



Recent evidence on FDI, Total Investment and the role of some determinants in Colombia

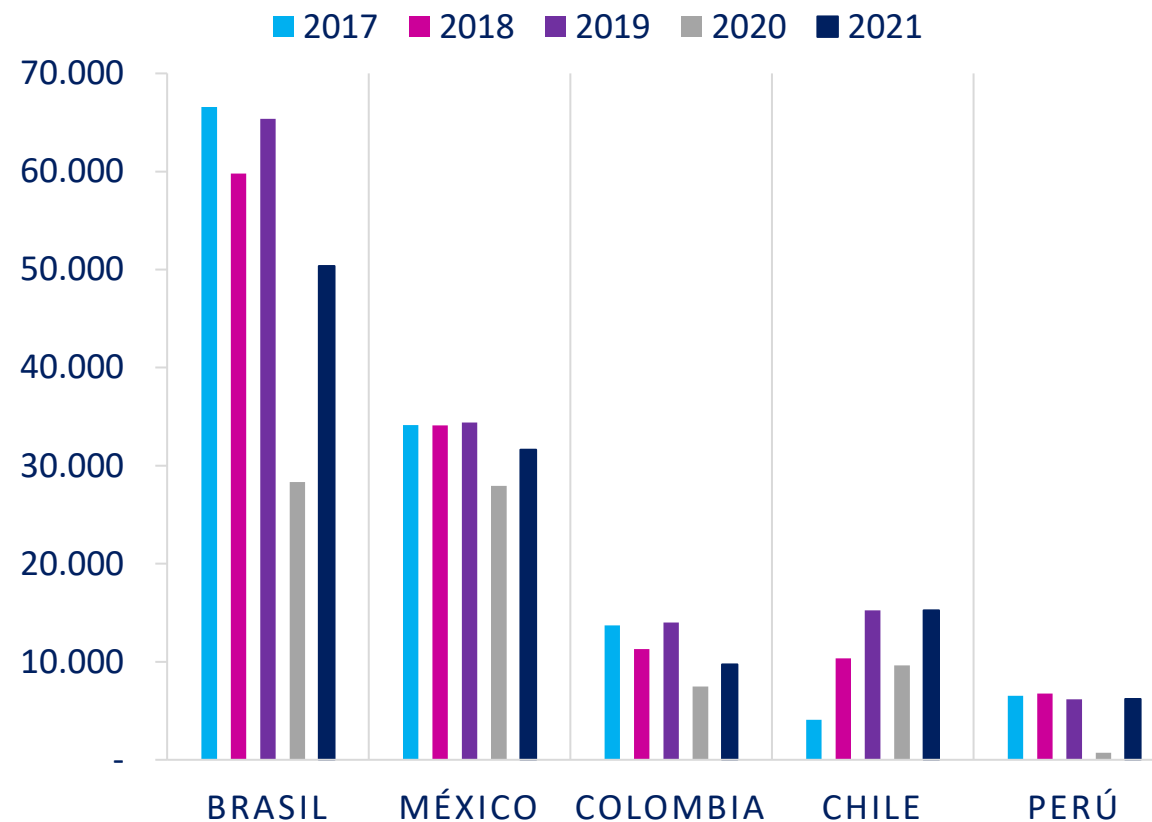
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► FDI in the Region (LAC and Caribbean)

- The 5 larger economies explain jointly **≈ 85% of the regional-FDI** (which is **8% of Global FDI**)
The inflows amounts are lower w.r.t. those received in the pre-pandemic period.
- In terms of the **GDP**, the FDI inflows represents between **2% and 4%** in these economies
- The harder tax competition into the region is presented in-between these countries, in addition to Argentina

FDI Inflows 5-LAC (Billions of US\$)

