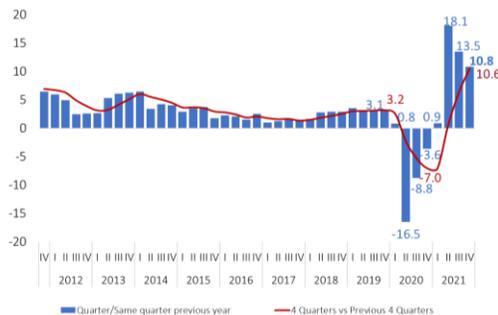
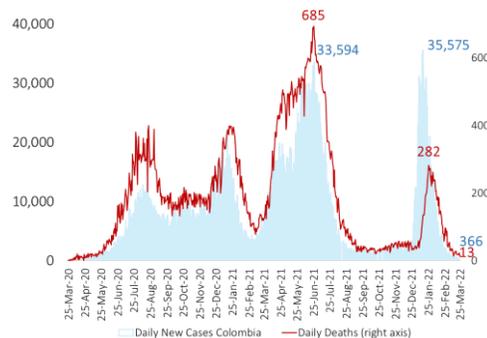


Figure 1. Quarterly GDP Growth (annual growth, %)



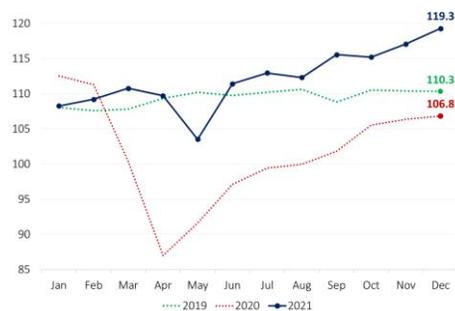
Source: DANE. Own Calculations.

Figure 2. COVID-19 Daily New Cases and daily Deaths Colombia as of 26th August



Source: Ministry of Health. Own Calculations

Figure 3. Economy Tracking Indicator ISE (Seasonally adjusted)



Source: DANE. Own Calculations.

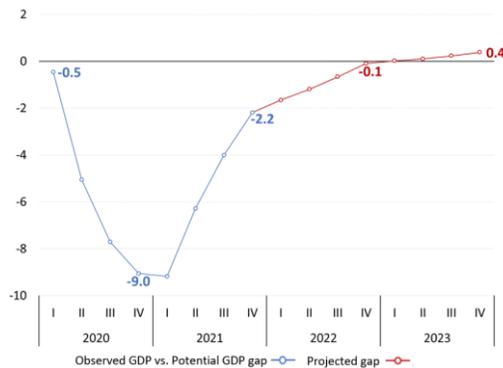
Economic Activity

After 2020 saw the biggest economic downturn recorded in Colombian history, the economy experienced a sharp recovery in 2021, reaching an annual growth of 10.6%. The economy closed last year 2.8% above 2019 level. On a quarterly basis, Q4 GDP increase came in at 10.8% (see Figure 1). Almost all economic sectors are above pre-pandemic levels and had a positive contribution to overall growth, with manufacturing and commerce as the main driving force in the economy. Nevertheless, sectors such as oil and mining and construction have not returned to 2019 levels yet. On the demand side, household and government consumption closed the year above pre-pandemic levels.

Omicron's wave hit at the end of Q4 (see Figure 2). However, the advances in the vaccination plan -where more than 45% of the population was fully vaccinated at the end of 2021- made the country less vulnerable to the fourth COVID-19 peak. This led daily deaths to increase at much lower rates than daily cases. As a result, no strong mobility restrictions were implemented during Q4, allowing the economy to maintain the momentum experienced in Q3.

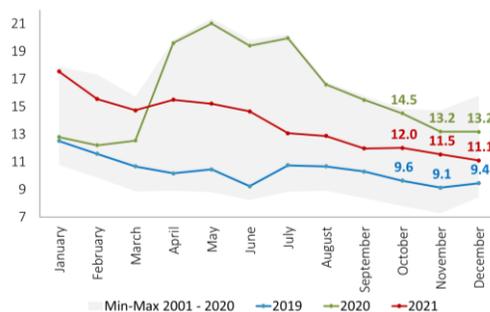
Monthly economic activity, measured with the Economy Tracking Indicator, performed steadily in Q4 and throughout 2021 (see Figure 3). Despite national strikes in Q2, the economy showed strong signs of recovery and stood above 2019 levels during H2. Q4 ended with the year's highest level of economic activity, reaching levels considerably higher than 2019 and 2020.

Figure 4. Real GDP vs Potential GDP gap (%)



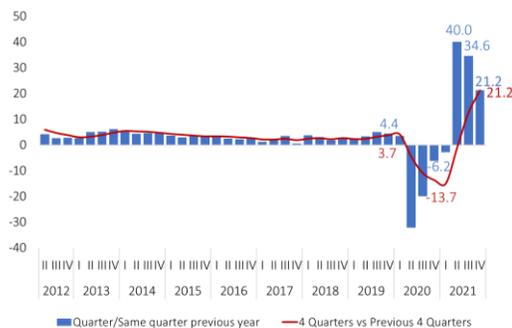
Source: DANE, Own calculations.

Figure 5. National unemployment rate (%)



Source: DANE. Own Calculations

Figure 6. Commerce Sector: 18.4% of GDP (annual growth, %)



Source: DANE. Own Calculations.

For all the reasons presented above, the economy was able to consolidate a strong recovery in 2021. Figure 4 shows the gap between seasonally adjusted real and potential GDP. This “output gap” has been steadily narrowing and we expect it to be fully closed by the end of 2022.

Unemployment rate stood at 11.1% in Q4, the lowest value registered since February 2020 (11%) (see Figure 5). Even so, employment has not kept pace with GDP as there are still 374 thousand jobs left to return to pre-pandemic levels.

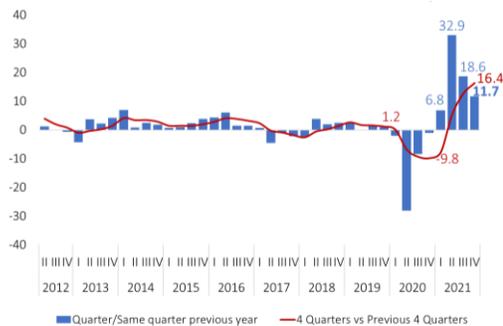
Supply GDP

In Q4, all economic sectors had a positive contribution to the overall 10.8% growth of GDP. Commerce and Manufacturing presented the highest contributions among sectors, with 4.2pp and 1.5pp, respectively. Arts achieved the highest annual growth with 33%. As the presence of a statistical base effect from the low GDP levels presented in Q4 2020 alters the analysis, it is also important to analyze growth against pre-pandemic levels.

Commerce GDP registered an annual and biannual variation of 21.2% and 13.7%, respectively (see Figure 6). Subsectors that were hardly hit in 2020 such as accommodation and food services -with an annual growth of 52.4%- together with transportation (24.2%) were the components of commerce GDP that grew the most in annual terms. Compared to Q4 2019, both sectors performed above, each with 36.9% and 2.1%, respectively.

Manufacturing was another high performer in Q4, as it registered a GDP increase of 11.7% compared with the same quarter of 2020

Figure 7. Manufacturing Sector: 11.8% of GDP (annual growth, %)



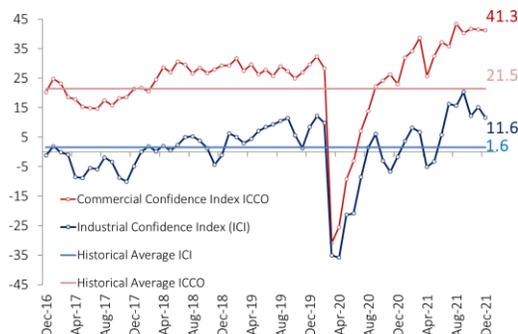
Source: DANE. Own Calculations.

Figure 8. Industrial Production and Sales Index (January 2019 = 100)



Source: DANE. Own Calculations.

Figure 9. Industrial and Commercial Confidence Index (%)



Source: Fedesarrollo. Own Calculations.

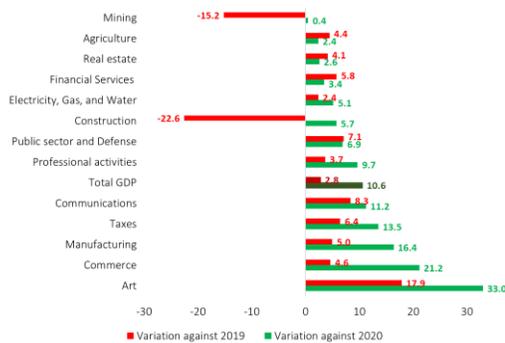
and 10.5% compared to Q4 2019 (see Figure 7). On a monthly basis, annual real industrial production grew in October (10.2%), November (14%), and December (13.2%). Similarly, real sales reached an annual growth of 9.6% in October, 14.3% in November and 11.3% in December (see Figure 8).

