

MANAGING INTEREST RATE RISK IN A LOW INTEREST RATE ENVIRONMENT – CONSIDERATIONS FOR LIFE INSURERS

BACKGROUND

Post-Brexit, as global interest rates were further lowered, life insurers continue to be challenged with managing their businesses in this unprecedented, persistent global low interest rate environment. Global interest rates have been on a downward trend during the past 10 years, and for most currencies currently close to all-time lows [Exhibit 1].

Life insurers face immediate two-fold challenges:

i a structural challenge predominantly driven by the mismatch between long-dated liabilities vs. shorter dated assets. This mismatch tends to be exacerbated in declining interest rate environments, eroding insurer's economic value of equity as the value of liabilities increases more than the value of shorter dated assets; and ii reduced investment returns in a low interest rate environment. This is a particular problem for life insurers which have large guaranteed return portfolios.

In markets with recent monetary tightening or the expectation thereof, insurers are concerned with sharp interest rate hikes. Any increase in policy surrenders could potentially result in realised losses due to forced selling of favourable yielding fixed income assets currently held in order to cover surrender benefits.

THE IMPACT ON LIFE INSURERS IN ASIA PACIFIC

Whilst the effect on life insurers across Asia-Pacific varies greatly from country to country and insurer to insurer, the impact tends to be driven by two major factors:

EXHIBIT 1: Global 10 year interest rate swap rates (%)



Source: Bloomberg (20 Sep 2016)

1. The existing insurance liability composition and its sensitivity to interest rates, e.g. guaranteed products vs. unit linked, term vs. yearly renewable policies

Duration risk is less of an issue for the Australian and New Zealand life insurance markets, where many insurers have negative life insurance contract liabilities. Such negative contract liabilities reflect estimated net present values of policies in favour of the insurer. Consequently, their liabilities decrease as interest rates fall. Additionally, many insurers have portfolios largely consisting of yearly renewable term policies, reducing the importance of long term investment returns compared to insurers with large portfolios of long term, guaranteed return products. Hence, the principle effect of low interest rates in Australia and New Zealand is decreased interest income on investment portfolios which are heavily weighted towards cash.

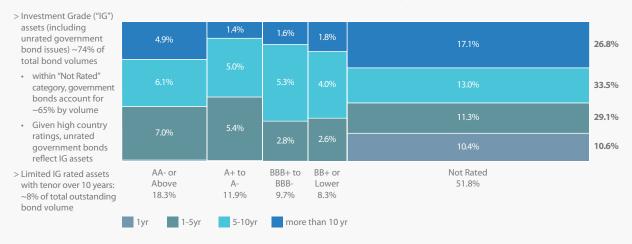
At the other end of the spectrum are markets where life insurers have significant whole of life or guaranteed return portfolios. This usually coincides with large positive life insurance liabilities since these policies having been priced with significantly higher interest rate assumptions. These legacy portfolios are highly vulnerable to low or declining rate environments. These issues are prevalent in the life insurance markets in Taiwan, Japan and South Korea.

2. The stage of development of accessible capital markets, e.g., emerging markets in Asia Pacific facing shortages of domestic high grade assets, or liquid markets for hedging

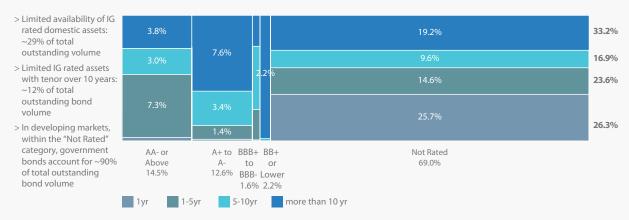
In Asia Pacific, Australia, Hong Kong and Singapore for example, tend to have higher proportions of high grade assets in the domestic capital markets, supported by the relative high country credit ratings or issuance by state

EXHIBIT 2: Developing Bond market structure by tenor and rating¹

DEVELOPED MARKET - HONG KONG, SINGAPORE, AUSTRALIA



DEVELOPING MARKET - INDONESIA, THAILAND, MALAYSIA



¹ Note: Data represents corporate and government bonds listed on country exchanges and unlisted bonds screened using country of incorporation, only S&P rating considered for the analysis, industry sector classification as per Bloomberg, does not include certificates, municipals, private securities and preferred instruments, tenor represents original maturity. Data source: Bloomberg (bonds outstanding as of 31 Aug 2016).

