly have operations in Asia Pacific (APAC) countries with exposure to local currencies, as well as the USD and Euro (EUR). Anecdotally, the FIG team saw large payments flows in AUD, USD, SGD from Malaysia and Indonesia as corporates and sophisticated retail clients alike anticipated local currency depreciation and sought to prepay future expenses in those currencies.

It seems intuitive and most Asian currencies have indeed weakened significantly in the lead up to the Fed’s tightening cycle, but how they will perform now that the cycle is underway remains uncertain. Further, ANZ acknowledges that volatility stemming from China’s rebalancing creates a whole new environment this time round for currencies, particularly those in the APAC region.

However, with many clients reconsidering their hedging strategies in this time of heightened volatility, ANZ has sought to provide the historic performance context of APAC currencies over the course of the four longest tightening and easing cycles from the past 25 years.

FIGURE 1
Fed Funds Target Rate time series with cycles shaded

![Fed Funds Target Rate time series with cycles shaded](image-url)

- Sources: Bloomberg, ANZ Analysis

*In the two most recent prolonged rate hiking cycles, many currencies actually strengthened against USD*

Contrary to expectations, most of the currencies shown strengthened vs. USD while the Fed was raising U.S. interest rates.

1 “How Will Asia FX Fare Following a Fed Rate Hike?” (ANZ Research, 8-Dec-2015)
FIGURE 2
Currency Movements in Rate Hiking Cycles

- For the Feb 1994 – Feb 1995 cycle, the sole exception was Indonesian Rupiah (IDR), which depreciated by 3.3%.
- From June 2004 – June 2006, the only currency to weaken against USD was the Japanese Yen (JPY), which generally tends to behave differently from other Asian currencies because of its role as a “safe haven” currency.

Although these results should not be taken as conclusive evidence that currencies strengthen against the USD while U.S. rates are rising, they do suggest that the relationship is not always as straightforward as commonly assumed. USD has appreciated significantly against most currencies in recent months in anticipation of the Fed’s eventual move, so it is possible that the rate increase is already largely priced in.

Results during the two easing cycles are fairly mixed, with no clear trend.

Conversely, USD is generally expected to weaken when the Fed begins loosening monetary policy, as lower U.S. rates make investments in other currencies relatively more attractive.

FIGURE 3
Currency Movements in Rate Easing Cycles

- From Jan 2001 – June 2003, when the Fed lowered rates by 550bp over 2.5 years, the Australian Dollar (AUD), IDR, Korean Won (KRW) and EUR appreciated against USD, while the Singapore Dollar (SGD), Philippine Peso (PHP) and JPY depreciated.
- In the easing cycle that began in Sep 2007, every currency except the JPY and SGD weakened, with the Global Financial Crisis creating a broad “risk-off” mentality that hurt most currencies, and benefited JPY because of its safe haven status.

SHARING OUR INDUSTRY INTELLIGENCE WITH CLIENTS

The analysis suggests that the relationship between U.S. interest rate cycles and APAC currency performance is not as clear as commonly believed.

Currency movements are driven by many factors besides Fed policy or interest rate differentials, and since markets are forward-looking, it could be the case that the expected USD appreciation has largely taken place before the Fed began raising rates.

ANZ FIG have had a number of FX hedging conversations with investor clients, particularly those with assets in APAC, in particular China and Indonesia, where currency fluctuations can have material impacts on returns as well as loan to value (LTV) covenants on USD denominated bank facilities.

Please reach out to your FIG banker if you would like to discuss terms relevant to loan document hedging requirements; best practice approaches to currency risk management; and/or structuring and assessment of various FX hedging alternatives to achieve specific objectives, including for example, target returns, accounting and cash flow impacts.

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For further detail or any questions, please contact GlobalFIGInsights@anz.com or call your ANZ relationship banker directly.
PAINTING THE CAPITAL MARKETS GREEN

BACKGROUND
In December 2015, the participating 195 countries of the 2015 United Nations Climate Change Conference agreed, by consensus, in ‘the Paris Agreement’ to reduce emission with the aim of keeping global warming below 2°C.

However, in the years preceding this conference, we have seen the fallout from the Global Financial Crisis (GFC), Euro Crisis and ongoing market uncertainty making it more difficult for governments to budget for infrastructure investment, green or otherwise. Likewise utilities stocks have been hit hard by falling equity valuations, while bank asset financing has shifted away from long-dated capital intensive infrastructure exposures.

