

Why Australian Fixed-Income Is Always on the Agenda

Executive Summary

- Australian investors retain one of the lowest allocations to fixed-income, and many of these investors use cash and term deposits in lieu of fixed-income.
- Over a period of rising yields, fixed-income offers the benefits of coupon payments, “roll-down” returns and a “pull to par.”
- Fixed-income portfolios offer more advantages than a single government bond due to the benefit of yield curve positioning, continual reinvestment of coupon income, credit spreads (above the risk-free rate of government bonds) and active management.
- Australian fixed-income can play an important role in diversified portfolios due to liquidity, income and a negative correlation to equities in risk-off environments.

Investors in Australia retain one of the lowest allocations to the fixed-income asset class in the developed world. While this is a concerning fact, what is more alarming is that these assets have been allocated to cash and term deposits.

There is undoubtedly a structural element to this allocation based on investor biases (lack of fixed-income understanding) and market structure (historically high term deposit rates); however, both institutional and retail investors have maintained a low allocation relative to international counterparts, despite watching Australian fixed-income outperform cash over the past decade.

Cash and term deposits play an important role in a client’s overall asset base depending on their circumstances. But, it’s important to realize that the characteristics of cash and term deposits are very different than those of an Australian fixed-income portfolio and therefore they are not necessarily a sound replacement in a diversified portfolio.

The Appeal of Australian Fixed-Income

We have seen a dramatic decrease in the level of domestic interest rates since 2008, with the 10-year bond yield falling from around 6% to below 2% in August 2016 (Exhibit 1). As we know, a decline in yields equates to an increase in the capital value of bonds held and when combined with coupons, can result in attractive total returns. This multi-year rally in bonds has led to numerous market commentators citing an impending doomsday as the so called “bond bubble” bursts if bonds return to their 10-year average.

Exhibit 1: Australian 10-Year Government Bond Yields



Source: Bloomberg. As of 31 Jul 18

An Oversimplified Scenario

Many who subscribe to an impending doomsday scenario use well understood bond math such as effective duration to justify their expectations of an extended period of significant negative returns for the asset class.

Example:

Change in value (%) = (years of duration) * (interest rate change %)

Portfolio duration = 5 years

Interest rate change = +1%

Portfolio return = -5%

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While effective duration is a reasonable measure of interest rate sensitivity for an instant price shock to a single government bond, it fails to capture the true total returns of a fixed-income portfolio and actually gives you the wrong answer.

Time Is Your Friend in Fixed-Income

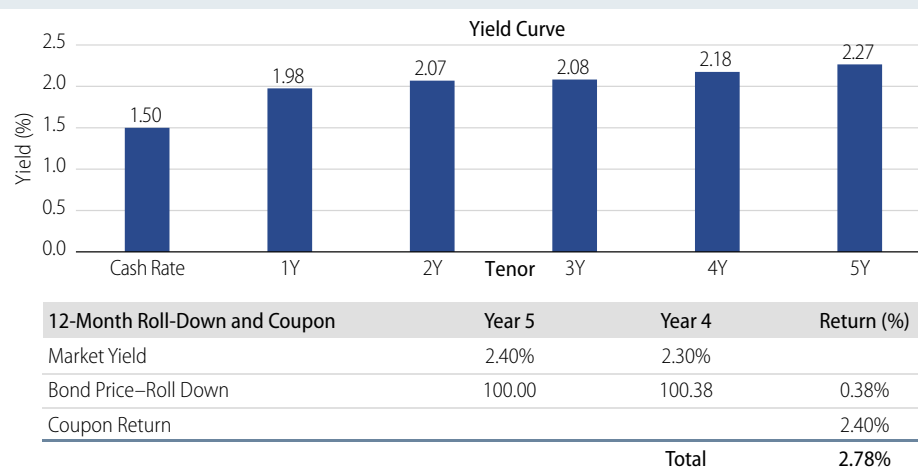
Simply using duration to measure the total return of a portfolio over a period of rising yields fails to account for other factors, such as:

- **Coupon** – The longer it takes yields to rise, the more your coupons offset any mark to market losses from the increase in yields. For example, a bond portfolio generates income constantly, so if rates increase over a period of time the income return will partially or completely offset the negative capital return as coupons are reinvested back in the higher interest rate environment.
- **Roll Down** – Yield curves generally have a positive slope, as investors see more risk (i.e., inflation and defaults) when lending for longer periods of time than doing so for shorter periods, which therefore require a higher rate of return. This is exacerbated when investors expect higher interest rates in the future. This positive slope results in a portfolio of bonds generating capital appreciation over time, simply by moving closer to maturity and rolling down the curve.