EXHIBIT 3:

Range of solutions considered by insurers

Changes to existing business model

- Re-designing product features, e.g. reduce/ eliminate guarantee features
- Diversifying into asset management

New asset types

- Bespoke private placements
- Mortgage backed securities/ covered bonds
- Absolute return funds
- Move in to loan markets

Extension of asset duration

- Interest rate swaps
- Offshore debt capital markets
- Government bonds
- Bespoke infrastucture lending

Search for yield

- Taking increased credit risk or longer tenors targeting higher returns
- Portfolio allocation toward equities
- Global search for offshore high yielding fixed income assets. Typically hedged back to local currency

Source: ANZ, Risk.net, Moody's, The Financial Times

owned entities/governments. Markets in South East Asian countries are developing, reflecting limited availability of high grade investment assets, often constrained by the country credit ratings. This could have been one of the drivers for insurers in such markets to look offshore for assets. Please refer to Exhibit 2.

WHAT IS THE SOLUTION?

While there may not be a single solution that solves the existing issues of life insurers, there are a range of typical solutions considered by insurers [Exhibit 3]. Long-term solutions tend to involve strategic changes to a life insurers' businesses.

ADDRESSING THE DURATION GAP

For example, rebalancing product portfolios away from guaranteed products, redesigning product features to limit costly embedded financial options and including terms in policies which shift the burden of lower rates to policyholders will considerably alter the product offering of life insurers. However, this approach would require time to meaningfully alter the life insurer's product portfolio composition due to the "legacy" portfolios.

Today's life insurers are able to learn from the Japanese life insurance industry in the 1990s. In the 1980s, Japanese life insurers had offered long-term savings products with guarantees as high as 8%. By 1999, interest rates had fallen as low as 3% causing many small and medium sized life insurers to fail. Those that survived were those that quickly changed their product mix, cut costs and re-priced products. Also, importantly, the survivors were the insurers who locked interest rates in early – while interest rates were low, they continued to decline and have since yet to recover.

ANZ has been discussing hedging solutions, using interest rate swaps and derivatives such as options/swaptions to address the asset-liability duration gap. Life insurers could use long tenor interest rate swaps to extend the duration of

the asset portfolio, and thereby reduce the duration gap. The flexibility of entering into swaps (irrespective of historically low rates) when considering the impact on available capital for both assets and liabilities, generally provides many life insurers with more confidence as opposed to the more significant risk associated with a potential rise in interest rates.

However, the challenge in Asia Pacific markets is the limited liquidity in domestic long-dated interest rate instruments making it difficult for life insurers to hedge meaningful parts of their investment portfolios and address duration gaps. In the presence of tight liquidity conditions when putting on any sizable hedges from a markets perspective, requires careful planning and execution to ensure that executed transaction prices do not become punitive.

Finally, take up of such hedging solutions have been relatively limited in Asia Pacific as compared to Europe or the US. This is mostly driven by regulatory benefits that can be achieved in the developed market Solvency/RBC frameworks combined with deeper liquidity in such instruments. However, potential convergence of global insurance regulatory standards considered by the IAIS, and the continued adoption and evolution of risk based capital frameworks in Asia Pacific (e.g. Singapore's RBC2 and Hong Kong's RBC consultations) is expected to increase incentives for life insurers to consider using such hedging solutions, as the evolving regulatory approaches will be a significant factor in managing capital and enhancing policy holder protection.

OPTIONS IN THE LONG END: ALTERNATIVE ASSETS AND LOANS TO ADDRESS DURATION AND YIELD CHALLENGES

Insurers will have to re-think their asset allocation and risk management strategies to cope with the "new normal" of today's market environment. In the long run, insurers are likely to expand asset allocation to alternative assets and loans to overcome the existing duration gap issues.

REGULATIONS ARE SIGNIFICANTLY INCREASING CAPITAL COSTS FOR MOST BANKS. CONSEQUENTLY, BANKS ARE REALLOCATING CAPITAL FROM LOW RETURN, CAPITAL INTENSIVE BUSINESSES, SUCH AS INFRASTRUCTURE TERM LENDING OR PROJECT FINANCE, TO MORE CAPITAL EFFICIENT BUSINESS SUCH AS CASH MANAGEMENT AND TRANSACTION BANKING.

Alternative assets, such as infrastructure or project finance loans, can offer attractive yields, long term cash flows and desired asset liability matching against interest rate fluctuations. As restrictive regulations on offshore investments are eased in markets such as mainland China, Taiwan and Korea, alternative assets are likely to become more main stream.