FIGURE 1
New Investment in Clean Energy – falling short of requirements

Over 2014, roughly US$318bn flowed to new clean energy investment (US$188bn to asset finance), falling well short of the incremental investment needs of $1trn per annum estimated by the International Energy Agency.

WHO IS PLUGGING THE SHORTFALL?
In our last edition of Issues that Matter, ANZ’s Financial Institutions Group highlighted that infrastructure as an asset class is best suited to multigenerational investors, such as pension funds and sovereign wealth funds. These investors have the long term mandate and financial wherewithal to withstand intermittent periods of turbulence as well as regulatory, accounting or restrictive investment policies that can disincentivise long-term investment. However, to encourage a broader range of investors and fill the near US$700m shortfall, financial innovation is vital with all eyes on capital markets.

Source: Bloomberg New Energy Finance (Q3, 2015)

3 International Energy Agency (www.iea.org)
Green bonds represent a new hope for clean energy infrastructure funding, with 5 year CAGR over 60% in this burgeoning new market.

**WHAT ARE GREEN BONDS?**

In simple terms, Green Bonds are bonds whose proceeds are used to finance or refinance climate-friendly or environmentally-friendly projects. There are three broad guidelines which most Issuers have relied on:

1. **World Bank** – World Bank Green Bond Project Selection Criteria with projects to be selected by World Bank environmental specialists
2. **Climate Bonds Initiative (CBI)** – Climate Bonds Standard
3. **International Capital Markets Association (ICMA)** – Green Bonds Principles

**SUITABILITY FOR COMMERCIAL BANKS**

Initially the domain of development banks only, Green Bonds have become a staple of ANZ DCM discussions with commercial banks. Net proceeds are used to finance projects with environmental benefits such as renewable energy, energy efficiency, sustainable transport, sustainable water management, sustainable waste management and sustainable land use. Such projects may not typically be prioritised by the bank due to the long-term and capital intensive nature of infrastructure funding, which has been disincentivised under Basel Committee of Banking Supervision’s (BCBS) regulatory reforms.

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**FIGURE 2**

**Green Bond Issuance**

Green bonds represent a new hope for clean energy infrastructure funding, with 5 year CAGR over 60% in this burgeoning new market.

Source: Climate Bonds Initiative (www.climatebonds.net)
“Green bonds allow banks to sell bonds beyond their traditional investor base. We haven’t seen lower borrowing costs, but there is certainly an increase in volume as a broader investor set participates”, says Bhavik Pandya, Director, DCM.

“Using the Climate Bonds criteria enabled us to leverage our position as a leading financier to the renewables and commercial buildings sector in Australia in order to successfully issue a green bond. Not only was feedback positive during our roadshow particularly with regards to use of criteria and the disclosure obligations that flow from that, but also our customers, whose assets are included in the bond were very supportive” says Katharine Tapley, Director, Sustainable Finance Solutions at ANZ.

In 2015, ANZ self-led an AUD600m 5 year green bond in Australian domestic markets as well as a USD350m 5 year green bond debut issue for IDBI – the first USD green bond from an Indian commercial bank.

Both issuers developed a framework using the Green Bond Principles, developed by ICMA, although the approach diverged. ANZ’s green bond was certified pre-issuance by the Climate Bonds Initiative, following successful verification by Ernst & Young, while IDBI issued on the basis of a Green Framework developed using Green Bond Principles with the intention to seek third party verification for their reports on use of proceeds going forward.

ANZ’s Financial Institutions Group, together with the Capital Markets team, works with bank issuers to structure green bonds that meet the high standards demanded by green bond investors. “One of the positive impacts of both green bond issuances was the visibility and press for both IDBI and ANZ. I think demonstrating being able to deliver into the green agenda by issuing green bonds has really added to their reputations globally”, comments Arshad Khan, Director, FIG India.

