Liquidity risk

Liquidity risk is the risk that the Group is unable to meet its payment obligations as they fall due, including repaying depositors or maturing wholesale debt, or that the Group has insufficient capacity to fund increases in assets. The timing mismatch of cash flows and the related liquidity risk is inherent in all banking operations and is closely monitored by the Group and managed in accordance with the risk appetite set by the Board.

The Group's approach to liquidity risk management incorporates two key components:

- **Scenario modelling of funding sources**

  ANZ's liquidity risk appetite is defined by the ability to meet a range of regulatory requirements and internal liquidity metrics mandated by the Board. The metrics cover a range of scenarios of varying duration and level of severity. The objective of this framework is to:

  - Provide protection against shorter-term extreme market dislocation and stress.
  - Maintain structural strength in the balance sheet by ensuring that an appropriate amount of longer-term assets are funded with longer-term funding.
  - Ensure that no undue timing concentrations exist in the Group's funding profile.

  A key component of this framework is the Liquidity Coverage Ratio (LCR), which is a severe short term liquidity stress scenario mandated by banking regulators including APRA. As part of meeting LCR requirements, ANZ has a Committed Liquidity Facility (CLF) with the Reserve Bank of Australia (RBA). The CLF has been established to offset the shortage of available High Quality Liquid Assets (HQLA) in Australia and provides an alternative form of contingent liquidity. The total amount of the CLF available to a qualifying ADI is set annually by APRA. From 1 January 2017, ANZ's CLF is $43.8 billion (2016 calendar year end: $50.3 billion).

- **Liquid assets**

  The Group holds a portfolio of high quality unencumbered liquid assets in order to protect the Group's liquidity position in a severely stressed environment, as well as to meet regulatory requirements. High Quality Liquid Assets comprise three categories, with the definitions consistent with Basel 3 LCR:

  - Highest-quality liquid assets (HQLA1): Cash, highest credit quality government, central bank or public sector securities eligible for repurchase with central banks to provide same-day liquidity.
  - High-quality liquid assets (HQLA2): High credit quality government, central bank or public sector securities, high quality corporate debt securities and high quality covered bonds eligible for repurchase with central banks to provide same-day liquidity.
  - Alternative liquid assets (ALA): Assets qualifying as collateral for the CLF and other eligible securities listed by the Reserve Bank of New Zealand (RBNZ).

  The Group monitors and manages the size and composition of its liquid assets portfolio on an ongoing basis in line with regulatory requirements and the risk appetite set by the Board.

	Half Year Average[1]			Movement	
	Sep 17 $B	Mar 17 $B	Sep 16 $B	Sep 17 v. Mar 17	Sep 17 v. Sep 16
Market Values Post Discount					
HQLA1[2]	**128.7**	127.1	119.7	1%	8%
HQLA2	**4.7**	4.3	4.1	9%	15%
Internal Residential Mortgage Backed Securities (Australia)[2]	**30.3**	33.7	35.3	-10%	-14%
Internal Residential Mortgage Backed Securities (New Zealand)[3]	**1.1**	0.6	1.2	83%	-8%
Other ALA[4]	**14.9**	15.6	17.7	-4%	-16%
Total Liquid Assets	**179.7**	181.3	178.0	-1%	1%
Cash flows modelled under stress scenario					
Cash outflows	**174.5**	172.7	182.9	1%	-5%
Cash inflows	**41.3**	38.2	40.2	8%	3%
Net cash outflows	**133.2**	134.5	142.7	-1%	-7%
Liquidity Coverage Ratio[5]	**135%**	135%	125%	0%	10%

1. *Half year average basis, calculated as prescribed per APRA Prudential Regulatory Standard (APS 210 Liquidity) and consistent with APS 330 requirements.*
2. *RBA open repo arrangement netted down from CLF, with a corresponding increase in HQLA.*
3. *New Zealand LCR surplus is excluded from NZ internal RMBS, consistent with APS 330 treatment.*
4. *Comprised of assets qualifying as collateral for the CLF, excluding internal RMBS, up to approved facility limit; and any liquid assets contained in the RBNZ's Liquidity Policy - Annex: Liquidity Assets - Prudential Supervision Department Document BS13A12.*
5. *All currency Level 2 LCR.*

Funding

ANZ targets a diversified funding base, avoiding undue concentrations by investor type, maturity, market source and currency.