Some of the portfolio reallocations are expected to follow incentives provided by insurance regulations. For example, the China Insurance Regulatory Commission (CIRC) Risk Oriented Solvency System ("CROSS") has credit risk based capital charges that are quite beneficial for infrastructure (1%-13%) and real estate exposures (8%-12%), as compared to charges for equity exposures of 31%-48%: the spate of Chinese insurer's offshore search and investments in such assets could have been partly driven by such regulatory incentives.

Regulations are significantly increasing capital costs for most banks. Consequently, banks are reallocating capital from low return, capital intensive businesses, such as infrastructure term lending or project finance, to more capital efficient business such as cash management and transaction banking. This reallocation provides an opportunity for insurers to fill the funding or capital needs of companies where banks have reduced the area of product offerings. "However, Banks can still play an important role with existing borrower relationships: they can be the bridge between such borrowers and insurers, by matching and structuring the long term funding needs of companies with the long term investment needs of insurers", says Elodie Norman, Head of FIG Hong Kong.

The potential challenge for insurers to partake in a scalable manner in the Asia Pacific alternative and loan markets in its present state is the lack of standardised documentation for the currently individually highly customised loan and alternative transactions. Lacking such a standard (e.g. like US Private Placement documentation) would require insurance investment teams to either set up their own credit administration operations, similar to banks, or outsource to financial service providers that can offer such services.

SHARING OUR INDUSTRY INTELLIGENCE WITH CLIENTS

The FIG, Global markets and Client Insights & Solutions teams in ANZ have been engaged with insurers across Asia Pacific in assessing potential solutions.

"The low interest rate environment will continue to see demand for long dated assets as asset managers with life and annuity exposure are faced with increasing liabilities on their portfolios. Combined with the risk of declining long dated global yields will see asset managers look for alternatives to traditional swap yields. This in itself will create opportunities for high grade borrowers who have longer term funding needs," says Mark Lindon, Client Insights, New Zealand.



GLOBAL MARKETS
Dominique Blanchard
Global Head, Investor Sales
E: Dominique.Blanchard@anz.com



FINANCIAL INSTITUTIONS GROUP Elodie Norman Head of Hong Kong E: Elodie.Norman@anz.com



CLIENT INSIGHTS & SOLUTIONS Mark Lindon Head of New Zealand E: Mark.Lindon@anz.com

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

AUTHORS

For any comments or feedback please contact the authors at GlobalFIGInsights@anz.com

Sumeet Wadhera, Head of Client Insights & Solution Design, Global Financials

Robert Tsang, Solution Design, Global Financials Kevin Wong, Solution Design, Global Financials Mark Lindon, Solution Design, Global Financials Aaron Comerford, Head of Legal, Markets Katherine Hardcastle, Project Business Analyst, Institutional Robert Fievez, Project Manager, OTC Reform Project Prakash Prabhu, Associate, Global Financials Vaibhav Garg, Analyst, Global Financials
Prateek Agrawal, Analyst, Global Financials
Michael Jurkovic, Associate Director, NPP Business Project
Lead, Transaction Banking
Luke Perkins, Associate Director, Head of Agency Australia,
Transaction Banking
Peter Dalla, Associate Director, Solutions Management –
Insurance, Transaction Banking

ANZ GENERAL DISCLAIMER

IMPORTANT NOTICE

The document may be restricted by law in certain jurisdictions. Persons who receive this document must inform themselves about and observe all relevant restrictions.

1. Disclaimer for all jurisdictions

Except if otherwise specified in section 2 below, this document is issued and distributed in your country/region by Australia and New Zealand Banking Group Limited (ABN11 005 357 522) ("ANZ"), on the basis that it is only for the information of the specified recipient or permitted user of the relevant website (collectively, "recipient"). This document may not be reproduced, distributed or published by any recipient for any purpose. It is general information and has been prepared without taking into account the objectives, financial situation or needs of any person. Nothing in this document is intended to be an offer to sell, or a solicitation of an offer to buy, any product, security, instrument or investment, to effect any transaction or to conclude any legal act of any kind. If, despite the foregoing, any services or products referred to in this document are deemed to be offered in the jurisdiction in which this document is received or accessed, no such service or product is intended for nor available to persons resident in that jurisdiction if it would be contradictory to local law or regulation. Such local laws, regulations and other limitations always apply with non-exclusive jurisdiction of local courts. Certain financial products $may\ be\ subject\ to\ mandatory\ clearing, regulatory\ reporting\ and/or\ other\ related$ obligations. These obligations may vary by jurisdiction and be subject to frequent amendment. Before making an investment decision, recipients should seek independent financial, legal, tax and other relevant advice having regard to their particular

