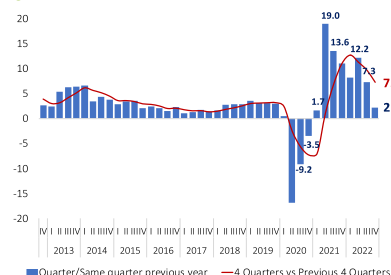
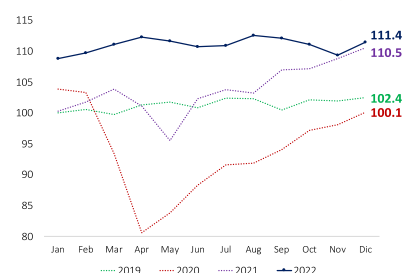


Figure 1. Quarterly GDP Growth (annual growth, %)



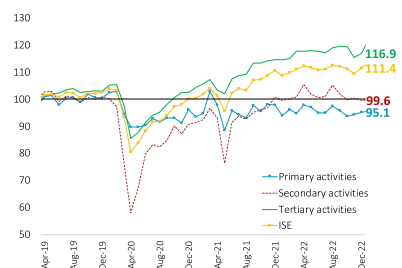
Source: DANE. Own Calculations.

Figure 2. Economy Tracking Indicator ISE (base Jan-19 = 100, Seasonally adjusted)



Source: DANE. Own Calculations.

Figure 3. ISE by activities (base Jan-19 = 100, Seasonally adjusted)



Source: DANE. Own Calculations.

Figure 4. ISE and labor market indicators (base average 2019 = 100, seasonally adjusted)

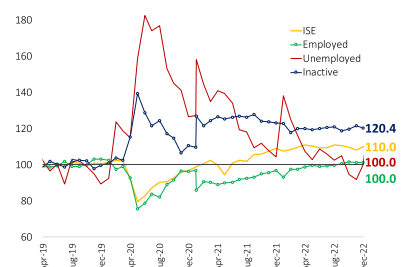
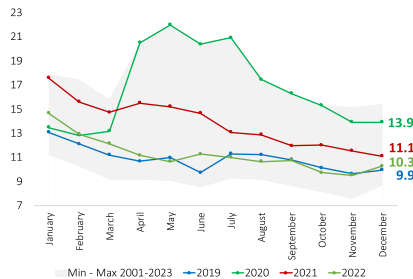
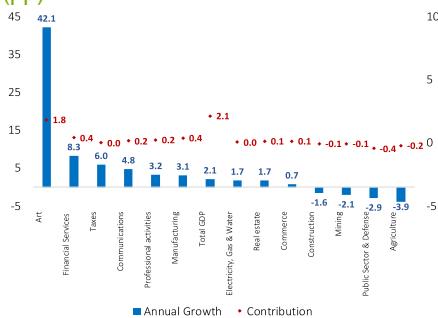


Figure 5. National unemployment rate (%)



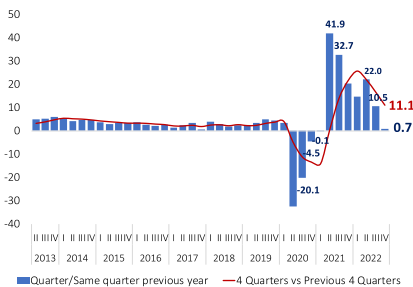
Source: DANE. Own Calculations.

Figure 6. Annual growth (%) vs. Contribution (pp)



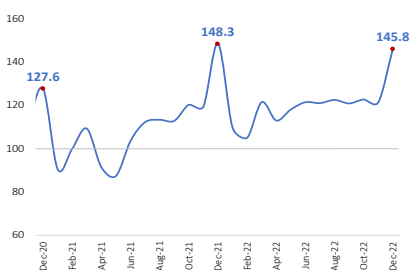
Source: DANE. Own Calculations.

Figure 7. Commerce: 20% of GDP (annual growth, %)



Source: DANE. Own Calculations.

Figure 8. Retail sales index (Base 2019=100)



Source: DANE. Own Calculations.

decreased by 0.8 pp with respect to the same month of 2021 (see Figure 5).

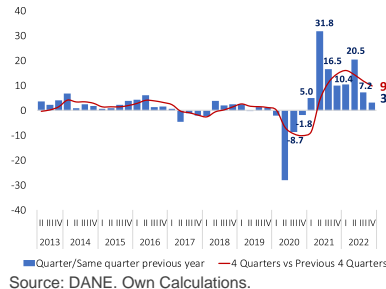
## GDP, the supply side

In Q4, most sectors exhibited some growth while four of them contributed negatively to the overall 2.1% growth of GDP (see Figure 6). Arts were again the top driver with an annual increase of 42.1% and a contribution of 1.8pp. In contrast, agriculture decreased 3.9% in real terms, followed by public sector and defense (-2.9%), and mining (-2.1%). Furthermore, these sectors also had a negative contribution to the annual variance.

Commerce annual growth came in at 0.7% (see Figure 7), its lowest level since early 2021. This dynamic was explained mainly by the decrease in trade and repair of vehicles (-1.8%) and the low increase in transportation and warehousing (5.8%), and accommodation and food services (1.8%). Accordingly, in December the retail sales index had a negative annual growth of 1.7% (see Figure 8).

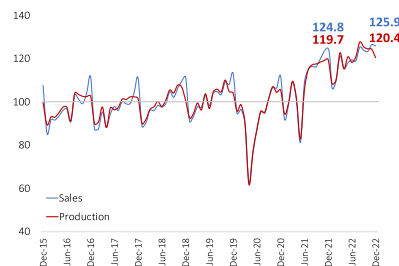
Manufacturing posted a 3.1% growth rate, the lowest for the sector since 2020-Q4 (see Figure 9). None of the manufacturing subsectors decreased this quarter but all of them showed slower growth rates, with wood processing activities (6.4%) and furniture production (5.9%) showing the largest expansions. Similarly, the industrial production index closed 2022-Q4 with an annual growth of 5.2% in October, 4.4% in November and 0.6% in December (see Figure 10).

Figure 9. Manufacturing: 11.8% of GDP (annual growth, %)



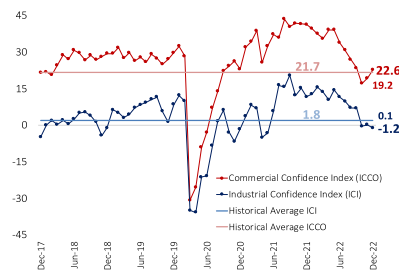
Source: DANE. Own Calculations.

Figure 10. Industrial Production and Sales Index (2019 = 100)



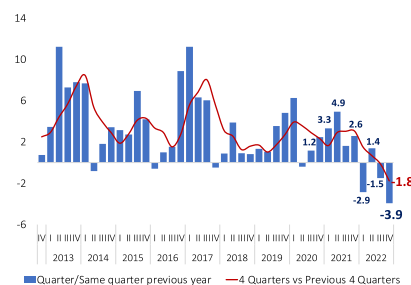
Source: DANE. Own Calculations.

Figure 11. Commercial and Industrial Confidence Index



Source: Fedesarrollo. Own Calculations.

Figure 12. Agriculture: 5.4% of GDP (annual growth, %)



Source: DANE. Own Calculations.

During the last quarter of 2022, the commercial and industrial confidence index indices stood near their respective historical averages (see Figure 11). In fact, commercial confidence had shown a slight recovery with an increase of 5.6ppp during the quarter, while the industrial one lost 0.8pp. The former was mainly explained by a growing optimism over the economic situation ending the year and in the next six months. The industrial confidence behavior was attributed to a consistently negative current volume of orders and an annual reduction of 60.9% in the production expectations for the next quarter.

Agriculture has been showing a poor performance this year, closing the last quarter with a drop of 3.9% in its GDP (see Figure 12). According to DANE, this is mainly due to a continuous decrease in coffee production (-20.4% during Q4-2022), other traditional crops (-4.8%), and livestock (-0.9%). This performance has been attributed to higher production costs due to the depreciation of the peso and international shortages, as well as the “Niña” phenomenon. As a result, agricultural activities stand 1.8% below 2021 levels.

After struggling in 2021, the oil industry showed a recovery during this year. The sector increased 3.2% in Q4 when compared to the same quarter last year, showing a total growth of 2.6% in 2022 (see Figure 13).

