



Liquidity measures and market responses in the way to recovery

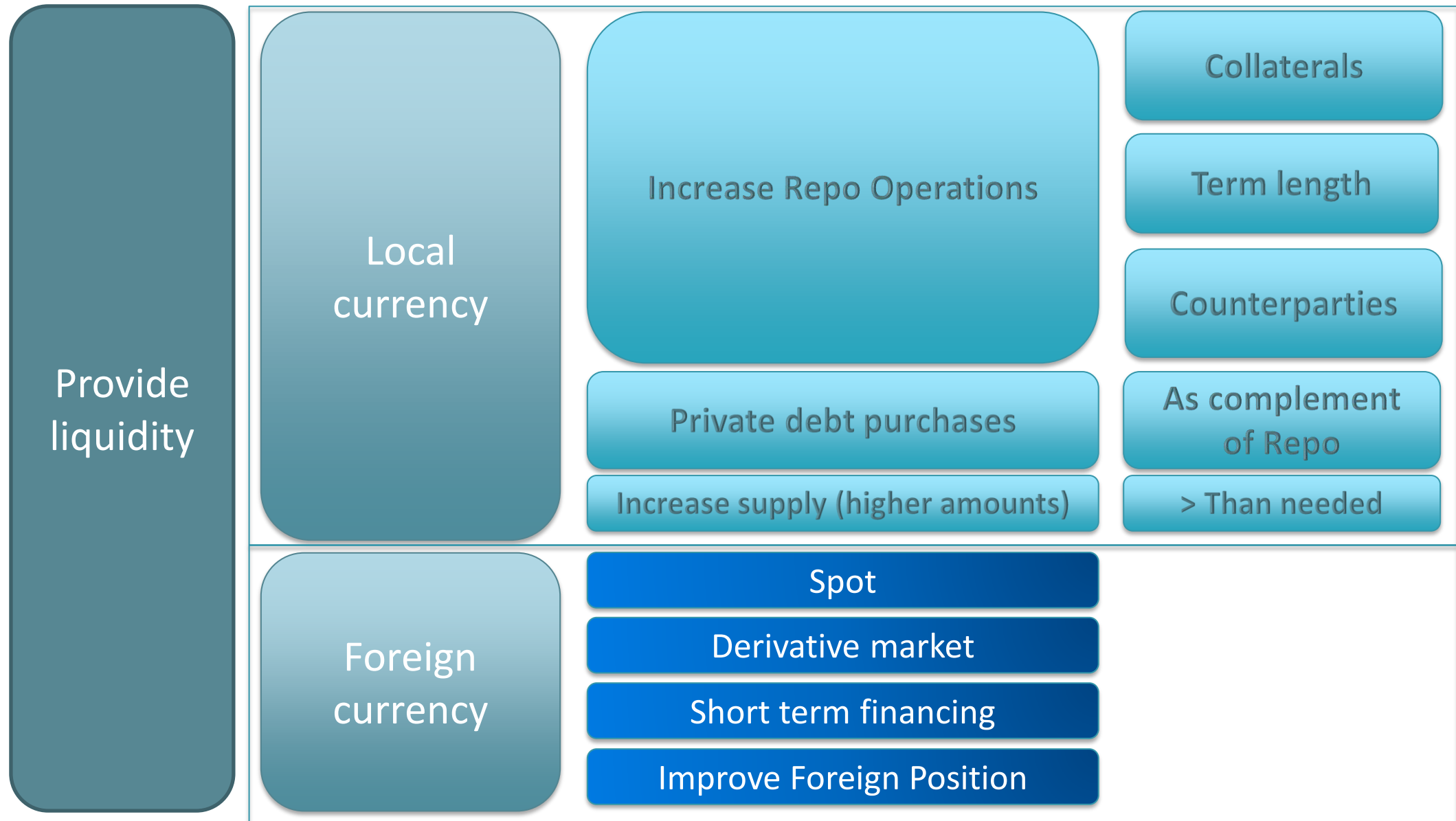
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July 2021

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As response to the economic crisis resulting from COVID-19, Banrep started using several resources and tools pursuing the following:

- Rapid response with significant impact
- Encourage credit dynamics
- Improve confidence
- Ensure liquidity
- Support growth and economic activity
- Provide support for an adequate functioning in:
 - Payment System
 - Foreign Exchange Market
 - Fixed Income Market
 - Credit Market

Several measures were implemented to achieve the former goals. The central bank worked in three main dimensions.



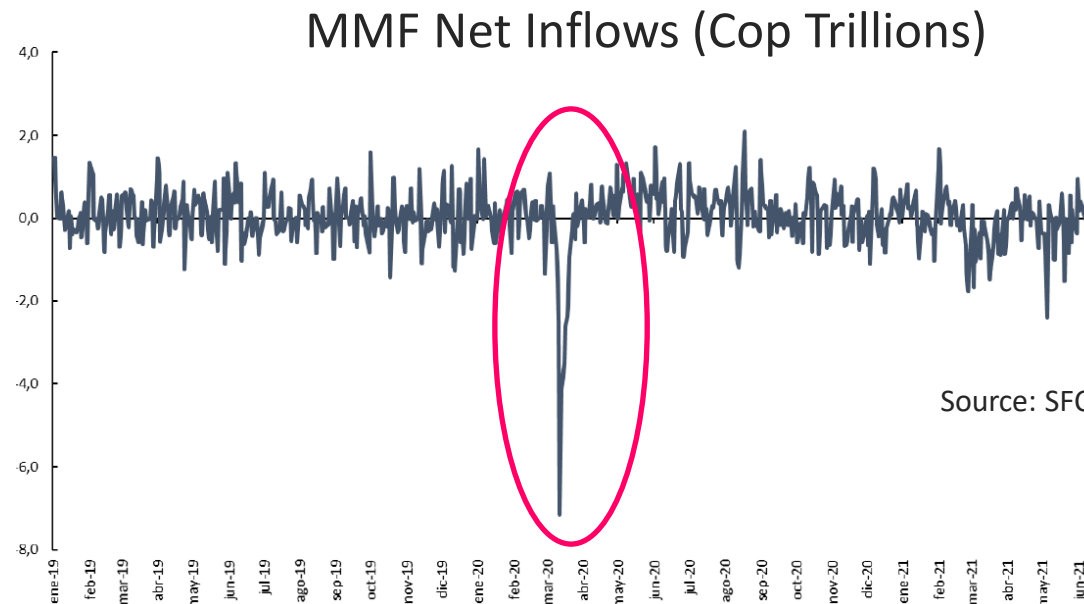
New Collaterals

- By Law, only public debt 1999-July 15,2009.
- From July 2009 any collateral authorized by the Board... but the CB continued to use only public debt.
- In 2012 CB began repos at reference rate with authorized broker dealers using private debt. This in response to collapse of major broker.
 - This decision, in conjunction with actions from the MoF and the Supervisor, calmed the markets.
 - The use of those repos was scarce (0.27%).
 - It was announced as a temporary instrument. Opened from Nov 2012-March 2013.
- During the taper tantrum, MMF experienced outflows. The CB was pressed to open repo with private debt, but it didn't.
 - Since then, the CB monitors outflows from MMF... but with a lag.
 - MMFs must comply now with a liquidity requirement.

New Collaterals

- Private debt (CDs, Bonds). A- and above rated.
- Foreign government debt. A- and above rated. Only eligible currencies.
- Loans, “A” Rated

March 12th, 2020: many alarmed calls saying that MMF were experiencing outflows, and that the CB should offer repos with private debt (MMFs have access to CB liquidity with public bonds and at a high interest rate: reference rate + 200 b.p; but their holdings are small: $\approx 5\%$) → The CB began repos with private debt at the reference rate. The system did not work, the back office was done manually. Initially, settlement took until 2 a.m. Tenor: 30- and 7-day. Longer term did not attract demand.



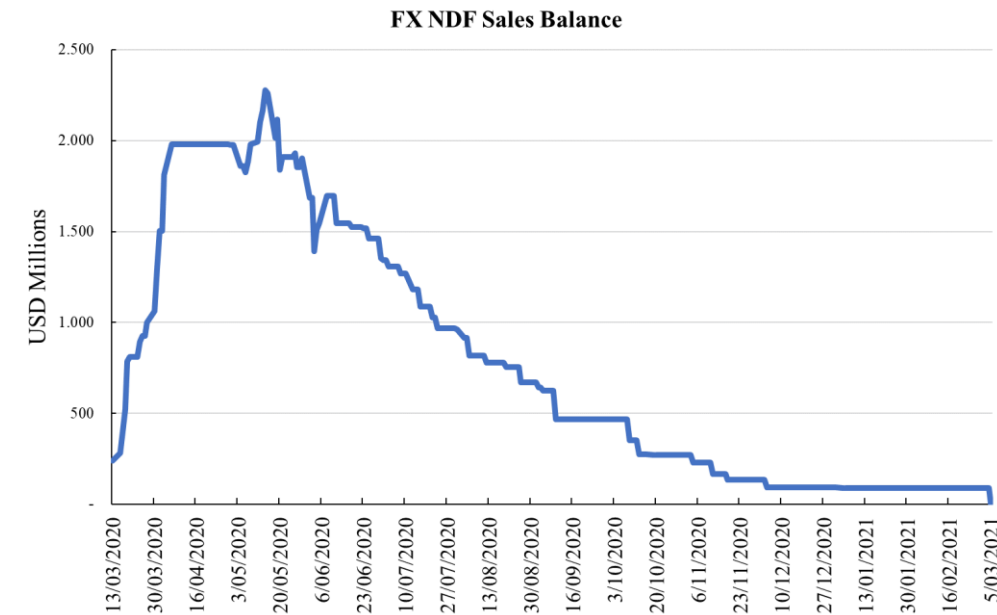
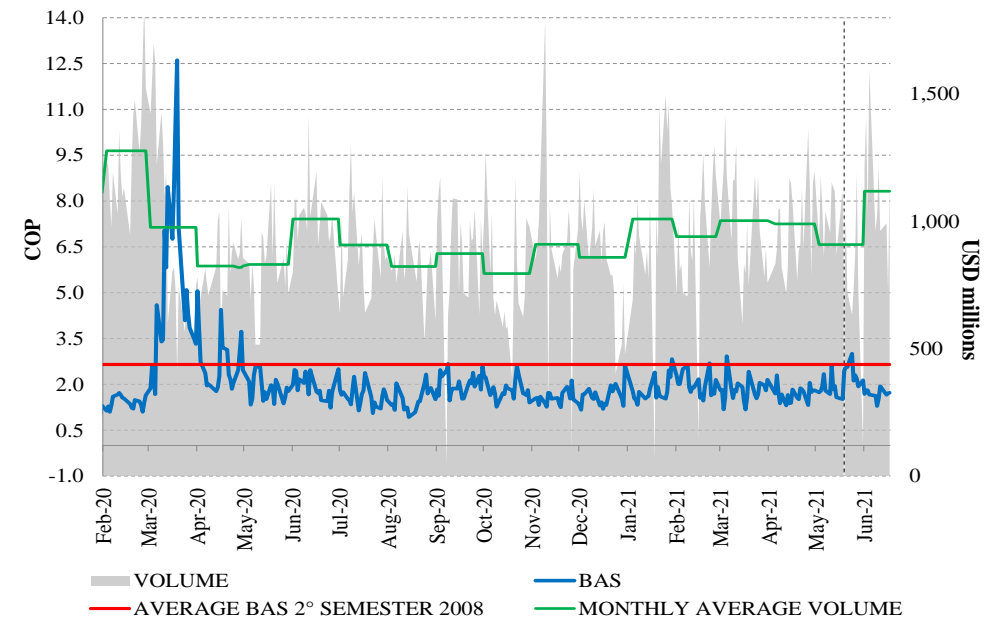
Repo counterparties

- In 2015 CB reduced the # of counterparties to promote development of interbank market
 - Repo operations (auction and the window): credit establishments and broker dealers (in its own position) that were public bond market dealers. These are the ones that transmit most the monetary policy.
 - Intraday repos with overnight conversion for the adequate functioning of the payment system (reference rate + 200 b.p): repo operations counterparties + entity types with liquidity risk (trust companies*, they manage MMFs, broker dealers*) or relevant in the payment system (pension funds*).
- Covid: the CB expanded its counterparties for repo operations.
 - Credit establishments, broker dealers, trust companies, pension funds, insurance companies, securitizers, and special public entities.