The views and recommendations expressed in this document are the author's. They are based on information known by the author and on sources which the author believes to be reliable, but may involve material elements of subjective judgement and analysis. Unless specifically stated otherwise: they are current on the date of this document and are subject to change without notice; and, all price information is indicative only. Any of the views and recommendations which comprise estimates, forecasts or other projections, are subject to significant uncertainties and contingencies that cannot reasonably be anticipated. On this basis, such views and recommendations may not always be achieved or prove to be correct. Indications of past performance in this document will not necessarily be repeated in the future. No representation is being made that any investment will or is likely to achieve profits or losses similar to those achieved in the past, or that significant losses will be avoided. Additionally, this document may contain 'forward looking statements'. Actual events or results or actual performance may differ materially from those reflected or contemplated in such forward looking statements. All investments entail a risk and may result in both profits and losses. Foreign currency rates of exchange may adversely affect the value, price or income of any products or services described in this document. The products and services described in this document are not suitable for all investors, and transacting in these products or services may be considered risky. ANZ and its related bodies corporate and affiliates, and the officers, employees, contractors and agents of each of them (including the author) ("Affiliates"), do not make any representation as to the accuracy, completeness or currency of the views or recommendations expressed in this document. Neither ANZ nor its Affiliates accept any $responsibility\ to\ inform\ you\ of\ any\ matter\ that\ subsequently\ comes\ to\ their\ notice,\ which$ may affect the accuracy, completeness or currency of the information in this document.

Except as required by law, and only to the extent so required: neither ANZ nor its Affiliates warrant or guarantee the performance of any of the products or services described in this document or any return on any associated investment; and, ANZ and its Affiliates expressly disclaim any responsibility and shall not be liable for any loss, damage, claim, liability, proceedings, cost or expense ("Liability") arising directly or indirectly and whether in tort (including negligence), contract, equity or otherwise out of or in connection with this document

If this document has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. ANZ and its Affiliates do not accept any Liability as a result of electronic transmission of this document.

ANZ and its Affiliates may have an interest in the subject matter of this document as follows:

- They may receive fees from customers for dealing in the products or services described in this document, and their staff and introducers of business may share in such fees or receive a bonus that may be influenced by total sales.
- They or their customers may have or have had interests or long or short positions in the
 products or services described in this document, and may at any time make purchases
 and/or sales in them as principal or agent.
- They may act or have acted as market-maker in products described in this document.

ANZ and its Affiliates may rely on information barriers and other arrangements to control the flow of information contained in one or more business areas within ANZ or within its Affiliates into other business areas of ANZ or of its Affiliates.

Please contact your ANZ point of contact with any questions about this document including for further information on these disclosures of interest.

${\bf 2. \, Country/region \, specific \, information:}$

Australia. This document is distributed in Australia by ANZ... ANZ holds an Australian Financial Services licence no. 234527. A copy of ANZ's Financial Services Guide is available at http://www.anz.com/documents/AU/aboutANZ/FinancialServicesGuide.pdf and is available upon request from your ANZ point of contact. If trading strategies or recommendations are included in this document, they are solely for the information of 'wholesale clients' (as defined in section 761G of the Corporations Act 2001 Cth). Persons who receive this document must inform themselves about and observe all relevant restrictions.

Brazil. This document is distributed in Brazil by ANZ on a cross border basis and only following request by the recipient. No securities are being offered or sold in Brazil under this document, and no securities have been and will not be registered with the Securities Commission - CVM.

Brunei. Japan. Kuwait. Malaysia. Switzerland. Taiwan. This document is distributed in each of Brunei, Japan, Kuwait, Malaysia, Switzerland and Taiwan by ANZ on a cross-border basis.

Cambodia. APS222 Disclosure. The recipient acknowledges that although ANZ Royal Bank (Cambodia) Ltd. is a subsidiary of ANZ, it is a separate entity to ANZ and the obligations of ANZ Royal Bank (Cambodia) Ltd. do not constitute deposits or other liabilities of ANZ and ANZ is not required to meet the obligations of ANZ Royal Bank (Cambodia) Ltd.

