

ECONOMIC REPORT

Year 10 | Volume nº 94 | 2022 Q2

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Data as good as of 30/06/2022.

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MARKET SCENARIO



1. Market scenario - Highlights

- In the first two quarters of 2022 a total of R\$ 282.1 bi in securities were issued so far (3.1.1). As a positive highlight it is possible to again single out the corporate fixed income markets. Values issued in such realm (corporate bonds + commercial paper) accounted for R\$ 152.8 bi in 308 offers, compared to R\$ 102.8 in 222 offers for the same period of 2021 (3.3.2). Another positive remark can be attributed to crowdfunding, which has already surpassed the full values of 2021.
- However, as a disappointing figure in such context one could mention equity offers. Both money values and number of offers are below last year for the semester, specially when we exclude the offer tied to the Eletrobras group capitalization – this offer alone accounts for R\$ 33.7 bi, that is, 64% of the full amount of equity offers in 2022 (3.3.2).
- The set of regulated participants (2.1) has risen 4.6% relative 2021-Q4, now comprising 75.063 participants. It shall be pointed out that growth has been observed in almost all categories, of which can be highlighted Registered Market Analysts, with a 25% growth since them (1.441 versus 1.147).
- The estimate for the total regulated market (2.2.1) is R\$ 27.48 tri, 2.3% down relative to 2022-Q1 (R\$ 28.14 tri). Despite number stability, we call attention to the reduction in the equities market cap subtotal, impacted by the recent drawdown in the national equity markets (5.1).
- The daily average financial turnover in the secondary market for equities (odd lot) and REITs keeps below last year, however the opposite can be now stated for the corporate bond market (4.1.1, 4.1.2 e 4.1.3). Finally, the YTD number of derivatives contracts settled on exchanges (4.2.2) has kept below last year's for all varieties here considered except for CDI futures.

2. Regulated markets

2.1. Number of participants*	2017	2018	2019	2020	2021	2022
Registered Non-Resident Investors	19.416	19.293	18.244	18.705	19.220	19.088
Registered Investment Funds	16.182	17.718	19.427	22.295	26.445	27.738
Registered Asset Managers	3.382	3.452	3.560	3.786	4.185	4.360
Legal persons	2.479	2.512	2.603	2.774	3.036	3.154
Firms	903	940	957	1.012	1.149	1.206
Registered Research Analysts	606	662	698	923	1.147	1.441
Legal persons	606	615	629	840	1.161	1.317
Firms	0	47	69	83	108	124
Registered Investment Consultants	673	659	694	790	1.018	1.155
Legal persons	479	498	547	632	815	929
Firms	194	161	147	158	203	226
Registered Brokerage Firms (trading)	74	74	74	69	70	71
Registered Brokerage Firms (distribution)	94	101	100	102	106	107
Registered Brokers (sum)	6.652	7.778	10.798	13.881	18.141	20.709
Legal persons	5.492	6.619	9.608	12.275	16.969	19.486
Firms	1.160	1.159	1.190	1.156	1.172	1.223
Registered Custodians	145	139	146	146	156	155
Registered Bookkeepers	53	59	61	63	72	72
Registered Organized Market Administrators	1	1	1	3	3	4
Registered CSDs	1	1	1	1	2	2
Registered Crowdfunding Platforms	N/A	14	26	32	54	55
Registered public companies, including foreign and subsidized, with active status	672	666	656	675	765	771
Registered Independent Auditors	391	375	528	354	346	343
Registered Rating Agencies	7	7	7	6	6	6
TOTAL (*Estimates)	48.349	50.999	55.021	61.831	71.736	75.063

Source: CVM, APIMEC

2. Regulated markets

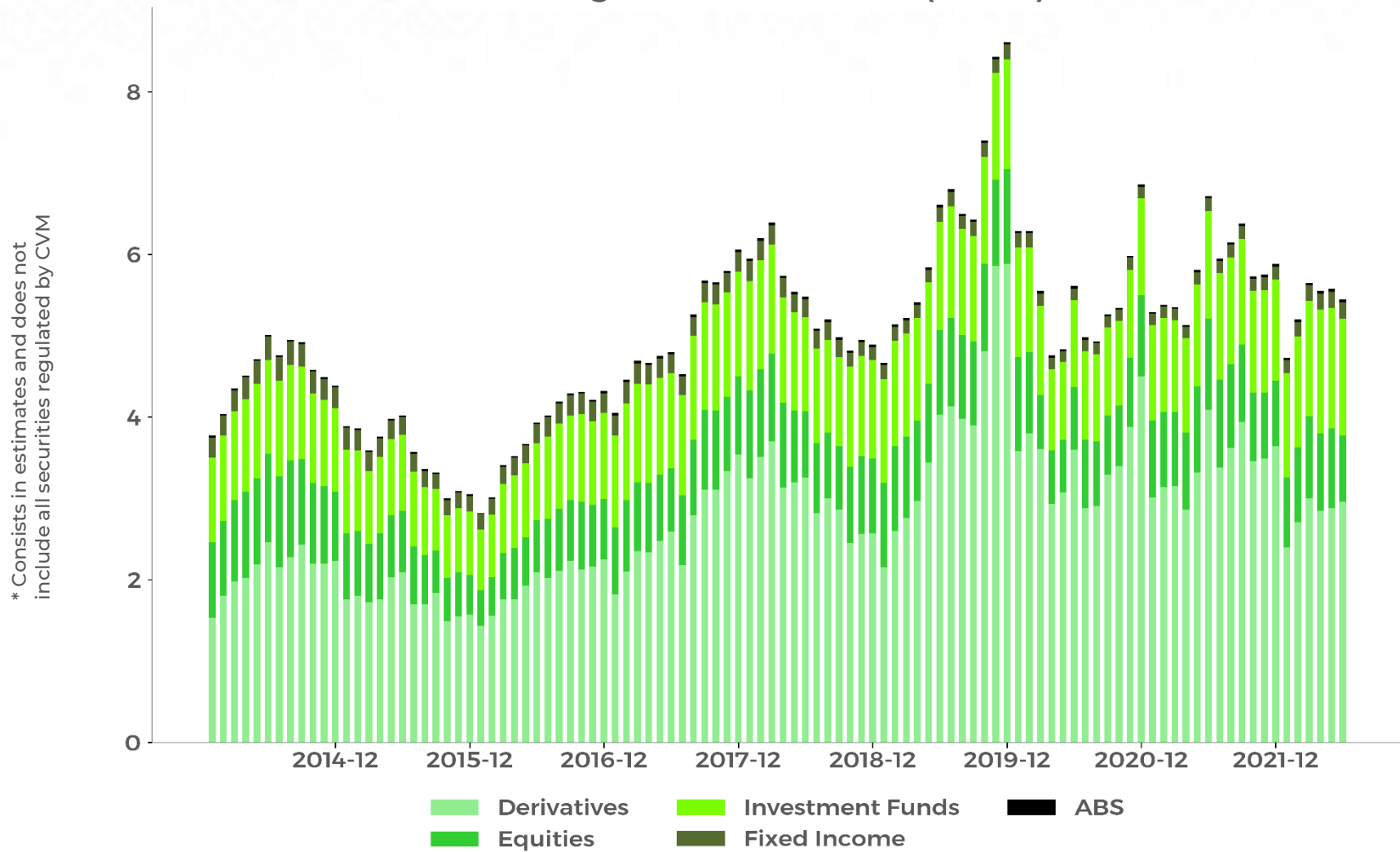
2.2.1. Total regulated markets (US\$ tri)*

CATEGORY	ASSET	2017	2018	2019	2020	2021	2022
Fixed Income	Corporate Bonds	0.23	0.15	0.17	0.13	0.15	0.19
	Commercial Paper	0.01	0.01	0.01	0.01	0.01	0.01
Securitization	MBS	0.02	0.02	0.02	0.02	0.02	0.02
	Agrobusiness	0.01	0.01	0.01	0.01	0.01	0.02
Variable Income	Equities – Market Cap	0.96	0.92	1.17	1.00	0.81	0.81
Derivatives	Notional outstanding	3.54	2.56	5.88	4.50	3.63	2.95
	Structured Notes	0.00	0.01	0.00	0.00	0.01	0.01
Investment Funds	Rule-555	1.15	1.08	1.18	1.03	1.03	1.20
	Structured Funds	0.14	0.13	0.17	0.16	0.21	0.24
TOTAL		6.05	4.87	8.60	6.86	5.87	5.44

* Consists in estimates and does not include all securities regulated by CVM

2. Regulated markets

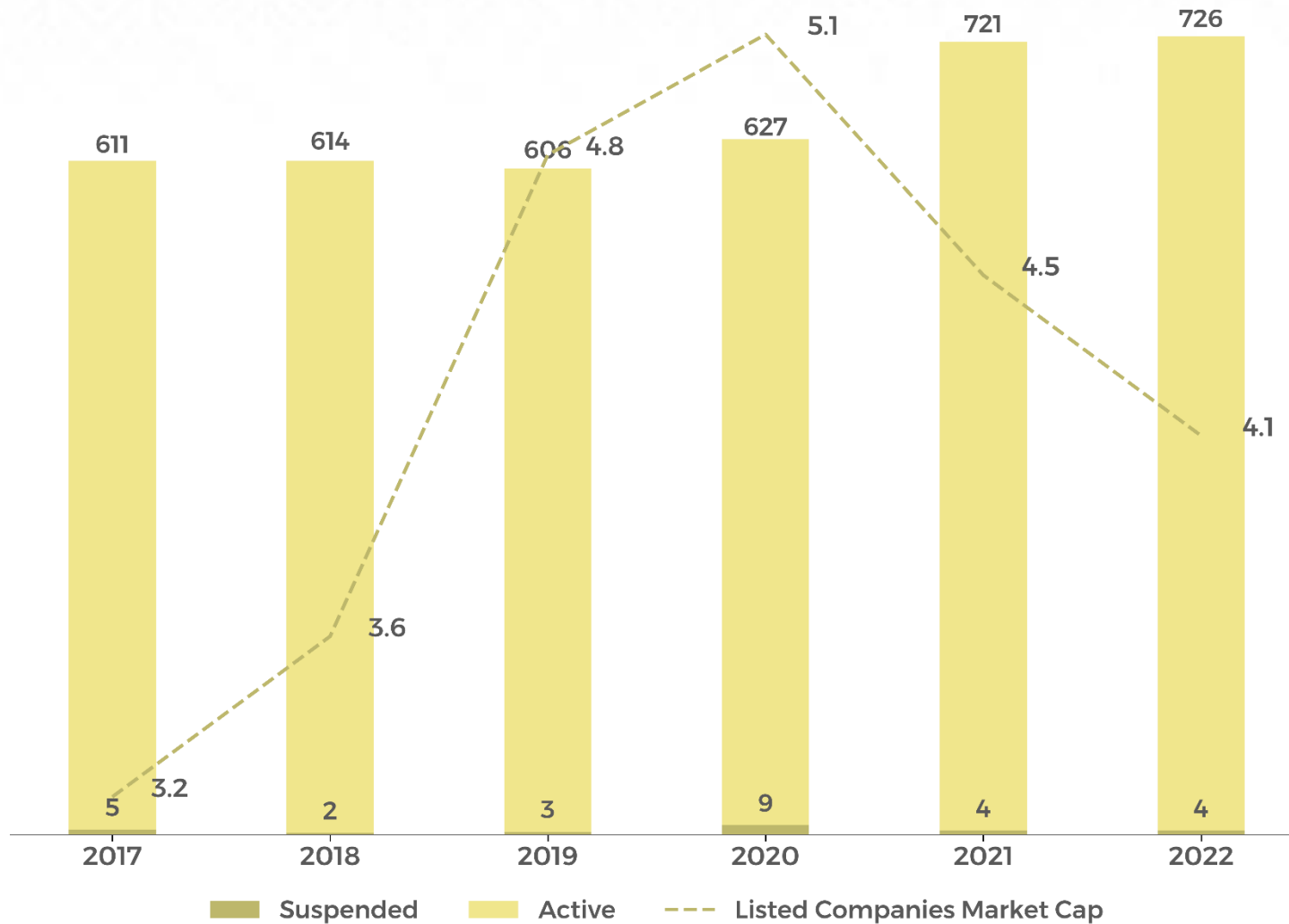
2.2.2. Regulated market value (US\$ tri)*



