BondAdviser

Research Report

Report Created on 14 May 2019

Issuer Name

Neuberger Berman Australia Pty Limited

Security Name

Neuberger Berman Global Corporate Income Trust

Security Recommendation

Subscribe

Security Risk

High

Issuer Outlook

Improving	Stable	Deteriorating

Key Characteristics

Product Type	Listed Investment Trust	**Asset Class**	Fixed Income
Issue Size*	~$900,000,000	**Sub-Asset Class**	Credit
Net Asset Value	$2.00	**Manager**	Neuberger Berman Australia Pty
Fixed/Floating	Fixed	**Responsible Entity**	Equity Trustees Limited
Payment Frequency	Monthly	**Custodian & Administrator**	JP Morgan Chase Bank N.A.
Target Distribution	5.25% p.a. (net of fees)	**Unit Registrar**	Boardroom Pty Limited
First Distribution	5.25% p.a. (net of fees)	**Offer Opens*****	5 June 2019
Franking Credits Incl.	No	**Offer Closes*****	28 June 2019
ASX Listed	Yes (ASX Code: NBI)	**Allotment Date*****	12 July 2019
Convertible	No	**Commences Trading on**	12 July 2019
GICS Sector**	Investment Companies	**First Payment Date**	August 2019

* Issue size includes inital $413 million and assumes full take up of Entitlement and Shortfall Offers. ** We classify NBI within the GICS Sector "Investment Companies", but note that the ASX is likely to assign it a "Not Applicable" classification. *** Dates are slightly variable between Entitlement and Shortfall Offers.

Summary

The Neuberger Berman Global Corporate Income Trust (NB GCIT) is a listed income trust (LIT) designed to provide investors with access or exposure to the global high-yield bond market (ASX: NBI). This $2.7 trillion asset class is a major pillar of the global fixed income universe and highly diversified by geography, sector and credit quality. Specialist expertise is required to operate in this market and the global NB high yield investment team comprises highly-skilled debt specialists with significant experience managing high yield bonds. The strength, scale and expertise of NB's global network underpins the firm's high yield platform which has been in existence for over 20 years. The investment objective of the trust is to provide stable income with a target distribution of 5.25% p.a. after fees, payable monthly. The trust aims to provide incremental capital appreciation throughout the cycle and more importantly, avoid capital downside. The GCIT is not leveraged and all foreign currency risk is hedged into AUD.

On 26 September 2018 the NB GCIT successfully raised $413 million in its initial public offering at an indicative Net Asset Value (NAV) of $2.00. On 14 May 2019, a non-renounceable Entitlement Offer was announced with an offer ratio of 1 new unit for every 1 existing unit held. A Shortfall Offer is also available which includes a 15% placement capacity under ASX Listing Rule 7.1. Assuming each Offer is taken up in full, an additional $475 million will be raised for NB GCIT, which should be invested within 3 days given the robust liquidity of the market.

All management and other costs associated with the LIT are 0.85% p.a. of invested capital. The Offers open on 5 June 2019 and fully closes by 28 June 2019 and the New Units are expected to be fully issued by 12 July 2019.

Figure 1: 20Y Risk and Return

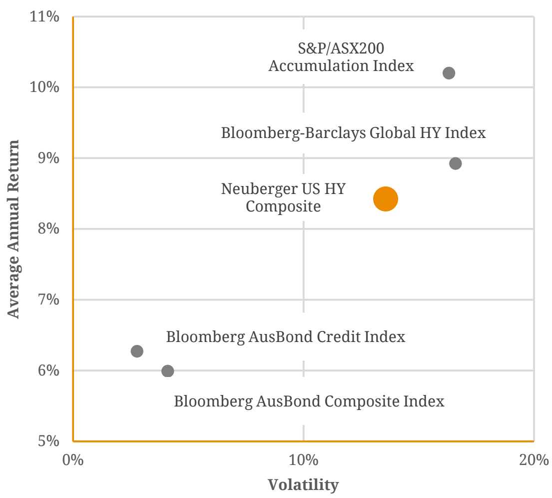
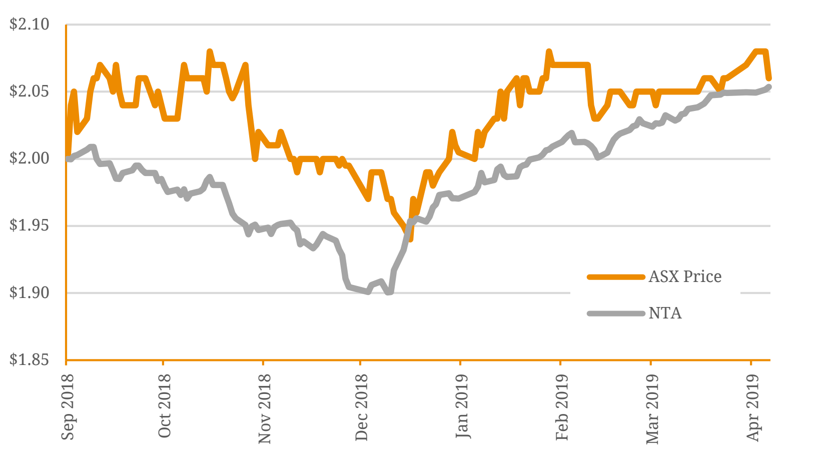


Figure 2: Neuberger Berman Global High Yield Performance



Security Recommendation - Subscribe *as at 14 May 2019*

This product is best recommended for investors looking for diversified exposure to the global high yield market and broader fixed income asset class. The Trust seeks to pay a stable and consistent monthly distribution equivalent to at least 5.25% p.a. (net of fees) which may also make it a suitable diversifier to retail investor income portfolios, which are typically biased toward domestically-sourced, equity-based and/or hybrid income streams.

A Listed Investment Trust (LIT) structure derives unit holder returns from two sources: distributions and capital returns from the underlying portfolio and share price movements which drive the prevailing premium/discount to Net Tangible Assets (NTA). The latter is a function of market and manager sentiment but also reflects liquidity and structural features of the trust. The manager has established multiple mechanisms to bolster NTA stability which should minimise trading price variability. Price movements away from NTA would, in our opinion, be more speculative and not a function of asset fundamentals or financial risk management. The former is of course subject to risks, however the investment manager's successful implementation of its portfolio strategy and risk framework have been in existence and developed for over 20 years.

Following its successful launch in September 2018, the NB GCIT has been met with robust demand in the secondary market and has traded at a premium to NTA on a consistent basis - highlighting the quality of the underlying portfolio and favourable market sentiment towards the trust. The trust did experience a period of NTA declines which coincided with a global market selloff in late 2018. Through 2019, the NB GCIT has more than recovered and its estimated NTA is currently around $2.04.

The NB GCIT has paid out a consistent level of monthly distributions thus far, putting it firmly on track to meet its distribution target of 5.25% p.a. net of fees. Furthermore, we do not expect the Entitlement Offer to have any dilutionary impact on future distributions given the very short ramp-up period (capital is expected to be deployed within three days). The trust's ability to quickly deploy capital is one of its key differentiators from other Fixed Income trusts and is made possible due to the size and depth of the global high yield market, which accordingly offers a superior level of liquidity relative to other sectors within the asset class.

We are arguably in the later stages of the current credit cycle with poses a risk to all asset classes but given the firm's high yield platform has successfully navigated portfolios through two economic cycles, we are confident in the ability of NB going forward. However, we note the high yield market is cyclical and should be considered as a medium to long term investment by investors. This is evident by the long-term performance of NB where portfolio managers have consistently outperformed in deteriorating economic environments which is a testament to the firm's approach to credit risk and portfolio risk management.

