

# ECONOMIC REPORT

Year 9 | Volume nº 90 | 2021 Q2

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Data as good as of 30/06/2021.

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# MARKET SCENARIO



# 1. Market scenario - Highlights

- Estimates for the total regulated market (2.2.1) are 15% up relative to last year's same period, reaching R\$ 33.7 tri. Among the main drivers for that trajectory, one can point out the aggregated value of Rule 555 Investment Funds and the derivatives outstanding notional value. On its turn, the set of regulated participants (2.1) has risen 7.7% YTD, comprising 66.529 participants, mainly driven by investment funds (9.9%) and registered brokers (15.0%).
- In the first six months of 2021 a grand total of R\$ 287.8 bi in securities were issued (3.1.1), R\$ 176.9 bi of which were issued on the second quarter.
- Relative to last year same period, total offerings on the primary market have demonstrated growth both in its number (35%) and in its value (62%), according to item 2.2.2.
- One can highlight, relative to last year accumulated semester, a 250% growth in the number of equity offerings (3.3.2), denoting a more diverse set of companies raising capital, even with smaller average values (R\$ 1.8 bi per issue in 2021 vs R\$ 3.1 bi in 2020). One can still note a substitution tendency from CP to Debentures as the most common vehicle in the private debt market.
- The daily average financial turnover in the secondary market for equities (odd lot), debentures and REITs keeps sustained above last year (4.1.1, 4.1.2 e 4.1.3). Finally, the YTD number of derivatives contracts settled on exchanges (4.2.2) keeps above last year's same period for CDI Futures contracts only.

## 2. Regulated markets

2.1. Number of participants*	2016	2017	2018	2019	2020	2021
Registered Non-Resident Investors	18.429	19.416	19.293	18.244	18.705	18.716
Registered Investment Funds	14.936	16.182	17.718	19.427	22.295	24.513
Registered Asset Managers (sum)	3.353	3.411	3.475	3.561	3.814	3.946
Fiduciary Administrators (only)	29	36	42	42	49	51
Asset Managers (only)	3.227	3.281	3.349	3.438	3.686	3.821
Both	97	94	84	81	79	74
Registered Research Analysts	624	606	615	630	840	989
Registered Investment Consultants	648	686	669	697	791	893
Registered Brokerage Firms (trading)	84	74	74	74	69	69
Registered Brokerage Firms (distribution)	107	94	101	100	102	102
Registered Brokers (sum)	6.053	6.652	7.778	10.798	13.881	15.970
Legal persons	4.828	5.492	6.619	9.608	12.275	14.810
Firms	1.225	1.160	1.159	1.190	1.156	1.160
Registered Custodians	144	145	139	146	146	151
Registered Bookkeepers	35	53	59	61	63	67
Registered Organized Market Administrators	1	1	1	1	3	3
Registered Crowdfunding Platforms	N/A	N/A	14	26	32	39
Registered public companies, including foreign and subsidized, with active status	690	672	666	656	675	715
Registered Independent Auditors	408	391	375	528	354	350
Registered Rating Agencies	7	7	7	7	6	6
<b>TOTAL</b>	<b>45.519</b>	<b>48.390</b>	<b>50.971</b>	<b>54.956</b>	<b>61.776</b>	<b>66.529</b>

## 2. Regulated markets

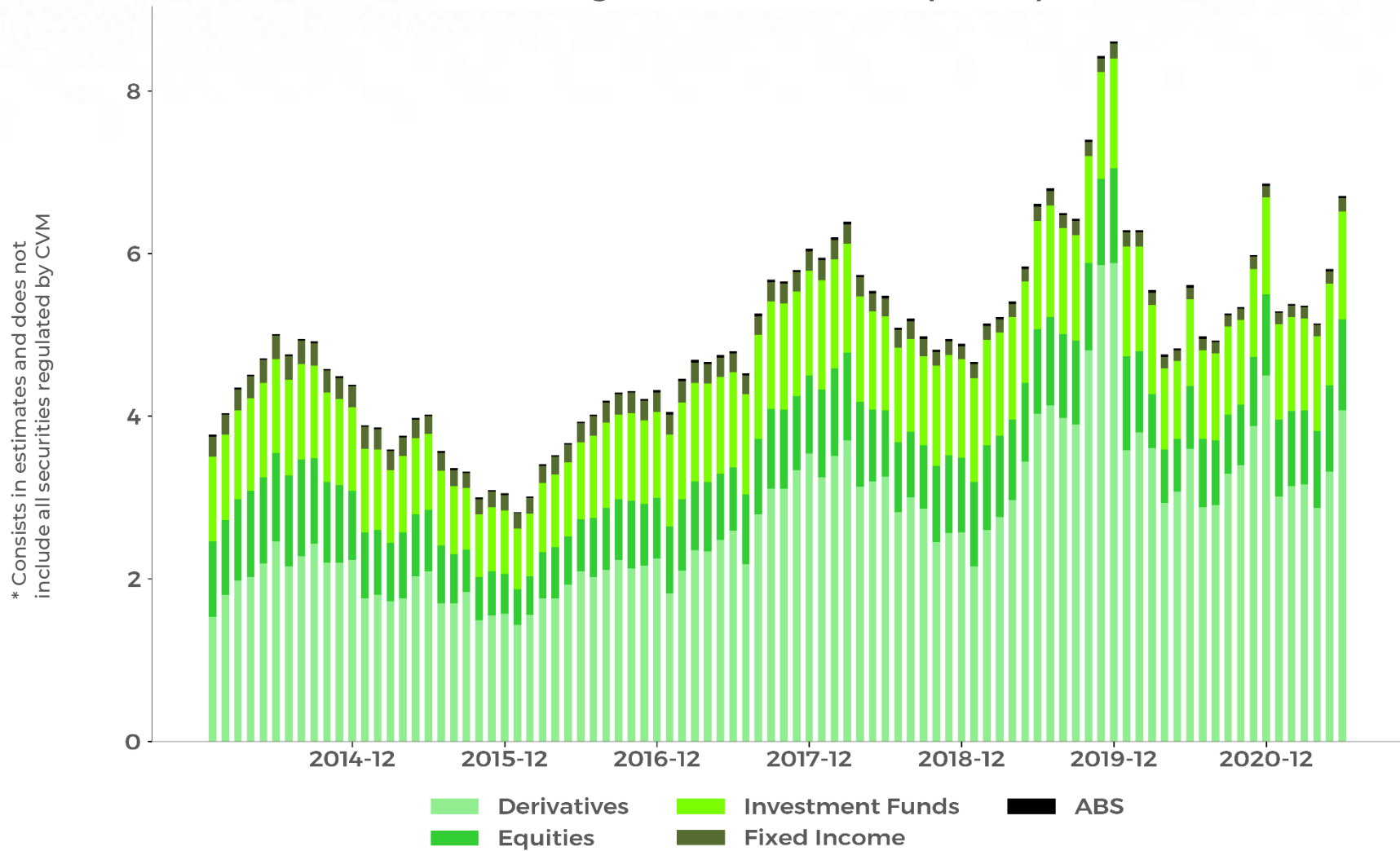
### 2.2.1. Total regulated markets (US\$ tri)\*

CATEGORY	ASSET	2016	2017	2018	2019	2020	2021
Fixed Income	Corporate Bonds	0.24	0.23	0.15	0.17	0.13	0.15
	Commercial Paper	0.00	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	0.01
Variable Income	Equities – Market Cap	0.74	0.96	0.92	1.17	1.00	1.12
Derivatives	Notional outstanding	2.25	3.54	2.56	5.88	4.50	4.06
	Structured Notes	0.00	0.00	0.01	0.00	0.00	0.01
Investment Funds	Rule-555	0.95	1.15	1.08	1.18	1.03	1.14
	Structured Funds	0.11	0.14	0.13	0.17	0.16	0.19
<b>TOTAL</b>		<b>4.31</b>	<b>6.05</b>	<b>4.87</b>	<b>8.60</b>	<b>6.86</b>	<b>6.70</b>

