Risk Report

Year nº7 Vol nº68 Jun/2019

Scenario

Na comparação com a edição de maio, nosso Mapa de Riscos verificou em junho estabilidade nos indicadores que o compõem. O contexto no qual tais indicadores operaram no mês de maio foi um no qual os principais índices acionários nacionais obtiveram performance positiva (ainda que próxima a estabilidade), no sentido oposto das demais economias emergentes e mundiais (gráfico 2.1). A despeito da performance negativa, o comportamento do indicador de volatilidade do mercado de renda variável nacional mostrou queda no mês, em divergência com o observado nos indicadores agregados das economias emergentes e mundiais (gráfico 2.2).

Pode-se ainda chamar atenção para alta do indicador de probabilidade média de default (gráfico 5.1) nos últimos meses, em linha com o movimento do indicador de volatilidade do mercado acionário nacional nesse período mais amplo (gráfico 2.2) e com a situação específica de alguns grupos corporativos nacionais negociados em Bolsa. Destarte, a alta do indicador ainda não foi alta o suficiente para, com base nas estatísticas históricas, movimentar o indicador de risco de crédito que compõe o Mapa de Riscos.

Após a reunião do COPOM do dia 19/6, o comitê optou por manter inalterada a meta da taxa SELIC. As expectativas de mercado precificam cortes em reuniões futuras, tendo em vista o contexto de expectativas mais contidas de crescimento econômico e inflação e um possível cenário de cortes de juros nos EUA (ver abaixo) [1]. Dessa maneira,

chama-se atenção para a performance positiva de todos os demais índices de referência (gráficos 2.5), em linha com o movimento recente de queda nas taxas nominais de 10 anos (gráfico 1.2).

Após a reunião do FOMC, no dia 19/6, as expectativas de mercado implícitas no mercado de derivativos consideram iminente um corte na taxa básica de juros norte-americana na próxima reunião, no dia 31/07 [2]. Tal constatação é concomitante a uma análise do banco Morgan Stanley, o qual através de uma série de indicadores, tais como taxas de juros, atividade industrial, emprego e crescimento de lucros por ação, argumenta que a economia americana estaria adentrando tecnicamente um período de virada cíclica em direção a uma recessão [3]. Ainda nessa linha, expectativas inflacionárias na Europa, Japão e Estados Unidos encontram-se no menor valor desde meados de 2016 [4]. Dessa forma, como pontos de atenção, podemos mencionar a relevância de uma possível elevação futura dos riscos de mercado e de crédito, conforme lido pelo indicador do Mapa.

[1] Conforme expectativas do Boletim Focus BCB de 21/06/2019.

[2] Fonte: Bloomberg, função WIRP.

[3] Ver: https://www.zerohedge.com/news/2019-06-17/if-morgan-stanley-right-world-now-recession

[4] Fonte: Bloomberg, indicadores de swaps de inflação, taxa a termo vértice 5 anos – 5 anos, e taxas de inflação implícita em títulos públicos para a maturidade de 5 anos.

Risk Map - last 36 months (May/2019)