$22.0 billion of term wholesale debt with a remaining term greater than one year as at 30 September 2017 was issued during the year ended 30 September 2017. The weighted average tenor of new term debt was 5.3 years.

The following tables show the Group's total funding composition:

	As at			Movement	
	Sep 17 $M	Mar 17 $M	Sep 16 $M	Sep 17 v. Mar 17	Sep 17 v. Sep 16
Customer deposits and other liabilities[1]					
Australia	**201,365**	197,632	187,667	2%	7%
Institutional	**186,782**	179,326	171,155	4%	9%
New Zealand	**75,323**	74,266	72,818	1%	3%
Wealth Australia	**-**	326	343	-100%	-100%
Asia Retail & Pacific	**9,157**	21,867	22,782	-58%	-60%
TSO and Group Centre[1]	**(4,997)**	(5,202)	(5,142)	-4%	-3%
Customer deposits	**467,630**	468,215	449,623	0%	4%
Other funding liabilities[2,3]	**12,838**	11,725	14,049	9%	-9%
Total customer liabilities (funding)	**480,468**	479,940	463,672	0%	4%
Wholesale funding[4]					
Debt issuances	**90,263**	88,778	91,080	2%	-1%
Subordinated debt	**17,710**	20,297	21,964	-13%	-19%
Certificates of deposit	**55,222**	57,428	61,429	-4%	-10%
Commercial paper	**18,023**	9,482	19,349	90%	-7%
Other wholesale borrowings[2,5,6]	**65,441**	70,070	65,924	-7%	-1%
Total wholesale funding	**246,659**	246,055	259,746	0%	-5%
Shareholders' equity	**59,075**	57,908	57,927	2%	2%
Total funding	**786,202**	783,903	781,345	0%	1%

	As at			Movement	
	Sep 17 $M	Mar 17 $M	Sep 16 $M	Sep 17 v. Mar 17	Sep 17 v. Sep 16
Funded assets					
Other short term assets & trade finance assets[7]	**58,576**	60,008	65,800	-2%	-11%
Liquids[6]	**169,317**	168,030	161,302	1%	5%
Short term funded assets	**227,893**	228,038	227,102	0%	0%
Lending & fixed assets[8]	**558,309**	555,865	554,243	0%	1%
Total funded assets	**786,202**	783,903	781,345	0%	1%
Funding liabilities[4,6]					
Other short term liabilities[2]	**46,021**	51,655	49,288	-11%	-7%
Short term funding	**62,119**	53,495	69,028	16%	-10%
Term funding < 12 months	**18,872**	20,968	23,668	-10%	-20%
Other customer and central bank deposits[1,2,9]	**78,652**	81,247	79,115	-3%	-1%
Total short term funding liabilities	**205,664**	207,365	221,099	-1%	-7%
Stable customer deposits[1,10]	**421,172**	416,775	402,146	1%	5%
Term funding > 12 months	**91,840**	93,556	90,708	-2%	1%
Shareholders' equity and hybrid debt	**67,526**	66,207	67,392	2%	0%
Total stable funding	**580,538**	576,538	560,246	1%	4%
Total funding	**786,202**	783,903	781,345	0%	1%