Overall, the NB GCIT is on track to meet its targets for investors and is performing in-line with our initial and repeated 'Subscribe' recommendation. The basis for recommendation of the trust is a blend of both subjective and objective analysis of the underlying portfolio and the manager's background, experience, analytical capability and proven track record. Based on our research, we believe this product offers investors a stable source of income with the yield being offered considered fair and commensurate with its risk and the performance of NBI over the past six months has confirmed all of our assumptions to date.

For these reasons, we recommend investors **Subscribe** to the Neuberger Berman Global Corporate Income Trust Entitlement Offer and/or Shortfall Offer.

Positive / Negative Risk Factors

What factors would change the Recommendation UP

- Neuberger Berman is a global asset management firm with a network comprising over 600 investment professionals in 23 countries. The firm offers services in equities, fixed income and alternative assets, all adding to overall depth of market knowledge and expertise. This notion is further supported by 99% of lead portfolio managers having more than 20 years industry experience.
- The firm has been managing high yield bonds since 1997 and the Global Non-Investment Grade Credit platform has evolved with the broader market. As a result, NB has been a major market participant for over 20 years and experienced a wide range of market conditions, including two recessionary periods. Despite the global high yield market experiencing over 1,500 defaults since 1998, Neuberger Berman's Global Non-Investment Grade Credit platform has experienced just one default over the same period.
- The target portfolio is well diversified across geographies, credit quality and industries across 250-350 issuers with a strong focus on liquidity. The Global High Yield strategy has strong risk management systems in place at an investment team level and firm-wide level (Neuberger Berman has a dedicated risk management division) to ensure unintended risk exposures are identified early and managed efficiently.
- NB has a successful history of issuing and managing listed vehicles in developed markets such as the US and Europe. This gives investors a level of confidence in the operational and structural risk management of the product. This is further supported by NB's strong governance framework.

What factors would change the Recommendation DOWN

- Given the unit price of the LIT is determined in a public market (ASX), the value of the product will be more sensitive to news flow and other announcements relative to NB's wholesale offerings.
- Credit quality deterioration (or in a worst-case scenario, issuer defaults) in the NB GCIT portfolio could result in a material decline in the NAV. However, this is partially mitigated by NB's strong track record, successful active strategies in managing global high yield bonds and approach to constructing portfolios which builds in significant diversification by country, industry and credit quality.

- While we are content with the internal controls of within the Global High Yield strategy and broader NB investment platform, operational risk is always a threat to portfolio performance. This includes the failure of internal procedures and human error or misjudgement.

- A lower interest rate environment would dampen high yield bond yields and there may be a risk that the target net distribution of 5.25% p.a. will not be met. We note this is a remote possibility currently and supported by the fact that high yield bonds have rarely exhibited yields lower than the target yield of the NB GCIT.

Issuer Outlook - Stable *as at 14 May 2019*

Investment Objectives, Strategy & Performance

The NB GCIT is a listed investment trust (LIT) designed to give investors diversified exposure to the $2.7 trillion global high yield bond market. The investment objective is to provide investors with a stable distribution of 5.25% p.a. (net of fees) throughout the cycle (payable on a monthly basis) while offering scope for capital appreciation and avoiding capital downside through active portfolio management.

This market has been a longstanding pillar of the broader fixed income landscape and if we consider the rich history of the asset class (best captured by the ICE BofAML high yield index series), the weighted-average yield of the market has only fallen below the target distribution level in Europe (20% target allocation), whilst yields in US and Emerging Markets (80% target allocation) have typically traded well in excess of the target yield. This is further supported with current global interest rate settings being at, or close to historical lows. Consequently, we are comfortable with the target yield of the LIT. This is dependent on the underlying portfolio operating at or near full investment and given the closed-end nature of the LIT and robust liquidity of the market, we expect any cash drag to negligible.

While the NB GCIT is a relatively new product, its underlying portfolio and strategy have been in existence for over 20 years with a strong historical performance. Throughout this period, this strategy has returned 8.42% p.a. on average and experienced just one default, highlighting the long-term success of NB as a high yield asset manager. The reference benchmark for the Global High Yield strategy is the ICE BofAML Global High Yield Constrained Index (USD Hedged Total Return) which the portfolio has outperformed by 1.07% p.a. on average over 20 years. Importantly, this outperformance is most prominent in poor credit environments (+3.74% p.a. on average in years where the benchmark records a negative return) – a demonstration of NB's defensive investment approach that focuses on downside mitigation, rigorous risk management, as well as technical positioning.

The strategy primarily focuses on larger, higher credit quality names in the global high yield market (BB, B). In effect, this ensures that the investment team does not chase portfolio return at the expense of credit quality and demonstrates the long-term approach of the firm. Specifically, in a strong economic environment (or near cycle peak), lower credit quality and/or distressed credits will typically outperform, which is not a core focus of the Global High Yield strategy. However, in a distressed environment, these instruments will fare worse than higher quality credits. Due to a strict approach to security selection and sector rotation that avoids credit deterioration, the portfolio has exhibited strong outperformance in economic downturns while showing modest outperformance in buoyant conditions. However, due to the skewed returns associated with credit (i.e. downside is far larger than the upside), the long-term performance of the strategy is robust, largely attributable to this defensive approach to credit risk. Overall, securities rated either above BB (investment-grade) or below CCC (~10% of the proposed portfolio) are used opportunistically as an adjustment tool to the risk profile of the portfolio rather than strategic holdings.

Portfolio Construction & Investment Process

The target portfolio of the GCIT is based on the underlying principles of NB's Global High Yield strategy with a few minor and conservative adjustments. The exclusion of loan assets, a stricter cash balance (1-2%) at any given time and all exposure completely hedged into AUD are all examples of these principles. As a result, the proceeds are expected to construct a straightforward bond portfolio across the high yield credit spectrum with no leverage, equities, credit derivatives or structured products. However, we note interest rate and currency derivatives will be employed to manage interest rate risk in line with the market and hedge all currency risk.

A key attribute of the target portfolio is its inherent diversification benefits. This begins at a top-down level where industry exposure cannot be more than 3x the industry exposure of the benchmark and geographic exposure cannot deviate by more than 20% from the benchmark. This flexibility allows NB to toggle these weights to actively manage the portfolio at a macroeconomic level in line with current or future investment themes (regional / industry asset allocation). At a bottom-up level, any issuer cannot exceed 3% of the total portfolio and on average, position sizes (by issuer) are expected to range from 0.25 – 0.50%. As a result, NB can pinpoint, control and act on idiosyncratic risk without any individual position materially driving portfolio performance. To ensure the portfolio remains nimble in these scenarios and NB can actively manage the GCIT smoothly, NB primarily focuses on large issuers in the deepest (and highest) credit quality segments of the high yield spectrum (BB- and B-rated issuers, ~93% of target portfolio).

The investment process is administered by NB's Global Non-Investment Grade Credit and Emerging Market Debt Corporate platform where the Global High Yield strategy is one of seven strategies. All strategies have a central portfolio management team with significant expertise in their respective areas. The Global High Yield strategy is a blend of more geography-specific strategies across the platform and consequently, the portfolio management team comprises five investment professionals who are also portfolio managers of the US and European High Yield strategies as well as the Emerging Markets Corporate Debt strategy. To support the decisions of the portfolio managers, the broader Global High Yield investment team comprises an additional 51 individuals across research, trading and investment specialist functions.

