
FTSE Currency FRB Index Series

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Section 1

About the Forward Rate Bias (FRB)

1. What is the forward rate bias?

The currency forward rate bias is the observed tendency of higher interest rate currencies' return to outperform that of lower interest rate currencies. It is also called 'carry' in the currency market. This can be identified over a given time period as the higher interest rate currency's appreciation over and above the extent expected from the pricing of currency forward contracts. Hence, this outperformance can be captured through a series of currency forward contracts

2. Did FTSE observe this behavior in the currency markets?

No. Record plc, a specialist currency management firm, is one of a number of firms to have recognized this behavior. Their experience in the management of return-seeking currency portfolios led to their researching this behavior further. Their research has demonstrated that the forward rate bias is a fundamental, sustainable return stream that has relatively little correlation, over the long-term, with other asset classes such as equities and fixed income.

It is driven by macroeconomic imbalances between economies which affects the riskiness of different currencies. This has a direct impact on real interest-rate differentials between countries. The differentials are captured in the relationships between the currencies of the countries concerned, thus producing the forward rate bias. It can therefore be seen as an 'alternative beta' and exploited by investors.

3. Is this related to currency hedging or overlay?

It is not related to currency hedging – hedging involves reducing the risk from foreign currency movements in an investor's international asset portfolio, whereas this 'alternative beta' is a new distinct source of investment return. 'Overlay' is a generic term used to describe a particular structure of a currency mandate. It therefore can

refer to either currency hedging (i.e. risk reduction) or return generation from currencies.

4. How consistent is this bias?

It has been observed over the past 30 years – effectively the full history of free floating currencies since the collapse of the Bretton Woods system in the early 1970s.

Section 2

FTSE Currency FRB Index Series – FRB5 and FRB10 Indexes

1. What indexes have FTSE and Record created to capture this bias?

In 2009 FTSE launched the FTSE Currency FRB Index Series with the FRB5 indexes. These indexes represent the return from investing which can be derived from five of the world's largest currencies (by turnover): Swiss Franc (CHF), Euro (EUR), Pound Sterling (GBP), Japanese Yen (JPY) and US Dollar (USD). These indexes provide the market with the ability to access these five currencies and see the FRB pattern in practice.

In addition, FTSE and Record have worked together to produce the FRB10 indexes. These indexes consist of a comprehensive set of ten of the largest developed currencies, producing a total of 45 currency pairs. The currencies are: Australian Dollar (AUD), Canadian Dollar (CAD), Swiss Franc (CHF), Euro (EUR), Pound Sterling (GBP), Norwegian Kroner (NOK), New Zealand Dollar (NZD), Swedish Krona (SEK), Japanese Yen (JPY) and US Dollar (USD).

These developed currencies relate to the majority of the 'G10' countries and provide a comprehensive offering for use in benchmarking and in the creation of index tracked funds. Both the FRB5 and FRB10 indexes provide a manager-independent approach.

2. What weighting scheme will be used in the FRB5 and FRB10 indexes?

Most equity indexes are market-cap weighted, while bond indexes are, similarly, market-value weighted. The ten currency pairs within the FRB5 indexes and the 45 currency pairs within the FRB10 indexes will be equally-weighted.

3. How does the index strategy work?

The FTSE Currency FRB Index Series (consisting of both the FRB5 and FRB10 index series) is designed to represent the performance of the Forward Rate Bias strategy implemented through developed market currencies. Each month, the currency representing the higher interest rate country of each pair is bought (representing a long position) and the currency of the lower interest rate country is sold (representing a short position), using one month currency forward contracts.

Currency pairs are rolled on or reversed (if the direction of the interest rate difference has changed) at the end of each month. All FX deals are fully-costed, so the index is investable and the portfolio of currency pairs is valued on a daily basis. Excess return and total return index values are calculated.

4. Why are only seven of the ten constituent currencies denominated within the FRB10 indexes?

Though the FRB10 indexes use ten currencies to create the 45 currency pairs, a decision was made to only denominate in seven of these currencies. The decision to exclude the Norwegian Kroner, New Zealand Dollar and Swedish Krona is based on client demand. However, should a client wish to receive the FRB10 indexes denominated in one of the currently excluded currencies, FTSE is able to build a customized version, using its custom solutions expertise.

Total Return (not Excess Return) calculations all use ‘achieved’ overnight rates for the cash return – i.e. they use interest rates that are calculated as an average of overnight rates actually achieved in each market, rather than a LIBOR “fixing” rate.

5. Which overnight rates are used in the Currency FRB5 indexes?

FTSE will be using these rates, by base currency:

- USD – Fed Funds Effective Rate (FED FUNDS)
- EUR – Euro Overnight Index Average (EONIA)
- GBP – Sterling Overnight Index Average (SONIA)
- JPY – Tokyo Overnight Average Rate (TONAT)
- CHF – Tomnext Overnight Indexed Swap (TOIS)

6. Which overnight rates are used in the Currency FRB10 indexes?

In addition to the above, FTSE will be using the following rates:

- AUD – Interbank Official Cash Rate, Reserve Bank Australia (IOCR)
- CAD – Canadian Overnight Repo Rate (CORRA)

7. Does FTSE use the same one-month nominal rate to calculate the end-of-day value for the index or is a daily spot rate used?

The end-of-day index value is calculated based on the one-month forward rate on that day, adjusted for the number of days remaining until the month-end. It will therefore reflect changes in the interest differential between currencies on a day-to-day valuation basis, although the pair direction, determined on this differential, is only changed at the end of each month.

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