ANZ’s Group Treasurer, Rick Moscati commented at the time of ANZ’s issuance that “We have developed the bond in response to investor demand and to deliver on our commitment to deploy capital for the transition to a low-carbon economy”. ANZ’s order book attracted investors who had never before participated in bond issues from ANZ, resulting in a highly successful, oversubscribed and granular order book.
ALIGNING WITH INVESTOR CLIENT EXPECTATIONS IN ASIA PACIFIC

BACKGROUND

In consumer banking, a prominent university experiment concluded that if your retail bank is arms-length with strong services, consumers are not bothered by paying for help with banking needs. However, if the bank uses a friendship-based sales model, it is supposed to help you out when you need it without expecting direct compensation.4

ANZ FIG, as part of the broader Institutional business, subscribes to several client surveys, but unlike consumer industries, we have no specialist teams of behavioural psychologists analysing the human experience around the services offered. While our team are not ‘jumping’ on just any social occasions and face-to-face meetings with clients, as the broader industry grapples with cost pressures, regulatory reforms, computer modelling, disintermediation and slowing growth, it is clear that product commoditisation is well underway and clients are increasingly favouring a ‘self-serve’ approach, with less face time, for all but the most strategic discussions.

HIGH EXPECTATIONS FOR CUSTOMER EXPERIENCE

FIG Investor clients have a sophisticated, commercial mindset and for many years, the major focus of innovation efforts has been on the product side. However, global competition, regulations and technology diffusion make it easy for competitors to quickly match most improvements and marginalise incremental gains. More and more of our investor customers are interacting directly through platforms and back office, conducting transactions through a ‘self-serve’ model. The key point of differentiation for ANZ in our Asia Pacific (APAC) home markets is increasingly customer experience innovation via straight through processing (STP) and enhanced operations.

“Digitisation has transformed much of the volume driven products transacted in the Financial Institution segment into flow business and, as a result, most of our FIG customers are driven not just by price, but timely execution and delivery” says Peter Murray, Head of Customer Engagement, Global Markets Operations. “Our FIG customers can be the most complex segment to service – and they have the highest expectations for customer platform STP and service experience. This challenge has driven ANZ to invest in and improve our operational platforms and implement our Global Client Service model to ensure our FIG customers are receiving the best execution and service they deserve.”

REGIONAL DIFFERENCES IN ASSET MANAGER SERVICE OPERATIONS

In North America, Europe, Japan and Australia where the funds and insurance market is mature, ANZ’s asset manager (AM) clients, or the custodians servicing their operations, have invested substantially in their back office platforms and STP. When empanelling banks, these sophisticated, global clients may have a ‘no fail’ policy, while others will have operational capabilities comprising up to 30% of their decision-making. Meanwhile in Asia, less investment in STP and back office operations is evident; however the expectations of ANZ’s Asian investor clients are no lower. Exhibit 1 highlights some key outputs from PwC’s 2015 COO survey.5

4 The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior; Pankaj Aggarwal; Journal of Consumer Research; Issue: 31 (June); 2004; Pages: 87-101
5 Asia Investment Management COO Survey 2015 (PriceWaterhouse Coopers and Stradegi)
FIGURE 1
Best Practices Adoption Rate – Asian Asset Managers vs Global Asset Managers

“…Asian players have a tendency to lag behind their global counterparts in best practice adoption…”

“A majority of asset managers scored their operations higher than what is borne out by the actual adoption of best practices…”

“…Asian asset managers are still trying to establish the performance and risk functions, whereas global players are moving up the value chain and are looking to offer good fixed income attribution and robust reporting…”

“…Cost seems to be the main driver for Asian asset managers… whereas global players considered strategic significance of the function as the key driver…”

<table>
<thead>
<tr>
<th>Best Practices Adoption Rate</th>
<th>Global AMs</th>
<th>Asian AMs</th>
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</thead>
<tbody>
<tr>
<td>Technical development governance framework</td>
<td>71%</td>
<td>40%</td>
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<tr>
<td>Internal service levels documented, regularly measured and reported</td>
<td>71%</td>
<td>60%</td>
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<td>Process to define fund jurisdictional structures</td>
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<td>Pricing error accountability and escalation process</td>
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<td>Valuation and performance error reporting process</td>
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<td>Compliance with the Global Investment Performance Standards</td>
<td>79%</td>
<td>50%</td>
</tr>
<tr>
<td>Transaction cost analysis process to validate best execution</td>
<td>86%</td>
<td>50%</td>
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</table>

CHANGING RELATIONSHIPS AS LOCAL CAPABILITIES DEMANDED

“ANZ FIG has to be fully aligned with our customer-facing service operation teams. These teams are increasingly seen as a critical contact point for FIG clients, satisfying high expectations and building long-term trust through consistently smooth customer experiences and timely responses”, says Mark Harding, Financial Institutions Group, South East Asia.