Legend: Macroeconomic Risk, Liquidity Risk, Credit Risk, Market Risk, Risk Appetite
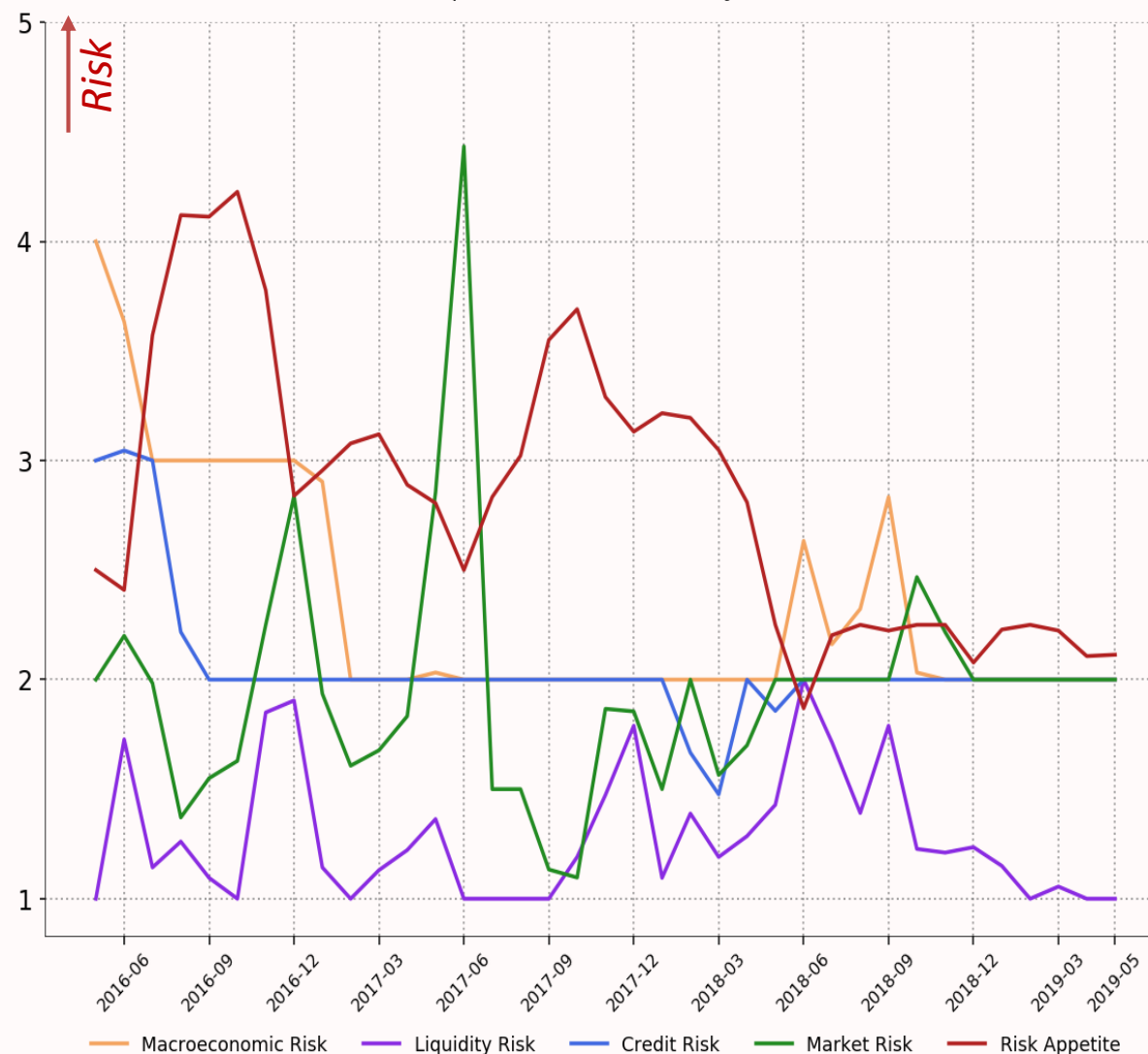
Note: Data as of 2019-05-31 and does not reflect any future changes that may have occurred after.

1.1. USD FX Rates - Emerging Markets (May/2019)

Fonte/Source: Bloomberg
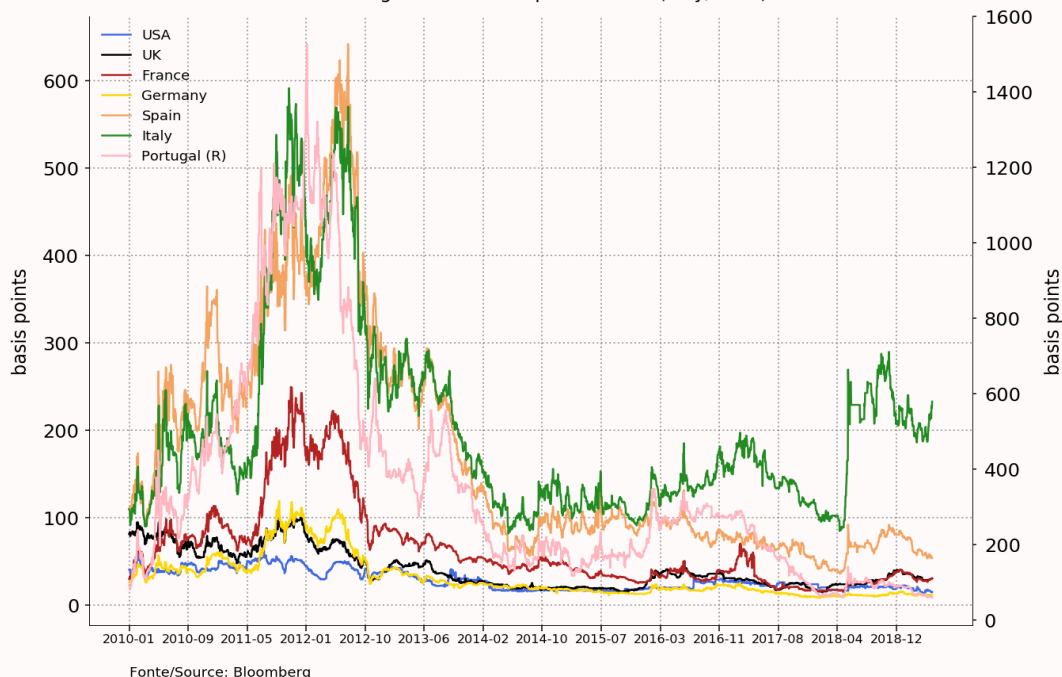
1.3. Sovereign CDS - Emerging Markets (May/2019)

