

Lonsec Research Process Document

Research Approach

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Managed Funds Research Approach

Lonsec Research — An Overview

Lonsec Research Pty Ltd (Lonsec), and its predecessors Lonsec and Lonsdale Securities, has been a provider of investment research to the Australian financial intermediary market since 1993. On 1 July 2011, Lonsec became a fully owned subsidiary of Lonsec Fiscal Holdings Pty Ltd (formerly Financial Research Holdings Pty Ltd) (the Lonsec group), a privately-owned entity with a multi-brand strategy of providing leading financial services research and investment execution.

Lonsec has an experienced and specialist research team, which draws on a robust research process to undertake in-depth assessments of financial products.

Lonsec's analysts take pride in their incisive and penetrating style of financial product analysis. Each team member has extensive experience in the financial services industry, with backgrounds spanning a variety of well-regarded funds management, banking and investment research houses.

In addition to managed funds research, Lonsec offers extensive research on structured products, Exchange Traded Funds (ETFs), property and infrastructure investments, as well as direct equities research. We have organically built Lonsec to more than 35 investment professionals, while at the same time maintaining a strong 'small company' culture. Lonsec has always been adviser focused, which has helped us to deliver a research product that continues to be relevant to the financial services industry. Increasingly, larger dealer groups, high net worth groups and institutions are also recognising the quality of Lonsec Research and Consulting services.

Lonsec's Research Business Model

Lonsec's business model is structured to minimise conflicts of interest, perceived or actual. Lonsec also has detailed policies and procedures in place outlining management of conflicts.

Lonsec generates revenue from charging fund managers to participate in the research process and from selling subscriptions to this research. The revenue generated from fund managers defrays the cost of producing research for subscribers.

Lonsec's Research Objective

Lonsec's key research objectives are to:

- Empower subscribers and their clients with its strategic, implementable investment advice;
- Identify those financial products that we believe can generate risk adjusted returns in line with relevant objectives;
- Provide a high level of qualitative research detailing the positive and negative attributes of the financial products it rates; and
- Deliver this advice through the timely publication of in-depth reports and updated advisories.

Lonsec's Research Philosophy

Our research process is premised on the belief that managing money is a combination of 'art' and 'science' and that there is more than one way to manage money; there are, however, a number of critical ingredients that combine to produce a quality financial product.

Lonsec believes that investment research should be forward-looking and qualitatively skewed. Accordingly, qualitative factors generally account for 80 percent of the rating for most mainstream asset classes, with Lonsec's assessment of people and process having the greatest impact on the research outcome.

Within the quantitative component, generally contributing 20 percent of the research outcome, there is an emphasis on the quantum and consistency of returns, the degree of 'activeness' to deliver alpha, the volatility of returns and the defensiveness of the financial product over three years and beyond.

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Research Breadth

Having a large research team enables Lonsec to provide in-depth investigative research across a broad range of sectors and sub-sectors. This is an important part of our value proposition to dealer groups and their financial advisers; research breadth is critical to ensure that when creating APLs and model portfolios, there are sufficient high quality investment options available across all investment sectors and sub-sectors.

Key sectors and sub-sectors researched by Lonsec include:

DOMESTIC EQUITIES	GLOBAL EQUITIES	INCOME	PROPERTY & INFRASTRUCTURE	ALTERNATIVES	MULTI-ASSET	DIRECT EQUITY
LARGE CAP (VALUE/GROWTH/CORE)		DOMESTIC	AREIT	GROWTH ALTERNATIVES (MOD & HIGH)	DIVERSIFIED	ASX 200 COMPANIES
SMALL CAP		GLOBAL	GREIT	EVENT DRIVEN, FUND OF HEDGE FUNDS, LONG SHORT CREDIT, MACRO, MARKET NEUTRAL, MANAGED FUTURES, PRIVATE EQUITY, RISK PREMIA	MULTI-MANAGER	LISTED INCOME (HYBRID) SECURITIES
SRI		DIVERSIFIED	DOMESTIC INFRASTRUCTURE		REAL RETURN	
LONG SHORT		UNCONSTRAINED BONDS	GLOBAL INFRASTRUCTURE		SUPER FUNDS	
LIC		LIT			MULTI-ASSET INCOME	
	SMA				SMA	
	PASSIVE/INDEX				LOW COST	
	ETF (ACTIVE AND PASSIVE)					
INCOME FOCUSED	EMERGING MARKETS	EMERGING MARKET DEBT	DIRECT (OFFICE, HEALTHCARE, INDUSTRIAL, OFFICE)		OTHER	
GEARED	SECTOR	ALTERNATIVE INCOME (MOD & HIGH)			STRUCTURED PRODUCTS	
	SPECIALISED				LONGEVITY PRODUCTS	
	REGIONAL	MORTGAGE FUND			RETIREMENT PRODUCTS	

Lonsec's Research Process

Lonsec's research process follows a structured framework of assessing a range of qualitative and quantitative factors and then scoring these attributes relative to other financial products within the same sector.

Lonsec does not believe there is a single 'best' way to manage money and the research process we apply accommodates a range of investment approaches and styles.

When having a financial product researched by Lonsec, a financial product provider is assured of a transparent and consistent research methodology, and a collaborative process of engagement throughout the review process. The research process is dynamic and we continue to monitor and engage with each financial product we rate throughout the year, not just at the annual review.

Research process in practice

Lonsec's research process follows a sequential progression; each step must be completed before the following commences.

Timing of Reviews

Every sector is reviewed at least annually. The Lonsec research team commits to and publishes an annual sector review calendar. All external stakeholders can rely on this calendar as a clear guide to the annual research timetable.

Out-of-cycle reviews may be undertaken for financial products that fund managers want reviewed expedited outside of the regular sector timetable.

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Operational check

New financial products must pass an operational check before being contracted to participate in the research process. This includes items such as product availability, offer documents, completion of Lonsec's New Manager Questionnaire and a commitment to provide data to Lonsec and its data supplier, Financial Express.

Research agreement issued and executed

The research agreement must be executed, and invoice paid, before the research process commences.

Data collection

Quantitative information is sourced from Financial Express for Managed Funds. Other product quantitative information is sourced from Bloomberg, or SuperRatings, another Lonsec group company. Qualitative information is mostly collected in questionnaire format. Standard inputs are outlined in more detail below. The data portal is completed prior to review meetings taking place.

Desktop Review

Initial due diligence is conducted by the analysts on the data collected in the form of a desktop review.

Onsite review

Formal face to face meetings are held with senior executives, as well as a range of investment and operational personnel (risk, legal, compliance, trading & execution) with a minimum of two Lonsec research analysts present.

Follow up questions

Phone, video, email and further meetings as required.

Peer review

Peer review meetings are held following the review of each sector and involve the key team members for each sector, as well as senior members of the research teams. Using a standardised template and sector summary sheet, all financial products and the proposed ratings are tabled at these meetings.

The lead analyst assesses qualitative momentum, business risk, investment risk, and identifies strengths, weaknesses, changes since last review and 'red flags' to be aware of. The lead analyst and other analysts involved in the site visit submit a proposed rating and the rating is debated. A quorum of appropriately experienced analysts will vote on the rating. The Chairperson of the peer review meeting or their delegate may cast the deciding vote in the event of a deadlock. The General Manager for each sector then has a final right of veto over ratings awarded and may either overturn a rating or request further work to be done prior to ratification.

In accordance with ASIC guidance, a draft report with no rating or overall opinion is sent to the fund manager, providing five business days for fact checking.

Fund Review published

The financial product rating and the report (for investable products), is available to the fund manager, all Lonsec subscribers and other stakeholders.

Findings published in Sector Review

The Sector Review incorporates all the respective financial products researched the respective asset class or sector, discusses themes and compares the peer group.

Added to Lonsec Recommended List

Financial products that achieve an investable rating are added to Lonsec's Recommended List and become a part of Lonsec's ongoing review cycle which includes ongoing monitoring.

Managed Funds Research Process in More Detail

Lonsec's disciplined research process relies on researching and rating financial products according to its conviction in the ability of the financial product to meet its stated investment objective.

Qualitative and quantitative assessment in Managed Funds

Lonsec's research methodology follows a structured framework of assessing various qualitative and quantitative factors and then scoring these different attributes relative to other financial products within a sector. In specialised

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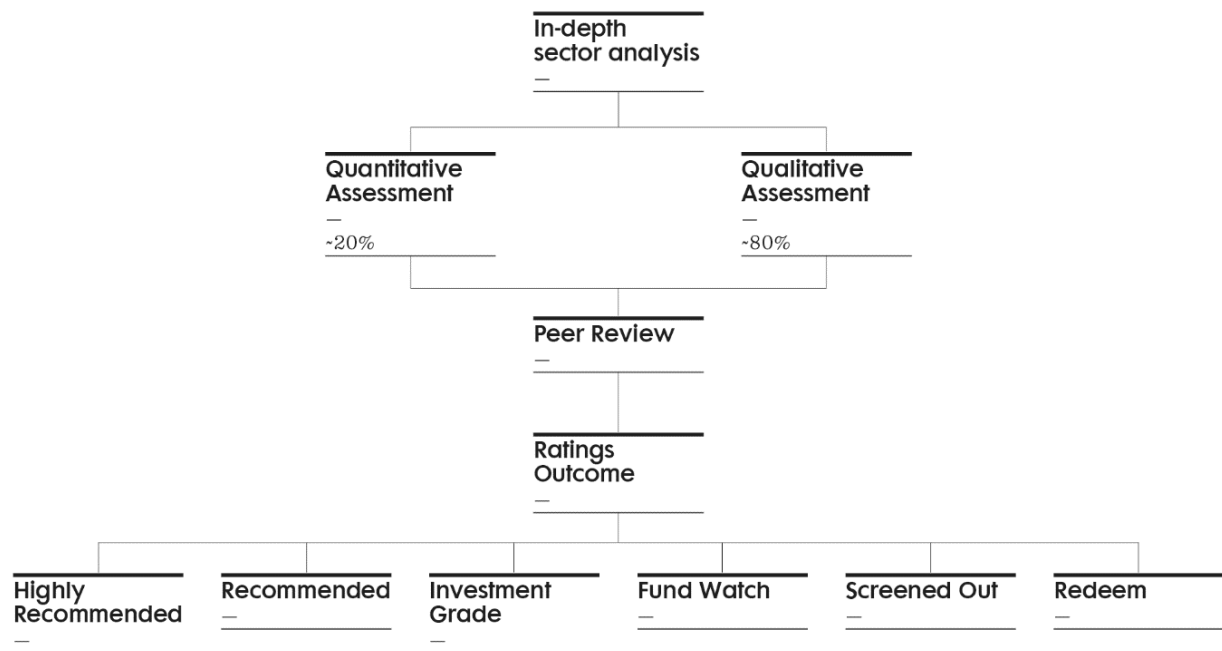
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sectors and where relevant quantitative data or a peer group is unavailable, the research process may be 100% qualitative.

The qualitative assessment stage of the research process spans a range of inputs, including extensive contact with the fund manager and key investment professionals.

Standard inputs to the research process for Managed Funds

- Product Disclosure Statement (PDS)
- Lonsec corporate questionnaire and the Financial Services Council (FSC) Questionnaire or similar RFP due diligence process document
- Alternative Investment Management Association (AIMA) due diligence questionnaire (for hedge funds)
- Analyst file notes from face-to-face meetings, teleconferences and video conferences.
- Lonsec’s Data Portal
- Manager presentation material
- Internal file notes from previous meetings
- Quantitative output from Lonsec ratings model
- Peer reviewed discussions and requirements for further information
- Manager responses to follow-up questions.