Under this structure, the portfolio management function has final discretion regarding buy and sell decisions, but the investment decision is generated through a collaborative process across the Global High Yield network. This begins at idea generation where research analysts organized by four distinct industry sectors will identify opportunities to present to the respective sector team. If the proposal is progressed, it is taken to the Global High Yield Credit Committee comprising all portfolio managers of all high yield strategies across the platform. This populates the portfolio with attractive positions in the high yield market across the U.S., Europe and Emerging Markets (known as 'sleeves'). Aggregate, top-down geographic exposure is then managed / adjusted by the Global High Yield Asset Allocation Committee which consists of the Chief Investment Officer & Global Head of Fixed Income and the portfolio managers of the Global High Yield strategy (see Investment Process section for additional information).

As at 31 March 2019, the NB GCIT has 440 holdings from 302 issuers with a Yield to Worst of 5.82%, a weighted average interest rate duration of 4.14 years and an average credit quality of BB- (S&P). The portfolio is additionally well diversified by industry sector with no single category (of 18) representing more than 13%.

Liquidity, Operational & Financial Risk Management

A strong focus on risk is a firm-wide effort with robust controls throughout the investment process and further oversight at a firm level (see Governance, Asset Stewardship & Internal Controls). The approach to risk management begins with the Global High Yield strategy where respective sector analysts continually monitor the credit fundamentals of issuers under their research coverage. We note that relative peers, each NB credit research analyst is responsible for only 25-30 issuers to enable deeper issuer engagement and research coverage. To ensure a level of consistency, teams utilise NB's proprietary "Credit Best Practices Checklist" which covers fundamental and technical factors at an economic, industry, issuer and security level. This allows analysts to perform scenario analysis, assign internal ratings and apply relative value techniques to identify potential opportunities and proactively avoid / remove threats. Importantly, any adverse 5% move by an individual position relative to the benchmark index automatically triggers a Global High Yield Committee Review to ensure unforeseen idiosyncratic risks are addressed and managed early.

While the research team monitors the pool of existing and potential positions, the portfolio management team is ultimately responsible for any inclusions or exclusions to the portfolio. At this level, there is a primary focus on diversification within the regional sleeves, balanced against rotational strategies to add alpha. As a result, the portfolio managers are responsible for managing credit risk at a sector level and across the credit risk spectrum. Expertise is required to objectively and consistently manage these risk exposures, which is evidenced by 99% of NB's lead portfolio managers each have more than 20 years of industry experience. Broader geographical investment risk is controlled by the Global High Yield Asset Allocation Committee which is are responsible for adjusting over/underweight positions in the U.S., European and Emerging Markets sleeves of the Global High Yield strategy. This additional oversight incorporates the views of the Chief Investment Officer & Global Head of Fixed Income, adding further expertise to the risk management framework. The geographic, sector and individual issuer strategies to manage risk and generate excess returns reflects the active management of the NB GCIT.

A dedicated risk management team separate to the Global High Yield investment team conducts regular analysis on the constructed portfolio as an additional check. This ensures that the portfolio reflects the intended risk exposures of the portfolio management team. Throughout this process, both the portfolio managers and the separate risk management team use sophisticated risk management tools on an ex-post and ex-ante basis, quantitatively attributing portfolio risks.

The Liquidity Risk of the GCIT is limited as a result of its closed-end nature and it is expected it will only hold a cash balance equal to 1-2% of total portfolio value. Instead, liquidity risk largely relates to the ability of the portfolio managers to enter and exit positions to capitalise on investment opportunities efficiently and divest deteriorating credits promptly. To avoid illiquid positions, the investment team screens out defaulted securities while placing minimums on total publicly-traded debt and total EBITDA for potential issuers to be incorporated into the portfolio. This also allows NB to be an active manager, reflective of estimated annual turnover being 50-75% of the portfolio (albeit ~50% of this relates to reinvestment of maturities). Portfolio implementation is the responsibility of the Portfolio Construction Team which consists of the portfolio managers and head high yield trader where levels are set by the portfolio managers for execution by traders.

Operating Risk is defined by the Basel Committee on Banking Supervision (BCBS) as "the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events". As such, operational risk captures business continuity plans, environmental risk, crisis management, process systems and operations risk, people related risks, health and safety, and information technology risks. This includes errors in internal controls, hedging policies and other operational aspects of the NB GCIT and/or underlying portfolio. The internal controls are overseen by governance mechanisms (see next section), while the hedging and interest rate derivatives functions could pose a risk to portfolio returns. However, NB has a designated hedging team which administers all the firm's undesired foreign currency exposures. This is further supported by the fact that the only foreign exchange exposure in the NB GCIT relates to the British Pound, Euro and US dollar. As only USD-denominated Emerging Market high-yield bonds are included in the Global High Yield strategy, there is no exposure to volatile Emerging Market currencies which can present hedging issues. As a result, we are comfortable with the hedging policies and procedures of the NB GCIT. All foreign currency exposures of the NB GCIT will be fully hedged to Australian dollars.

Governance, Asset Stewardship & Internal Controls

NB is a large, global asset manager operating across various asset classes. As such, firm-wide governance is crucial to ensure internal controls are established and maintained. Importantly, these functions are independent of the portfolio construction process and comprise dedicated committees providing continual oversight.

- The Investment Risk Committee (IRC) reviews investment risks associated with new and existing products. The IRC is supported by NB's Portfolio Analysis & Risk group which pinpoints risk exposures across the firm's portfolios and generates reports for the IRC, including risk metrics, scenario analysis, stress testing and liquidity coverage ratios. The Portfolio Analysis & Risk group comprises around 20 risk professionals in New York and London.

- The Operating Risk Committee (ORC) reviews operating risks associated with new and existing products while also continually improving the operating framework of NB. The objective of the ORC is to minimise losses from inadequate or failed internal processes, people, systems, or from external events. Similar to the IRC, the ORC is supported by the Operational Risk Management group which provides periodic reports to the ORC. The Operational Risk Management group comprises around ten risk professionals in New York and London.

- The Asset Management Guideline Oversight (AMGO) function acts as an independent overseer to client investment guidelines. The AMGO team monitors all pre- and post-trade compliance to ensure all client and regulatory requirements are met globally. The AMGO unit has the ability to alert portfolio managers to new and existing instances of non-compliance through the firm's order management systems. Any breaches are reviewed, resolved and communicated in line with the terms of the relevant Investment Management Agreement (IMA). The AMGO team comprises nine members in New York, Chicago and London.

Importantly, the Chief Risk Officer is independent of investment teams and oversees each the Portfolio Analysis & Risk, Operational Risk Management and Asset Management Guideline Oversight teams. In turn, the Chief Risk Officer reports directly to the Chief Executive Officer and is overseen by the Board of Directors, as well as Trustees.