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

## 2. Regulated markets

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

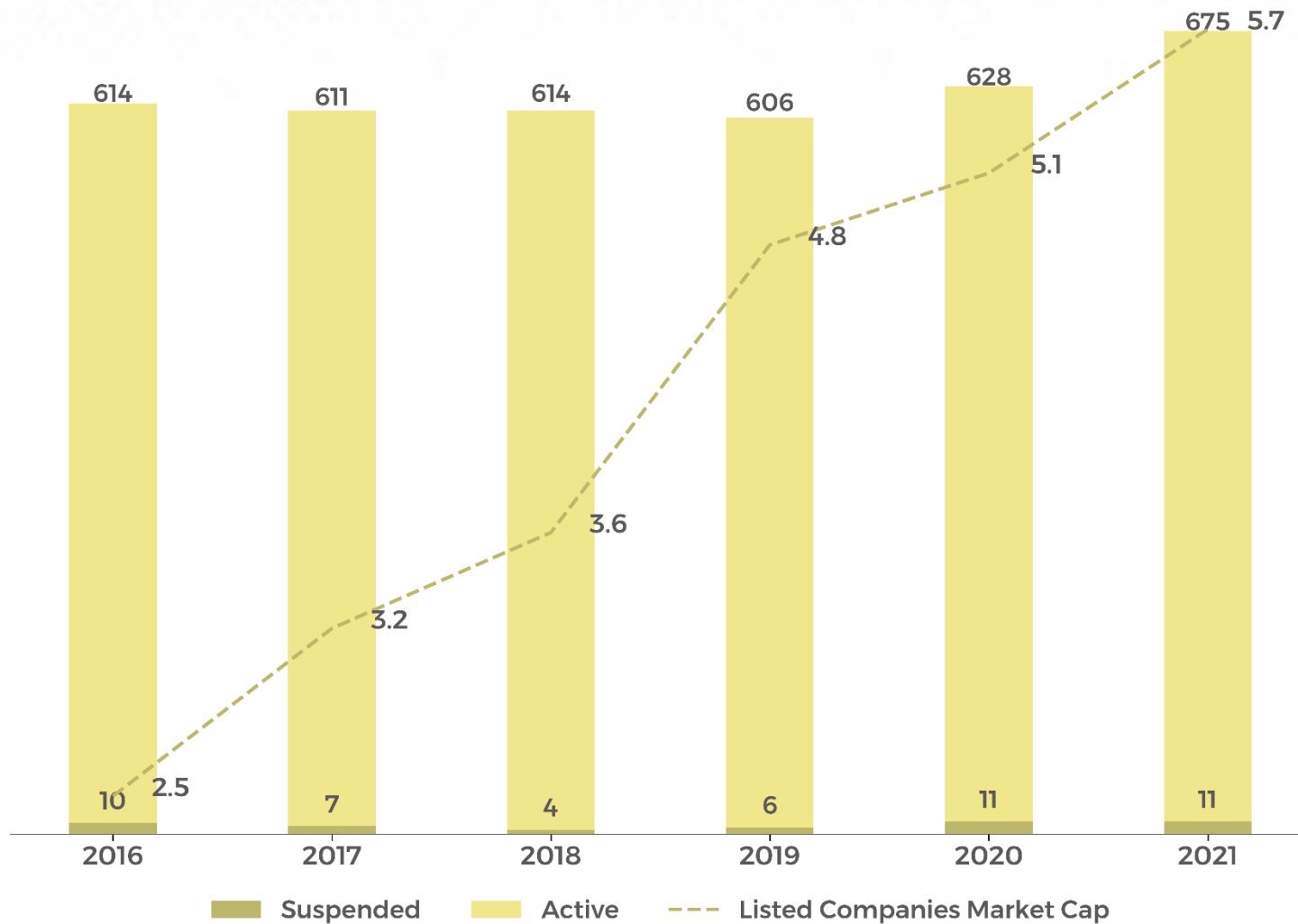


Source: CVM and Organized Market Administrators



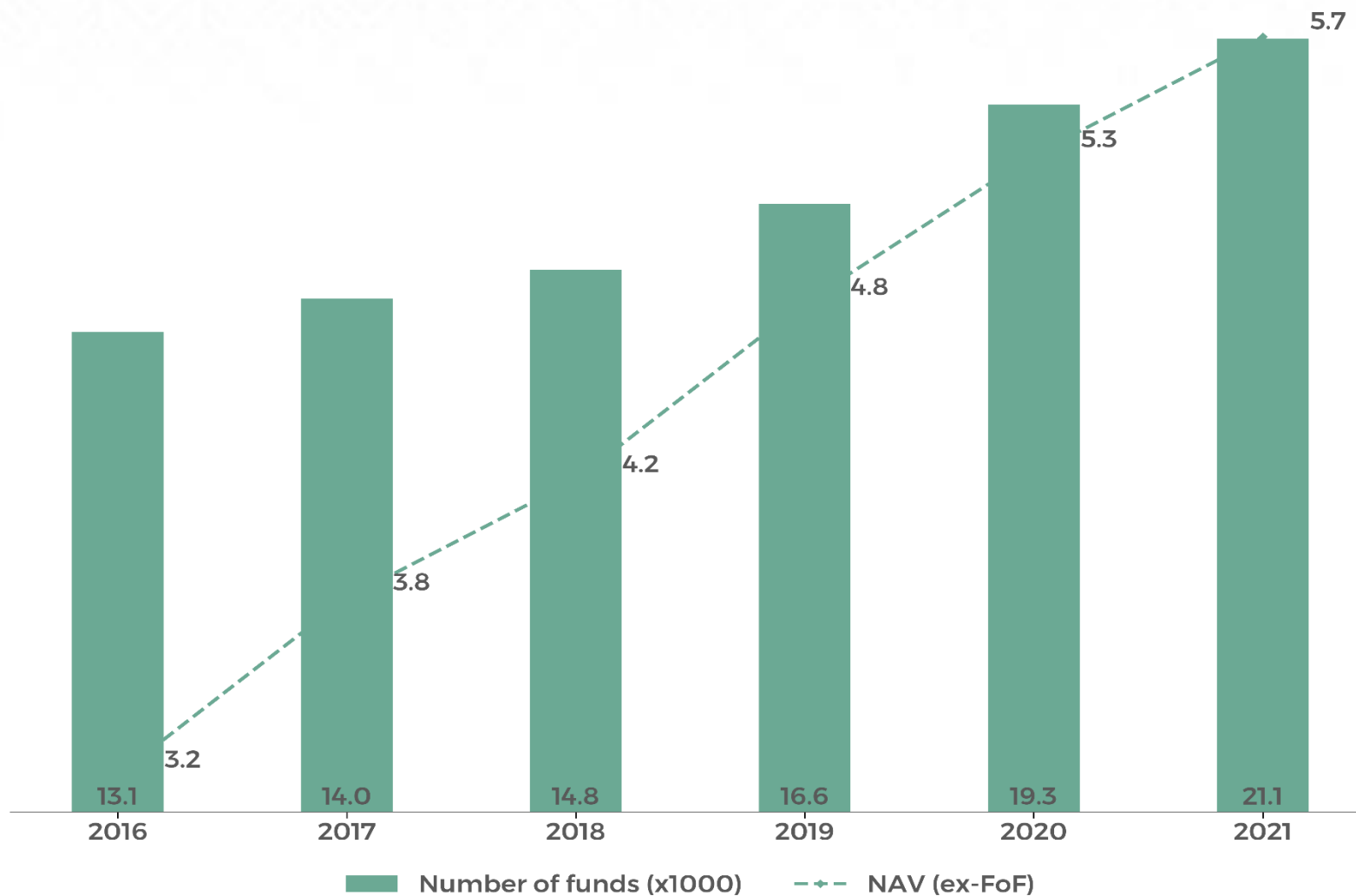
## 2. Regulated markets

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

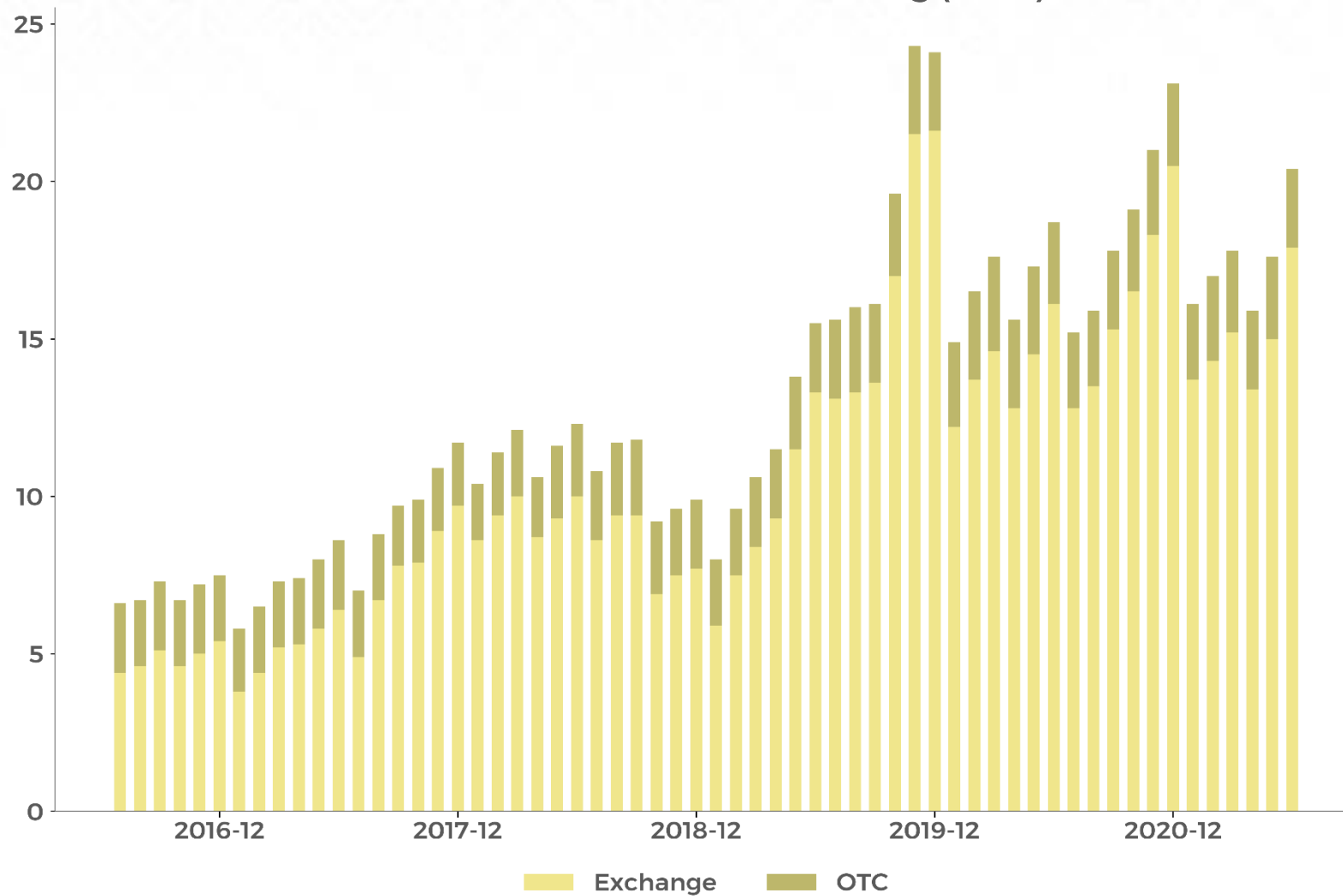


Source: CVM, B3

### 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).

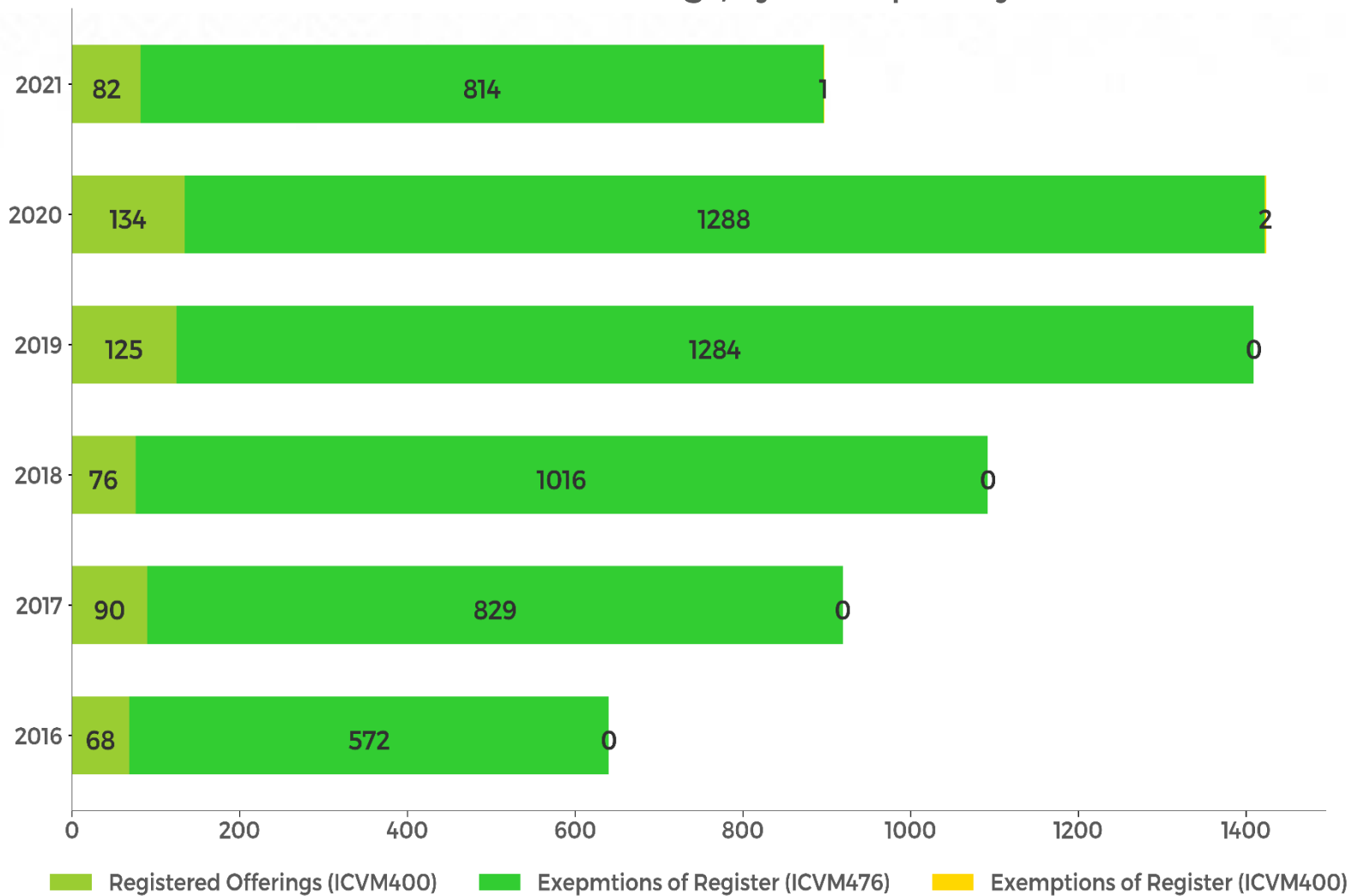
3.1.1. Annual totals (quantity and value)*	2016		2017		2018		2019		2020		2021	
	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi
ICVM 400	69	40.9	90	48.9	76	33.5	125	89.6	134	120.1	82	61.6
ICVM 400 (exemptions)	-	-	-	-	-	-	-	-	2	5.0	1	0.1
ICVM 476	572	127.3	829	176.5	1.014	250.2	1.281	383.1	1.270	303.7	814	226.1
ICVM 588 (crowdfunding)	-	-	-	-	3	0.00	86	0.10	98	0.13	25	0.03
<b>TOTAL</b>	<b>641</b>	<b>168.2</b>	<b>919</b>	<b>225.4</b>	<b>1.093</b>	<b>283.7</b>	<b>1.492</b>	<b>472.8</b>	<b>1.504</b>	<b>428.9</b>	<b>922</b>	<b>287.8</b>

Source: CVM

### 3. Primary markets

#### 3.1. Annual totals by rule

3.1.2. Total YTD offerings, by rule – quantity\*

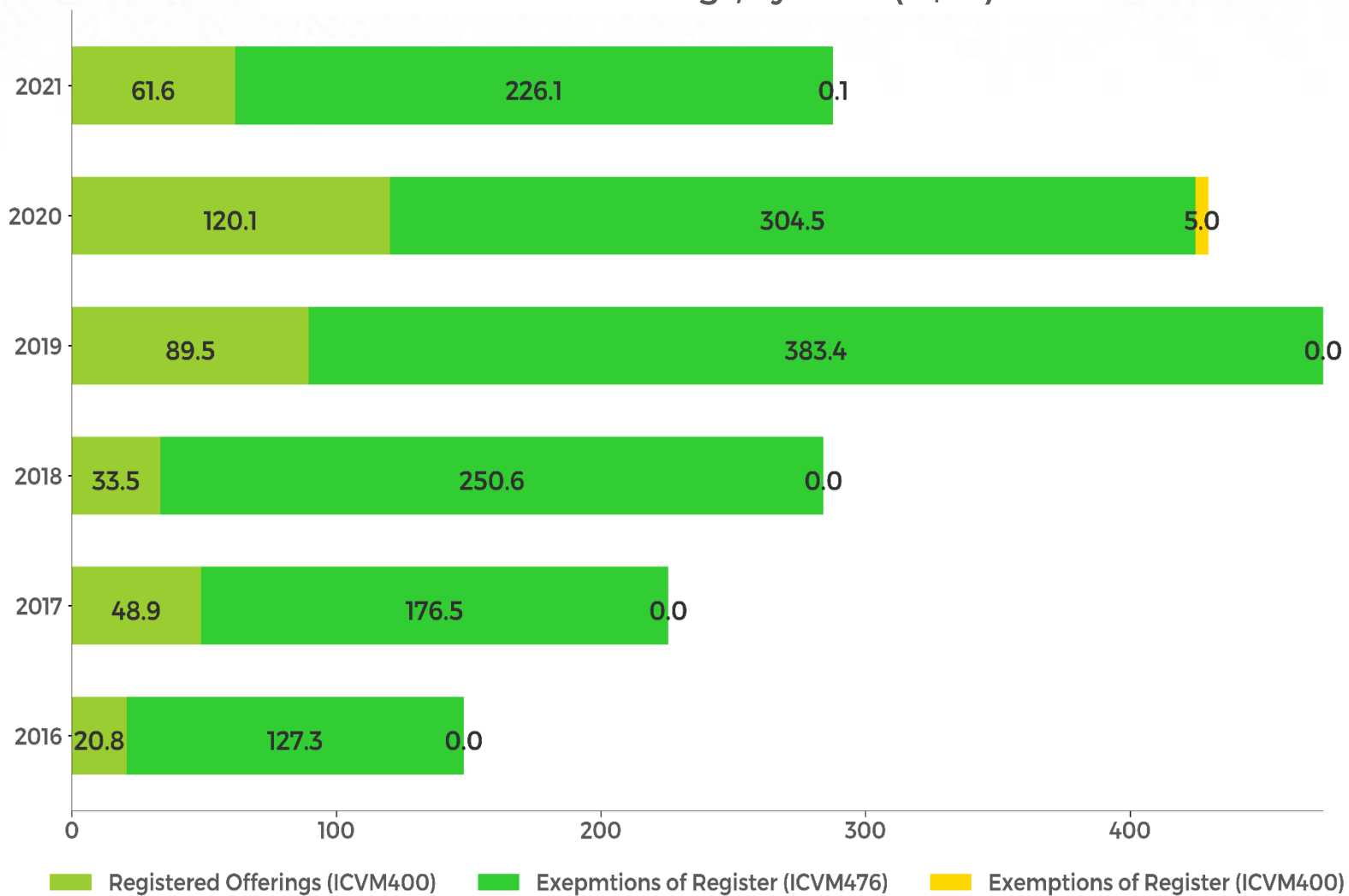


\* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agrobusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing).