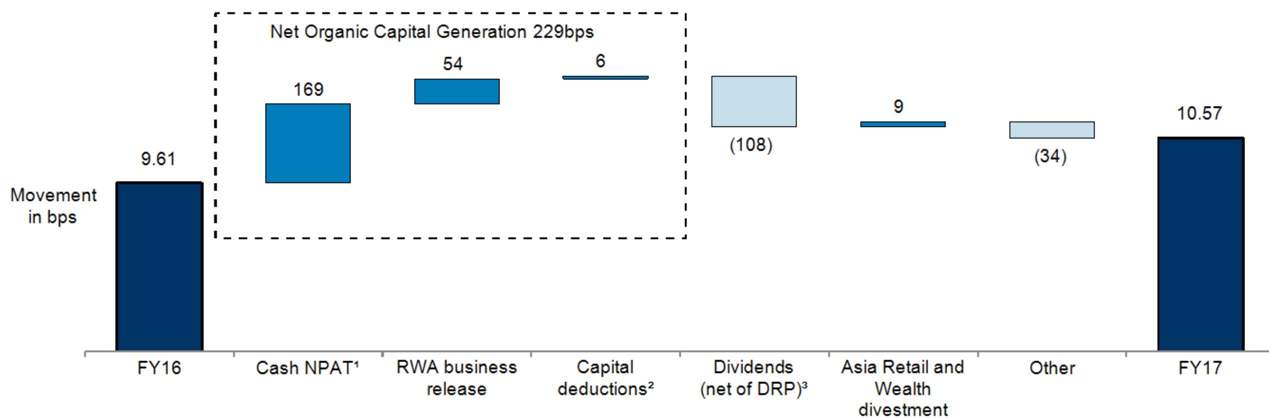
1. *Includes term deposits, other deposits and an adjustment recognised in Group Centre to eliminate Wealth Australia investments in ANZ deposit products.*
2. *Securities sold under repurchase agreements reclassified to align with current period presentation.*
3. *Includes interest accruals, payables and other liabilities, provisions and net tax provisions, excluding other liabilities in Wealth Australia.*
4. *Excludes liability for acceptances as they do not provide net funding.*
5. *Includes borrowings from banks, securities sold under repurchase agreements, net derivative balances, special purpose vehicles and other borrowings.*
6. *Includes RBA open-repo arrangement netted down by the exchange settlement account cash balance.*
7. *Includes short-dated assets such as trading securities, available for sale securities, trade dated assets and trade finance loans.*
8. *Excludes trade finance loans.*
9. *Total customer liabilities (funding) plus Central Bank deposits less stable customer deposits.*
10. *Stable customer deposits represent operational type deposits or those sourced from retail / business / corporate customers and the stable component of other funding liabilities.*

Capital Management

	As at					
	APRA Basel 3			Internationally Comparable Basel 3[1]		
	Sep 17	Mar 17	Sep 16	Sep 17	Mar 17	Sep 16
Capital Ratios						
Common Equity Tier 1	**10.6%**	10.1%	9.6%	**15.8%**	15.2%	14.5%
Tier 1	**12.6%**	12.1%	11.8%	**18.4%**	18.2%	17.4%
Total capital	**14.8%**	14.5%	14.3%	**21.2%**	21.3%	20.7%
Risk weighted assets ($B)	**391.1**	397.0	408.6	**306.5**	309.4	316.4

1. *Internationally Comparable methodology aligns with APRA's information paper entitled "International Capital Comparison Study" (13 July 2015).*

APRA Basel 3 Common Equity Tier 1 (CET1) – September 2017 v September 2016



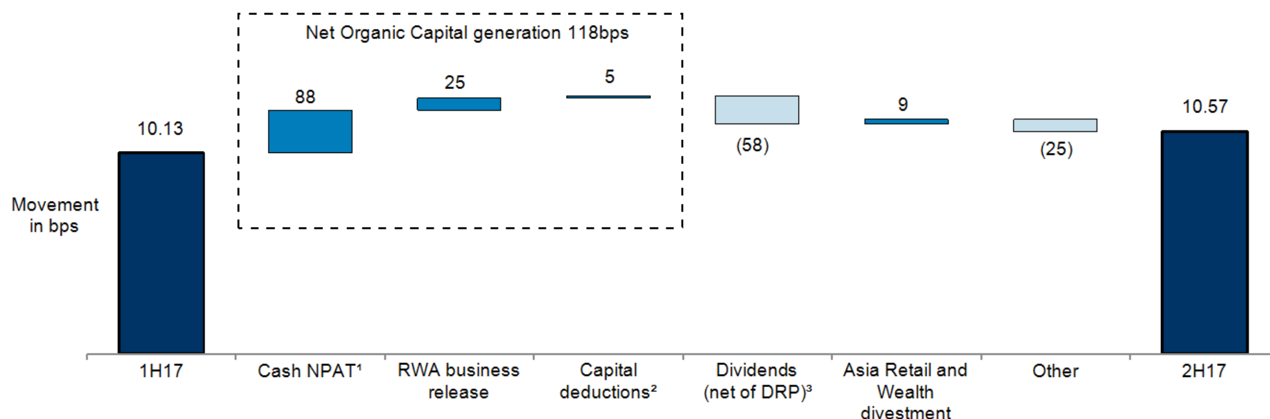
1. *Excludes large/notable items for the purposes of Capital Management attribution.* *Refer to pages 14 to 16.*
2. *Capital deductions represent the movement in retained earnings in deconsolidated entities, capitalised software (excluding accounting changes relating to the capitalisation of internally generated software assets), EL versus EP shortfall and other intangibles in the period.*
3. *9.9 million ordinary shares were provided/issued under the Dividend Reinvestment Plan and Bonus Option Plan for the final 2016 and 2017 interim dividend with neutralisation of the Dividend Reinvestment Plan.*