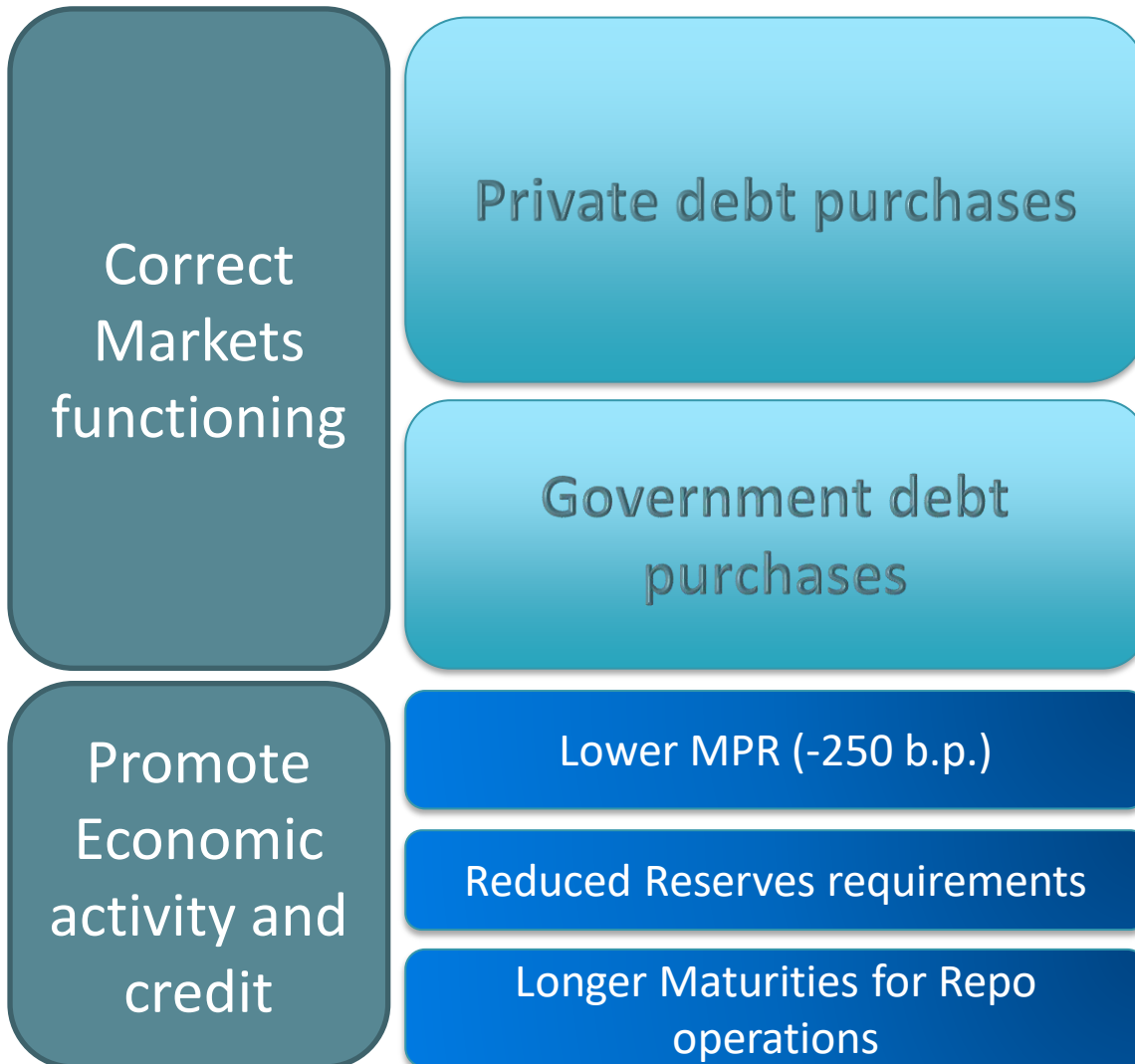
*On their own position or managed funds.

Liquidity in Foreign Currency

- March 2020: bid-ask spread and COP/USD reached their highest value
- The CB sold FX-swaps (USD 400 million) to mitigate the pressure from margin calls
 - Pension funds were authorized as counterparties.
 - Minimum price for the purchase of the USD in the future: market price
- The CB offered FX-swaps (USD 400 million) to support external credit
 - Minimum price for the purchase of the USD in the future: below market price
 - No demand
- The CB sold NDF USD 1000 million per month March-May
 - Advantage: international reserves are not affected
 - Auctioned the roll-over of the contracts until March 2021
 - Roll over demand decreased significantly.
 - Minimum forward price: market price (since May 2020; before below market price)
- The CB bought USD 3500 million from the government
 - The government sold USD from external funding and from the loan it took from the sovereign wealth fund
- In April 2020 CB had access to FIMA, however it was not used



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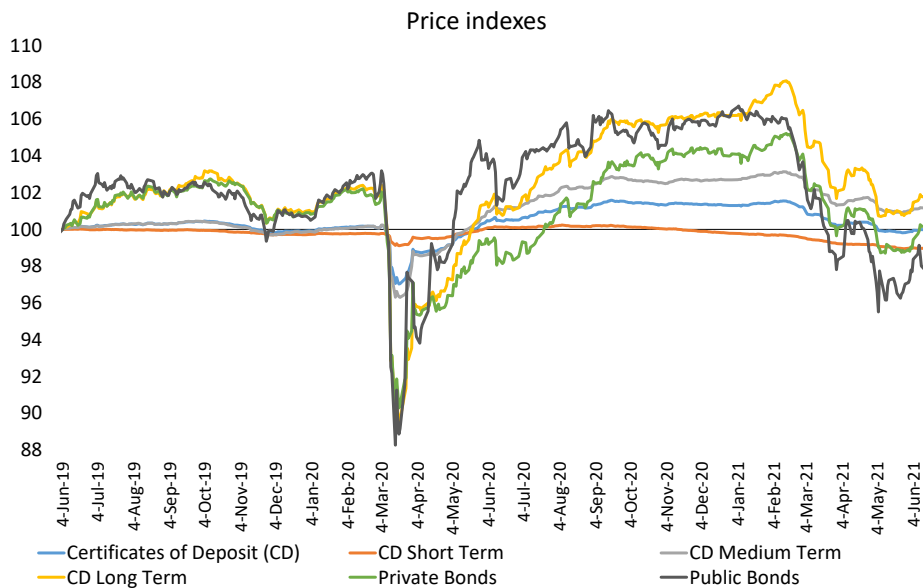
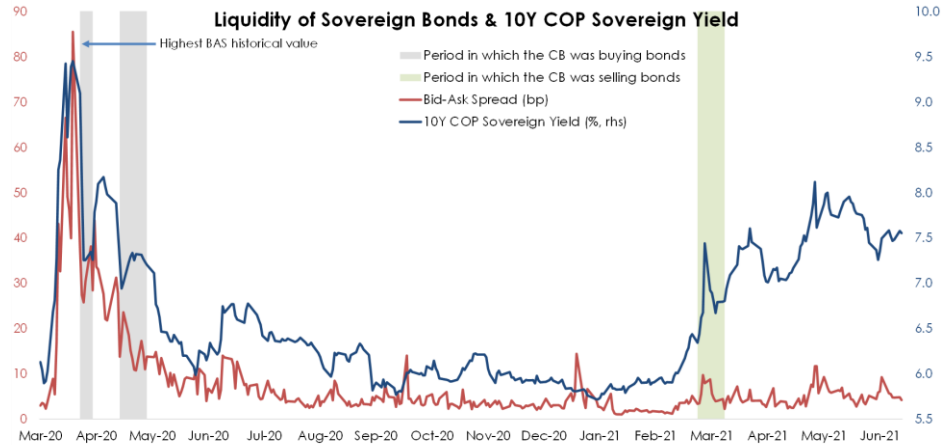


From 4,25% to 1,75%.

-2%. 7% to 5%. COP \$ 10 trillion (9.4% of the monetary base).

Using public debt (9 and 12 months) and loans (6 months)