### 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).

### 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).

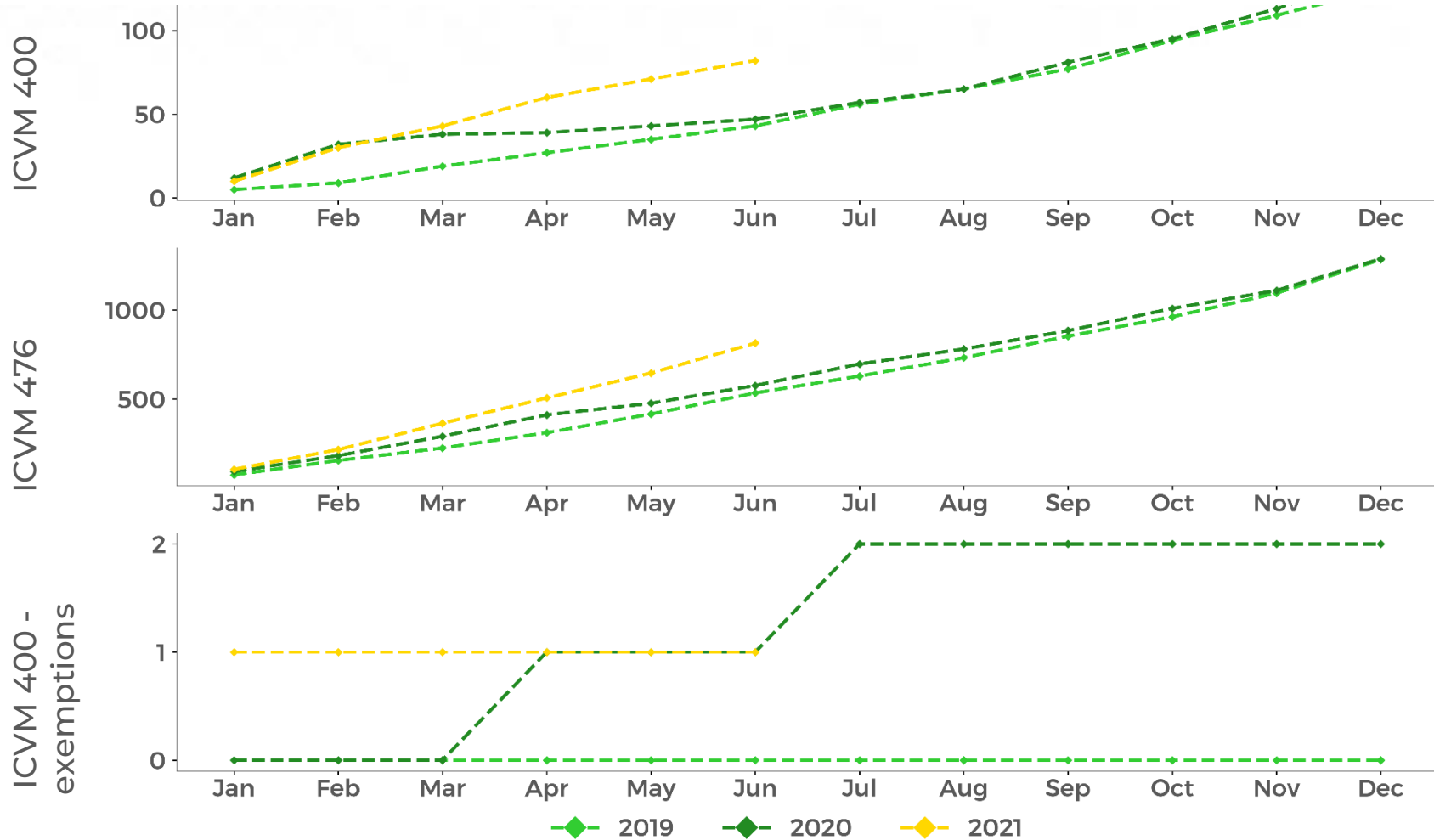
3.2.1. Accumulated totals for the current month (quantity and value)*	2016		2017		2018		2019		2020		2021	
	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi
ICVM 400	25	5.3	37	14.2	43	18.8	43	30.9	47	45.8	82	61.6
ICVM 400 (exemptions)	-	-	-	-	-	-	-	-	1	0.0	1	0.1
ICVM 476	250	47.9	348	63.3	455	122.5	534	171.5	576	131.4	814	226.1
ICVM 588 (crowdfunding)	-	-	-	-	-	-	35	0.00	60	0.06	25	0.03
<b>TOTAL</b>	<b>275</b>	<b>53.2</b>	<b>385</b>	<b>77.5</b>	<b>498</b>	<b>141.3</b>	<b>612</b>	<b>202.4</b>	<b>684</b>	<b>177.3</b>	<b>922</b>	<b>287.8</b>

Source: CVM

### 3. Primary markets

#### 3.2. Accumulated totals by rule

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



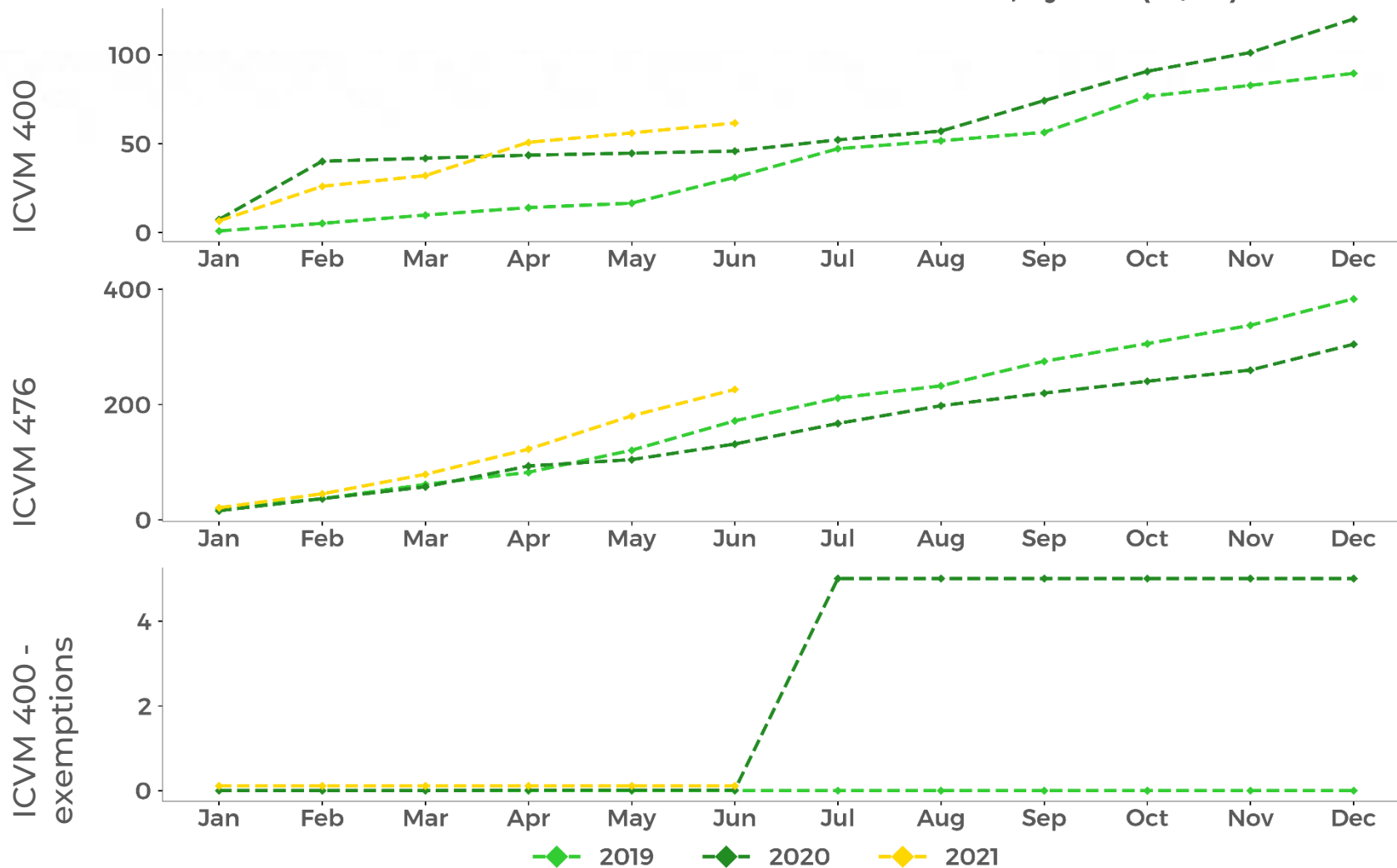
Source: CVM



### 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

\* 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).

3.3.1. Annual totals (quantity and value)*	2016		2017		2018		2019		2020		2021	
INSTRUMENT	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi
Equities	10	10.7	25	38.8	5	11.2	42	90.2	51	117.6	42	76.8
Corporate Bonds	170	63.3	264	88.2	351	149.2	379	185.7	276	121.2	199	97.0
Bank Bonds	4	2.1	8	3.0	14	6.0	21	10.0	2	0.96	-	-
Commercial Paper	72	8.8	101	27.3	84	29.0	94	36.6	71	21.9	23	5.8
MBS	106	17.7	104	7.7	101	8.3	186	17.6	222	14.1	170	12.0
Agribusiness ABS	37	12.8	67	12.4	52	6.1	69	14.3	56	13.3	45	10.3
CDOs	68	3.7	138	16.4	187	20.6	254	36.8	262	42.1	158	31.0
REITs	66	6.1	74	8.2	104	17.6	196	42.3	253	48.6	144	30.1
Private Equity	107	23.0	138	23.5	194	36.2	168	39.4	231	49.8	116	24.5
<b>TOTAL</b>	<b>641</b>	<b>148.1</b>	<b>919</b>	<b>225.4</b>	<b>1.092</b>	<b>284.1</b>	<b>1.409</b>	<b>472.9</b>	<b>1.424</b>	<b>429.6</b>	<b>897</b>	<b>287.8</b>

Source: CVM

## 3. Primary markets

### 3.3. Annual totals by instrument

3.3.2. Accumulated totals for the current month (quantity and value)*	2016		2017		2018		2019		2020		2021	
	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi	qty	R\$ bi
Equities	4	3.5	8	13.1	3	6.8	12	29.3	12	36.9	42	32.9
Corporate Bonds	69	21.4	108	27.2	158	73.1	169	98.6	136	50.5	199	28.9
Bank Bonds	1	0.7	2	1.1	10	4.1	13	6.6	-	-	-	-
Commercial Paper	35	3.3	41	7.0	34	17.5	39	9.9	63	18.9	23	5.8
MBS	46	6.2	40	2.3	41	3.1	59	5.4	79	6.8	170	12.1
Agribusiness ABS	13	4.9	27	5.5	25	2.1	23	5.5	17	4.1	45	10.4
CDOs	35	1.8	55	3.7	84	7.6	110	11.7	117	19.1	158	31.0
REITs	24	1.8	40	4.3	51	11.1	66	13.4	104	20.8	144	30.2
Private Equity	48	9.5	64	13.4	92	16.0	86	22.1	96	20.1	116	24.5
<b>TOTAL</b>	<b>275</b>	<b>53.3</b>	<b>385</b>	<b>77.6</b>	<b>498</b>	<b>141.4</b>	<b>577</b>	<b>202.5</b>	<b>624</b>	<b>177.2</b>	<b>897</b>	<b>287.8</b>

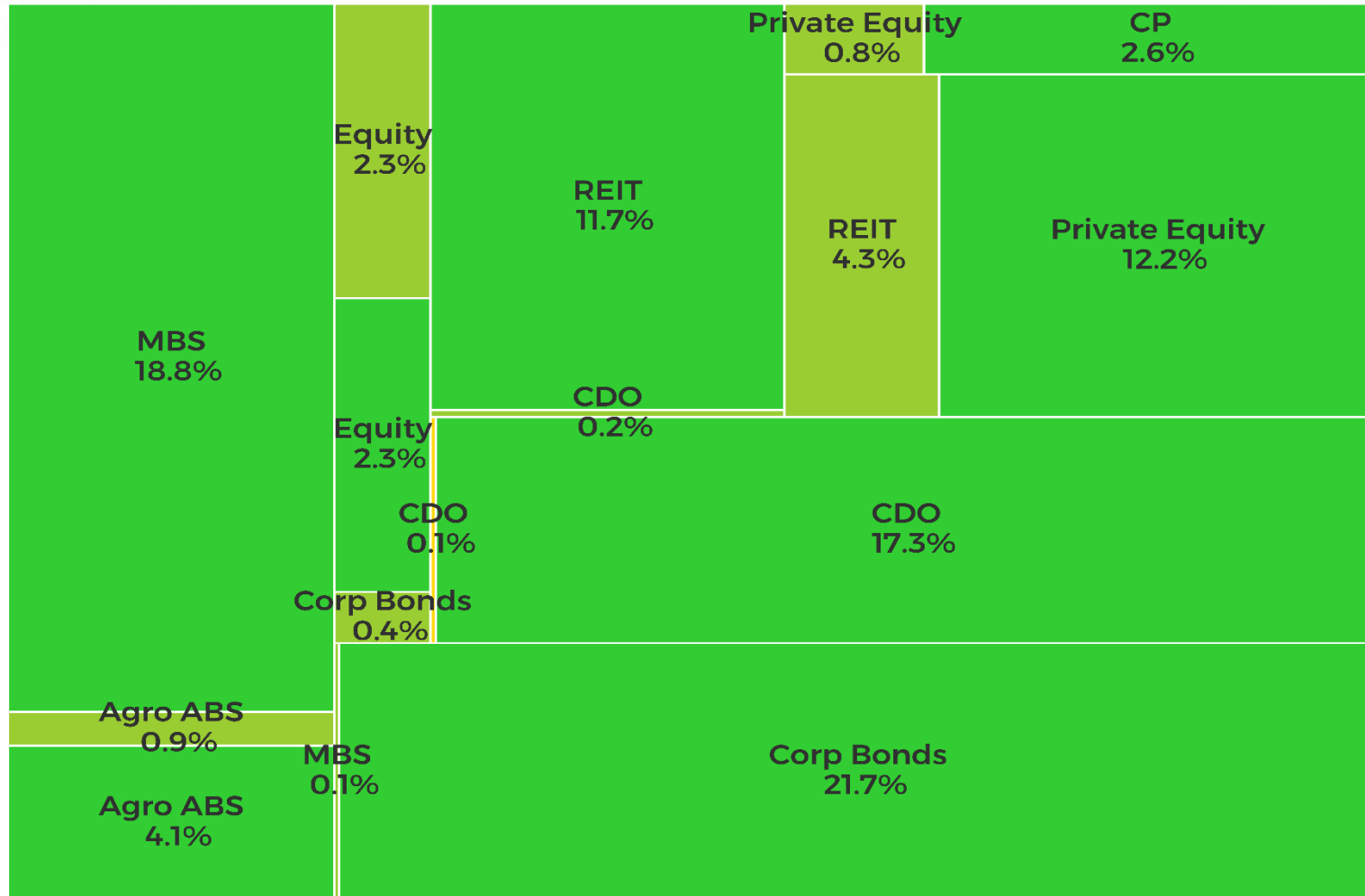
\* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agribusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing).

