

Question 2: Currency Hedging analysis

Hendri van Zyl^a

^a*Stellenbosch University, Stellenbosch, South Africa*

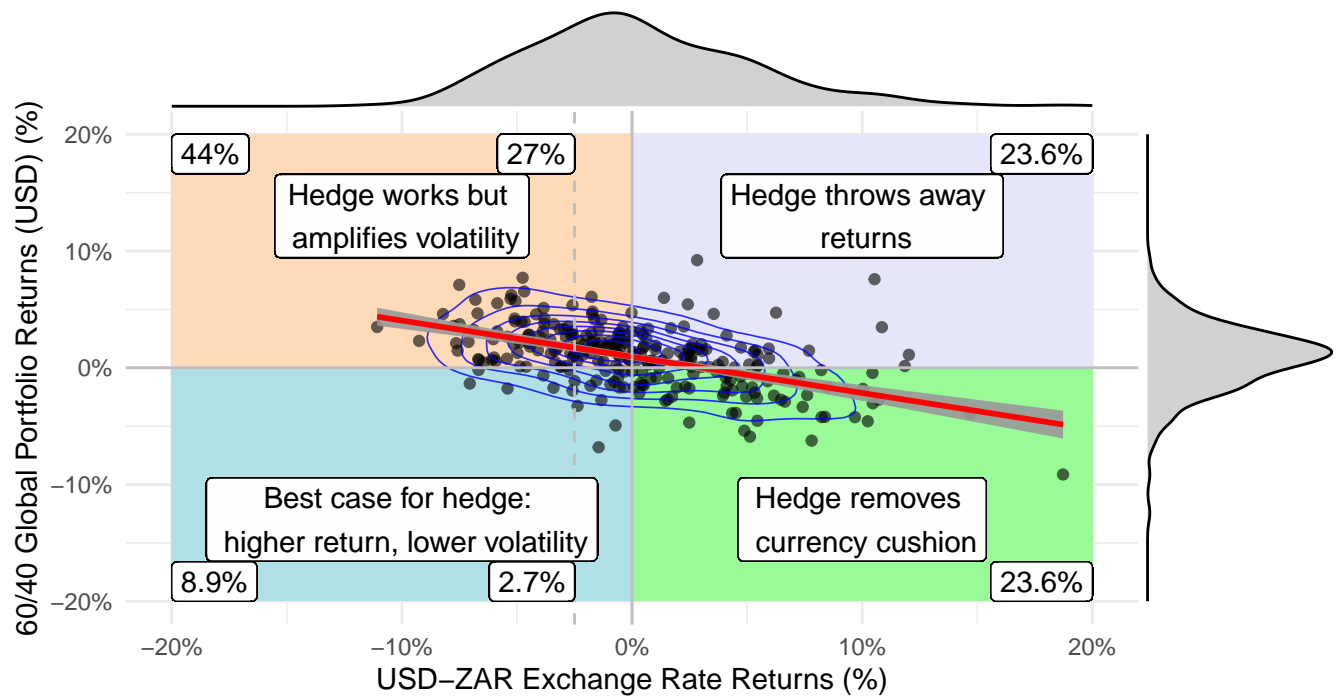
Abstract

This paper investigates the volatility paradox phenomenon whereby negatively correlated assets in a portfolio counterintuitively result in lower overall volatility than would be expected given the constituent assets.

1. The Volatility paradox

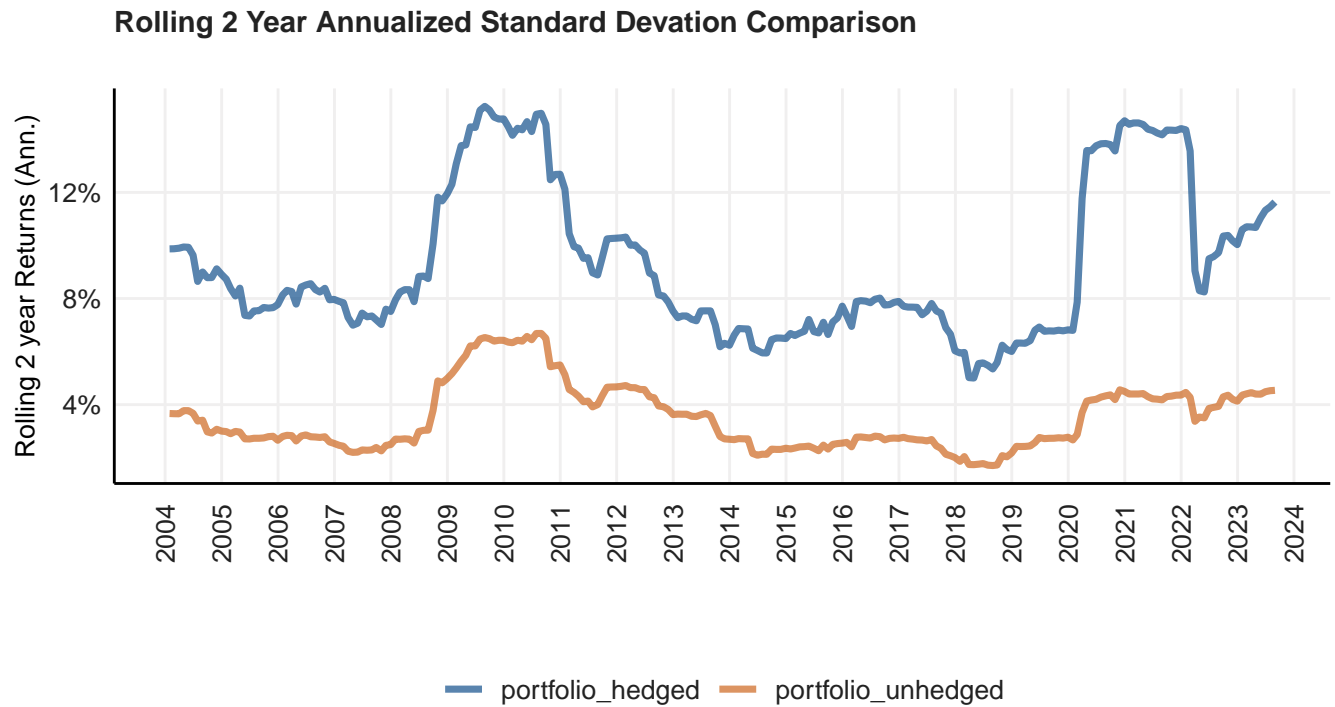
The figure below illustrates that global assets and the Rand have a demonstrably negative relationship over the sample period.

Scatter Plot of USD/ZAR returns vs Portfolio returns



2. Rolling volatility

The figure below clearly illustrates that using the rand as a currency hedge increases volatility substantially.



Note:

This strengthens the argument against long term currency hedging for the purposes of reducing overall volatility by introducing a negatively correlated asset. One can at least say that in this very specific context the strategy does not appear to be effective.