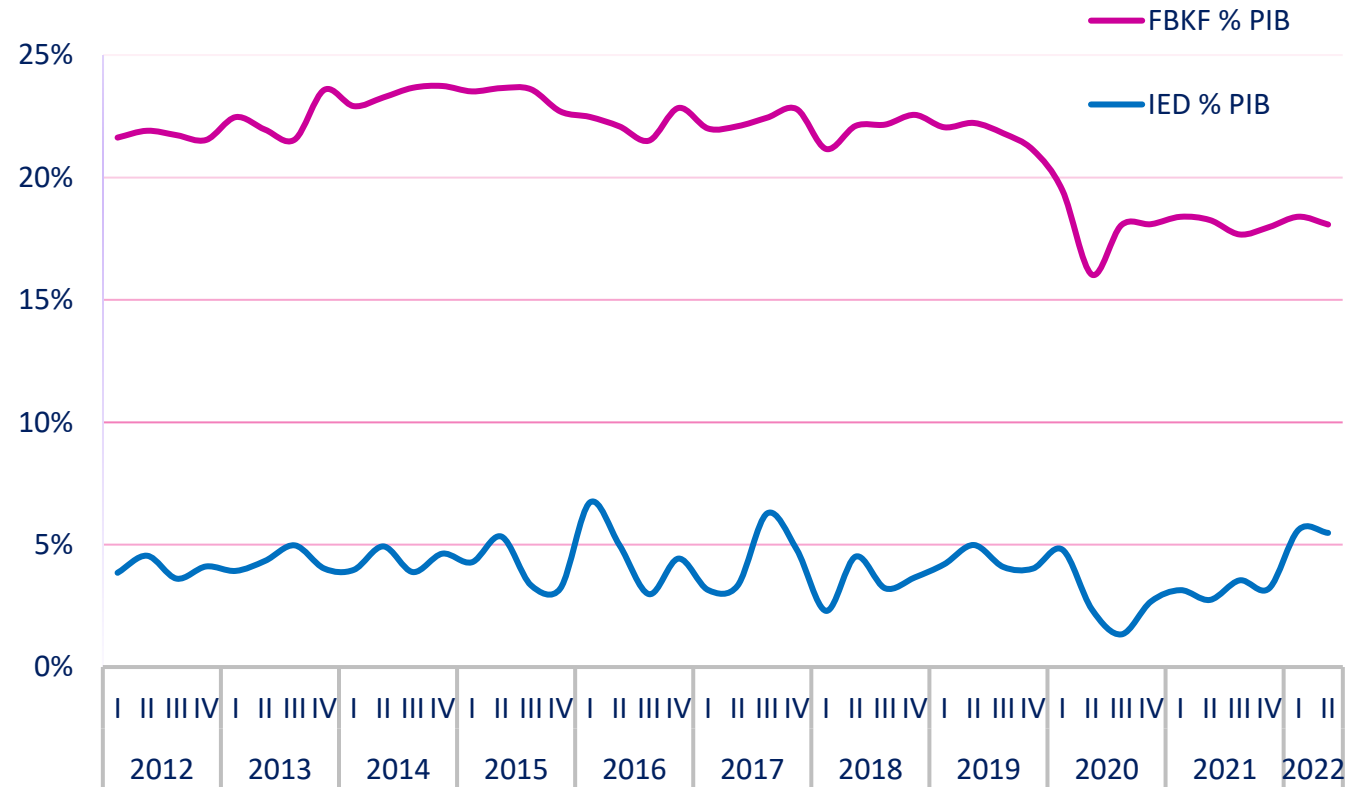


Source: Central Banks

► Importance of FDI in total investment in Colombia

- FDI in Colombia has fluctuated between 4% and 5% of GDP in the last decade.
- It explains between 20% and 25% the country's total investment

Total Investment and FDI- Inflows in Colombia (% GDP)