Fonte/Source: Bloomberg

1.2. 10-Year Sovereign Interest Rates - EM vs USA (May/2019)

Fonte/Source: Bloomberg
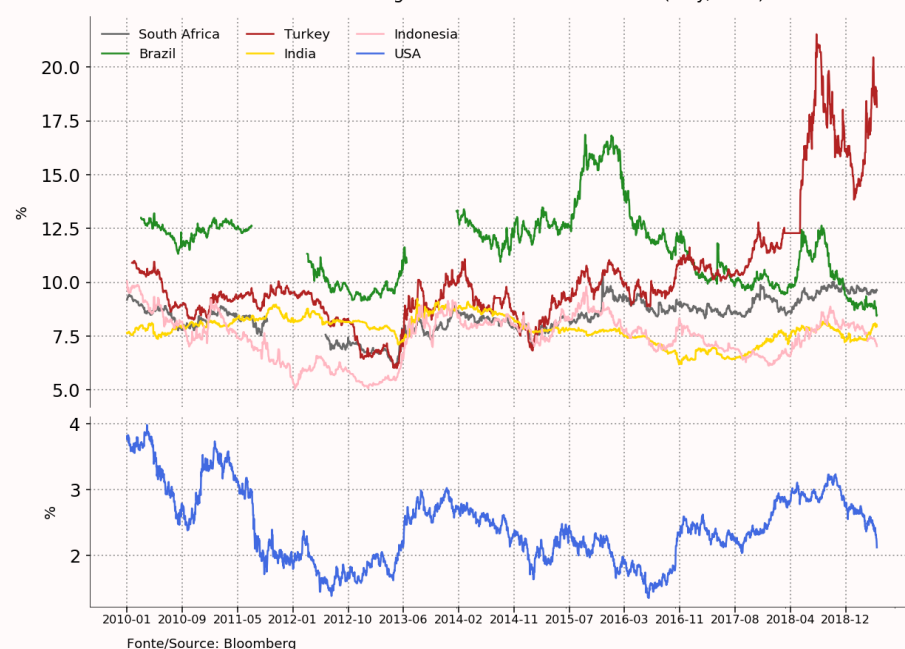
1.4. Sovereign CDS - Developed Markets (May/2019)

Fonte/Source: Bloomberg

2.1. USD MSCI Equity Indexes - trailing 12 months (May/2019)

Fonte/Source: Bloomberg
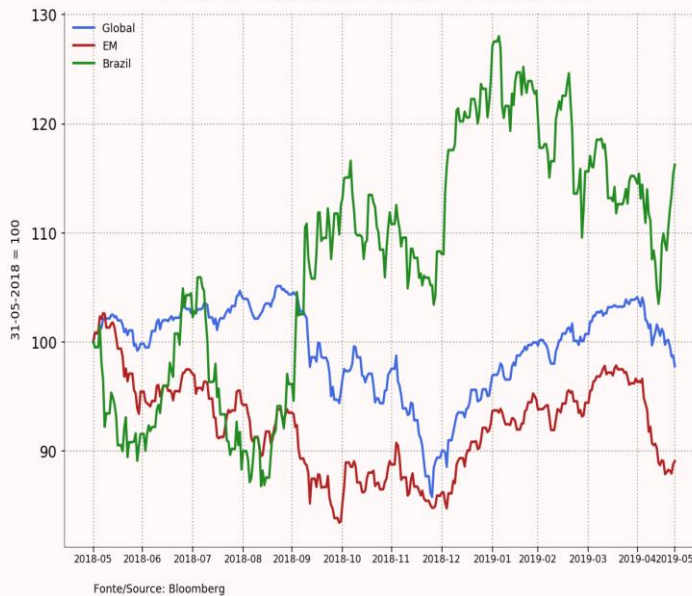
2.3. Corporate Bond Indexes - trailing 12 months (May/2019)