Source: CVM

# 3. Primary markets

## 3.4. Totals by rule and instrument

3.4.1. YTD quantity of offerings (%)\*



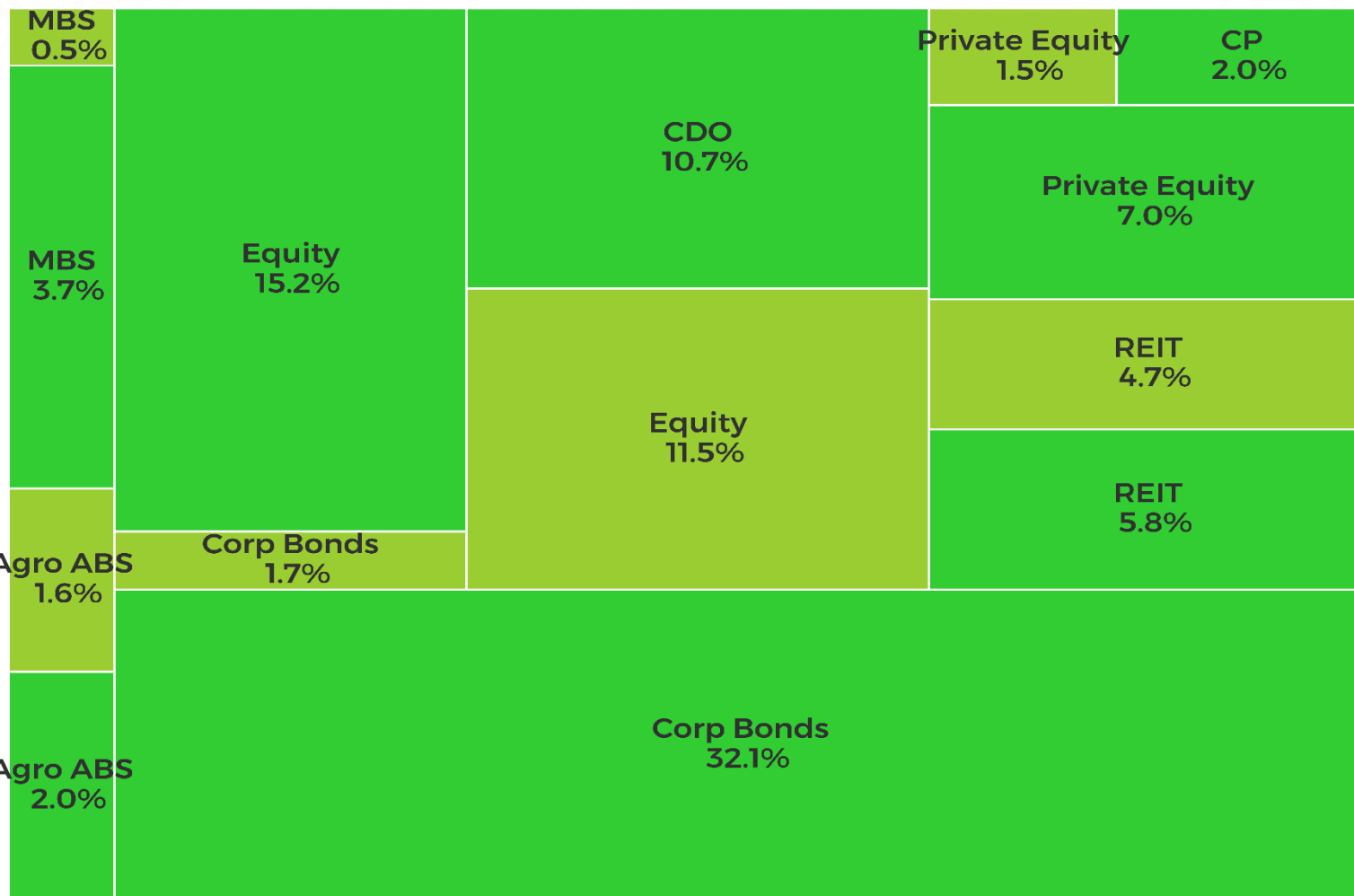
\* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agrobusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing).

■ 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 (%)\*



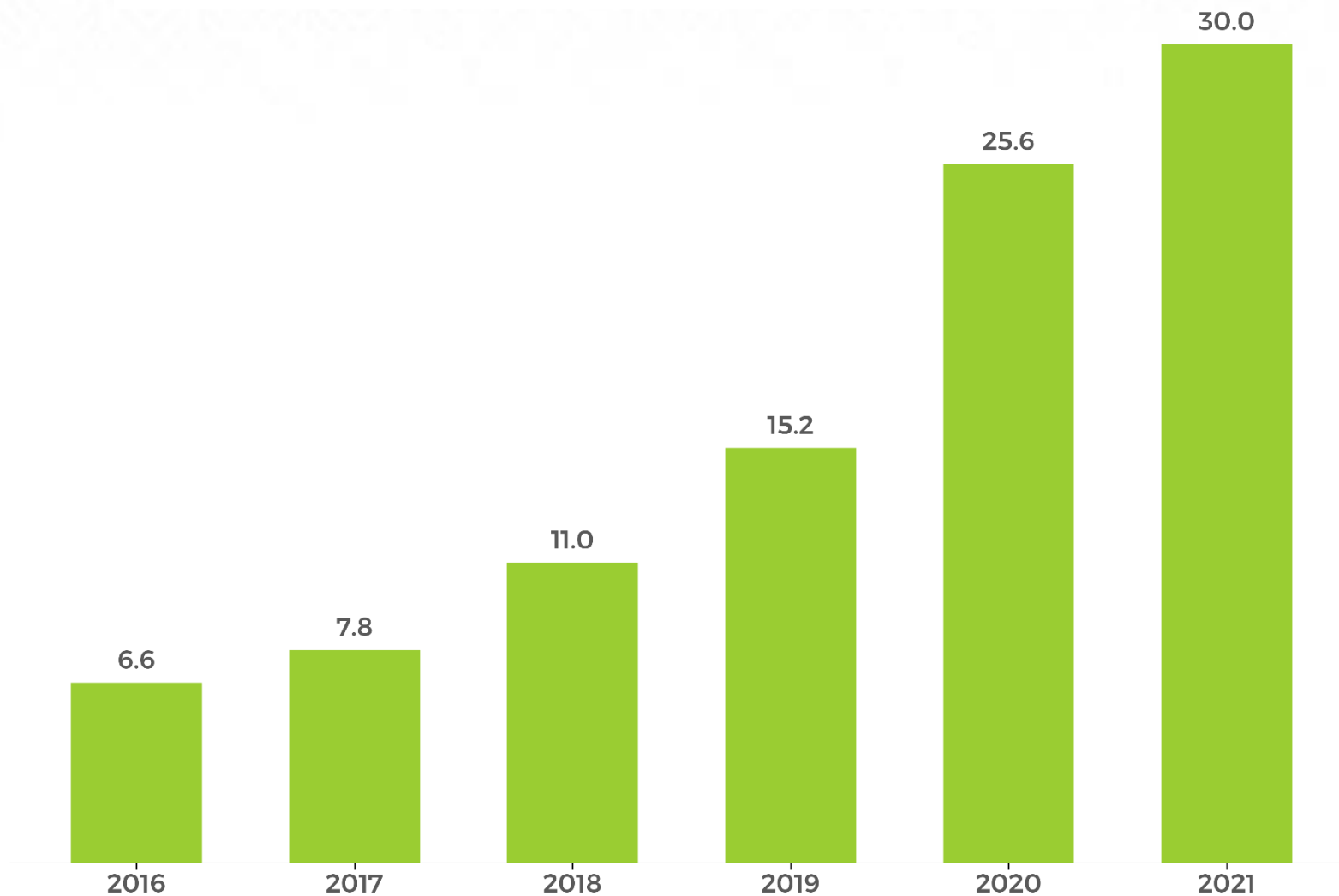
\* Consists in estimates and does not include all securities regulated by CVM. Includes stocks+DR, MBS, Agrobusiness ABS, CDOs, REITs, Private Equity, CP, bank bonds and corporate bonds (ex-leasing).

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 (odd-lot)

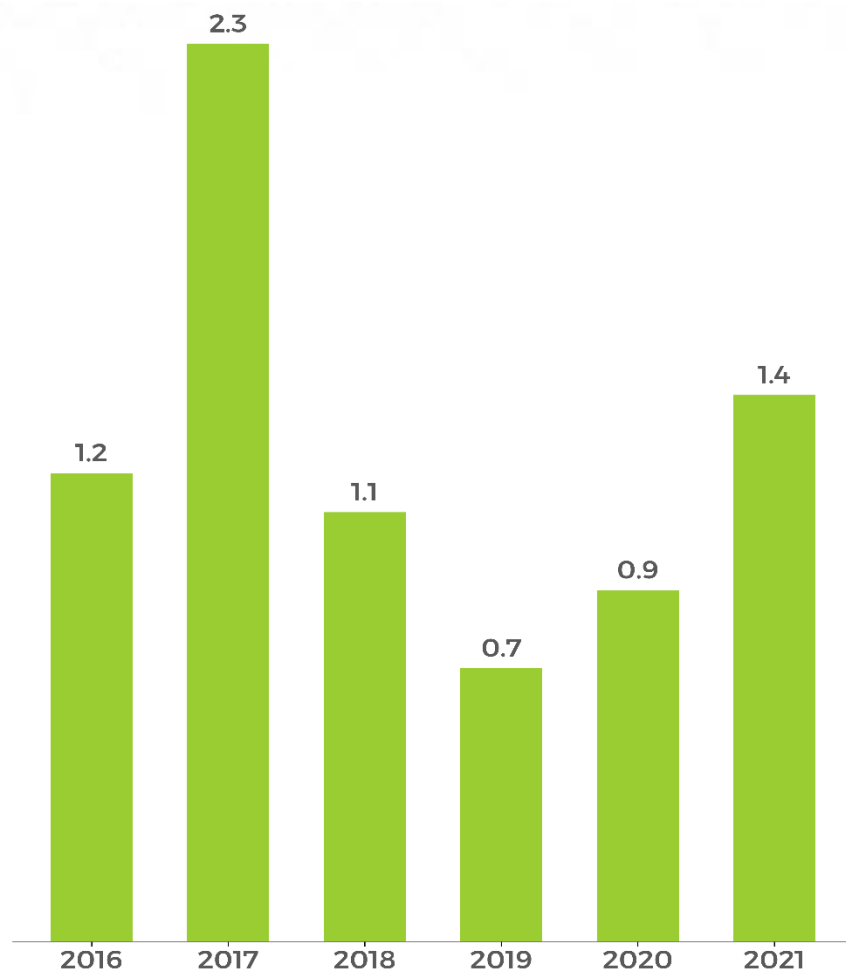


Source: B3

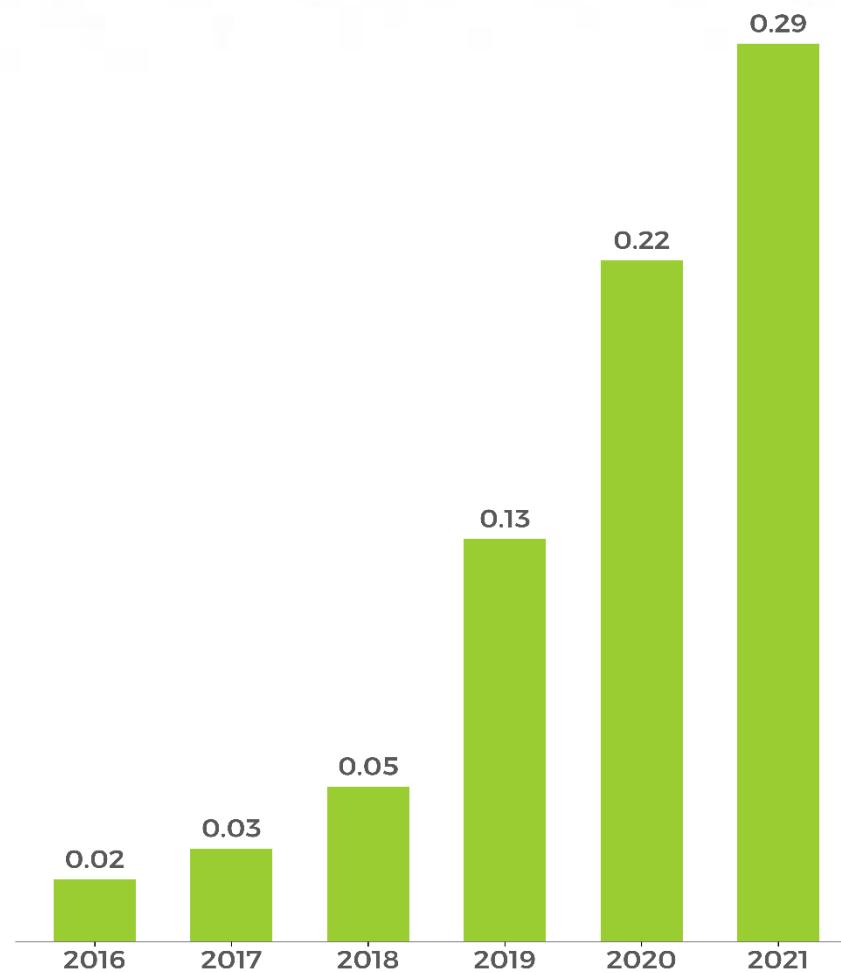
## 4. Secondary markets

### 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	2016	2017	2018	2019	2020	2021
CDI Futures	302.5	354.4	371.0	476.0	516.8	309.2
USD Futures	71.4	74.2	91.7	94.6	80.3	36.8
Ibovespa Futures	19.1	18.8	23.8	36.1	41.9	20.9
<b>TOTAL</b>	<b>393.0</b>	<b>447.4</b>	<b>486.5</b>	<b>606.7</b>	<b>639.0</b>	<b>366.9</b>