In general, 2023-Q4 did not show promising results on the economic activity front. The slowdown trend that started in Q3 was exacerbated during the last quarter of the year as shown in the poor (and even negative) growth that most sectors experienced.

Figure 13. Oil: 67.4% of Mining GDP (annual growth, %)

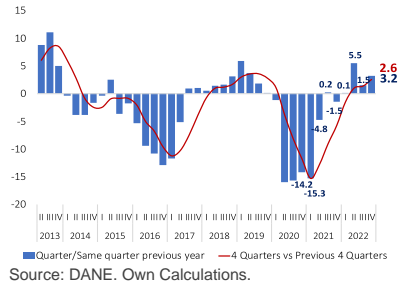


Figure 14. Total Consumption: 95.71% of GDP (annual growth, %)

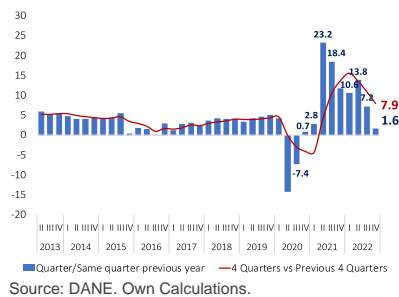


Figure 15. Household Consumption: 76.5% of GDP

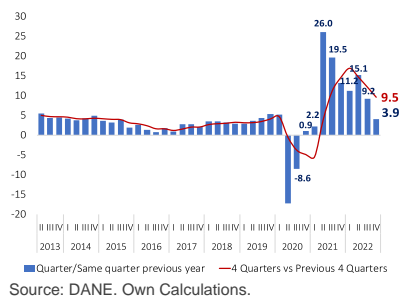
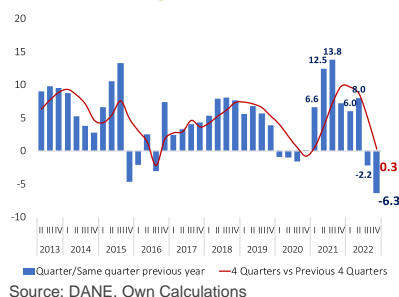


Figure 16. Government Consumption: 19.2% of GDP (annual growth, %)



## GDP, the demand side

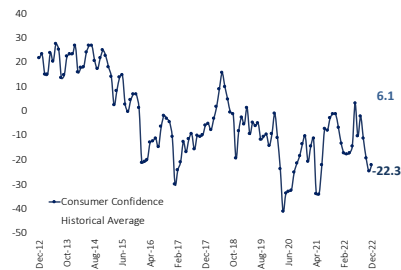
On the demand side, final consumption experienced an annual variation of 1.6% during 2022-Q4 (See Figure 14), a considerable deceleration when compared to the rest of the year. In particular, household consumption increased by 3.9% annually (see Figure 15), while government consumption had a drop of 6.3% annually (see Figure 16).

Within the components of household consumption, services consumption registered the highest growth level (9.1%), followed by non-durable goods consumption (1.4%). On the other hand, durable goods consumption had a reduction of 8.2%, while semi-durable goods consumption decreased by 0.6%. In total, household consumption increased by 9.5% compared to 2021.

Consumer Confidence decreased 10.8pts during Q4 and ended the year at -22.3 (see Figure 17). Although it had a slight increase during December, this is the lowest level registered since May of 2021. Thus, it is almost 35pp below its historical average. This result was explained by a reduction of 12.8pp and 7.9pp in the Consumer Expectations Index and the Economic Conditions Index, respectively. During Q4, Consumer Confidence decreased across all socioeconomic levels. For low-income households it fell 5.6pp, whereas for the middle-income ones dropped by 17pp and for high-income families only decreased 0.8pp.

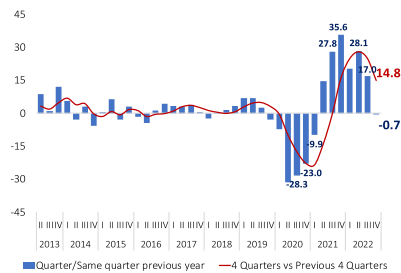
On the foreign trade front, exports and imports showed an important downturn in Q4. After growing at double-digit rates for various terms, exports decreased by 0.7% while imports increased by 7.6% (see Figures 18 and 19). In total, exports and imports had an annual

Figure 17. Consumer Confidence Index



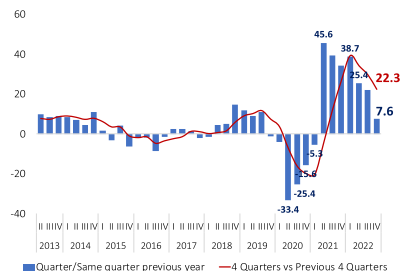
Source: Fedesarrollo. Own Calculations.

Figure 18. Total exports: 13.8% of GDP (annual growth, %)



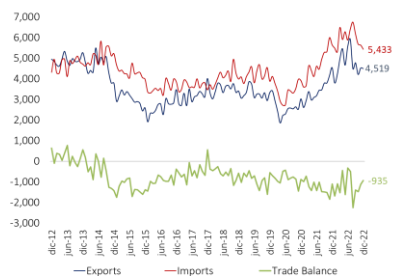
Source: DANE. Own calculations.

Figure 19. Total imports: 24.3% of GDP (annual growth, %)



Source: DANE. Own calculations.

Figure 20. Trade balance (USD million)



Source: DANE. Own calculations.

growth of 14.8% and 22.3%, respectively, in 2022. In line with these results, the trade balance deficit shrunk, reaching USD -935 million (see Figure 20).

## Outlook

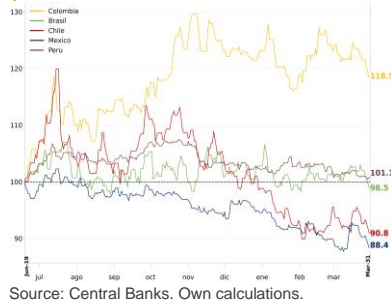
After the public announcement of labor, health and pensions as the top priorities in the government's reform agenda, there hasn't been much clarity about key decisions in each of them and their consequences on public debt, social security and financial stability. As promised in the latest financial plan published in December, the Government will pay Ecopetrol, in full, the unpaid portion of the fuel subsidies generated in 2022.

GDP started losing momentum in Q4; manufacturing and commerce, the strongest drivers in the previous quarter, are losing steam. Instead, the contribution of arts and financial services to GDP increased. On average, GDP growth forecasts for 2023 stand around 1%.

Meanwhile, inflation is still increasing because of high fuel and food prices. Indeed, inflation started the year as a major concern as it did not ease at the close of 2022. In December, it reached 13.1%, the highest level in more than 20 years, and it continued to edge up until March. For the remainder of 2023, high interest rates and economic deceleration should help tame inflation; we expect it to close at 8.5% at the end of the year.

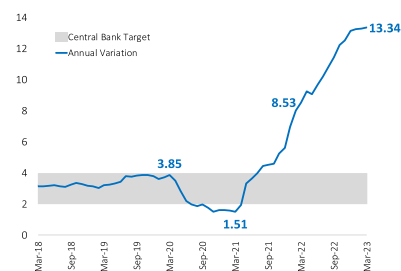
Furthermore, the minimum wage negotiation, politically aware of the impact of rapid price increases on low-income families'

Figure 21. Exchange rate index, June 19 (second round of Colombian elections) = 100



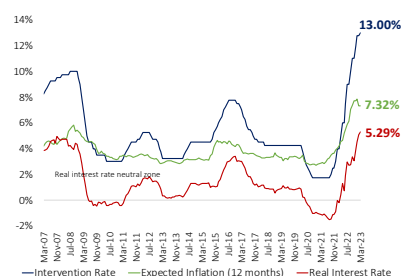
Source: Central Banks. Own calculations.

Figure 22. Annual inflation (%)



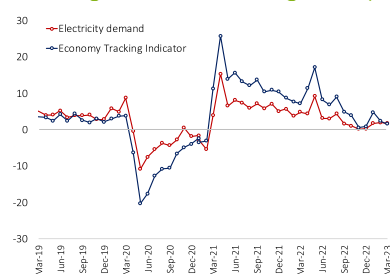
Source: DANE. Own calculations.

Figure 23. Intervention rate, real interest rate, and expected inflation (%)



Source: Central Bank. Own calculations.