Source: CVM and Organized Market Administrators

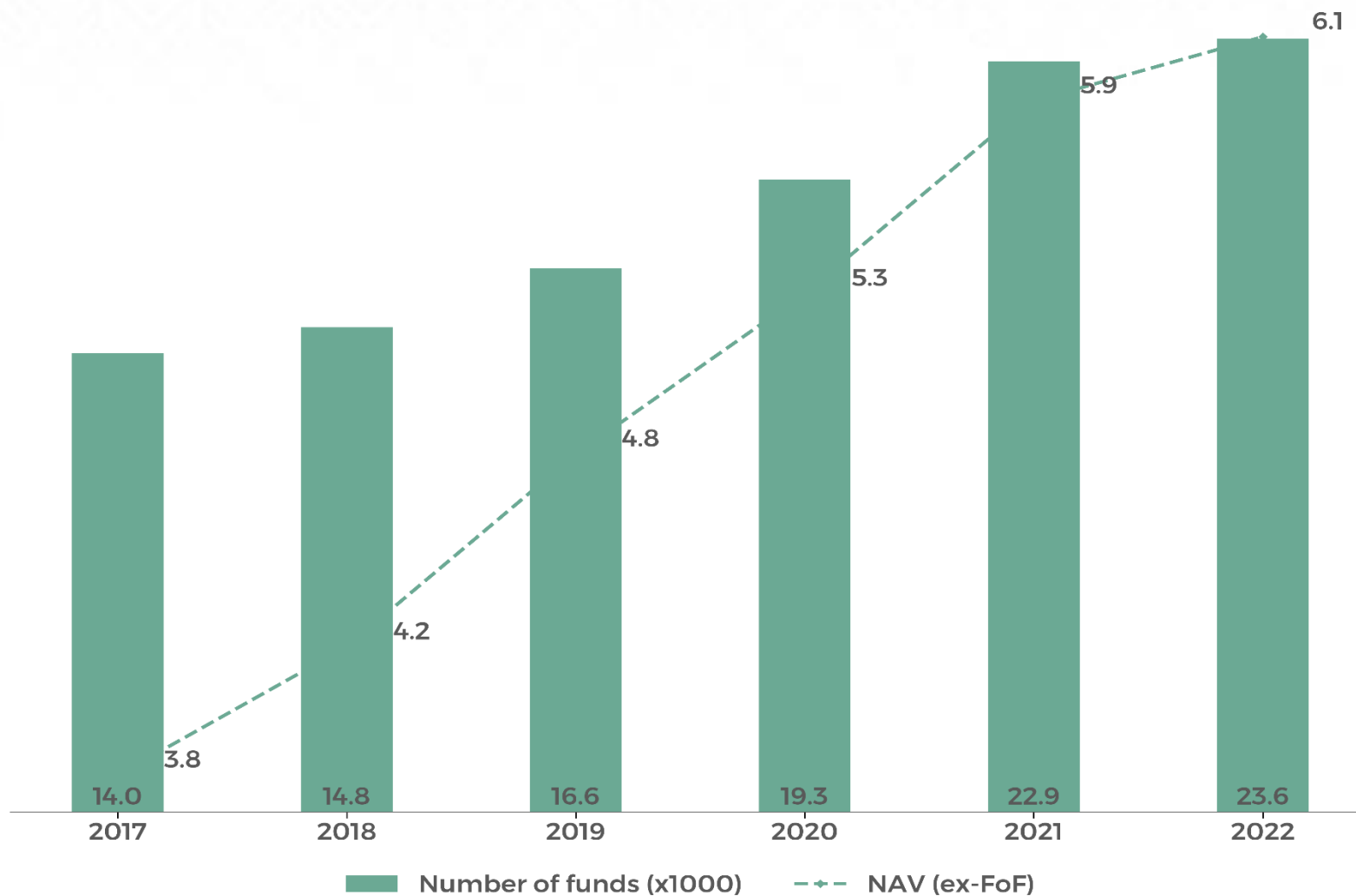
2. Regulated markets

2.3. Registered companies and listed companies market cap (R\$ tri)

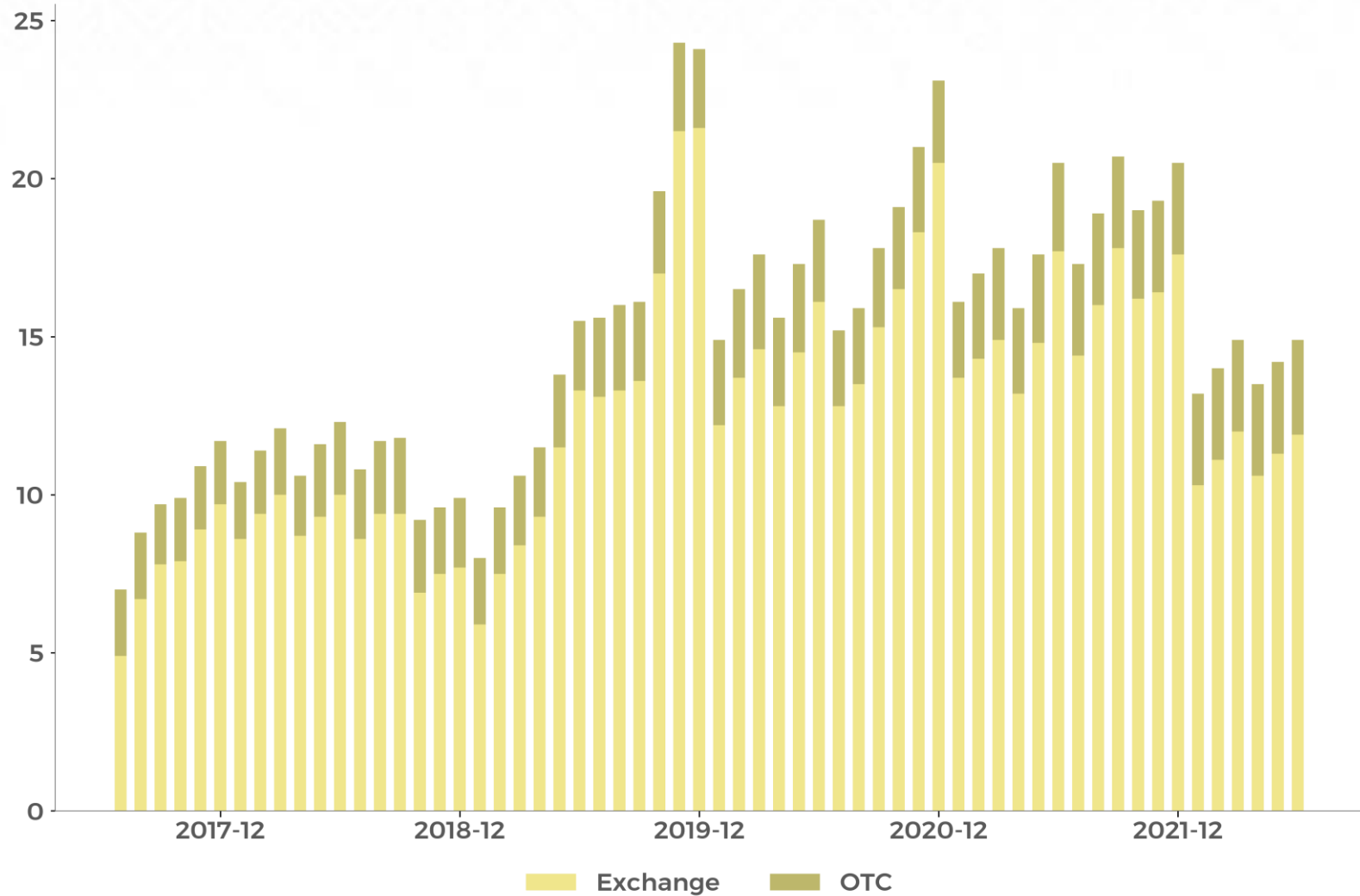


Source: CVM, B3

2.4. ICVM 555 Funds (ex-FoF) – quantity and NAV (R\$ tri)



2.5. Derivatives – notional outstanding (R\$ tri)



3. Primary markets

3.1. Annual totals by rule

* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agrobusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing). ICVM 476 offers exclude ongoing efforts.

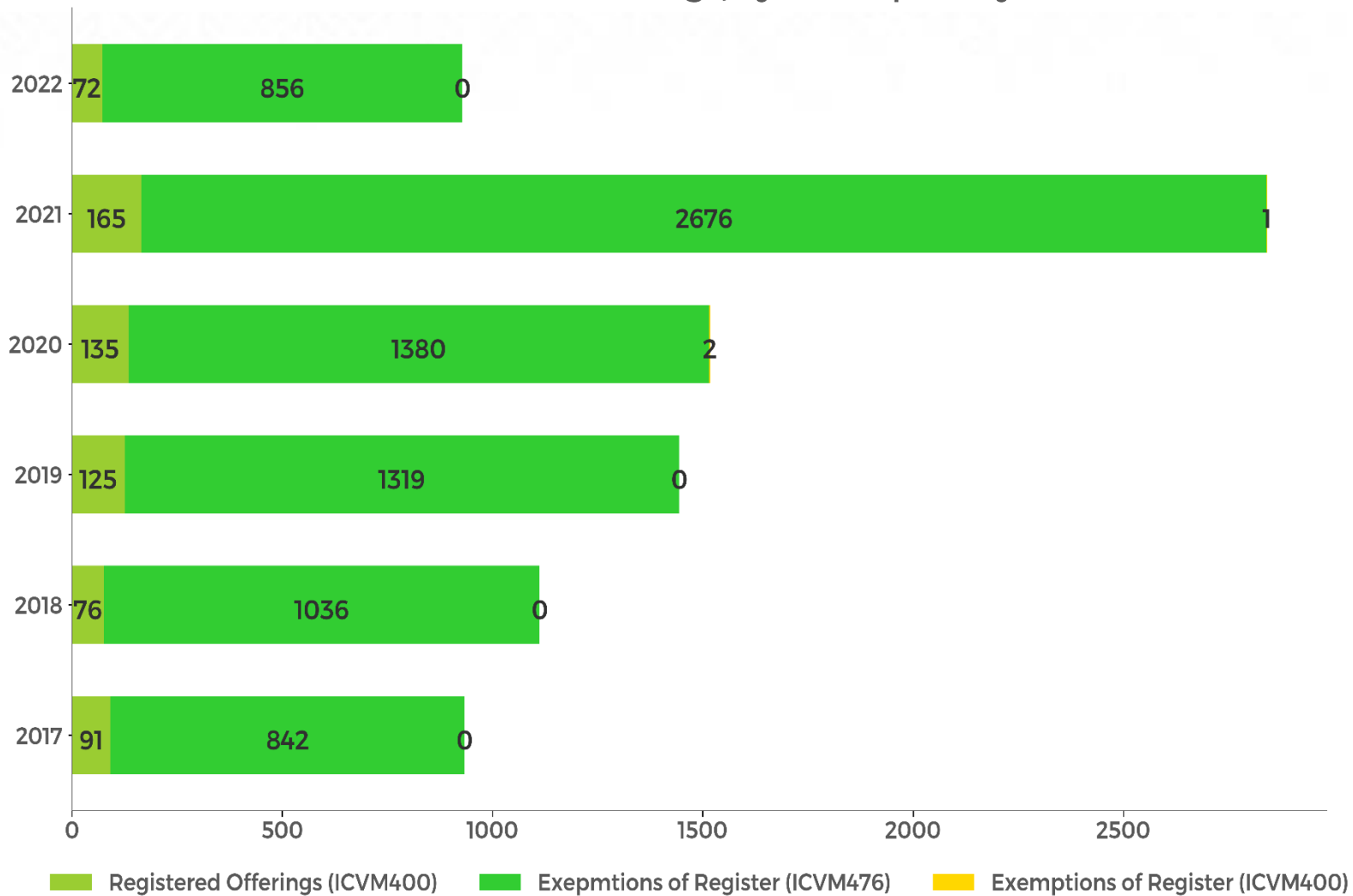
3.1.1. Annual totals (quantity and value)*	2017		2018		2019		2020		2021		2022	
	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi
ICVM 400	91	50.2	76	33.5	125	89.5	135	120.2	165	129.3	72	71.2
ICVM 400 (exemptions)	-	-	-	-	-	-	2	5.0	1	0.1	-	-
ICVM 476	842	177.0	1.036	252.7	1.319	386.3	1.380	318.1	2.676	597.3	856	210.8
ICVM 588 (crowdfunding)	-	-	3	0.00	86	0.10	98	0.13	74	0.13	77	0.15
TOTAL	933	227.2	1.115	286.2	1.530	475.9	1.615	443.4	2.916	726.8	1.005	282.1

Source: CVM

3. Primary markets

3.1. Annual totals by rule

3.1.2. Total YTD offerings, by rule – quantity*

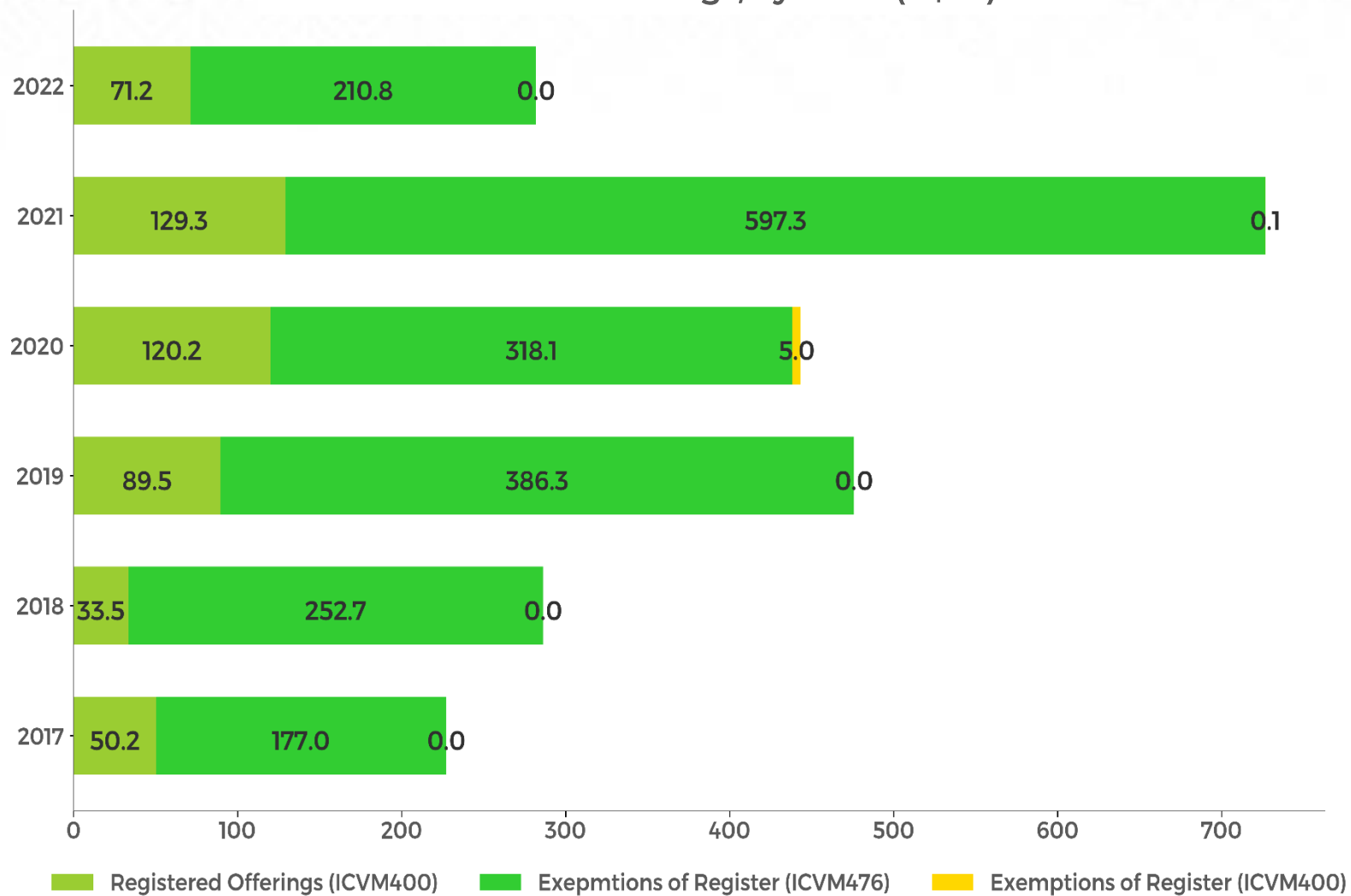


* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agrobusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing). ICVM 476 offers exclude ongoing efforts.