European Economic Area ("EEA"): United Kingdom. ANZ is authorised in the United Kingdom by the Prudential Regulation Authority ("PRA") and is subject to regulation by the Financial Conduct Authority ("FCA") and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on reguest. This document is distributed in the United Kingdom by ANZ solely for the information of persons who would come within the FCA definition of "eligible counterparty" or "professional client". It is not intended for and must not be distributed to any person who would come within the FCA definition of "retail client". Nothing here excludes or restricts any duty or liability to a customer which ANZ may have under the UK Financial Services and Markets Act 2000 $\,$ or under the regulatory system as defined in the Rules of the PRA and the FCA. ${\bf Germany.}$ This document is distributed in Germany by the Frankfurt Branch of ANZ solely for the information of its clients. Other EEA countries. This document is distributed in the EEA by ANZ Bank (Europe) Limited ("ANZBEL") which is authorised by the PRA and regulated by the FCA and the PRA in the United Kingdom, to persons who would come within the FCA definition of "eligible counterparty" or "professional client" in other countries in the EEA. This document is distributed in those countries solely for the information of such persons upon their request. It is not intended for, and must not be distributed to, any person in those countries who would come within the FCA definition of "retail client"

Fiji. For Fiji regulatory purposes, this document and any views and recommendations are not to be deemed as investment advice. Fiji investors must seek licensed professional advice should they wish to make any investment in relation to this document.

Hong Kong. This publication is distributed in Hong Kong by the Hong Kong branch of ANZ, which is registered at the Hong Kong Monetary Authority to conduct Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) regulated activities. The contents of this publication have not been reviewed by any regulatory authority in Hong Kong. If in doubt about the contents of this publication, you should obtain independent professional advice.

India. This document is distributed in India by ANZ on a cross-border basis. If this document is received in India, only you (the specified recipient) may print it provided that before doing so, you specify on it your name and place of printing. Further copying or duplication of this document is strictly prohibited.

Myanmar. This publication is intended to be of a general nature as part of customer service and marketing activities provided by ANZ in the course of implementing its functions as a licensed bank. This publication does not take into account your financial situation or goals and is not Securities Investment Advice (as that term is defined in the Myanmar Securities Transaction Law 2013). The contents of this publication have not been reviewed by any regulatory authority in Myanmar. If in doubt about the contents of this publication, you should obtain independent professional advice.

New Zealand. This document is intended to be of a general nature, does not take into account your financial situation or goals, and is not a personalised adviser service under the Financial Advisers Act 2008.

Oman. This document has been prepared by ANZ, ANZ neither has a registered business presence nor a representative office in Oman and does not undertake banking business or provide financial services in Oman. Consequently ANZ is not regulated by either the Central Bank of Oman or Oman's Capital Market Authority. The information contained in this document is for discussion purposes only and neither constitutes an offer of securities in Oman as contemplated by the Commercial Companies Law of Oman (Royal Decree 4/74) or the Capital Market Law of Oman (Royal Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy non-Omani securities in Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). ANZ does not solicit business in Oman and the only circumstances in which ANZ sends information or material describing financial products or financial services to recipients in Oman, is where such information or material has been requested from ANZ and by receiving this document, the person or entity to whom it has been dispatched by ANZ understands, acknowledges and agrees that this document has not been approved by the CBO, the CMA or any other regulatory body or authority in Oman. ANZ does not market, offer, sell or distribute any financial or investment products or services in Oman and no subscription to any securities, products or financial services may or will be consummated within Oman. Nothing contained in this document is intended to constitute Omani investment, legal, tax, accounting or other professional advi

People's Republic of China ("PRC"). Recipients must comply with all applicable laws and regulations of PRC, including any prohibitions on speculative transactions and CNY/ CNH arbitrage trading. If and when the material accompanying this document is distributed by Australia and New Zealand Banking Group Limited (ABN 11 005 357 522) ("ANZ") or an affiliate (other than Australia and New Zealand Bank (China) Company Limited ("ANZ C")), the following statement and the text below is applicable: No action has been taken by ANZ or any affiliate which would permit a public offering of any products or services of such an entity or distribution or re-distribution of this document in the PRC. Accordingly, the products and services of such entities are not being offered or sold within the PRC by means of this document or any other document. This document may not be distributed, re-distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations. If and when the material accompanying this document relates to the products and/or services of ANZ C, the following statement and the text below is applicable: This document is distributed by ANZ C in the Mainland of the PRC.