Where available, quantitative assessment, using proprietary models, accounts for 20% of the assessment for mainstream asset classes and complements the qualitative inputs discussed above.

The Lonsec research team critically assesses a number of qualitative factors, with each factor weighted across sectors according to its deemed importance and its relative influence on the performance of the financial product. Final ratings are a mix of absolute and relative assessment and there is no forced ranking of ratings. The emphasis is on Lonsec’s view of the likelihood of the financial product to meet its investment objectives over its stated investment horizon. The Lonsec ratings model is integral to the ratings process, as it helps maintain structured focus on the underlying ratings criteria. However, the model alone does not drive the ratings, with final ratings ultimately subject to validation at Peer Review.

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Each sub-factor is scored (with 5 being the highest and 1 being the lowest) by all analysts who attended the review meeting.

The below is an example of factors considered in equities funds. Research, portfolio construction and risk management factors will be tailored to peer groups. For example, in multi-manager, multi-asset funds, consideration is given to capital market and asset allocation skill and manager selection, mandate tailoring and blending (where relevant).

Factors assessed in Managed Funds (Australian Equities -Small Caps example)

Corporate and Governance/ People and Resources

Assessed via contact with both senior and junior members of the investment team and considers:

- Profitability, Business ownership structure and Track Record
- Considers, experience, team size, quality, stability, management of key person risk, qualifications, track record, co-tenure, investment 'culture' and alignment of interests

Philosophy (style)

Considers investment philosophy

- Is it clearly articulated
- Consistent — 'true to label'

Lonsec considers key valuation metrics, performance in differing market conditions, output from style research tools. Holdings based style analysis software is utilised in this part of the process.

Research

- Idea generation
- Intellectual Property
- Breadth and Edge
- Investment tools - - Screening process, fundamental analysis, valuation methodology, efficacy of analysts' models

Lonsec typically requests that managers explain multiple investment theses as a means of demonstrating the investment process at work and gauging consistency with the fund manager's stated investment style and objectives.

Portfolio construction

- Clear link from investment research
- Buy and Sell discipline
- Management of unintended bets
- Alignment with investment objectives.

Risk management

- Risk awareness of process
- Monitoring, accountability, methodology and frequency
- Pre- and post-trade compliance
- Tools

Fees

- Fees — management fees and any performance fees
- Fees relative to investment objectives and fairness

Capacity

- In certain sectors, the quantum of assets under management relative to the size of the market invested in (i.e. the Manager's 'capacity') is considered to critical to the funds ability to deliver alpha. Hence investor focus and evidence of adherence to capacity limits are key considerations in the rating.

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Quantitative

- Quantum
- Consistency
- Activeness
- Volatility
- Defensiveness

Peer Review — Overview

Qualitative assessment involves extensive contact with key investment professionals. Rigorous internal peer review by the Lonsec team is also a critical component of the process.

Peer Review Committees are held following the review of each sector or financial product and are open to all analysts within the Lonsec Research team. Utilising the Lonsec ratings model all financial products and the proposed ratings are tabled at these meetings. The model forms the basis of all ratings discussions. The lead and secondary analyst/s directly involved in a rating present the proposed rating to the Peer Review Committee. The analyst/s assess qualitative momentum, business risk, investment risk, and identify strengths, weaknesses, changes since last review and 'red flags' to be aware of. The lead analyst submits the proposed rating, the Peer Review Committee members debate this and those analysts with sufficient seniority ratify the rating outcome by a vote.

Where the final rating differs from the initial rating suggested by the model (after qualitative debate), the reasons for difference are recorded in the minutes.

Attendance & quorum requirements

Analysts are invited to attend the Peer Review Committee, including any ad hoc Peer Review Committee. All attendees are able to participate in person, via phone or video conferencing subject to those attendees having access to the relevant materials being discussed.

Attendance requirements are as follows:

- A GM of research must attend fulfilling the role of Peer Review Chair. The Peer Review Chair can be the sector lead of that particular sector if the GM is the lead or secondary analyst on the financial product being researched.
- The lead and secondary analyst/s are required to attend the Peer Review Committee where their financial product ratings are being discussed.
- Sector leads are required to attend all Peer Review Committees where funds belonging to their asset class are reviewed.
- All non-sector leads and other analysts may attend all Peer Review Committees where they have been asked to attend due to their specialist knowledge or considered input by the Chair, or sector lead.
- All new analysts may attend all Peer Review Committees as non-voting members to gain an understanding of the process and gain familiarity with various fund managers when asked to do so by the Chair.

The primary quorum requirements are as follows:

- OOC Peer Review Committees – require at least four analysts and a designated Chair. Required attendance includes the relevant asset class sector lead, lead and secondary analysts and other voting analysts who can provide relevant sector input to an OOC rating.
- For all sector Peer Review Committees – require at least four analysts and a designated Chair to be present to constitute a quorum, including both lead and secondary analysts, and at least two of the analysts must be senior investment analysts.
- Ad hoc Peer Review Committees – as per above for OOC Peer Review Committees

The Chair or sector lead can request additional attendance over and above minimum requirements.

Voting

Those analysts with sufficient seniority are voting members of the Peer Review Committee. All voting members have one equal vote, and all voting matters are decided by simple majority vote. Voting is to be conducted on a blind voting basis with votes submitted confidentially (either in a peer review meeting or via circular resolution) to the Chair of the Peer Review Committee.

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Equality of votes:

The Chair (only GMs) has a right of veto over ratings assigned. Where a veto is applied, the GM must report reasons to the CEO. However, he/she must first consider calling a new Peer Review Committee allowing enough time for the lead and secondary analyst/s to re-evaluate, and if necessary, submit further information in order for all analysts involved in the first vote to reconsider. A second Peer Review Committee must comprise, wherever possible, the same analysts involved in the first vote, and at least the same number of voting members. The Chair can request additional attendance by as many analysts as he/she sees necessary to arrive at a decision.

New analysts:

Where new analysts commence with Lonsec Research the date at which the analyst is given voting rights is determined as follows:

Senior Investment Analysts – can become voting members on the completion of all mandatory compliance training (e.g. RG146 training) and the decision of the CEO of Lonsec Research. This determination of voting rights will be a subjective decision based on the analysts perceived skill, abilities and experience.

Investment Analysts and Associate Investment Analysts - can become voting members on the completion of all mandatory compliance training (e.g. RG146 training), successful completion of a probation period (three months or longer from commencement with Lonsec Research plus final approval by the CEO of Lonsec Research). The period of three months may be extended. This determination of voting rights will be a subjective decision based on the analysts perceived skill, abilities and experience. Recommendations in this regard will be made by the GM to the CEO.

Graduate Investment Analysts cannot be voting members; however, they can input scores into the rating model under supervision of a voting member that attended the manager review meeting. Voting members will then either agree or disagree with the rating by the casting of their vote in the peer review meeting.

Non-voting members - during the period where an analyst is a non-voting member but has completed all mandatory compliance training (e.g. RG146) can be a lead analyst and present to the Peer Review Committee. Non-voting members can also participate in peer review debate.

Voting by proxy:

If a secondary analyst/s is unable to attend a Peer Review Committee, the Chair has the ability to allow the analyst to submit his/her vote by proxy to the Chair of the Peer Review Committee in relation to the funds they have reviewed in extenuating circumstances only. Voting by proxy must be approved in advance by the Chair. The lead analyst must attend and present to the Peer Review Committee. If the lead analyst is unavailable to present, the presentation should be held over until such a time that the lead analyst can present to the Peer Review Committee. Note: the Chair has the ability to allow the secondary analyst/s to present to the Peer Review Committee instead of the lead analyst in extenuating circumstances.

Ad hoc Peer Review Committee

An ad hoc Peer Review Committee can be called by the Chair or the relevant sector lead as required for ratings actions where material changes have occurred with a fund manager in between sector reviews (i.e. Fund Watch). The reason for the rating action is discussed and voted upon.

The ad hoc Peer Review Committee has the ability to release an updated rating on all funds affected by the announcement (i.e. "Fund Watch", upgrade, downgrade) when the information becomes public, subject to consultation with the Chair and where possible the lead or secondary analyst/s.

Where analysts receive non-public and material information, it must be communicated internally as soon as possible. The Peer Review Committee confirms the action to be taken when the information becomes public. The Chair may seek advice from the group general counsel on the recommendable action.

Submission of materials

It is a requirement to present the following in order to call and hold a Peer Review Committee:

- Completed / accurate rating model and any associated commentary i.e. completed file note
- Relevant performance analysis
- Any other material and analysis relevant to present a rating
- Details of the issue for an ad hoc Peer Review Committee including any material supplied by the fund manager involved.

All material must be submitted as soon as possible prior to the Peer Review Committee time/ date.

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The Chair determines whether the quality and quantity of information submitted is sufficient for a ratings decision and if the Peer Review Committee has had appropriate time to prepare. If the appropriate information is not submitted in time, then the Chair will hold over the ratings decision until such time as an appropriate Peer Review Committee presentation can take place.

A rating is not to be considered final until feedback is received from the fund manager after their review of the draft Research report and until said feedback is assimilated and considered relative to the rating arrived at in peer review.

Definitions

Chair

The General Managers (GM) of Research (Australian Equities, Global Equities, Emerging Markets and ESG, Multi-Asset and Alternatives and Head of Manager Research) are the designated chairs for all Peer Review Committees. They may delegate the Chair to a sector lead if required. If either GM of Research is unable to attend or delegate, the responsibility falls to a sector lead of the asset class in question unless the sector lead of that asset class is a lead analyst presenting at peer review. In this instance, the Chair will fall to a sector lead who is not responsible for the asset class being reviewed.

Lead analyst

Allocating a lead analyst to a rating is used for identification purposes and workflow management. Generally, the lead analyst will (with the support of the secondary analyst/s):

- perform the role of lead analyst in the review meeting
- be responsible for completing the file note
- be responsible for completing and reviewing the rating model ensuring that all comments and scores are accurately reflected
- be responsible for leading the peer review presentation
- be responsible for writing the fund review report or iterations
- be responsible for writing the draft report, incorporating manager feedback, and publishing the report
- be involved where necessary in communicating the rating verbally to the client at the time of publishing, in concert with the General Manager and/or Sector Lead.

Secondary analyst/s

All other analysts assigned to the review of a financial product where they are not confirmed as the lead analyst.

Minutes

The sector lead is required to ensure that minutes are recorded and store a final copy in a central location. The minutes must document reasons for rating decisions including reasons for the final rating deviating from the ratings model.

Dispute Resolution Process

If a fund manager seeks to formally dispute a published rating, the sector GM or CEO should enter the fund into Lonsec's Dispute Resolution Process. Under this process, two GMs who were not involved in the research process of the fund or the CEO of Lonsec, will review whether the investment process has been followed. Where necessary, further research may be commissioned, a rating may be overturned or it may be maintained.

Lonsec's Research Process Cycle

Frequency of ratings changes

Each financial product is formally reviewed on an annual basis as part of Lonsec's sector review process. This involves on-site reviews with the fund manager, revisiting all qualitative and quantitative inputs and an in-depth peer review to ensure consistency and rigour of inputs across all financial products in the relevant sector. As an indication, the frequency of rating changes as an outcome of the sector review process has ranged from 10 to 20 percent.

The rating of each financial product is also monitored on an ongoing basis as part of Lonsec's continual contact and information exchange with fund managers.

Where there are changes at a fund manager, financial product or sector level, Lonsec's analysts monitor the situation closely and keep clients informed. Any material changes are formally reviewed immediately (at the time of the change) and ratings updates communicated through Fund Viewpoints, as required.