Fonte/Source: Bloomberg

2.5. Brazilian Capital Markets Indexes - trailing 12 months (May/2019)

Fonte/Source: Bloomberg

2.2. USD MSCI Equity Indexes - 30-day historic annualized vol (May/2019)

Fonte/Source: Bloomberg

2.4. Corporate Bond Indexes - 30-day historic annualized vol (May/2019)

Fonte/Source: Bloomberg
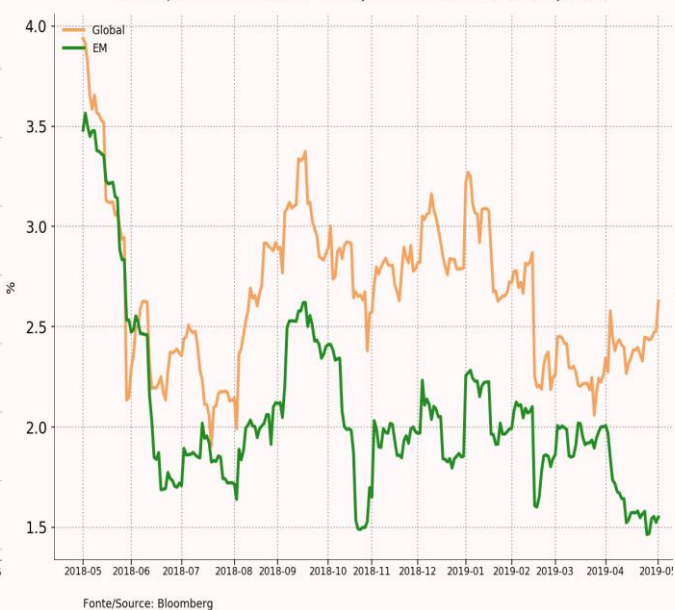
2.6. Brazilian Capital Markets Indexes - 30-day historic annualized vol (May/2019)

Fonte/Source: Bloomberg
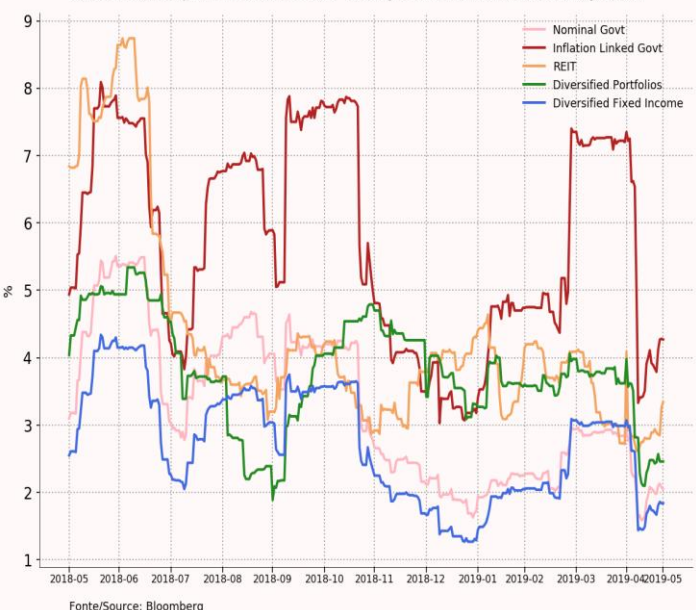
3.1. Bid-Ask Spread Index (May/2019)