Purchases of bonds



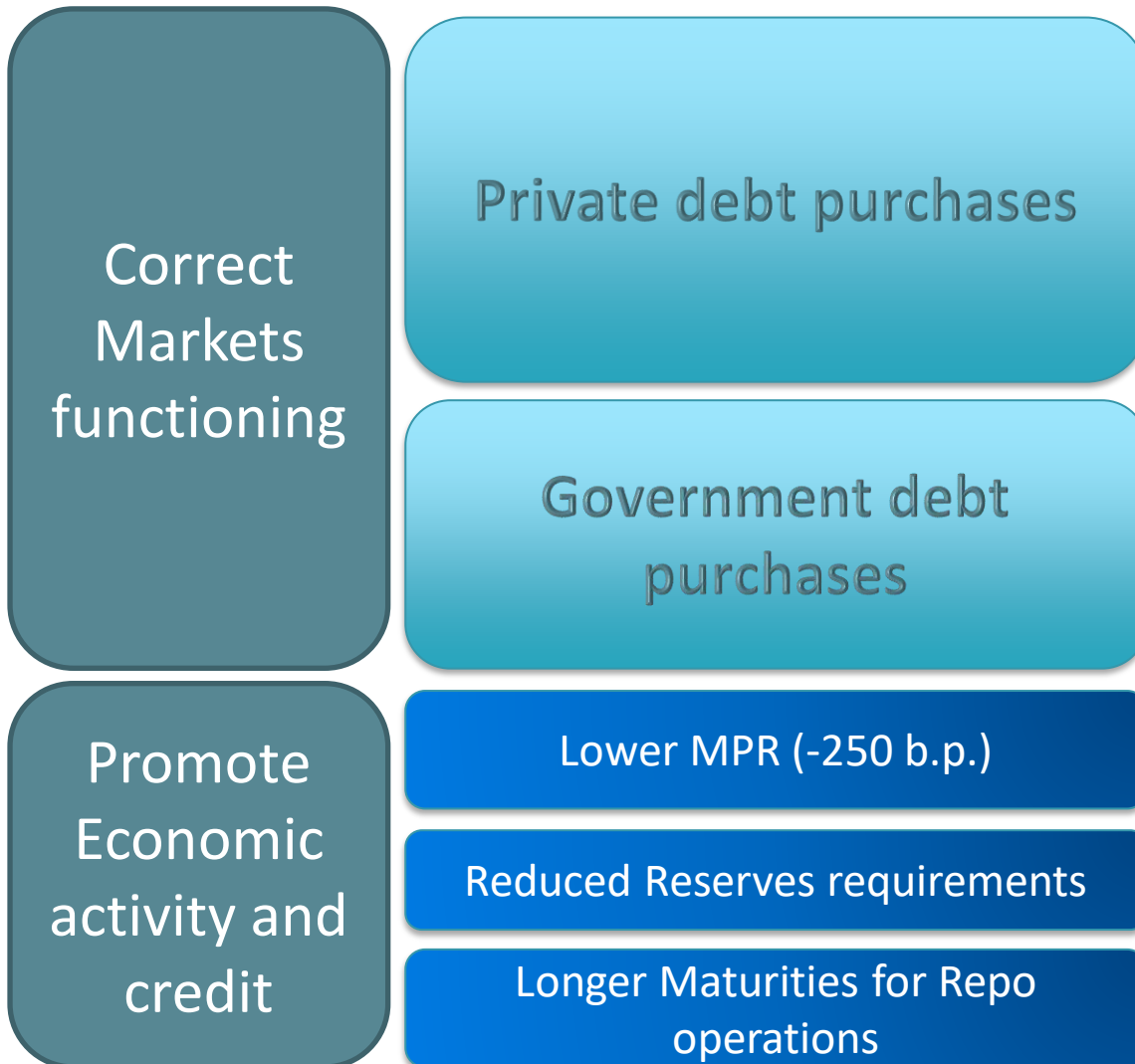
Public bonds

- The CB buys/sells when it needs to expand/contract the monetary base for a long time period.
- In March interest rates rose and liquidity disappeared.
- On March 23 and April 14, 2020 the CB announced it was going to buy COP \$2 trillion (0.6% of the stock) each month. It bought COP \$2 trillion in March, and COP \$0.8 trillion in April.
- The CB approved the “purchase” of public bonds through NDF. It has not been used. Advantage: effect on monetary base is small.
- In March and April 2021, CB sold almost 6 trillion pesos in government debt to avoid excess liquidity pushes interest rate downwards.

Private bonds

- First purchase of private bonds (certificates of deposit and bonds from credit establishments) by CB.
 - On March 23 it announced it was willing to buy COP\$10 trillion (6% of the stock; the amount of repos with private debt the CB had at that time) through auctions. The latest auctions were under-subscribed. The CB bought COP\$8,3 trillion.
 - Everything had to be done manually. At the beginning, the back offices worked on average until 1 a.m.

Several measures were implemented to achieve the former goals. The central bank worked in three dimensions.

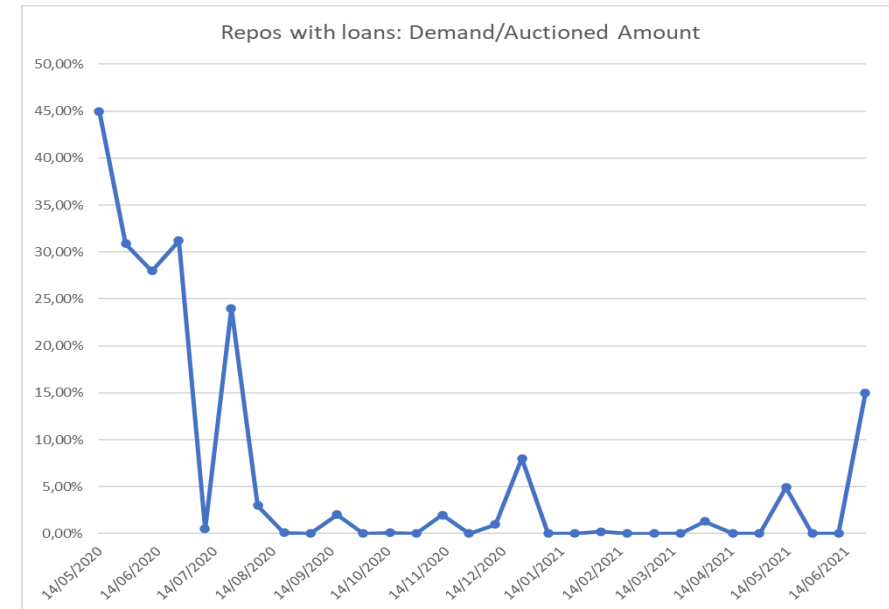
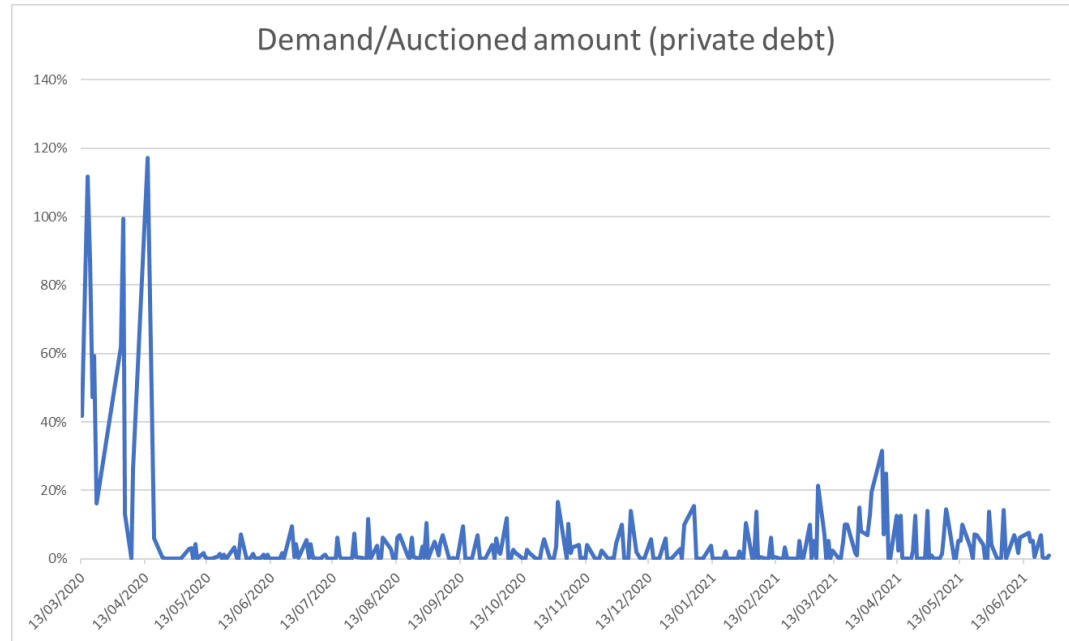


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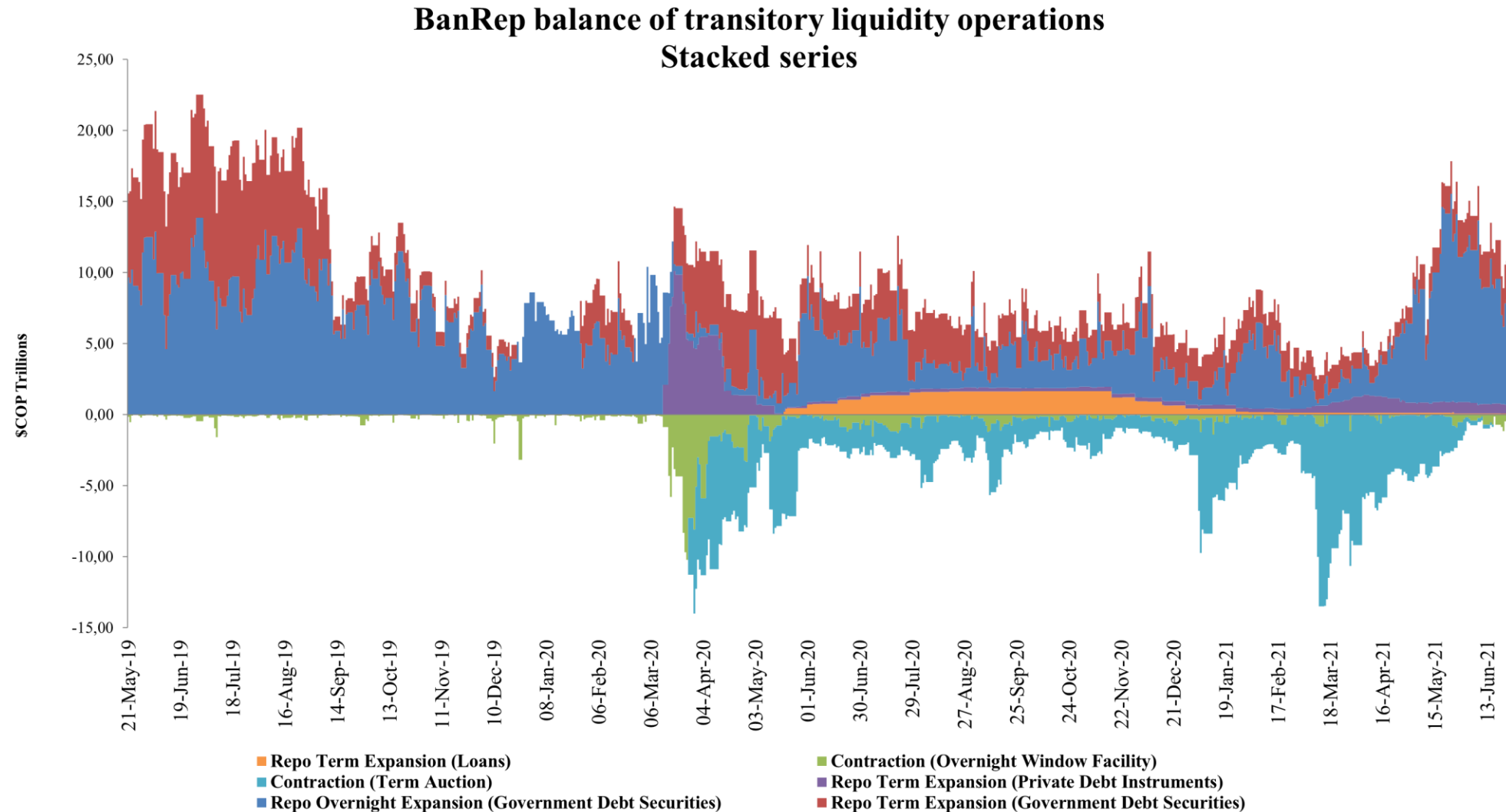
Using public debt (9 and 12 months) and loans (6 months)