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Importantly, Lonsec's process is dynamic and ongoing; and while rating changes outside the sector review cycle are less frequent, there will be a small number of financial products within each sector that are subject to 'out of cycle' rating changes each year. The frequency of actual changes in ratings is dependent on the degree of qualitative change within each fund manager and the degree of relative change between fund managers/financial products within a sector.

In general, ratings changes that are predominantly driven by the changing relative attractiveness between fund managers/financial products within a sector occur at the annual sector review cycle. Ratings changes driven by material qualitative change within a specific fund manager will occur as the change occurs (i.e. at any time throughout the year).

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Lonsec Ratings

The rating system designates financial products under the categories of Highly Recommended, Recommended, Investment Grade, Fund Watch, Redeem and Screened Out. These ratings reflect Lonsec's degree of conviction in the financial products' ability to generate risk adjusted returns in line with relevant objectives.

Highly Recommended Highly Recommended <small>Index</small> Highly Recommended <small>SMA</small>	<p>The Highly Recommended rating indicates that Lonsec has very strong conviction the financial product can generate risk adjusted returns in line with relevant objectives. The financial product is considered a preferred entry point to this asset class or strategy.</p>
Recommended Recommended <small>Index</small> Recommended <small>SMA</small>	<p>The Recommended rating indicates that Lonsec has strong conviction the financial product can generate risk adjusted returns in line with relevant objectives. The financial product is considered an appropriate entry point to this asset class or strategy.</p>
Investment Grade Investment Grade <small>Index</small> Investment Grade <small>SMA</small>	<p>The Investment Grade rating indicates that Lonsec has conviction the financial product can generate risk adjusted returns in line with relevant objectives. However, if applicable, Lonsec believes the financial product has fewer competitive advantages than its peers.</p>
Fund Watch Fund Watch <small>Index</small> Fund Watch <small>SMA</small>	<p>The Fund Watch rating indicates that no new investment into this financial product is recommended. A significant change has occurred with the financial product and a detailed assessment of the change is needed and / or series of rectifying actions required prior to this rating being changed.</p>
Screened Out Screened Out <small>Index</small> Screened Out <small>SMA</small>	<p>The Screened Out rating indicates that Lonsec currently does not have conviction that the financial product can generate risk adjusted returns in line with relevant objectives. The financial product currently has insufficient competitive advantages relative to its review peer group (if applicable).</p>
Redeem Redeem <small>Index</small> Redeem <small>SMA</small>	<p>The Redeem rating indicates the financial product is no longer considered worthy of investment for any time period and investors should immediately redeem units from the financial product, subject to seeking financial advice. An adverse development has taken place that is considered detrimental to the interests of investors.</p>
Approved	<p>The Approved rating indicates that Lonsec believes the financial product can generate risk adjusted returns in line with relevant objectives. If applicable, the financial product provides an adequate means for investors to gain exposure to the underlying assets.</p>
Not Approved	<p>The Not Approved rating indicates that Lonsec believes the financial product cannot generate risk adjusted returns in line with relevant objectives. If applicable, the financial product does not provide an adequate means for investors to gain exposure to the underlying assets.</p>

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Financial Products Withdrawn from Research Process

The following are statuses, not ratings. They articulate the circumstances under which a financial product was withdrawn from Lonsec's researched universe.

Discontinued Review	The Discontinued Review status is applied where a fund manager that has approached Lonsec and agreed to tender a financial product for assessment, subsequently elects to discontinue participating in the Review prior to its completion for any reason, other than the financial product being closed or unavailable to retail investors. The Discontinued Review status will be published on the Lonsec website.
Ceased Coverage	The Ceased Coverage status is applied to financial products where fund managers withdraw from the Lonsec research process after the research process has been completed.
Closed / Wind Up	The Closed / Wind Up status is applied to a financial product when the fund manager advises Lonsec that the financial product is being wound up and the capital is to be returned to investors.

Screened out

ASIC's updated Regulatory Guidance to Research Houses (ASIC RG79) requires that Lonsec publishes a rating for those financial products considered sub-investment grade. This applies to financial products that are new to Lonsec's research process and have undergone the full due diligence process. Fund Reviews and Fund Viewpoints will not be published for financial products rated as 'Screened Out'. Only Fund Profiles containing factual information and the Screened Out rating will be published. A confidential draft rating report summarising how the financial product was assessed against each of Lonsec's rating criteria will be provided to the fund manager, for internal use only.

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Listed Products Research Approach

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Exchange Traded Products and the Direct Channel

Lonsec Research has in-built breadth and flexibility that has allowed us to re-position our research offering in-line with emerging trends in the market. One such trend has been the push to direct (listed) for actively-managed products which has seen Lonsec initiate coverage on a range of Listed Investment Companies ('LICs'), Listed Investment Trusts ('LITs') and Exchange Quoted Managed Funds ('EQMF') that are listed on the ASX and Separately Managed Accounts (SMA) that are listed on technology platforms. At its heart, Lonsec recognises that these are professionally-managed portfolios seeking to deliver on benchmark relative or objectives-based investment objectives over an investment cycle. However, Lonsec is also acutely aware that these products are being delivered via different structures and platforms which creates research nuances which need to be incorporated in the ratings process.

	LICS	LITS	ETFS	ETMFS
MANAGEMENT	ACTIVE	ACTIVE	PASSIVE / INDEX	ACTIVE
CORPORATE STRUCTURE	COMPANY	TRUST	TRUST	TRUST
LIQUIDITY	CLOSED-ENDED	CLOSED-ENDED	OPEN-ENDED	OPEN-ENDED
PRICING	CAN TRADE AT PREMIUM OR DISCOUNT TO NAV	CAN TRADE AT PREMIUM OR DISCOUNT TO NAV	TRADE AT A TIGHT SPREAD AROUND NAV	TRADE AT A TIGHT SPREAD AROUND NAV
EXECUTION	LIVE PRICING ON ASX	LIVE PRICING ON ASX AQUA	LIVE PRICING ON ASX AQUA	LIVE PRICING ON ASX AQUA
DISCLOSURE	ONLY REQUIRED TO DISCLOSE NAV MONTHLY. NOT REQUIRED TO PROVIDE PORTFOLIO INFORMATION.	INAV AND FULL PORTFOLIO QUARTERLY WITHIN 2 MONTHS OF QUARTER END	INAV AND DAILY PORTFOLIO HOLDINGS.	DAILY NAV, INAV FULL PORTFOLIO QUARTERLY WITHIN 2 MONTHS OF QUARTER END.
RETAIN PROFITS?	YES	NO	NO	NO
PREMIUM / DISCOUNT TO NAV?	YES	YES	NO	NO

Lonsec's core research approach for all direct channels has been to use its wider managed funds methodology as the building block for the research process. This has then been specifically tailored for the research nuances for each channel. For LICs and LITs, this involves a recognition that such products are listed and trade at either a premium or discount to their net asset value over time. It also includes a recognition that LICs are companies which requires a separate assessment of their Board of Directors and governance framework. On the flip-side, Lonsec notes that EQMFs have the benefit of a market-making mechanism which means that an assessment of the efficacy of this is critical. Finally, with the SMAs, the review process must include an assessment both of the Model Portfolio managers approach to engagement with various platform providers and its ability to monitor and manage slippage risk.

For all channels, we also look at the suitability of a particular strategy for it. For instance, the requirement for most SMAs is for a high conviction and low turnover strategy as this minimises slippage caused by excessive trading. Also, for LICs there is an inherent recognition that the liquidity of the underlying strategy, reliance on trading gains for funding dividends, track record of the BOD in capital management and size / liquidity of the 'head stock' are predictors in the likely trading profile for each LIC. Finally, for EQMFs, there is a recognition that the efficacy of market-making is not uniform across all underlying asset classes or strategies. We believe that encapsulating this in our research process is a direct source of value add for clients.

Lonsec Research Process Document

Listed Products Research Approach

ISSUE DATE: 25-06-2018

Lonsec Research has recognised that the push to direct and increasingly the ASX is a structural change in our industry that a contemporary research house must cover. Given the ever-increasing breadth and depth of these channels, Lonsec has decided to consolidate its expertise in this area by providing specialised resourcing for it. This has involved placing stewardship of this product range (including passive ETFs) under the Head of Listed Product role and also hiring a specialised direct Investment Analyst. However, Lonsec also has deep asset class expertise across equities, fixed income, hard assets, multi-assets and alternatives. As mentioned, Lonsec recognises that such reviews are of professionally-managed portfolios. Hence, the direct and specialist asset class teams collaborate extensively on the review of these products including joint product meetings (where appropriate), peer review and report generation. Lonsec considers this approach to be the best use of its skill-set and to provide the best rating outcome for clients.

Lonsec Research Process Document

Equities Research Approach

Research Coverage

Lonsec's equities research coverage spans:

- All constituents of the S&P / ASX200 index
- ASX-listed hybrid / debt securities (Listed Income Securities)
- Lonsec will from time to time cease coverage of securities that drop out of the ASX200 index and initiate coverage on all securities that enter the ASX200 index.
- Lonsec will generally maintain research coverage of all listed income securities until the call / maturity date for each respective security.

Report Type	Summary	Release frequency
Equities — Stock Viewpoint	A two-page equity research report inclusive of a stock rating, investment risk profile, company valuation, business snapshot, investment view, financial forecasts, bull & bear points and key trends and charts.	Daily
Equities — Corporate Action Reports	Lonsec provides corporate actions reports (including recommendation) on a broad range of corporate actions for all ASX200 stocks under coverage. The corporate actions covered include, capital raisings and mergers & acquisitions.	As required. Usually within five business days of announcement
Equities — IPO Reports & Initiations	Lonsec will initiate coverage on all stocks that enter the ASX200 index. Lonsec will also provide research reports on major IPOs on an ad-hoc basis.	Quarterly, post the announcement of S&P / ASX200 Index changes.
Listed Income — Viewpoint	A two-page research report inclusive of issue rating, key financial metrics and an overview of the key risks associated with the issue.	Quarterly or as required
Listed Income — Corporate Action Reports	Lonsec provides corporate actions reports (including recommendation) on a broad range of corporate actions for all Listed Income Securities under coverage.	As required. Usually with five business days of announcement
Listed Income — Quarterly Journal	A quarterly journal providing a summary on the listed debt / hybrid market	Quarterly
Listed Income — Yield Update	The weekly Yield Update table provides a summary of the structure, trading metrics and distribution details of the listed income securities within Lonsec's universe. In addition, this document shows Lonsec's current preferred securities and an overview of topical fixed income news during the week	Weekly
Lonsec TV — Market update	A monthly market update video discussing recent market developments and short-term market outlook.	Monthly

Equities Research Approach

Research Philosophy

Lonsec considers the primary purpose of investing in equities is to generate dividend income, capital growth or a combination of both and it is this risk versus reward relationship that determines the attractiveness of an investment. For any given company, the level of risk to capital and the level of risk to income are not necessarily the same. In order to differentiate between these inherent risk, Lonsec's equity research sets out to capture and highlight the various characteristics of each stock in a simple, yet effective manner. This approach has been tailor made for the financial advice channel and sets out to assist financial advisers in selecting the right stock for the right client.