The Commercial Confidence Index (CCI) presented a stable performance in Q4. Since its downturn in Q2 caused by nationwide strikes, CCI showed a strong recovery along Q3 and Q4 and closed the year above its historical average, standing at 41.3% (see Figure 9). Industrial confidence index reached its peak at the end of Q3 and presented a downward trend in Q4. Nevertheless, in tandem with the CCI, industrial confidence ended the year above its historical average.

Construction was one sector that could not gain enough steam in 2021. During Q4 it presented an annual growth of 6.2% (see Figure 10). However, it is worth noting that construction growth is mostly due to a statistical base effect, as it registered a 18% drop in 2020 compared to the same period in 2019. The latter was mainly caused by a contraction in edifications (-11.2%). As a result, construction GDP in 2021 presented an annual growth of 5.7% but remained 22.6% below pre-pandemic levels.

Oil and mining struggled to recover in 2021 as well. Even though in Q4 the sector increased 8.2% compared to the same quarter of last year (see Figure 10), this result was far from what was required to recover from the annual decrease observed in 2020. Consequently, oil and mining ended the year with a timid 0.4% annual growth compared with 2020 and decreased 15.2% in contrast to pre-pandemic levels.

Figure 10. GDP sectors (annual growth, %)

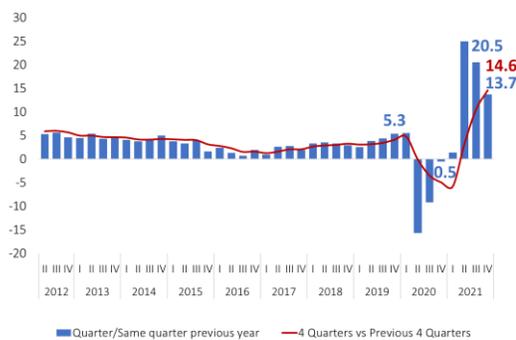


Source: DANE. Own Calculations.

Finally, sectors that grew in 2020 continued expanding during 2021. This was the case of public administration, real estate, financial services, electricity and agriculture (see Figure 10). As expected, these sectors did not register high growth rates as they did not have to overcome a collapse in 2020.

All in all, almost all sectors closed last year with levels of economic activity above those registered in 2019, with construction and oil and mining as notable exceptions.

Figure 11. Household Consumption: 73.8% of GDP (annual growth, %)

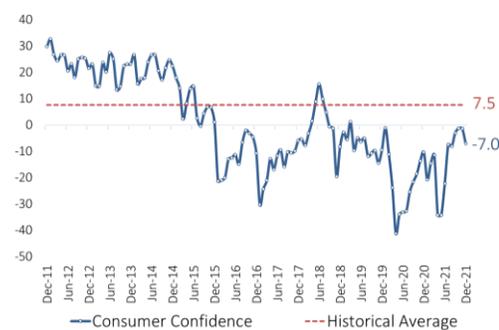


Source: DANE. Own Calculations.

Demand GDP

On the demand side, household consumption experienced an annual variation of 13.7% (see Figure 11), surpassing pre-pandemic levels by 13.1% (Q4 2019). Unsurprisingly, the fastest-growing groups of consumed goods are those that were the most affected by the pandemic last year: clothing and footwear (annual growth of 33.6%), restaurants and hotels (31%), and transportation (40.5%). However, as we suggest in our article 'Savings and investment during COVID' this increase in household consumption is not likely to go on indefinitely.

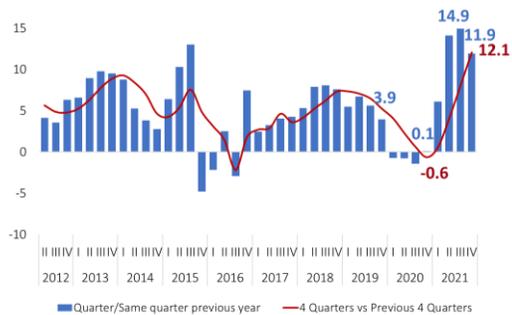
Figure 12. Consumer Confidence Index



Source: Fedesarrollo. Own Calculations.

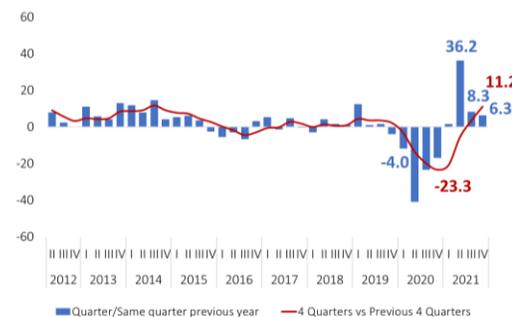
After a major drop of almost 40pp in June, Consumer Confidence, measured by Fedesarrollo's Consumer Confidence Index (CCI), started a steady recovery along the year and reached its peak in November, achieving pre-pandemic levels (see Figure 12). Nevertheless, CCI experienced a contraction in December due to a decrease in the Economic Condition Index. All in all, Consumer

Figure 13. Government Consumption: 17.5% of GDP (annual growth, %)



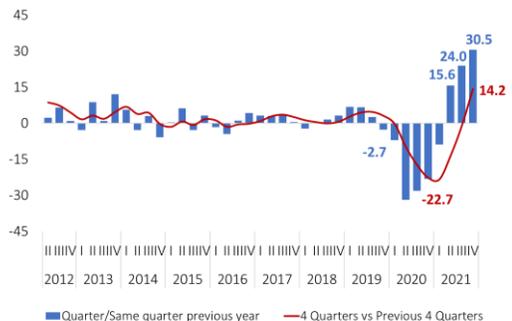
Source: DANE. Own Calculations

Figure 14. Gross Fixed Capital Formation: 18.1% of GDP (annual growth, %)



Source: DANE. Own calculations.

Figure 15. Total exports: 13% of GDP (annual growth, %)



Source: DANE. Own calculations.

confidence remained in negative territory, below its historical average at the end of 2021.

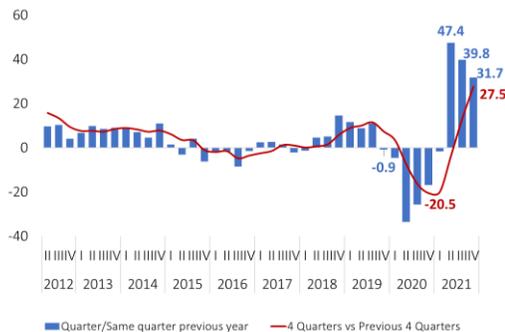
Government consumption, which represented 17.5% of GDP in Q4, achieved an annual growth of 11.9%. With these results, 2021 closed with a total increase of 12.1% (see Figure 13). Programs related to COVID-19 crisis such as the vaccination plan, solidarity income and PAEF explained this performance.

According to the Medium-Term Fiscal Framework (MTFF) presented by the government in mid-June, the fiscal deficit should have been 8.6% of GDP in 2021 and public debt was expected to rise to 66.8% of GDP, up from 50.3% in 2019 and 64.7% in 2020. However, 2021 ended with a fiscal deficit of 7.1% of GDP and public debt closed below 64% of GDP. Nevertheless, as stated by the Central Bank, Colombia registered a public debt of \$167 USD million at the end of 2021, which represents an increase of 13.3% compared with 2020.

Gross fixed capital formation, which was hit the hardest by the pandemic, showed an upward trend in 2021 and achieved a positive annual growth of 6.3% in Q4 (see Figure 14). Nevertheless, investment remains 14.2% below pre-pandemic levels. The main drivers of this performance were investments in housing, intellectual property, and machinery, each with annual growth rates of 25.1%, 5.5%, and 13.6%, respectively.