- **September 2017 v September 2016**

  ANZ's CET1 ratio increased 96 bps to 10.6% during the year. Key drivers of the movement in the CET1 ratio were:

  - Net organic capital generation was 229 bps or $9.3 billion. This was primarily driven by cash profit and a net reduction in underlying RWA growth (excluding foreign exchange impacts, regulatory changes and other one-offs) which collectively provided 223 bps to the CET1 ratio. Throughout the September 2017 full year, RWA reduction was primarily driven by a $16.4 billion decrease in Institutional Credit RWAs (CRWAs) from a reduction in lending, due to portfolio rebalancing.
  - Payment of the March 2017 Interim and September 2016 Final Dividends (net of shares provided under the DRP, with March 2017 DRP neutralisation) reduced the CET1 ratio by 108 bps.
  - The transition of Asia Retail and Wealth businesses in China, Singapore and Hong Kong to DBS increased CET1 ratio by 9 bps.
  - Other impacts are mainly driven by net impacts from RWA measurement changes (reduced CET1 ratio by 27 bps principally from changes to ANZ's new capital model for Australian Residential Mortgages), and a further 7bps reduction from other impacts associated with movements in non-cash earnings and net foreign currency translation.

APRA Basel 3 Common Equity Tier 1 (CET1) – September 2017 v March 2017



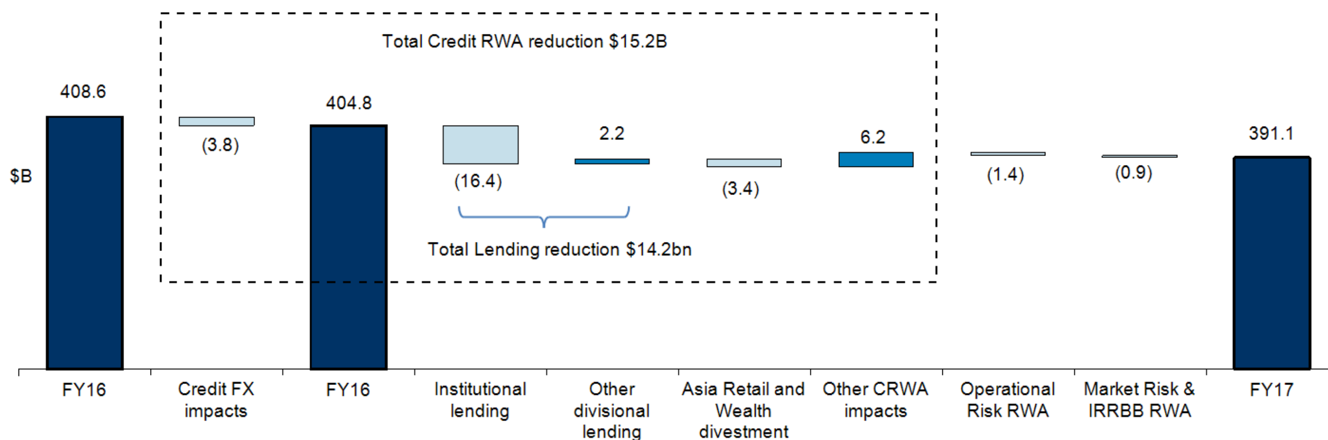
[1] *Excludes large/notable items for the purposes of Capital Management attribution. Refer to pages 14 to 16.*
[2] *Capital deductions represent the movement in retained earnings in deconsolidated entities, capitalised software (excluding accounting changes relating to the capitalisation of internally generated software assets), EL versus EP shortfall and other intangibles in the period.*
[3] *1.4 million ordinary shares were issued under the Bonus Option Plan for the 2017 interim dividend with neutralisation of the Dividend Reinvestment Plan.*