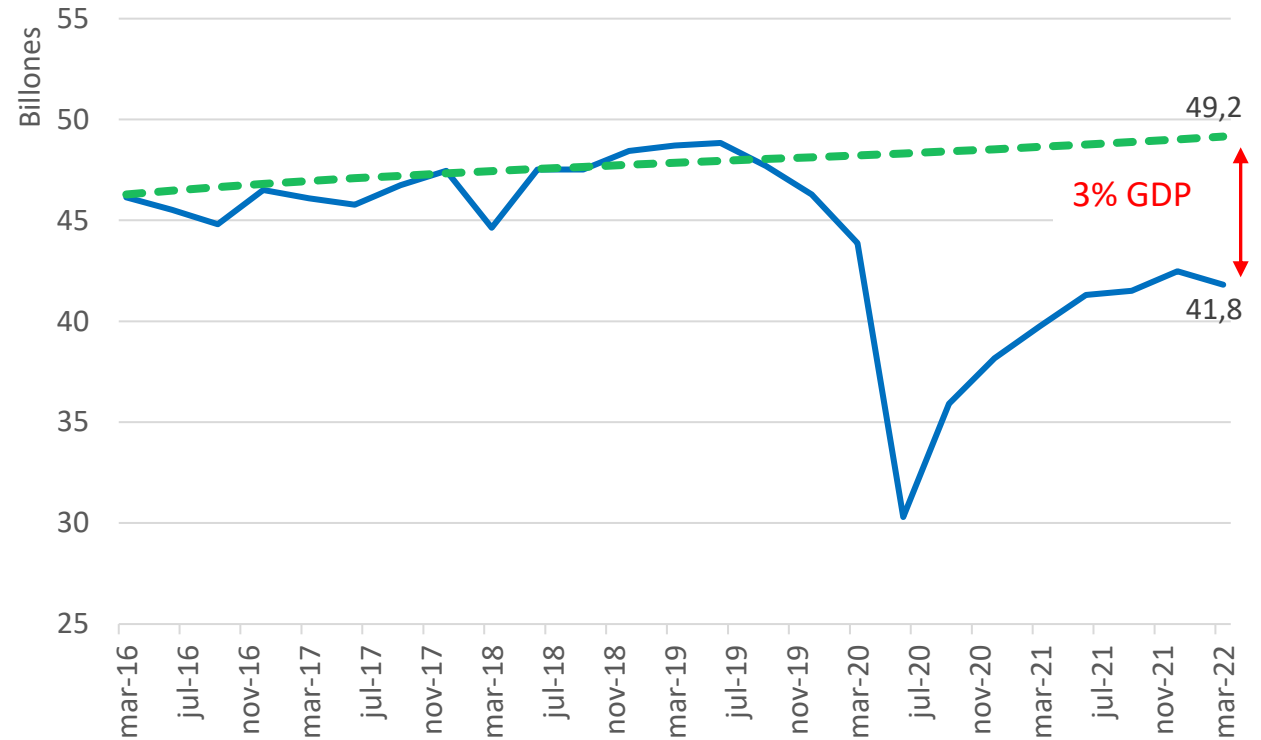


Fuente: DANE y Banco de la República

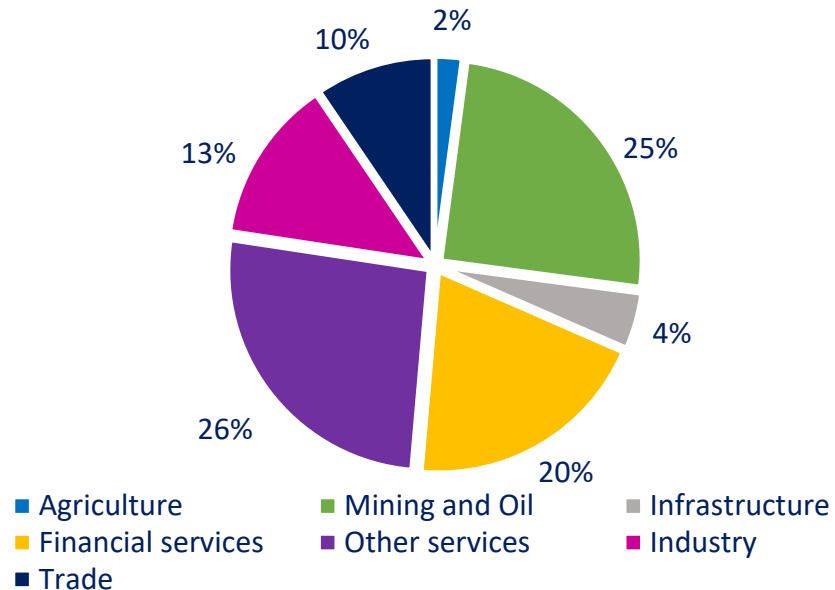
► Investment in Colombia continues to register lower levels than pre-pandemic

► Despite the FDI recovery in 2021, especially to Oil-Mining and Financial Sectors, the Colombia's investment continues to register negative gaps.