Collaterals and maturities in longer term repo operations

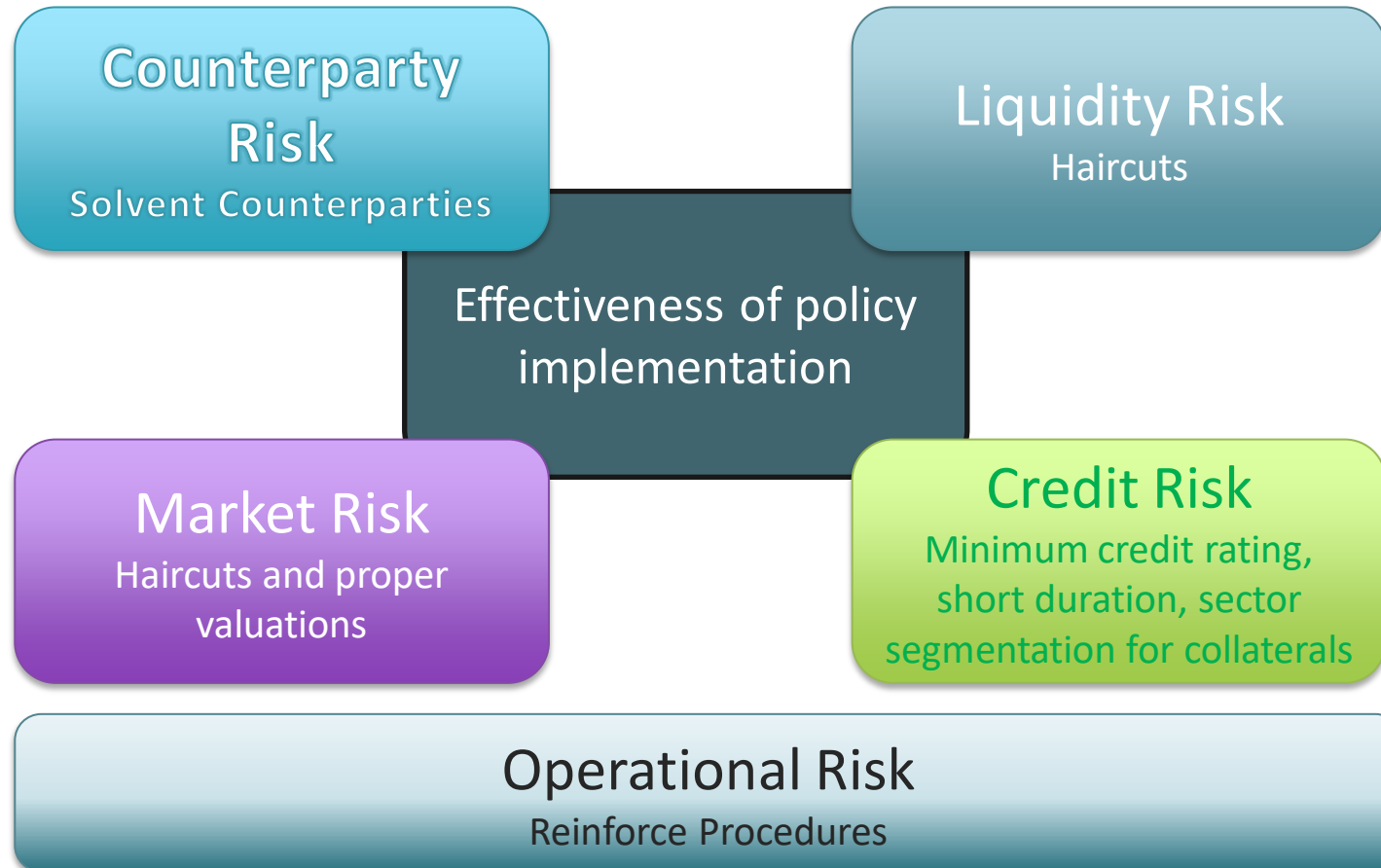


- **Repos with loans**
 - Objective: to provide support to credit
 - Began on May 14, 2020. A 3-month program was announced for COP \$6,3 trillion (estimated liquidity needed for the next 3 months under an adverse scenario, in which credit establishments did not receive interest from their loans). One auction every two weeks for COP \$1 trillion. Interest rate: reference rate + 200 b.p. Maturity: 6 months.
 - June 30: the CB announced this facility was going to be opened until needed
- **One-year and 9-month repos with public bonds**
 - Objective: to provide support to credit
 - Started in July 2020. One auction every two weeks for COP \$1 trillion at the reference rate
 - Low demand. With recent liquidity needs, demand has increased.

As part of the normalization process, the balance of operations is now like the one observed before the beginning of the pandemic



Key: Find the right balance of risks and policy implementation



Projects on structural operations, collaterals and maturities

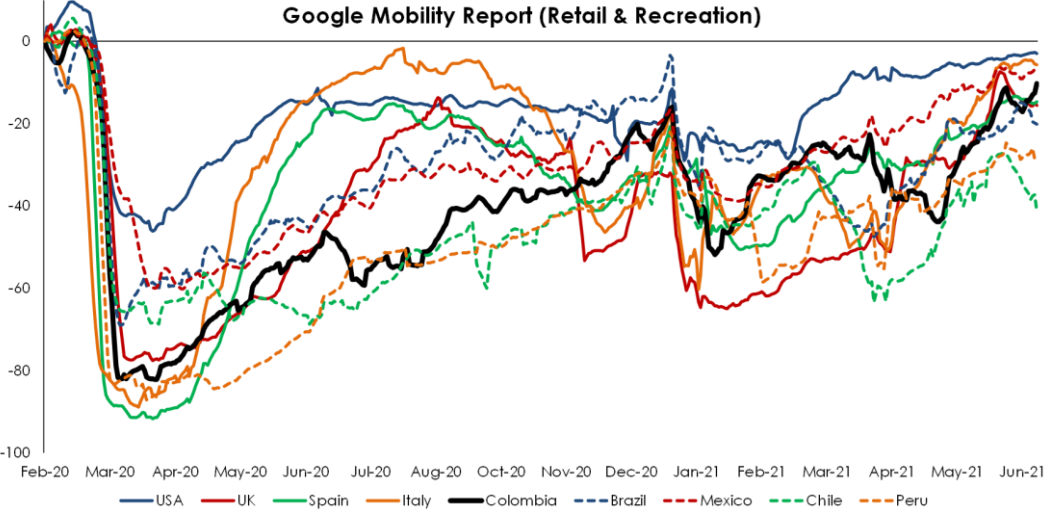
When Colombia returns to “normality” should the CB

- receive private debt as collateral, restricted to a small percentage of the repo, to help in the development of the private debt market?
- continue to do overnight repos, or should it move some of them to 7- or 14-day maturity?

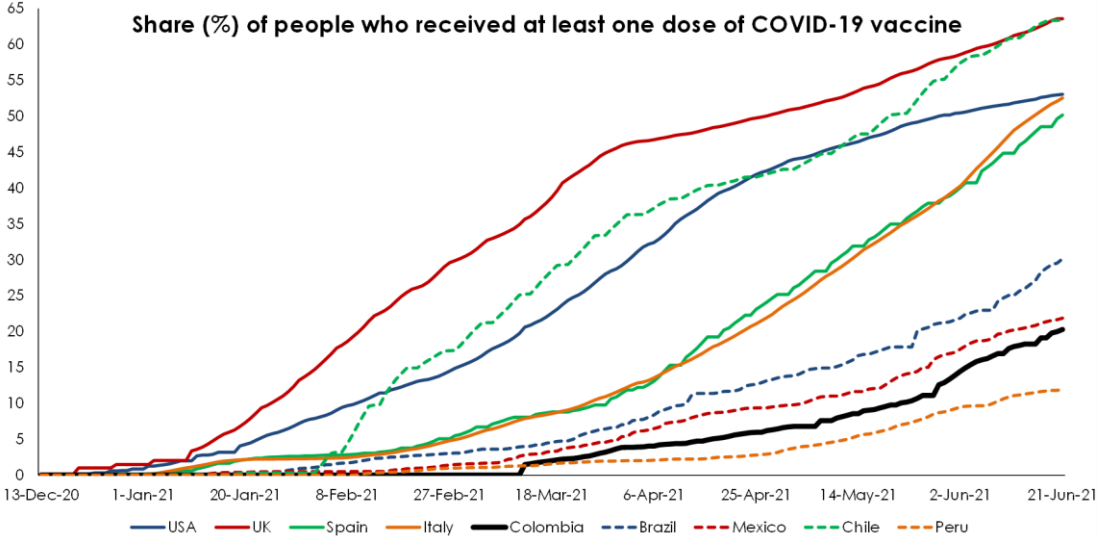


Recent market
developments reactions
(Colombia's credit rating
downgrade by S&P)

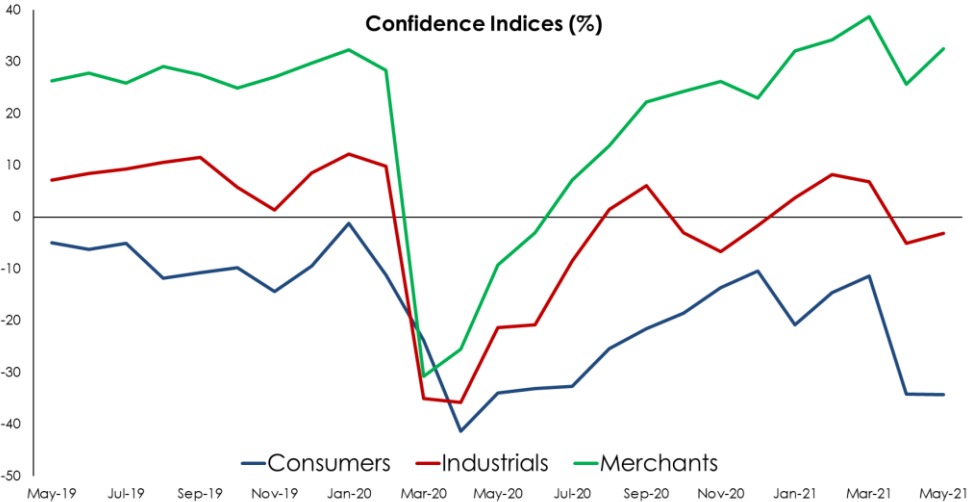
Alongside lockdowns and economic activity, confidence indices have improved, however consumer sentiment is still below pre-pandemic levels



Note: 7-Day Moving Average. Source: Google. Calculations: Banco de la República.