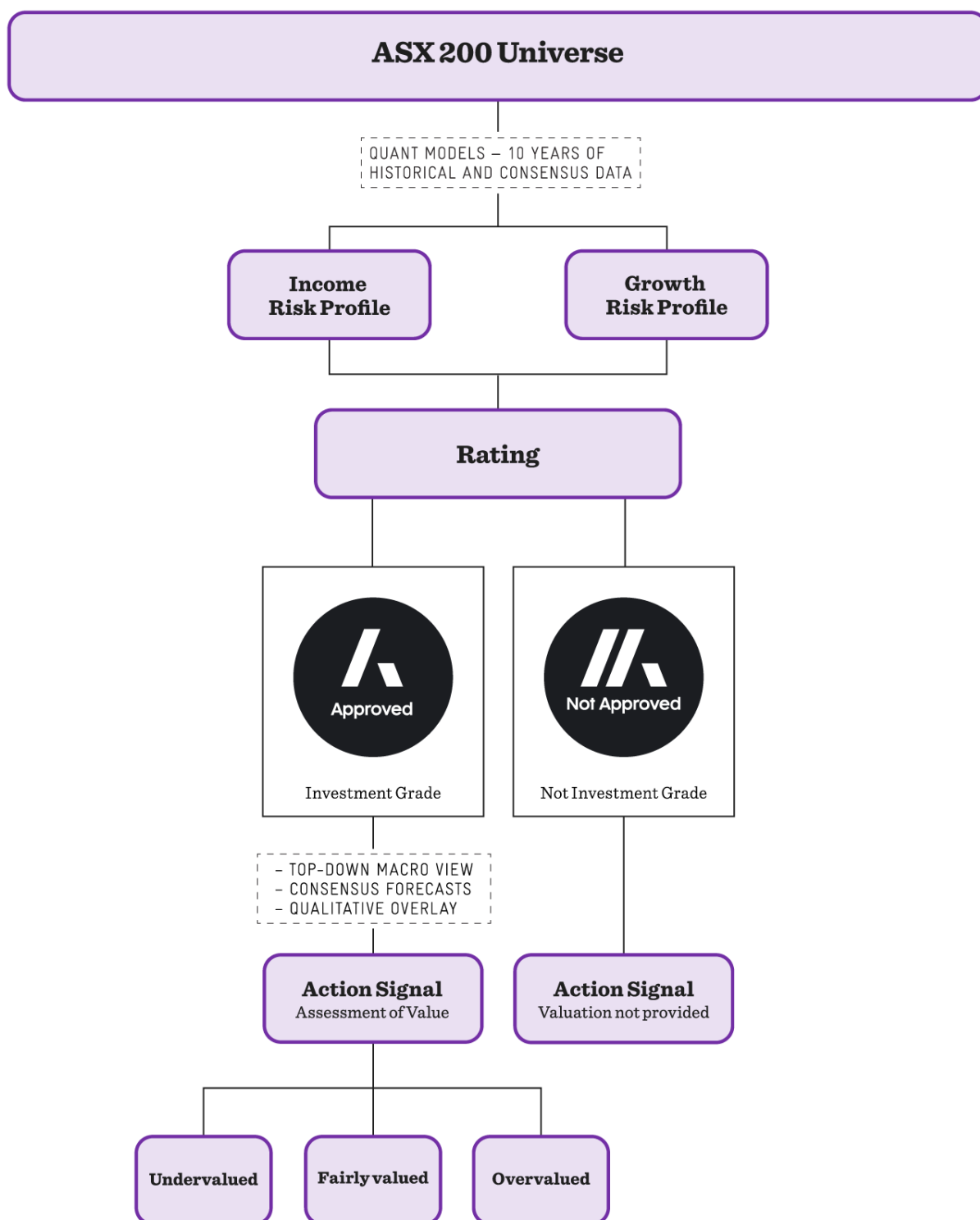
Research Approach

Lonsec's approach to equities research departs from the traditional 'Buy-Hold-Sell' broker that focuses more on the valuation upside potential of a stock. Rather, Lonsec's approach utilises a combination of qualitative and quantitative analysis methods to provide answers to three key investment questions at an individual stock level:

- Which stock to buy? (Rating: Approved / Not Approved;
- What are the investment risks of each stock? (Risk Profile: Income / Growth)
- Is the stock trading at a reasonable price? (Action Signal: Undervalued / Overvalued)

ASX200 research is performed by Lonsec's Direct Equities team. This is a team of five dedicated equity investment specialists, with three of the team being senior analysts with extensive market experience. Stock responsibilities are delegated along sectoral lines, with Lonsec believing this approach is optimal from an intellectual property and efficiency point of view.

Equities Research Approach



Equities Research Approach

Which stock to buy?

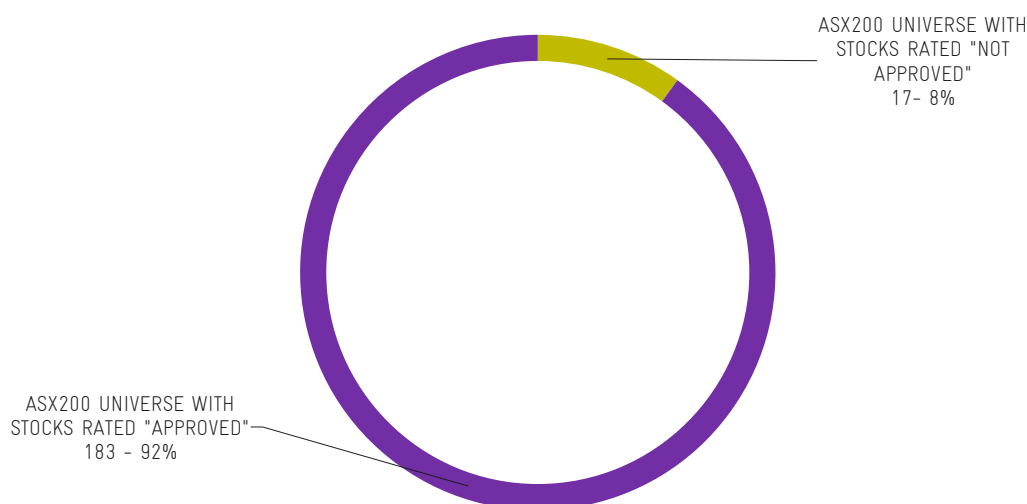
Lonsec's proprietary quantitative models utilise a database comprising a wide range of historical and forecast data points to determine and classify the Income and Growth risk profile for each security in the ASX200. The quantitative model will derive a suggested **Approved or Not Approved** rating by combining the Income and Growth Risk ratings for each stock. The Income and Growth risk profiles are derived from up to eight years of actual data and two years of forward consensus data. The outcome of this model is the peer reviewed by the Direct Equity team to ensure that the team agrees with the assessment. There is the ability for the Direct Equity team to provide a qualitative overlay to the rating as this point.

In terms of the mechanics of the overall rating, where the risk ratings in both categories are above Lonsec's stated risk threshold, the security is deemed as being high risk and will be classified as Not Approved, i.e. it is not investment grade. Securities can also be deemed as Not Approved where there is insufficient historical and / or forecast information at hand for the quantitative model to form a view on a stock. Using this approach, the ASX200 universe is filtered down to a smaller universe of investment grade securities that have attained an Approved rating.

Lonsec's equities research team then combines the outputs of the quantitative models, the latest consensus earnings forecasts and Lonsec's own earnings forecasts to ratify the investment view and derive and maintain bespoke valuations for each of the ASX200 constituents. The valuations and investment views for each company are monitored on a daily basis to capture the latest changes in the outlook for each company.

Once assigned, the rating of '**Approved**' or '**Not Approved**' should be relatively stable for each stock as it is a long-term assessment of the medium to long term prospects of a stock. Lonsec considers this to be a key attraction of its rating process versus the 'Buy-Hold-Sell' broker approach. However, a small number of stocks may change rating each year when a material change (positive or negative) occurs and Lonsec adjusts its return and risk ratings on the stock

Given the universe is the ASX200 which is a higher quality and large capitalisation index versus some broader or more niche indices such as the All Ordinaries or the Small Ordinaries, Lonsec would not expect to have a 'fat tail' of Not Approved stocks. This has proven to be the case, with only 17 out of 200 stocks currently being demarcated as sub-investment grade. This statistic has remained relatively stable since the inception of this methodology in 2015.



Ratings Outcome

Lonsec's research process allows it to classify its investment universe constituents as either Approved or Not Approved investments. The rating definitions are presented below.

Equities Research Approach

	<p>AN APPROVED RATING INDICATES THAT LONSEC BELIEVES THE STOCK IS OF 'INVESTMENT GRADE' QUALITY, MEANING WE BELIEVE THE LONG-TERM INCOME AND / OR GROWTH POTENTIAL OF THE COMPANY OUTWEIGHS THE POTENTIAL RISKS</p>
	<p>THE NOT APPROVED RATING INDICATES THAT LONSEC BELIEVES THE STOCK IS NOT OF 'INVESTMENT GRADE' QUALITY, MEANING WE BELIEVE THE POTENTIAL RISKS OUTWEIGH THE LONG-TERM INCOME AND / OR GROWTH POTENTIAL OF THE COMPANY</p>
	<p>A CEASED COVERAGE RATING INDICATES THAT THE STOCK IS NO LONGER INCLUDED IN THE S&P/ASX 200 AND HENCE LONSEC HAS CEASED COVERAGE OF THE STOCK. NEW STOCKS COMING INTO THE S&P/ASX 200 WILL BE INITIATED WITH AN APPROVED OR NOT APPROVED RATING WITHIN 20 BUSINESS DAYS OF INCLUSION IN THE INDEX</p>

What are the investment risks of each stock?

As well as an overall research rating, Lonsec's quantitative model will derive a risk profile based on the risk to Income or Growth. This is achieved quantitatively by screening each stock by a bespoke set of factors relevant to each risk factor, resulting in stocks being allocated to four distinct 'buckets' – Low, Attractive, At Risk or Inferior.

Lonsec's assessment of a company's Income Risk profile follows a structured framework of assessing ten key financial metrics to arrive at an overall Income risk rating for the company. This risk rating is combined with the expected dividend yield of the company, over the medium term, to classify the company into one of the following categories:

- **Low Income** — reflecting a below-market dividend yield, whilst exhibiting lower dividend volatility and a relatively lower risk profile than the broader market;
- **Attractive Income** — reflecting an above-market dividend yield, whilst exhibiting lower dividend volatility and a relatively lower risk profile than the broader market;
- **Income at Risk** — reflecting an above-market dividend yield, whilst exhibiting higher dividend volatility and a relatively higher risk profile than the broader market;
- **Inferior Income** — reflecting a below-market dividend yield, whilst exhibiting higher dividend volatility and a relatively higher risk profile than the broader market.

Equities Research Approach

The key financial metrics assessed are those which are most likely to impact the company's ability to pay dividends. Some of the financial metrics assessed include:

- Historical earnings and dividends track record;
- Forecast earnings and dividend expectations and trends;
- Balance sheet strength;
- Dividend cover and payout ratio;
- Historical volatility of earnings and dividends; and
- Free cash flow generation.

Lonsec's assessment of a company's Growth Risk profile follows a structured framework of assessing ten key financial metrics to arrive at an overall Growth risk rating for the company. This risk rating is combined with the expected earnings growth of the company, over the medium term, to classify the company into one of the following categories:

- **Low Growth** — reflecting a below-market growth rate, whilst exhibiting lower earnings volatility and a relatively lower risk profile than the broader market;
- **Attractive Growth** — reflecting an above-market growth rate, whilst exhibiting lower earnings volatility and a relatively lower risk profile than the broader market;
- **Growth at Risk** — reflecting an above-market growth rate, whilst exhibiting higher earnings volatility and a relatively higher risk profile than the broader market; and
- **Inferior Growth** — reflecting a below-market growth rate, whilst exhibiting higher earnings volatility and a relatively higher risk profile than the broader market.

The key financial metrics assessed here are those which are most likely to impact the company's earnings. Some of the financial metrics assessed include:

- Historical sales and earnings track record;
- Forecast earnings expectations and trends;
- Balance sheet strength;
- Historical volatility of earnings;
- Free cash flow generation;
- Return on Equity;
- Book value / NTA growth; and
- Track record of outperformance

Lonsec notes that these risk profile assessments are not be static and will be updated as this data set 'rolls' over time as one year is dropped and another year is added. In addition, the consensus data itself can also change with analyst forecasts. Accordingly, the Income and Growth risk profiles for each stock will gradually change over time as the data changes. Given the data set is over 10 years, there should not be any rapid change, unless a company has a sudden and major change (positive or negative) to its forecasts.

