

Fund Valuation Confidence

 ... hypothesis statement

- **presumed relationship** *"The confidence in fund valuation (dependent variable) decreases with the greater difference between actual and expected NAV value of the fund, lower explainability of NAV movement for the fund, lower amount of fact-checked processes of fund oversight, and more impactful drivers of fund valuation uncertainty (independent variables)."*
- **anticipated change** *"If the NAV value differential, NAV movement explainability, fund oversight fact-check, and drivers of fund valuation uncertainty change, the uncertainty of fund valuation will change as well."*
- **example** *"The confidence in fund valuation will be high (i.e. low uncertainty in the fund valuation) when the fund has low percentage of NAV difference, NAV movement of fund can be explained in detail, all processes in fund oversight are fact-checked, and drivers of uncertainty in fund valuation are weak (or not present)."*

Fund and Market Behaviour

phenomenon	observation	data	approach
identification of fund valuation and market behaviour issues	<ul style="list-style-type: none"> • fund valuation issues <ol style="list-style-type: none"> 1. difference in data <ul style="list-style-type: none"> • errors in data • for instance, a discrepancy between actual and expected NAV 2. difference in treatment of data <ul style="list-style-type: none"> • we want to know of what part of discrepancy is arising from the way the calculations are setup • for instance, corporate actions are manually entered and we are not treating (validating) them in the same way as other processes or a policy setting in relation to the NAV Protect technology can cause discrepancies 	<ul style="list-style-type: none"> • NAV value difference <ul style="list-style-type: none"> • errors in data • discrepancy between actual and expected NAV • where can we get expected NAV? • NAV movement explainability <ul style="list-style-type: none"> • u780_nav_mvmt_analysis • fund oversight fact-check <ul style="list-style-type: none"> • dependent on other hypothesis • drivers of fund valuation uncertainty <ul style="list-style-type: none"> • dependent on other hypothesis • operational risk factors of fund and market behaviour <ul style="list-style-type: none"> • dependent on other hypothesis 	<ul style="list-style-type: none"> • confidence output can be in a form of some confidence curve (bell shaped function)
impact of fund valuation and market behaviour issues to fund operations	<ul style="list-style-type: none"> • measuring the uncertainty of fund valuation by determining the impact of fund valuation and market behaviour issues to fund operations 		

Notes

- user experience
 - the current-level of confidence (inherently provided by NAV Protect) can be extended with the ability to identify issues when there is a service provider outage (TPA) and clients are comparing the backup NAV
 - the NAV Protect functionality computes the expected fund price (expected NAV) and explains the difference between expected and actual NAV
 - it already gives the confidence in fund valuation processes, but we can further increase such confidence by providing more insight into possible differences (if there are any differences)
- confidence in fund valuations
 - only certain portion on NAV confidence is based on fund valuation, but the uncertainty drivers (identified risk factors) are arguable the most important factors that contribute to the confidence in fund valuation
 - NAV value difference is generally more risky than the drivers of valuation uncertainty
 - but fund can have problems in the middle of the fund that offset each other and fund may produce no difference in NAV value as the result (when looking at fund from the top level)
 - funds are usually analysed in 3 layers: top (fund), middle (category), and the bottom (security) layer