3. Primary markets

3.1. Annual totals by rule

3.1.3. Total YTD offerings, by rule – (R\$ bi)*



* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agrobusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing). ICVM 476 offers exclude ongoing efforts.

3. Primary markets

3.2. Accumulated totals by rule

* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agrobusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing). ICVM 476 offers exclude ongoing efforts.

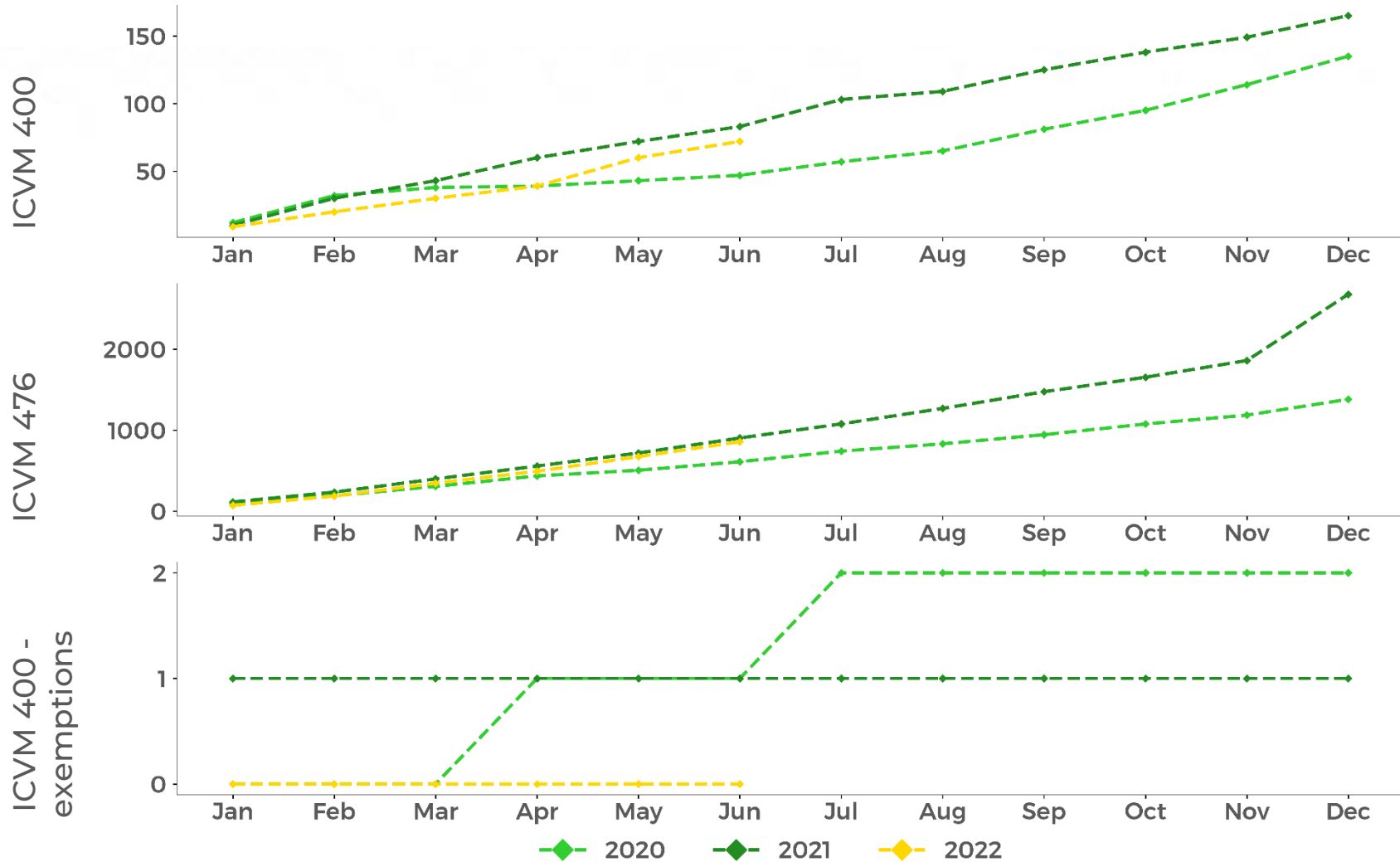
3.2.1. Accumulated totals for the current month (quantity and value)*	2017		2018		2019		2020		2021		2022	
	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi
ICVM 400	37	14.2	43	18.8	43	31.0	47	45.8	83	61.9	72	71.2
ICVM 400 (exemptions)	-	-	-	-	-	-	-	-	1	0.1	-	-
ICVM 476	355	63.7	466	123;7	548	172.8	609	135.8	902	229.7	856	210.8
ICVM 588 (crowdfunding)	-	-	-	-	35	0.04	60	0.06	25	0.03	77	0.15
TOTAL	392	77.9	509	18.8	626	203.8	716	181.7	1.011	291.7	1.005	282.1

Source: CVM

3. Primary markets

3.2. Accumulated totals by rule

3.2.2. Accumulated totals for the current month, by rule (quantity)

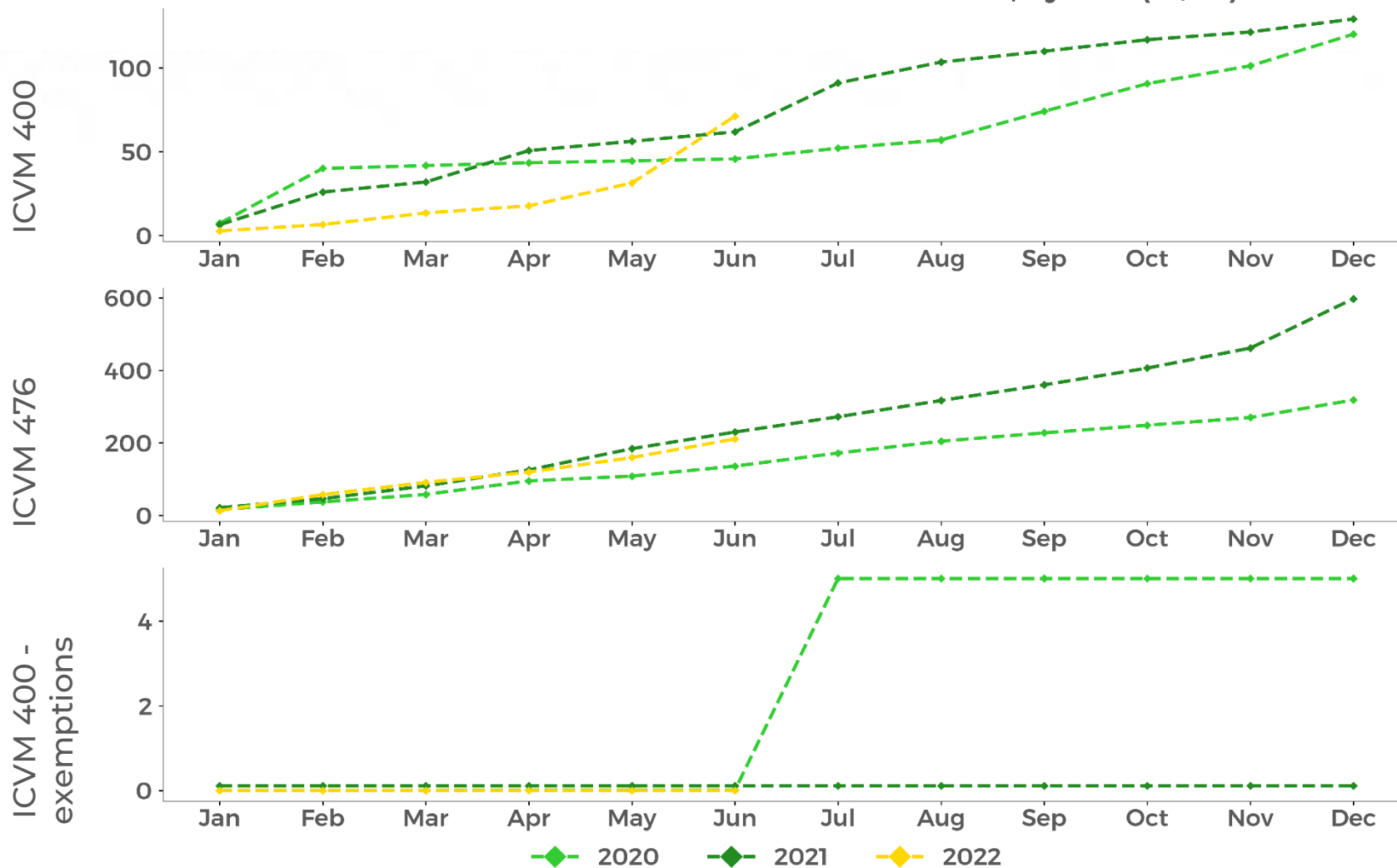


Source: CVM

3. Primary markets

3.2. Accumulated totals by rule

3.2.3. Accumulated totals for the current month, by rule (R\$ bi)



Source: CVM

3. Primary markets

3.3. Annual totals by instrument

3.3.1. Annual totals (quantity and value)*	2017		2018		2019		2020		2021		2022	
	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi
Equities	26	40.1	5	11.2	42	90.2	53	118.6	71	130.7	14	52.2
Corporate Bonds	264	88.2	351	149.1	379	185.7	276	121.2	502	251.0	233	134.4
Bank Bonds	8	3.0	14	6.0	21	10.0	2	0.96	-	-	-	-
Commercial Paper	101	27.2	84	29.0	94	36.6	71	21.9	82	27.0	68	18.4
MBS	104	7.7	101	8.2	188	17.6	230	14.3	424	33.6	167	16.1
Agribusiness ABS	67	12.4	52	6.1	69	14.3	56	13.3	125	25.0	78	17.6
CDOs	141	16.6	196	21.2	268	37.7	302	48.2	680	88.5	168	15.1
REITs	75	8.2	106	17.7	197	42.3	259	49.2	384	62.6	111	16.0
Private Equity	147	23.8	203	37.7	186	41.4	268	55.7	574	108.3	89	12.2
TOTAL	933	227.2	1.112	286.2	1.444	475.8	1.517	443.3	2.842	726.7	928	282.0

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Source: CVM

3. Primary markets

3.3. Annual totals by instrument

3.3.2. Accumulated totals for the current month (quantity and value)*	2017		2018		2019		2020		2021		2022	
	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi
Equities	8	13.1	3	6.8	12	29.3	12	36.9	43	77.1	14	52.2
Corporate Bonds	108	27.2	158	73.1	169	98.6	136	50.5	200	97.0	233	134.4
Bank Bonds	2	1.1	10	4.1	13	6.6	-	-	-	-	-	-
Commercial Paper	41	7.0	34	17.5	39	9.9	63	18.9	22	5.8	68	18.4
MBS	40	2.3	41	3.1	59	5.4	81	6.9	185	12.7	167	16.1
Agribusiness ABS	27	5.5	25	2.1	23	5.5	17	4.1	46	10.4	78	17.6
CDOs	56	3.7	88	7.9	117	11.9	134	22.0	198	32.3	168	15.1
REITs	40	4.3	53	11.1	66	13.4	104	20.8	153	31.1	111	16.0
Private Equity	70	13.7	97	16.9	93	23.1	110	21.5	139	25.3	89	12.2
TOTAL	392	77.9	509	142.5	591	203.7	657	181.6	986	291.7	928	282.0