- **September 2017 v March 2017**

  ANZ's CET1 ratio increased 44 bps to 10.6% during the September 2017 half. Key drivers of the movement in the CET1 ratio were:

  - Net organic capital generation was 118 bps or $4.7 billion. This was primarily driven by cash profit and a net reduction in underlying RWA (excluding foreign exchange impacts, regulatory changes and other one-offs). The RWA reduction was mainly driven by a $7.6 billion decrease in Institutional CRWAs from lower lending due to portfolio rebalancing.
  - Payment of the March 2017 Interim Dividend (with DRP neutralisation) reduced the CET1 ratio by 58 bps.
  - The transition of Asia Retail and Wealth businesses in China, Singapore and Hong Kong to DBS increased CET1 ratio by 9 bps.
  - Other impacts are mainly driven by net impacts from RWA measurement changes (reduced CET1 ratio by 21 bps principally from changes to ANZ's new capital model for Australian Residential Mortgages), and a further 4 bps reduction from other impacts associated with movements in non-cash earnings and net foreign currency translation.

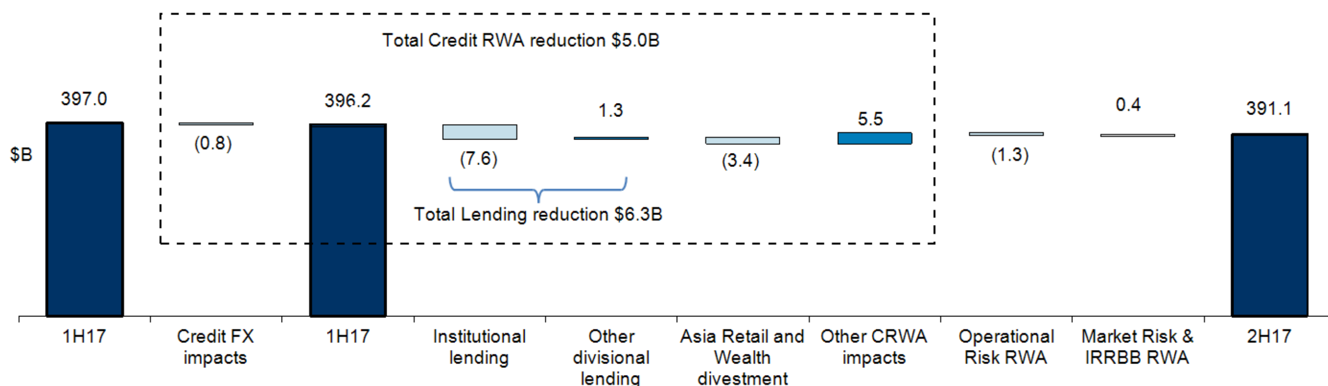
Total Risk Weighted Assets (RWA) – September 2017 v September 2016



- **September 2017 v September 2016**

  ANZ's total RWA decreased by $17.5 billion. Excluding the impact of foreign currency exchange translation and other non-recurring CRWA changes, CRWAs decreased by $14.2 billion, primarily driven by a decline in Institutional lending. Other CRWA changes mainly reflect the impact of RWA modelling changes to the Australian Residential Mortgages portfolio, partially offset by the Asia Retail and Wealth business transition of China, Singapore and Hong Kong to DBS. Non-CRWA decreased by $2.3bn mainly driven by lower Operational Risk, from reduced operation size (following portfolio rebalancing in Institutional and the transition of Asia Retail and Wealth businesses) and simplification of portfolios across the Group.