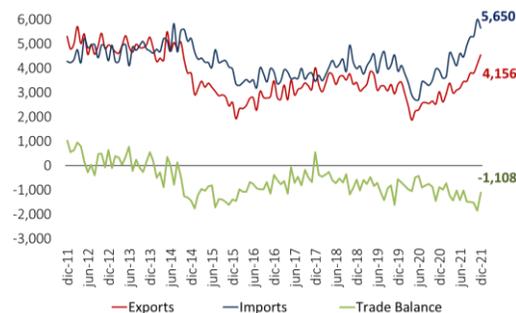
In terms of foreign trade, exports GDP showed an annual increase of 30.5% (see Figure 15). Exports continued its steady increase along 2021 and closed the year at pre-pandemic levels, edging out exports of 2019 Q4 by 0.31%. On the other hand, imports GDP

Figure 16. Total imports: 22.6% of GDP
(annual growth, %)



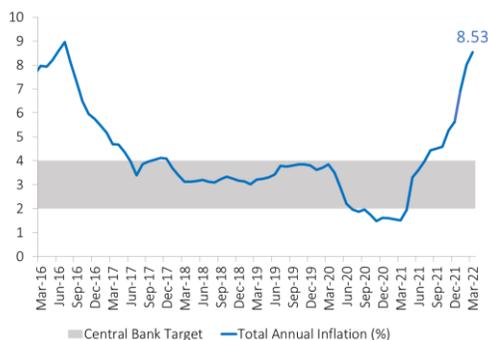
Source: DANE. Own calculations.

Figure 17. Trade balance (USD millions)



Source: DANE. Own calculations.

Figure 18. Annual inflation (%)



Source: DANE. Own calculations.

grew 31.7% annually and surpassed pre-pandemic levels by 9.4% (see Figure 16). The latter led the trade balance deficit to continue widening and close 2021 at USD-6.128 million FOB, its highest ever.

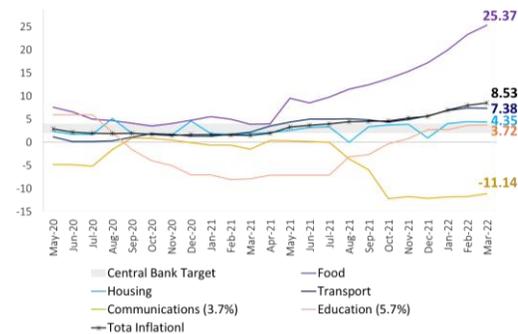
Outlook

2021 was the year where Colombia emerged from its largest economic crisis in history. Despite turbulent events such as the national strikes and blockades during the second quarter of last year, the third COVID-19 wave, and losing investment grade, the reopening of the economy and the vaccination plan led economic activity to rebound above pre-pandemic levels. Commerce and industry set the pace of the recovery, while government consumption stood out on the demand side. For 2022, Russia-Ukraine conflict, inflation and presidential elections will be key drivers of economic performance.

Colombia is clearly not immune to the conflict between Russia and Ukraine. In the first place, this event let Brent prices to close the month of March with an average of USD 117 per barrel (bp), its highest level since 2012. Coal, on the other hand, was near USD 350 per metric ton (pmt), achieving historical records. This represents an opportunity for Colombia's trade sector as these commodities accounted for 46% of total national exports in 2021.

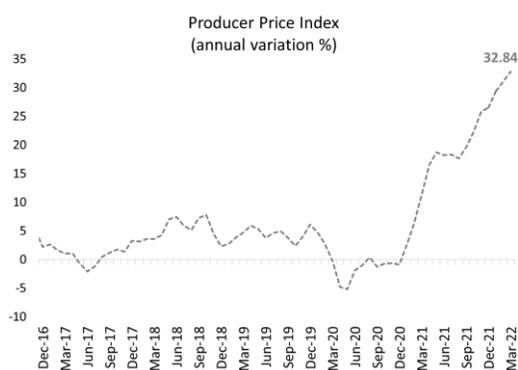
Having said that, the Russia-Ukraine conflict represents a risk on various fronts. The Government will need to make a fiscal effort to stabilize internal gasoline and diesel prices, as the stabilization fund 'FEPC' smooths out its price volatility at high costs to the national

Figure 19. Annual inflation by groups (%)



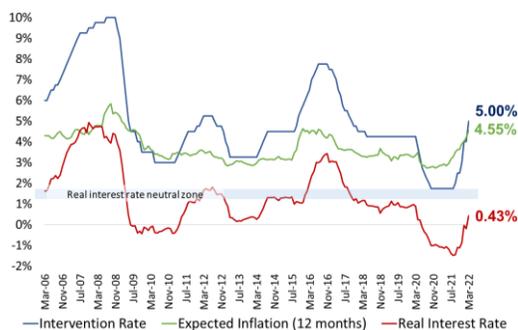
Source: DANE. Own calculations.

Figure 20. Producer Price Index (Annual variation %)



Source: DANE. Own calculations.

Figure 21. Intervention rate, real interest rate and expected inflation (%)



Source: Central Bank. Own Calculations

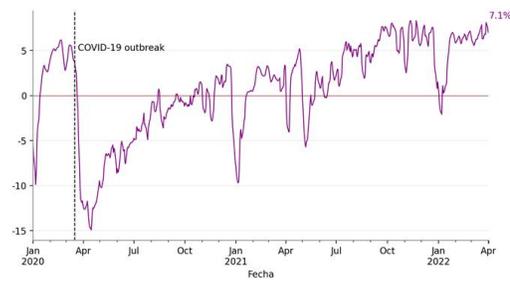
budget. Estimates from Corficolombiana suggest that this year the FEPC fund deficit could be around 15-30 COP trillion. On the other hand, Colombia imports of fertilizers and iron are highly dependent on Russia, so the prices of these supplies are likely to raise in the next months.

This brings us to the next challenge Colombia will face in 2022: inflation. 2021 closed with an annual inflation of 5.62%, exceeding the Central Bank's target range. In addition, the first months of 2022 have not seen an ease in prices as well (see Figure 18). Food prices have been the main drivers of this performance (see figure 19). On the other hand, producer prices have also experienced severe pressures, evidenced in the producer price index annual variation (see Figure 20). We expect consumer inflation to reach its peak in April and stand at 6.9% at the end of 2022.

In response to persistent inflation, the Central Bank started 2022 with a 100bp increase in their intervention rate (see Figure 21), followed by an additional hike of the same magnitude in March. Nevertheless, the real interest rate is still close to negative levels, suggesting the economy remains far away from operating under a contractionary monetary policy stance. We expect the Central Bank will keep raising its intervention rate for the rest of the year, closing 2022 at 7.75%.

Finally, presidential elections will be the main topic in the coming months. Left-wing candidate Gustavo Petro seemed to have no competition until the 'consultas', where right-wing candidate Federico Gutiérrez (aka 'Fico') emerged as his main rival. Sergio Fajardo -the candidate from the center left- has a long way to go to recover from his poor performance at the 'consultas'. We assign a

Figure 22. Electricity demand (7-day moving average), data as of April 03 2022 (Variation against pre-pandemic levels, 2019 demand mean)



Source: XM.

Petro win a 40% probability, a Fico win 50%, and a Fajardo win a 10% chance (see our article 'Always a good fight').

The outlook for 2022 Q1 seems favorable. Electricity demand, a good indicator to estimate economic activity, is performing well above pre-pandemic levels (see Figure 22). For 2022, the economy is likely to keep raising, but being dependent on what will happen with international and national inflation, and how political and social stability will behave during and after presidential elections. All in all, we project Q1 GDP to register an annual increase of 6.5% and for 2022 a total growth of 4.75%.

Savings and investment during COVID

Two years into the COVID pandemic, the Colombian economy has experienced roller-coaster swings the likes of which it has never witnessed before. The dramatic downturn of 2020, followed by a remarkable rebound in 2021, is already a well-known fact; we are also well aware of the stark deterioration of the current account deficit, reaching almost 7% of GDP in Q4 2021.

The behavior of the current account is, of course, a mere reflection of the saving and investment decisions made by agents in the economy, which means that in 2020 to some extent, but especially in 2021, investment far outpaced savings. The current account is, however, the net effect of the decisions of different agents, which might have behaved quite differently during these difficult years.

In this section we delve deeper into the taxonomy of the investment and saving decisions of different agents in the economy, using data just made available by Dane as of the end of 2021. As we will see, the results raise several concerns, above and beyond the alarms already in place at the economy-wide level.

A small caveat before we begin. Even though the difference between investment and saving is, by definition, equivalent to the current account deficit (it is a macro identity), in practice the measurements lead to differences between one and the other. The data on investment and saving presented in this section comes from the national accounts computed by Dane in COP, while the balance of payments data used to analyze the current account is computed by the Central Bank in dollars.