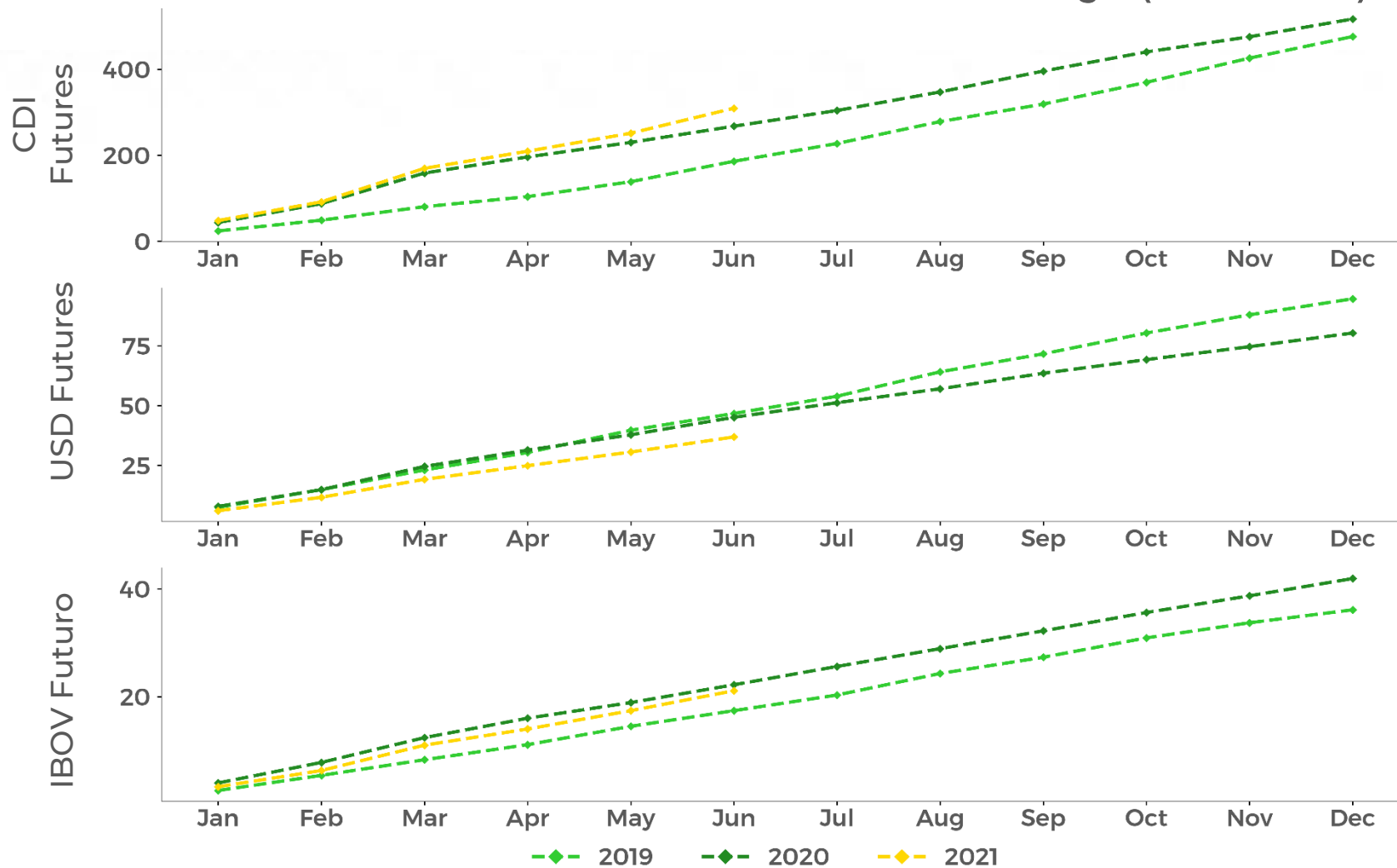
Source: Organized Market Administrators



## 4. Secondary markets

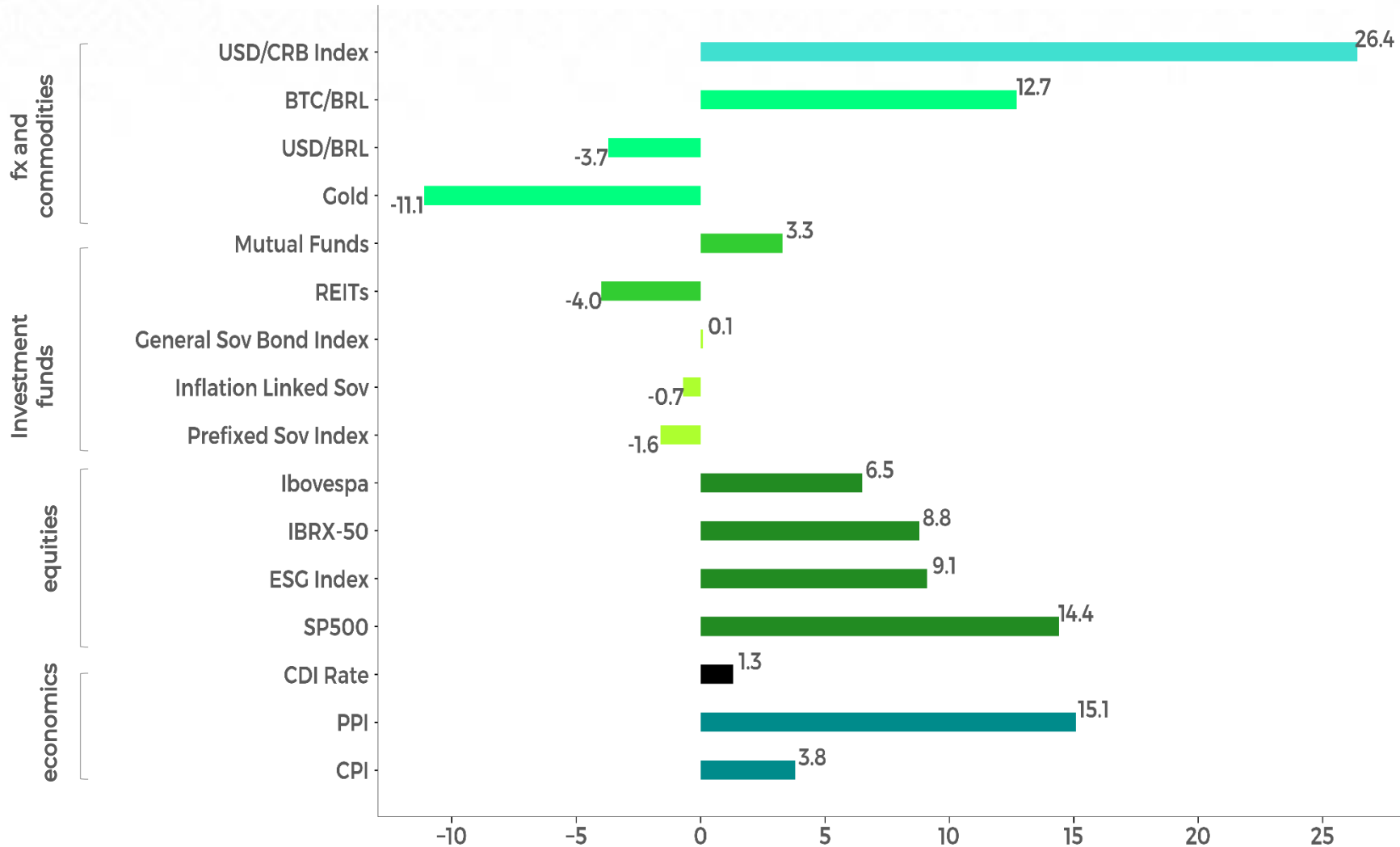
### 4.2. Derivatives

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



Source: Organized Market Administrators

## 5.1. YTD % asset returns

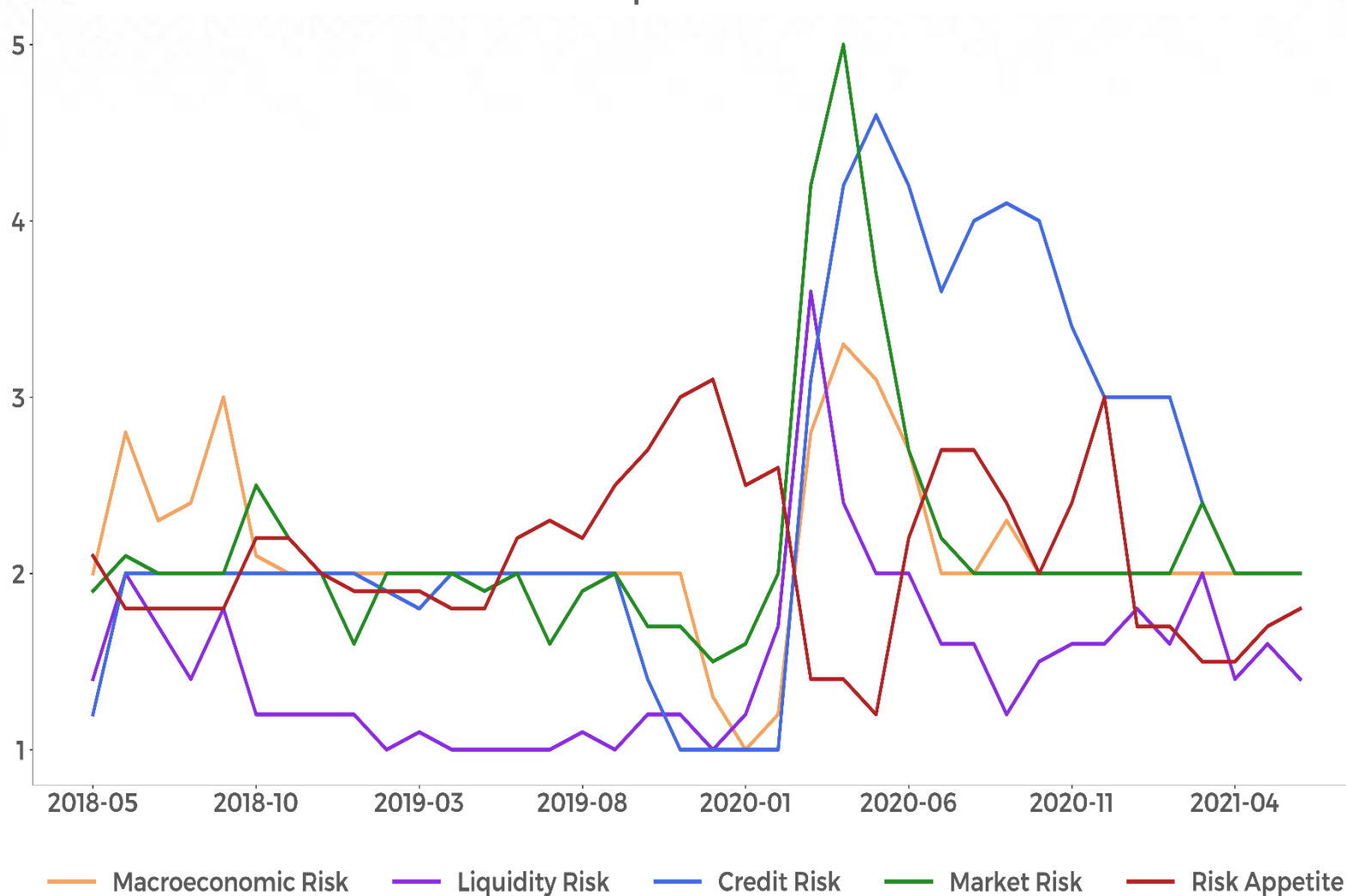


Source: Economatca, Bloomberg

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



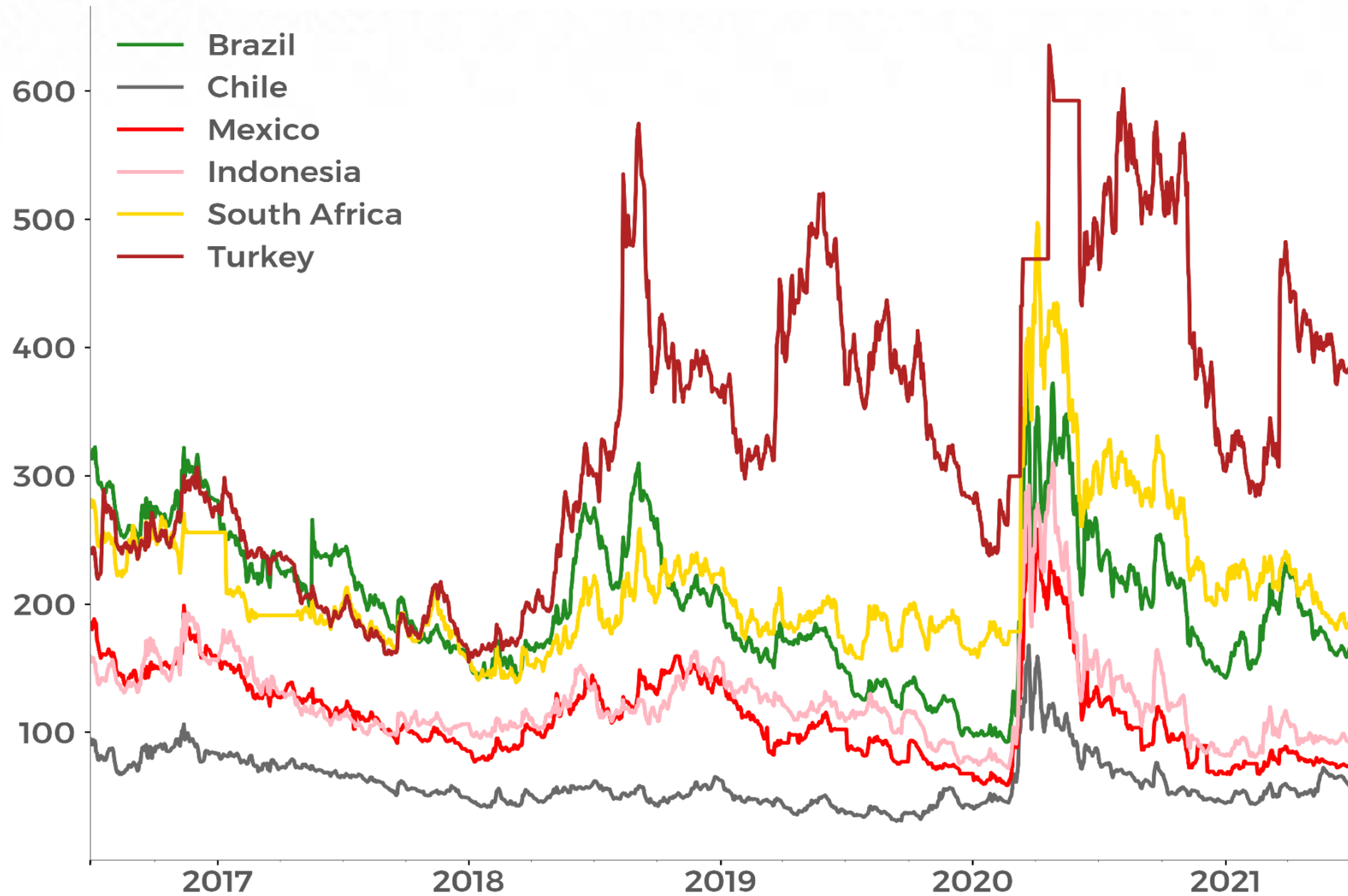
Calculated by CVM according to Methodology

## 6. Risk map - highlights

	MACRO	MARKET	LIQUIDITY	RISK APPETITE	CREDIT
2021-Q2	2.0	 2.0	 1.4	 1.8	 2.0
2021-Q1	2.0	2.4	2.0	1.5	2.4

- Falling indicators for credit, market and liquidity risks.
- Falling Sovereign CDS (7.3) and USD sovereign yield spreads (9.2).
- Last quarter: positive net foreign inflows on the secondary market for equities (10.2)