Anecdotally, ANZ is witnessing a changing relationship between asset managers and previously dominant global market-makers, with bigger investor clients moving away from a core group of counterparties, to a selection with capabilities more suited to the financial instruments they wish to trade. This is partly explained by global market makers’ hefty cost to serve pass-through to clients, with the Committee on the Global Financial System (CGFS), finding that “compressed pricing of immediacy services observed in the past will give way to liquidity premia more consistent with actual market-making capacity and costs… in determining the degree and price of immediacy services for a given client, these banks break down the cost of all resources allocated to the client (e.g. trading, sales coverage, research) and compare them with all direct and expected downstream ancillary revenues”.

Regional Banks, with local Asian presence, have taken up the mantle, aligning infrastructure and building capabilities to accommodate the predicted increase in Asian currency volumes and inventory demanded as the market develops. To meet the high expectations of global and Asian FIG investor clients alike, banks require strong offshore balance sheets and committed local presence, to offer a complete product suite, spanning G10 and local currency with appropriate customer servicing and engagement to ensure execution success.

SHARING OUR INDUSTRY INTELLIGENCE WITH CLIENTS

Intra-Asia flows account for ~US$3 trillion per annum, larger than flows between Asia and Europe or between Asia and the US. ANZ expect that to account for 60% of global GDP by 2050. It has become an opportunity too large for FIG’s clients to ignore and a critical investment for ANZ’s Global Markets business.

However, as banks’ balance sheets have to be more carefully managed due to the more stringent capital and liquidity requirements imposed by the BCBS, global investment banks have been pulling back from the Australian and emerging Asia market, either unable or unwilling to take on more risk in a sector strained by thin liquidity.

5 Asia Investment Management COO Survey 2015 (PriceWaterhouse Cooper and Stradegi)
6 CGFS Papers No 52 “Market-making and proprietary trading: industry trends, drivers and policy implications (November 2014)
7 International Monetary Fund (IMF), ‘Asia and Pacific: Still Going Strong’, October 2014, ANZ Research
8 Risk.net (Sep 09, 2015), ANZ analysis
Against this backdrop, ANZ has built the capability to process significant volume increases across both G10 and the full range of Asian Non Deliverable Forwards and Deliverable Currencies, including frontier markets like VND, PNG and FJD. Recognising that FIG clients require STP to be an increasingly larger portion of transaction volumes, ANZ has worked with clients to achieve this primary goal to meet their specific requirements, while also developing a customer service team with FIG expertise to manage escalations and keep resolution time & costs to a minimum. In parallel, customer experience has been prioritised with quality, consistency, risk and cost-effectiveness at the fore encompassing 24/5 access and trading desks in places such as London, New York, Hong Kong, Singapore, Tokyo, Sydney, Melbourne and Wellington supported by customer servicing in nearly 20 countries around the globe.
PART 1 - TLAC TRACTION IN ASIA PACIFIC: APPLICATION

BACKGROUND

Australian Prudential Regulation Authority (APRA) Chairman, Wayne Byrnes’ “Six Issues for 2016” speech forewarned that Australia “will not be alone in extending the TLAC regime beyond G-SIBs”. In part one of our two-part analysis, ANZ has sought to understand how application of the Financial Stability Board’s (FSB) Total Loss Absorbing Capacity (TLAC) standards beyond Global Systemically Important Banks (G-SIB) may work in Asia Pacific (APAC).

Unlike the framework for G-SIBs, the Basel Committee of Banking Supervision’s (BCBS) Domestic Systemically Important (D-SIB) framework is principles-based and allows national authorities the discretion to adopt the appropriate measures to accommodate the structural characteristics of their financial systems. Including Australia, there are eight Asia Pacific countries that are members of the FSB – Australia, China, Hong Kong, India, Indonesia, Japan, Singapore and South Korea. Of these eight, all but Indonesia have published a first list of D-SIBs to which higher loss absorbency requirements apply. For Indonesia, we have made the assumption that PT Bank Mandiri (Persero) Tbk, PT Bank Rakyat Indonesia, Bank Central Asia Tbk and PT Bank Negara Indonesia will be the declared D-SIBs.