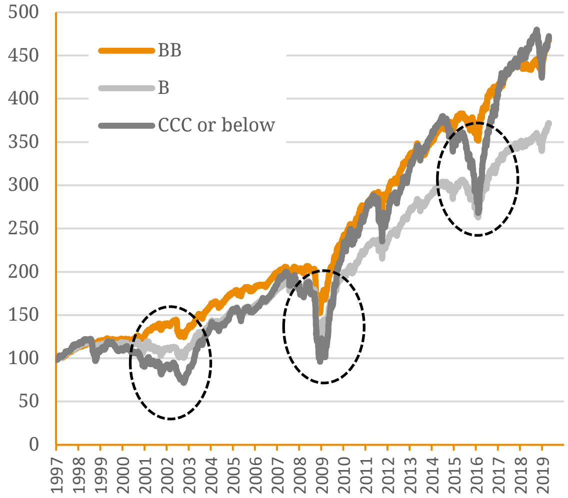
At a product level, the NB GCIT is a close-ended listed investment trust (LIT) domiciled in Australia (issued by Neuberger Berman Australia Pty Ltd) with a single class of units on issue. The LIT is registered with ASIC as a Managed Investment Scheme, and Equity Trustees Limited is the Responsibility Entity (RE) acting in the best interest of holders. Neuberger Berman Australia Pty Ltd is as the Manager of the trust while Neuberger Berman Europe Limited and Neuberger Berman Investment Advisers LLC are the Investment Managers. The Product Disclosure Statement, Trust Deed and Investment Management Agreement (IMA) are the key documents governing the NB GCIT.

Quantitative Analysis

The risk-return profile of the global high-yield asset class is unique in that it provides equity-like income but at a much lower capital volatility, but there is some increased risk relative to other fixed income instruments. However, active strategies can be successfully applied to partially mitigate these risks and this is one of the key advantages of the NB GCIT. Neuberger Berman has experienced just one default in its 20-year history managing high yield bonds (vs over 1,500 high yield defaults globally in this time) while generating an average outperformance of 4.53% over the bottom quartile of annual market returns over the same period. This consistent focus on downside risk equates to a strong track record which includes the successful navigation through two US recessions, namely the dot-com bubble (2002/03) and the global financial crisis (2008/09).

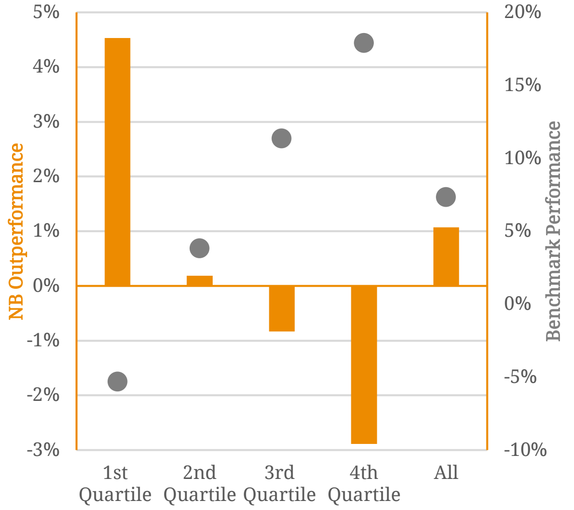
We concede that the firm's high yield performance has been modest during periods of strong market conditions, but this is a material feature of the manager's defensive investment approach that deliberately attempts to avoid credit deterioration. Specifically, the Global High Yield strategy (which is a composite of regional strategies) focuses on the liquid, higher-quality segment of the high yield universe (BB- or B-rated securities). As a result, distressed credits (CCC- or below rated securities) are not a core holding of the portfolio which is the main contributor to market outperformance when the economic landscape is improving (higher capital appreciation) or benign (higher income). While these higher-risk instruments will exhibit outperformance in these conditions, the opposing downside as economic conditions deteriorate is far larger, demonstrating the skew of credit returns. For Neuberger Berman's Global High Yield strategy, the end result is stronger outperformance in market downturns with modest outperformance in an improving or benign global economy. An examination of Neuberger Berman's US High Yield strategy, a representation of the firm's longest track record in high yield (since 1997) shows an overall outperformance of 1.07% p.a. over 20 years (Figures 3 and 4 below).

Figure 3. ICE BofAML US High Yield Total Return Index by Credit Quality



Source: BondAdviser, Bloomberg

Figure 4. NB US High Yield Composite Average Outperformance by Market Return Quartile



Source: BondAdviser, Neuberger Berman, Bloomberg

There are many factors that determine the risk-return profile of the NB GCIT but none is greater than credit risk, where credit improvement or deterioration will be the major determinant of outperformance or underperformance, respectively. Over the past 20 years, the successful active management of Neuberger Berman's high yield strategies demonstrates the obvious benefits of strategic positioning against credit expectations, but we note the composition of the global high yield universe has changed significantly over this period. This shift has been predominantly led by growth in the European and Emerging Markets high yield markets, which Neuberger Berman has captured through the launch of its Global High Yield strategy in 2016.

In quantitatively evaluating the future performance of this strategy, we have adopted the CreditMetrics framework, a proven methodology created by JPMorgan in 1997 which was later purchased by MSCI in 1999. We note that the portfolio is subject to two broad overarching risks, namely credit and liquidity, but the latter is challenging to model with conviction, especially in a market where publicly-available transactional data is limited. For this reason, our focus will be solely on credit risk for analytical purposes.

The CreditMetrics model attempts to model credit migrations (i.e. improvements or deteriorations in the credit quality of an asset), which will directly impact the valuation of NB GCIT (through Net Asset Value). Based on estimated fair value yield curves, we can revalue each individual holding for each derived credit rating. Although Neuberger Berman has a robust track record in avoiding defaults, our analysis places no limit on adverse credit migration to model a possible worse-case scenario for investors. We note that this approach is therefore more applicable to the broader global high yield asset class and takes no implicit assumption of NB's capability and longstanding track record in avoiding defaults.

We model the probability of mark-to-market losses from Moody's historical data known as transition rates (Table 1 below). Specifically, this data represents long-term statistics (1981-2018) regarding the probability of an issuer being upgraded or downgraded from its current credit rating over a certain period. Despite the recommended investment horizon being 3-5 years, we apply a one-year credit migration outlook for our quantitative framework to limit the uncertainty of variables. For each rating band and for the majority of the population, an instrument's credit rating is likely to remain static over this timeframe with some probability (>10%) of a one-notch upgrade or downgrade. Note that the probability of a credit rating downgrade will typically exceed the probability of an equivalent rating upgrade, highlighting that credit migrations are negatively skewed. Our analysis builds on the principles behind Merton's structural credit model to randomly generate a series of credit ratings in one year's time. The core assumption is that asset (firm) returns are normally distributed and that the value of an issuer in one year is determined by the credit rating (or default) of the company at that time.

Table 1. Moody's Global Corporate 1-Yr Credit Rating Transition Rates and Average Recovery Rates[1]

Current Rating	1-Yr Forward Transition								Instrument	Recovery Rate
	AAA	AA	A	BBB	BB	B	CCC	Default	Revolver Loan	86%
AAA	91.11%	8.18%	0.61%	0.07%	0.02%	0.00%	0.00%	0.00%	Term Loan	75%
AA	0.84%	89.62%	8.95%	0.44%	0.06%	0.04%	0.02%	0.02%	Senior Secured Bonds	62%
A	0.05%	2.59%	91.14%	5.51%	0.50%	0.11%	0.04%	0.06%	Senior Unsecured Bonds	48%
BBB	0.03%	0.15%	4.29%	90.58%	3.90%	0.71%	0.16%	0.19%	Senior Subordinated Bonds	29%
BB	0.01%	0.04%	0.45%	6.74%	83.28%	7.67%	0.77%	1.05%	Subordinated Bonds	29%
B	0.01%	0.03%	0.15%	0.49%	5.37%	82.53%	7.32%	4.10%	Junior Subordinated Bonds	21%
CCC	0.00%	0.02%	0.02%	0.09%	0.39%	7.63%	79.82%	12.03%	Firm-Wide Recovery	55%