- Brazilian equities have decoupled in what amounts the risk appetite in equities markets (9.1). In this sense, a more detailed look shows that future profit expectations have rebounded faster than asset prices. The subcomponent related to the sovereign yield spread (9.2) was the one that drove higher the change in the risk appetite indicator for the quarter.
- Expressive performance for the IMA-B and IBOVESPA indexes, correlated with higher long term inflation expectations in Brazil (8.5 e 8.7). On its turn, the rise in the volatility of the IFIX index can be attributed to the announcement of a new tax reform that may impact REITs.

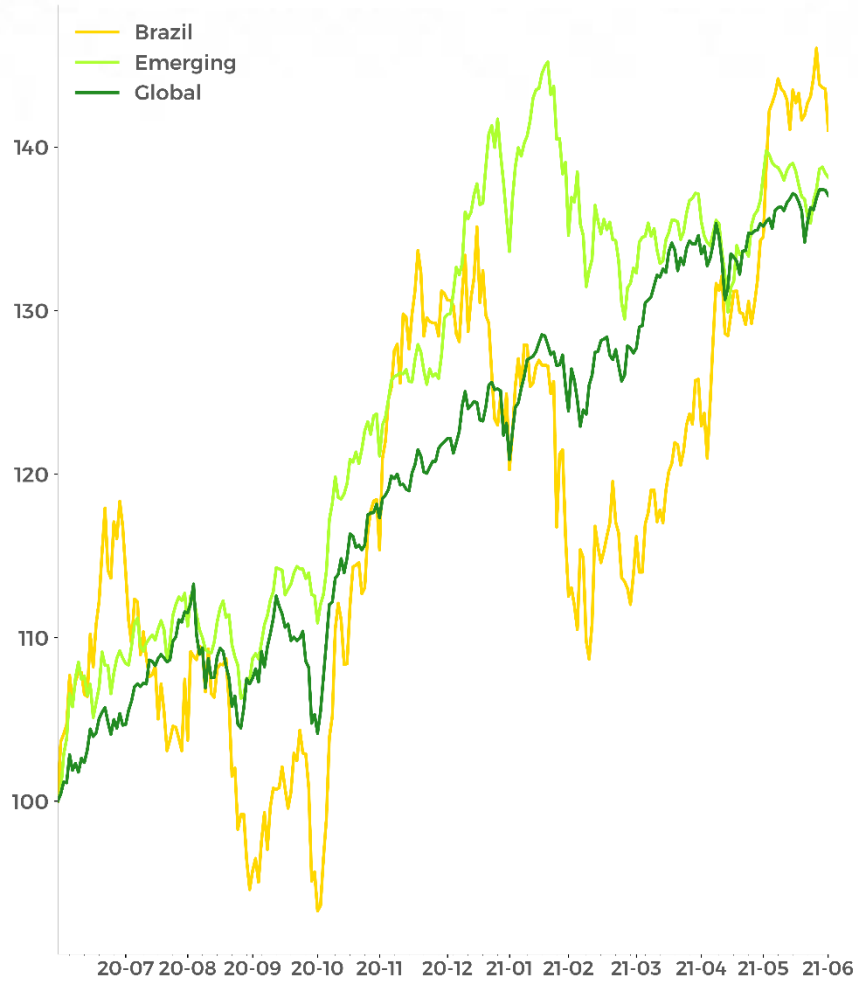
### 7.1. Sovereign CDS – emerging economies (basis points)



Source: Bloomberg

## 8. Market risk

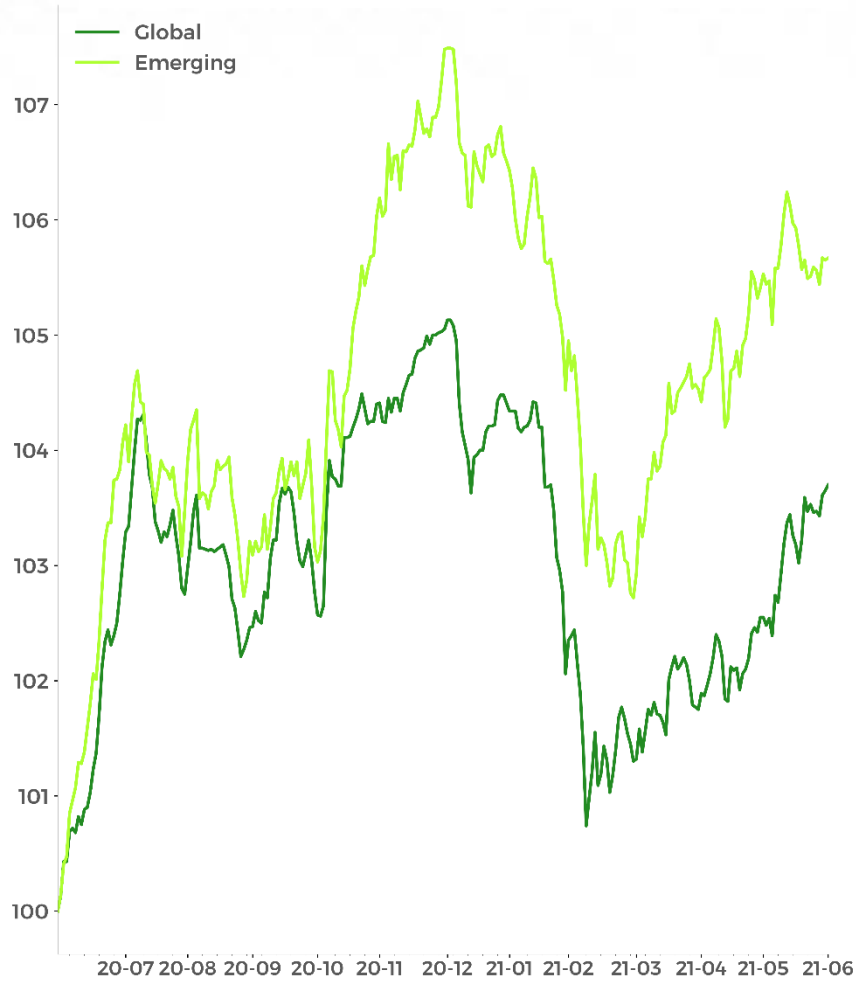
### 8.1. MSCI equity indexes – last 12 months return



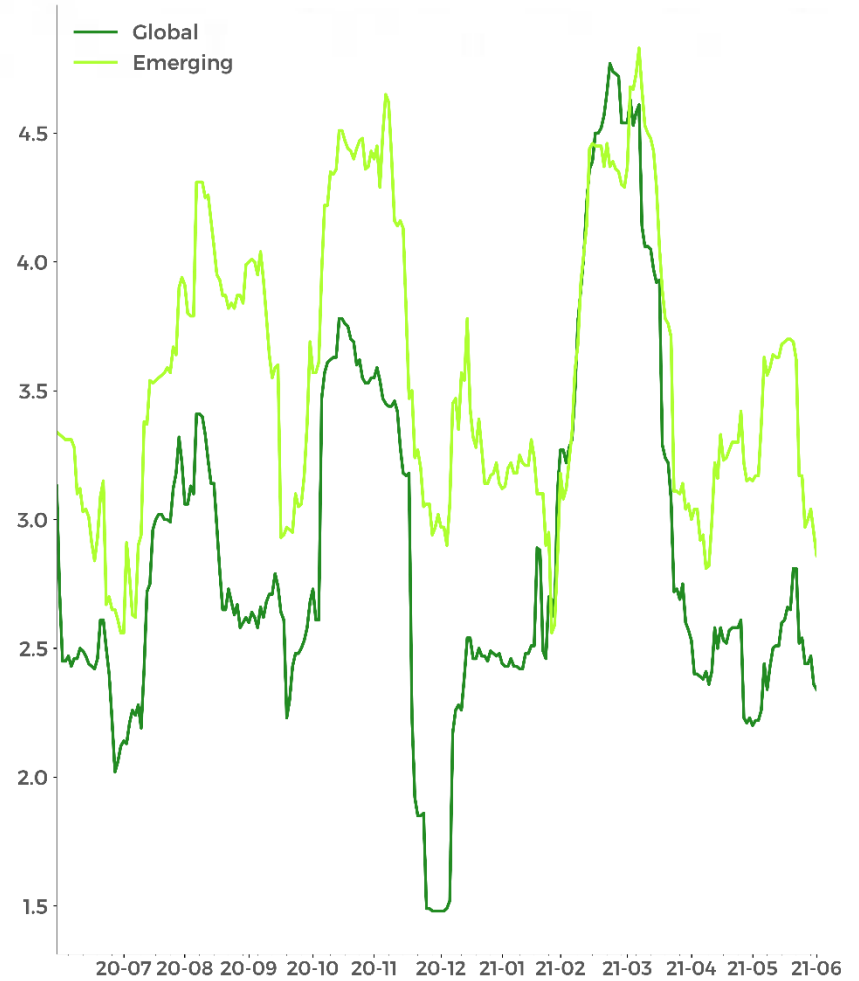
### 8.2. MSCI equity indexes – volatility



### 8.3. Corporate bond indexes – last 12 months return



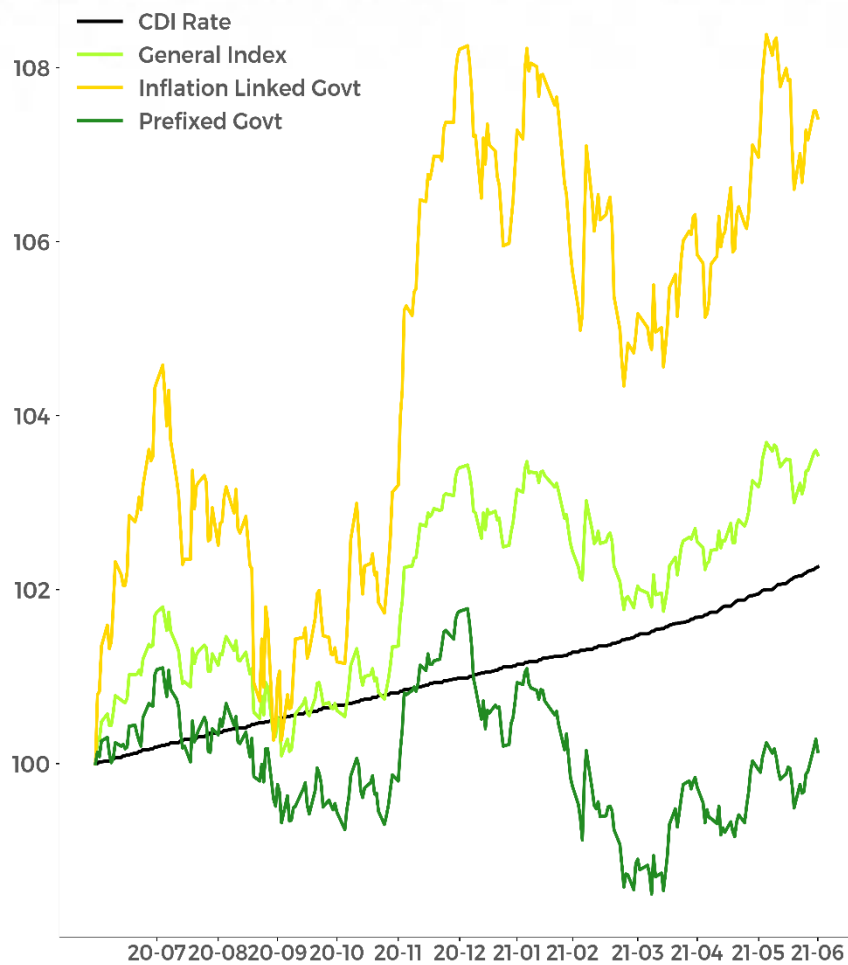
### 8.4. Corporate bond indexes – volatility