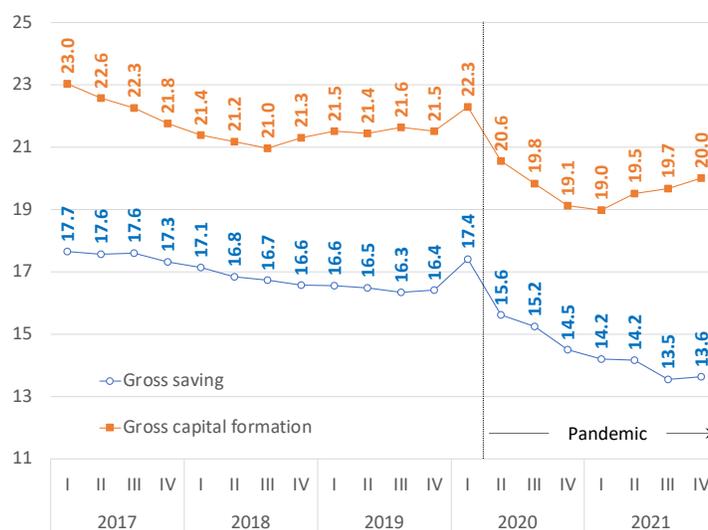
The figures presented below show four-quarter windows at each point in time, instead of just quarterly data. This gives, in our opinion, a clearer sense of where things are headed.

Let us start first with aggregate saving and investment, shown in Figure 1. Prior to the pandemic, Colombia had been experiencing a decline in saving, followed by a decline in investment during 2017 and part of 2018; then, starting the in the second half of 2018, investing started to recover. With saving falling, naturally the current account deficit worsened.

When the pandemic exploded (see the dotted vertical line), the reduction in saving relative to GDP gained momentum during all of 2020, while investment fell by almost four percentage points of GDP. Then, in 2021, investment rebounded, bolstering the recovery process, while savings continued to fall even further. When comparing the start of the blue line back in 2017 with the current situation, aggregated saving has fallen by a whopping 4 pp of GDP.

The economy needed to spend its way out of the pandemic, which means saving had to suffer too. The question we will address now is who did what during this process.

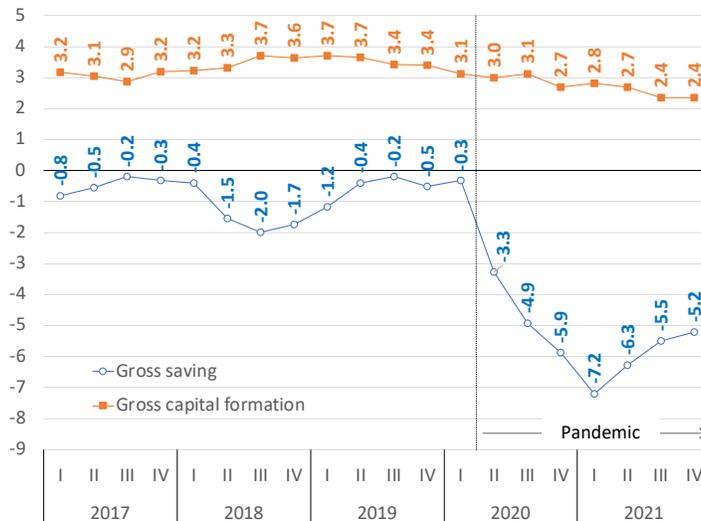
Figure 1. Aggregate saving and investment (% of GDP) – 4-quarter windows



Source: Dane, EConcept calculations.

Let us begin first with the government, which under the national accounts' aggregate perspective corresponds to the non-financial public sector as a whole. Figure 2 shows, on the one hand, a steady decline in investment, coupled with a dramatic collapse in savings during the first part of the pandemic. The fiscal effort on the government consumption front, spending across the board on subsidies, vaccines, etc., is shown in full by the blue line: saving went all the way down to -7.2% of GDP in 2021-I and then started to recover, but not in full: it closed last year at a still whopping -5.2%.

Figure 2. Government saving and investment (% of GDP) – 4-quarter windows

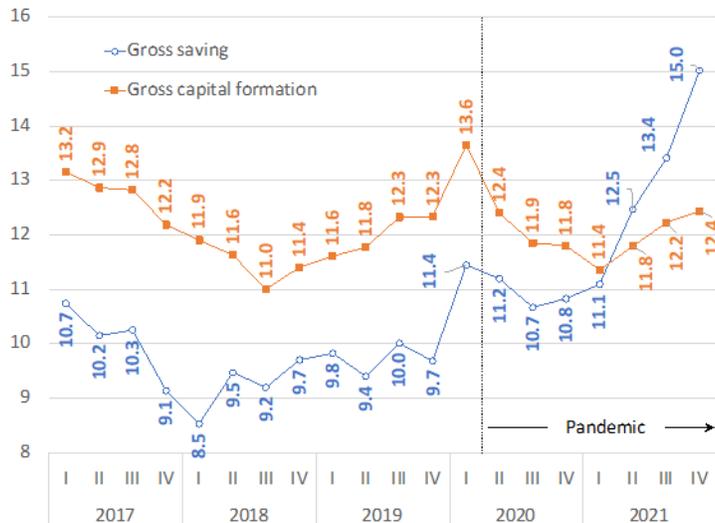


Source: Dane, EConcept calculations

The steady decline in public investment is, to some extent, masked by the large swings in public saving. However, a decline it is indeed: comparing the pre-pandemic situation with the current numbers, public investment is now around a full percentage point of GDP smaller.

We move now to the corporate world, which national accounts define as “non-financial companies.” Given that these companies are the main investors in the economy, it should come as no surprise that the investment path shown in Figure 3 is behind the dynamics of investment at the aggregate level, shown in Figure 1 at the beginning of this section: a decline between 2017-I and 2018-III, followed by a recovery between 2018-IIIV and 2020-I; then came a substantial reduction until the first quarter of last year caused by the pandemic and, finally, the process was crowned by a slight recovery during the last three quarters of 2021.

Figure 3. Non-financial companies saving and investment (% of GDP) – 4-quarter windows



Source: Dane, EConcept calculations

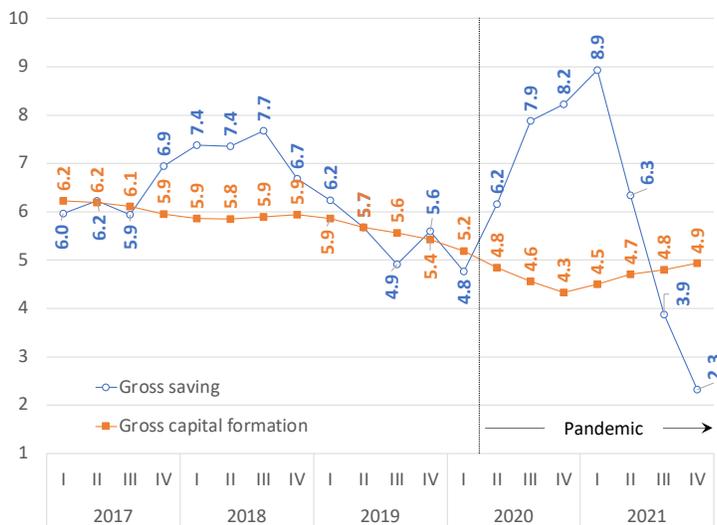
The evolution of companies' saving at the macro level warrants a brief parenthesis. In national accounts, as in everyday life, saving is the net result of disposable income minus consumption expenditures; however, in national accounts, companies do not consume, which means saving is equal to its disposable income.

That said, the evolution of companies' saving (which amounts to the evolution of companies' disposable income) has been generally on the rise since 2018. What is puzzling, though, is the acceleration companies' saving, relative to GDP, during all of last year. As a result, companies became net savers in the economy in 2021, completely out of character when it comes to macro behavior: normally, companies invest in excess of what they save.

This brings us, at last, to the most worrisome part of the puzzle: households. Figure 4 shows that, in tandem with the all the other agents in the economy, households ended the 2017-2021 period with less investment, even after taking into account the 0.6% of GDP rebound of 2021. Household saving, on the other hand, has been all over the place during these trying COVID times: it rose sharply in 2020, but then gradually collapsed last year. Indeed, in Q4 2021 household saving came in at a dismal 2.3% of GDP,

almost 7 pp lower than in 2021-I. So much, then, for households as providers of net saving for the rest of the economy to invest.