Fonte/Source: Bloomberg
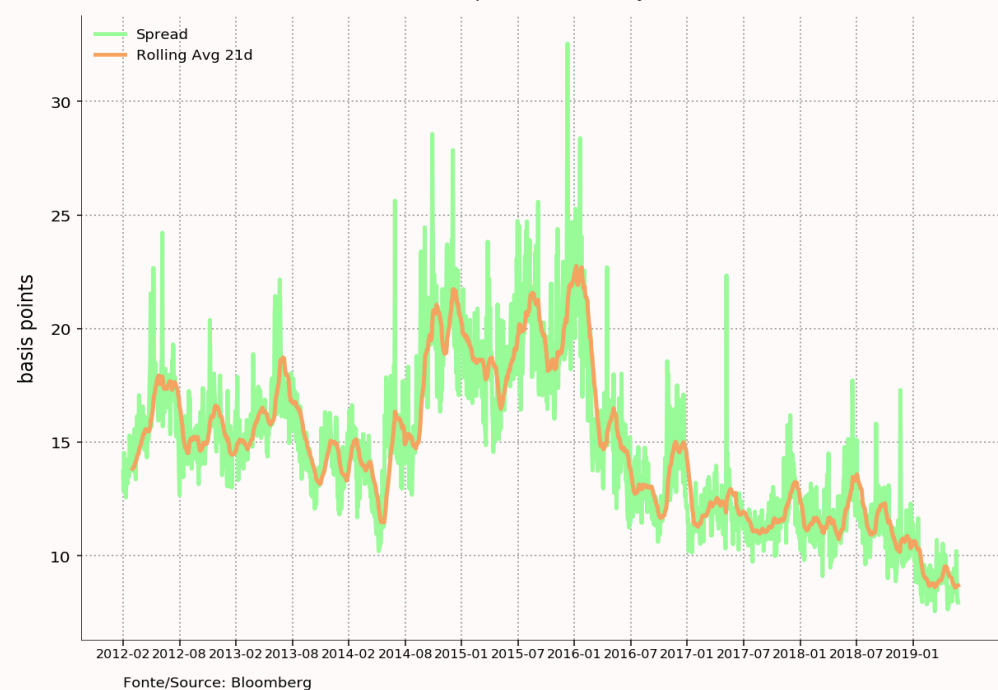
3.2. ICVM 555 Mutual Funds - Average Liquidity Index (May/2019)

Fonte/Source: Bloomberg
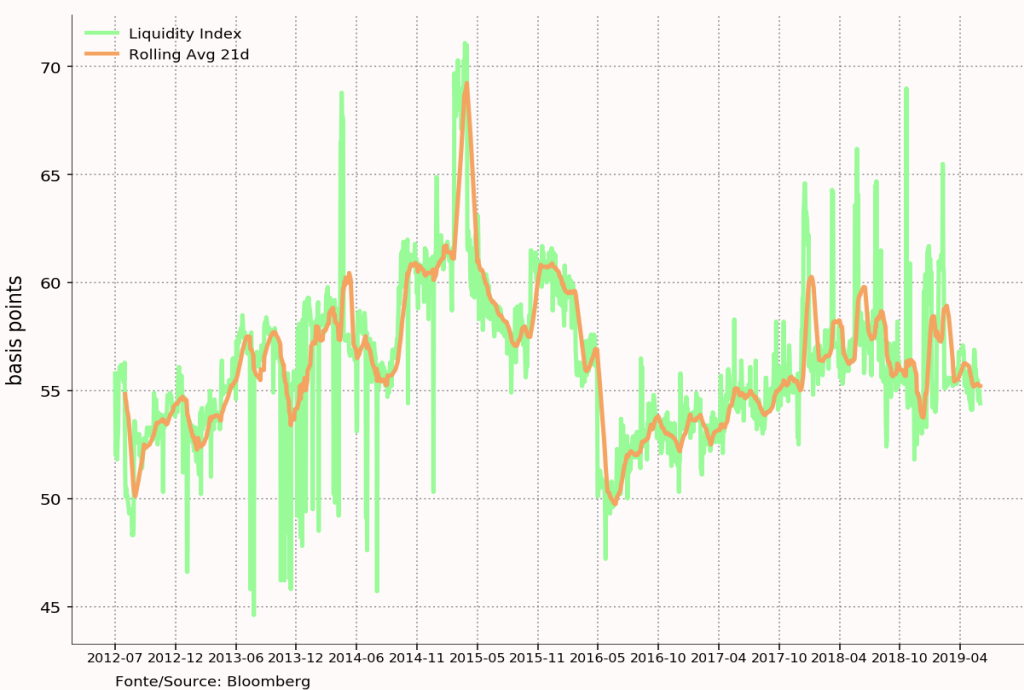
3.3. Net Foreign Investor Stock Exchange Inflows (May/2019)