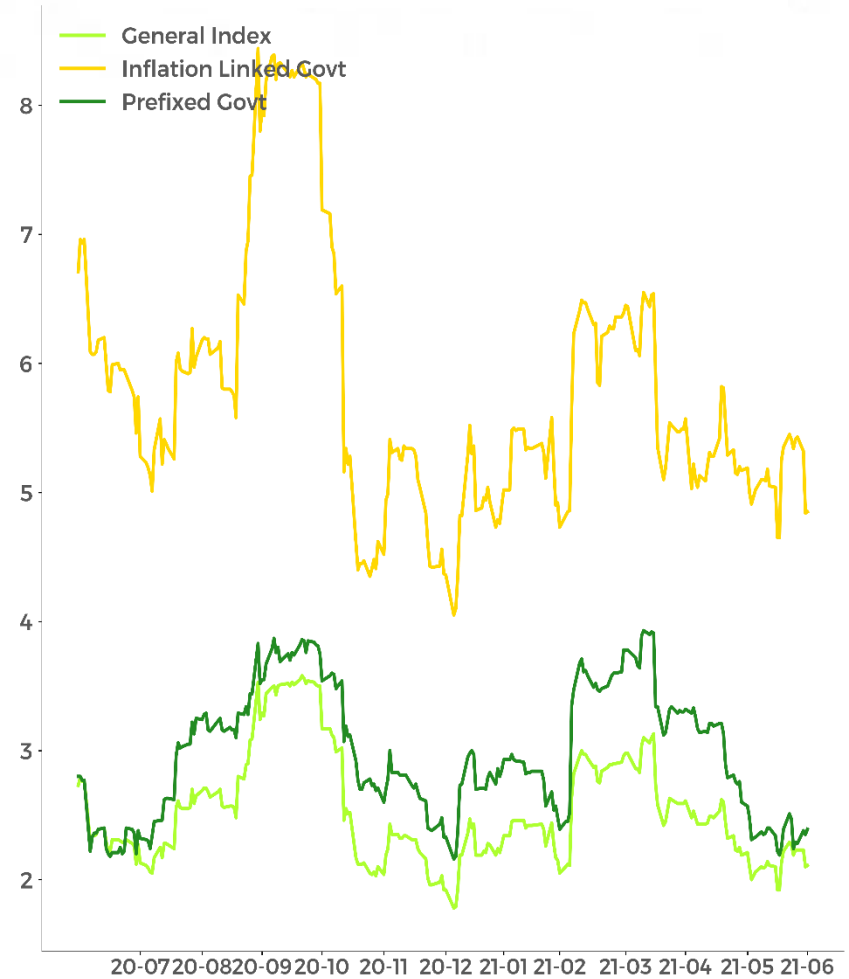


## 8. Market risk

### 8.5. National fixed income indexes – last 12 months return

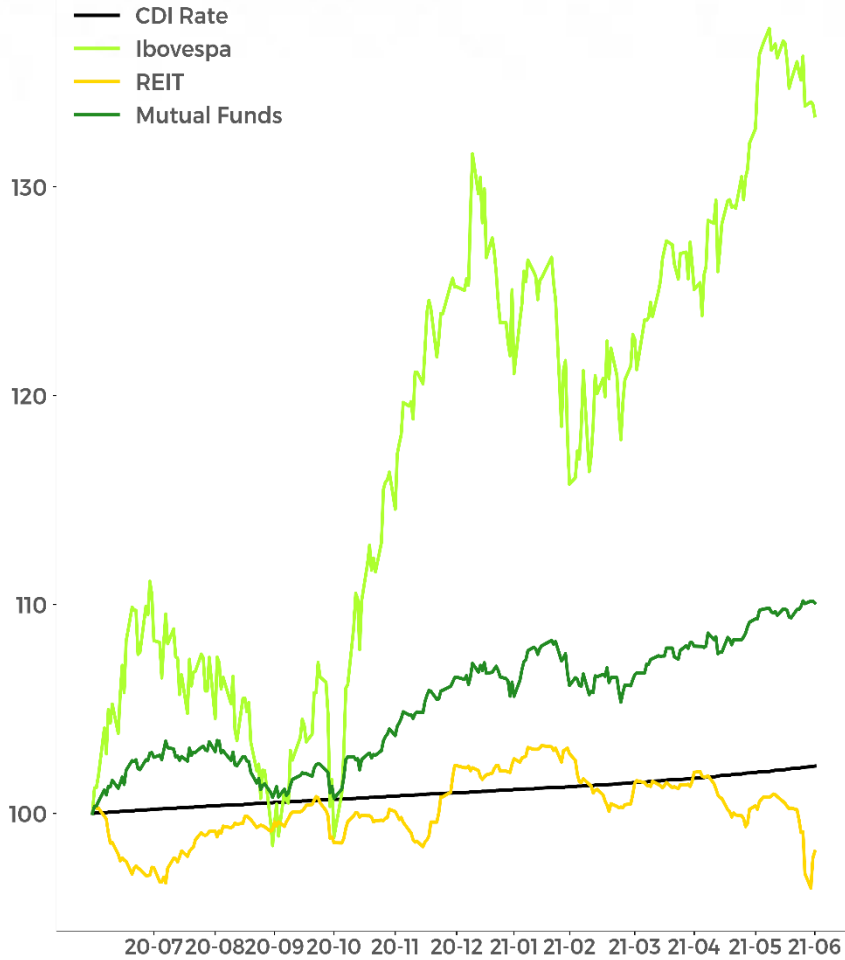


### 8.6. National fixed income indexes – volatility

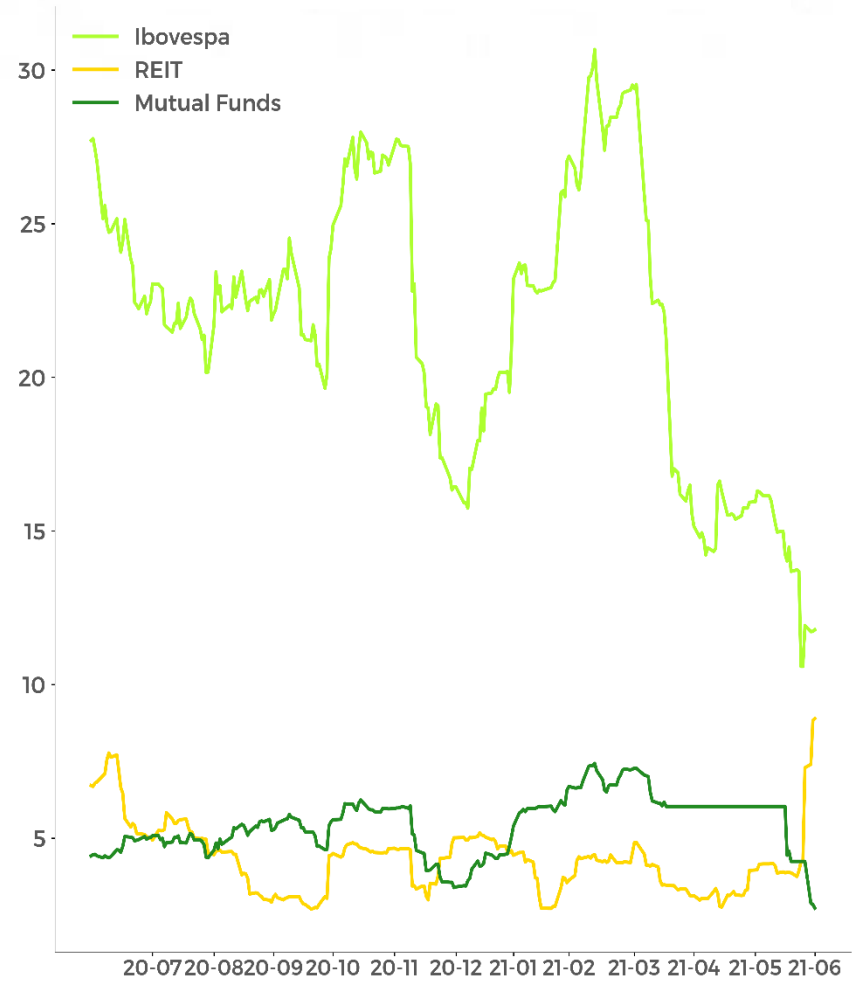


# 8. Market risk

## 8.7. National variable income indexes – last 12 months return

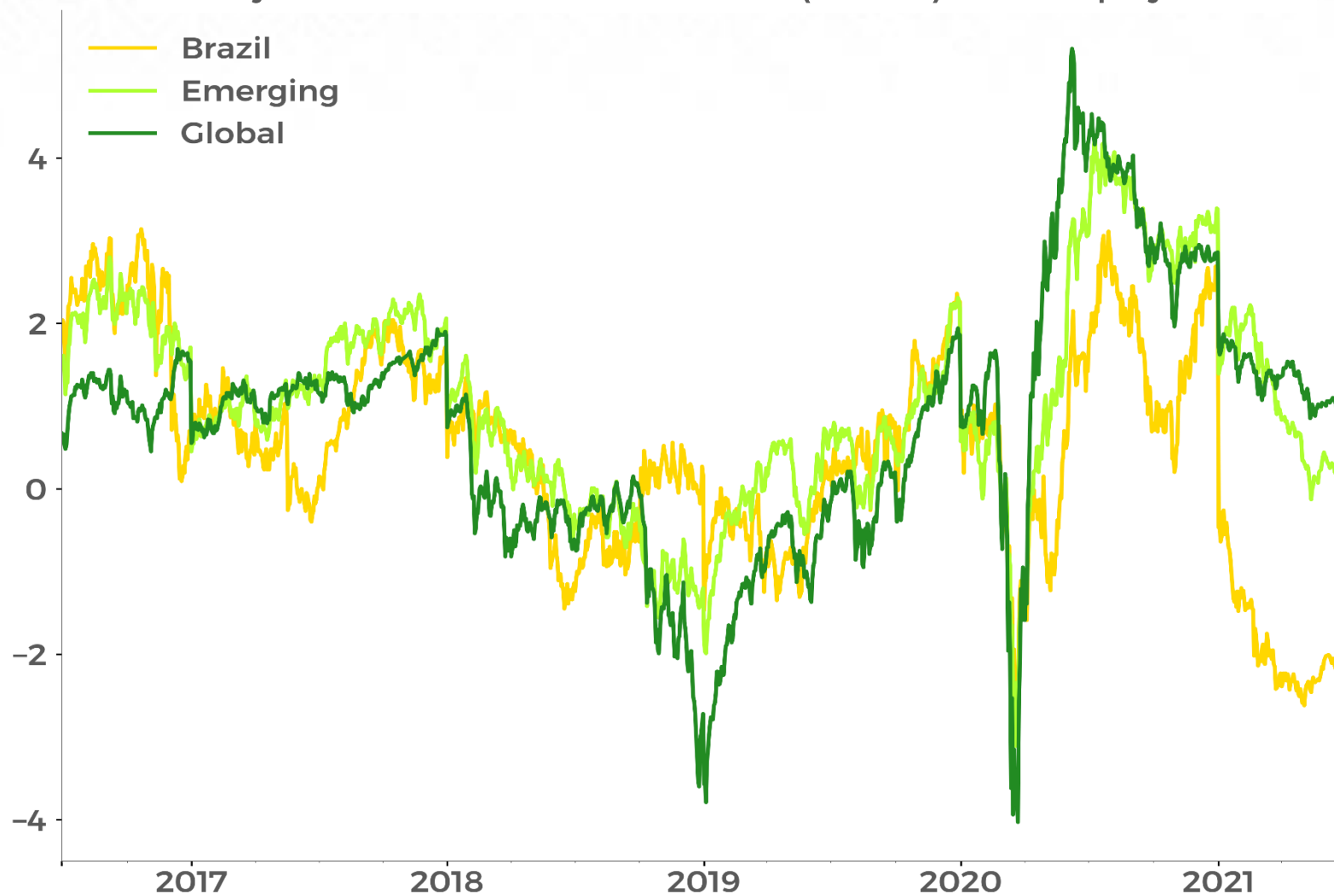


## 8.8. National variable income indexes – volatility



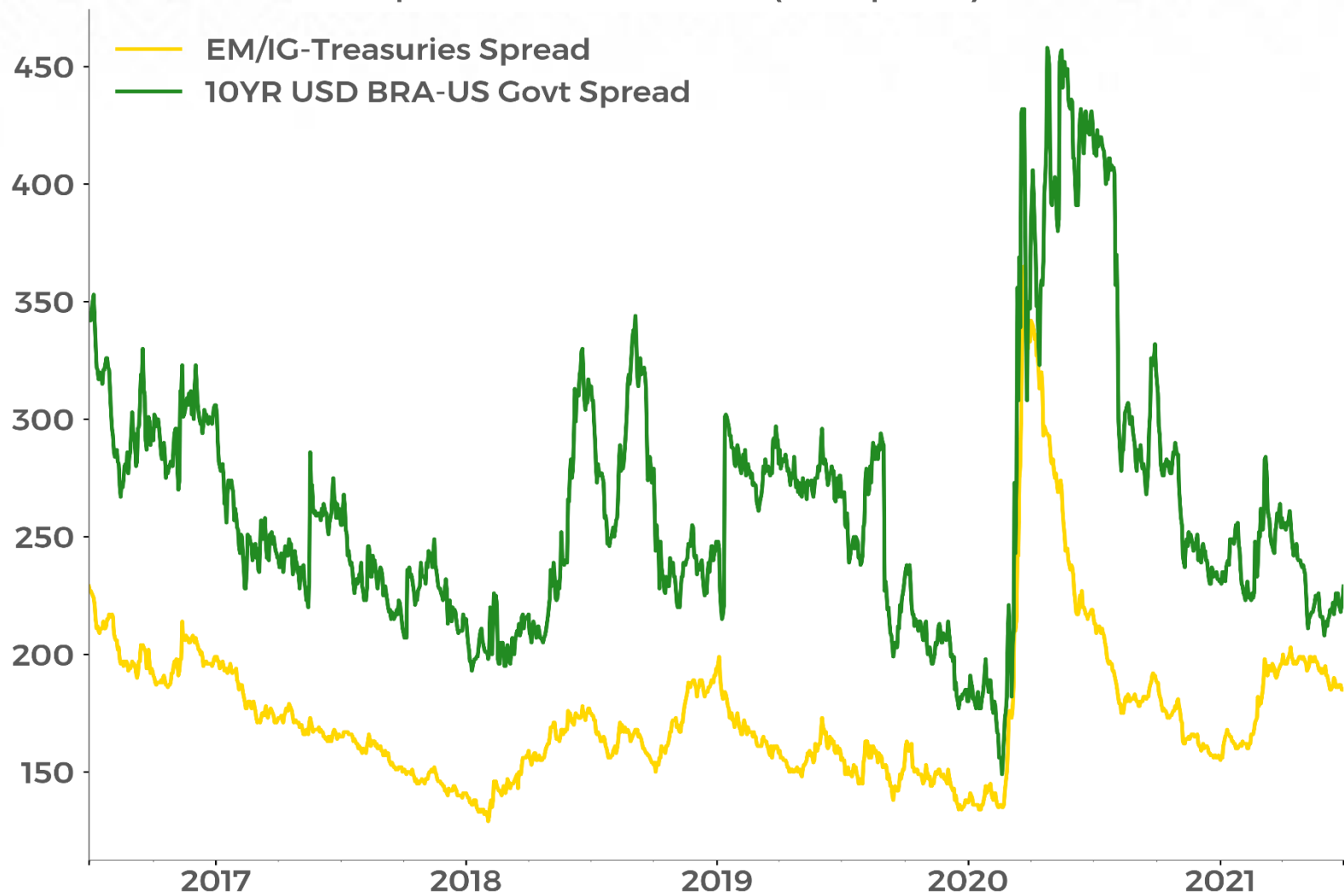