Lonsec's Stock Viewpoint presents a series of charts that provide a visual snapshot of some of the key financial parameters that are likely to impact the share price performance of the given company. The charts are grouped into four different segments, namely Growth, Income, Financial Strength and Valuation. These charts display up to 10 years (where available) of historical and forecast data to provide a real-time snapshot of the company's track record with respect to its earnings, dividends, balance sheet strength and secondary market valuation metrics.

Equities Research Approach

Is the stock trading at a reasonable level?

A key part of Lonsec's investment process is to use the research process to aid it in creating a bespoke set of earnings forecasts to both ratify the investment view and derive and maintain bespoke valuations for each of the ASX200 constituents. This bespoke valuation is the bedrock of an Action Signal for each stock which highlights whether the current share price represents an attractive entry point for each stock based on valuation upside.

Lonsec adopts a flexible approach to its ASX200 valuation modelling and this is largely based on the sector in which a stock resides. The core valuation technique is a Dividend Discount Model or DDM and this accounts for the majority of industrial stocks. However, where a differentiated is justified then this will be adopted, i.e. DCF for resource stocks as the economic life of an asset is defined.

Lonsec's Action Signal will naturally change with movement in the share price and / or Lonsec's assessment of fair value. Movement between 'Undervalued, Fairly Valued or Overvalued' will be mostly dependent on share price movements. Lonsec's fair value will be reasonably stable in the short term but will change over the medium to long term, in-line with analyst views based on the company and industry outlook and macro-economic conditions.

In circumstances where the Company's valuation requires an urgent review due to a material event, Lonsec will place the fair value under review. In this situation, Lonsec will remove the fair value for the stock and advise that its valuation is currently under review in the 'Action Signal' section. This status will usually only apply for short period of less than five business days. When a valuation is under review, the rating is not affected as only the fair value is being reviewed.

As well as the Action Signal, Lonsec's Stock Viewpoint will also provide an indication of the forecast expected returns split by Income and Capital growth from an investment in this company at the last traded price. The Income is represented by the expected dividend yield over the next two fiscal years. The Capital growth component is calculated by comparing the current market price to Lonsec's fair valuation for the company in each particular year. The Forecast Return projections are based on a number of variables and forecasts that are subject to change / review on a regular basis.

Equities Research Approach

Lonsec's Listed Income (Hybrids) Securities Research Process

Lonsec's listed income research follows a structured framework to derive an investment rating and risk assessment. The investment rating is a long-term assessment which remains relatively static, though will be upgraded or downgraded should our 'investment grade' view change. The risk assessment is more dynamic, and may vary more frequently throughout the term of the issue. In forming our investment rating, we have assumed that positions are held to maturity and therefore will continue investment coverage through to maturity.

Investment recommendation

Each listed income investment under coverage is assigned either an 'Approved' or 'Not Approved' rating:

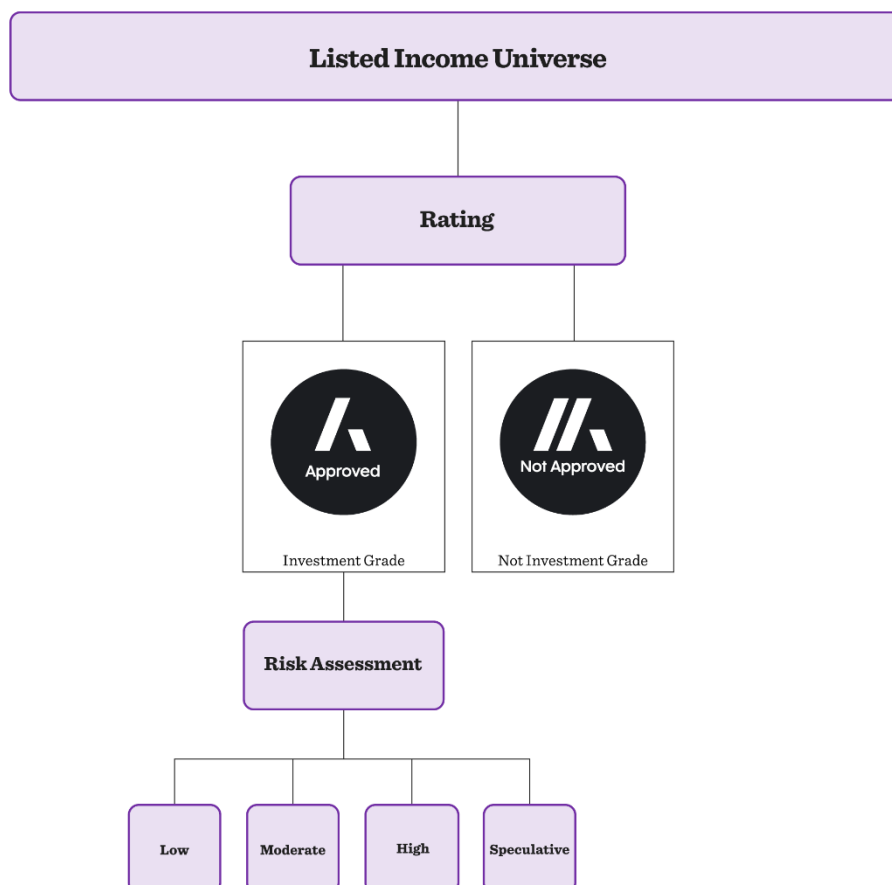
Approved

The 'Approved' rating indicates that Lonsec believes the security is of 'Investment Grade' quality, meaning we believe the security will pay all distributions in the term to call and holders will receive face value on maturity, such that the income potential outweighs the potential risks.

Not Approved

The 'Not Approved' rating indicates that Lonsec believes the security is not of 'Investment Grade' quality, meaning we believe the potential risks outweigh the long term income potential of the security.

These recommendations are made with reference to the Lonsec risk assessment, which is discussed below, and with consideration to the relative attractiveness of the expected return. The potential return refers to the interest margin on offer over the relevant benchmark rate and any other investment return which may include conversion discounts, in-built call options, entitlements to IPOs and future step-ups in the margin.



Equities Research Approach

Risk assessment

The six risk categories identified and assessed (in order of importance) are:

Financial

The financial strength of the financial product issuer is examined according to the sector in which the company operates. This is primarily designed to ensure the analysis represents a true reflection of the financial product issuer's financial strength and to take account of the fact that banks and insurance companies have very different financial structures than traditional industrial companies. Specifically, the key indicators analysed include balance sheet strength, wholesale credit rating, capital adequacy ratios, interest cover, asset quality, liquidity, net tangible assets, gearing and earnings quality.

Structure

The risks inherent in any listed income security can vary significantly based on the security structure. To assess structure risk, Lonsec examines subordination / capital classification, distribution payment tests, distribution restriction conditions and conversion conditions.

Maturity

The risks associated with the maturity structure of the issue are examined in detail and a relevant risk rating assigned. One of the key factors in the market's pricing of a listed income security is the maturity terms and conditions, as these determine the 'how' and 'when' the invested capital is returned to the investor. Lonsec forms a view on the expected maturity date of each security, having considered the maturity and / or conversion terms, the financial capacity of the financial product issuer, the ascribed equity credit and the significance of the size of the issue to the financial product issuer.

Liquidity

Liquidity risk is the risk that an investment may not be easily converted into cash with little or no discount to the last traded market value, and at minimum delay. A liquidity premium should be required by investors to compensate for lack of liquidity. Low liquidity can also result in higher than desired volatility. Key attributes analysed to rate liquidity include issue size and average weekly turnover.

Industry

Structural and operational risks associated with the industry in which the company operates can impact the financial position and prospects of the financial product issuer, and hence the performance of the listed income security. Industry analysis involves consideration of the following factors: current and forecast industry conditions, domestic and global economic outlook and its expected impact on the industry, regulatory risks, the company's positioning and pricing power within its industry, the power of suppliers and buyers, as well as the life cycle stage of the industry.

Volatility

Volatility measures how much the market value of an issue fluctuates with respect to its face value over the life of the issue. Volatility is often viewed negatively in that it represents uncertainty, however, it can also provide the potential for higher returns. Both capital and income will contain some degree of volatility depending on the nature of the underlying investment. Our assessment of expected volatility takes into consideration a number of metrics including financial product issuer strength, economic and credit market conditions, investor sentiment, equity market conditions, the perception of or likely occurrence of distribution deferral or a conversion trigger, capital ranking / structure, liquidity, conversion terms, maturity risk and the volatility of listed peers.

Equities Research Approach

Risk rating

Following an assessment of the risks and metrics described above, a risk ranking score is assigned to each of the six risk categories. The risk scores are assessed on a scale of 1 to 5, with 1 implying low risk and 5 high risk. Adding the scores of each category derives a total risk rating score out of 80, which represents the overall risk rating for the security. Out of the six risk categories, Financial risk is the heaviest weighted category and accounts for 43.75% of the total risk score. Structural risk follows with a weighting of 25.00% and Maturity risk at 12.50%. Liquidity, Industry and Volatility risks are the lowest weighted categories at 6.25% each.

The risk rating categories range from Low to Speculative, and are described below:

Low

A low risk assessment indicates that a majority of the risks are rated as low and the overall risk score is below 34 which indicates strong credit quality.

Moderate

A moderate risk assessment indicates that a majority of the risks are rated as moderate and the overall risk score is between 35 and 50 which indicates good credit quality.

High

A high risk assessment indicates that a majority of the risks are rated as high and the overall risk score is between 51 and 69 which indicates low credit quality.

Speculative

A speculative risk assessment indicates that a majority of the risks are rated very high and that the overall risk score is between 70 and 80 which indicates the issue is below investment grade and has speculative qualities.

Risk rating categories (example only)

	LOW	MODERATE	HIGH	SPECULATIVE
FINANCIAL		●		
MATURITY		●		
STRUCTURE	●			
LIQUIDITY		●		
INDUSTRY	●			
VOLATILITY			●	
RISK PROFILE		●		

Lonsec also advises on the Lonsec client risk profiles that each security is suited to.

Index Funds Research Approach

Index Funds Research Process in More Detail

Whether there is some level of oversight or governance by the fund manager or if the index / investment process is completely rules-based and non-discretionary is very important in determining whether a financial product is active or passive. Some 'smart beta' approaches may be considered under a process which leverages off the expertise of analysts covering active managed funds if there is a level of discretion or judgement. The efficacy of the index being tracked will be considered where it differs from conventional market benchmarks.

The following research process is undertaken for index (or passive) funds, both ETFs and unlisted index managed funds. The process is also used for those alternative or smart beta funds determined to be more passive than active in nature.

Standard inputs to the research process for Index Funds

- PDS
- Lonsec corporate questionnaire and the FSC questionnaire
- Analyst notes from face-to-face meetings
- Lonsec 'Request for Information' templates
- Fund Manager presentation material
- Internal file notes
- Quantitative output from Lonsec ratings model
- Fund Manager responses to follow-up questions.

Index funds research process

The following ratings criteria are adopted when rating index funds:

People and resources

- Size and quality of the investment team
- Investment experience — industry and index specific
- Stability and turnover
- Key person risk — should be relatively low for index funds; need to understand if otherwise
- Quality of systems to efficiently track the index
- Quality of third party service providers, including custodian and registry services
- Quality of intermediaries used to purchase index constituents; how does the fund best ensure best execution? Is this monitored?
- Quality of investment management processes requiring human intervention; are they clearly defined and documented, how compare to best practice?