Figure 4. Household saving and investment (% of GDP) – 4-quarter windows



Source: Dane, EConcept calculations

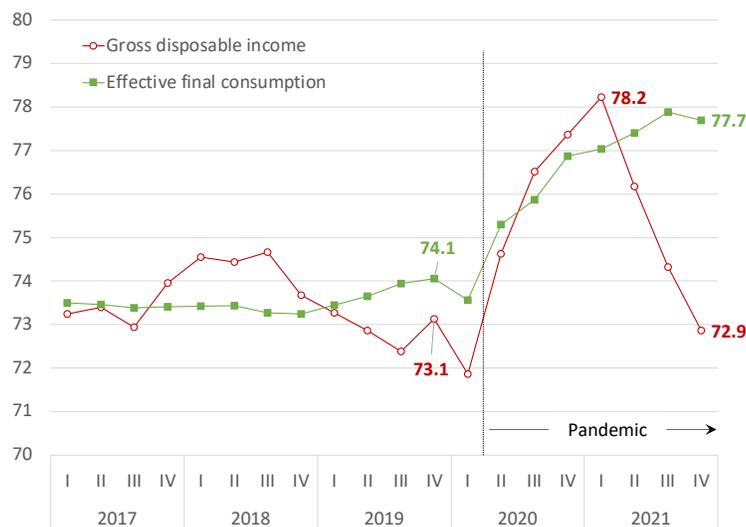
What happened to household saving? The answer lies in Figure 5, and is a combination of income patterns and consumption decisions. Households' disposable income had been losing steam during the latter part of 2019, prior to the COVID breakout, but as the pandemic progressed, lockdowns were enforced, and the government launched its subsidy programs aimed at offsetting the associated negative income effects on Colombian families, disposable income went up... relative to GDP (not in absolute terms).

Figure 5 also shows that, quite significantly, household consumption went up in line with disposable income.

This upward trend in disposable income and consumption (again, relative to GDP) took place during 2020, but changed in a dramatic way in 2021. Last year, disposable income took a nosedive, but consumption continued to edge up; remember that, also, investment suffered (recall Figure 4). The

reason behind the sudden fall in disposable income last year has to do with reduced fiscal transfers, increases in poverty and 0.7 million people moving and staying away from the labor market; the relative importance of each of these factors remains to be assessed, and Dane's information is not yet rich enough to provide a clear-cut answer.

Figure 5. Household disposable income and consumption (% of GDP) – 4-quarter windows



Source: Dane, EConcept calculations

The bottom line is that Colombian households are consuming much more (relative to GDP) than prior to the pandemic, while their disposable income suffered tremendously last year. As a result, households stopped being suppliers of saving to the rest of the economy, adding to the pressures exerted by the expansionary fiscal policy implemented during the pandemic. This cannot go on indefinitely.

As was to be expected, the effects of COVID on the economy have not stopped just because cases dropped to much lower levels, the economy rebounded, and people have regained much of the mobility taken away by lockdowns during 2020. The scars left by COVID, unsurprisingly but unfortunately, will stay with us a while longer. Maybe a lot longer.

Taking fiscal and monetary stimuli away from households in such a fragile state will take a lot of coordination and acumen on the part of policymakers during this and the next administration, as well as at the Central Bank. Strong inflation will just make everything much more difficult.

Always a good fight

Polls have acquired a bad reputation. Some of them are accused of manipulation, of poorly reflecting what the universe of voters may be really thinking, and of pushing hidden agendas. We don't share these suspicions. Four years ago, at this stage in the presidential race, pollsters rightly pointed out that the supposed winner, Germán Vargas, was out of sync with the Colombian people, and that Iván Duque would win the first round and the run-off -- as then actually occurred.

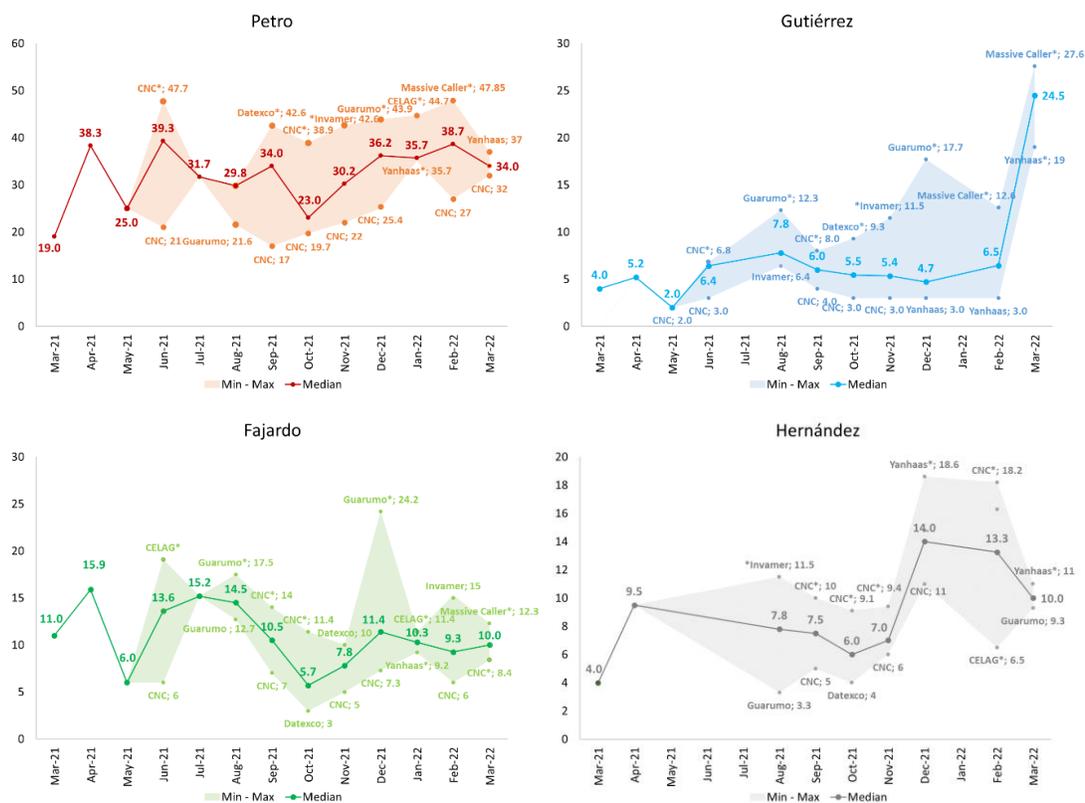
Nowadays, polls are saying that Gustavo Petro will be the winner of the May 29th first round, with a very stable vote intention of around 34% (see Figure 6). Second would be Federico Gutierrez (aka Fico), whose vote intention just experienced a jump worthy of Cape Canaveral, from less than 10% to around 24%. Third, voter intentions for Fajardo and Hernández have never surpassed 16% and have recently converged at around 10%. Hence the only visible surprise, which is shared by all pollsters, as the narrowing of the fan chart indicates, is the four-fold increase of Fico.

Furthermore, the polls basically reflect what happened in the March 13th elections. Namely, the order of the candidates was: 1) Petro, 2) Fico, 3) Fajardo. Fico doubled Fajardo; and Petro's results, averaging between congress and consultas, were clearly higher than Fico's, and with a substantial margin, but not yet rendering Fico uncompetitive.

Now let's turn to the run-off polls results. Figure 7 reveals an interesting feature of Colombian politics, which occurs with some regularity at the current stage of elections: namely, that people want to see "a good fight." Until February, Petro was an absolute victor when people were asked for their run-off voting intentions: 31 percentage points higher than Fico in November, and 21 pp in February. The distance from Fajardo was smaller, at 17 pp and 14 pp, respectively. That is not the case anymore. Since people want

to witness a good fight, the bets for the run-off have narrowed the difference between Petro and Fico to just 1.9 pp (see the dotted line in Figure 7). Wow! Who would have predicted this two months ago? And the difference between Petro and Fajardo narrowed to 4.6 pp. Even between Petro and Hernández, the gap shrunk.

Figure 6. Vote intention for the first round, as of April 4 (to be held on May 29, 2022)