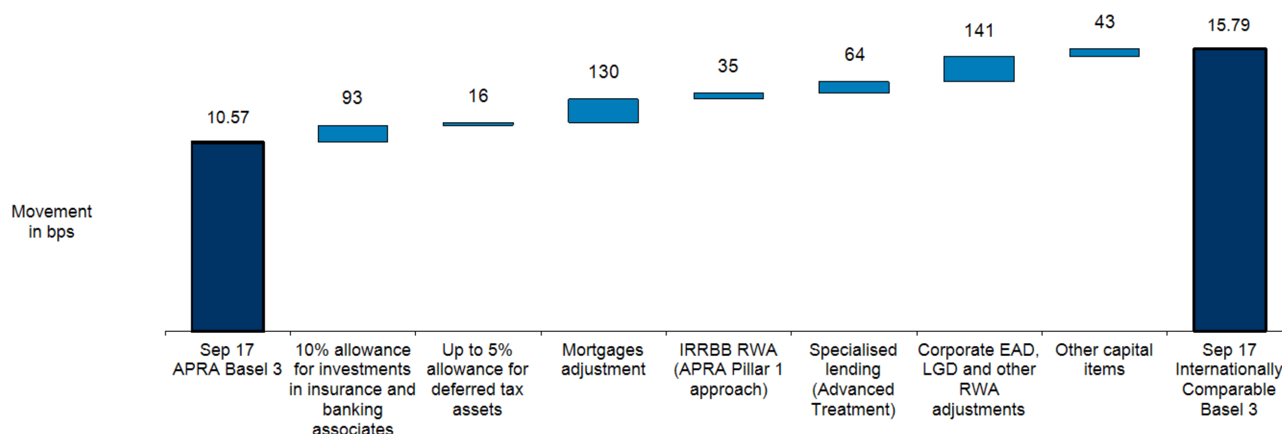
Total Risk Weighted Assets (RWA) – September 2017 v March 2017



- **September 2017 v March 2017**

  ANZ's total RWA decreased by $5.9 billion. Excluding the impact of foreign currency exchange translation and other non-recurring CRWA changes, CRWAs decreased by $6.3 billion primarily driven by a decline in Institutional lending. Other CRWA changes mainly reflect the impact of RWA modelling changes to the Australian Residential Mortgages portfolio, partially offset by the transition of Asia Retail and Wealth business in China, Singapore and Hong Kong to DBS. Non-CRWA decreased by $0.9 billion mainly driven by lower operational risk RWA from reduced operation size (following portfolio rebalancing in Institutional and the transition of Asia Retail and Wealth businesses) and simplification of portfolios across the Group.

APRA to Internationally Comparable[1] Common Equity Tier 1 (CET1) as at 30 September 2017



1. *ANZ's interpretation of the regulations documented in the Basel Committee publications; "Basel 3: A global regulatory framework for more resilient banks and banking systems" (June 2011) and "International Convergence of Capital Measurement and Capital Standards" (June 2006). Also includes differences identified in APRA's information paper entitled "International Capital Comparison Study" (13 July 2015).*

The above provides a reconciliation of the CET1 ratio under APRA's Basel 3 prudential capital standards to Internationally Comparable Basel 3 standards. APRA views the Basel 3 reforms as a minimum requirement and hence has not incorporated some of the concessions proposed in the Basel 3 rules and has also set higher requirements in other areas. As a result, Australian banks' Basel 3 reported capital ratios will not be directly comparable with international peers. The International Comparable Basel 3 CET1 ratio incorporates differences between APRA and both the Basel Committee Basel 3 framework (including differences identified in the March 2014 Basel Committee's Regulatory Consistency Assessment Programme (RCAP) on Basel 3 implementation in Australia) and its application in major offshore jurisdictions.

The material differences between APRA Basel 3 and Internationally Comparable Basel 3 ratios include:

Deductions

- Investments in insurance and banking associates – APRA requires full deduction against CET1. On an Internationally Comparable basis, these investments are subject to a concessional threshold before a deduction is required.
- Deferred tax assets – A full deduction is required from CET1 for deferred tax assets (DTA) relating to temporary differences. On an Internationally Comparable basis, this is first subject to a concessional threshold before the deduction is required.

Risk Weighted Assets (RWA)

- IRRBB RWA – APRA requires inclusion of Interest Rate Risk in the Banking Book (IRRBB) within the RWA base for the CET1 ratio calculation. This is not required on an Internationally Comparable basis.
- Mortgages RWA – APRA imposes a floor of 20% on the downturn Loss Given Default (LGD) used in credit RWA calculations for residential mortgages. Additionally, from July 2016, APRA also requires a higher correlation factor above the Basel framework 15% .The Internationally Comparable Basel 3 framework only requires a downturn LGD floor of 10% and a correlation factor of 15%.
- Specialised lending - APRA requires the supervisory slotting approach to be used in determining credit RWA for specialised lending exposures. The Internationally Comparable basis allows for the advanced internal ratings based approach to be used when calculating RWA for these exposures.
- Unsecured Corporate Lending LGD – Adjustment to align ANZ's unsecured corporate lending LGD to 45% to be consistent with banks in other jurisdictions. The 45% LGD rate is also used in the Foundation Internal Ratings-Based approach (FIRB).
- Undrawn Corporate Lending Exposure at Default (EAD) – To adjust ANZ's credit conversion factors (CCF) for undrawn corporate loan commitments to 75% (used in FIRB approach) to align with banks in other jurisdictions.