Indexation Method

- Full replication, stratified sampling or derivative — is the method appropriate?
- Clarity of index methodology / rules. Is this consistent with the product objectives?
- Efficacy of index.
- Does the index provide efficient access to the asset class or strategy?
- Are appropriate risk management measures built into the portfolio construction and investment process?

Transparency

- Are the methodology and index constituents readily available and transparent?
- How easily can the index be understood by investors?
- How frequently is the NAV calculated? Can historical performance be readily downloaded?
- How frequently are the constituents re-balanced? How much notice does the index provider give?

Index Funds Research Approach

- Is the index calculation (including valuation of index constituents) performed externally or in-house? Is the calculation free of conflicts?

Liquidity

- Number and quality of market makers.
- What are market makers contracted to supply / provide? How are market makers monitored? Are they effective?
- Period to redeem funds.
- Funds under management and market activity / market depth will also be taken into account.
- Premium / discount to Net Asset Value (NAV). There should be some tolerance for smaller, less liquid funds and funds with constituents that trade outside ASX opening hours.

Fees and indirect costs

- Headline Management Cost
- Bid / offer spread on a relative basis and any other costs associated with investing in the product

An assessment is made within each peer group; however, a comparison is made across the broader peer group to ensure fees are reasonable. For example, Australian equities index funds are compared to the broader Australian equities fund universe.

Performance

- A relative assessment of tracking error (that is, how closely the portfolio follows the index to which it is benchmarked) versus peers in the same sector.
- For alternative or smart beta funds, how effective has the strategy been in meeting objectives.

New funds and funds with limited or no history will effectively be 'penalised' by assigning a score of zero the quantitative component of the ratings criteria and reassigning part of this to the qualitative component. Lonsec will recalibrate the quantitative weighting when it considers the fund has sufficient track record and after taking into account factors including the fund's performance following rebalancing and distributions, as well as any track record of the manager in offshore markets.

Lonsec view

- Conviction in the ability of the financial product to meet its objectives
- Takes into account the fund manager's focus on continuous improvement / thought leadership in running low cost, low tracking error index funds.

Lonsec Research Process Document

Direct Assets Research Approach

Direct Assets Research Process in More Detail

Lonsec has developed a disciplined approach to the research of direct assets (e.g. property, infrastructure or other). The discipline relies on recommending financial products according to their investment merit and the likely impact of anticipated market conditions.

Lonsec's direct assets analysis takes approximately three weeks (two weeks for draft report).

The methodology follows a structured framework of assessing various qualitative and quantitative criteria, then scoring these different attributes relative to other financial products within their sector. The individual scores are then weighted according to a fixed weighting scheme, and aggregated to arrive at the rating after undergoing a peer review process. The Head of Manager Research has an ultimate right of veto over the rating.

Broad sector filters

Lonsec is unlikely to consider for its review process:

- Projects that are not Managed Investment Schemes (MIS);
- 'Cash Boxes' (with no identifiable assets);
- Short-term property development projects (especially high density residential apartments);
- Funds with a large portion of assets earmarked for re-positioning and / or having substantial vacancy (even if covered by vendor guarantees).

Standard inputs to the research process

- PDS or Information Memorandum
- Fund manager financial models
- Asset valuation reports
- Technical and due diligence reports
- Fund manager investment process and performance data
- Biographies of key personnel
- Constitution and Compliance Plan.

Factors assessed in Direct Assets

The analysis of a financial product is an all-encompassing exercise, with the research team critically assessing a range of 35 criteria within six major determinant categories:

MAJOR DETERMINANT CATEGORY	NUMBER OF SUB-CRITERIA
FINANCIAL RETURNS	7
GEARING AND DEBT	5
ASSETS	8
MANAGEMENT	8
MARKET ANALYSIS	4
EXIT STRATEGY/LIQUIDITY	3

Extensive **quantitative** assessment using proprietary models accounts for a major part of the assessment. While potential returns are calculated and compared to recent competing financial products and sector benchmarks, the assessment also involves examining risk factors and evaluation of key sensitivities.

Qualitative assessment involves extensive contact with the fund manager and their key investment professionals. Rigorous internal peer review by the Lonsec team is also a critical component of the process.

Direct Assets Research Approach

Financial

- Internal Rate of Return (IRR) — total return (fund returns after fees and costs)
- Distribution yield (including level of income support)
- Tax advantages
- Assumptions (leases)
- Gearing / interest cost / hedging relative to industry averages
- Costs and fees relative to industry averages
- Balance sheet
- NTA and estimated time to breakeven

Assets / Business

- Asset attributes (including underlying business if applicable)
- Tenant quality and diversity.
- Look for comparative advantage / potential to add-value
- Benchmarking of critical asset factors, such as Weighted Average Lease Expiry.
- Regular valuation of assets (at least annually)

Market Risk

- Diversification
- Sector outlook
- Values / cycle
- Exit strategy & liquidity mechanisms.

Management

- Experience
- Structure (prevalence of representatives on the Board or Investment Committee who are not part of the management of the fund manager)
- Style / philosophy
- Compliance and related-party process
- Previous performance of all similar funds of manager
- Disclosure.

Direct Assets Key Beliefs

We look for quality assets that will generate recurring income streams with growth potential.

Lonsec is focused on assessing performance over the expected life of a project and beyond.

Our recommendations are based on certainty of returns — looking for above average returns for the lowest risk.

We believe active management can add value and we look for the attributes of a capable investment team including appropriate size / resources, experience, style and processes.

Fund managers must be accountable for the performance of their trusts. At the least, they must meet forecast distributions and we prefer a demonstrable record of out-performance in terms of total returns.

Remuneration of fund managers should be linked to investment performance.

It is desirable for managers to co-invest alongside unit-holders in the trusts they manage.

Direct Assets Research Approach

Risk factors in Direct Assets

The process of evaluating and rating a project involves the examination of risk factors that specifically relate to the project. These include operational, financial, liquidity and management risks.

A key part of this risk assessment is the assessment of the financial performance of the parent group of the responsible entity / fund manager. If this entity is an ASX-listed group, Lonsec will have access to the publicly available financial statements and operational announcements. If the group is privately owned, similar financial and operational information will be requested and included in the assessment of the project.

Updating information in Direct Assets

Lonsec tracks the performance of all relevant property, infrastructure or other funds that the fund manager is responsible for. In the first instance, Lonsec considers the actual versus forecast distribution, secondly, total returns versus benchmark. It is the responsibility of the fund manager to provide this information to Lonsec, as well as to promptly notify Lonsec of any significant changes that materially — or may materially — affect the basis of a financial product recommendation.

Frequency of reviews and ratings changes

Open-ended financial products

Each financial product is formally reviewed on an annual basis as part of Lonsec's review process. This involves on-site reviews with the fund manager, revisiting all qualitative and quantitative inputs and an in-depth peer review to ensure consistency and rigour of inputs across all financial products in the relevant sector.

The rating of each financial product is also monitored on a more informal, ongoing basis as part of Lonsec's continual contact and information exchange with fund managers.

Where there are changes at a fund manager, financial product or sector level, Lonsec's analysts monitor the situation closely and keep subscribers informed. Any material changes are formally reviewed immediately (at the time of the change) and ratings updates communicated through Fund Updates, as required.

Closed-end financial products

This term refers to traditional property or other syndicates that raise capital for a limited period to purchase specific assets and the syndicate / trust / fund has a specified investment term. Lonsec undertakes the same rigorous evaluation and ratings process as for open-end funds. Once an offer period finishes, the Lonsec rating effectively ceases. However, a new Lonsec rating may be applied if a roll-over of investor capital is proposed or a liquidity offer is made.

Lonsec monitors the performance of closed-end funds as part of a review of the fund manager's other financial products. After the initial capital raising, a formal Fund Update is not prepared unless there is an event that warrants Lonsec commenting on how this may affect the investment and which recommends any action for investors to take.

Lonsec Research Process Document

Structured Products Research Approach

ISSUE DATE: 25-06-2018

Structured Products Research Process in More Detail

Structured products key beliefs

- Where an index generates structured product returns, investors should be charged fees and other costs that are commensurate with providing beta exposure; i.e. fees and costs should be lower than those charged for equivalent actively managed exposure
- Where an index generates product returns, the index should have logical methodology, wide representation, be freely investable, liquid, transparent and free of conflicts in its construction
- The structured product needs to make investment sense — there must be a clear link between the structured product's objectives, expected risk and return, and the investor's risk profile
- Structured product managers should provide research supporting the logic and investment rationale of the structure and features of the structured product. It is preferable that this research be generated internally and be driven by a clear investment thesis
- A structured product's return, risk and correlation objectives should be transparent, realistic and stated over a timeframe appropriate for the underlying asset class / investment strategy.
- The financial product structure needs to be efficient and in investors' best interests and be supported within the PDS by appropriate accounting, taxation and legal opinions

Standard inputs to the Structured Products research process

- PDS
- Term sheets (if applicable)
- Loan agreements (if applicable)
- Analyst notes from face-to-face meetings
- Fund manager presentation material
- Fund manager responses to follow-up questions

In-depth analysis

The research process follows a structured framework of critically assessing various factors in three broad groups. Note: due to the different types of structured products, the following factors are not relevant to all.

Structural features

- Fund manager experience — track record in structuring investments in the relevant asset class or strategy
- Fees and costs — appropriateness in an absolute or peer relative sense
- Transparency — investor pay-off during the investment term and maturity, fees, structure and capital protection
- Liquidity — consistency with product objectives. Structured products with a long term time horizon are not necessarily penalised for illiquidity
- Lonsec view — likelihood of achieving the structured product objectives, given the risks involved

Underlying fund

The qualitative and quantitative factors considered in assessing an actively managed fund are outlined in Lonsec's Managed Funds Research Approach. Briefly they are:

- People and resources
- Style
- Research
- Portfolio construction
- Risk management
- Lonsec view

Within the quantitative component, there is an emphasis on the returns, risk and consistency of returns of the underlying fund over three years and beyond — this is not essential for new funds if the core members of the investment team have a proven track record of managing money in the same style elsewhere.

Structured Products Research Approach

Index

Where an index or indices are used to generate the returns for a structured product, the rating will be determined by a qualitative assessment of the following factors:

- Methodology — rules relating to index construction (inclusion/exclusion of constituents) should be clear
- Representative — index components should have a meaningful coverage of the relevant sector or market being targeted
- Tradability — index components should be freely available or have potential for use as the basis for participants
- Transparency — index calculation method should be clearly outlined and available for market participants
- Independence of index provider — to avoid potential for conflicts over securities selection or methodology between structured product issuer and index provider
- Active management (if applicable) — the level of discretion and alignment of interests with investors

Structured Products Ratings model

At the completion of the in-depth factor analysis, a peer review is conducted. Each member of the research team assigns a score to each relevant factor in the ratings model. The Lonsec ratings model is integral to the ratings process, as it helps maintain structured focus on the underlying ratings criteria. However, the model alone does not drive a rating; the final rating is subject to analyst judgment. This is subject to rigorous internal peer review by the Lonsec team. The GM of Alternatives and Structured Products has an ultimate right of veto over the rating.