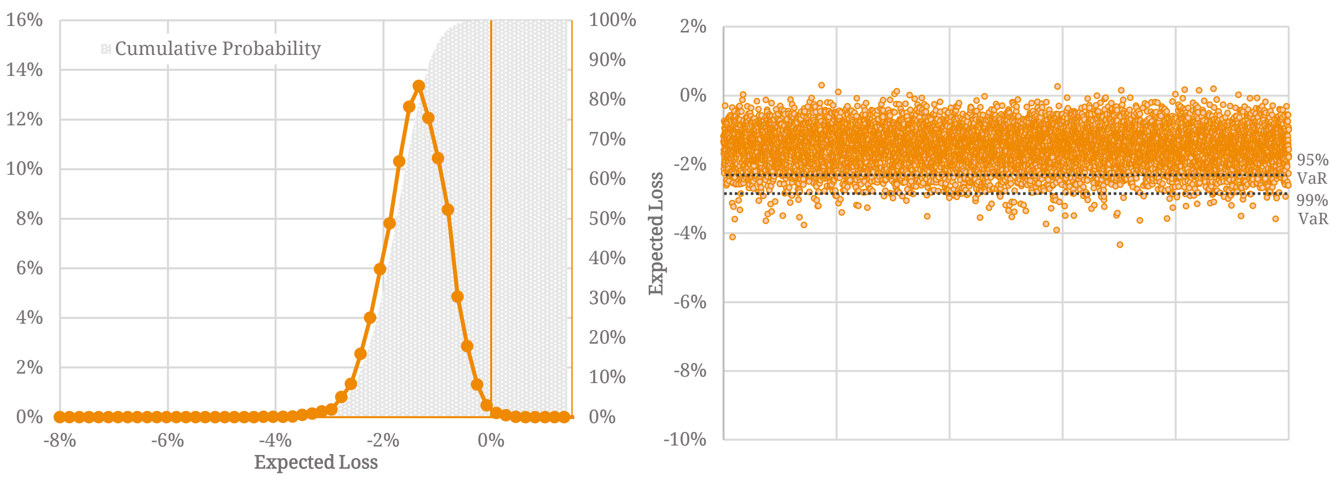
[1]Average recovery rates from 1920-2018 and average transition rates from 1981-2018
Source: BondAdviser, Moody's

As mentioned, the NB GCIT consists of three different "sleeves" across the US, EU and Emerging Markets (EM). Given the unique nature of each of the sleeves, our methodology was applied individually across the three sets of portfolio assets, before aggregating the weighted contributions to determine NB GCIT performance (Figure 5). We assume there is no FX impact, noting this is mostly mitigated by NB themselves through hedging on a 3-month forward basis.

We simulate 10,000 scenarios where each portfolio asset has an end credit rating defined by the transition probabilities in each of the three sleeves. Mapping valuation changes to these hypothetical credit rating states, we derive a probability distribution of portfolio valuations for each sleeve (Figures 6-8). The revaluation overlay allows us to estimate (unrealised) credit loss over a one-year horizon and illustrates the valuation impact of adverse credit migrations across all three sleeves of the NB GCIT and the portfolio in total.

As illustrated, portfolio exposure remains largely grounded at current levels with a skew to the downside reflecting the natural characteristics of credit investing. Given the portfolio is entirely comprised of non-investment-grade assets, our estimated credit loss is very manageable with a mean loss of ~1.49% and with portfolio value-at-risk (at a 1% VAR probability) of a ~2.84% loss. This largely reflects substantial diversification benefits in the underlying portfolio, despite the lower historical recovery rates of the senior unsecured bond asset class (~48% in default), supporting our ultimate assessment of the NB GCIT's approach. The quantitative framework defines the forward-looking risk score for our overall product assessment of the NB GCIT. This is consistent with the BondAdviser Fund Research Methodology and overlays an objective evaluation to our recommendation. On the basis of our analysis, we assign the NB GCIT a risk score of 'BB' which also equates to a weighted-average credit rating of the portfolio at the end of a one-year period.

Figure 5. NB GCIT Credit Migration Impact – Combined Portfolio (US 60%, EU 20%, EM 20%)



We note that this risk assessment does not account for the previously mentioned expertise of the NB High Yield team in avoiding defaults and instead assumes that assets would be held to default. In reality, covered issuers are actively researched and followed and subjected to many levels of scrutiny and oversight. We expect that, in-line with demonstrated history, assets would be managed prior to such an event occurring.

Another key assumption in our testing is the complete exclusion of income in the transition scenarios, which would more than compensate for the (unrealised) market value losses from adverse credit ratings changes within the NB GCIT.

Considering all of the above and in particular our conservativeness in assuming no pre-emptive actions are taken before a default and for no coupon income, we remain very comfortable with the NB GCIT and on management's ability to avoid significant credit losses whilst delivering the targeted income levels.