Figure 24. Electricity demand and Economy Tracking Indicator annual growth (%)



Source: XM, DANE. Own calculations.

purchasing power, resulted in a nominal increase of 16% for 2023, a real increase of 3.4%. The new minimum wage is COP 1.16 pesos.

Additionally, persistent inflation has led the Central Bank to increase its intervention rate throughout 2022 and in the beginning of 2023, as seen in figure 23; indeed, the intervention rate hit 13% in March. We expect the cutting cycle to begin in the second half of the year, taking the CB intervention rate to 10.5% rate at the end of the year.

Focusing on the international context and its side effects on Colombian economy, rumors of stagnation and recession characterized the first quarter of 2023.

All in all, the first signs of an economic slowdown are here. The government has ignited a controversy in the wake of the first cabinet reshuffle of this administration. The political and internal security fronts will most likely be additional critical areas during 2023. In October regional elections will be held, marking a major political test for President Petro.

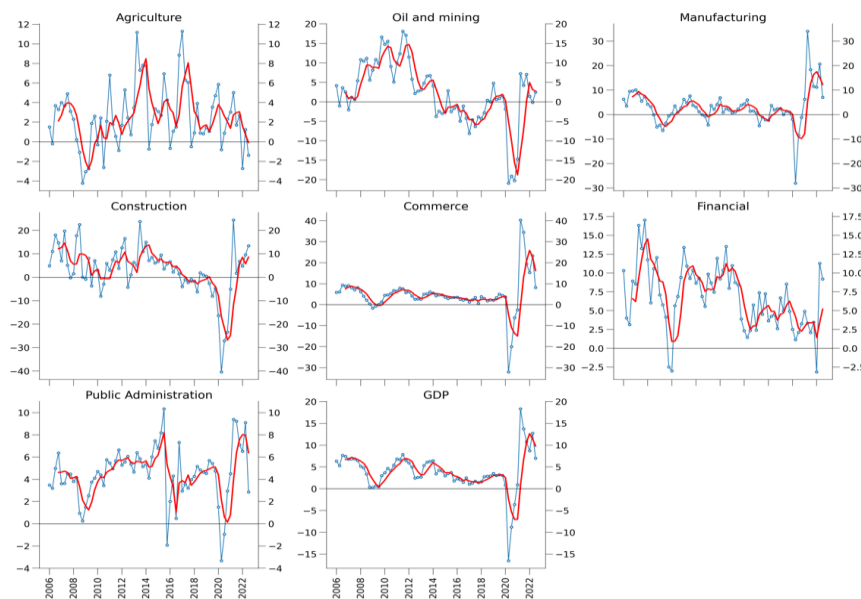


## Growth deceleration: good news for the external sector

GDP growth posted a strong 7% result in Q3. However, as Figure 1 shows, across most sectors (except for oil & mining and construction), growth keeps losing momentum. Manufacturing and commerce, strong growth drivers during the recovery phase, are losing steam quite noticeably. Also worth noting: public administration spending sharply decelerated, which does not help growth but might be good news for fiscal results (are we about to witness a lower-than-expected central government deficit in 2022?). Agriculture, which posted strong results during the pandemic, contracted in Q3.

The evolution of economic activity throughout Q3 is worth a look. The ISE monthly economic activity indicator computed by Dane, and fully consistent with GDP shows there was a spike in August, but September continued the downward trend that started in 2021 (Figure 2). Electricity demand, highly correlated with economic activity, shows that this deceleration deepened in Q4; in November, electricity demand barely grew at all (only 0.2%).

**Figure 1. Quarterly GDP annual growth (%) - data as of Q3-2022**



The red line shows annual growth for 4-rolling quarters

Source: Dane, EConcept.

Figure 2. Economic tracking indicator and electricity demand - annual growth (%)



ISE data as of September 2022; electricity demand data as of November 30<sup>th</sup>, 2022.

Source: Dane, EConcept.

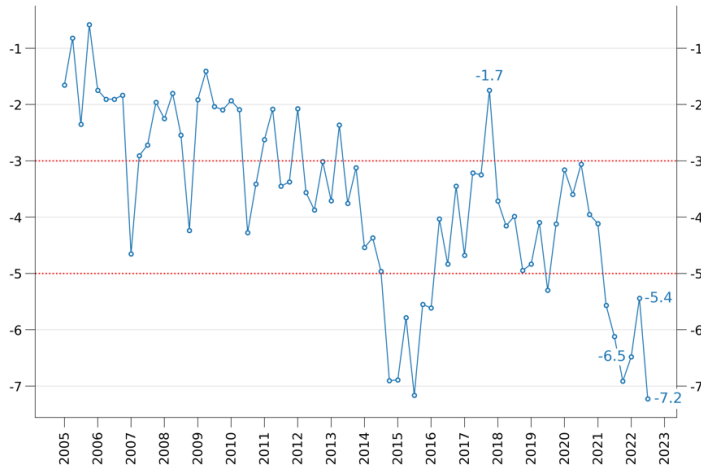
Growth seems to have entered a new phase. Behind us are double-digit growth quarters; enter a new chapter of growth rates below potential GDP growth. There is a broad consensus that this will continue to be the case throughout 2023; we, in particular, expected growth to be between 1.5% and 2.2% next year, that's less gloomy than Central Bank and government expectations, though.

Even though lower growth in Q4 and 2023 is not good news (with it comes higher unemployment and higher poverty, also prompted by high inflation), it may come as a blessing in disguise, to help reduce Colombia's external imbalances.

This is not, mind you, an out-of-context statement. The Central Bank just published its balance of payments data for Q3, and it turns out the current account deficit (CAD) just registered, at 7.22% of GDP, is the largest on record; it edged slightly higher than the 7.16% of GDP posted in Q3 of 2015 (Figure 3). The deficit just announced is a surprisingly high number, given that in Q3 2022 the average Brent price was \$101 per barrel, while back in Q3 2015 it was just \$50 per barrel.



**Figure 3. Current account balance (% of GDP) - data as of Q3-2022**

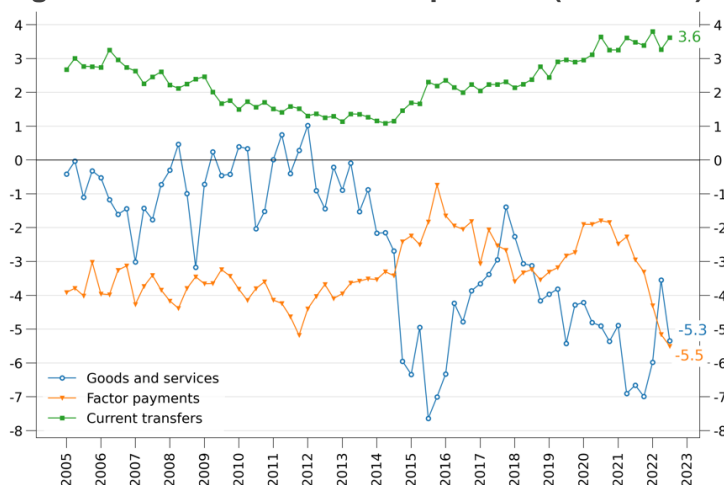


Source: Central Bank, Dane, EConcept.

The CAD increase from 5.4% of GDP in Q2 to 7.2% in Q3 was in part a result of the average exchange rate in both quarters (COP 3,915 / dollar in Q2 and COP 4,374 / dollar in Q3, i.e., an 11.7% depreciation) since GDP is in pesos and the base number of CAD is in dollars. However, it was much more than that.

What happened, then, this last quarter? Breaking down the current account into its main components provides a clear-cut answer, as Figure 4 shows: the goods and services balance took a drastic U-turn, while the factor payments balance went even deeper into negative territory. Current transfers, mostly driven by remittances, were the only stable component, with a surplus of 3.6% of GDP.