Current Total Investment and Its Long-Term Trend in Colombia (HP-Filter)



FDI Inflows by Sector in Colombia: 2016-2020



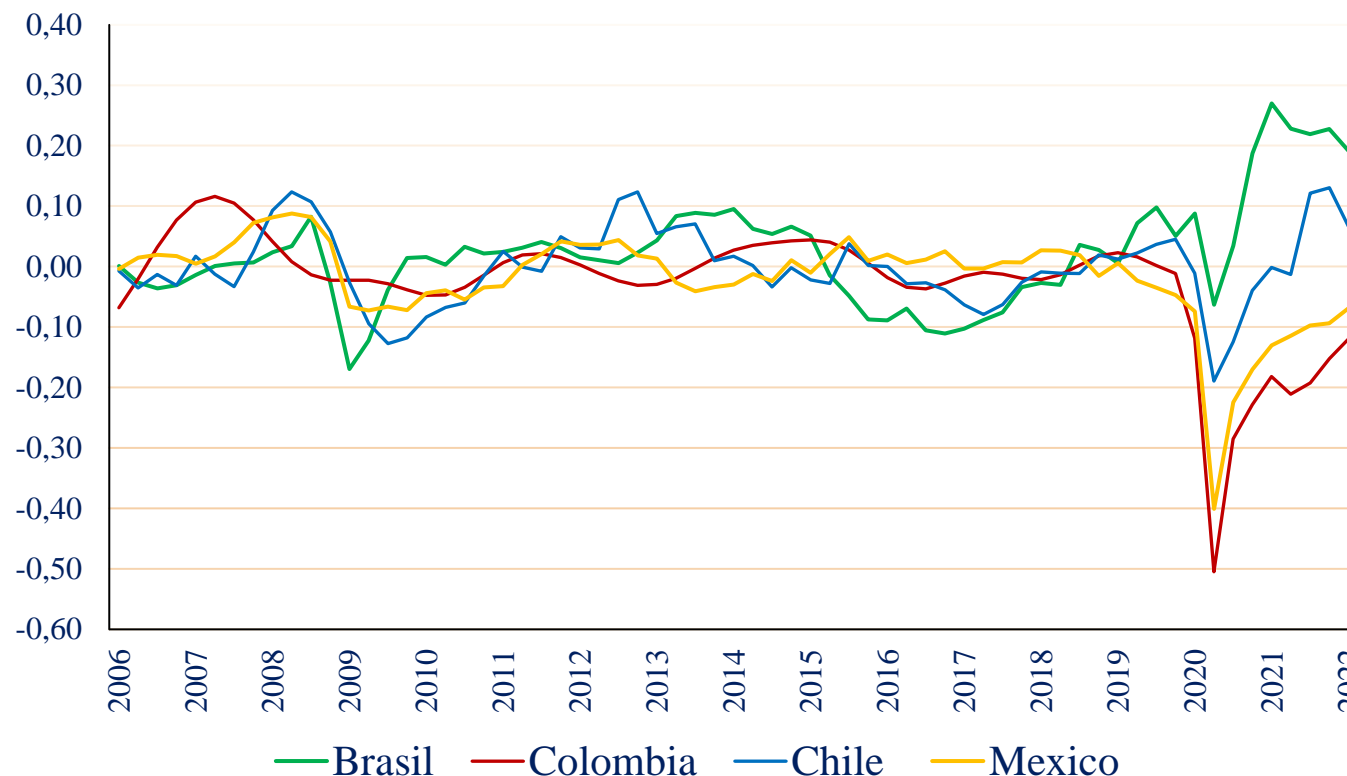
Source: DEPE-SGEE-BR with data from DANE

► Some LAC recovered their levels of L.R. investment.