Figure 6. NB GCIT Credit Migration Impact (LHS) & Simulation (RHS) – US Sleeve

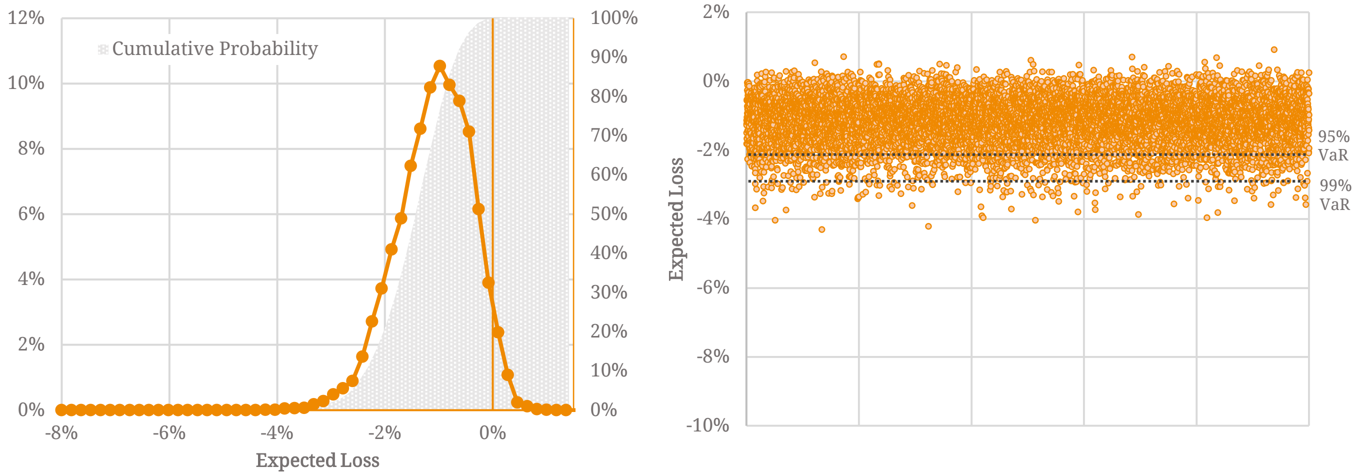


Figure 7. NB GCIT Credit Migration Impact (LHS) & Simulation (RHS) – EU Sleeve

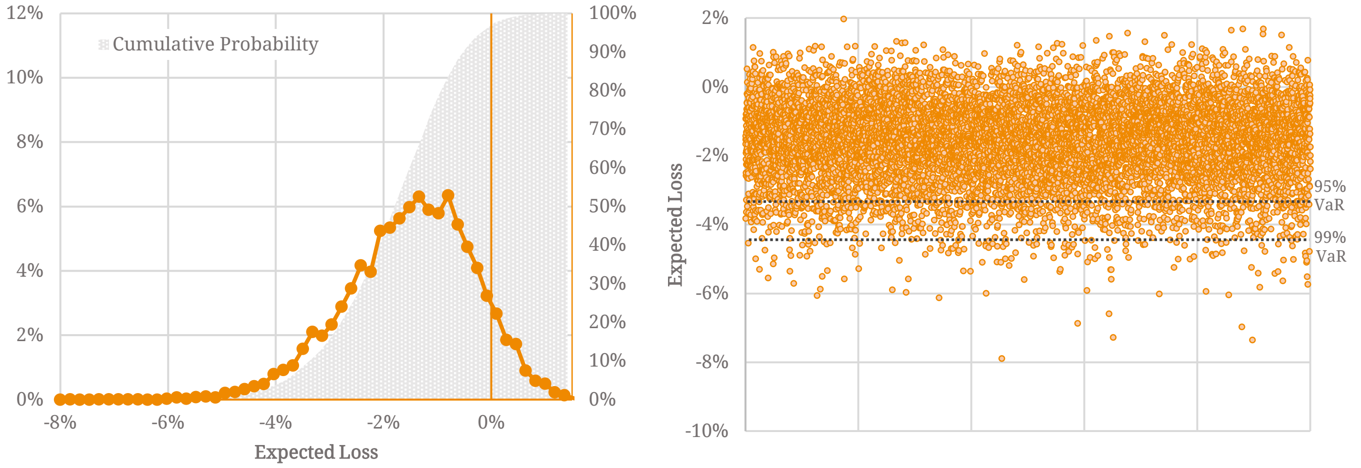
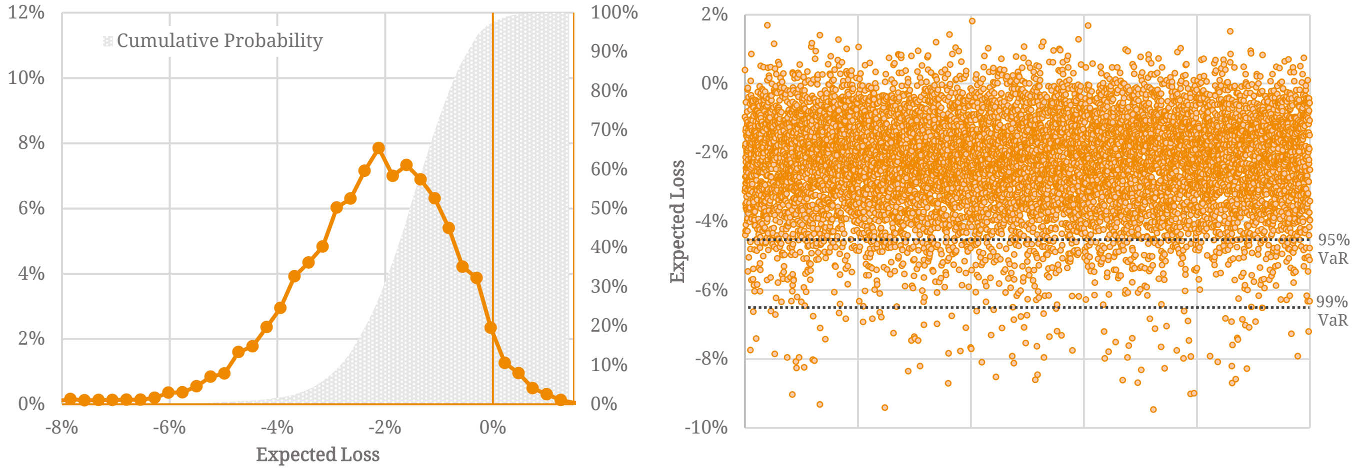


Figure 8. NB GCIT Credit Migration Impact (LHS) & Simulation (RHS) – EM Sleeve



Investment Process

The investment process underpinning the NB GCIT has been in existence and refined for over 20 years. This robust approach consists of multiple layers across analysis, implementation and subsequent, risk management ensuring strong risk control is embedded at all stages of portfolio management. The Neuberger Berman Global High Yield strategy is collaboratively administered through NB's Global Non-Investment Grade and EMD Corporate platform. The investment process allows the firm to apply its overarching investment philosophy, where the proactive avoidance of credit deterioration, in-depth relative value analysis, sector and quality rotation, EM country selection and regional asset allocation are all utilised to generate portfolio alpha.

Portfolio Construction

NB's team network consists of 55 investment professionals, helmed by five portfolio managers. The team dynamic contributes to the portfolio construction process through several functions beginning with the idea generation process and ending with the regional asset allocation overlay function.

The portfolio managers have final discretion regarding portfolio construction, but individual research analysts have primary responsibility, utilising the firm's proprietary credit research processes to identify potential opportunities for the portfolio. The credit research function is segregated into specialist teams across either Developed Markets (DM) or Emerging Markets (EM), and then further split into sector classifications, namely Consumer, Cyclical, Telecom and Energy / Utilities. Credit selection at a team level is first filtered into appropriate issuers / securities which are then subject to extensive fundamental analysis, defined by Neuberger Berman's proprietary "Credit Best Practices Checklist". This set of criteria incorporates material quantitative (financial statements, security covenants, market valuations) and qualitative (management, strategy, governance) factors which are considered from a macroeconomic, industry and issuer perspective. In EM credit analysis, the country of origin is another important variable utilised by analysts.

Any substantive portfolio recommendations undergo a two-stage vetting process, initially within respective sector teams and then subsequently by the Global High Yield Credit Committee. Committee members are dependent on whether the recommended security / issuer will be included in the Developed Market high-yield sleeves (US or Europe) or the Emerging Markets high-yield sleeve. Regional sleeve construction is the primary responsibility of the portfolio management team with a strong focus on intra-region geographical, sectoral and credit quality diversification. Sector and quality rotation strategies are employed by the portfolio managers within individual sleeves.

To control regional-specific risk and return profiles, the Global High Yield strategy employs an additional asset allocation overlay. This function is managed by the Global High Yield Asset Allocation Committee which comprises the portfolio managers and the Chief Investment Officer & Global Head of Fixed Income. Top-down views for the U.S., European and Emerging Markets high yield landscapes are formulated and then weighted accordingly based on the Global High Yield scorecard. These weightings are applied to the regional sleeves generated collaboratively by the research and portfolio management teams. While separate portfolio managers are responsible for either Developed Market or Emerging Market sleeves, they are collectively responsible alongside the Chief Investment Officer & Global Head of Fixed Income for asset allocation decisions.

Portfolio Management

The portfolio management process is largely focused on monitoring and managing portfolio risks. Risk management is a firm-wide foundation of Neuberger Berman and consequently, there is a dedicated firm-wide risk management team. This acts as an additional check to ensure portfolio managers do not hold unintended risks in the portfolio. At a portfolio level, a number of quantitative tools are utilised to stress deployed capital and draw comparisons to the benchmark index. From a governance perspective, the firm employs many risk management professionals to operate internal controls which are established and overseen by the IRC (Investment Risk Committee) and ORC (Operating Risk Committee).

With this continual oversight, managing risk is a shared responsibility together with the Global High Yield research teams and portfolio managers. The most prominent and consistent risk of the portfolio is the credit risk of the underlying issuers. The monitoring of credit risk is the responsibility of the respective analyst covering the sector and issuer. For each company, the analyst will conduct scenario analysis and other forward-looking exercises to determine the likelihood of debt servicing. If the analyst has conviction that the issuer will be unable to meet debt obligations, a sell decision will most likely be triggered. We note a review is triggered automatically if a security declines by greater than 5% against the benchmark index, ensuring idiosyncratic risk is identified and managed early. This proactive approach allows the portfolio managers to avoid deteriorating credits, a key contributor to the manager's outperformance over the past 20 years.