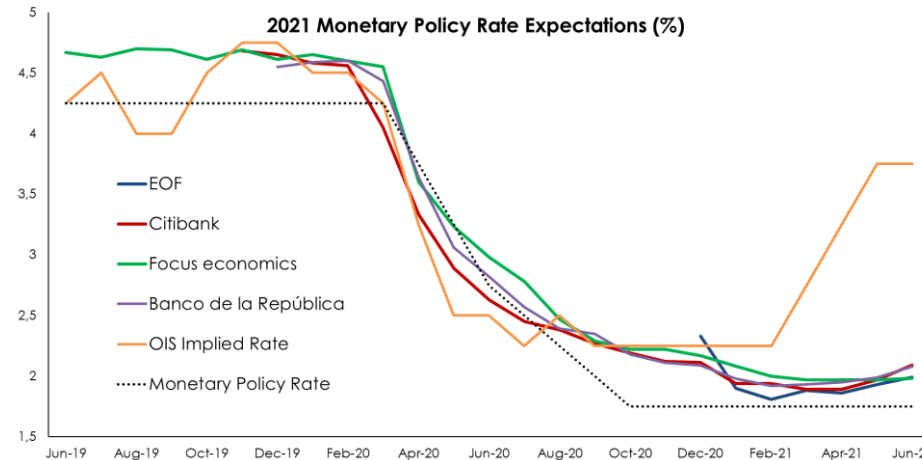
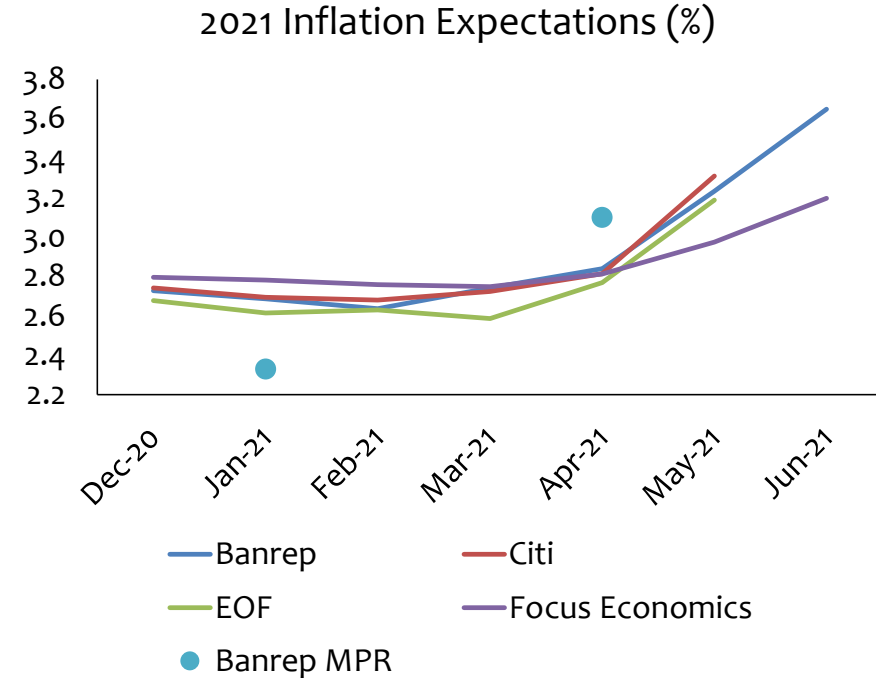
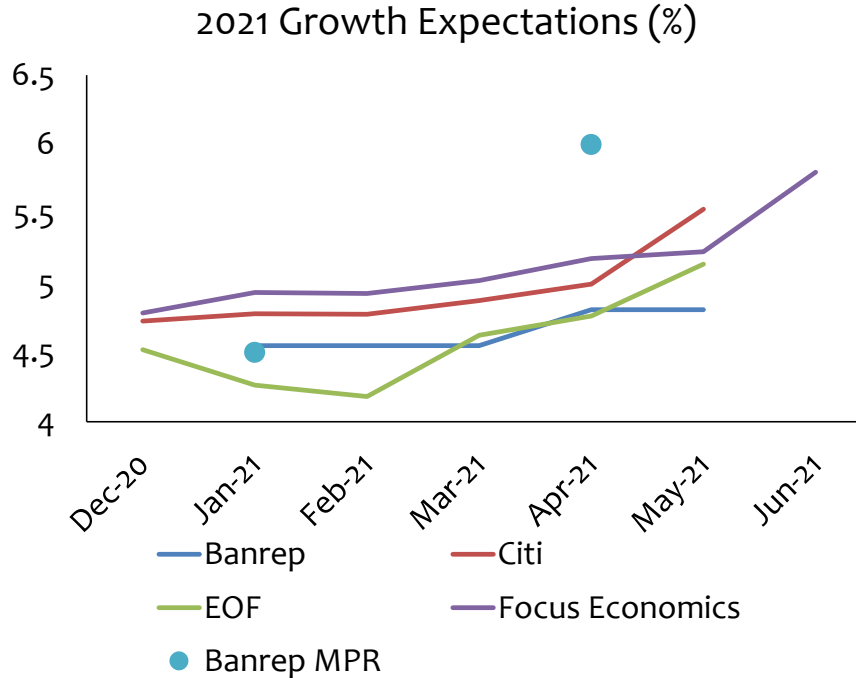


Source: Our World in Data.



Growth and inflation expectations have shown an upward trend. There has been a steeper path of MPR implied in asset prices vs surveyed values

Source: Surveys by Banco de la República (Banrep), Citi, Fedesarrollo & BVC (EOF), Focus Economics & Banrep Staff forecasts (Monetary Policy Report-MPR). The January and April MPRs were released on February 1st and May 3rd, 2021, respectively.



Source: OIS Swaps; surveys by Fedesarrollo, BVC (EOF), Citibank, Focus Economics, Banco de la República.

On May 19th 2021 S&P announced its decision to downgrade Colombia's credit rating to speculative grade

During 1H21 market sentiment was led by inflationary factors that increased expectations of tighter monetary policies. Colombian markets showed weaker performance and a significant increase in risk premium.

Since S&P announcement markets have behave positively showing some recovery. According to market participants local assets had already priced in the announcement.

Dec 31/20 - May 19/21

	Policy Rate	Local Currency Yield 2-Year	Local Currency Yield 10-Year	USD Yield 2-Year	USD Yield 10-Year	FX Rate	Stock Market	5-Year CDS	EMBI	Commodity
Germany	0	7	47			-0,34%	10,81%			
UK	0	26	72			3,26%	7,58%			
Japan	0	0	5			-5,47%	2,19%			
USA	0	5	77	5	77	0,28%	9,57%			
Colombia	0	86	203	34	100	-6,80%	-11,98%	48	24	28,69%
Inflation-Linked		32	114							
Brazil	150	300	232	-22	52	-2,21%	3,04%	39	-5	16,95%
Mexico	-25	94	136	-16	76	-0,07%	12,06%	15	-23	28,69%
Peru	0	38	196	70	106	-3,35%	1,84%	29	23	30,42%
Chile	0	85	119			-0,23%	-3,52%	22	-13	30,42%
EMs	0	36	58			0,86%	2,81%	14	1	20,30%

May 19/21 – Jun 16/21

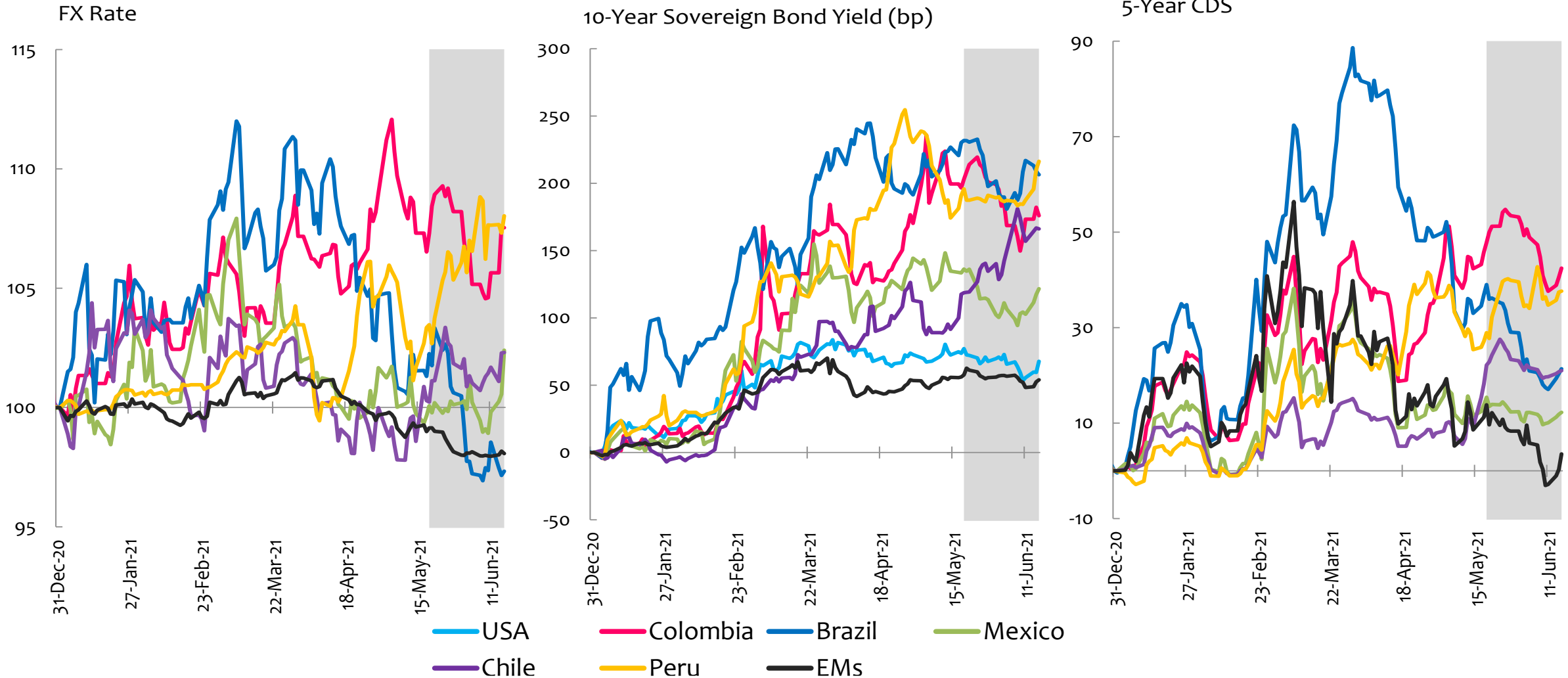
	Policy Rate	Local Currency Yield 2-Year	Local Currency Yield 10-Year	USD Yield 2-Year	USD Yield 10-Year	FX Rate	Stock Market	5-Year CDS	EMBI	Commodity
Germany	0	-3	-13			-1,48%	5,46%			
UK	0	0	-11			-0,90%	3,38%			
Japan	0	0	-3			-1,35%	4,44%			
USA	0	5	-9	5	-9	1,04%	2,62%			
Colombia	0	15	-27	12	-8	-0,23%	-1,17%	-5	10	11,60%
Inflation-Linked		3	-7							
Brazil	75	6	-25	-5	-9	5,06%	5,40%	-18	3	-5,83%
Mexico	0	-7	-15	-11	-13	-2,28%	2,42%	-3	-3	11,60%
Peru	0	-19	20	3	0	-4,22%	-10,56%	9	14	-4,46%
Chile	0	26	47			-2,03%	8,09%	-1	10	-4,46%
EMs	0	6	-1			1,09%	3,20%	-10	7	4,12%

Source: Bloomberg, SEN, MasterTrader. Data up to June 16th, 2021.