FIGURE 1

D-SIBs of FSB member countries

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• Pillar 1 TLAC higher of:
  1. ≥16% of consolidated Risk Weighted Assets (RWA) by end-2019, rising to ≥18% by end 2022; and
  2. ≥6% of BCBS leverage ratio denominator in 2019, rising to ≥6.75% by 2022

• G-SIBs headquartered in emerging market economies (EMEs) have until 1 Jan 2025 and 1 Jan 2028 on above targets respectively (accelerated if bank/corporate debt issuance >55% of GDP)

• Pre-funded industry commitments (i.e. Deposit Insurance Scheme) can contribute up to 3.5% of RWA TLAC

• Those banks designated as G-SIBs after 2018 will have 36 months to comply

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</table>

Source: Prudential Regulators, FSB, ANZ Analysis, SNL (12/1/16)
Notes: Foreign relates to majority ownership, D-Sibb = National D-SIB Buffer; G-Sib relates to designation of entity or parent entity designation, G-Sibb = G-SIB Buffer; MCR = Minimum Capital Ratio; CCB = Capital Conservation Buffer; CCyB = Countercyclical Capital Buffer; CAR = Capital Adequacy Ratio per latest report; For all the banks, D-Sibb and CCB used are as of end of transition period while CCyB is for the current transition period; ANZ: Australia and New Zealand Banking Group Limited, CBA: Commonwealth Bank of Australia, NAB: National Australia Bank Limited, WBC: Westpac Banking Corporation, ABC: Agricultural Bank of China, BOC: Bank of China, CCB: China Construction Bank, ICBC: Industrial & Commercial Bank of China, BoCom: Bank of Communications Co., Ltd., HSBC: Hongkong and Shanghai Banking Corporation Limited, BOC: Bank of China (Hong Kong) Limited.

FIGURE 2
National Finishes BCBS

<table>
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<tr>
<th>Country</th>
<th>CET1</th>
<th>AT1</th>
<th>T2</th>
<th>MCR</th>
<th>CCB</th>
<th>CCyB</th>
<th>CCB+CCyB</th>
<th>MCR+Buffers</th>
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<td>10.5%</td>
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</tr>
</tbody>
</table>

FIGURE 3
Key G-SIB TLAC Requirements

- Pillar 1 TLAC higher of:
  1. ≥16% of consolidated Risk Weighted Assets (RWA) by end-2019, rising to ≥18% by end 2022; and
  2. ≥6% of BCBS leverage ratio denominator in 2019, rising to ≥6.75% by 2022
- G-SIBs headquartered in emerging market economies (EMEs) have until 1 Jan 2025 and 1 Jan 2028 on above targets respectively (accelerated if bank/corporate debt issuance >55% of GDP)
- Pre-funded industry commitments (i.e. Deposit Insurance Scheme) can contribute up to 3.5% of RWA TLAC
- Those banks designated as G-SIBs after 2018 will have 36 months to comply
NATIONAL REGULATORS EMPOWERED

The biggest concerns heard by ANZ FIG from Asia Pacific Bank clients related to the structural bias towards holding company structure and the 33% external debt requirement originally flagged in the FSB’s November 2014 consultation. The final standards released have somewhat mitigated these concerns with:

(a) authorities permitted to adjust loss-absorbing requirements for international lenders organised into subsidiaries, such that they are not disadvantaged; and

(b) the proposed 33% of TLAC required to be in the form of long-term debt has been relegated to an ‘expectation’, which is not mandatory at a supra-national level, but may be imposed or exceeded by home authorities.

These two measures, allow for the regulator to exercise national discretion such that Asia Pacific banks, most of which are predominantly deposit funded, will not require a drastic shift of their liabilities away from deposits towards external issuance, although we expect some incremental volumes to be required.

“The FSB’s standards allow those banks designated as G-SIBs after 2018, 36 months to comply. How much time national regulators provide for APAC D-SIBs is still unknown, and probably depends on the extent of action required by D-SIBs to comply as well as investor market depth”, says Brenda Trenowden, Financial Institutions Group, Europe.

ROUTES OF APPLYING TLAC

Many APAC regulators are consulting on enhancements to their resolution regimes for financial institutions. These recovery and resolution plans will likely see some form of statutory bail-in regime appropriate to TLAC. However, as was done for Asia Pacific banks’ regulatory capital under Basel III, it is likely that some form of contractual loss absorbency or recognition of bail-in will be required by national regulators in this region to complement statutory bail-in powers.