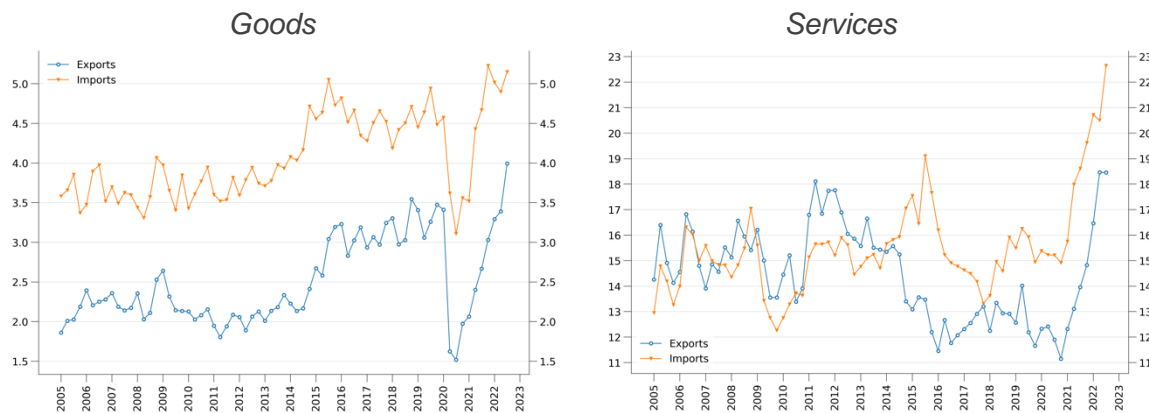
**Figure 4. Current account components (% of GDP) - data as of Q3-2022**



Source: Central Bank, Dane, EConcept.

The reason behind the sharp deterioration in the goods and services balance was an increase in imports of goods (see Figure 5, left panel) which jumped by almost 2.5 pp of GDP, while exports of goods remained flat vis-à-vis Q2. On the services side (Figure 5, right panel), exports jumped, but not enough to offset what happened on the goods side.

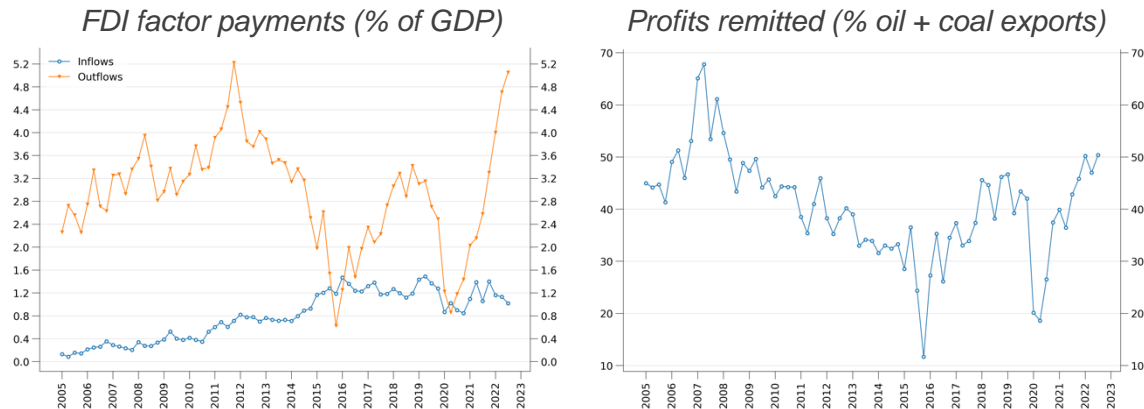
**Figure 5. Goods and services balance (% of GDP) - data as of Q3-2022**



Source: Central Bank, Dane, EConcept.

On the factor payments side, the situation we analyzed a few months ago when Q2 data was published, deteriorated further; namely, profits remitted abroad continued to go up relative to GDP (see Figure 6, left panel). If one compares these remitted profits with oil and coal exports, the ratio continued close to 50% (Figure 6, right panel). No surprise there, given the marginal increase in taxation coming to these sectors next year because of the tax reform.

Figure 6. Profits remitted abroad - data as of Q3-2022



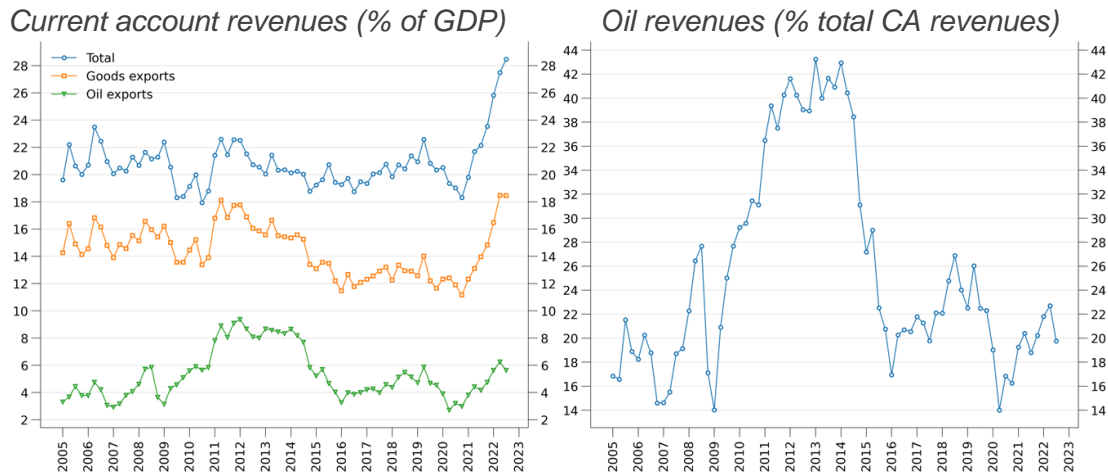
Source: Central Bank, Dane, EConcept.

Before moving on to the relationship between the high current account deficit in Q3 and the low growth already apparent in Q4, let us take a look at oil exports and FDI coming to the oil sector. On the export side, Figure 7 (left panel) shows the evolution of total current account revenues, goods, and oil exports, as a percentage of GDP; it is clear that starting in 2020, total current account revenues have gone up by much more than oil exports.

The right-hand side panel in Figure 7 gives an even clearer indication that this is the case: while oil exports explained between 40% and 43% of total current account revenues back in 2012-2014, they now oscillate between 20% and 23%. Colombia is much, much less dependent on oil now, which makes it harder to understand why the Petro administration is so keen on trumping it further, claiming an excessive reliance on oil revenues.

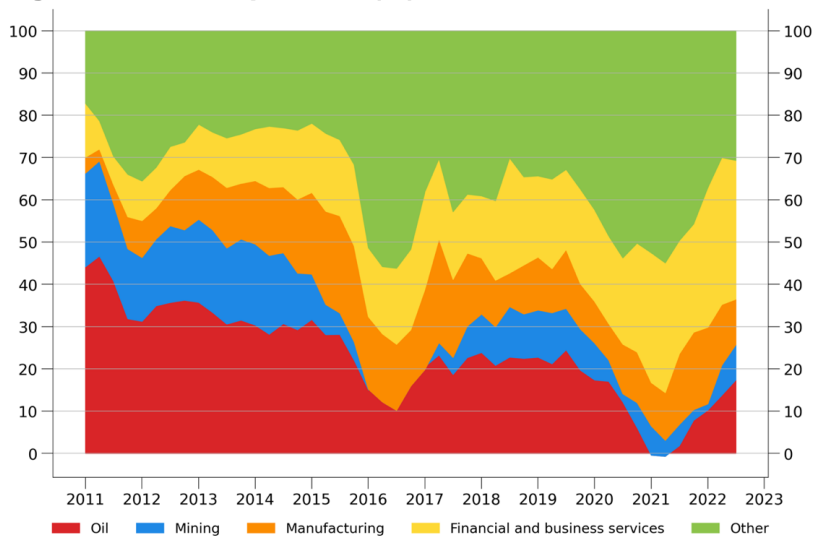
This is confirmed by FDI data. Figure 8 shows that incoming FDI to the oil sector is now less than 20% of all FDI.

Figure 7. Oil exports in context - data as of Q3-2022



Source: Central Bank, Dane, EConcept.

Figure 8. FDI composition (%) - data as of Q3-2022



Source: Central Bank, Dane, EConcept.

Considering the excessively high current account deficit registered in Q3, news about low growth in Q4 (and next year) should not be considered as all bad. If growth does not slow down, which in turn makes imports decelerate, correcting our external imbalances will be extremely hard, and financing them could be extremely dangerous. Consider that Q3 imports were purchased at record-high exchange rates, reaching 5,000 pesos per dollar. Ironically, such an undervalued currency did not reduce the CAD. Or maybe it induced precautionary high imports.

Monetary policy is already doing its job of curbing private spending. Fiscal policy must also shoulder the burden, especially next year and in 2024. The budget addition being submitted to Congress in Q2 of 2023 should be especially mindful of the current account implications of fiscal policy. Saving part of the revenues coming from the tax reform now seems more important than ever.