Positive variations of the FX rate = FX valuations. Commodities are Brent oil in Colombia and Mexico, copper in Chile and Peru, and soy in Brazil.

Amidst uncertain external conditions Colombian assets deteriorated more than most and then some corrections took place

25/06/2021



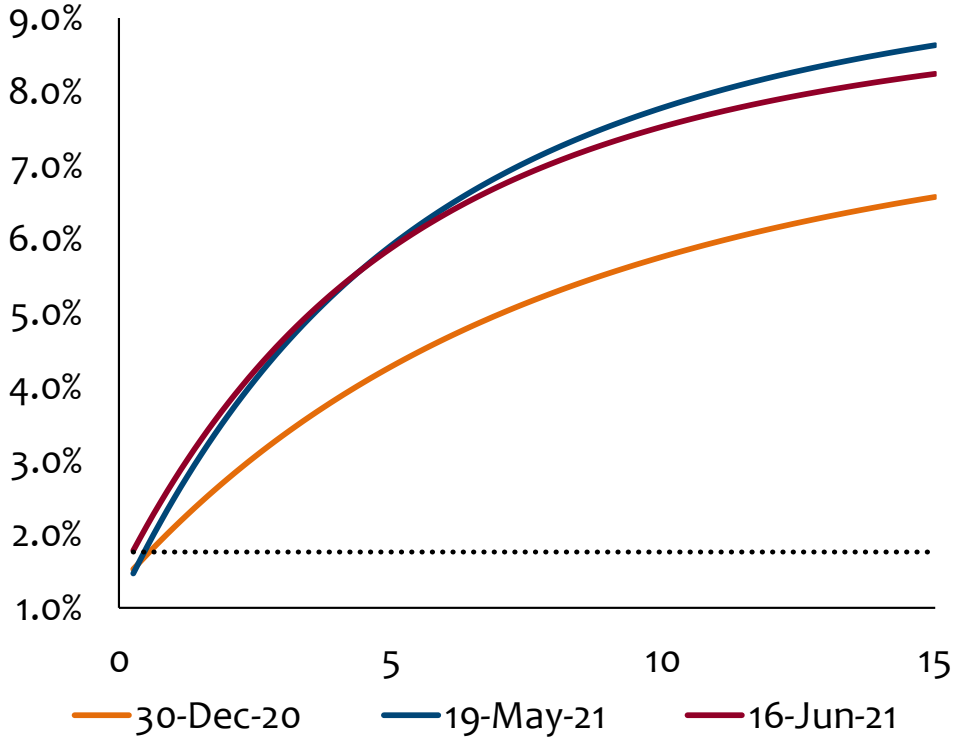
Source: Bloomberg. Data up to June 16th, 2021.

Note: The shadow corresponds to the period May 19th – June 16, 2021

Positive variations of the FX rate = FX devaluations.

Symmetric response in pesos and UVR denominated bonds

TES COP

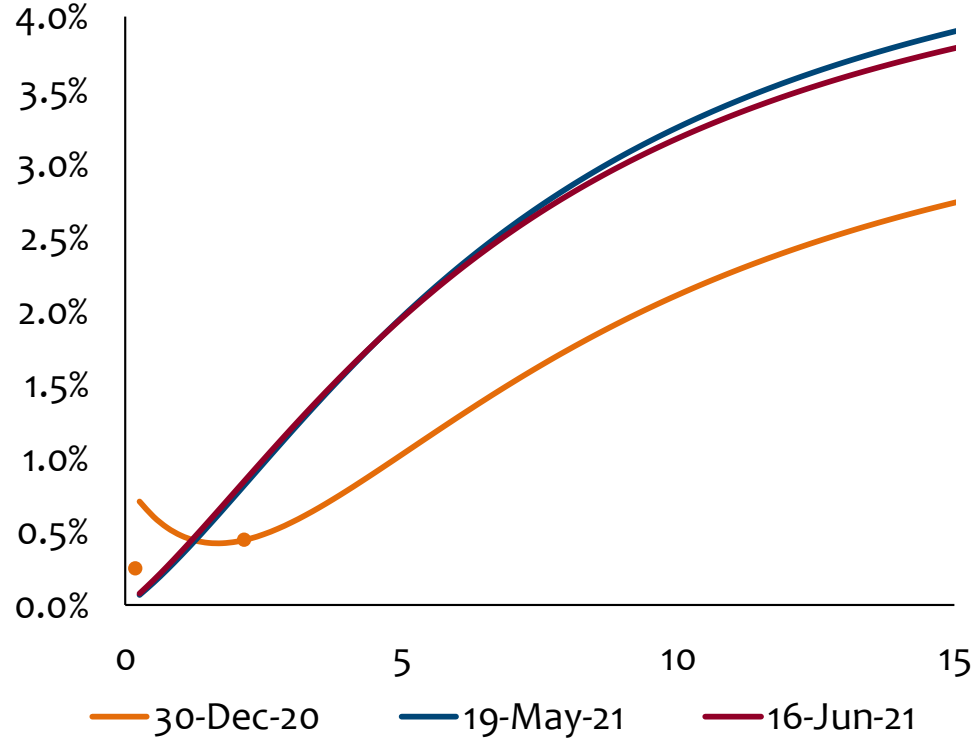


Change 19may21-16jun21

	2	3	5	10
Year	Year	Year	Year	Year
	15	8	-5	-27

pbs

TES UVR (Inflation-Linked)



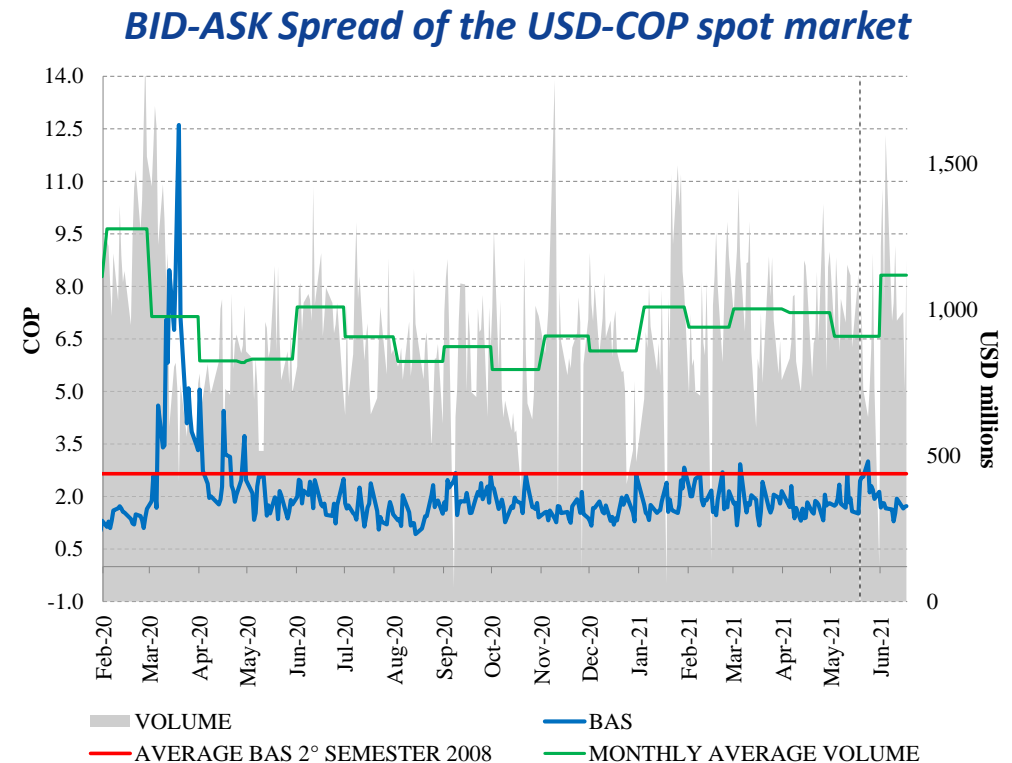
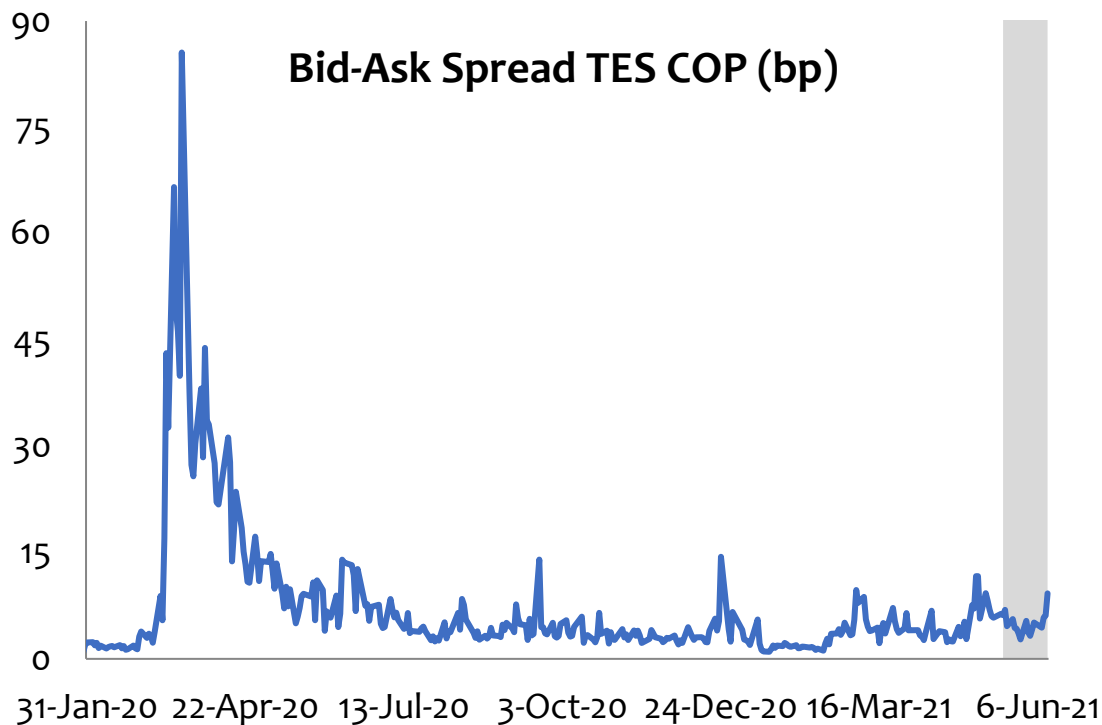
Change 19may21-16jun21

	2	3	5	10
Year	Year	Year	Year	Year
	3	2	-1	-7

pbs

Source: SEN, MasterTrader. Calculations: Banco de la República.
 * The curves were estimated by the methodology of Nelson & Siegel.