► Brazil and Chile, recovered their investment levels (levels are above their L.R. trends).

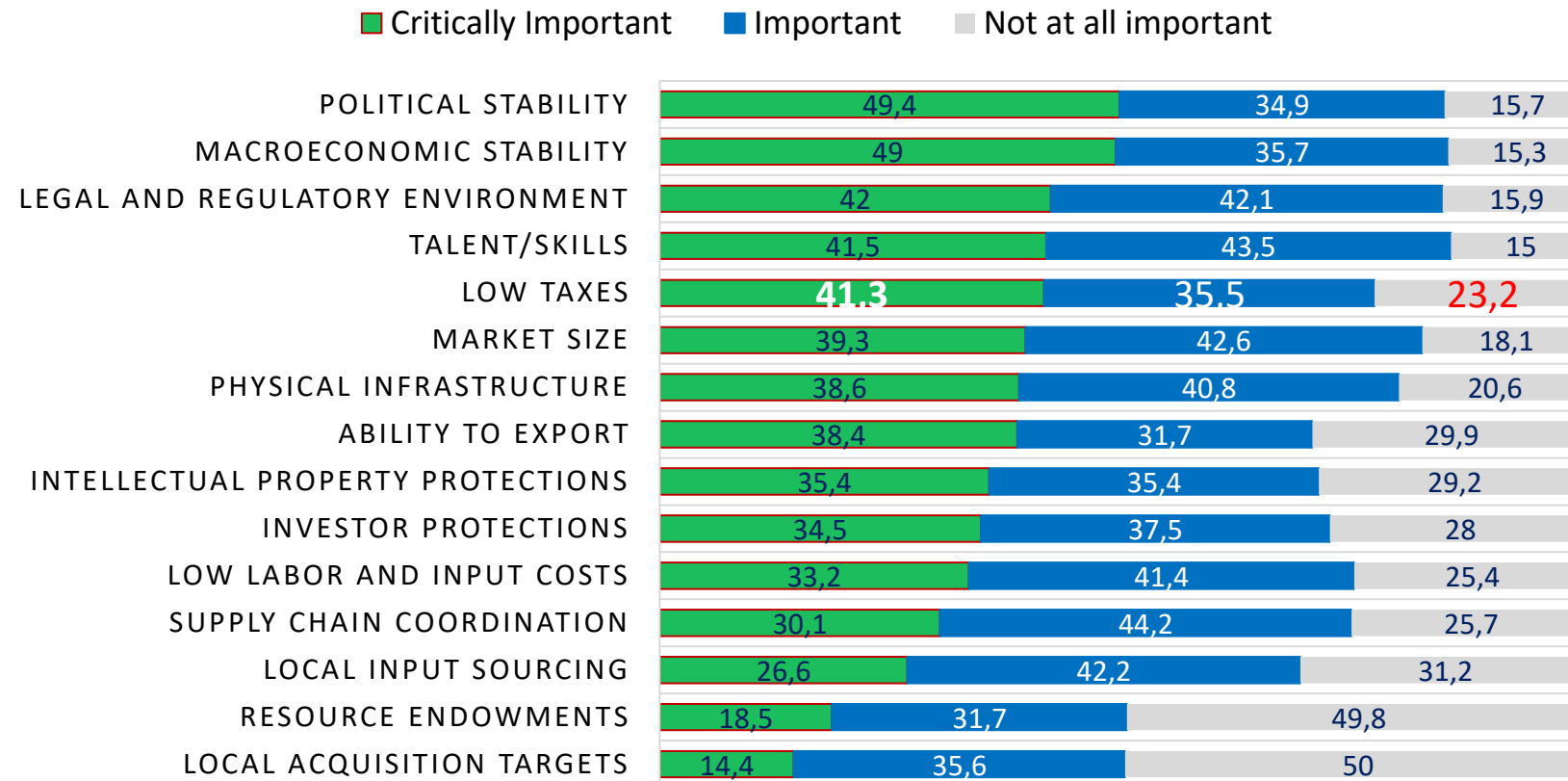
► Colombia and Mexico have not yet recovered their investment levels registered before the pandemic.