Source: Bloomberg

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



Source: Bloomberg

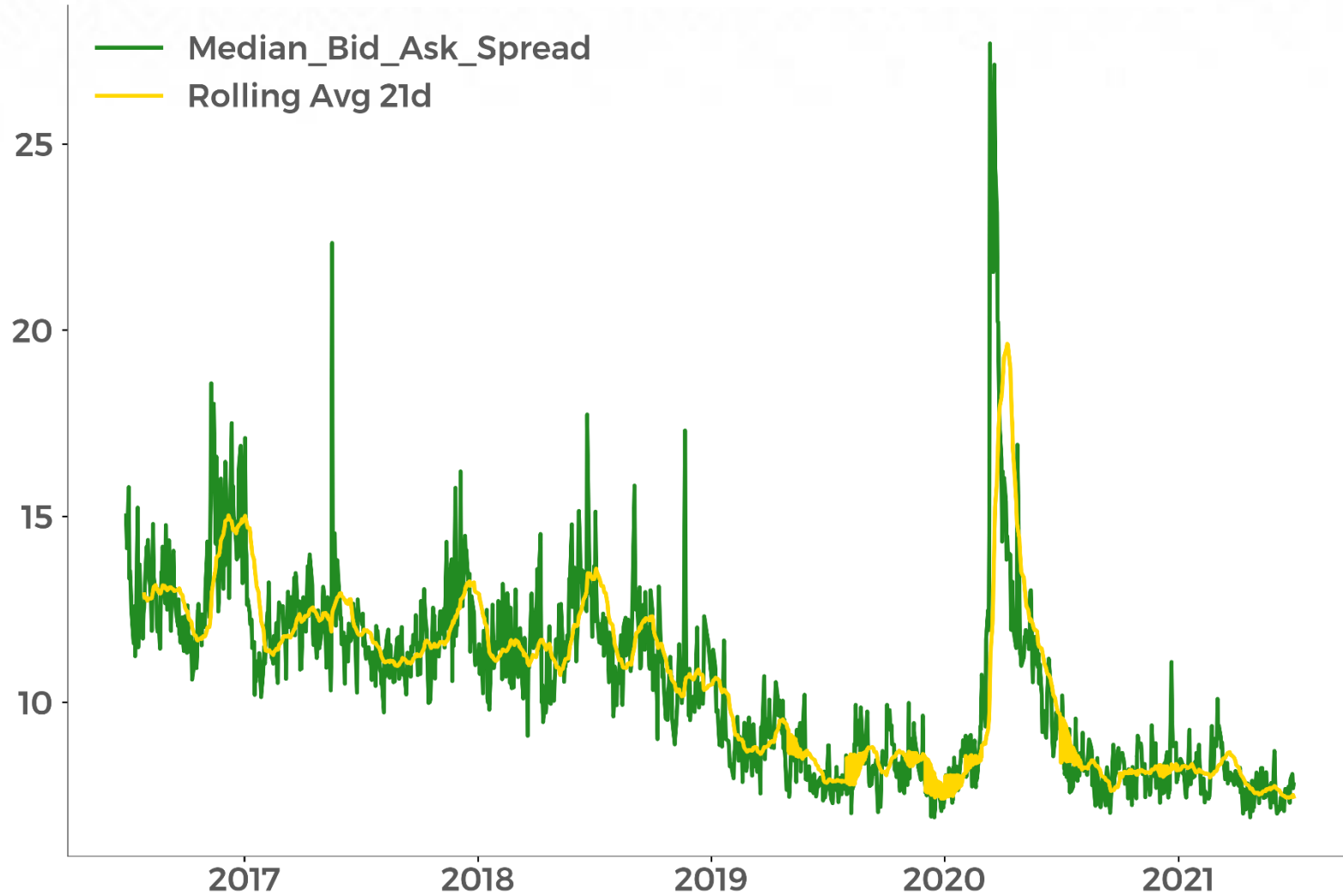
## 9.2. Spreads vs US treasuries (basis points)



Source: Bloomberg

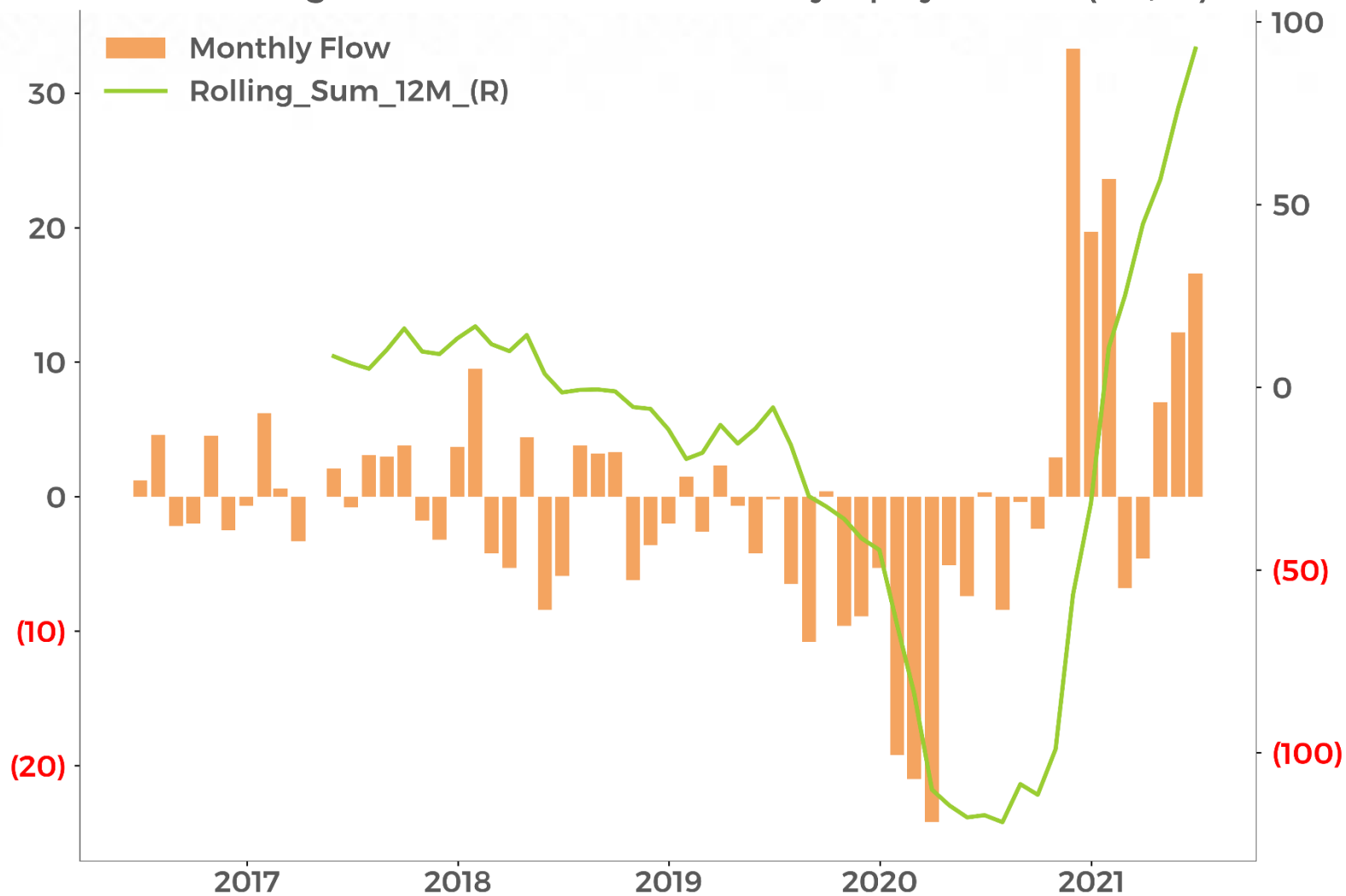
# 10. Liquidity risk

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



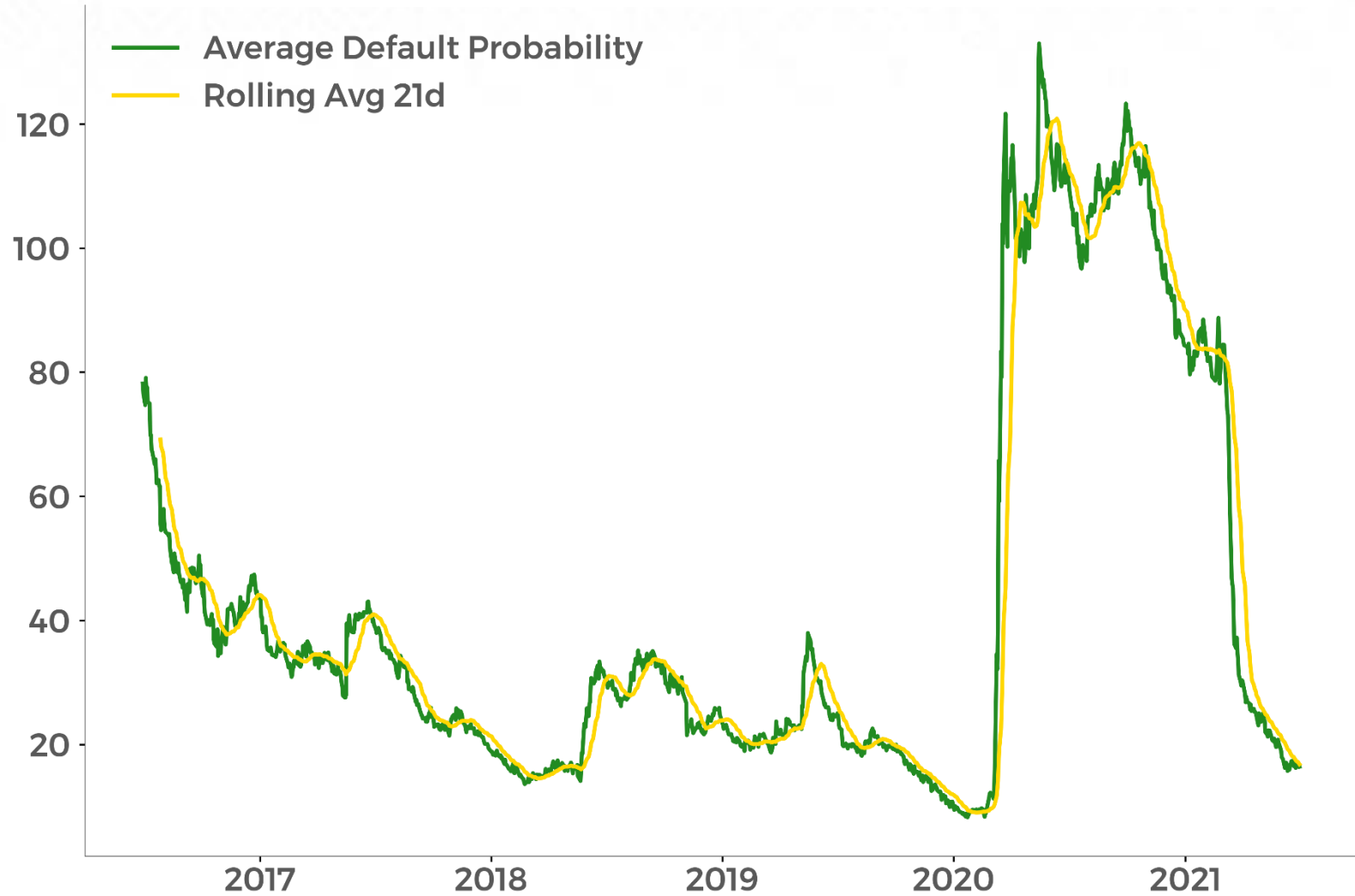
Source: Bloomberg

## 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.