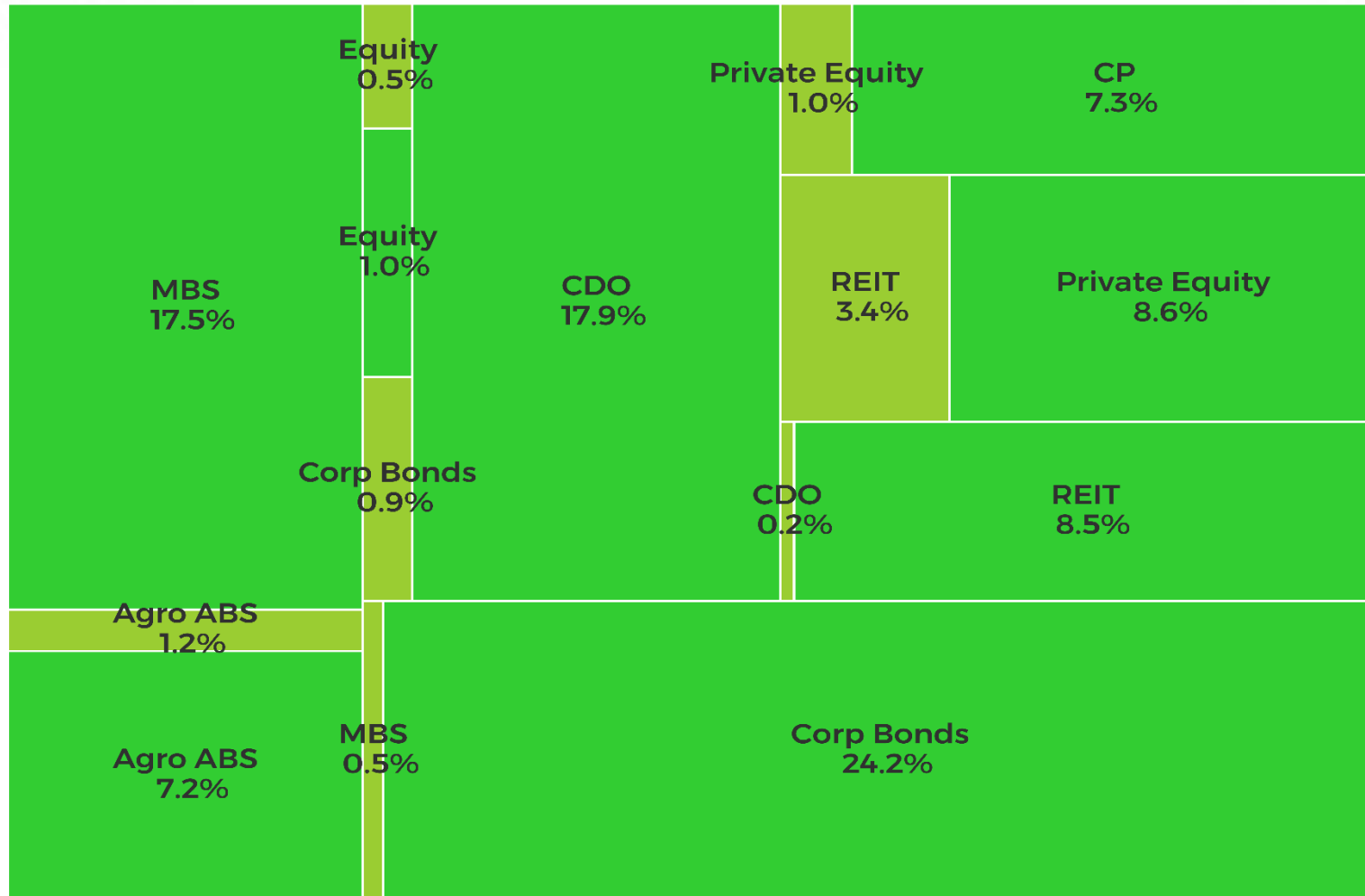
* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agribusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing). ICVM 476 offers exclude ongoing efforts.

Source: CVM

3. Primary markets

3.4. Totals by rule and instrument

3.4.1. YTD quantity of offerings (%)*



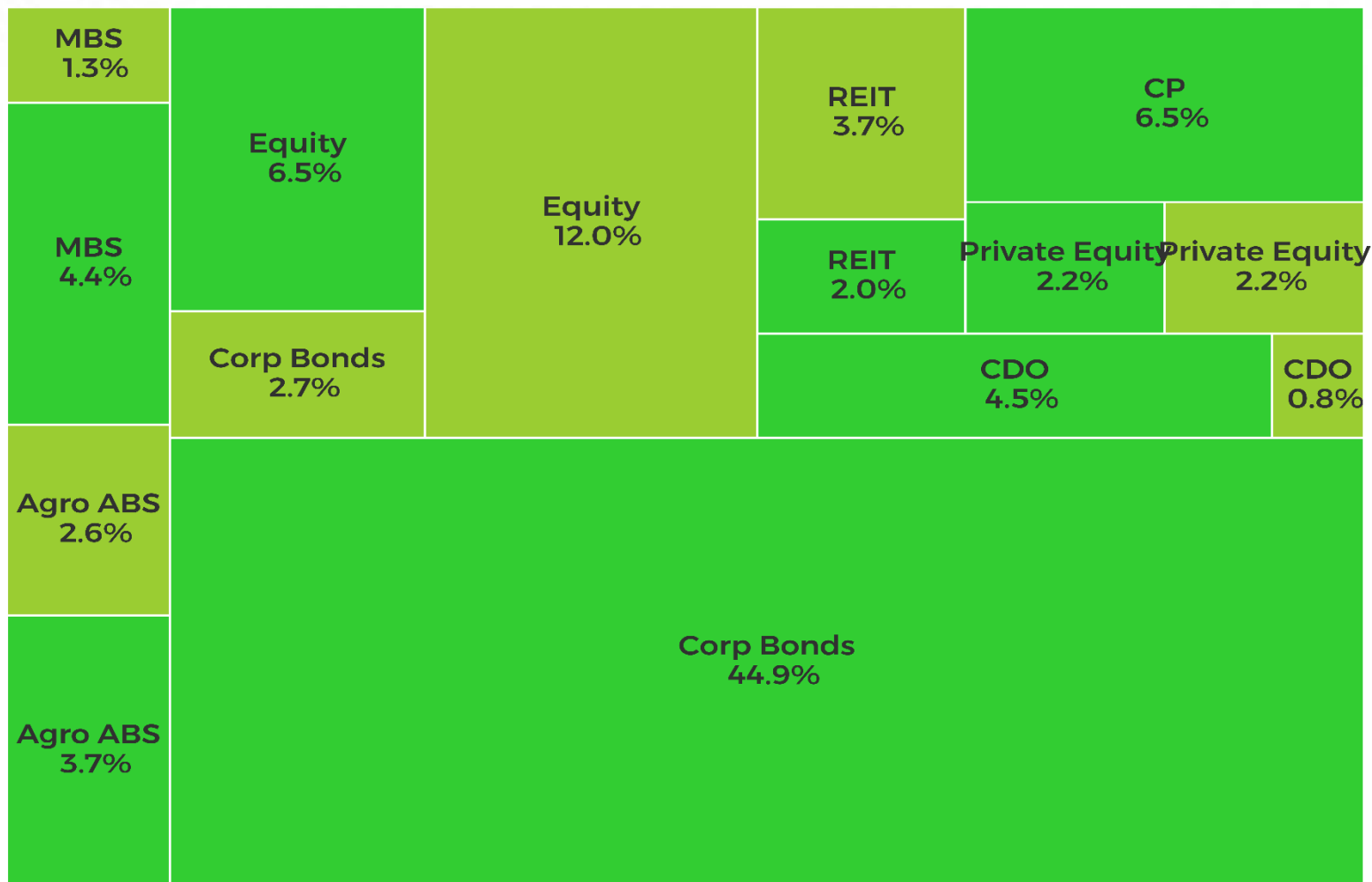
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Registered Offerings (ICVM400) Exemptions of Register (ICVM476) Exemptions of Register (ICVM400)

3. Primary markets

3.4. Totals by rule and instrument

3.4.2. YTD value of offerings (%)*



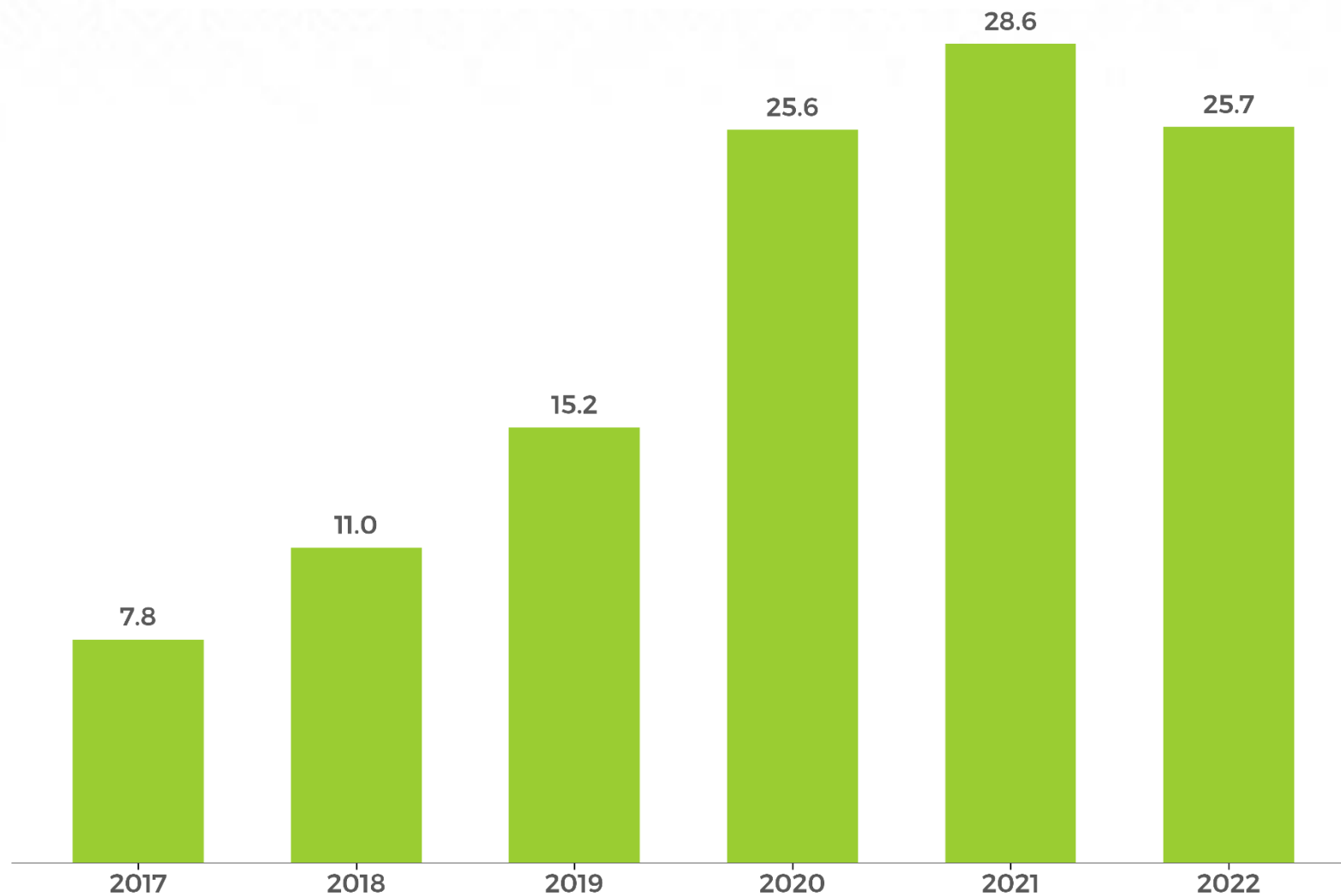
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Registered Offerings (ICVM400) Exemptions of Register (ICVM476) Exemptions of Register (ICVM400)