Leverage Ratio

At 30 September 2017, the Group's APRA Leverage Ratio was 5.4% which is above the 3% minimum currently proposed by the Basel Committee on Banking Supervision (BCBS). APRA has not finalised a minimum leverage ratio requirement for Australian ADIs. The following table summarises the Group's Leverage Ratio calculation:

	As at			Movement	
	Sep 17 $M	Mar 17 $M	Sep 16 $M	Sep 17 v. Mar 17	Sep 17 v. Sep 16
Tier 1 Capital (net of capital deductions)	**49,324**	**48,091**	**48,285**	3%	2%
On-balance sheet exposures (excluding derivatives and securities financing transaction exposures)	**752,347**	747,708	744,359	1%	1%
Derivative exposures	**31,469**	30,968	30,600	2%	3%
Securities financing transaction (SFT) exposures	**28,598**	30,286	31,417	-6%	-9%
Other off-balance sheet exposures	**96,765**	97,492	98,460	-1%	-2%
Total exposure measure	**909,179**	**906,454**	**904,836**	**0%**	**0%**
APRA Leverage Ratio[1]	**5.4%**	**5.3%**	**5.3%**		
Internationally Comparable Leverage Ratio[1]	**6.2%**	**6.0%**	**6.0%**		

1. *Leverage ratio includes Additional Tier 1 securities subject to Basel 3 transitional relief, net of any transitional adjustments.*

- **September 2017 v September 2016**

  ANZ's Leverage Ratio increased 9 bps during the year mainly driven by:
  - Net organic capital generation (cash earnings) net of dividend payments increased the ratio by 30 bps.
  - Lower net Additional Tier 1 capital reduced the ratio by 10 bps mainly from redemption of remaining $1.1 billion of transitional CPS2 on issue in March 2017 half.
  - Net growth in exposures reduced the ratio by 10 bps mainly driven by on balance sheet growth in Australia division (primarily from growth in home loans) partially offset by the transition of Asia Retail and Wealth businesses to DBS. Other impacts lowered the ratio by 1 bp.

- **September 2017 v March 2017**

  ANZ's Leverage Ratio increased 12 bps in the September half mainly driven by:
  - Net organic capital generation (cash earnings) net of dividend payments increased the ratio by 15 bps.
  - The above were offset by net growth in exposures which reduced the ratio by 3 bps primarily driven by on balance sheet growth in Australian division (primarily from growth in home loans) partially offset by the transition of Asia Retail and Wealth businesses to DBS.

Other regulatory developments

- **Financial System Inquiry (FSI)**

  The Australian Government completed a comprehensive inquiry into Australia's financial system and the FSI final report was released on 7 December 2014. The contents of the report are wide-ranging and key recommendations that may have an impact on regulatory capital levels include:
  - Setting capital standards such that Australian Authorised Deposit-taking Institutions' (ADIs) capital ratios are unquestionably strong;
  - Raising the average internal ratings-based (IRB) mortgage risk weight to narrow the difference between average mortgage risk weight for ADIs using IRB models and those using standardised risk weights;
  - Implementing a framework for minimum loss absorbing and recapitalisation capacity in line with emerging international practice;
  - Developing a common reporting template that improves the transparency and comparability of capital ratios of Australian ADIs; and
  - Introducing a leverage ratio that acts as a backstop to ADIs risk-based capital requirements, in line with the Basel framework.