Other decisions to sell holdings may be due to relative value analysis (i.e. over- or under-priced) or sector/credit quality rotation strategies at a sleeve level (i.e. to generate alpha or de-risk concentrations). The active management of the NB GCIT is reflected in typical annual turnover for the strategy being 50-75% of the portfolio (noting that typically half of this is reinvestment of maturities).

Liquidity risk is considered at both a security and issuer level. This consideration is largely managed at the filtering stage of the idea generation process where only large, non-investment grade companies are considered for investment based on EBITDA and publicly-traded debt outstanding. If a portfolio recommendation proceeds to implementation, any one security holding is limited to less than 15% of that security's outstanding principal amount, to ensure the holding can be liquidated relatively efficiently.

Currency and interest rate risks are managed using derivatives to hedge any unintended exposure. The portfolio managers do not intend to take strategic positions in currencies, and fully hedge all foreign currency exposures (USD, GBP, EUR) back to Australian dollars. Yield curve positioning is a function of underlying credit analysis, with interest duration expected to be within 1.5 years of the benchmark index duration.

Figure 9. Investment Process

Universe	• Developed Market: 1,200 Issuers • Emerging Market: 350 Issuers
Filters	• US: >US$500m of publicly-traded debt and >US$100 of EBITDA • Europe: >US$200m of publicly-traded debt • Emerging Markets: >US$300m of publicly-traded debt • No defaulted or severely distressed securities, one-time issuers or other outliers • = 1,100 Issuers (93% of $Index Value)
Fundamental Credit Analysis	• Proprietary "Credit Best Practices Checklist" across economic, industry and issuer factors • Includes forward-looking scenario analysis of financial position and internally generate credit rating of each issuer • Analysts cover 25-30 issuers each and visit management bi-annually • Relative Value analysis in regards to security valuations, technical factors and fundamentals.
Evaluation	• 1st level evaluation undertaken by respective sector team • 2nd level and final evaluation undertaken by Global High Yield Credit Committee • This committee is split into sub-committees regarding Developed Markets and Emerging Markets high yield investment decisions
End Result	• 200 – 300 Issuers in Developed Markets & 40– 60 Issuers in Emerging Markets

Regional Sleeve Construction

- Approved individual credits are populated into regional sleeves across US, Europe and Emerging Markets by the Global High Yield Strategy portfolio managers
- At this level, there is a strong focus on diversification across industries, geography (within the regional sleeve) and credit quality
- Any issuer cannot exceed 3% of the total portfolio and on average, position sizes (by issuer) are expected to range from 0.25 – 0.50%

Asset Allocation Overlay

- Driven by NB's global macroeconomic outlook. Asset allocation between sleeves is toggled to best reflect the risk / return profile of the global high-yield market
- The Global High Yield Asset Allocation Committee is responsible for this stage of the process which consists of the Global High Yield Strategy portfolio managers and CIO & Global Head of Fixed Income
- Top-down indicators are used for a 'scorecard' based on macro/fundamental (40%), valuation (30%) and technical (30%) factors

Risk Management

- The fixed income platform has a dedicated team for risk management
- Risks are quantified into sector, industry, issuer, country, coupon, maturity, duration, quality, liquidity and seniority on a daily basis using a number of internal and external risk management tools
- Any >5% adverse change in a position relative to the benchmark index automatically triggers a Global High Yield Credit Committee review
- Strong governance mechanisms across the network complement internal controls

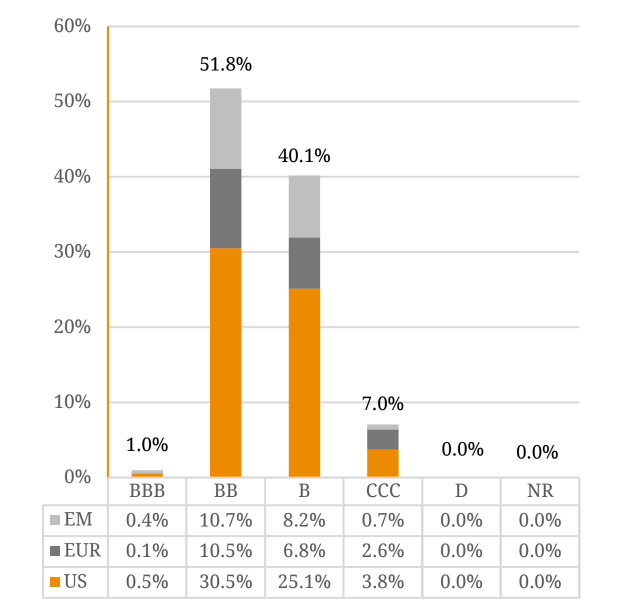
Source: BondAdviser, Neuberger Berman

Appendix 1: Target Portfolio Overview (as at 31 March 2019)

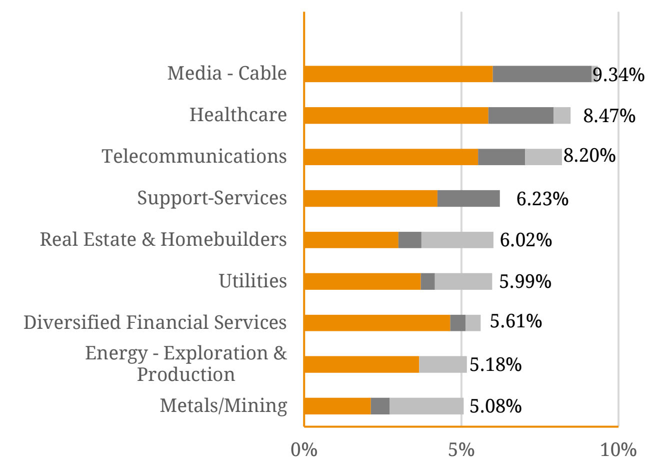
NB GCIT Breakdown

Composition	US	EUR	EM	Total
Asset Allocation	60%	20%	20%	**100%**
Issuers	158	88	85	**302**
Average	0.65%	1.05%	1.18%	**0.33%**
Max	3.24%	4.15%	9.30%	**2.20%**
Securities	248	96	96	**440**
Average	0.24%	0.21%	0.21%	**0.23%**
Max	1.38%	0.83%	1.72%	**1.72%**
Metrics	**US**	**EUR**	**EM**	**Total**
Coupon Rate	6.20%	4.60%	6.57%	**5.96%**
Yield to Worst	5.38%	6.15%	5.97%	**5.67%**
Spread to Worst	3.80%	4.39%	4.39%	**4.05%**
Duration (Years)	4.30	3.97	3.88	**4.14%**
Maturity (Years)	6.72	6.52	5.69	**6.45**