► Currently, the negative gap for Colombia is the largest



Source: DEPE-SGEE-BR with FMI Data

► ¿What about the chief factors which could play an important role in the investment decision?



Source: WB -Global Investment Competitiveness Report 2019. Survey to 2,500 MNEs in 10 middle-income countries

- The tax burden is important in FDI decisions, but could be a "second order factor", according to WIR-2022 (Chap II)

- In the region, currently effective tax rates are not so different than statutory (except Chile)

Statutory and Effective Corporate Tax Rates, 2021

	Colombia	Chile	México	Perú	Brazil
Statutory Income Tax	31%	25% */	30%	30%	34%
Effective Income Taxes ^{1/}	29,7%	11,7%	27,9%	29,2%	27,3%

1/ Source: U.S. Department of the Treasury (Colombia, Chile y México) and OECD (Peru y Brazil, 2020)

- In Colombia, there are important and costly benefits on corporate income taxes as mechanisms of tax competition

Colombia: Fiscal Cost by Benefits to Corporate Income Taxes (COP \$Billions)

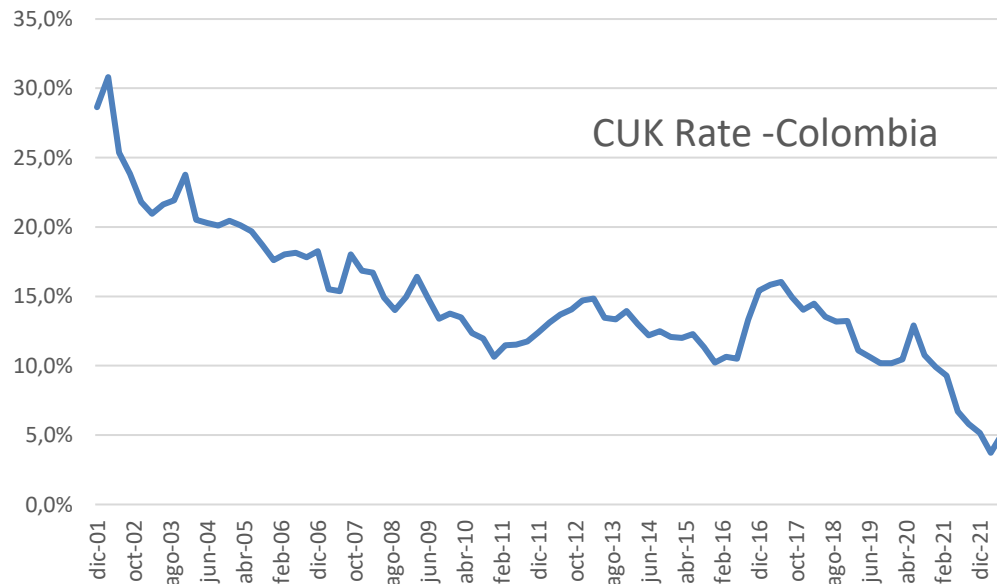
Items	2020	2021
Exemptions	4,18	6,74
Discounts	4,55	6,57
Fixed Assets Deductions	0,7	1,2
Reduced tax rates	1,0	1,5
Total Tax Benefits	10,5	16,0

Total Tax Benefits (% GDP) 1,0% 1,4%

Source: MFMP - MoF.