Fonte/Source: B3
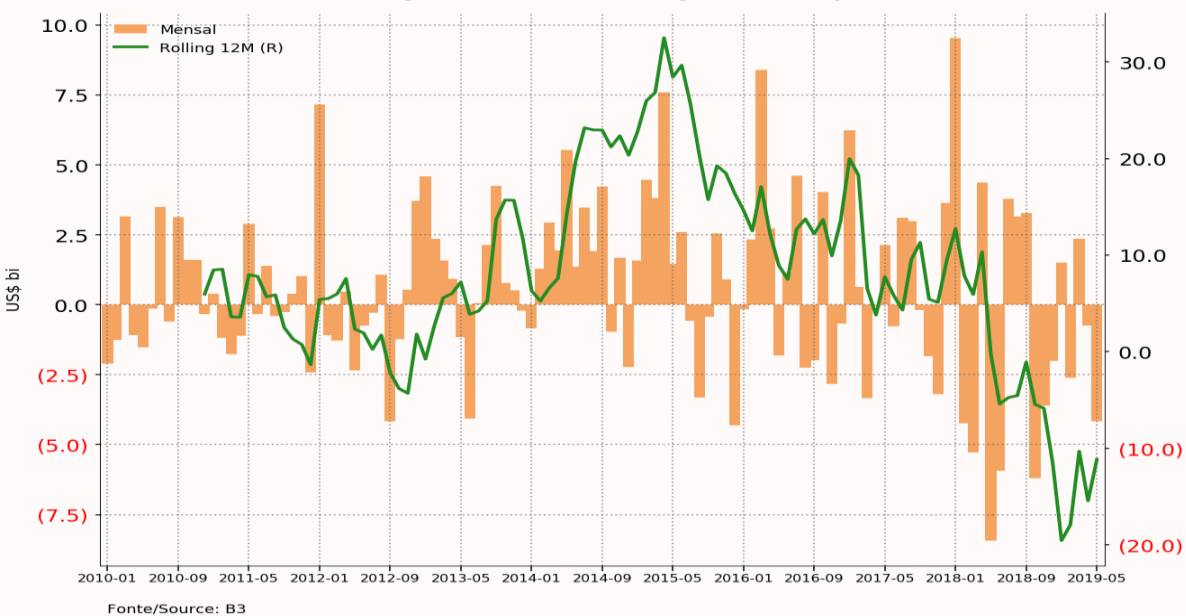
4.1. Adjusted Estimated PE Ratio - MSCI Indexes (May/2019)