Clarity of a statutory regime in terms of non-viability and related loss absorption, particularly pertaining to timing and process, is often viewed favourably by investors and rating agencies. “We saw this with South Korean and Japanese regulatory capital bonds. These bonds had contractual loss absorption clauses, but investors took comfort that the statutory regime stipulated that non-viability can only occur when the bank is on the brink of failure and not earlier. Moody’s landed on one less notching down”, says Kang Jae Kim, Global Head, Financial Institutions DCM.

Regulatory capital instruments remain an attractive avenue for Asia Pacific D-SIBs to boost both their total capital adequacy as well as meet future TLAC requirements. ANZ analysis of Asia Pacific D-SIBs’ use of Additional Tier 1 (AT1) and Tier 2 (T2) securities to meet minimum capital requirements shows considerable reliance on common equity tier 1 (CET1) even after two full years of Basel III and market acceptance of the new loss absorbing security structures.

FIGURE 4

Use of regulatory capital tiers to meet MCR

Left bar represents minimum CET1 ratio, Middle bar represents implied AT1 capacity using minimum Tier 1 ratio, Right bar represents implied T2 capacity using minimum capital adequacy ratio.

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</tbody>
</table>

Sources: SNL, (2/11/16), ANZ Analysis, National Regulators
Notes: AT1 instruments have been issued by Singaporean banks, but have been fully utilised absorbing deductions and are therefore not shown as contributing to MCR. Wherever existing AT1 or T2 capital is lower than the implied capacity, the gap has been filled by the next higher tier of available existing capital.
SHARING OUR INDUSTRY INTELLIGENCE WITH CLIENTS

ANZ FIG, DCM and Syndicate engage regularly with investors, regulators and issuers alike on reforms, such as TLAC. While reforms are still ongoing with limited clarity at this stage on what the final requirements will be for TLAC eligible debt securities in Asia Pacific, we do expect that more bank issuers will want to make use of regulatory capital instruments within the minimum capital requirements and up to other binding constraints, such as the leverage ratio (i.e. for AT1).

Our analysis in exhibit 4 shows significant capacity for regulatory capital instrument issuance, particularly AT1. The market for AT1 instruments remains nascent in many Asian local currencies, especially relative to T2, however ANZ expects that the higher outright yield will appeal to investors, especially as they factor in expectations of a steepening USD rates curve and its impact on rates.
PART 2 - TLAC TRACTION IN ASIA PACIFIC: ISSUANCE

BINDING CONSTRAINTS
In part two of our two-part analysis, ANZ has sought to understand the quantum of issuance that may be required from D-SIBs in APAC to meet the potential TLAC standards for D-SIBs in their home countries.

The analysis assumes:

- D-SIBs meet 6.75% leverage ratio equivalent to Tier 1 capital divided by the BCBS leverage exposure denominator using AT1 to meet existing shortfalls
- Where the leverage ratio is not reported, ANZ have used Tier 1/Total Assets as a proxy ratio
- ANZ notes that in some jurisdictions, regulators may impose compositional requirements (i.e. in the UK at least 75% of the Tier 1 capital contribution to the leverage ratio must be in the form of CET1)

- D-SIBs meet 18% of consolidated RWA in TLAC-eligible securities
- TLAC eligible securities include regulatory capital instruments excess to MCR requirements; senior unsecured bonds issued to wholesale investors with >1 year residual tenor; and for Japanese banks, a 3.5% of RWA inclusion of prefunded contributions to the FSA’s deposit insurance scheme.

TLAC LEVERAGE RATIO OF 6.75%
Within the APAC region, leverage for banks is typically lower than in Western countries, particularly when RWA/Assets is considered. However, Asia Pacific D-SIBs also have substantial exposure to low risk weight assets including state-owned enterprises, public sector debt and trade finance assets. When these exposures are taken on-balance sheet according to the leverage exposure measure, there will be some banks that need to raise Tier 1 capital levels to meet a 6.75% minimum TLAC leverage ratio if imposed.

“The sheer size of the leverage ratio denominator will mean that banks need to act early on the Tier 1 numerator to shift their leverage ratios higher”, says Giao Pik Ho, Financial Institutions Group, South East Asia.
Some banks will need to raise Tier 1 capital levels to meet a 6.75% TLAC leverage ratio. The quantum of extra Tier 1 capital to meet the leverage ratio is likely to be much higher than for MCRs.