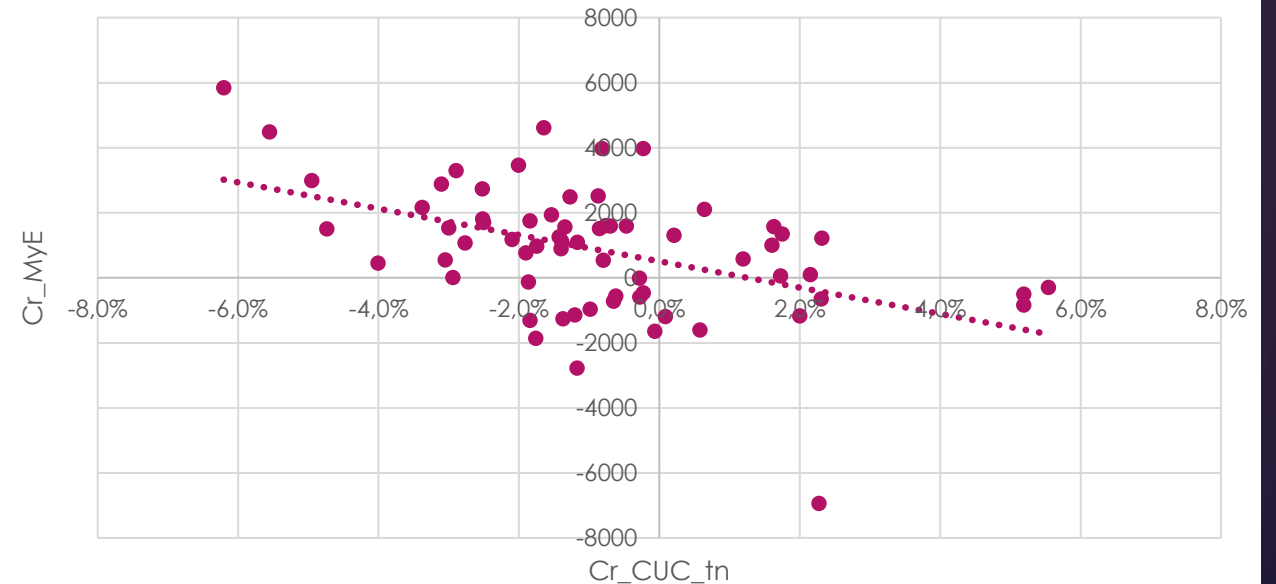
- Taxes are part of the Cost of Use of Capital (**CUK**), which is one of the most important factor be considered in investment decision. The CUK in Colombia has been declining

$$CUK = \underbrace{\frac{IPP_K \text{ Goods}}{IPP_{Total}}}_{\text{Relative prices of K}} \underbrace{\frac{(1 + \tau^{iva} - \theta)}{(1 - \tau^r - \gamma\tau^{ica})}}_{\text{Taxes (ETRs)}} \underbrace{(r + \delta - \Delta IPC_t)}_{\text{Real Interest Rates}}$$



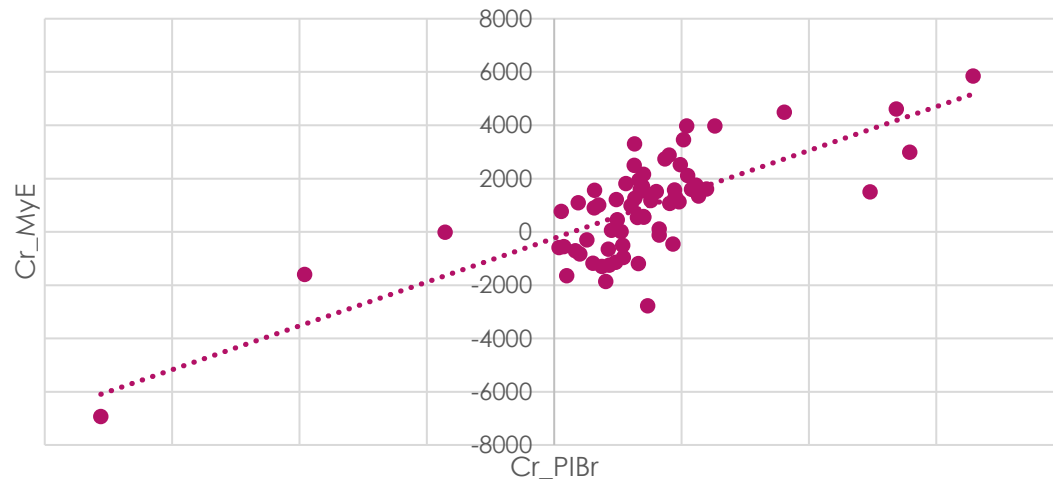
Source: SGEE-SGIEPM-BR

Non-conditional correlation between Investment and CUK –Annual variations: 2006:1 2022:2

