Risk-Free Rate - Applied

Whilst simple in theory, applying the concept of the Risk-Free Rate (RFR) can be challenging, especially in the context of determining a benchmark for an investment in a stock: its respective alternative cost, the Cost of Equity (CoE).

RFR is the return achieved for an investment with basically zero risk, or zero volatility. Whereby in any domestic capital market, local sovereign bonds are assumed to constitute the least risky investment alternative. Hence, if one considered buying shares of a company operating in Germany, one may refer to the yields of German domestic government bonds as the regional applicable RFR. However, with numerous domestic government bonds outstanding, especially across a wide maturity spectrum, the question arises: which one to choose.

The assumption that bonds with shorter maturities are less risky than longer ones seems evident: Along time, the likelihood of a default as well as the materialization of inflation-related risks simply increases. Therefore, in ordinary markets – exceptions occur – bonds with longer maturities carry a higher yield than such with shorter ones.

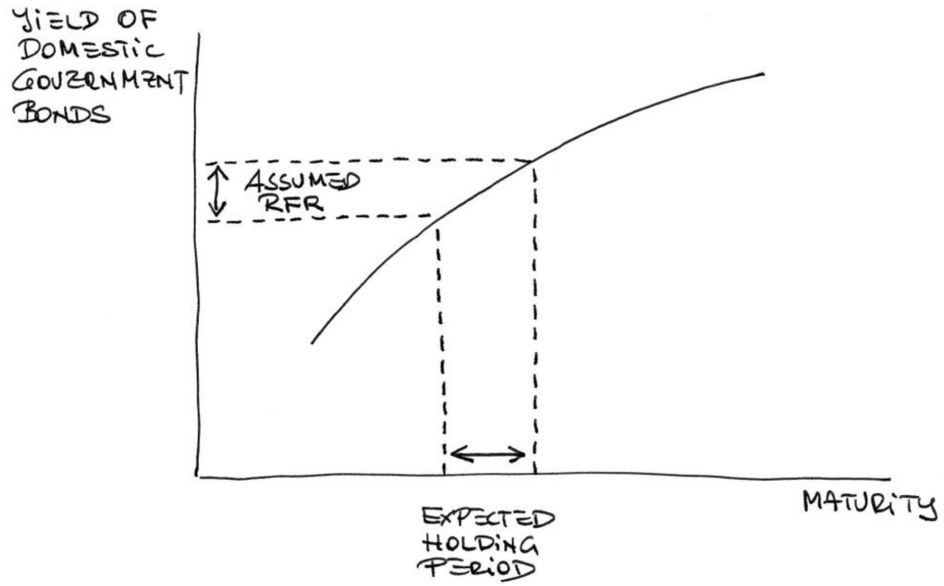
Literature and practice suggest using the yield of a 10-year domestic government bond as a RFR when determining the CoE: the benchmark for investing in a stock. – This assumption may be challenged, though: For instance, an investor may hold shares for few months only, or for decades, perhaps. Therefore, the appropriate benchmark for an investment would be the RFR of a domestic sovereign bond with a maturity exactly matching the expected holding period of a share. Hence, a pension fund with a relatively long investment horizon may rather use a longer-dated sovereign bond as a benchmark, unlike some hedge fund flipping positions in a matter of days or weeks.

Now, empirical research indicates that – on average - stockholders hold on to their shares for a period of approximately 10 years: Hence the frequently quoted reference to apply 10-year government bonds as RFR benchmark. – Therefore, an "average", typical investor acquiring shares in a corporate in Germany may apply as a RFR benchmark German domestic government bonds with a remaining maturity of 10 years.

In principle, this concept may equally be applied in any (considerably more risky) emerging market: Also in such environments, local government bonds are deemed the least risky investment alternative available (even tough not being risk-free at all, with a credit rating certainly worse than that of the United States or Germany, perhaps even below investment grade).

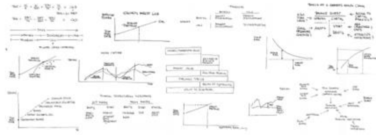
However, identifying appropriate RFRs in lesser developed capital markets can be a challenge: Often, longer-dated government bonds within the maturity spectrum of the average holding period of stocks do simply not exist. In such a case, only broad assumptions or approximations may help. – This may also be the only reasonable alternative when determining an appropriate RFR benchmark in high-inflationary environments. (Unless one used a stable base currency in assessing an investment proposition). – Finally, an alternative approach may also be required when assessing a firm formally registered in a (challenging, instable) emerging market, whilst running global operations and benefitting from a well-diversified product portfolio. In this case, a blend of RFRs may be considered across those regions in which this corporate generates most of its cash flow.

COPYRIGHT www.christianschopper.com - DO NOT COPY OR PASTE



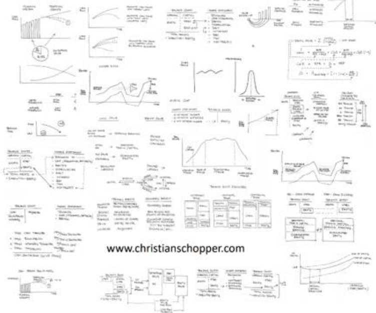
COPYRIGHT www.christianschopper.

For more concepts click on:



Corporate Finance Concepts

Christian Schopper



COPYRIGHT www.christianschopper.com - DO NOT COPY OR PASTE