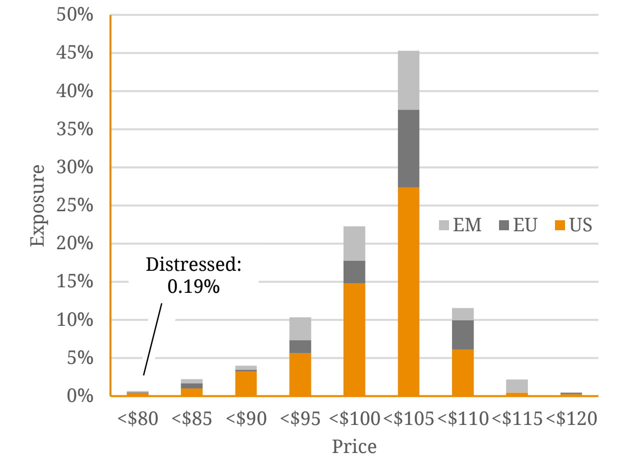
Target Portfolio Credit Quality



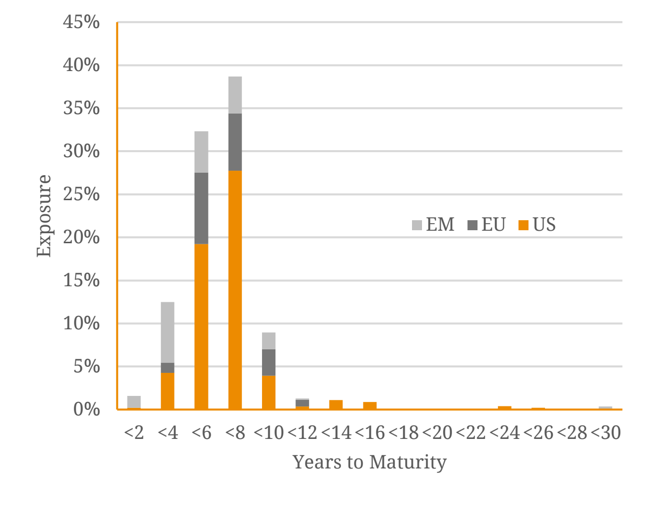
Industry Diversification (Top 10)



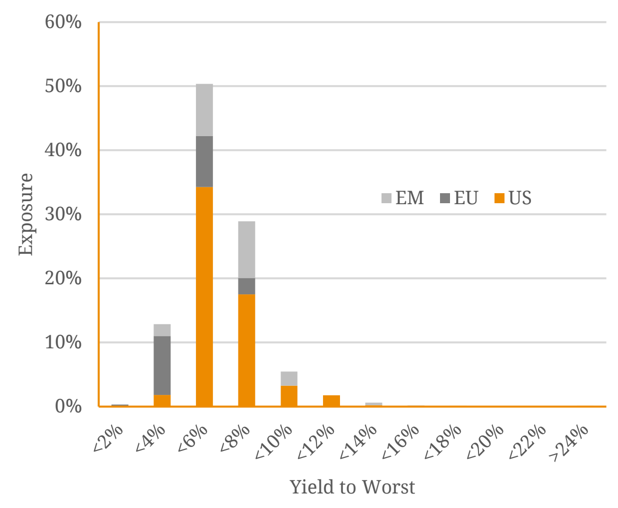
Issuer Bond Price Distribution



Maturity Profile



Yield Distribution



Source: BondAdviser, Neuberger Berman

Appendix 2: About Neuberger Berman

Neuberger Berman is an independent global investment management firm with US$445 billion of assets under management (AUM) across fixed income, equities and alternative strategies. The firm's global network includes over 2,000 employees in over 20 countries, of which over 600 are investment professionals (as at 31 March 2019).

The firm was founded in 1939 by Roy Neuberger and first began managing institutional funds in 1977. Neuberger Berman became a public company in 1999 and was subsequently acquired by Lehman Brothers in 2003. In the wake of the global financial crisis, a management buyout of the business occurred in 2009 and it became 100% independent again in 2014 and has remained so ever since.

Consequently, the company is owned by approximately 500 of its own employees with ~US3 billion of employee capital invested alongside clients' funds - aligning firm and client interests. This has naturally led to a very high retention ratio for the group with over 99% of client assets being managed by lead portfolio managers who have been with Neuberger Berman for over 20 years.

The fixed income platform comprises Neuberger Berman's largest segment by AUM (~US$140 billion) and consists of six divisions including the Global Non-Investment Grade Unit. The group's experience in managing non-investment grade (or high yield) instruments began in 1997, managing solely US high-yield bonds. European high yield bonds followed in 2006 with a separate European High Yield strategy launched in 2014. The Emerging Markets Corporate Debt strategy was added in 2013 consisting of a team with over 15 years' experience in managing Emerging Markets high yield bonds. The evolution of Neuberger Berman's high yield capabilities stems from the underlying development of the global high yield universe, which has grown from US$261 billion in 1997 to US$2.7 trillion in 2019.

The Global High Yield strategy was launched in August 2016 leveraging off the existing Global Non-Investment Grade & Emerging Markets Debt Platform. As a result, the strategy's rich network of investment professionals is a combination of portfolio managers and analysts from the Global Non-Investment Grade Credit and Emerging Markets teams. The team consists of 55 professionals, including 4 portfolio managers.

Figure 7. Neuberger Berman Assets Under Management Breakdown

Investment Platform		
Equity	**Fixed Income**	Alternatives
US$90bn	**US$140bn**	US$83bn

↓

Global Fixed Income Platform[1]					
Multi-Sector Solutions	Global Investment Grade	**Global Non-Investment Grade**	**Emerging Markets Debt**	Municipals	Alternative Credit
US$12bn	**US$58bn**	**US$38bn**	**US$20bn[1]**	**US$11bn**	**US$5bn**

Source: BondAdviser, Neuberger Berman (as at 31 December 2018)

1. *Emerging Markets Debt AUM includes US$3.5bn in Emerging Markets Corporate Debt*

Research Methodology

Every research report prepared by BondAdviser includes a clear recommendation on the security. This recommendation framework is designed to help investors navigate different investment opportunities by identifying the market price, yield, term to maturity, liquidity, volatility and risk.

The guide below may help you understand our research opinions. For further information on our research approach, you can refer to our RG79 statement by **clicking here**.

Research Opinions key

- **Buy** - Over the next 12 months, the analyst expects the security to outperform the current yield due to credit spread tightening or favourable movements in the underlying yield curve.
- **Hold** - Over the next 12 months, the analyst expects the security to provide stable returns broadly in line with the current yield but with little credit spread tightening.
- **Sell** - Over the next 12 months, the analyst expects the security to underperform the current yield due to credit spread widening or adverse movements in the underlying yield curve.
- **Suspended** - The recommendation has been suspended temporarily due to the disclosure of new information or market events that may have a significant impact on our recommendation. This also includes situations where we have been given non-public information and we need to temporarily suspend our coverage in order to comply with applicable regulations and/or internal policies.
- **Not Rated** - A security that has not been assigned a formal recommendation.
- **Ceased Coverage** - The recommendation has ceased due to issuers failure to disclosure necessary information or coverage is subjectively removed in accordance with our Research Governance Statement.

About BondAdviser

BondAdviser is Australia's only specialist independent fixed income research platform providing valuable information and clear investment recommendations for all ASX-listed interest rate securities and a broad range of over-the-counter corporate bonds.

We are the first choice for financial advisers, stockbrokers, private banks; and wealth management firms that need access to the highest quality, most timely and independent fixed income insights and useful analytical tools.

Clients use BondAdviser to meet their risk, governance and compliance requirements. Partnering with us gives them confidence they have a transparent audit trail when making recommendations about fixed income securities. This ensures they can demonstrate they have always acted in their clients' best interests.

Offering a one-stop-shop for pre-trade analytics, compliance and post trade support in Australian fixed income securities, we provide independent research recommendations updated daily.

The company is not aligned to any financial services organisation and the executive team brings over 75 years' combined experience in the fixed income sector.

Learn more

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Important Information