Fonte/Source: Bloomberg

5. Credit Risk

4.2. Spreads vs US Treasuries (May/2019)

Fonte/Source: Bloomberg

5.1. Weighted Average Default Probability Index (May/2019)

Fonte/Source: Bloomberg

5
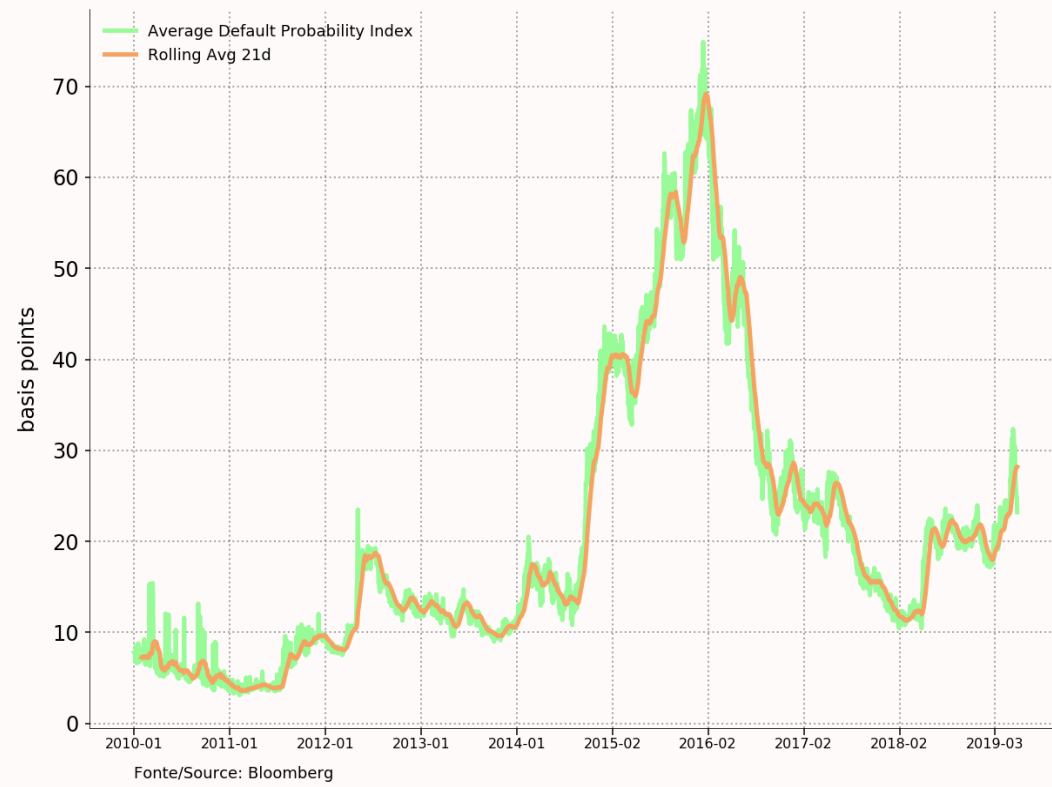
Risk Map

Macroeconomic Risk: simple monthly average of the daily Z-score (2500 day rolling window) of the 5YR Brazilian sovereign CDS (graph 1.3). Z-score Intervals and corresponding Risk Scale: above 2sd => 5; between 1,5 e 2sd => 4; between 0,5 e 1,5sd => 3; between-1 e 0,5sd => 2; below -1sd => 1.

Market Risk: arithmetic average of two composites, respectively the arithmetic monthly average of the daily Z-score (1250 day rolling window) of the 30 day realized annualized volatility of the MSCI Brasil Index (equities, see below) and the Anbima IMA-G Index (fixed income, see below). Z-score Intervals and corresponding Risk Scale: above 2sd => 5; between 1,5 e 2sd => 4; between 0,5 e 1,5sd => 3; between-1 e 0,5sd=> 2; below -1sd => 1.

Liquidity Risk: simple monthly average of the daily Z-score (1250 day rolling window) of the Bid-Ask Spread Index (see below) . Z-score Intervals and corresponding Risk Scale: above 2sd => 5; between 1,5 e 2sd => 4; between 0,5 e 1,5sd => 3; between -1 e 0,5sd=> 2; below -1sd => 1.

Risk Appetite: weighted average of three composites: first, the arithmetic average of the Adjusted Estimated PE Ratio, with a 0.5 weight; second, the arithmetic monthly average of the daily Z-score (1250 day rolling window) of the other two series that compose the Risk Appetite section (see below), each series with a weight equal to 0.25. Z-score Intervals and corresponding Risk Scale for the Adjusted Estimated PE Ratio: above 2sd => 5 between 1,5 e 2sd => 4; Entre 0,5 e 1,5sd => 3; Between -1 e 0,5sd => 2; Below -1sd => 1. Z-score Intervals and corresponding Risk Scale for remaining series: below -2sd => 5; between -1,5 e -0,5sd => 4; between -0,5 e 1sd => 3; between 1 e 2sd => 2; above 2sd => 1.

Credit Risk: simple monthly average of the daily Z-score (1250 day rolling window) of the Weighted Average Default Probability Index (see below). Z-score Intervals and corresponding Risk Scale: above 2sd => 5; between 1,5 e 2sd => 4; between 0,5 e 1,5sd => 3; between-1 e 0,5sd=> 2; below -1sd => 1.

Macroeconomic Risk

Selected FX return (USD pairs): aaily trend of the local currencies of some emerging markets usually considered peers to Brazil against the USD.

Interest Rates. aaily trend of yearly interest rates for local currency sovereign bonds, calculated based on Bloomberg bond indexes for the US and for some emerging markets usually considered peers to Brazil.