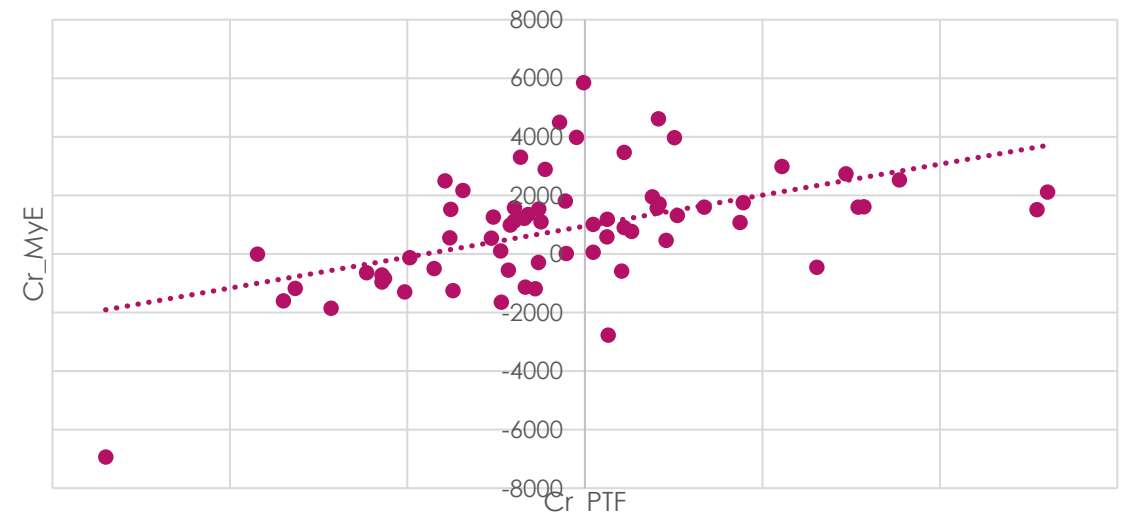


- ▶ Other crucial factors to Invest 'decision (including FDI) are macro stability, market size, infrastructure, human capital, etc.
- ▶ Some of them are captured indirectly by economic activity (GDP) and total factor productivity (TFP). Its correlation with Investment is positive in Colombia

Non-conditional correlation between
Investment and GDP –Annual variations: 2006:1
2022:2



Non-conditional correlation between Investment
and TFP –Annual variations: 2006:1 2022:2



Source: DEPE- SGEE-BR

► Assessment these factors on the investment behavior in Colombia: 2002.01-2019.04 (FM-OLS). Elasticities

	(1)	(2)	(3)	(4)
Cost of Use of Capital	-0.175*** (0.0527)	-0.185*** (0.0343)	-0.140*** (0.0226)	-0.133*** (0.0110)
Economic activity (GDP)	1.695*** (0.0601)	2.135*** (0.144)	2.235*** (0.0939)	1.888*** (0.0476)
Total factor productivity	4.211*** (0.370)	4.627*** (0.297)	3.591*** (0.219)	2.036*** (0.123)
Opportunity Cost		-0.917*** (0.176)	-0.371*** (0.128)	-0.253*** (0.0629)
Real Exchange Rate			-0.323*** (0.0335)	-0.370*** (0.0165)
Trade Openness				0.557*** (0.0215)
Constant	-30.23*** (2.243)	-29.99*** (3.318)	-28.11*** (2.148)	-20.41*** (1.089)
Observations	59	59	59	59
R-2	0.920	0.947	0.969	0.973

*** p<0.01, ** p<0.05, * p<0.1