Qatar. This document has not been, and will not be:

- lodged or registered with, or reviewed or approved by, the Qatar Central Bank ("QCB"), the Qatar Financial Centre ("QFC") Authority, QFC Regulatory Authority or any other authority in the State of Qatar ("Qatar"); or
- authorised or licensed for distribution in Qatar,

and the information contained in this document does not, and is not intended to, constitute a public offer or other invitation in respect of securities in Qatar or the QFC. The financial products or services described in this document have not been, and will not be:

- registered with the QCB, QFC Authority, QFC Regulatory Authority or any other governmental authority in Qatar; or
- authorised or licensed for offering, marketing, issue or sale, directly or indirectly, in Qatar.

Accordingly, the financial products or services described in this document are not being, and will not be, offered, issued or sold in Qatar, and this document is not being, and will not be, distributed in Qatar. The offering, marketing, issue and sale of the financial products or services described in this document and distribution of this document is being made in, and is subject to the laws, regulations and rules of, jurisdictions outside of Qatar and the QFC. Recipients of this document must abide by this restriction and not distribute this document in breach of this restriction. This document is being sent/issued to a limited number of institutional and/or sophisticated investors (i) upon their request and confirmation that they understand the statements above, and (ii) on the condition that it will not be provided to any person other than the original recipient, and is not for general circulation and may not be reproduced or used for any other purpose.

Singapore. This document is distributed in Singapore by the Singapore branch of ANZ solely for the information of "accredited investors", "expert investors" or (as the case may be) "institutional investors" (each term as defined in the Securities and Futures Act Cap. 289 of Singapore.) ANZ is licensed in Singapore under the Banking Act Cap. 19 of Singapore and is exempted from holding a financial adviser's licence under Section 23(1) (a) of the Financial Advisers Act Cap. 100 of Singapore. In respect of any matters arising from, or in connection with the distribution of this document in Singapore, contact your ANZ point of contact.

United Arab Emirates. This document is distributed in the United Arab Emirates ("UAE") or the Dubai International Financial Centre (as applicable) by ANZ. This document: does not, and is not intended to constitute an offer of securities anywhere in the UAE; does not constitute, and is not intended to constitute the carrying on or engagement in banking, financial and/or investment consultation business in the UAE under the rules and regulations made by the Central Bank of the United Arab Emirates, the Emirates Securities and Commodities Authority or the United Arab Emirates Ministry of Economy; does not, and is not intended to constitute an offer of securities within the meaning of the Dubai International Financial Centre Markets Law No. 12 of 2004; and, does not constitute, and is not intended to constitute, a financial promotion, as defined under the Dubai International Financial Centre Regulatory Law No. 1 of 200. ANZ DIFC Branch is regulated by the Dubai Financial Services Authority ("DFSA"). The financial products or services described in this document are only available to persons who qualify as "Professional Clients" or "Market Counterparty" in accordance with the provisions of the DFSA rules. In addition, ANZ has a representative office ("ANZ Representative Office") in Abu Dhabi regulated by the Central Bank of the United Arab Emirates. ANZ Representative Office is not permitted by the Central Bank of the United Arab Emirates to provide any banking

United States. If and when this document is received by any person in the United States or a "U.S. person" (as defined in Regulation S under the US Securities Act of 1933, as amended) ("US Person") or any person acting for the account or benefit of a US Person, it is noted that ANZ Securities, Inc. ("ANZ S") is a member of FINRA (www.finra.org) and registered with the SEC. ANZ S' address is 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). Except where this is a FX- related or commodity-related document, this document is distributed in the United States by ANZ S $\,$ (a wholly owned subsidiary of ANZ), which accepts responsibility for its content Information on any securities referred to in this document may be obtained from ANZ S upon request. Any US Person receiving this document and wishing to effect transactions in any securities referred to in this document must contact ANZ S, not its affiliates. Where this is an FX- related or commodity-related document, it is distributed in the United States by ANZ's New York Branch, which is also located at 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). Commodity-related products are not insured by any U.S. governmental agency, and are not guaranteed by ANZ or any of its affiliates. Transacting in these products may involve substantial risks and could result in a significant loss. You should carefully consider whether transacting in commodity-related products is suitable for you in light of your financial condition and investment objectives. ANZ S is authorised as a broker-dealer only for US Persons who are institutions, not for US Persons who are individuals. If you have registered to use this website or have otherwis received this document and are a US Person who is an individual: to avoid loss, you should cease to use this website by unsubscribing or should notify the sender and you should not act on the contents of this document in any way.

Vietnam. This document is distributed in Vietnam by ANZ or ANZ Bank (Vietnam) Limited, a subsidiary of ANZ. Please note that the contents of this document have not been reviewed by any regulatory authority in Vietnam. If you are in any doubt about any of the contents of this publication, you should obtain independent professional advice.