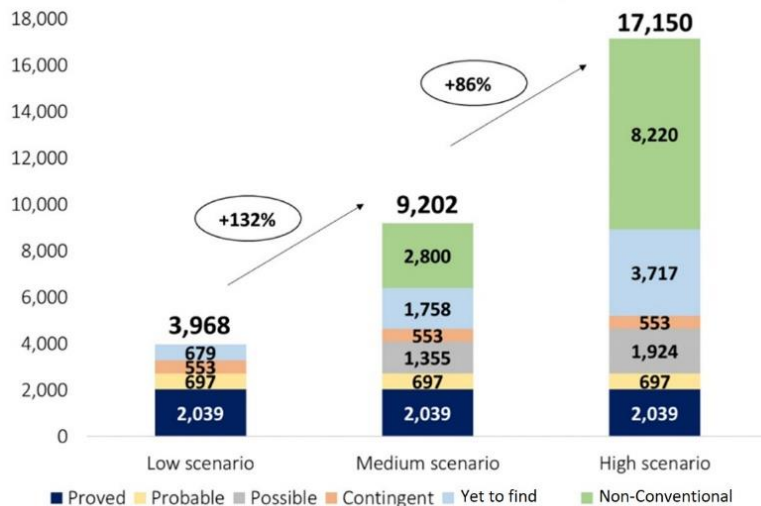
## **Oil & gas fall from grace**

What would be the effect of the tax reform and the ban on exploration on oil production, exports, trade balance, tax collection, and royalties? This seems to us the most pressing question for Colombia in the medium term. Fortunately for us, there is an official projection computed by a courageous and valuable memo circulated by the Autonomous Fiscal Rule Committee (CARF).

Before we expose CARF's official projections for 2023-2030, let us review the recent trends in the Colombian oil industry. The current estimation of 1P (i.e. proven), 2P (i.e. probable) and 3P (i.e. possible) oil reserves show that Colombia has limited proven reserves, yet it could have a quite promising oil future if it were to tackle its yet-to-find and non-conventional reserves (Figure 9). The current reserves' outlook could improve between three- or six-fold if Colombia decided to tackle its offshore and fracking potential.

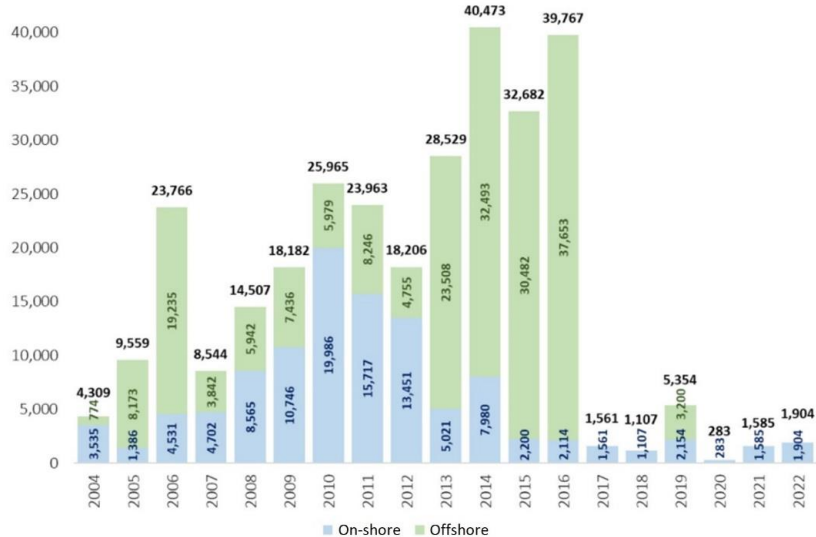
Apart from such prospects, the crucial issue is the intensity with which the O&G industry is pursuing the plays of Figure 9. The best indicator is the acquisition of seismic information. The behavior could not be less promising. Since 2017 The average annual figure is 1.560 Km/year, which pales vis-à-vis the average of 29.940 Km/year between 2010-16 (Figure 10). The drop of 95% reflects the severe 2015-2017 oil crisis and the COVID-19 restrictions. However, in 2019, when the oil crisis was over and COVID was not on the horizon ignited only a mild recovery. Neither the offshore nor the onshore received the attention they did before 2016.

Figure 9. Scenarios of 1P, 2P and 3P Colombian oil reserves, 2022



Source: ANH, UPME, ACP, CREE.

Figure 10. Seismic acquisition in Colombia, 2004-2022 (Km)



Source: ANH.

Does the 2017 drop in Figure 10 reflect the new anti-oil-climate-change-transition Zeitgeist of recent years? Does it reveal a fall from grace of Colombia among international producers? Is it the result of low-price expectations that prevailed before the Russian invasion of east Ukraine? Does it indicate Ecopetrol's shift from exploration towards the secondary and tertiary recovery of its mature, legacy oil fields? All of the above?

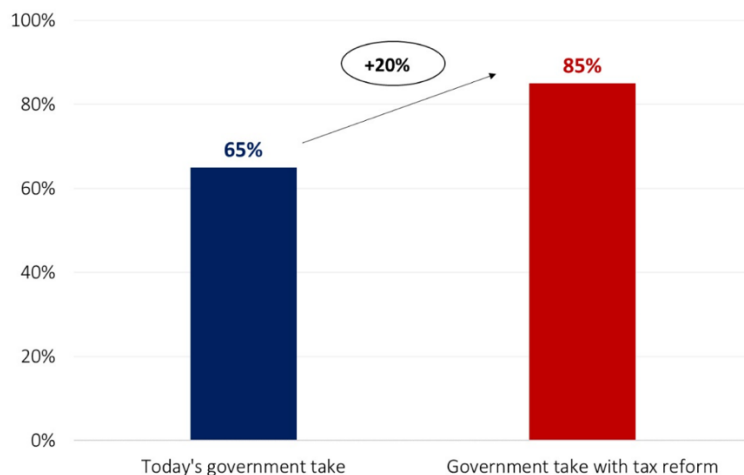


That paradox of allegedly huge yet-to-find, offshore and non-conventional reserves inexplicably left unattended by a dormant and numb O&G industry was characteristic before 2021. Then the presidential campaign took off.

Henceforth things got awful for the Colombian O&G industry. Indeed, during the presidential campaign, Gustavo Petro exposed a dismal approach toward hydrocarbons, signaling that Colombia should get rid of this and the rest of the so-called “extractive” industries, except for energy transitions and green technologies related to metals; i.e., those necessary for batteries, solar, wind, hydrogen and so on.

Then the November 2022 tax reform materialized such an approach by means of a) adding surcharges to O&G corporate income taxes contingent on extraordinary prices; b) eliminating the possibility of deducting royalties paid to municipalities and states from the income tax base; and c) raising the dividends tax rate from 10% to 20%. These measures increased the Colombian state take from 65% to 85% (in times of high international oil prices, Figure 11).

**Figure 11. Estimation of Government Take under a scenario of high oil prices.**



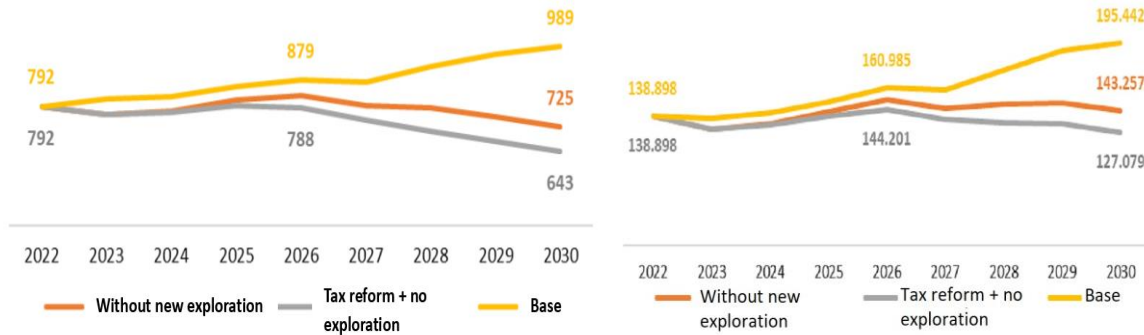
Source: Asociación Colombiana de Petróleo (ACP), Asociación Colombiana de Minería.