### Figure 5
Reported Leverage Ratios of Asia Pacific D-SIBs

Source: SNL (11/1/16)
Note: The banks with no bars in the chart represent that they already meet the LVR requirement.

### Figure 6
Leverage Exposure Measure and Leverage Exposure Measure/RWA – APAC Banks (USDbn)

Leverage Exposure measure is a much larger denominator, therefore the quantum of extra Tier 1 capital to meet the leverage ratio is likely to be much higher than for MCRs.

### Figure 7
Incremental AT1 required to meet leverage ratio shortfall, AT1/RWA ratio if AT1 used to meet leverage ratio shortfall (USDbn)

BCBS MCR implies an optimal 1.5% AT1/RWA ratio (except China, 1%). However to meet LVR using AT1 (if permitted), several banks would need to issue AT1 in excess of this, with markers highlighted orange where AT1/RWA > 3%.
TLAC-ELIGIBLE SECURITIES TO MEET 18% OF CONSOLIDATED RWA

The TLAC buffer sits between MCR and capital buffers, including the capital conservation buffer (CCB), countercyclical capital buffer (CCyB), and domestic or global systemically important bank buffers (D/G-SIBB). That means that Singapore and India’s higher MCR requirements may be a boon because TLAC will fully encompass MCR, while buffers apply in addition.

Based on the buffers outlined in part 1 of our analysis, that means TLAC + CET1 buffers will be at a minimum of 20.5%, based on Singapore’s inclusion of a D-SIBB in MCR, rather than within CET1 buffers in excess of TLAC. Meanwhile, for Hong Kong G-SIB HSBC, TLAC + buffers will be at least 23.625%.

FIGURE 8
TLAC requirements within bank capital composition

![Diagram showing TLAC requirements within bank capital composition](Source: FSB)

FIGURE 9
TLAC plus regulatory capital buffers requirement compared to existing Regulatory Capital (USDbn)

Only 2 banks, Norinchukin Bank and Daiwa Bank meet TLAC plus CET1 buffers using their existing capital base. Most banks will need to consider options to address their shortfall.

![Diagram showing TLAC plus regulatory capital buffers requirement compared to existing Regulatory Capital](Source: SNL (11/1/16)

Note: For all the banks, D-SIBB and CCB used are as of end of transition period while CCyB is for the current transition period

Most Asia Pacific D-SIBs hold enough CET1 to meet minimum CET1 requirements and CET1 buffers if they maximise use of regulatory capital issuance to meet MCRs. Only Norinchukin Bank and Daiwa Bank would meet TLAC plus CET1 buffers using their existing capital base, even where their prepaid contributions to the deposit insurance scheme are included up to 3.5% of RWA.
FIGURE 10
TLAC Shortfall and TLAC Shortfall as a percentage of total outstanding senior, unsecured bonds with residual tenor > 1 year (USDbn)

Issued debt securities can be restructured, preferably over a manageable timeframe, as and when they fall due for refinance, to include a TLAC bail-in clause or alternatively statutory changes to reflect bail-in and resolution. However not all banks have the quantum of outstanding debt securities with residual tenor > 1 year to address a TLAC shortfall.

Source: SNL (11/1/16)

Most Asia Pacific G/D-SIBS, excluding Australia, have TLAC shortfalls which are substantially greater than existing external liabilities that could be replaced with TLAC-eligible securities. The Chinese G/D-SIBS have by far the largest TLAC shortfall to address in terms of volume, dwarfing the total TLAC shortfalls of the remaining APAC countries. This shortfall has implications on future term funding profiles as well as potential impacts on net interest margins and consequently shareholder returns.

SHARING OUR INDUSTRY INTELLIGENCE WITH CLIENTS

While TLAC is not a measure for 2016, ANZ expects that requirements for bail-in of securities and higher loss absorption for D-SIBs will be on the horizon for APAC D-SIBs. The key question is one of timing and whether statutory bail-in, assuming such path, will require a contractual complement that can be embedded in debt terms as existing liabilities are refinanced and/or new bonds issued.

If your institution would like a discussion with our DCM and FIG experts on what TLAC might mean for a particular jurisdiction, please contact your relationship banker directly for more detailed commentary.

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