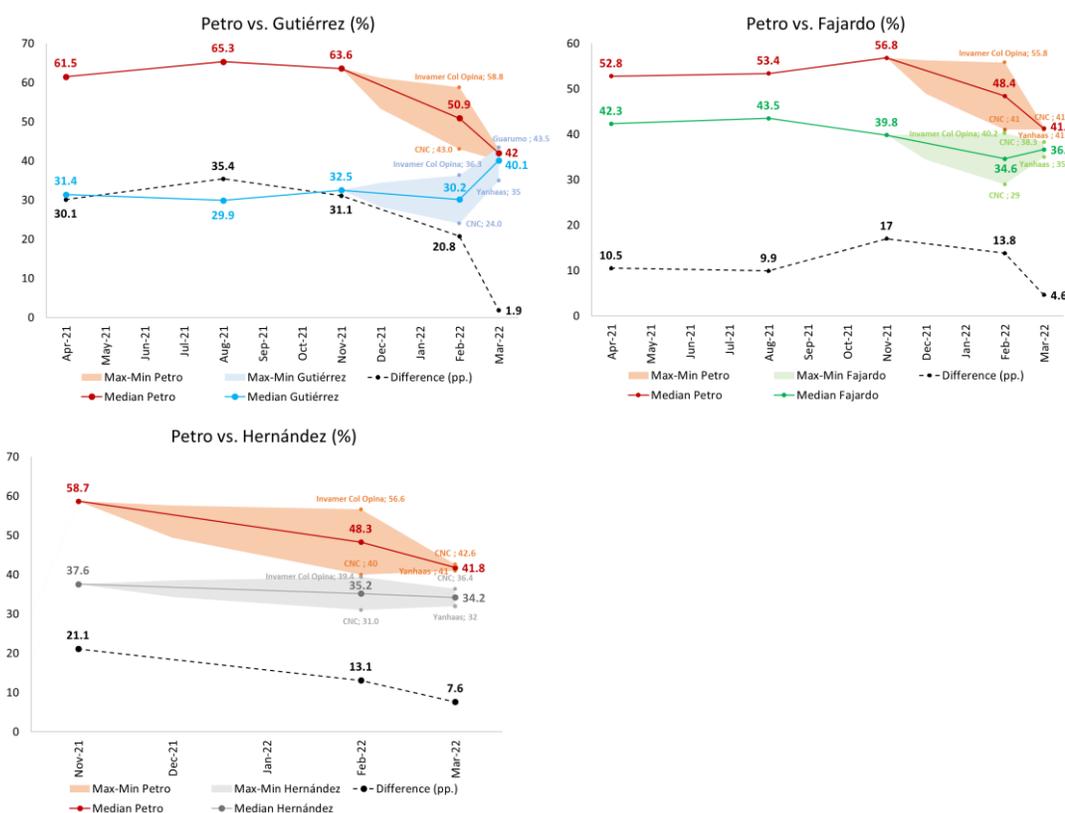


Source: Pollsters Invamer, Yanhaas, Centro Estratégico Latinoamericano de Geopolítica (CELAG), Massive Caller, Datexco, Guarumo - EcoAnálítica, Centro Nacional de Consultoría (CNC), EConcept calculations.

What conclusions can we draw from these trends? First, Fico is witnessing a rising trend, yet Petro is not yet declining for the first round. This is crucial. Fico's favorability has been at the expense of the rest of the candidates, except Petro. However, Petro has not risen either. This could be interpreted as Petro having a glass ceiling.

However, the trends have already changed for the run-off. Figure 7 shows a decline of 20 pp since November in Petro’s vote intention for the run-off: and of 10 pp since February. And this drop is accelerating. In contrast, Fico’s run-off vote intention jumped 10 pp in one month. If these trends were to continue, we would be witnessing an epochal change in sentiment. Whatever Fico is doing, he should keep doing it. It is working. The same cannot be said about Fajardo. His run-off vote intention is below that of most of 2021, and barely 2 pp above February.

Figure 7. Vote intention scenarios for the run-off, as of April 04 (to be held on June 19, 2022)



Source: Pollsters Invamer, Yanhaas, Centro Estratégico Latinoamericano de Geopolítica (CELAG), Massive Caller, Datexco, Guarumo - EcoAnálítica, Centro Nacional de Consultoría (CNC), EConcept calculations.

The March 13th elections may have been devilish for Fajardo, a mixed blessing for Petro, and Fico’s first communion. Nowadays, the portrayal of Petro in the business community is that of a spoiler; yet for many ordinary people that is precisely why they like him. Financers can half-heartedly accept Fico, but since

he appears to be able to beat Petro, he will be embraced with full support. Among ordinary Colombians, Petro's revanchist attitude has so far captured peoples' imagination, yet they could be having second thoughts about whether he could represent a jump off a cliff.

We think that Colombians will keep us seated at the edge of our chairs, biting our nails, and guessing who is going to prevail in June. From our point of view, we still give a Petro win a 40% probability, Fico's victory 50%, and Fajardo's 10%.

Petro as revenge

More than a sign of hope, Gustavo Petro's proposals seem inspired by a spirit of revenge. His most notorious proposals are: 1) end oil exploration and export; 2) use primary money creation at zero cost to finance expenditure; 3) grab pension savings to pay for education and the elderly; 4) impose tariffs on clothing and food, to promote import substitution in those industries; 5) re-nationalize (partially) health care; 6) impose higher taxes on the 4,000 richest people, collect COP 40 trillion pesos every year, and raise property taxes to force property sales of unproductive assets; 7) provide public lending and compete with private banks; and 8) immediately after inauguration, declare a three-month economic emergency to solve Colombia's poverty.

In the eyes of Petro's voters, these ideas would punish those guilty of Colombia's ills, and benefit the have-nots. The oil and coal producers, who are to blame for polluting the planet, must be punished by closing their operations as soon as possible. On those who manage the issuance of money, allegedly guilty of the government borrowing and paying interest, we must take revenge with free issuance to the government. On those who have saved for pensions, we must take revenge, it is not clear why, by dividing that money between the elderly and the young.

Apparently, someone should take revenge on those perverting health care, by re-nationalizing it, and handing it over to the labor unions, backtracking 30 years of obvious advances. Health care covers 97% of Colombians. When it was public, it only reached 30%, the richest and best connected. There are almost

two million health care visits a day, and the system overcame the pandemic without charging for ICU or COVID vaccination.

Rich people have farms and other idle assets, for which they should be punished via income and property taxes. A misleading calculation of potential COP 40 trillion (slightly less than 4% of GDP) extractable from them, allows Petro to solve the fiscal deficit. If those fat cats don't find buyers for their properties, due to higher taxes, the government would buy those farms and pay for them with debt bonds. That idea was applied in the '60s and '70s, and it didn't work.

In the strikes of 2021, imports of food, clothing and many other things were closed, due to the Buenaventura seaport blockade resulting in food and clothing price increases. Imposing tariffs will bring the same to the middle-income and poorest classes. With these proposals, people would be further impoverished, to help a handful of companies.

From the banks, which don't compete as intensely as they should and do not give enough credit, especially for agriculture, one must take revenge by putting the government to lend, even if it ends up in cronyism. State loans will become the most frequent form of corruption, as has happened a thousand times.

These proposals have Petro leading in the polls. Probably, the voters share their vindictive inspiration. People have gone from discouragement to revenge, and their patience has run out in the face of the indolence of governments and politicians. This is fertile ground for all kinds of populism, from the right and from the left.

Do people understand the consequences of that agenda? There will be unemployment because businesses will wither in the 20 departments that depend on oil and coal. There will be less tax collection and dividends from Ecopetrol with which to pay the teachers' salaries, health care or pensions. We will return to teacher pay arrears at the end of every year. There will be queues of pensioners waiting for their allowances. There will be food and clothing shortages. Without a friend in the public sector, nobody would get a credit from the state. Many beneficiaries of these credits will not pay. In short, there will be hunger,

despair and disbelief. In due time all this would be blamed on the "rich" who take the money out of the country.

People are angry because they have suffered a lot. Not only because of COVID, but because of the lack of opportunities for young people, parents and professionals. While many suffer, a few get rich. Politicians have fueled this rage, since they and their families profit from being close to power.

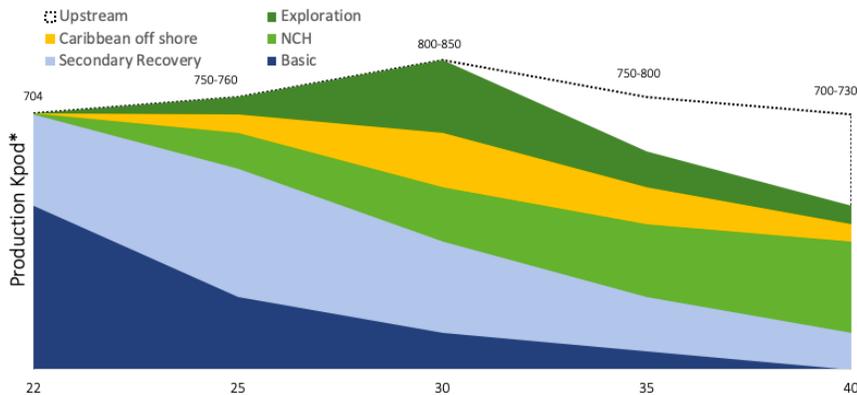
But we can't pour the baby down the drain with dirty bathtub water. Fifty million souls live from what Colombia produces. Nothing would be gained if only a fraction of current Colombia's GDP is produced.

This type of criticism does not dent Petro's popularity; nor does it motivate him to respond. It attracts media attention like honey. Other candidates can say whatever they like, and hardly stir up a debate. Petro opens his mouth, even drunk, and radio stations and television channels come out to ask what the others think of it. Petro is the inverse of Bruno, the one from Disney's "Encanto": we don't talk about Bruno, no, no, no. Here we only talk about Petro, tro, tro, tro.