As a reaction to these measures and the announcement by the ineffable minister of mining and energy of no new exploration licenses, CARF performed a prospective analysis, spelling out three scenarios: a) base: the counterfactual case of no-tax reform and no ban on exploration; b) ban exploration, and c) ban exploration, plus tax reform. Figures 12 to 15 show their results, which could not be more eloquent and worrisome.

In sum, by 2030 the Petro-Ocampo “new normal” could induce a fall in oil production from close to one million barrels per day (bpd) to 640 kbpd, a more than one-third decline. Consequently, total exports would

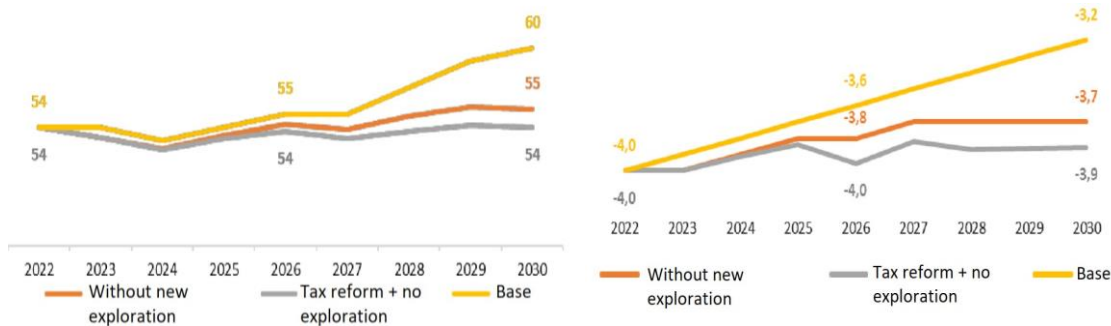
fall by 6 billion dollars by 2030 and the trade balance would be 0.7% of GDP larger and remain basically stagnating at around 4% of GDP for the rest of the decade (Figures 12 and 13).

**Figure 12. Scenarios of oil production (left, kbpd) and oil exports (kbpd, year) until 2030**



Source: Autonomous Fiscal Rule Committee.

**Figure 13. Scenarios of Colombian total exports (left, \$bn FOB) & Trade balance (% of GDP) until 2030**



Source: Autonomous Fiscal Rule Committee.

Would a non-oil Colombia be able to either diversify enough its exports or attract enough FDI to tourism, agribusiness, manufacturing, and services to finance such a widening of the current account deficit? The Ocampo-Petro expectations are presumably that that would be the case.

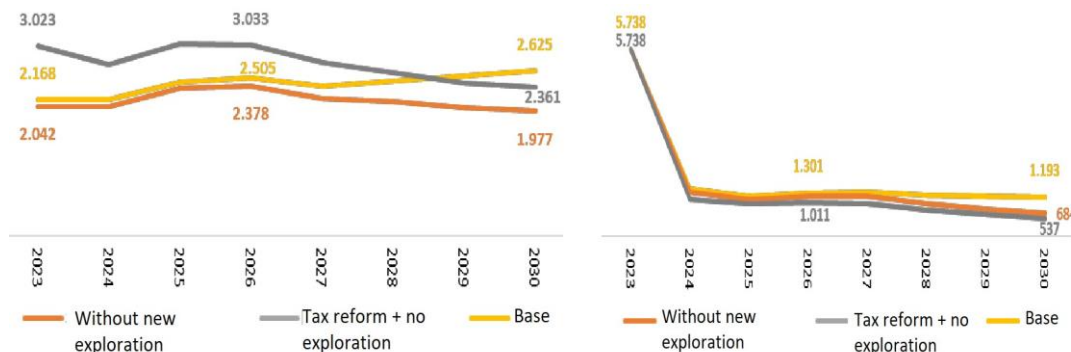
Otherwise, enough Colombians should move abroad, fleeing from devaluation and lack of opportunity, so that their remittances would grow enough to fill that gap. Current remittances are close to 3% of GDP and are sent by 5 million Colombians living abroad. Hence, it would be necessary to raise remittances

approximately by 25%, something that could be achieved by one million Colombians fleeing the non-oil country of Petro-Ocampo.

The fiscal scenario for national and regional governments is interesting. First, the national government does not feel the pain until 2029, due to the increase in tax collections derived from higher tax rates on O&G and a non-deductibility of royalties (Figure 14, left panel). Ecopetrol dividends would fall sharply in 2024, due to the expected decline in international prices, and decline further at the end of the decade. Finally, municipalities and states royalties would fall between 150 and 200 million dollars per year during this administration (i.e., until 2026, Figure 15) due to lower exploration, and more than 700 million dollars per year at the end of the decade due to the added effect of higher taxes on this industry.

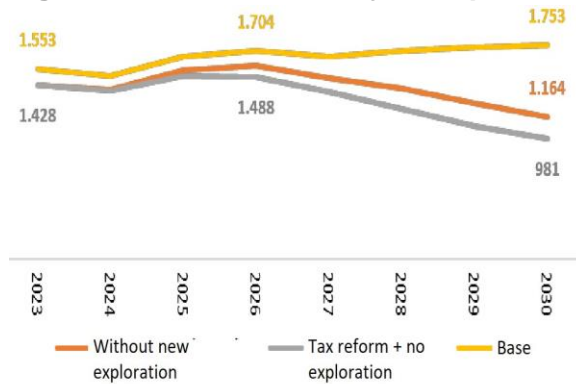
It is difficult to understand why any government would be willing to impose such pain on the fiscal, external, and regional balances. The CARF did not spell out the derived consequences on exchange rate devaluation, GDP growth, employment, household purchasing power, and poverty, especially in oil-producing regions. That is not its mandate. However, its numbers and figures are quite eloquent on the substantial consequences and challenges derived from the measures and attitudes adopted by the Petro-Ocampo administration.

**Figure 14. Scenarios of Colombian income tax revenues (left) & Ecopetrol dividends until 2030.**



Source: Autonomous Fiscal Rule Committee (CARF).

Figure 15. Scenarios of royalties paid to municipalities and states until 2030.



Source: Autonomous Fiscal Rule Committee (CARF).

Colombia has never been an oil country. But, since the 1980s, with the substantial discoveries of the Casanare piedmont and at the beginning of this century with the increase in production in Meta, it became a country “with oil.” Petro and Ocampo are willing to launch the economic and social experiment of running a country while forfeiting its oil output.

## The illusion of control

Since the election of Gustavo Petro, the COP has lost close to 25% vis-à-vis the dollar. This depreciation was attributed partly to price dirigisme, manifested in many announcements, some materializing and some that did not even make it to actual policies. That was the case of the ill-remembered tweet on taxing capital outflows. Later, the tax reform increased the state take of oil production, from ~65% to ~85%, in periods of high prices. Two key prices continue to be controlled well below their level: gasoline and diesel. They come from ex-president Iván Duque and have been kept at a fiscal cost to the state of close to 25 billion a year.

Recently the government announced halving the price of the so-called SOAT, the insurance against motorcycle and automobile accidents. Specialists estimate its annual cost at two trillion pesos. These price controls and those of energy, fertilizers, and meat, led Senator Gustavo Bolívar, the most vocal Petro supporter, to boast of a government that finally decided to help the people. At the rate of one intervened price per week, they will end up “helping” everyone (see Table 1).