The factor weightings assigned to each type of structured product are summarised as:

	MANAGED FUND	ACTIVE MANAGED INDEX	ACTIVE / PASSIVE INVESTMENT PLATFORM	INDEX	DERIVATIVE	PASSIVE LOAN
STRUCTURAL FEATURES	30%	30%	100%	70%	100%	100%
- MANAGER EXPERIENCE						
- FEES & COSTS						
- TRANSPARENCY						
- LIQUIDITY						
- LONSEC VIEW						
Underlying Fund						
QUALITATIVE	56%					
- PEOPLE & RESOURCES						
- STYLE						
- RESEARCH						
- PORTFOLIO CONSTRUCTION						
- RISK MANAGEMENT						
- LONSEC VIEW						
QUANTITATIVE	14%					
- RETURN						
- RISK						
- CONSISTENCY						
INDEX		70%		30%		
- METHODOLOGY						
- REPRESENTATIVE						
- TRADABILITY						
- TRANSPARENCY						
- CONFLICT MANAGEMENT						
- ACTIVE MANAGEMENT						
TOTAL	100%	100%	100%	100%	100%	100%
MINIMUM HURDLE	65%	65%	65%	65%	65%	65%

Structured Products Research Approach

Using the structured product

After a structured product has been researched and rated, Lonsec offers general advice regarding the investor risk profile(s) most suited to the structured product.

Definitions of the six Lonsec risk profiles are available on the Lonsec website.

Structured product risk characteristics

Each structured product review includes a table graphically illustrating Lonsec's qualitative opinion of a wide range of risks that may exist in a structured product.

For example:

Product risk characteristics

	LOW	MODERATE	HIGH
LEVERAGE	●		
LIQUIDITY	●		
COUNTERPARTY		●	
CONCENTRATION			●
VOLATILITY			●

Point-in-time reviews

Lonsec's structured product research reports are point-in-time reviews. Lonsec assumes no obligation to update its structured product research reports or provide ongoing research coverage or performance reporting.

Structured product classification

Lonsec classifies structured products as active or passive.

Active

- Managed fund — where the return is generated by actively managed underlying funds
- Managed index — where the return is generated by a discretionary overlay, such as security selection, leverage, volatility targeting and / or shorting, applied to one or more indices or ETFs.

Passive

- Index — where the return is generated by exposure to one or more indices or ETFs
- Derivative — where the return is generated by exposure to one or more derivatives, such as option, futures or swap contracts
- Loan — funding structures providing investors with access to an investment loan and a menu of investments.

Active / Passive

Investment platform — structures providing investors with the ability to select from a menu of underlying funds or other assets.

Research Approach

Appendix A: Lonsec Research Team

Libby Newman
BBus, FFin, CPA

Head of Manager Research

Libby leads the Manager Research team of more than 25 analysts who collectively cover a diverse range of unlisted and listed managed funds spanning global and domestic equities, fixed interest, infrastructure, property, alternatives and multi-asset strategies. Prior to her appointment to this role in January 2018, Libby was General Manager, Income and Multi-Asset. Libby has more than 25 years experience in funds management and fund research and has been involved in research of fixed income and multi-asset funds since joining Lonsec in 2007 with primary focus on fixed income. Libby also serves on the Lonsec Investment Committee and Manager Selection Committee which meet quarterly to consider asset allocation and manager selection in model portfolios.

Prior to Lonsec, Libby spent 10 years as part of the fixed interest team managing Suncorp's insurance mandates. She also has experience in middle office, operations and investment performance systems testing and risk management at Abbey National (London), DST International (London) and boutique credit arbitrage manager Artesian (Melbourne).

Peter Green
BCom, BA, CA

Head of Listed Products & General Manager Australian Equities

Peter joined Lonsec in 2008 and is the General Manager Equities. In this role, Peter is responsible for managing research across a range of sectors. Prior to joining the managed funds team in mid-2012, Peter worked as a Senior Investment Analyst for both Lonsec's equities research and direct property teams.

Before Lonsec, Peter worked as a Development Analyst/Senior Property Accountant for the Centro Properties Group, where his main role was providing investment analysis and budgeting/forecasting capabilities to the Australian retail property team. He originally worked for Andersen/Ernst & Young as an external audit senior as well as spending two years in the United Kingdom in various accounting roles.

Deanne Baker
BCom (Hons)

General Manager, Multi-Asset and Alternatives

Deanne joined Lonsec Research in July 2007 and holds over 18 years' experience in managed funds research and portfolio management. As General Manager — Multi Asset and Alternatives, Deanne is responsible for the management of the research team in these areas, coordinating sector workflows and overseeing the quality and suitability of the research. Deanne is a member of the Lonsec Asset Allocation Committee which meets at least quarterly to consider asset allocation. Prior to joining Lonsec, Deanne spent seven years with Invesco, where she worked as an Investment Analyst and later, Assistant Investment Manager, responsible for multi-asset class and structured portfolios. Deanne has also previously held roles at Barclays Stockbrokers and Legal and General Investment Management in the UK.

Rui Fernandes
BEc, GradDipAppFin, CFA

General Manager, Global Equities

Rui is responsible for the global equities research effort and joined Lonsec in 2008.

Before joining Lonsec, Rui held a number of investment research and analytical roles in the finance industry at firms such as Aviva Research, the Australian Prudential Regulation Authority and the Commonwealth Bank of Australia.

Steven Sweeney
BA, GradDipAppFin

General Manager — ESG/SRI and Emerging Markets Manager Research

Steven joined Lonsec in June 2007 and is the General Manager of ESG/SRI and Emerging Markets within the managed funds research team. Steven has management responsibilities across the emerging markets, Asian equity and responsible investment sectors.

Research Approach

Prior to joining Lonsec, Steven spent three years as a Research Analyst at Aviva Research where he was responsible for researching and rating managed funds across various asset classes for the Navigator platform. His career also includes time at the Royal Bank of Scotland in Edinburgh where he provided research and reports across various industry sectors for the Chief Economist's unit.

Kevin Prosser
BEC, DipEd, ASIA, SDIAM

Research Manager —Direct Assets

Kevin joined Lonsec in 2003 and has overall responsibility for research into unlisted direct assets, including direct property syndicates and direct infrastructure funds.

Prior to Lonsec, he was an Analyst and Investment Advisor with E. L. & C. Baillieu Stockbroking, Research Manager with G. K. Goh Stockbrokers in Kuala Lumpur and a Research Analyst with McIntosh Securities and AMP.

Simone Gavin
BEng/BCom

Senior Investment Analyst

(Co Lead Global Emerging Markets)

Simone joined Lonsec in February 2013 as a Senior Investment Analyst within the managed funds research team. Simone is involved in the review of funds across all sectors, with primary focus in Australian equities, global equities, and global emerging markets.

Prior to Lonsec, Simone spent 13 years working within financial services, her experience including more than four years with Standard and Poor's managed funds research team. Simone also spent two years with Frontier Investment Consulting as an analyst working across various sectors and clients and five years with Towers Perrin including three years in the Netherlands.

Shailesh Jain
BBM, PGDMF, MeCom, MAF

Senior Investment Analyst

(Sector Lead Australian Equities, Global Emerging Markets, SRI and Small Caps)

Shailesh joined Lonsec in 2008 and works as a Senior Investment Analyst within the managed funds research team. Shailesh is responsible for leading the research effort across the Australian equities and small companies, global emerging markets and responsible investment sectors.

Shailesh has covered funds in most major sectors since joining Lonsec, including global equities, fixed income and multi-assets. Prior to Lonsec, Shailesh spent four years as a Credit Analyst at National Australia Bank where he was responsible for performing analytical review of financial statements and drafting credit memorandum.

Sam Morris
BSc, BEc, GradDipAppFin

Senior Investment Analyst

(Sector Lead Alternatives and GREITs)

Sam joined Lonsec in 2007 and is Senior Investment Analyst covering the Alternatives and Global Listed Property sectors. Sam has gained experience across all major asset classes, including Australian and Global Equities, Fixed Interest, Property and Infrastructure. Prior to working at Lonsec, Sam worked as an Economist/Property Consultant and in banking, including a role with UBS in Prime Broking in London prior to the Global Financial Crisis.

Adrian Hoe
BCom, BIS, CFA

Senior Investment Analyst

(Sector Lead — Australian Equities Specialised)

Adrian joined Lonsec's managed funds research team in November 2011 and is involved in the review of financial products across all sectors, with primary focus in Australian equities, Global equities and Alternatives.

He is also the sector lead for the Australian equities specialised sector. Prior to joining Lonsec, Adrian spent three years as a Research Analyst at IOOF where he was responsible for researching managed funds and providing investment consulting services.

Research Approach

Jude McDonnell **MAppFin**

Senior Investment Analyst **(Sector Lead – Fixed Interest)**

Jude joined Lonsec in February 2015. Jude is the lead analyst across Global and Domestic Fixed Interest and also works on the Multi Asset sector with her primary responsibility being the preparation of detailed research reports. Jude has 15 years of experience working within financial services.

Her most recent prior role of more than six years was with Mercer Investments where she was responsible for providing investment consulting services to institutional clients in the Superannuation, Insurance and Endowment and Foundation space. Jude's other work history includes roles with Macquarie Bank, Perennial Investment Partners, DST International, and Bank of New York Mellon (London).

Amy Ho **BCom, BBIS, CFA**

Senior Investment Analyst

Amy joined Lonsec's managed fund research team in January 2012 and is responsible for undertaking managed fund research across a range of sectors.

Most recently Amy worked as a Performance Analyst at Industry Superannuation Property Trust where she was responsible for performance reporting, attribution analysis and forecasting. She also held a position with JBWere in the Private Wealth Management division, where she was in charge of improving the systems and processes supporting the portfolio reporting service.

James Kirk **BCom (Hons), CFA**

Senior Investment Analyst

James joined Lonsec in April 2013 as a Graduate Investment Analyst within the managed funds research team. In this role, James is involved in the review of financial products across the global equities and the long/short equities sectors, with his primary responsibility being the preparation of detailed research reports.

James has completed his Honours in Finance degree alongside a double major in Finance and Financial Planning. Before joining Lonsec, James gained experience as an Investment Analyst within Dixon Advisory. James was responsible for implementing advice and producing equity and market commentary reports.

Prasanka Rajapaksha **CFA, BBA (Finance), CPA, ACMA**

Senior Investment Analyst

Prasanka joined Lonsec in May 2015 as an Investment Analyst to the managed funds research team. In this role, he is involved in the review of fixed income products and with his primary responsibility being the preparation of detailed research reports.

Prior to Lonsec, Prasanka was an AVP at Fitch Ratings for two years where his main focus was credit rating of banks and financial institutions. He also served five years at the Central Bank of Sri Lanka initially as a bank analyst/supervisor and later as a fixed income & forex dealer/analyst.

Sheng Tan **BAccts, BCom, CFA, CPA**

Senior Investment Analyst

Sheng joined the Lonsec managed funds research team in March 2016 and is primarily responsible for preparing detailed research reports across various sectors.

Sheng's most recent role was at ANZ Wealth, providing bespoke investment portfolio advice to retail clients. Prior to that, he spent four years as a Financial Analyst at Dixon Advisory executing a variety of investment analytical and research tasks.

Research Approach

Scott Bohan **BCom (Hons)**

Investment Analyst

Scott joined Lonsec in June 2018 as an Investment Analyst within the managed funds research team. In his role, Scott will be involved in the review of financial products across a range of different sectors including global and Australian equities and other asset classes as required.

Mark Stephan **DipFP, B.Com**

Investment Analyst

Mark joined Lonsec in October 2015 as an Associate Investment Analyst within the managed funds research team and was promoted to Investment Analyst in 2016. In his role, Mark is involved in the review of financial products across a range of different sectors including global equities, global emerging markets, Australian equities and global listed infrastructure. His primary responsibility is the preparation of detailed research reports.

Mark graduated with a Bachelor of Commerce (Finance & Marketing) from the University of Melbourne in 2013 and has passed Level 1 of the CFA examination. Before joining Lonsec, Mark gained experience as an Associate Adviser at RI Advice Surrey Hills and more recently at Netwealth Investment & Superannuation.

