

Eurex MSCI Derivatives – Synthetic exposure to the MSCI Brazil Index

As institutional investors move their focus towards the emerging markets, the BRIC markets, in particular, are thrusting back into the spotlight. Eurex recently expanded its BRIC offering with the recent launch of MSCI EM Latin America ex Brazil futures.

In this note, we illustrate how to create a synthetic exposure to the MSCI Brazil index through a spread trade between the existing MSCI EM Latin America futures and the recently listed futures on MSCI EM Latin America ex Brazil. We show that over the period from 2012 to 2016, at various rebalancing frequencies, this synthetic exposure could be achieved at substantially below 1% tracking error.

Currently Eurex does not offer a future on the MSCI Brazil Index. However, we can create a synthetic exposure by trading the futures spread between the MSCI EM Latam index and the MSCI EM Latam ex Brazil index. Table 1 below provides a summary of the product specifications of the two futures products.

The weights of the spread constituents are chosen such that all country weights in the MSCI EM Latam index except for Brazil will cancel out with the MSCI EM Latin America ex Brazil. With this constraint the weights of

the spread constituents only depend on one variable, which we choose to be the country weight of Brazil in the MSCI EM Latin America index*. In the following calculation, we use monthly data on the country weight of Brazil to fix the relative size of our spread constituents.

Below we illustrate this trade over the period from 2012 to 2016 by tracking a hypothetical position of USD 10 million in the MSCI Brazil established at the beginning of the data period. Several rebalancing frequencies – annual, semi-annual, quarterly and monthly – are applied. Figure 1 and Figure 2 (page 2) show the results in terms of annual tracking error in bps and total annual turnover versus the rebalancing period. The tracking error in all cases is substantially below 1% per year. The more often we adjust the positions the lower the tracking error, falling to below 25 bps for monthly rebalancing. The total annual turnover is a measure for the expected cost to maintain the exposure on the MSCI Brazil index. It increases with the rebalancing frequency.

Table 1 – Contract specifications

Futures on	MSCI EM Latin America Index	MSCI EM Latin America ex Brazil Index
Eurex product ID	FMEL	FMXB
Contract value per index point	USD 100	USD 10
Contract terms	Quarterly up to 36 months	
Tick size in points	0.1	0.5
Tick value in currency	10	5
Settlement	Cash settlement	
Final settlement price	Based on the closing index level on the last trading day of the maturity/expiration month	
Last trading day	Third Friday of the maturity/expiration month	
Continuous trading	08:00–22:00 CET	
Bloomberg code index	NDUEEGFL Index	M1LA7 Index
Bloomberg code futures	ZULA	M1LA7
TES fees per contract	USD 0.75	

* In terms of the country weight of Brazil w_{Br} , the spread can be expressed as $1/w_{Br} \text{ Latam} - (1 - w_{Br}) / w_{Br} \text{ Latam-ex-Brazil}$, where Latam and Latam-ex-Brazil are the respective MSCI EM indexes.

Figure 1 – Tracking error in bps

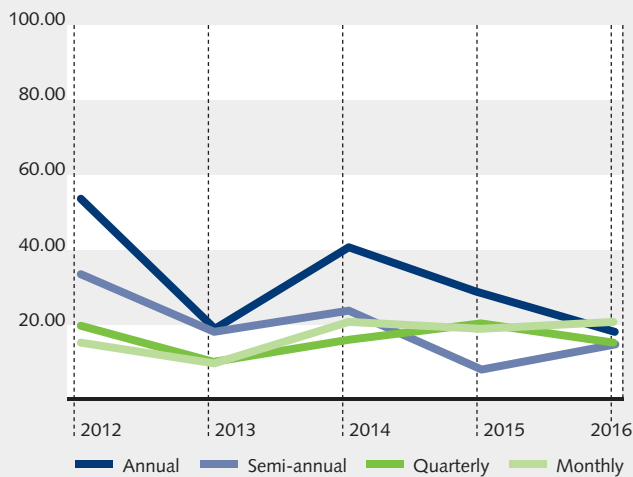
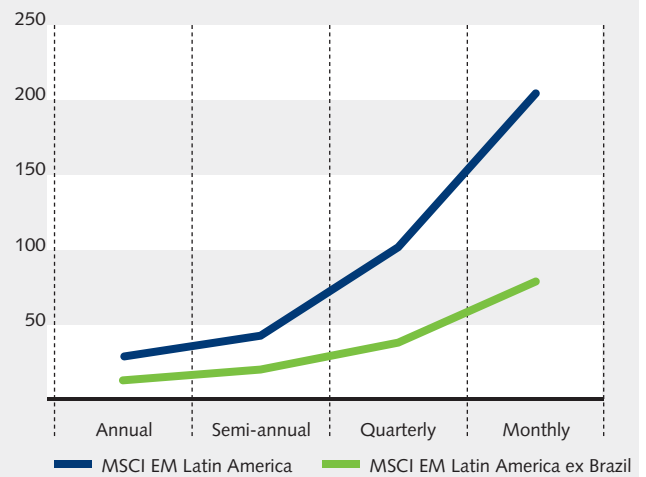


Figure 2 – Turnover per year in number of contracts



In summary, Eurex offers comprehensive access to Latin America through its MSCI index derivative segment. The recently listed futures contract on the MSCI EM Latin America ex Brazil together with the futures on the MSCI EM Latin America index offer a new and efficient way to establish a synthetic exposure to the MSCI Brazil. Tracking errors substantially below 1% per year are achievable.

It is also worth noting that Eurex lists MSCI Russia, MSCI India and MSCI China Free index futures completing the BRIC universe.

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