Colombian oil is far from condemned

There have been mixed signals from the oil & gas community in Colombia about how the substantial decline in production witnessed since 2019 should be interpreted. New light came from the recent results presented by Ecopetrol, and, more importantly, for the prospective view advanced by the administration. Indeed, as Figure 8 shows, Colombia's largest O&G producer expects to go from around 700 kbped to around 800-850 by 2030. Two different strategies would support this trend.

Figure 8. Ecopetrol expected production, 2022 – 2040



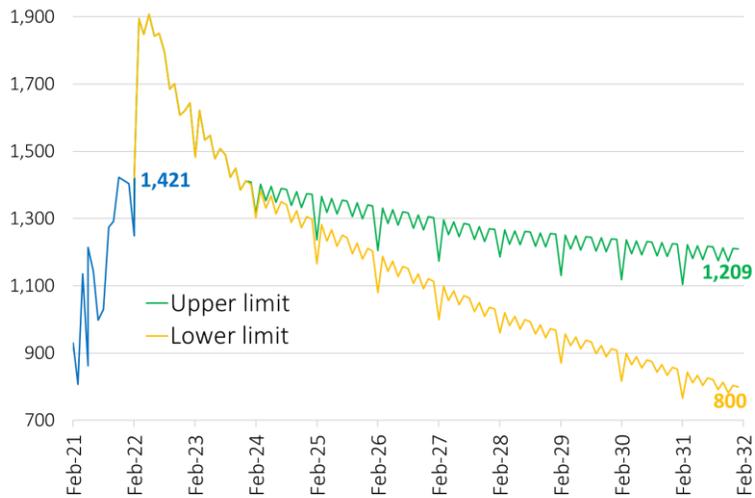
Source: Ecopetrol, EConcept calculations.

On the one hand, secondary recovery (the light blue area in Figure 8) would be able to support current production until the middle of this decade; henceforth, three separate plays would be responsible for compensating the decline of the legacy oil fields: 1) Non-conventional hydrocarbons, stemming from fracking in the Permian and in Colombia, 2) the Colombian Caribbean off-shore, and 3) exploration, mainly in Brazil, but also in Colombia.

Two interesting developments give us confidence in these scenarios: the first exploratory, appraisal well will be drilled in the Caribbean offshore in November with Oxy, in ultradeep waters; and the first pilot exploratory, appraisal well should be drilled this year in the non-conventional play in the Mid- Magdalena River basin. Current oil prices, and the prospect that high prices should be the case for at least the next two to three years give support to the economics of this strategy

We have estimated the eventual stream of revenues, in dollar terms and as a percentage of GDP, to be derived from this scenario. Figure 9 indicates that oil might still be the main source of Colombian exports for the rest of this decade.

Figure 9. Estimated oil monthly exports, 2021 – 2032 (USD million FOB)



Source: DANE, IEA, EIA, EConcept calculations.

Investment Opportunities in Colombia Transportation Sector

1. Roads

Fourth Generation (4G) Road Concessions Projects – First Wave Projects

Road	Length (km)	Contract Value (COP million)	Status
Honda - Girardot - Puerto Salgar	190.56	1,465,609.00	Operation
Perimetral de Oriente de Cundinamarca	152.24	1,647,776.11	Construction
Cartagena - Barranquilla	146	1,709,364.53	Construction
Autopista al Río Magdalena 2	144	1,740,427.56	Construction
Autopista Conexión Norte	145	1,300,273.78	Construction
Autopista Conexión Pacífico 1	50.1	2,087,106.18	Construction
Autopista Conexión Pacífico 2	97.5	1,300,234.03	Operation
Autopista Conexión Pacífico 3	146	1,869,330.68	Construction
Mulaló - Loboguerrero	32	1,587,924.10	Pre-Construction
Total	1103.4	14,708,045.97	

Source: National Planning Department, National Infrastructure Agency

Fourth Generation (4G) Road Concessions Projects – Second Wave Projects

Road	Length (km)	Contract Value (COP million)	Status
Autopista al Mar 1 (2012)	181	2,244,728.60	Construction
Autopista al Mar 2 (2012)	254	2,574,127.19	Construction
Santana-Mocóa-Neiva (2013)	456	2,969,581.00	Normalization
Rumichaca-Pasto (2013)	83	2,316,127.77	Construction
Popayán-S/der de Quilichao (2013)	77	1,702,786.72	Pre-Construction
Transversal del Sisga (2013)	137.03	966,849.10	Construction
Villavicencio-Yopal (2013)	266	2,939,320.80	Construction
P/ta de Hierro - Palmar (2013)	202.56	1,240,828.00	Operation
Bucaramanga - Barrancabermeja - Yondó	151.6	2,691,392.44	Construction
Autopistas del Caribe (2015)	253	4,314,364.07	Pre-Construction
Total	2,061.19	23,960,105.69	

Source: National Planning Department, National Infrastructure Agency

Fourth Generation (4G) Road Concessions Projects – Third Wave Projects

Road	Length (km)	Contract Value (COP million)	Status
Pamplona - Cúcuta (2015)	62.6	2,072,320.0	Construction
Bucaramanga – Pamplona (2013)	134.2	1,413,763.0	Construction
Total	196.80	3,486,083.0	

Source: National Planning Department, National Infrastructure Agency

Updated Map of 3G and 4G Road Concessions Projects

Agencia Nacional de Infraestructura



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Concesión carretera — Concesiones 1-3 G
 Programa Autopistas 4G



Source: ANI

Other Road Projects: Other infrastructure road projects, different to 4G involving the building, rehabilitation and maintenance of roads. Primarily private initiative.

Project	Length (km)	Contract Value (COP million)	Status
IP Cambao – Manizales (2013)	256	1,147,653.42	Construction
IP Tercer Carril Bogotá Girardot (2016)	144.81	4,197,839.61	Construction
IP Accesos norte a la ciudad de Bogotá D.C. (2014)	62	1,225,686.25	Construction
IP Chirajará – Fundadores / Bogotá Villavicencio* (2013)	86	5,090,472.46	Construction
IP Malla Vial del Meta (2013)	267.5	1,580,927.03	Pre-Construction
IP GICA	180	1,810,392.0	Construction
IP Vías del NUS* (2013)	157	2,490,136.0	Construction
IP Neiva – Girardot* (2014)	198.35	2,017,901.64	Construction
IP Antioquia – Bolívar* (2015)	495.2	2,752,552.19	Construction
Total	1,846.86	22,313,560.6	

Source: National Planning Department, National Infrastructure Agency

1. Airports

- **Tourist Airports** modernization, adequacy, administration, operation, and maintenance of Javier Noreña Valencia (La Macarena), Germán Olano (Puerto Carreño) and César Gaviria Trujillo (Inírida) airports.
 - **Capex:** USD 109.6 Million.
 - **Status:** Structured.

2. Massive urban transit systems and Strategic Transport

- **San Andrés island public transport:** Construction, rehabilitation, operation, and maintenance of the infrastructure associate to the stations, bus stops and supply of rolling stocks (electric fleet) and of the technological systems required.
 - **Capex:** USD 49.25 Million.
 - **Status:** Structured.

- **Intermodal Tram Stations in Medellín:** technical, legal, and financial structuration of project that contemplates the construction, operation, and maintenance of infrastructure for the Intermodal Stations in Medellín of the green corridor project “Calle 80 Tram”, of Medellín Metro company.
 - **CAPEX:** USD 145.8 Million.
 - **Status:** Structured.

II. Energy and Mining Sectors

Ministry of Mines and Energy – National Development Plan:

Projects considered in building phase

Project	Type	Capacity (MW)	Operation Start Date
Acacia 2	Wind	80	November 2022
Alpha	Wind	212	November 2023
Apotolorru	Wind	75	August 2023
Beta	Wind	280	November 2023
Camelias	Wind	250	December 2023
Campano	Solar	99	December 2022
Carrizal	Wind	195	June 2023
Cartago	Solar	99	December 2022
Casa Eléctrica	Wind	180	August 2023
Chemesky	Wind	100	August 2023
El Paso Solar	solar	68	January 2021
El Tesorito	Thermoelectric	199	December 2022
Ipapure	Wind	201	September 2023
Irraipa	Wind	99	June 2023
Ituango	Hydroelectric	1,200	June 2022
Kuisa	wind	200	August 2023
La Loma	Solar	150	November 2022
San Felipe	Solar	90	December 2022

Termo Jagüey	Thermoelectric	19	December 2021
Termo Rubiales	Thermoelectric	19	December 2021
Termocandelaria	Thermoelectric	252	November 2022
Termocaribe 3	Thermoelectric	42	November 2022
Termosolo 1	Thermoelectric	148	December 2023
Termosolo 2	Thermoelectric	80	December 2022
Termoyopal G3	Thermoelectric	50	August 2020
Termoyopal G4	Thermoelectric	50	August 2020
Termoyopal G5	Thermoelectric	50	September 2020
Windpeshi	Wind	200	December 2022
ENR Col 1	Solar	120	January 2024
Tayrona	Solar	76	January 2024

Source: UPME, Plan de Expansión 2020-2034

Oil Exploration Projects for Colombia in 2021 (4Q)

Exploration Projects	Status	Participants
Carnaval-1	Under evaluation	Lewis 50 %-Operator, Hocol 50 %
Cira 3540	Under evaluation	ECP (48%) Sierracol Energy Operator (52%)
Ibamaca-1	Under evaluation	HOCOL 100%
Cayena -1 ST1 ML1	Under evaluation	Parex 95% (Operator) Ecp 5% Sólo Riesgo
Cayena-1 ST 1 ML2	Under Evaluation	Parex 95% (Operator) Ecp 5% Sólo Riesgo

Source: Ecopetrol

Ecopetrol's Investment plan for 2020-2023 (USD million)

USD million	Investment 2021	Investment 2021-2023 Projected	
Production	1,474*	12,000	15,000
Downstream	228*	-	-
Exploration	86	9,000	11,000
Corporate	94*	-	-
Total	1,882*	12,000	15,000

Source: Ecopetrol. *Note: not includes affiliates and subsidiaries.