4. Secondary markets

4.1. Spot

4.1.1. Average daily volume (R\$ bi) – equities (round lot)

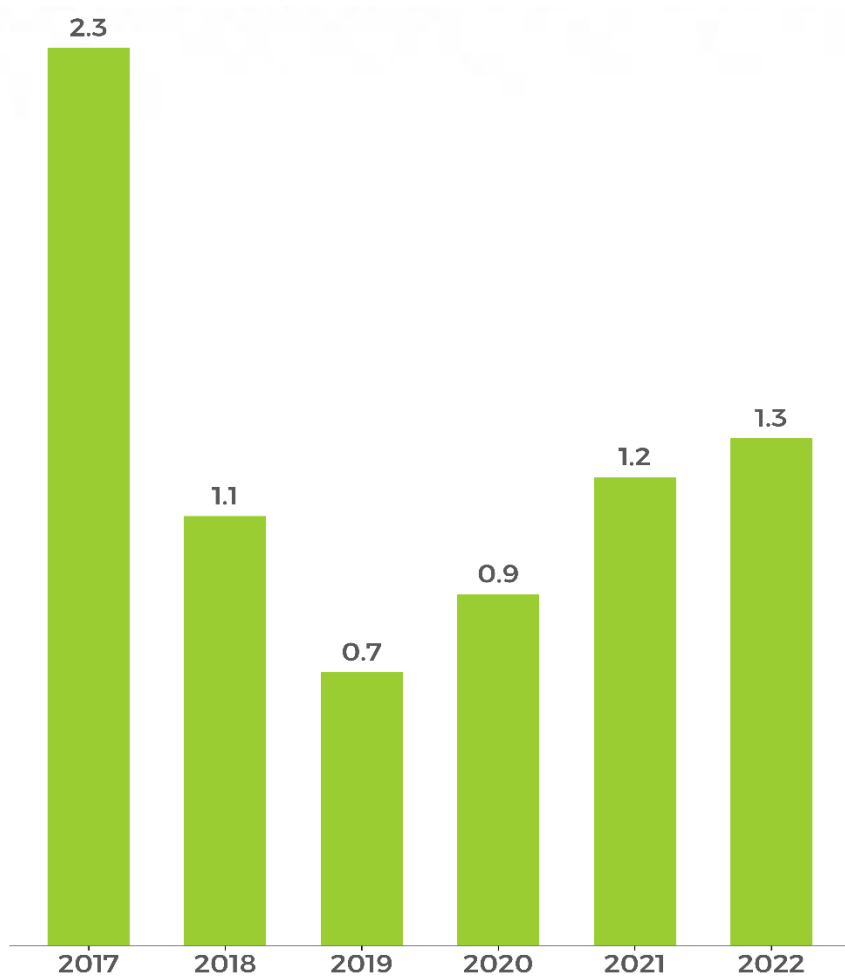


Source: B3

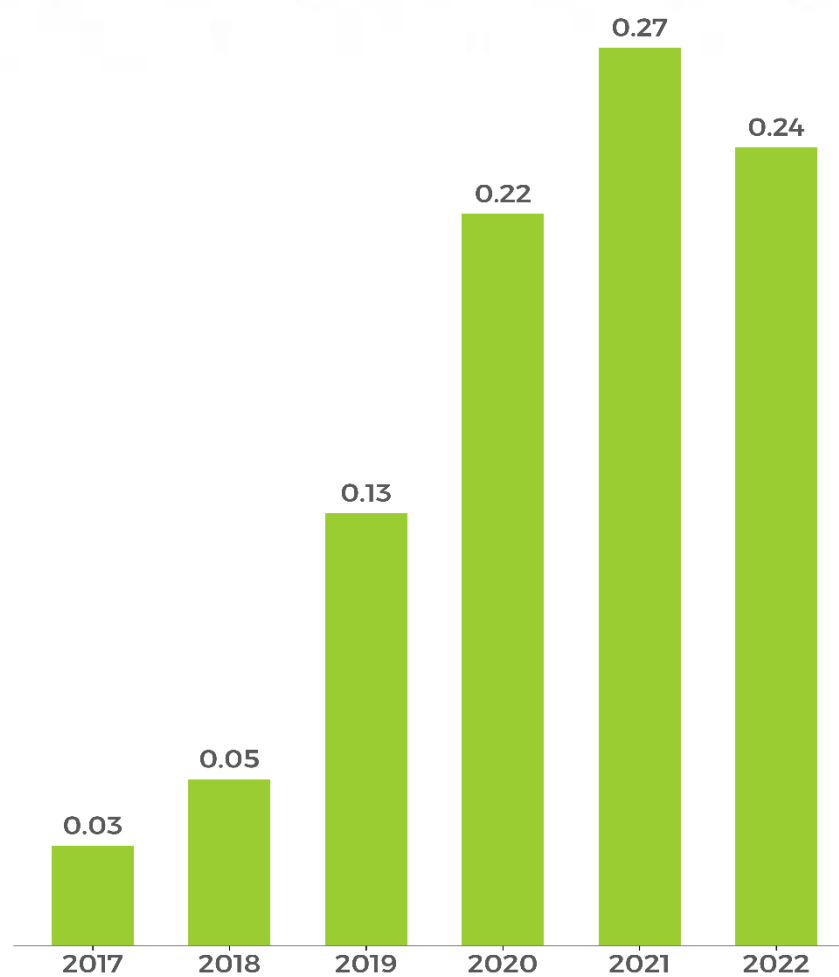
4. Secondary markets

4.1. Spot

4.1.2. Average daily volume (R\$ bi) – corporate bonds



4.1.3. Average daily volume (R\$ bi) - REITs



4. Secondary markets

4.2. Derivatives

4.2.1. Derivatives – millions of contracts settled on exchanges (annual total)

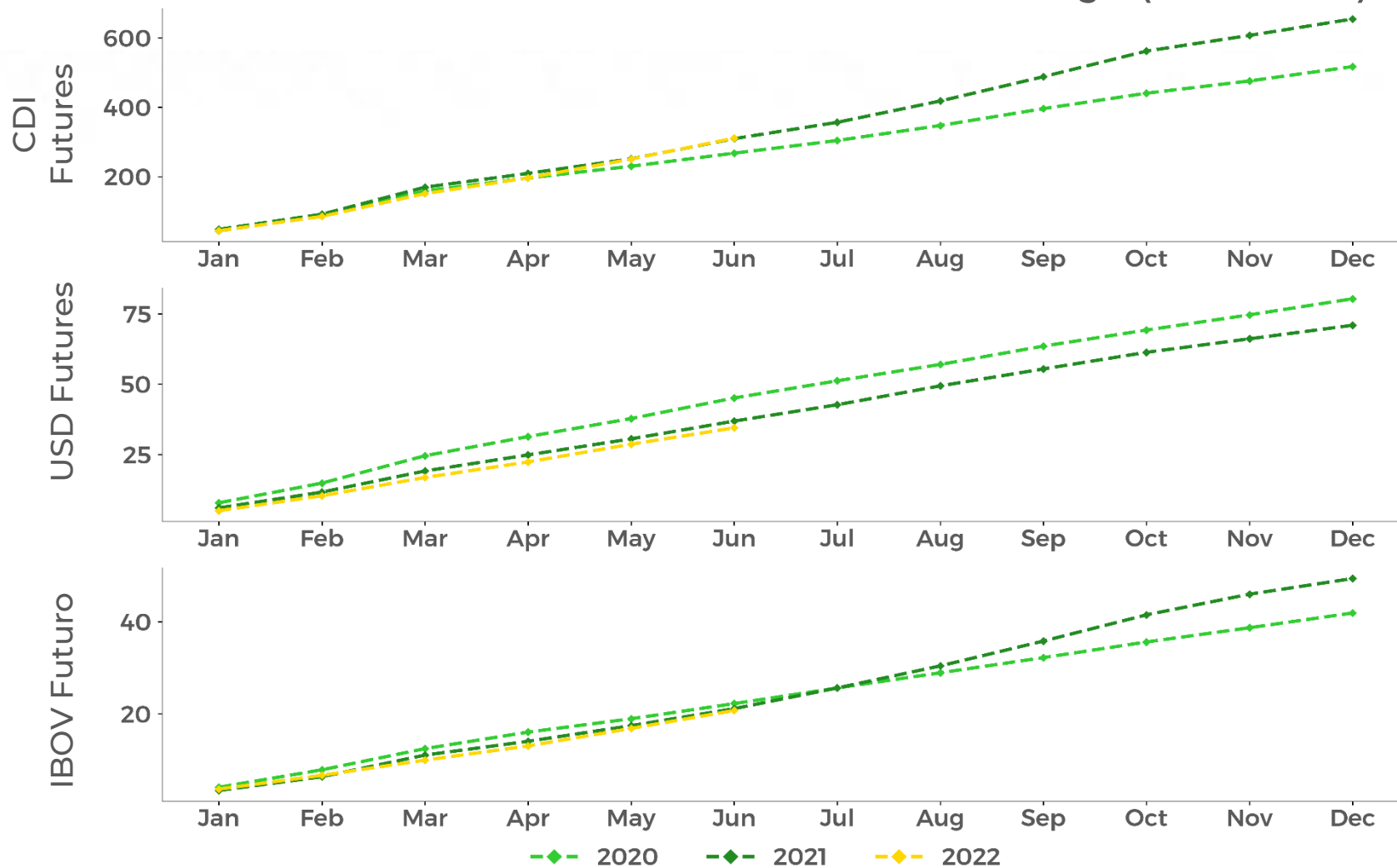
INSTRUMENT	2017	2018	2019	2020	2021	2022
CDI Futures	354.4	371.0	476.0	516.7	653.9	310.8
USD Futures	74.2	91.7	94.6	80.2	70.9	34.5
Ibovespa Futures	18.8	23.8	36.1	41.9	49.1	20.8
TOTAL	447.4	486.5	606.7	638.8	773.9	366.1

Source: Organized Market Administrators

4. Secondary markets

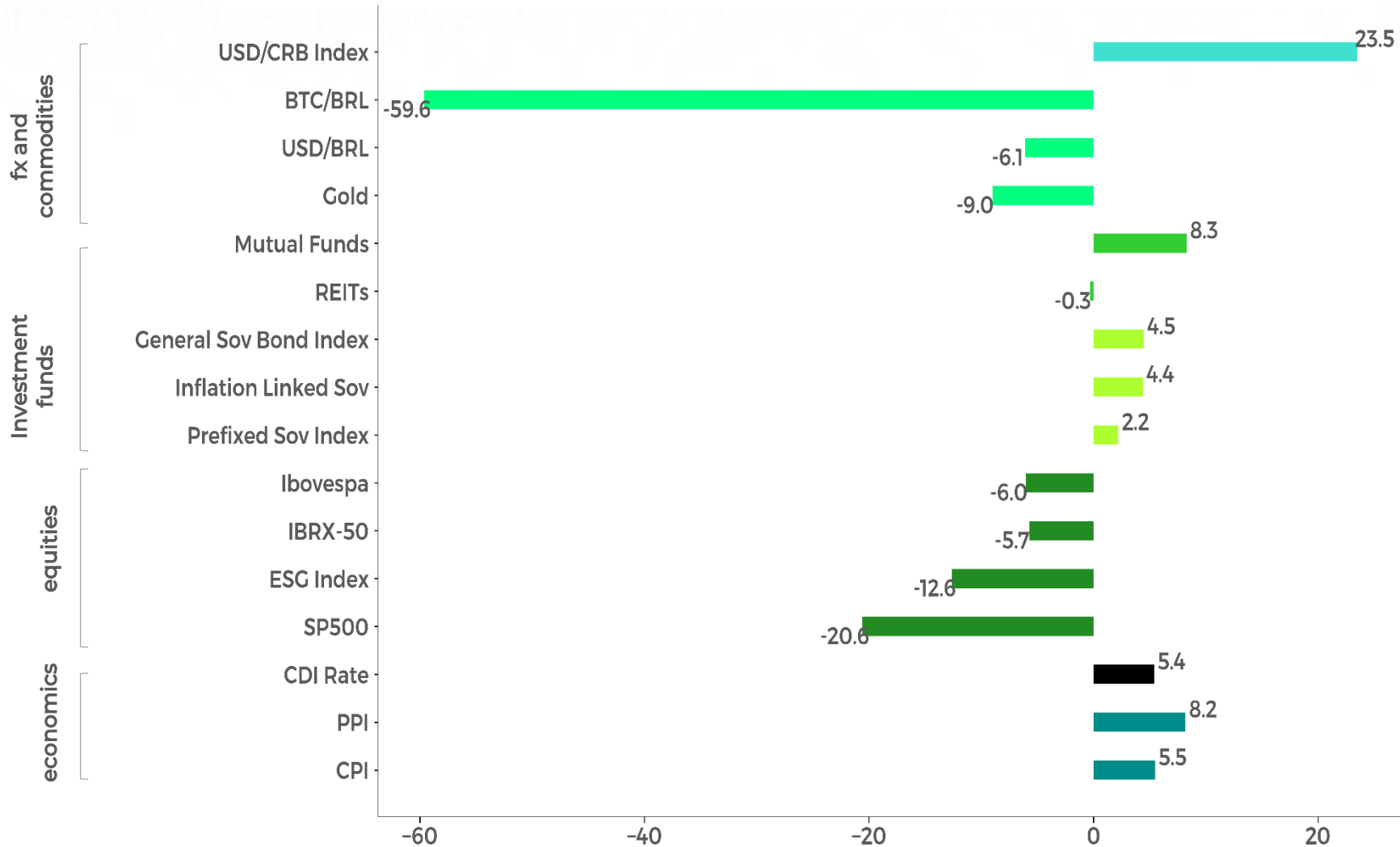
4.2. Derivatives

4.2.2. Derivatives – millions of contracts settled on exchanges (accumulated)



Source: Organized Market Administrators

5.1. YTD % asset returns

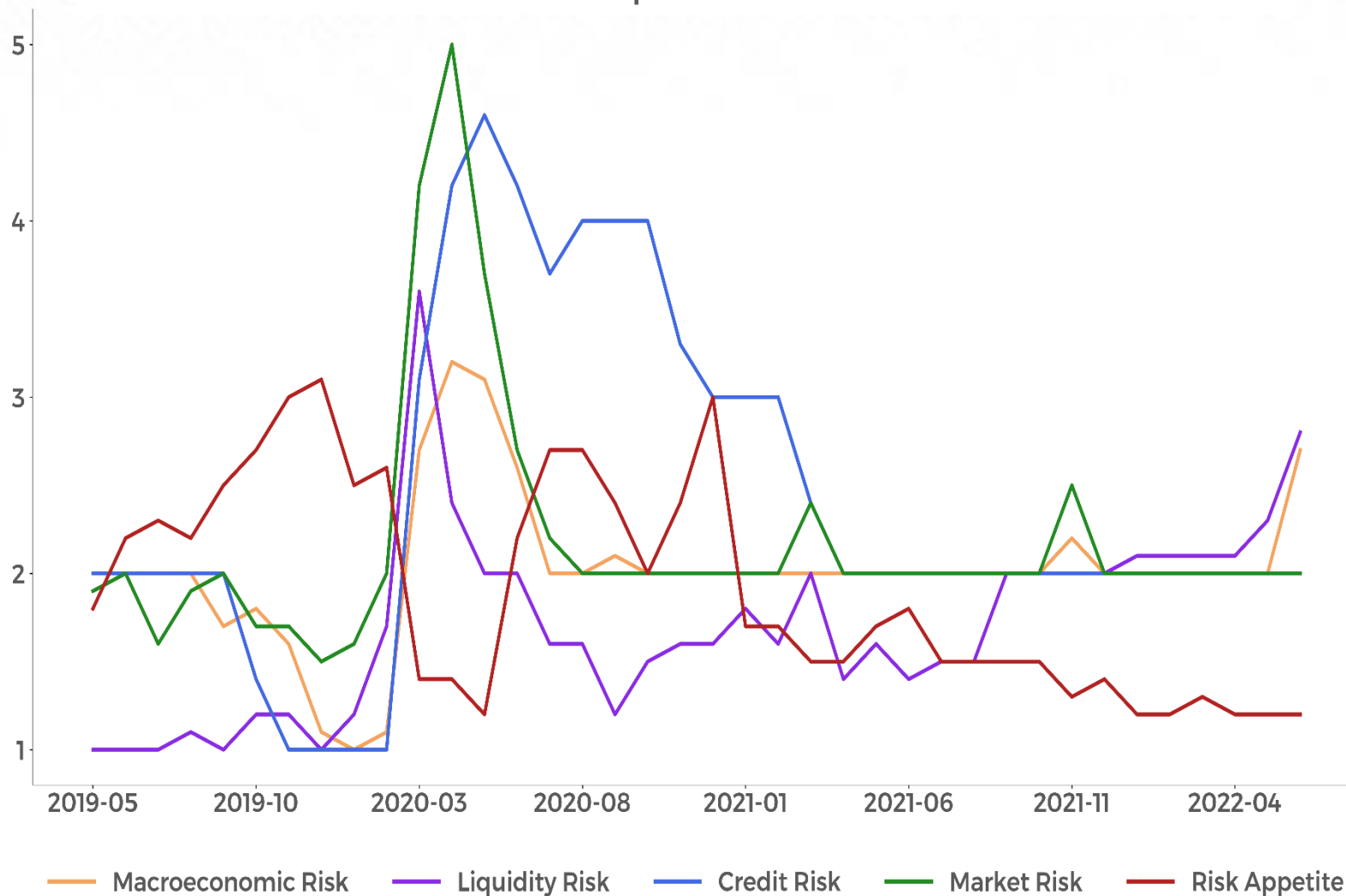


Source: Economatca, Bloomberg

A hand holding a pen points to a bar chart on a document. The document is overlaid with a green diamond pattern. The text 'RISK SCENARIO' is written in large white letters on the right side of the image.