CDS (Credit Default Swap): derivative in which the long transfers a series of payments (known as "spread" or "premium") for the short in exchange for protection against a credit event impacting the reference entity. The graphs depict the daily trend of the closing price (in b.p.) of the 5YR sovereign CDS spreads of some emerging markets usually considered peers to Brazil, and of some European countries.

Market Risk

Equity Indexes: the MSCI World Index (denominated in this report as "Global") reflects the performance of the equity markets of several global markets. The MSCI Emerging Markets Index (denominated in this report as "Emerging") reflects the performance of the equity markets of several emerging markets. The MSCI Indexes also reflect single markets, such as the case of the MSCI Brazil Index.

Corporate Bond Indexes: indexes developed by Barclays/Bloomberg to measure the performance of investment grade bonds, converted to USD when appropriate. The BEHGTRUU Index (denominated in this report as "Emerging") refers to bonds in emerging markets, while the LGCPTRUU Index (denominated in this report as "Global") does the same for the global markets. In Bloomberg methodology, the bonds are weighted by market value, unhedged.

Reference indexes: IRF-M = index composed by a basket of sovereign fixed-rate bonds (LTN and NTN-F). IMA-B = fixed income index that depicts the trend, at market prices, of a basket of retail price inflation-linked sovereign bonds (called NTN-B). IHFA = index for the mutual fund industry in Brazil, whose value reflects, in local currency, the performance of a hypothetical portfolio of mutual funds selected according to a methodology developed by ANBIMA. IFIX = main index for the Brazilian REIT industry. IMA-G = weighted average of the daily returns of IMA-B, IMA-C (wholesale price inflation linked sovereign bond index), IMA-S (floating rate sovereign bonds index) e IRF-M indexes. CDI = index for the main bank overnight rate in Brazil, widely used as benchmark.

Volatility. Dispersion measure for the realized returns of an index or of a security. The 30 day realized volatility refers to the annualized standard deviation of the closing price returns in the last 30 trading days, expressed in percentage terms.

Liquidity Risk

Bid/Ask Spread Index: difference of bid and ask prices of a security divided by its midprice, frequently used as a gauge for market liquidity. The lower this ratio, the more liquid the security tends to be. The graph refers to the daily trend of the median spread calculated based on a sample comprised by half of the Ibovespa Index members with the lowest turnover volume for a given month.

Liquidity Index –ICVM 555 Funds: estimated daily trend of the ratio between the total reported Liquid Assets less Estimated Cash Outflows (according to ICVM 512) and the total reported NAV. Excludes FoFs, funds with a single shareholder and funds with NAV below BRL5MM. Data is being continuously cleansed of outliers and reporting errors.

Foreign Investment in Stocks: Monthly foreign investor net inflows in the B3 secondary market for equities and equities derivatives.

Risk Appetite

Adjusted Estimated PE Ratio: ratio between the current price of an index or security and its estimated positive earnings for the following accumulated 12 months, according to the consensus of market analysts, excluding companies with negative EPS projections. The PE ratio can be understood as the payback time estimated to recover through its profits the capital investment in a given company. A high PE ratio indicates that the security might be overvalued relative to its recent profit potential. Inversely, a low PE ratio points that the security might be undervalued relative to its profit potential. In this report, the country/region analysis is done using the daily ratio for the corresponding MSCI Indexes as a reference. The calculated indicators refer to the Z-score (1250 trading day rolling window) of such ratios.

Emerging IG vs Treasuries Spread: spread between a USD investment grade mixed corporate/sovereign bond index for emerging markets and the a US treasuries index, expressed as an annual percentage yield. Calculations use the BEHGTRUU Index and the BUSY Index, both available through Bloomberg.

10YR USD Sovereign Bond Spread – Brazil x US Treasuries: difference between the yields of a generic 10YR USD-denominated sovereign Brazilian bond and an analogous *treasury*, both calculated by Bloomberg.

Credit Risk

Weighted Average Default Probability Index: grasps the average default probability of non-holding non-financial corporates traded in the B3 exchange. Its calculation proceeds as follows: for each trading day and for the whole available sample of eligible companies in that day, the weighted average (by market cap) of the 1YR default probabilities is calculated ("BB_1YR_DEFAULT_PROB"), as made available by Bloomberg.