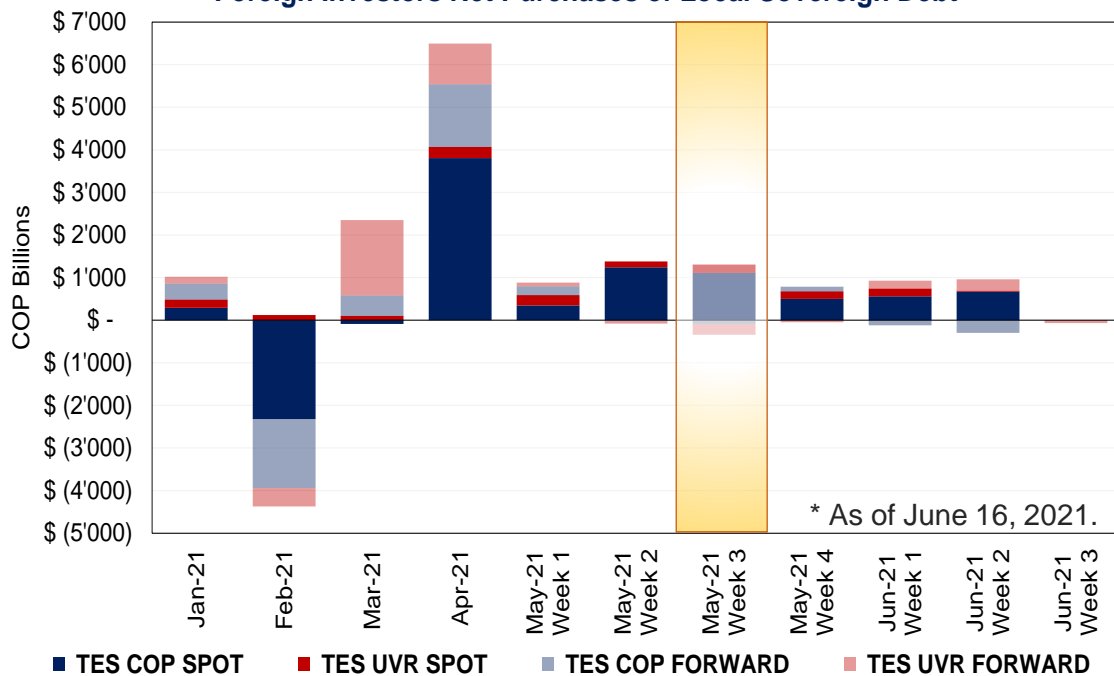
Liquidity has improved since the beginning of the pandemia and did not react negatively after the downgrade



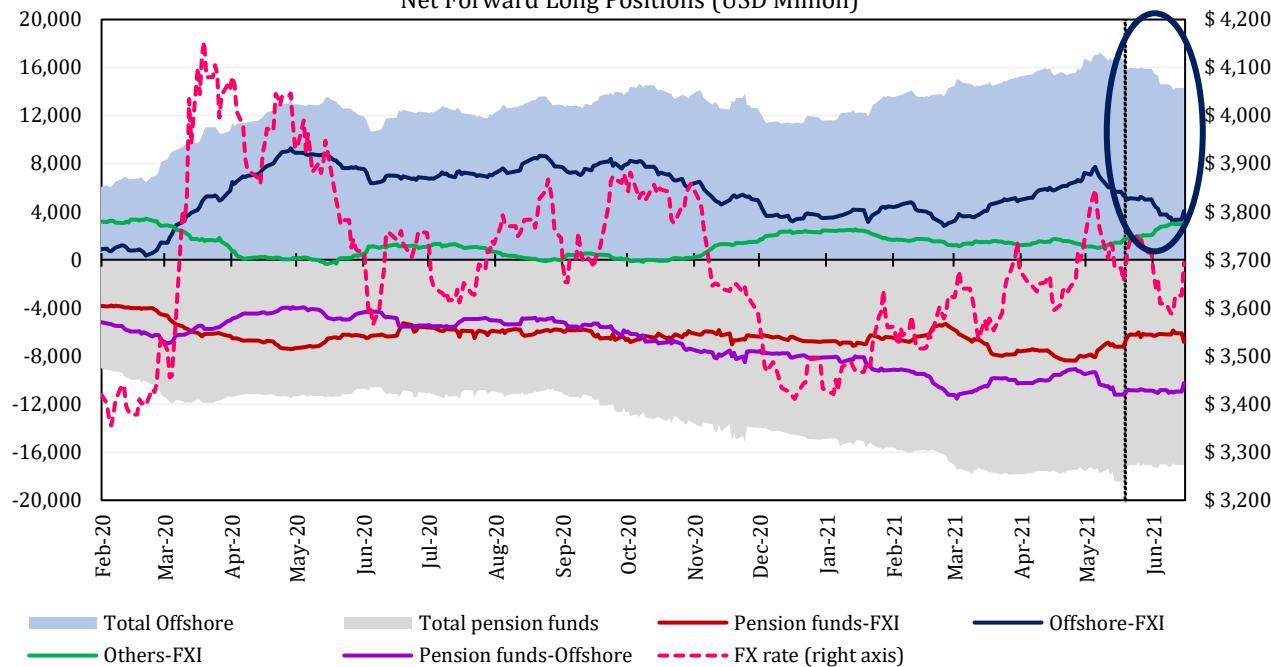
Source: SEN. Calculations: Banco de la República. Data up to June 11th, 2021.

2021 has shown a stronger demand of local assets by foreigners compared to 2020. This trend continued after the downgrade. Moreover, off shore agents' demand for USD forward contracts has lowered significantly.

Foreign Investors Net Purchases of Local Sovereign Debt



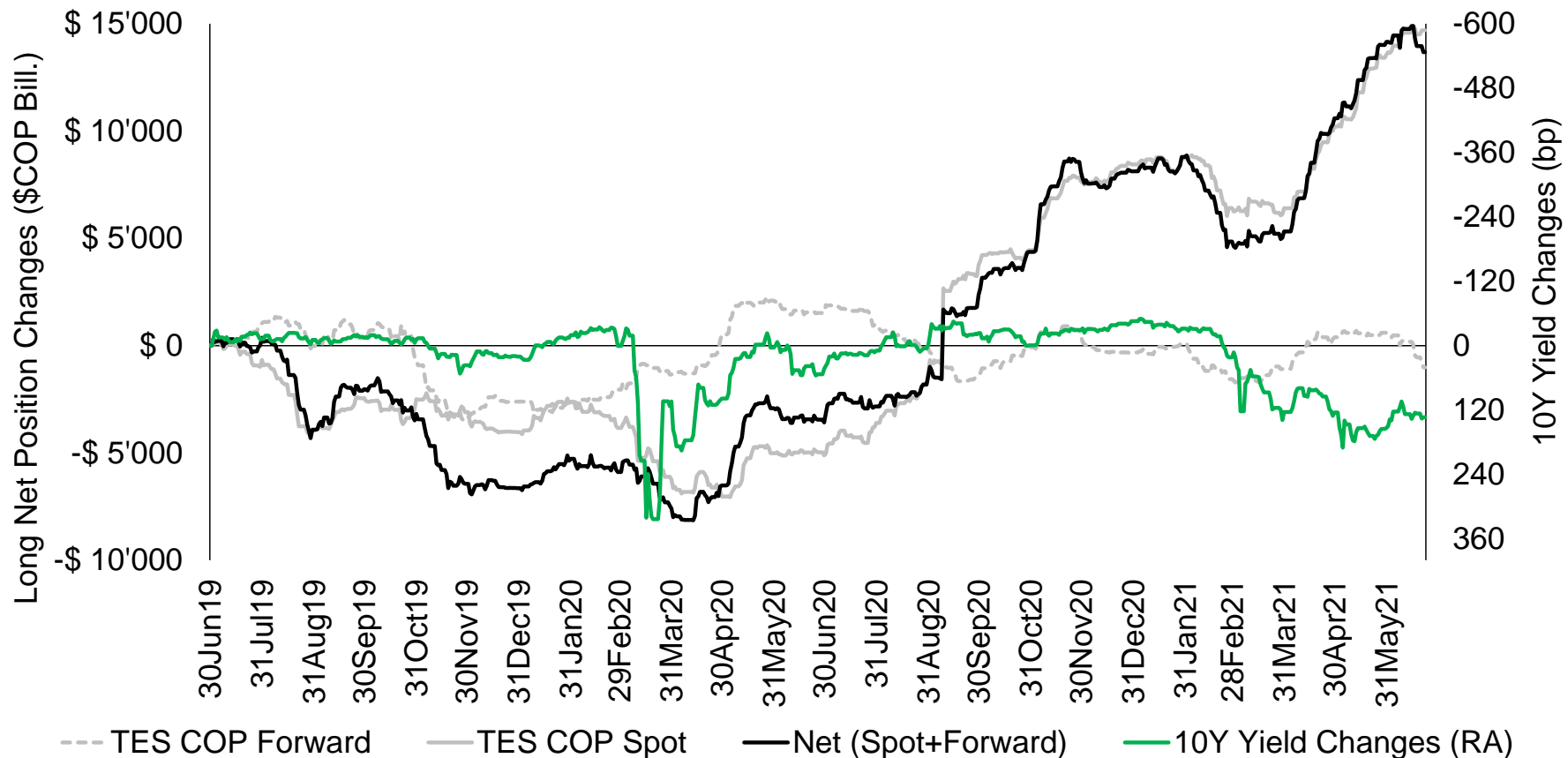
Net Forward Long Positions (USD Million)



