

2027 LEVEL II ERRATA

The corrections listed in this errata have already been incorporated into the digital edition. They apply only to the print and PDF versions of this book.

Level II – 3.1.7 The Black-Litterman Model

Original Text

τ - SCALAR TERM

Izdorek (2007) posits that the scalar term (τ) is inversely proportionate to the confidence in a view. For example, a smaller τ will give more weight to the subjective view excess return vector (Q) and less to the equilibrium excess return vector (Π). Izdorek (2007) concedes that there are multiple opinions on how to set the scalar term (τ), ranging from near zero to 1, but elects to follow He and Litterman (1999) in calibrating the confidence of each view in terms of ω_k/τ relative to the variance of the view, $p_k'\Sigma p_k$, and sets τ to 2.5% such that $\omega_k = (p_k'\Sigma p_k)\tau$.

Rather than thinking of τ as a precise number, it's best thought of as a dial that controls the influence of views versus history. Different practitioners choose τ differently, but consistency matters more than precision. Throughout this series of readings, we use a scalar of 2.5%.

Revised Text

τ - Scalar Term

Izdorek (2007) posits that the scalar term (τ) is inversely proportionate to the relative weight given to the implied equilibrium return vector (Π). Unfortunately, guidance in the literature for setting the scalar's value is scarce. Both Black and Litterman (1992) and Lee (2000) address this issue: since the uncertainty in the mean is less than the uncertainty in the return, the scalar (τ) is close to zero. One would expect the equilibrium returns to be less volatile than the historical returns. Izdorek (2007) concedes that there are multiple opinions on how to set the scalar term (τ), ranging from near zero to 1, but elects to follow He and Litterman (1999) in calibrating the confidence of each view in terms of ω_k/τ relative to the variance of the view, $p_k'\Sigma p_k$, and sets τ to 2.5% such that $\omega_k = (p_k'\Sigma p_k)\tau$. When the covariance matrix of the error term (Ω) is calculated using this method, the actual value of the scalar (τ) becomes irrelevant because only the ratio (ω/τ) enters the model.

Rather than thinking of τ as a precise number, it's best thought of as a dial that controls the influence of views versus history. Different practitioners choose τ differently, but consistency matters more than precision. Throughout this series of readings, we use a scalar of 2.5%.