In this example, if an investor buys a 5-year bond with a yield of 2.4% and holds it for one year, the term risk attributed to the bond is deemed to be lower and therefore the yield required by an investor falls to 2.3%. This change in yield has a positive price impact, as the bond's market price increases from its initial issue price of 100 to 100.38, all else being equal.

If at this point the investor sells the bond, their total return would be the 2.4% coupon received and the 0.38% capital return.

Exhibit 2: Roll Down Effect



Source: Bloomberg. As of 31 Jul 18

- **Pull to Par** – Fixed-income securities can trade below their face values, which commonly occurs when investors require a return greater than that of the coupon yield on a security. This results in capital appreciation over time that compensates the investor for the shortfall in coupon yield to achieve the required total return.

Fixed-Income Portfolios Are More Than Just a Single Government Bond

Yield Curve Positioning – While effective duration is a reasonable measure for the price impact on a single bond for a point-in-time interest rate movement, it is less accurate on the impact of a portfolio of bonds, as a portfolio is made up of numerous bonds spanning across the yield curve. When interest rates move, they rarely move in a perfectly linear fashion across different bond maturities; the yield curve may steepen, flatten or change shape based on the fundamental or technical drivers supporting the change in interest rate expectations.

This results in bonds of differing maturities experiencing very different mark-to-market price movements. While some may depreciate significantly, others could remain flat or even appreciate in value.

Different drivers impact different sections of the yield curve bonds with short maturities, which are often influenced by expectations of future moves by the Reserve Bank of Australia (RBA), and the longer-dated bonds are influenced by global factors such as inflation, debt loads or demographics.

Consistently Re-investing – The fundamental structure of a portfolio of bonds requires it to be regularly re-invested as it receives coupons and as the bonds mature. In this context, despite the initial price decline stemming from a rise in rates, over the medium- to long-term it is better for a bond portfolio's total return to be re-investing at the higher interest rate level.

Credit Spreads – Credit spreads refer to the additional return above the risk free rate (that of a government bond) that is required by investors to hold riskier debt, such as that issued by corporations. This spread differs from sector to sector and company to company and is heavily influenced by the prevailing and expected economic conditions. Credit spreads generally decrease in periods of rising interest rates as conditions in the economy are viewed to be strong or improving.

Active Management – Skilled active fixed-income managers not only have the ability to lower portfolio duration in the face of rising rates, but also to adjust the portfolio's exposure to any of the factors listed above. Furthermore, there are other tools such as inflation-linked securities or derivatives that can be employed to implement conditional strategies that may dampen or negate the negative mark-to-market returns from rising rates.

Each of these factors can help complement the pure return of interest rates in a fixed-income portfolio.

A Historical Perspective

We have seen a multi-decade decline in bond rates in Australia, from the excessive inflationary conditions of the 1980s through to the more recent environment where inflation has regularly undershot the RBA's target (Exhibit 3).

While rates have fallen over the long-term, Exhibit 3 highlights the bear market periods during this time, where interest rates levels have increased by 2% or more.

In Exhibit 4, we have tracked the yield change (dark blue) and performance (blue) of the 5-year Australian Government Bond (ACGB 5-year) during the highlighted bear market periods. This provides an example of the power of coupons and roll-down, with the running yield over the 1988-1989 bear market being sufficient to negate a negative capital return—with the bond generating a flat total return.