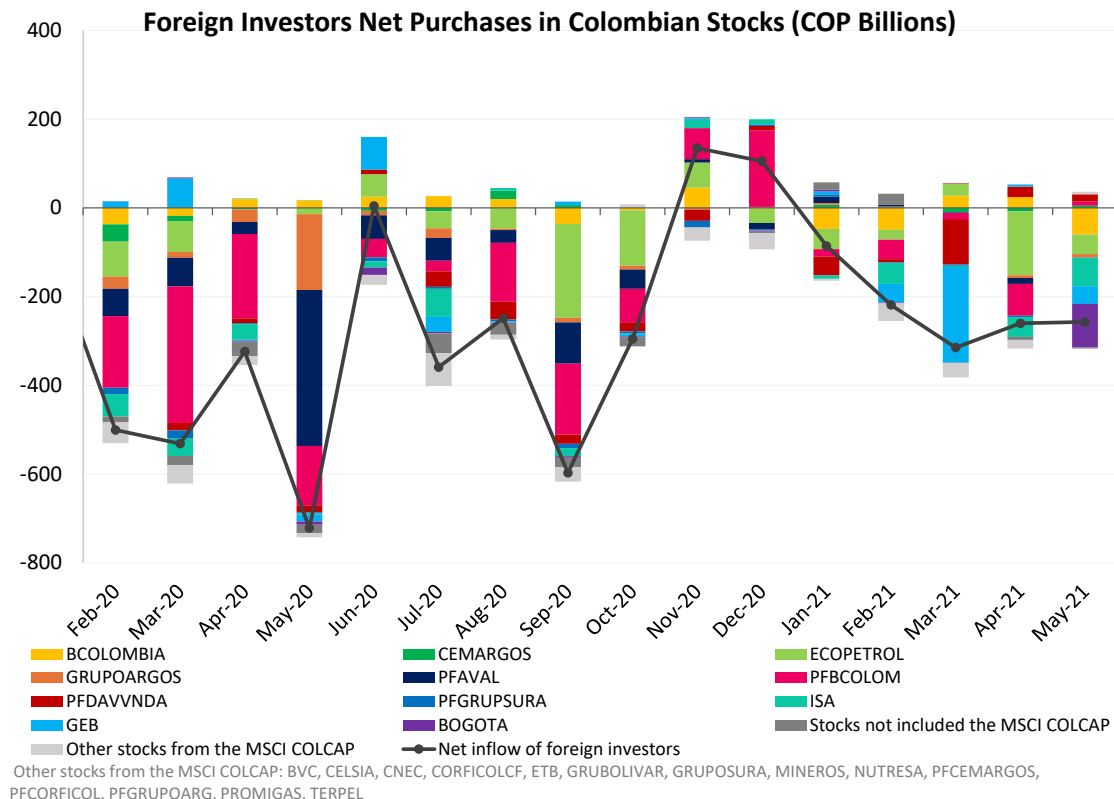
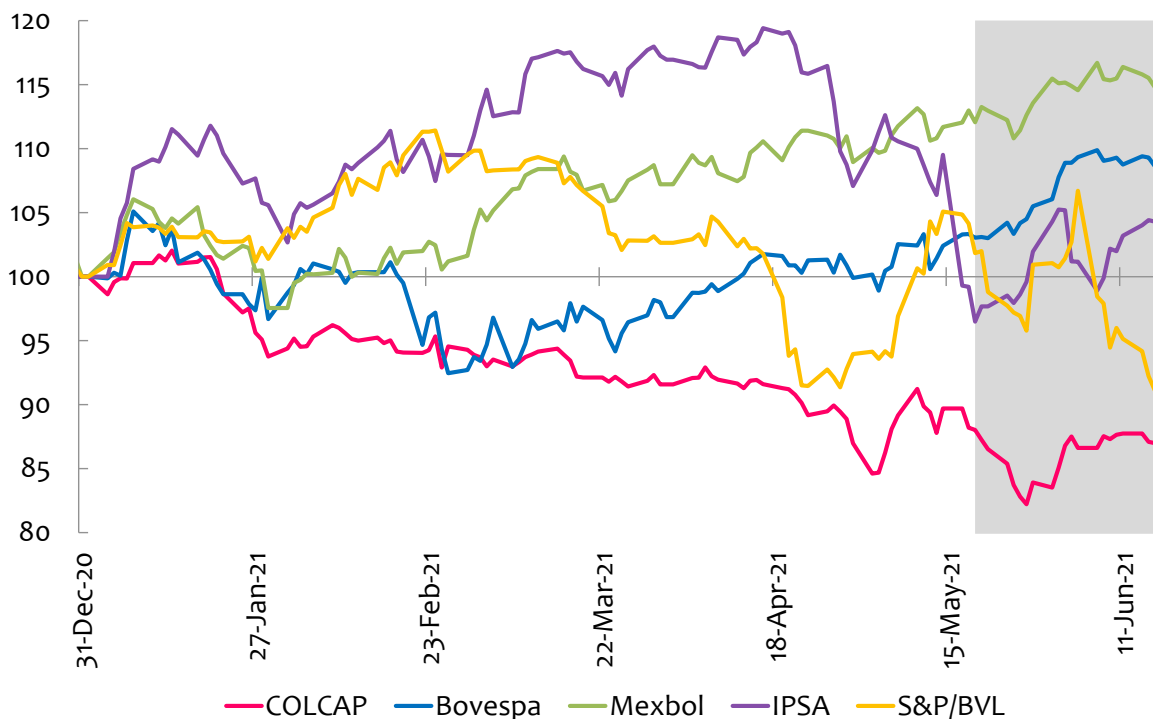
Source: Banco de la República. Updated information at June 15 2021.
 Total Offshore includes the net balances of the Offshore with FX intermediaries (FXI) and the Offshore with Pension Funds and Total Pension Funds (PF) includes net balances of PF with FXI and PF with the Offshore

Since late April dynamics of interest rates have not followed the important demand of foreigners in the government fixed income market. Some external concerns on the evolution of monetary stimulus and local woes on fiscal discussions and social unrest have stand out.

10Y Sovereign Bond Rates vs Foreign Net Purchases of Sovereign Bonds (in the Spot & Forward Markets)

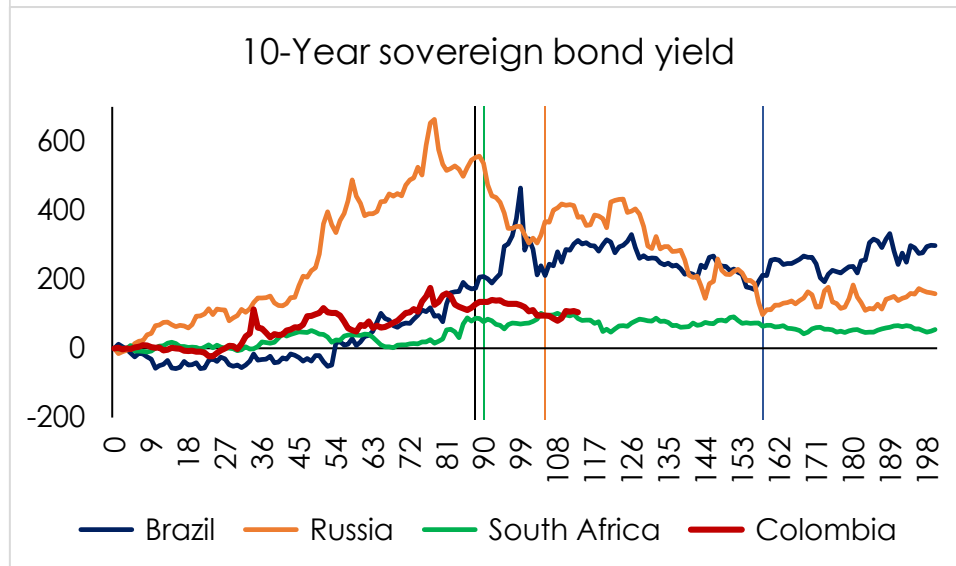
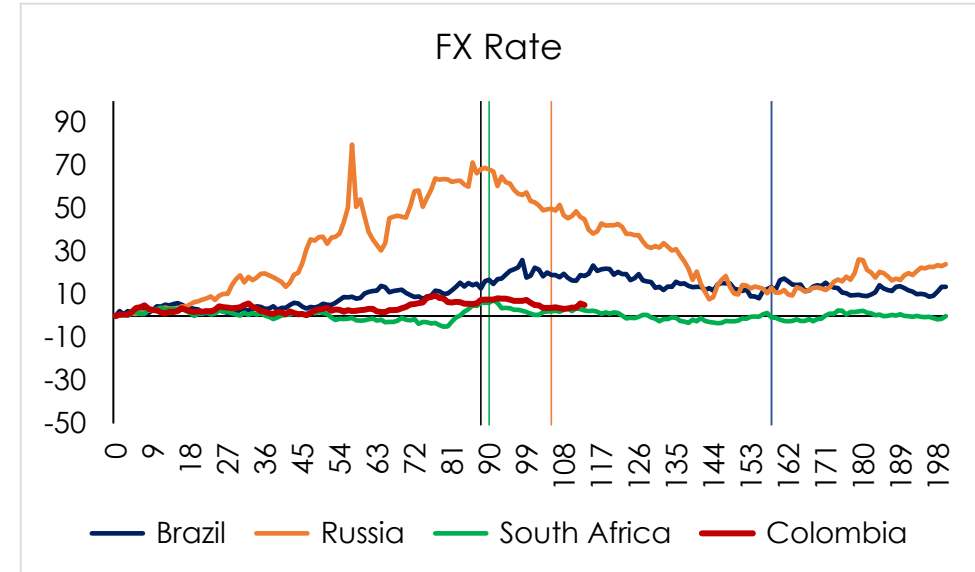
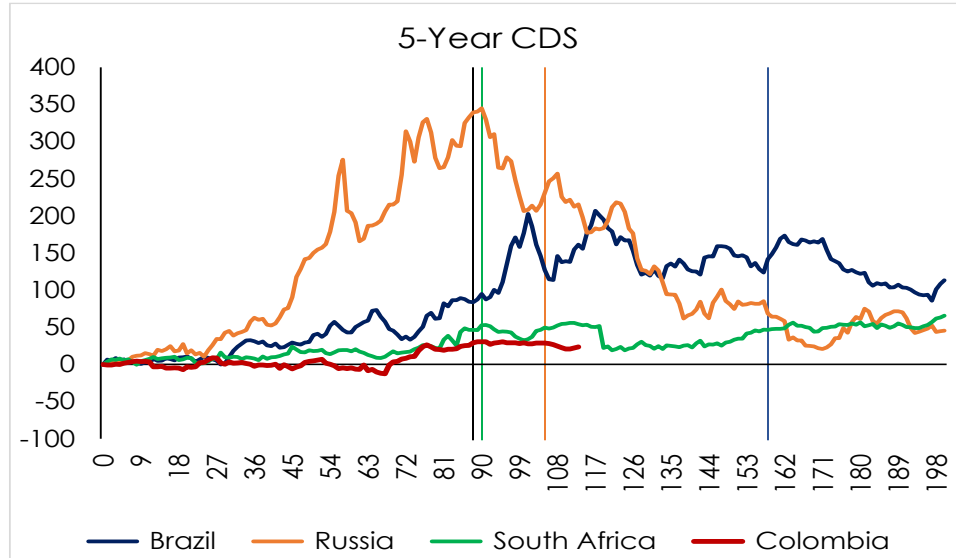


Local stock market deteriorated further widening the spread against other equities in the region. Capital outflows continued in line with its trend.



Source: Bloomberg. Data up June 16th, 2021.

Among other “Fallen angels” experience, Colombian assets’ reaction has been more contained



Note: The reaction data for each variable of interest (CDS, FX Rate, 10-Y Bond Yield) is measured as the spread against the same variable mean value for a control group. The control group is defined as the set of countries that were one notch above investment grade when the analyzed country lose its investment grade, but remained in that rating immediately after the episode. The analysis for all countries starts 4 months before the first downgrade announcement to make the reaction time frame comparable. Therefore, the zero mark in the X-axis shows where the studied variable was 4 months before the announcement.

Some comments of market participants...

- The key reason for the downgrade was the diminishing likelihood of a reversal of the deterioration in public finances given the belief that *“Colombia’s fiscal adjustment will prove to be more protracted and gradual than previously expected”*. Albeit this, the decision of S&P was perceived as a hasty move.
- Although some outflows can be expected from a further downgrade, the amount could be not as representative given the active regime of some foreign investors. Hence, even under a change in the participation of Colombian assets in relevant FI global indices (ie. Bloomberg Barclays), the impact could be limited.
- S&P kept Colombia’s local currency denominated bonds in BBB-, which reduces the probability of changes in the composition of the indices, even under the scenario of an additional change.
- Losing the investment grade has costs associated with higher financing rates from the public and private sectors, but it doesn’t imply that Colombia will face problems of accessing international markets.
- Some agents assign a high probability to a Fitch downgrade in the next couple months, given the current fiscal uncertainty.