Clinton Alexander **BBus, MBkg&Fin**

Associate Investment Analyst

Clinton joined Lonsec in March 2017 as a Graduate Investment Analyst within the managed funds research team. In this role, Clinton's main tasks will be to assist with the research into managed funds across a range of different sectors with his primary responsibility being the preparation of detailed research reports.

Clinton graduated with a Bachelor of Business (Accounting and Econometrics) and a Master of Banking and Finance from Monash University. Prior to joining Lonsec, Clinton was employed as Graduate Business Recovery and Insolvency Analyst with Pitcher Partners in Melbourne.

Chloe George **BEdo (Hons)**

Associate Investment Analyst

Chloe joined Lonsec in October 2016 as a Graduate Investment Analyst within the managed funds research team. In this role, Chloe's main tasks have been to assist with the research into managed funds across a range of different sectors with her primary responsibility being the preparation of detailed research reports.

Chloe graduated with a Bachelor of Economics with Honours from La Trobe University, and is enrolled for the CFA Level 2 examination in June 2018. Prior to joining Lonsec, Chloe gained experience as an Implementation Specialist at IRESS and a Consultant for Capita Procurement Solutions in London.

Geraldine Goh **MFin, BB(Acc)**

Associate Investment Analyst

Geraldine joined Lonsec in September 2016 as a Graduate Investment Analyst within the managed funds research team. Geraldine's responsibilities include assisting with the research into managed funds across a range of different sectors with her primary responsibility being the preparation of detailed research reports. Geraldine graduated with Master of Finance and Bachelor of Business (Accountancy) both from RMIT, and is currently studying for the CFA Level 2 examination in June 2018.

Prior to joining Lonsec, Geraldine gained experience as a Money Market and FX Dealer for First Commercial Bank Ltd, Singapore Branch.

Matthew O'Neill **BCom (Hons)**

Associate Investment Analyst

Matthew joined Lonsec in December 2015 as a Graduate Investment Analyst within the managed funds research team. In this role, Matt's main tasks will be to assist with the research into managed funds across a range of different sectors with his primary responsibility being the preparation of detailed research reports.

Research Approach

Matthew recently graduated with a Bachelor of Commerce with Honours (Finance & Economics) from the University of Melbourne and is currently studying for the CFA Level III examination in June 2018.

Amber Sunil
B.Bus Admin, DipFP

Associate Investment Analyst

Amber joined Lonsec in May 2018 and is involved in the review of financial products across a range of equity sectors. Prior to joining Lonsec Amber was an Investment Services Officer at netwealth and Investment Analyst at Investors Direct Financial Group, Australia. Amber has passed Level 3 of the CFA examination.

Sharmeel Suka
B.Com, MAppFin

Associate Investment Analyst

Sharmeel joined Lonsec in April 2016 and is involved in the review of financial products across a range of different sectors including global fixed interest, multi-asset, domestic fixed interest and global listed infrastructure. Sharheel has over 4 years of experience working within financial services.

Prior to Lonsec, his most recent role was as an Investment Research Analyst at netwealth Investments where he was involved in the due diligence process for its platform investment menu. Sharheel graduated from Monash University with a Master's of Applied Finance in 2014, after completing a Bachelor of Commerce from the University of Melbourne in 2012, and has passed Level 1 of the CFA examination.

Research Approach

Appendix B: Lonsec Research Analytics Team

Stewart Gault

BEng (Hons), GradDipAppFin, MBA, CFA

Head of Research Analytics

Stewart joined Lonsec in 2010 and leads the Research Analytics Team. Stewart's chief role is in the ongoing development of Lonsec's quantitative tools and data processes. He assists the manager research team in process improvement. Stewart has previously been a Senior Investment Analyst within the managed funds research team. He remains involved in peer review of financial products and is an active member of Lonsec's Research Process Committee.

Prior to Lonsec, Stewart was Director of Operations at Olympus Funds Management, where he was responsible for managing all operational aspects of the firm's listed investment company. He has also worked as a business consultant in Tokyo and was previously employed as an engineer with a technology firm.

Jen Lee

BComm

Senior Data Analyst

Jen joined Lonsec in 2013 and works as a Data Analyst within the managed funds research team. Jen manages the data supply with external providers and ensures the integrity of data used by Lonsec Research. Jen also provides support on strategic initiatives projects.

Prior to Lonsec, Jen worked at IRESS Limited, where she was responsible for financial market data for all exchanges available on IRESS terminal. Jen has also recently completed CFA Level 2.

Colin Chen

BAS/Dip.CS, BAS (Hons), PhD

Quantitative Research Analyst

Colin joined Lonsec in October 2015 as a Data Assistant within the managed funds research team. Colin assists in the maintenance of research models and tools, data integrity and client support.

Colin completed his studies at RMIT University with first class Honours and Doctorate degrees both in Mathematics. Prior to joining Lonsec, Colin was employed by RMIT as a research assistant and sessional tutor for the school of Mathematical and Geospatial Science. Colin has also worked as a consultant dealing with Econometric and Statistical projects.

Research Approach

Appendix C: Lonsec Investment Consulting Team

Veronica Klaus
BCom, GradDipAppFin

Head of Investment Consulting

Veronica joined Lonsec in October 2011 as a Senior Investment Consultant. Veronica as head of the consulting team provides advice and input into the model portfolio construction process, including fund research, selection and portfolio construction advice, as well as and asset allocation decisions. She is also responsible for maintaining relationships with key dealer group clients and providing them with tailored solutions.

Prior to joining Lonsec Veronica was a Director of Investment Consulting at 358 Australia Pty Ltd and prior to that, she spent a number of years at CPG Research & Advisory as a Senior Consultant; Standard & Poor's Investment Consulting Division; Manager Investments at State Super Financial Services and as a research analyst at Bridges Financial Services.

Michael Elsworth
BCom, MBA, GradDipAppFin

Executive Manager — Investment Consulting

Michael joined Lonsec in 2006 as part of the research team and at various times had overall responsibility for sectors including structured and exchange traded products, fixed income and alternatives. He has since moved to the Investment Consulting team as Executive Manager and provides advice and input into model portfolio construction and asset allocation decisions.

Prior to Lonsec, Michael worked at Westpac in both retail and institutional financial markets, and structured product development roles where he was responsible for sourcing, repackaging and marketing complex financial markets products. Michael spent three years in Hong Kong and two years in New York where he acted as Westpac's senior financial markets representative, helping expand the bank's reach in structured credit products.

Brook Sweeney
B.Bus (Accy/Banking & Finance), GradDipAppFin

Senior Investment Consultant

Brook joined Lonsec in January 2018 as a Senior Investment Consultant. In this role Brook provides portfolio construction advice, including fund research, selection and asset allocation to Lonsec Investment Consulting's clients including dealer groups, independent financial planning groups and industry super funds.

Brook has 18 years' investment experience and was recently a National Manager at Colonial First State (CFS), where he was responsible for part of CFS' retail distribution strategy. Previously, he spent eight years at Morningstar both in Australian and the UK in a variety of consulting roles.

Nicholas Thomas
B.Ec, B.M, MAppFin, CFA

Senior Investment Consultant

Nicholas joined Lonsec in March 2013 as a Senior Investment Analyst within the Research team. He has since moved to the Investment Consulting team as a Senior Investment Consultant. In this role Nicholas provides a range of investment advice, including strategic and dynamic asset allocation, manager selection and portfolio construction for Lonsec Investment Consulting's clients including dealer groups, independent financial planning groups and industry super funds. Nicholas has 18 years' investment experience. Prior to being at Lonsec, he spent eight years at Russell Investments as a Senior Research Analyst and five years at MLC Investment Management.

David Wilson
BCom

Investment Consultant

David joined Lonsec in 2015 as an Investment Consultant and is involved in the model portfolio construction process, review of approved product lists and client investment committee meeting preparation.

Prior to joining Lonsec, David worked as a Research manager for the Findex Group where he was responsible for fund manager research, performance reporting, APL and model portfolio reviews and economic research for a network of 150 financial planners. David holds a Bachelor of Commerce (Economics/Finance) and is currently completing a Masters of Applied Finance.

Research Approach

Eddy Zhang
BCom MFin MRes CPA

Quant Strategist

Eddy joined Lonsec in January 2017 as a Graduate Investment Consultant within the investment consulting team in Sydney. In this role, Eddy's main tasks will be to assist with the consulting services across a range of different clients with his primary responsibility being the preparation of performance report, performance attribution and investment committee pack.

Eddy recently graduated with a Master of Research (Applied Finance and Actuarial Studies) from Macquarie University. Prior to that, Eddy was an Accountant in a project management company for three years, where he was responsible for preparation financial reports across several projects. Eddy holds a Master of Finance and a Bachelor of Commerce (Accounting & Finance) from the University of New South Wales. Eddy has been qualified as a CPA since 2015.

Research Approach

Appendix D: Lonsec Direct Equities Research Team

Danial Moradi
BEng, GradDipAppFin, DipFP
Senior Equities Strategist

Danial Joined Lonsec in 2007, and is currently responsible for the management of Lonsec's Income and Emerging Leaders Model Portfolios, in addition to assisting with the construction and management of Lonsec's other direct equity model portfolios. Danial is also a member of Lonsec's Portfolio Services Investment Committee that oversees the management and Investment strategies of Lonsec's direct equity model portfolios.

Previously at Lonsec, Danial was responsible for in-depth research coverage on a number of listed companies from a wide range of sectors including Financial Services and Telecommunications, in addition to publishing Lonsec's quarterly Listed Income Securities Investment Journal. Danial has over 10 years' experience in trading, research and analysis of local and international equity and derivatives markets.

Ross Bird
BEng, FFin
Equities Strategist

Ross re-joined Lonsec in June 2013 developing specialised portfolios for wholesale clients. Ross is a member of Lonsec's Portfolio Services Investment Committee that oversees the management and Investment strategies of Lonsec's direct equity model portfolios.

Ross has 27 years' experience in Banking, Funds Management and Stockbroking research and portfolio management. Previously, Ross held Strategist roles at Lonsec, Aegis Equities, Morningstar and Bellwether. Prior to this, Ross was a Resources Analyst at National Mutual (now AXA) for 10 years.

Chad Troja
B.Intl Trade, M.AppFin
Senior Equities Analyst

Chad joined Lonsec at the end of 2017 from Catholic Church Asset Mgt where he was an Investment Analyst covering Australian Equities. Prior to this Chad spent 9 years at Perennial Investments Partners where he was part of the Global Equities team covering Consumers, Industrials and Health whilst also involved in FX.

With over 12 years funds management experience previous organisations include Invesco, Equity Trustees and Foreign & Colonial (UK). Joining Lonsec as a Senior Equity Analyst, Chad will cover Financials, Tech & Telecommunications

Toby Greene
BA, MFin, CFA Level III candidate
Graduate Equities Analyst

Toby joined the Lonsec Equities Research team in September 2016. Toby is responsible for maintaining research coverage on existing hybrid securities, AM and PM Bulletin market wraps and providing corporate action updates on ASX 200 listed companies.

Prior to Lonsec, Toby performed contract work as an analyst at multiple boutique corporate advisory firms for six months and worked two years in operations at a boutique marketing firm.

Kelly Glover
MFin
Investment Analyst

Kelly joined Lonsec in March 2017 as an Investment Analyst within the managed funds research team, before moving into the Direct Equities Research team in December 2017. In this role, Kelly is involved in the research coverage of Australian equities. Kelly completed his Masters in Finance degree in 2016. Before joining Lonsec, Kelly gained five years of experience as an Analyst at Jenepe Capital. Kelly was responsible for producing valuation and equity reports and assisting the Corporate Finance team with international IPO's and capital raisings.