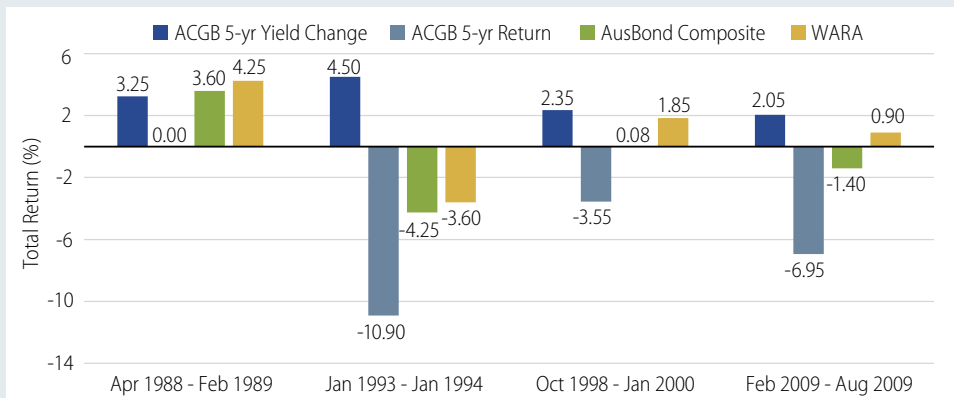
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Exhibit 3: Historic Bond Bear Markets



Source: Bloomberg, As of 31 Jul 18

Exhibit 4: Composite Returns During Bear Markets



Source: Bloomberg, Western Asset. As at 20 April 17

Periods are inclusive using nearest month-end data to Australian Govt 5-yr Bond Index yield peak and trough. ACGB 5-yr return calculation assumes constant yield from beginning of period. WARA is the Western Asset Core Australian Bond strategy representative account return gross of management fee net of trust expenses.

To highlight the impact of the other factors mentioned above such as a credit allocation and the benefit of active management, we have also included the return on both the Bloomberg AusBond Composite* 0+ Index (green) and the Western Asset Australian Bond representative account (yellow). Note that the Western Asset strategy has managed to generate a positive total return in three of the four bear market periods for bonds.

Velocity of Change

What the above chart also highlights is that the velocity of a rise in interest rates is just as important as the destination. For example, a protracted grind higher over an extended period has less of an impact on the total return of a bond portfolio (over the specific period) than an instantaneous shift, as coupons and reinvestment proceeds help to compensate the investor.

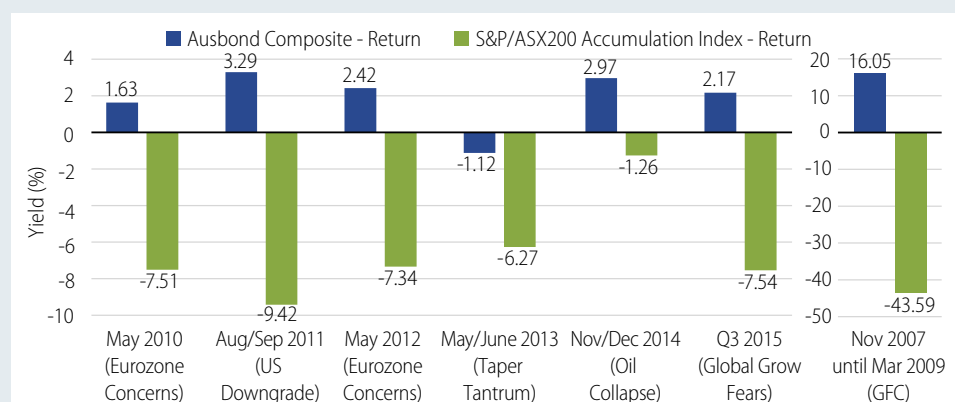
Given the investment time horizon for a core Australian bond portfolio should be five years or longer—if the period of rising interest rates is meaningfully shorter, the reinvestment of coupons and maturing bonds in the portfolio will likely result in higher total returns for a long-term investor.

Why Do We Include Australian Fixed-Income in a Diversified Portfolio?