  APRA supported the FSI's recommendations and in response introduced the following:
  - With effect from July 2016, APRA increased the capital requirements for Australian residential mortgage exposures for ADIs accredited to use the IRB approach to credit risk (including ANZ) to at least 25% risk-weighting. APRA also required refinements to residential mortgages risk models which ANZ implemented in June 2017. Collectively these changes have increased average credit risk weighting of ANZ's residential mortgages to approximately 28% as at September 2017.
  - In July 2017, APRA released an information paper outlining its assessment on the additional capital required for the Australian banking sector to be considered 'unquestionably strong'. APRA indicated that "In the case of the four major Australian banks, APRA expects that the increased capital requirements will translate into the need for an increase in CET1 capital ratios, on average, of around 100 basis points above their December 2016 levels. In broad terms, that equates to a benchmark CET1 capital ratio, under the current capital adequacy framework, of at least 10.5 per cent." APRA also stated that "ADIs should, where necessary, initiate strategies to increase their capital strength to be able to meet these capital benchmarks by 1 January 2020 at the latest." In order to accommodate future changes to capital framework mainly from:
    - Basel III changes in respect of credit risk, operational risk and the capital floor and;
    - Additional changes to address mortgage concentration risk and to improve transparency, comparability and flexibility.

- Discussion papers covering the above are expected to be released in late 2017, with consultation on draft prudential standards taking place throughout 2018. Final standards will then be issued in 2019 to take effect from early 2021. Importantly, APRA has indicated these changes to the capital framework will be accommodated within the 10.5% CET1 benchmark that Australian ADIs are expected to have met, a year ahead of the expected effective date of the new prudential standards.

- **Net Stable Funding Ratio (NSFR)**

  APRA released its final standards on NSFR in 2017 confirming that the minimum NSFR of 100% will become a regulatory requirement from 1 January 2018.

  As part of managing future liquidity requirements, ANZ monitors the NSFR in its internal reporting and the Group is well placed to meet this requirement by the implementation date.

- **Level 3 Conglomerates (Level 3)**

  APRA is extending its prudential supervision framework to Conglomerate Groups via the Level 3 framework which will regulate a bancassurance group such as ANZ as a single economic entity with minimum capital requirements and additional monitoring of risk exposure levels.

  In August 2016, APRA confirmed the deferral of capital requirements for Conglomerate Groups until 2019 at the earliest, to allow for the final capital requirements arising from FSI recommendations as well as from international initiatives that are in progress.

  The non-capital components of the Level 3 framework relating to group governance, risk exposures, intragroup transactions and other risk management and compliance requirements came into effect on 1 July 2017. These have had no material impact on the Group's capital position.

- **RBNZ review of capital requirements**

  On May 1, 2017 the RBNZ published an issues paper announcing that it is undertaking a comprehensive review of the capital adequacy framework applying to New Zealand locally incorporated registered banks over 2017 and 2018. The aim of the review is to identify the most appropriate framework for setting capital requirements for New Zealand banks, taking into account how the current framework has operated and international developments in bank capital requirements. The capital review will focus on the three key components of the current framework:

  - The definition of eligible capital instruments;
  - The measurement of risk; and
  - The minimum capital ratios and buffers.

  The RBNZ requested feedback about the topics covered by the issues paper for which responses were due on June 9, 2017. Detailed consultation documents on policy proposals and options for each of the three components will be released during 2017, with a view to concluding the review by the first quarter of 2018.

  On July 14, 2017, the RBNZ released a consultation paper on what types of financial instruments should qualify as eligible regulatory capital. The consultation paper sets out proposals for reform to the definition of eligible capital instruments for which responses were due September 8, 2017.

  The impact on Group and our subsidiary bank in New Zealand (ANZ Bank New Zealand) arising from the above consultations will not be known until the RBNZ finalises their review in 2018.

- **Current Proposals from the Basel Committee on Banking Supervision (BCBS) on RWA**

  As part of the BCBS agenda to simplify RWA measurement and reduce their variability amongst banks, the BCBS has issued a number of consultation documents associated with:

  - Standardised approach to RWA for credit risk;
  - Revisions to Standardised Measurement Approach to Operational Risk;
  - Fundamental Review of the Trading Book;
  - Interest Rate Risk in the Banking Book;
  - Framework on the imposition of capital floors based on standardised RWA approaches; and
  - Additional constraints on the use of internal models for credit RWA.

  Apart from the review of the Trading Book standard which has been finalised, BCBS is currently deliberating on the other proposals. Once finalised, APRA is expected to incorporate these issues as part of changes to the regulatory capital framework that APRA intends to implement by 2021, as outlined in its July 2017 information paper 'Strengthening banking system resilience – establishing unquestionably strong capital ratios'.