Modified Volatility Measure, Allow the Window Length to Vary

\[
\tilde{\sigma}_{it} = \left[ \sum_{\tau=-4}^{5} \left( \frac{\tilde{Z}_{i,t+\tau}}{P_{it}} - 1 \right) (Y_{i,t+\tau} - \overline{Y}_{it}^w)^2 \right]^{1/2}
\]
# of years from t-4 to t+5 for which $z_{it} > 0$.

$$Z_{it} = 0.5(x_{it} + x_{it-1})$$

$$K_{it} = \frac{P_{it}}{\sum_{\tau=-4}^{5} z_{i,t+\tau}}$$

$\tilde{Z}_{it} = K_{it} z_{it}$

By construction, the sum of the rescaled weights add up to $P$.

Correcting a typo in the paper.