In a diversified portfolio there are three primary roles that Australian fixed-income plays: liquidity,

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Exhibit 5: Total Returns During Recent Periods of Volatility



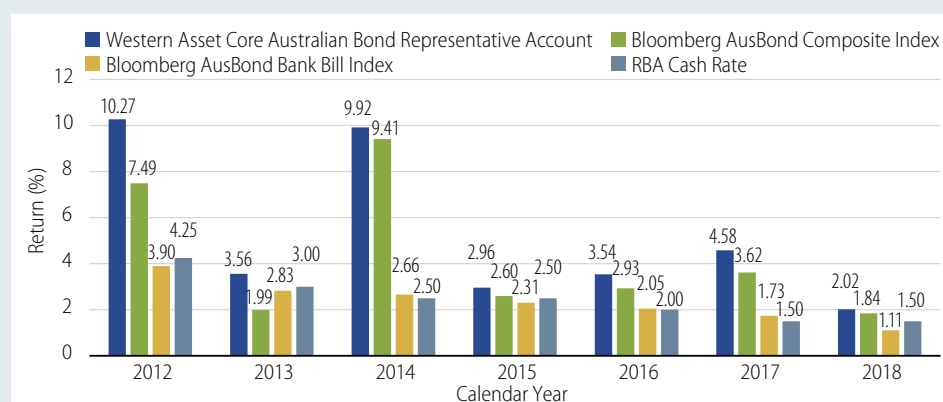
Source: Bloomberg

income and negative correlation to equities in risk-off environments. It is important to note that despite the historically low yields in recent times, Australian fixed-income has continued to provide these characteristics.

In five out of the six most recent equity market sell-offs, Australian bonds have provided strong positive returns to help dampen total portfolio volatility.

When comparing Australian fixed-income to cash or term deposits, cash only generates a modest level of income—though it does provide daily liquidity. While term deposits provide a slightly higher income level, this comes at the cost of lower liquidity. While some consider both to be slightly safer than Australian fixed-income, given they sit higher within the bank's capital structure (relative to bank senior debt) and do not face the same mark-to-market volatility as that of government bonds (given that there is no market price on term deposits), there is a clear cost attributed to such an allocation and in this case it is long-term underperformance.

Exhibit 6: The Western Asset Australian Bond Strategy Has Outperformed In the Past Five Years



Source: Bloomberg, Western Asset. As of 31 Jan 18

Gross of management fees net of trust expenses. Past Performance is not an indicator of future returns.

In four of the past five calendar years, the Australian fixed-income market (as represented by the Bloomberg AusBond Composite 0+ Index*) has outperformed cash and term deposits, while the Western Asset Australian Bond strategy has outperformed in all of the past five years.

Conclusion

While many investment commentators fear the initial capital price impact to bond markets due to their expectation of a sharp interest rate rise, factors such as the velocity of interest rate change, receiving coupons and roll-down over time dampen the drawdown. Further, through the effective use of the broad investment tool set available to bond managers, highly skilled active managers such as Western Asset have a proven track record of reducing risk and enhancing returns for investors. Finally, by merely holding a bond to maturity (assuming no default) we receive par value and coupons—the same as what is offered by term deposits, only with the added benefit of liquidity.

Overall, a period of rising interest rates represents a more challenging period for Australian fixed-income markets; however, the reality of a rising interest rate environment on the back of improving economic conditions is a far cry from the dooms day expectations of some market commentators.

When we assess the low overall impairment to an investor's portfolio of an Australian "bond bubble" scenario, relative to the impact of an equity bear market scenario, we believe it is prudent for investors to include an allocation to Australian fixed-income in their portfolios.

Past results are not indicative of future investment results. This publication is for informational purposes only and reflects the current opinions of Western Asset. Information contained herein is believed to be accurate, but cannot be guaranteed. Opinions represented are not intended as an offer or solicitation with respect to the purchase or sale of any security and are subject to change without notice. Statements in this material should not be considered investment advice. Employees and/or clients of Western Asset may have a position in the securities mentioned. This publication has been prepared without taking into account your objectives, financial situation or needs. Before acting on this information, you should consider its appropriateness having regard to your objectives, financial situation or needs. It is your responsibility to be aware of and observe the applicable laws and regulations of your country of residence. Western Asset Management Company Distribuidora de Títulos e Valores Mobiliários Limitada is authorised and regulated by Comissão de Valores Mobiliários and Banco Central do Brasil. Western Asset Management Company Pty Ltd ABN 41 117 767 923 is the holder of the Australian Financial Services Licence 303160. Western Asset Management Company Pte. Ltd. Co. Reg. No. 200007692R is a holder of a Capital Markets Services Licence for fund management and regulated by the Monetary Authority of Singapore. Western Asset Management Company Ltd is a registered Financial Instruments Business Operator and regulated by the Financial Services Agency of Japan. Western Asset Management Company Limited is authorised and regulated by the Financial Conduct Authority ("FCA"). This communication is intended for distribution to Professional Clients only if deemed to be a financial promotion in the UK and EEA countries as defined by the FCA or MiFID II rules.