RISK SCENARIO

6.1. Risk map – last 36 months



Calculated by CVM according to Methodology

6. Risk map - highlights

	MACRO	MARKET	LIQUIDITY	RISK APPETITE	CREDIT
2022-Q2	↑ 2.7	2.0	↑ 2.8	↓ 1.2	2.0
2022-Q1	2.0	2.0	2.1	1.3	2.0

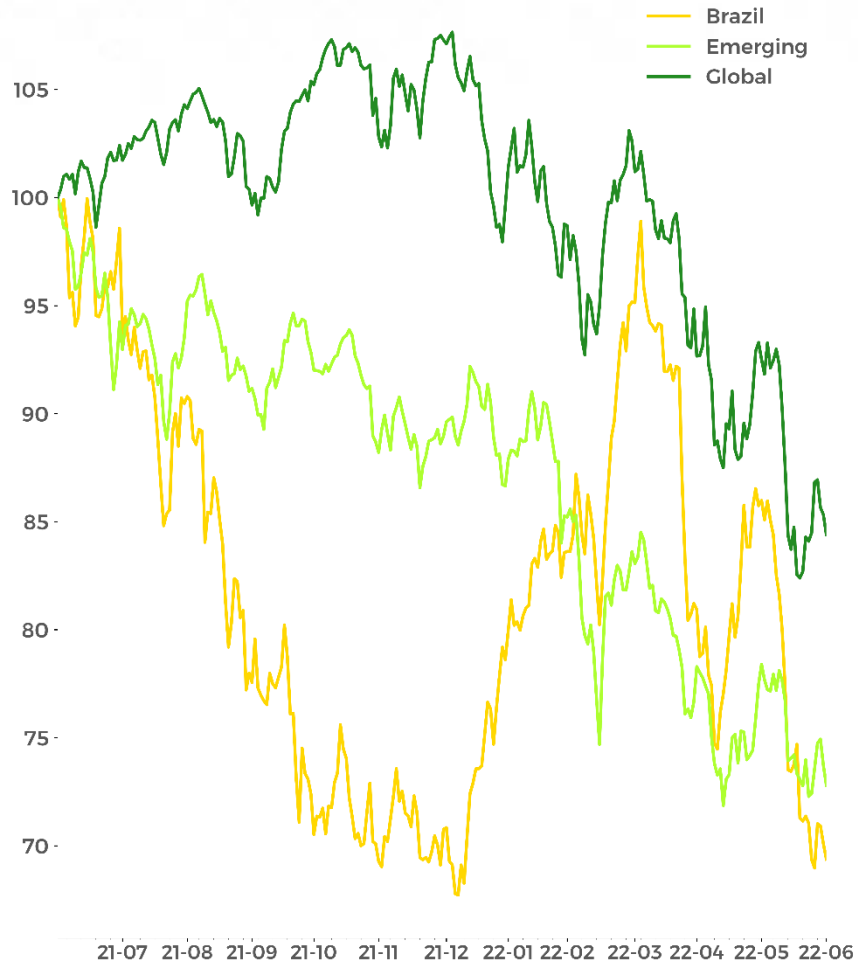
- In the 2022-Q2 global context, which marched steady on Q1 main trends, one must point out hikes in our liquidity risk and in our macroeconomic risk indicators. The hikes observed are concurrent with fears of deterioration in the Brazilian fiscal budget imbalances and solvency, illustrated by the rise in the sovereign CDS spread (7.1) and in the sovereign USD bond spread (9.2).
- The hike in our liquidity risk indicators is correlated to the deceleration of foreign investors net inflows in the Brazilian secondary equity markets.
- There was a new low in our risk appetite indicator, due to the national equity market driver.
- With higher international base rates, one can highlight for the semester an acceleration of realized volatility in equity markets, national and global (8.2), as well as in the national fixed income markets (8.6), correlated with the international movement (8.4).

