

### How Does Gearing Affect Risk and Return?

The Alleron long-short theoretical model exhibits negative correlation between short-side outperformance and long-side return. This stabilizing property means that **return tends to increase** and **risk tends to decrease** at moderate gearing levels. Figure 1 plots annualised return vs annualised return standard deviation as gearing changes between Feb 2005 and Aug 2016. The ASX 100 risk-return for the same period is displayed in green for reference.

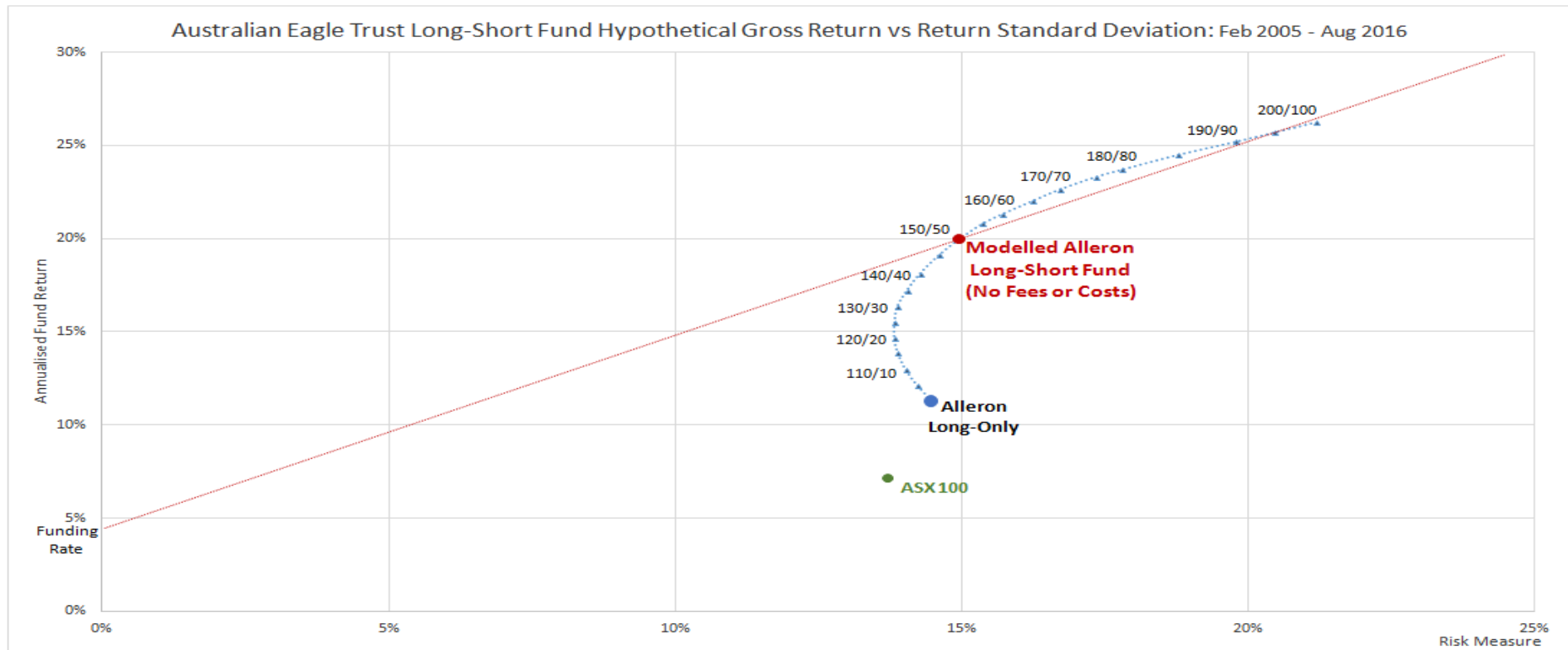


Figure 1: Standard Deviation Risk-Return as Gearing Changes (no fees or costs)

From Figure 1, a 150/50 gearing ratio is approximately correct in terms of providing a sensible risk-return trade-off. For lower gearing levels, the risk is much the same but return is distinctly lower. For higher gearing levels, risk increases progressively for each increment of additional return. Also, as these measures are based on historical calculation, a provision for unexpressed contingent risk is considered prudent.