Performance and Risk Disclosures

August 31, 2018

Rolling 1-Year Performance Returns Period Ending:	31 Aug 18	31 Aug 17	31 Aug 16	31 Aug 15	31 Aug 14
Western Asset Core Australian Bond Strategy Representative Account (gross of fees)	4.34%	0.22%	6.79%	6.51%	7.95%
Western Asset Core Australian Bond Strategy Representative Account (net of fees)	3.95%	-0.16%	6.37%	6.09%	7.55%
Bloomberg AusBond Composite 0+ Yr Index	3.84%	-0.66%	6.19%	6.29%	6.90%

Base Currency: AUD

Past investment results are not indicative of future investment results. Source for performance figures is Western Asset. Please refer to the Performance Disclosure for more information. Currency exchange rate fluctuations will impact the value of your investment.

The value of investments and the income from them may go down as well as up and you may not get back the amount you originally invested.

Investment Risks:

The strategy does not offer any capital guarantee or protection and you may not get back the amount invested. The strategy is subject to the following risks which are materially relevant but may not be adequately captured by the indicator:

Bonds: There is a risk that issuers of bonds held by the strategy may not be able to repay the investment or pay the interest due on it, leading to losses for the strategy. Bond values are affected by the market's view of the above risk, and by changes in interest rates and inflation.

Credit: The risk that an issuer will be unable to pay principal and interest when due.

Interest Rates: Changes in interest rates may negatively affect the value of the strategy. Typically as interest rates rise, bond values fall.

This strategy is managed by Western Asset. This information is only for use by professional clients, eligible counterparties or qualified investors. It is not aimed at, or for use by, retail clients.

Performance Disclosure

December 31, 2017

Australia Core Composite

Composite Inception Date: 12/01/1994 | Composite Creation Date: 12/01/1994

	No. of Accts	Gross Total Return	Net Total Return	Benchmark Total Return	Gross Total 3-Yr St Dev	Benchmark Total 3-Yr St Dev	Internal Dispersion	Mkt. Value AUD Mil	Percentage of Firm Assets	Firm Assets AUD Mil
2008	6	12.31%	12.09%	14.95%	2.69%	2.82%	0.80%	2,545	0.35%	725,273
2009	6	4.50%	4.29%	1.73%	3.03%	3.16%	0.78%	3,276	0.61%	536,185
2010	6	7.34%	7.13%	6.04%	3.18%	3.42%	0.37%	4,321	0.98%	442,817
2011	6	10.62%	10.40%	11.37%	2.61%	2.91%	0.12%	6,559	1.52%	432,247
2012	7	9.02%	8.81%	7.70%	2.42%	2.90%	0.40%	7,219	1.62%	444,896
2013	8	2.97%	2.76%	1.99%	2.39%	2.80%	0.15%	6,365	1.26%	504,814
2014	8	10.02%	9.81%	9.81%	2.39%	2.65%	0.10%	7,692	1.35%	569,482
2015	9	2.78%	2.58%	2.59%	2.41%	2.55%	0.07%	7,509	1.26%	596,175
2016	10	3.49%	3.29%	2.92%	2.70%	2.83%	0.07%	6,833	1.18%	578,935
2017	13	4.54%	4.33%	3.66%	2.63%	2.73%	0.08%	8,227	1.47%	557,833

Description: The Western Asset Australia Core strategy is a broad-market strategy that aims to maximize total return and add value through duration and curve positioning, sector allocation and security selection, while approximating benchmark risk. The strategy invests in a diversified portfolio using all major Australian investment-grade fixed-income sectors with a bias toward non-Treasuries.