7.1. Sovereign CDS – emerging economies (basis points)

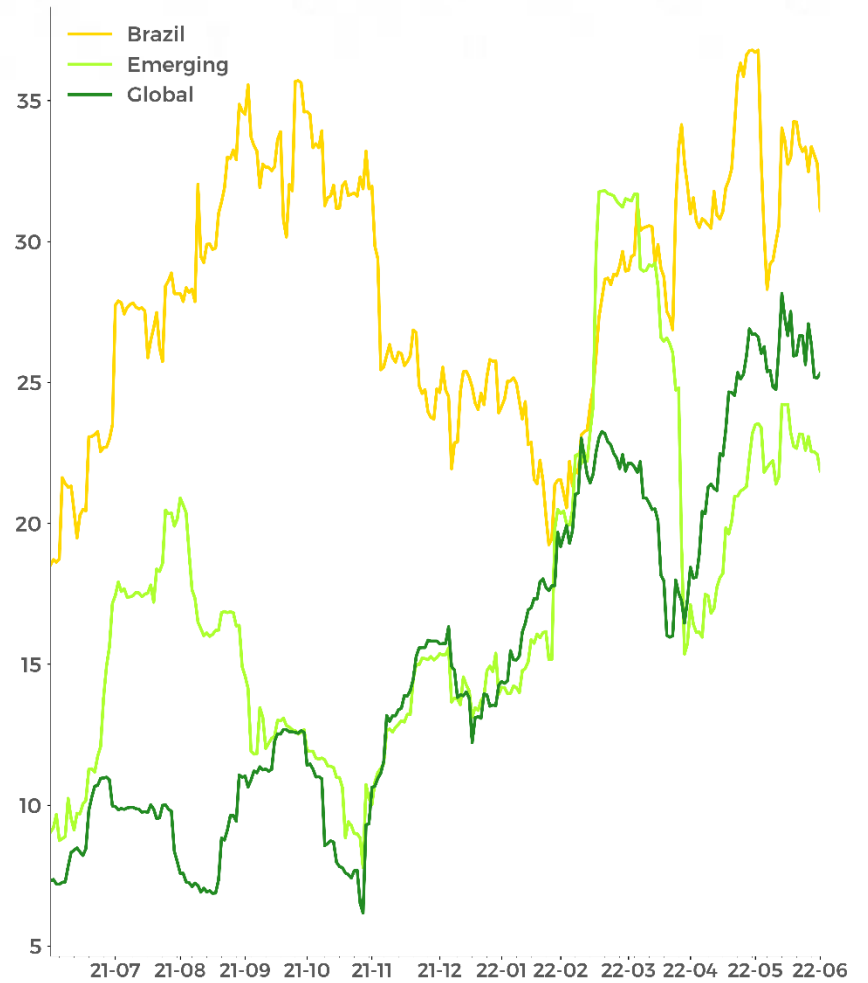


Source: Bloomberg

8.1. MSCI equity indexes – last 12 months return

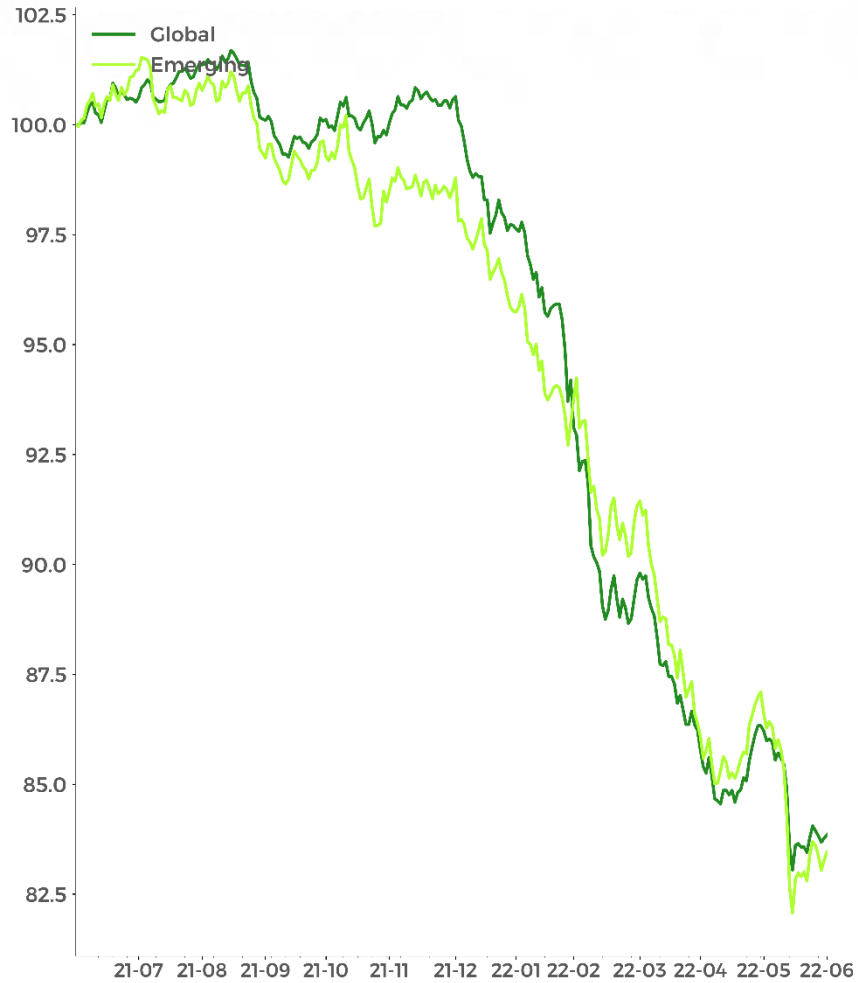


8.2. MSCI equity indexes – volatility

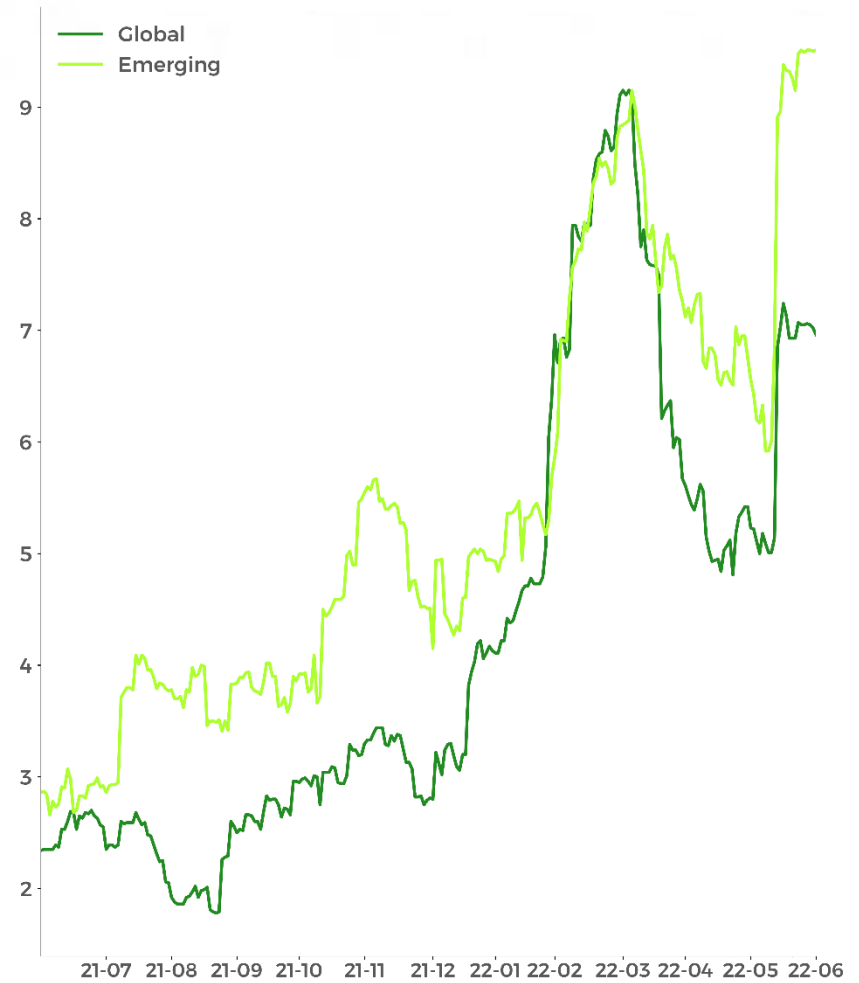


8. Market risk

8.3. Corporate bond indexes – last 12 months return

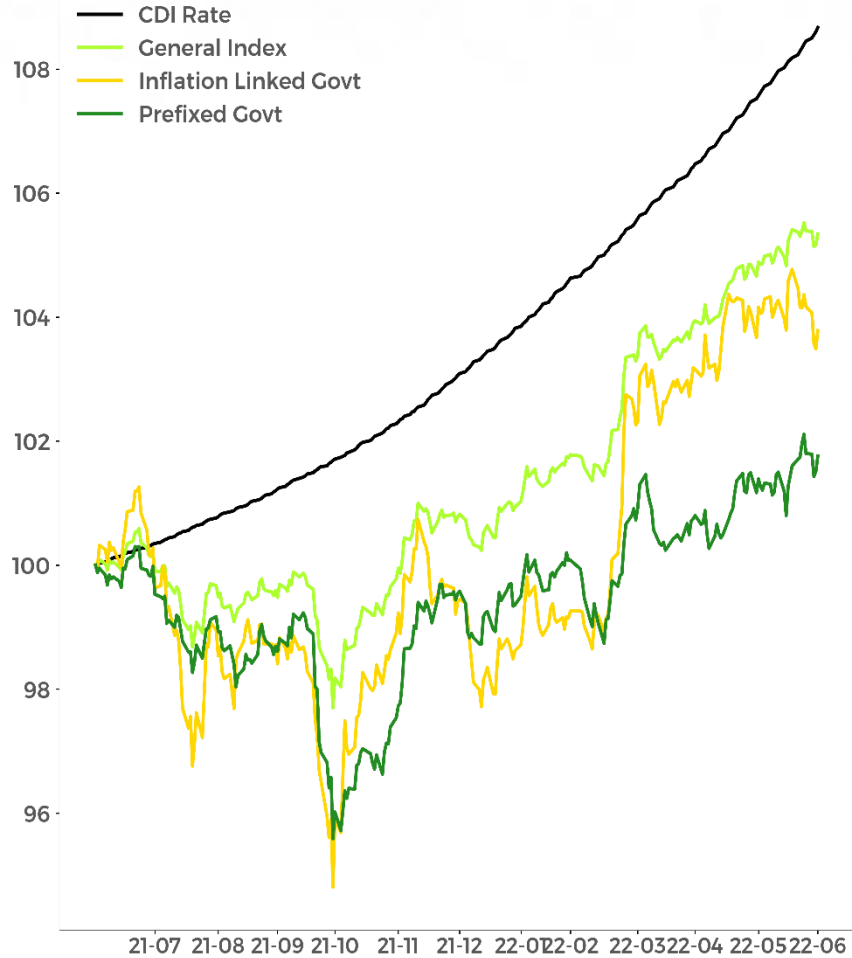


8.4. Corporate bond indexes – volatility

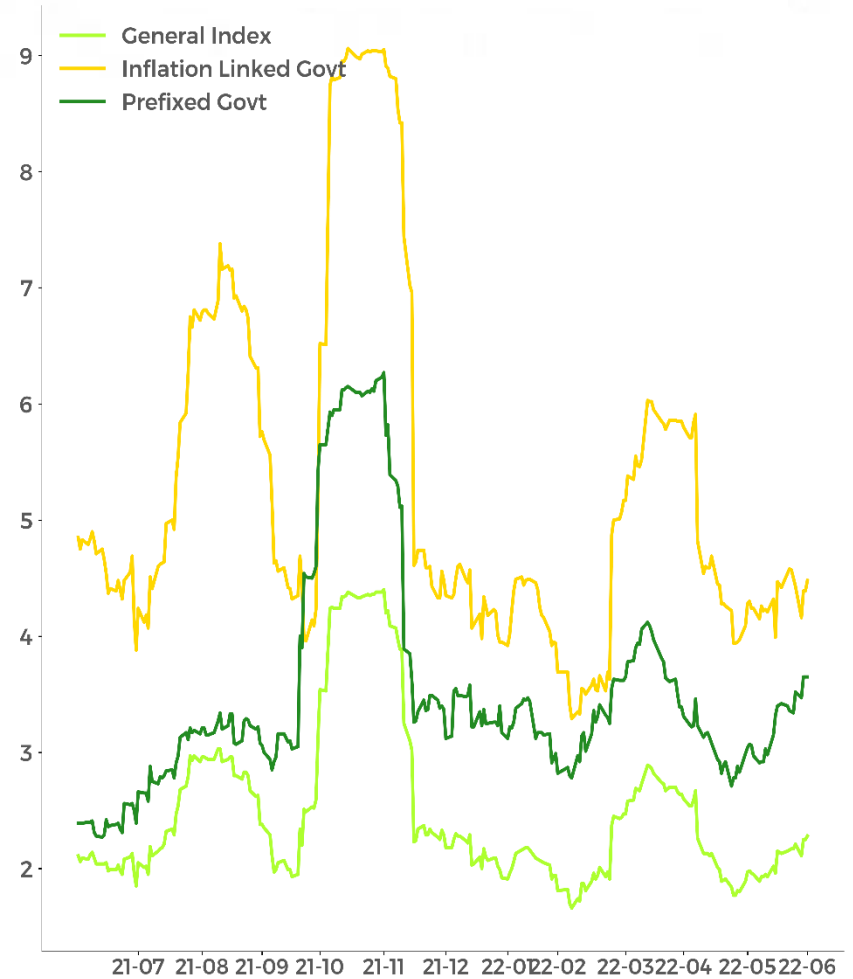


8. Market risk

8.5. National fixed income indexes – last 12 months return

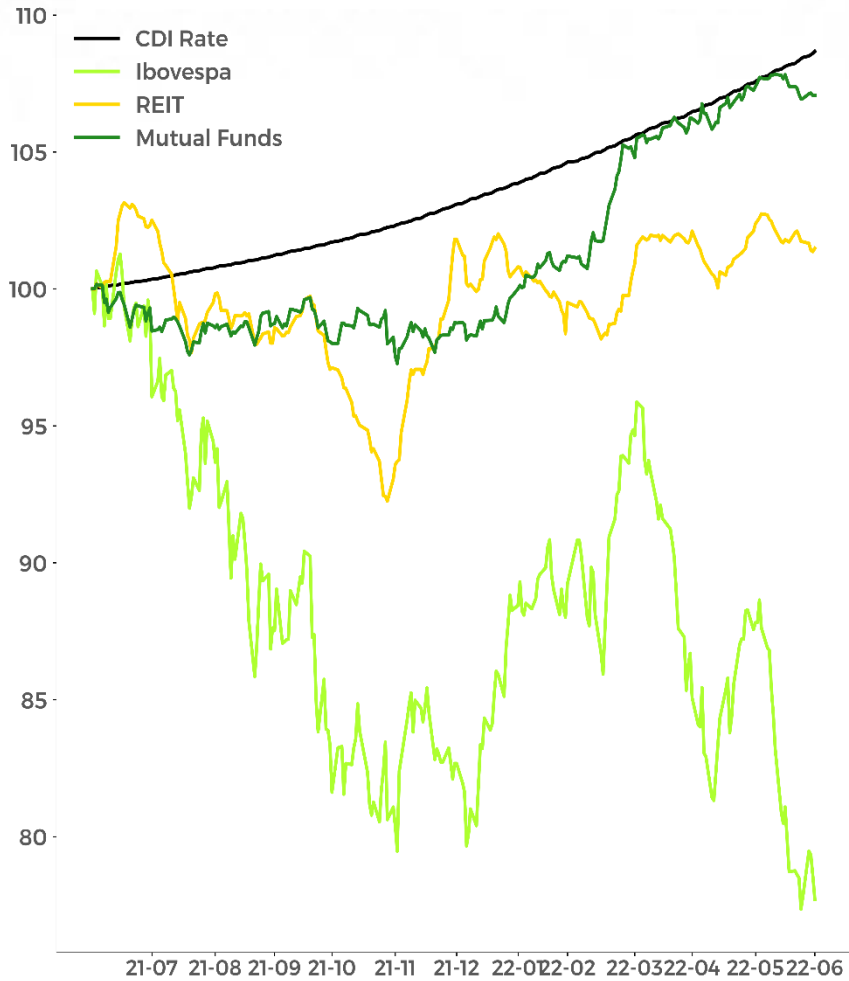


8.6. National fixed income indexes – volatility

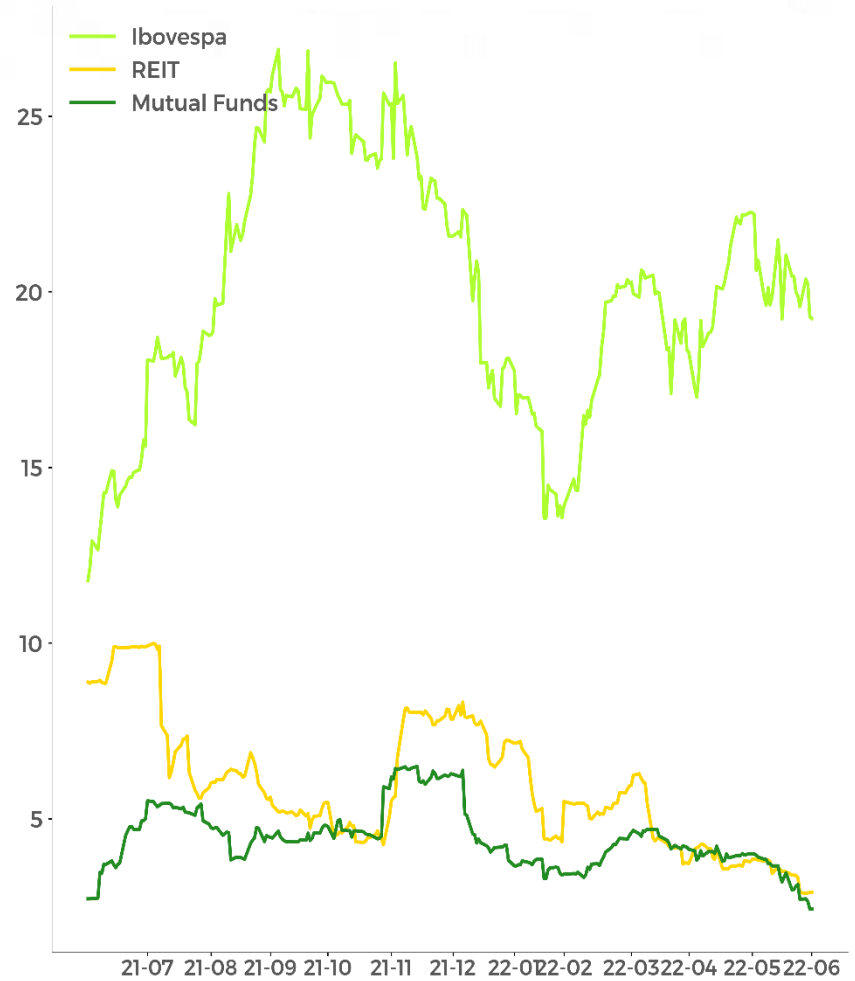


8. Market risk

8.7. National variable income indexes – last 12 months return



8.8. National variable income indexes – volatility



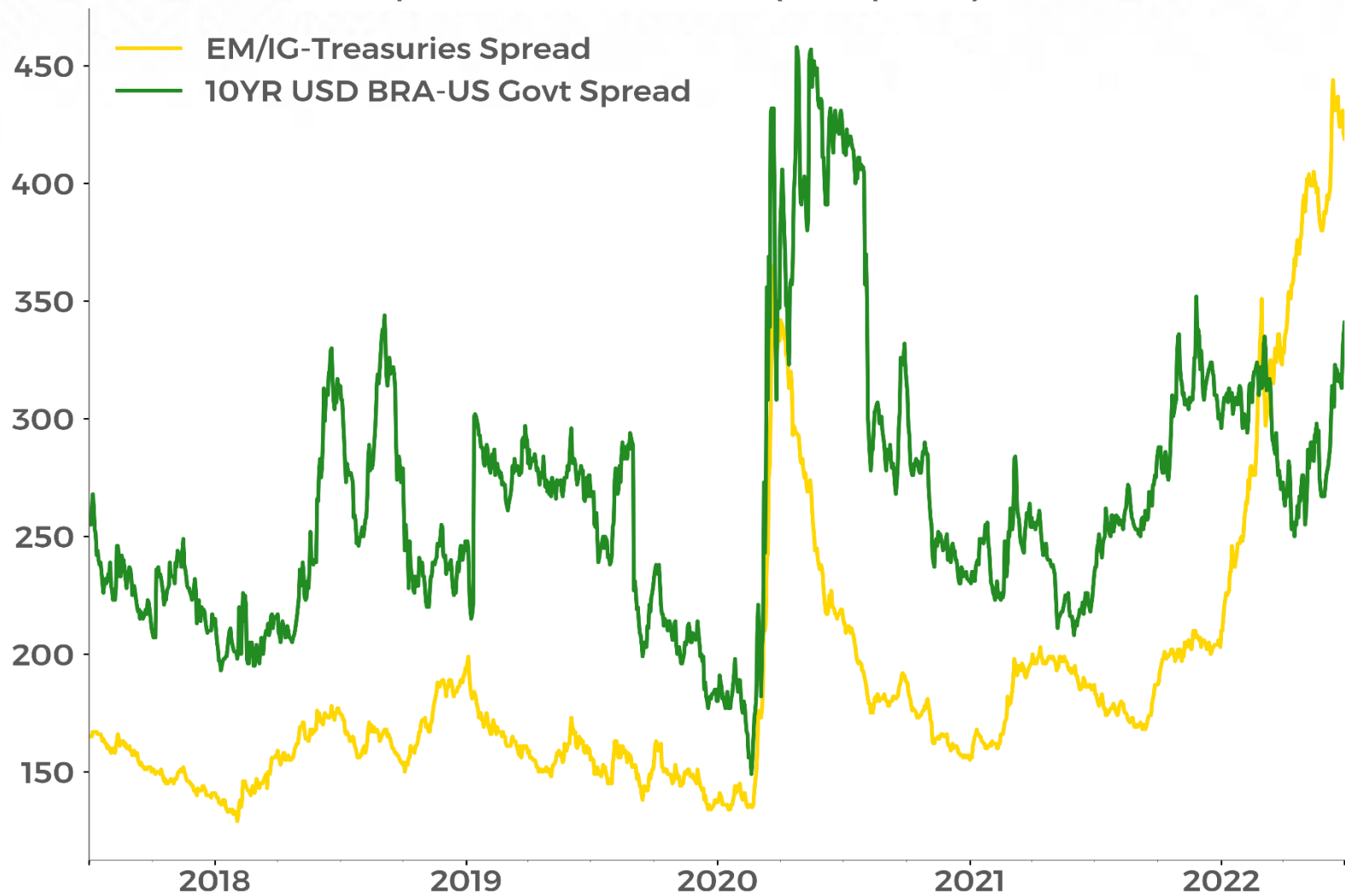
Source: Bloomberg

9.1. Adjusted estimated forward PE ratio (Z-Score) – MSCI equity indexes



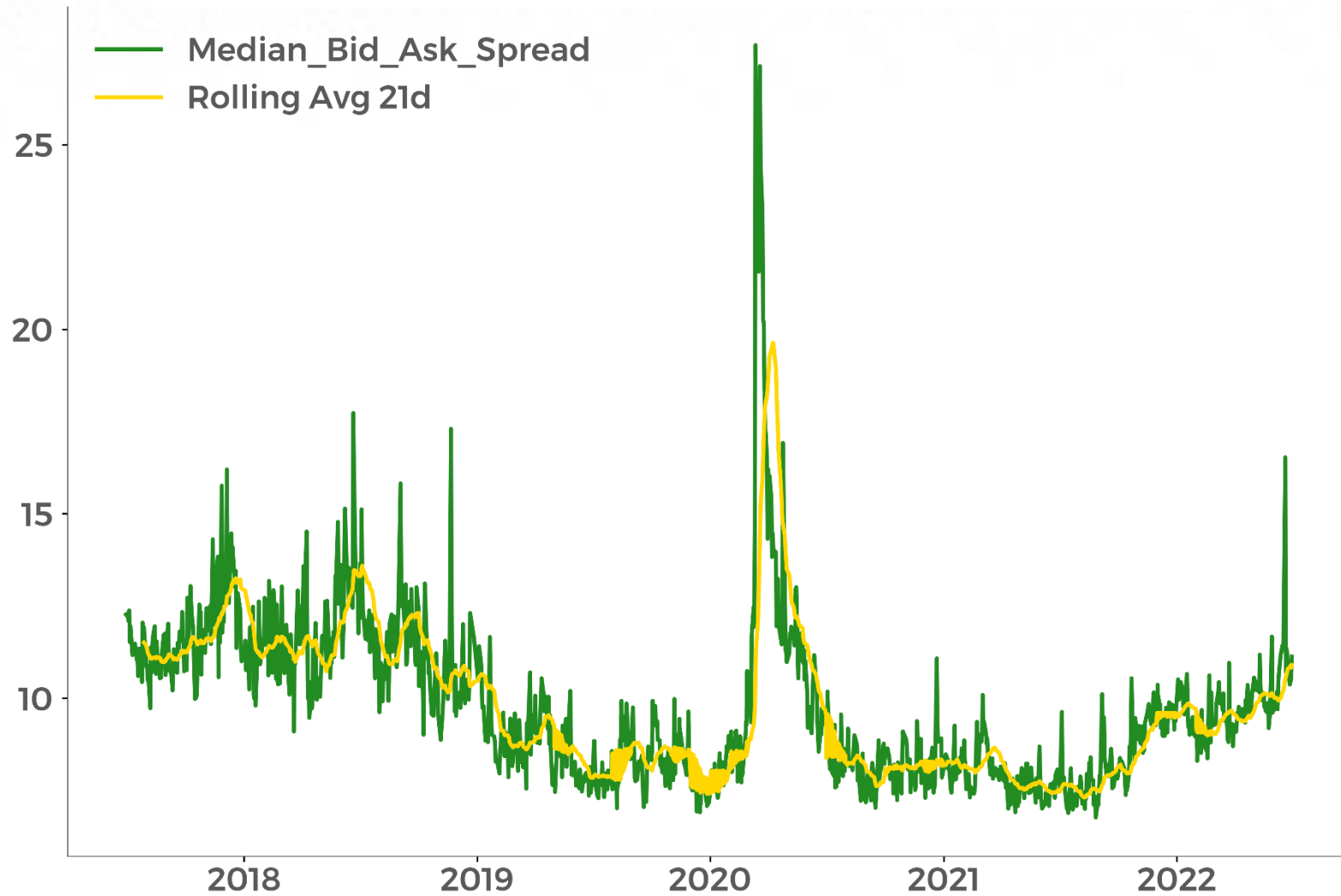
Source: Bloomberg

9.2. Spreads vs US treasuries (basis points)



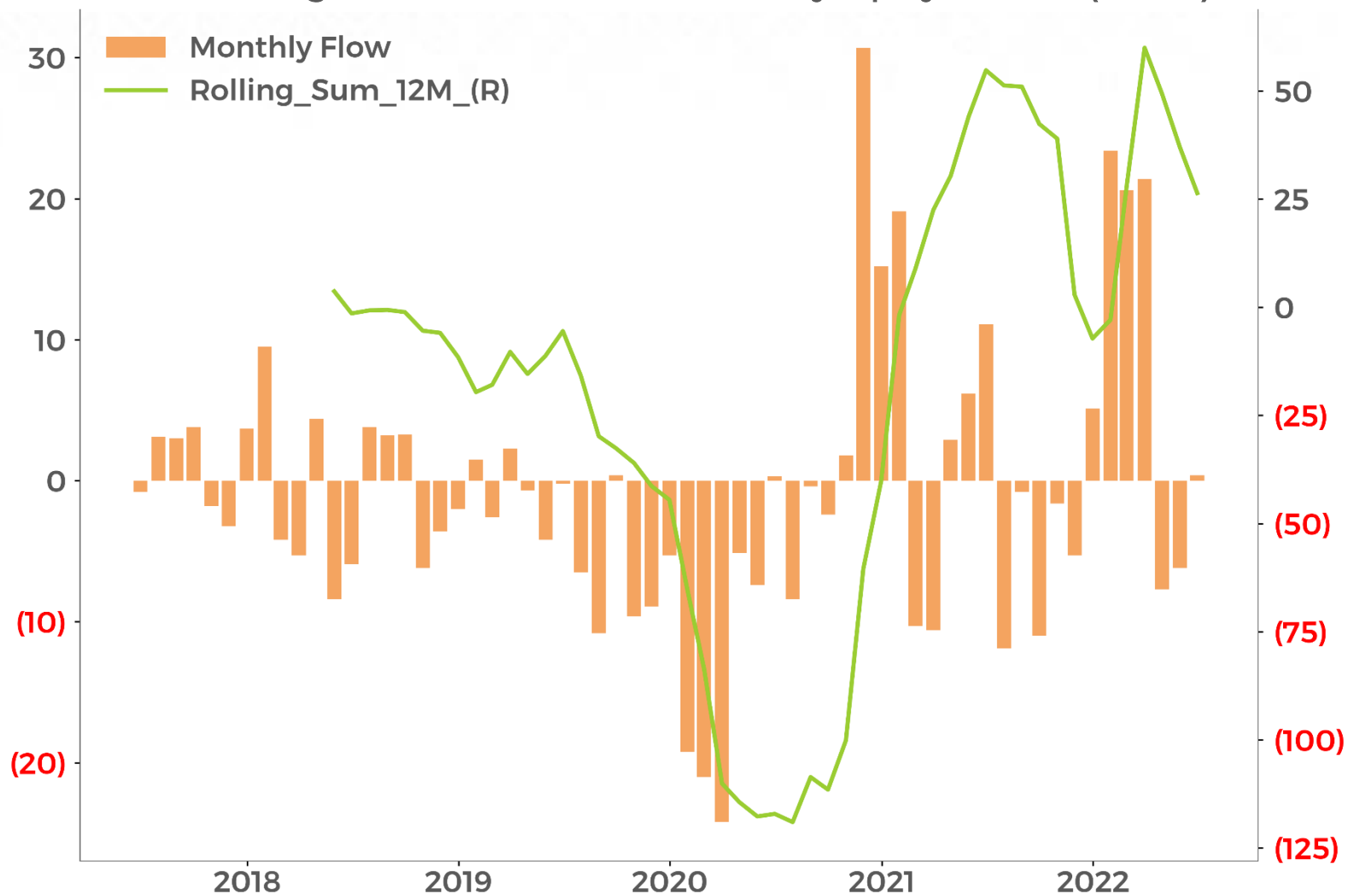
Source: Bloomberg

10.1. Bid-Ask spread index – equities (basis points)



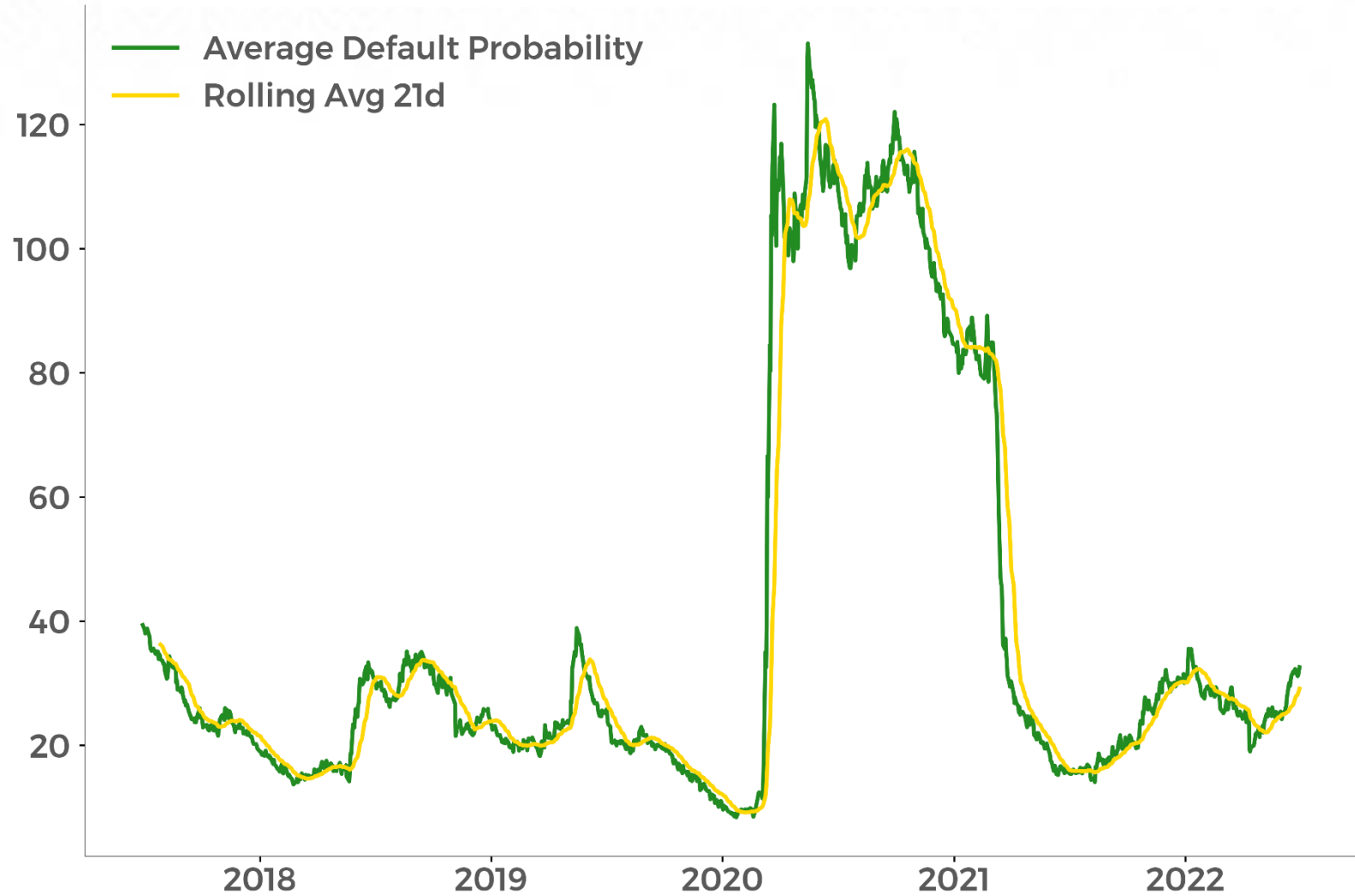
Source: Bloomberg

10.2. Net foreign investor inflows on secondary equity markets (US\$ bi)



Source: Bloomberg

11.1. Default probability index – equities (basis points)



Source: Bloomberg

Risk map

Macro 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; Between 0,5 and 1,5sd => 3; Between -1 and 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 and 2sd => 4; between 0,5 and 1,5sd => 3; between -1 e 0,5sd=> 2; below -1sd => 1.

Macro risk

Sovereign CDS Spreads: 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.

Market indexes

MSCI 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.

Índices de Referência: 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 indexes

Bid-Ask Spread: 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.

Net foreign inflows on equities: Monthly foreign investor net inflows in the B3 secondary market for equities and equities derivatives.

Risk appetite

Adjusted estimated forward 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.

EM_IG vs US Treasuries: 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.

USD Sovereign Brazil vs 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

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.