Figure 2 presents the same calculation as Figure 1 but with risk expressed as the maximum peak-to-trough drawdown calculated from daily data. On a historical basis, the maximum peak-to-trough drawdown has been more sensitive to gearing than the standard deviation measure, with maximum drawdown occurring during the GFC period. As before, a 150/50 gearing ratio is approximately correct.

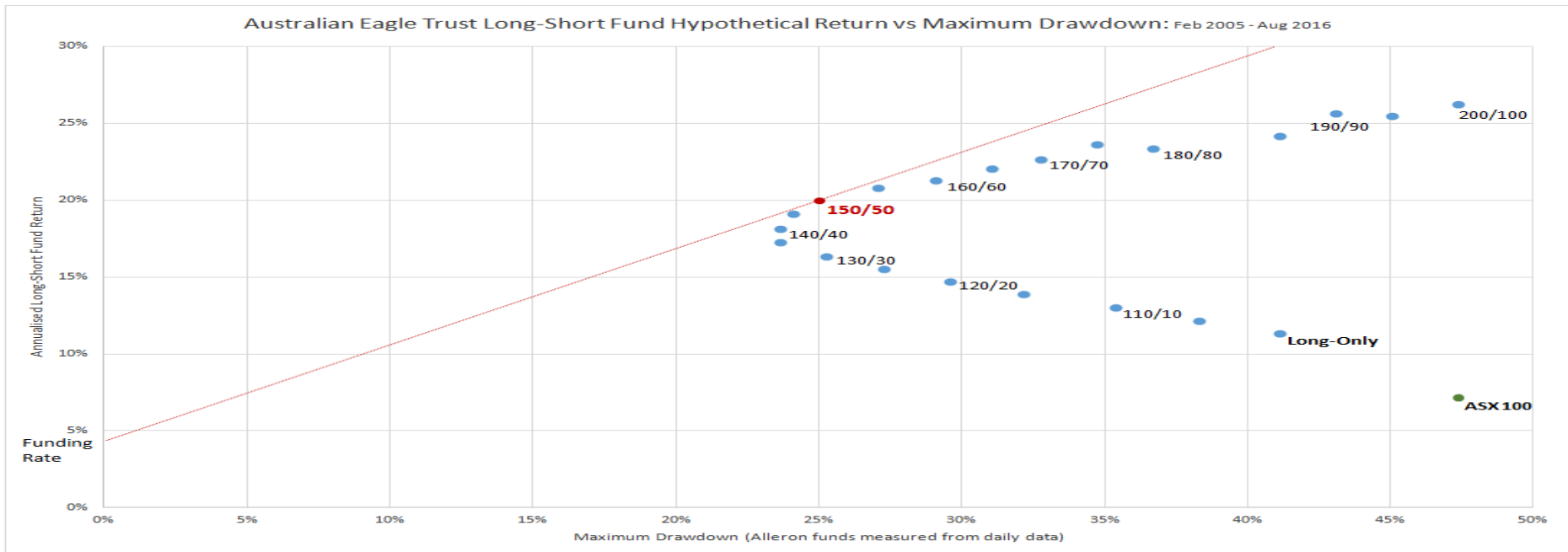


Figure 2: Maximum Peak-to-Trough Drawdown Risk-Return as Gearing Changes (no fees or costs)



## **Disclaimer**

While the information contained herein has been prepared in good faith, neither Alleron Investment Management Limited ("the Company") nor any of its shareholders, directors, officers, agents, employees or advisers give, have given or have authority to give, any representations or warranties (express or implied) as to, or in relation to, the accuracy, reliability or completeness of the information in this document, or any revision thereof, or of any other written or oral information made or to be made available to any interested party or its advisers (all such information being referred to as "Information") and liability therefore is expressly disclaimed. Accordingly, neither the Company nor any of its shareholders, directors, officers, agents, employees or advisers take any responsibility for, or will accept any liability whether direct or indirect, express or implied, contractual, tortious, statutory or otherwise, in respect of, the accuracy or completeness of the Information or for any of the opinions contained herein or for any errors, omissions or misstatements or for any loss, howsoever arising, from the use of this document.

Information in this presentation should not be considered as a recommendation in relation to holding, purchasing or selling shares, securities or other instruments.