Benchmark Description: The current benchmark is the Bloomberg AusBond Composite 0+ Yr Index. The index is engineered to measure the Australian debt market and is a composite of Treasury, Semi-Government, Supra/Sovereign, and Credit indices. This index is a subset of the Bloomberg AusBond Master Index.

Base Currency: AUD | **Composite Minimum:** No minimum asset size requirement.

Current Fee Schedule: .20 of 1% on the first AU\$100 million, .125 of 1% on amounts over AU\$100 million.

Western Asset claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Western Asset has been independently verified for the periods from January 1, 1993 to December 31, 2017.

Verification assesses whether (1) the Firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the Firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The Australia Core Composite has been examined for the period from January 1, 2006 to December 31, 2017. The verification and performance examination reports are available upon request.

For GIPS® purposes, the Firm is defined as Western Asset, a primarily fixed-income investment manager comprised of Western Asset Management Company, LLC, Western Asset Management Company Limited, Western Asset Management Company Pte. Ltd., Western Asset Management Company Ltd, Western Asset Management Company Pty Ltd, and Western Asset Management Company Distribuidora de Títulos e Valores Mobiliários (DTVM) Limitada, with offices in Pasadena, New York, London, Singapore, Tokyo, Melbourne, São Paulo, Hong Kong, and Dubai. Each Western Asset company is a wholly owned subsidiary of Legg Mason, Inc. ("Legg Mason") but operates autonomously, and Western Asset, as a Firm, is held out to the public as a separate entity. Western Asset Management Company was founded in 1971.

The Firm is comprised of several entities as a result of various historical acquisitions made by Western Asset, and their respective performance has been integrated into the Firm in line with the portability requirements set forth by GIPS.

The Composite is valued monthly. The Composite returns are the asset-weighted average of the performance results of all the accounts in the Composite. Gross-of-fees returns are presented before management fees, but after all trading expenses. Net of fees results are calculated using a model approach whereby the current highest tier of the appropriate strategy's fee schedule is used. This model fee does not reflect the deduction of performance-based fees. The portfolios in the Composite are all actual, fee-paying and performance fee-paying, fully discretionary accounts managed by the Firm for at least one full month. Investment results shown are for taxable and tax-exempt accounts and include the reinvestment of all earnings. Any possible tax liabilities incurred by the taxable accounts have not been reflected in the net performance. Composite performance results are time-weighted net of trading commissions and other transaction costs including non-recoverable withholding taxes. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

The returns for the accounts in the Composite are calculated using a time-weighted rate of return adjusted for weighted cash flows. The returns for the commingled funds in the Composite are calculated daily using net asset values (NAV), adding back the funds' total expense ratio or equivalent. Trade date accounting is used since inception and market values include interest income accrued on securities held within the accounts.

Composite returns are measured against a benchmark, when applicable. The benchmark is unmanaged and provided to represent the investment environment in existence during the time periods shown. For comparison purposes, its performance has been linked in the same manner as the Composite. The benchmark presented was obtained from third party sources deemed reliable but not guaranteed for accuracy or completeness. Benchmark returns and benchmark three-year annualized ex-post standard deviation are not covered by the report of independent verifiers.

Internal dispersion is calculated using the asset-weighted standard deviation of annual gross returns of those portfolios that were included in the Composite for the entire year. For each annual period, accounts with less than 12 months of returns are not represented in the dispersion calculation. Periods with five or fewer accounts are not statistically representative and are not presented. The three-year annualized ex-post standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period. The three-year annualized ex-post standard deviation is not presented for periods where 36 monthly returns are not available for the composite or the benchmark. Any gross total three-year annualized ex-post standard deviation measures prior to 2011, included within the "Examination Period" identified above, are not covered by the report of independent verifiers.

Past investment results are not indicative of future investment results.

Western Asset's list of composite descriptions is available upon request. Please contact Derek Fan at 626-844-9465 or derek.fan@westernasset.com. All returns for strategies with inception prior to January 1, 2008 are available upon request.