III. Others

- **Education:**

Design, construction or rehabilitation, maintenance, and operation of 8 schools in Soacha.

- **Capex:** USD 40.3 Million.
- **Status:** Structured

Design, construction, financing, operation, and maintenance of accommodation for university students, and provision of complementary services such as cleaning, surveillance, restaurant, among others, for the Universidad Nacional de Colombia in Manizales.

- **Capex:** USD 26.7 Million.
- **Status:** Structured

Construction, operation, and maintenance of student housing in Medellín.

- **Capex:** USD 79.6 Million.
- **Status:** Structured

Design, construction or rehabilitation, maintenance, and operation of schools in Ibagué

- **Capex:** USD 47.2 Million.

- **Museums:** Design, restoration, maintenance, operation, conservation and administration of collections of 8 museums in Cartagena, Villa del Rosario, Ocaña, Santa Fe de Antioquia, Villa de Leyva, Popayan and Honda.

- **Capex:** USD 18.2 Million.
- **Status:** Structured.

- **Sports:** structuring of a project that contemplates the design, modernization, adaptation, construction, provision, operation, maintenance and economic exploitation of the infrastructure that is required within the Center of High-Performance Sports (CAR).

- **Capex:** USD 44.6 Million.
- **Status:** Structured

- **Water and sewage:** Design, construction, operation and maintenance of the Santa Marta aqueduct. Construction of a Wastewater Treatment Plant for the Bogotá River, Duitama and Neiva.
 - **Capex:** USD 2,522.9 Million (Bogotá), USD 57.2 Million (Duitama), USD 128.7 Million (Neiva).
 - **Status:** Structured (Santa Marta, Bogotá). Phase 2 (Duitama and Neiva).

- **Electric Energy:** Rehabilitation, operation and maintenance of the infrastructure of an electric energy generation system, in Military Air Units – MAU of Colombian Force – CAF.
 - **Capex:** USD 134.3 Million.
 - **Status:** Structured.

- **National Parks:** Operation and development of Ecotourism services in Tayrona Natural National Parks, and Salamanca Park.
 - **Capex:** USD 71.4 Million.
 - **Status:** Structured.

- **Health:** To conceive the Great Hospital Park of Engativá, which is a hospital infrastructure of international reference with the highest specialized technology for patient care, laboratories, as well as study and innovation that allow it to be researched.
 - **Capex:** USD 35.5 Million.
 - **Status:** Structured

Design, financing, construction, equipment, endowment, operation, maintenance and reversal of a new high complexity hospital in Fusagasugá.

 - **Capex:** to define
 - **Status:** Structuration in course

- **Penitentiary Infrastructure:** Structuring technical, legal and financial under the PPP mechanism which includes the construction of prisons in Barrancabermeja and Uramita.
 - **Capex:** USD 273.6 Million (Barrancabermeja) and 304 million (Uremia).
 - **Status:** Structured

- **Urban Renewal and Public Buildings:** Structuring technical, legal and financial services for the construction of the Judicial Citadel of Bogotá.
 - **Capex:** USD 312.84 Million.
 - **Status:** Structured.

Design and construction of the new Congress building.

 - **Capex:** USD 136.8 Million.

- **Status:** Structured.
Design, construction, operation and maintenance of National Attorney General office in Cali.
- **Capex:** USD 114.4 Million.
- **Status:** Structured

IV. Public – Private Partnerships Projects without public funds

The purpose of these projects is to facilitate private sector participation in infrastructure projects, to the extent that private entities are now entitled to propose projects of this nature to either National or Regional Governments, as well as to invest in economic sectors in which private involvement has traditionally been scarce. This is the case of education, health, justice, defense and public building construction, among others.

Number of Public-Private Partnerships by Sector

Sector	Hired	Feasibility Studies	Pre-Feasibility Studies	Total
Agriculture		4	4	8
Water and Sewage		3	27	30
Environment and tourism		2	2	4
Science, tech and innovation				
Commerce, Industry and tourism			4	4
Culture and sports		3	6	9
Public Buildings and Urban Renewal	3	7	31	41
Education		7	3	10
Justice		2	1	3
Mining and Energy		3	5	8
Health Care	1	5	1	7
Information and Communication Technologies		1	3	4
Transport	38	35	64	137
Housing			2	2
Total	42	72	153	267

Source: National Planning Department- RUAPP (February 2022)

Forecast table

		2016	2017	2018	2019	2020	2021pr	2022f
Population	Millions	47.9	48.0	48.0	49.4	50.3	51.1	51.8
Real GDP	Trillions of 2015 COP	821.5	832.7	854.0	881.2	819.1	905.6	948.7
	% change	2.1	1.4	2.6	3.2	-7.0	10.6	4.8
Nominal GDP								
In pesos	Trillions of current COP	863.8	920.5	987.8	1,060.1	998.7	1,176.7	1,317.6
	% change	7.3	6.6	7.3	7.4	-5.5	17.8	12.0
In dollars	Billions of current USD	282.7	311.9	334.1	323.4	271.0	314.3	353.6
	% change	-3.7	10.3	7.1	-3.2	-16.7	16.0	12.5
GDP deflator	% change	5.1	5.1	4.6	4.0	1.4	6.6	6.9
Consumer prices (end of period)	% change	5.7	4.1	3.2	3.8	1.6	5.6	6.9
Nominal exchange rate (average)	COP/USD	3,055	2,951	2,956	3,281	3,693	3,744	3,726
	% change	11.3	-3.4	0.2	11.0	12.6	1.4	-0.5
Real exchange rate (average)	2010 average = 100	122.4	122.9	121.3	125.2	134.0	140.3	144.6
	% change	1.9	0.4	-1.3	3.2	7.0	4.7	3.1
Repo rate (end of period)	% (end of period)	7.50	4.75	4.25	4.25	1.75	3.00	7.75
Nominal interest rate (DTF)	% (end of period)	6.9	5.3	4.3	4.2	2.0	2.93	7.51
Current account balance	Billions of current USD	-12.6	-9.9	-14.0	-14.8	-9.6	-17.9	-17.7
	% of GDP	-4.3	-3.3	-3.9	-4.3	-3.3	-5.7	-5.0
Capital account balance	Billions of current USD	-12.3	-9.6	-13.0	-13.3	-8.2	-17.9	-17.7
	% of GDP	-4.4	-3.1	-3.9	-4.1	-3.0	-5.7	-5.0
Exports	Billions of current USD	31.8	38.0	41.9	39.5	31.1	41.4	43.6
	% change	-11.8	19.7	10.2	-5.8	-21.4	33.3	5.3
Exports (goods and services)	Billions of current USD	42.8	49.3	53.7	51.3	38.1	50.4	55.9
	% change	-9.0	15.3	8.9	-4.5	-25.7	32.1	10.9
Imports	Billions of current USD	44.9	46.1	51.2	52.7	43.5	61.1	64.5
	% change	-17.0	2.6	11.2	2.9	-17.5	40.5	5.5
Imports (goods and services)	Billions of current USD	56.2	58.1	64.3	65.5	51.3	70.9	78.4
	% change	-14.8	3.3	10.7	1.9	-21.6	38.2	10.6
Consolidated fiscal balance	% of GDP	-2.2	-2.3	-2.2	-2.9	-7.9	N.A.	N.A
Central Government Fiscal Balance	% of GDP	-4.0	-3.6	-3.1	-2.5	-7.8	-7.1	-6.2

f*:all values are forecasts