**Table 1. Price controls of different sorts**

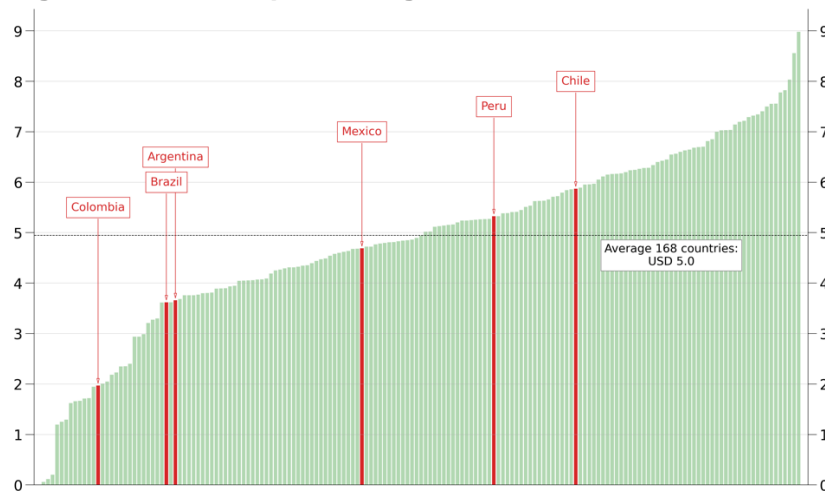
MEASURES AIMED AT MODIFYING PRICES	DETAILS
Reducing meat prices via reopening municipal slaughterhouses	Petro proposes reversing the closing of slaughterhouses originally justified on grounds of sanitary strictness, important for domestic consumption and exports
Reducing interest payments for college loans	Universities with beneficiaries of ICETEX loans must pay the real component of interest and cannot pass it through to college fees
40% tariff increase for textile and apparel products	Import substitution induced via higher tariffs. Fenalco, the merchants' guild, warned that prices to consumers could increase by 30%
Subsidies for fertilizers used for food production	The World Bank will lend \$ 50m to Colombia to reduce agricultural input costs
50% reduction of SOAT-accident insurance for motorcycles and work cars	Insurers are forced to maintain existing supply. There is documented fraud & medical treatment over-invoicing. It could cost COP 2 trillion per year
Reduction of energy prices	Discounts would be between 4% and 8%.
Gasoline and Diesel prices	Diesel prices will be frozen until June 2023. Gasoline prices will rise COP 200/month despite a of aprox. Nine thousand pesos per gallon.

Sources: Portafolio, La República, El Espectador.

When prices are set below costs or what is paid for goods and services abroad, experience shows that the consequences are: a) shortages, as could happen with SOAT and meat b) extremely high fiscal costs, as happens with Diesel and gasoline, c) uncertainty and runs, as happens with announcements fueling exchange rate depreciation, also with immense fiscal and private cost, and finally d) queues, black markets,

and corruption. In its first year in office, the government is expected to spend close to thirty trillion pesos in fuel subsidies and higher peso costs for dollar-denominated interest payments (one and a half tax reforms) and is likely to add COP 2 trillion for SOAT. Will they continue to control prices? Additionally, a fictitiously reduced price becomes a reason for protests, as shown by taxi drivers, motorcyclists, and truckers, who believe that gasoline and diesel cannot rise again. This is not the case in Chile and Peru, with progressive governments, which did not make the mistake of spoiling and spoiling people (Figure 16).

**Figure 16. Internal prices of gasoline in various countries**



Source: Global Petrol Prices, EConcept.

Everything must be paid for in the end, whether with shortages, taxes, queues, a black market, economic decline, or corruption. Everything will be paid for one way or another. In Kung Fu Panda (first picture) Master Oogway told Shifu that he needed to “abandon the illusion of control.” The Petro administration should revisit this piece of Oriental-Hollywood wisdom.

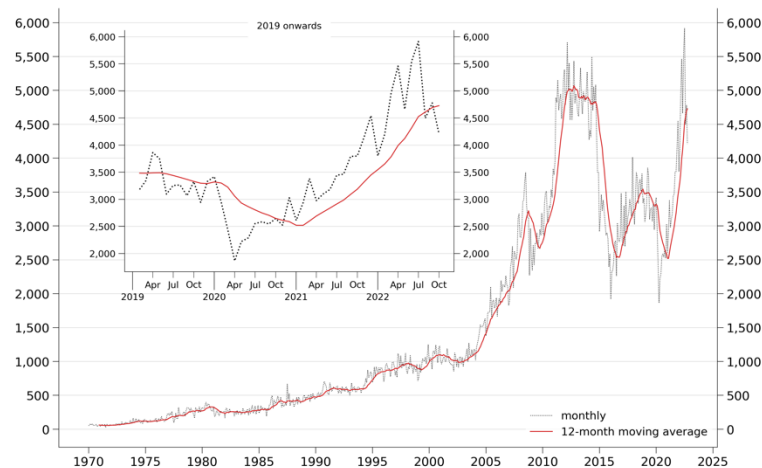
## Commodity price downturns, and textbook exchange rate effects on non-commodity exports

In the wake of the oil price collapse, between August 2014 and the end of 2016, the COP/\$ exchange rate went, approximately, from 2,000 to 3,000; this 50% depreciation in nominal terms was coupled with a 20% weakening of the real exchange rate. This exchange rate adjustment had to take place under the Colombian free-floating exchange rate regime, given that total goods exports fell from a peak of around \$5 billion to a trough of around \$ 2.5 billion per month (see Figure 17).



After the worst of the oil price crisis hit bottom, goods exports started to recover, and reached \$3.5 billion per month at the end of 2018, but started slowing down in 2019 and then collapsed again with the pandemic (see the inset in Figure 1).

**Figure 17. Total goods exports (\$ Millions)**



Monthly data as of October 2022

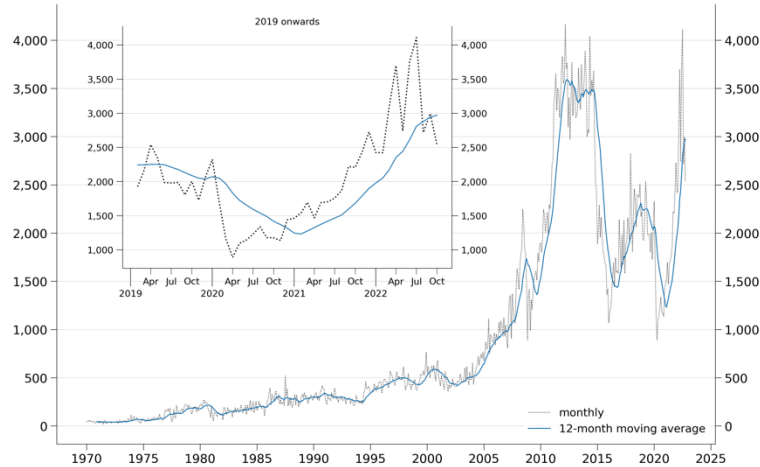
Source: Dane, EConcept.

So, prior to the pandemic kicking in, Colombia had experienced a massive depreciation of the currency (nominal and real), and, yet, exports were far from experiencing a boost. The textbook effect from the exchange rate to exports seemed to have stopped working.

However, after the worst effects of the pandemic started to recede, exports started to boom, not only recovering from the depths the pandemic had put them in but threatening to break records not seen in the past. There has been, of course, a new phase of the peso weakening, but this time around things seem to be working differently.

Is the textbook effect working again? Let us look more closely at Colombia's exports in the recent past, starting with what we in Colombia call "traditional" goods exports, which refer to the main commodities the country sells abroad: coffee, oil, coal, and ferronickel. These are worth separating from the rest since Colombia's capacity to export them should not be as influenced by terms-of-trade shocks as other exports. Figure 18 shows that monthly traditional goods exports jumped dramatically after the worst of the pandemic ended, reaching monthly levels of around \$4 billion, side by side with the best registers reached a decade ago. Notice, however, by looking at the inset, that these record highs might not be long-lived; more on this later on.

**Figure 18. Traditional goods exports (\$ Millions)**



Monthly data as of October 2022

Source: Dane, EConcept

Are all traditional goods exports exhibiting the same momentum? The answer is a resounding no, as Figure 19, which breaks traditional goods exports into their components, shows. Coffee and coal are behaving differently than oil and ferronickel.

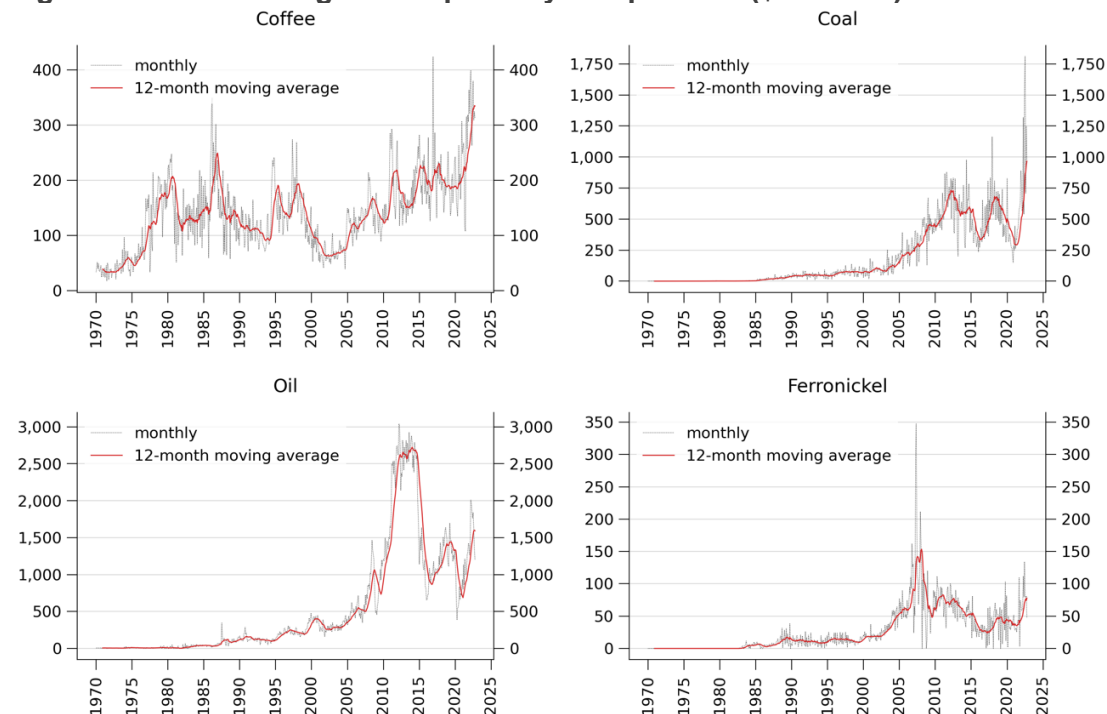
Coffee exports are definitely booming, at least until the recent price decline stemming from the new Brazilian crop. With external sales of between \$300 million and \$400 million per month, they were by far above anything we had seen in recent years. Actually, with ups and downs along the way, coffee exports were on the rise, in dollar terms, since the early 2000s.

Coal is undoubtedly the champion when among traditional goods. When the pandemic hit, monthly coal exports reached a meager \$250 million per month; we must go all the way back to 2006 to find similar registers. Since then, it has jumped to unseen heights, even reaching \$1.75 billion per month a few months back.

Now moving to the second group, oil is clearly not what it used to be for the Colombian economy. After reaching months of \$2.75 billion 10 years ago, oil exports bottomed out during the pandemic at even \$500 per month at some point in 2020. Since then, it has rebounded strongly, reaching even \$ 2 billion worth of exports, but recent months suggest more moderate sales, of around \$1.25 billion per month.

Finally, ferronickel, the junior member of the traditional goods family, has also rebounded after the pandemic but like in the case of oil, the new “normal” is a far cry from what we saw in the previous peak.

**Figure 19. Traditional goods exports by components (\$ Millions)**



Monthly data as of October 2022

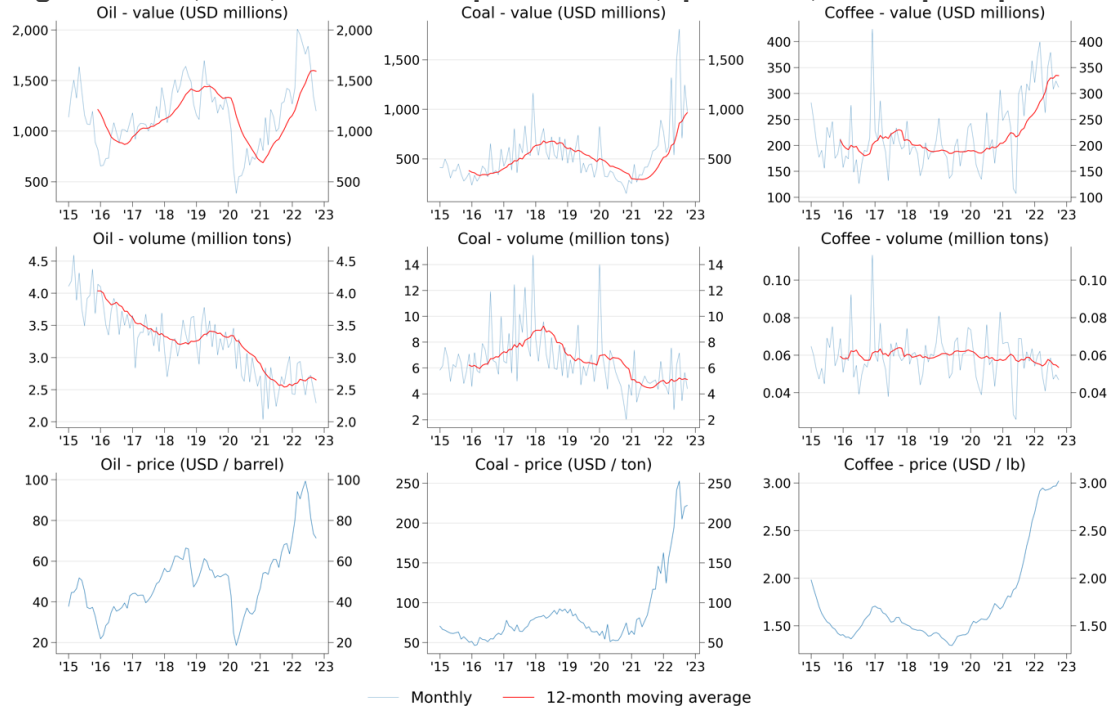
Source: Dane, EConcept.

An important additional issue with traditional goods exports is that the recent boom mentioned above is a price boom, not a volume one, as Figure 20 shows for coffee, oil, and coal. The values exported (the first row in Figure 20) indeed jumped after the pandemic, but a breakdown of the value into volumes (second row) and prices (third row) shows nothing has happened to volumes other than stagnation in recent times.

All the boom has been caused by prices, driven by a volatile international situation. This volatility seems to have reached its peak and, now that it is receding, prices are going south both for oil and coal: implicit prices per barrel of oil exported were already below \$80 in October; implicit coal prices per ton are no longer at \$250.

Implicit prices in Colombia's coffee exports remain stubbornly high.

**Figure 20. Oil, coal, and coffee exports: values, quantities, and implicit prices**



Monthly data as of October 2022

Source: Dane, EConcept

Now let us move on to non-traditional goods exports, i.e., the rest of our goods exports (see Figure 21). Taken as a whole, this group had peaked its sales abroad in 2011-2012, even before oil did. The \$1.5 billion – \$1.6 billion monthly levels posted back then dropped to around \$1 billion to \$1.25 billion for a long time until, around mid-2020, they started to climb quite rapidly.

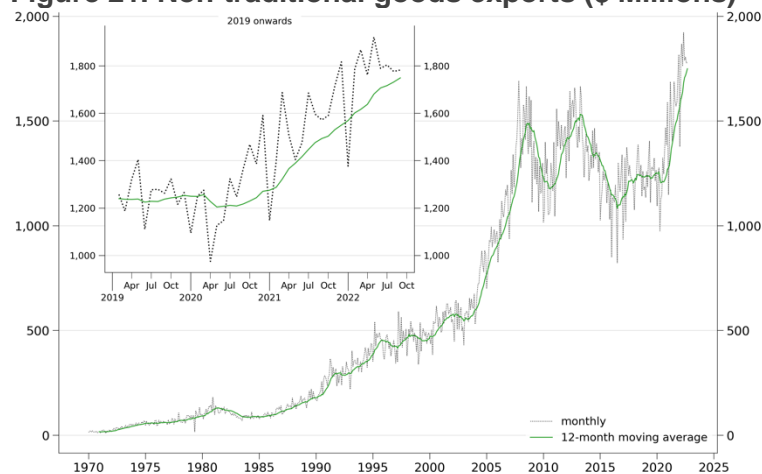
Colombia is now exporting close to \$1.8 billion per month worth of non-traditional goods exports and, if you look at the inset figure, the momentum continues (as opposed to what the inset shows in Figure 18) for traditional goods exports).

Numerous explanations could be behind this surge in exports. The rebound of the world economy from the pandemic could be one of them. For sure it is acting as a driver, which cannot be denied but, going

back in time, previous spikes in world growth have not helped Colombia's non-traditional goods exports. This time around world growth is acting as a tailwind, but something else is at play: the exchange rate.

The drastic nominal and real weakening of the exchange rate seems to be finally generating the textbook effect taught in undergraduate macroeconomics courses. When one thinks about all the worrisome factors behind a weaker COP, this spike in non-traditional goods exports is surely the silver lining.

**Figure 21. Non-traditional goods exports (\$ Millions)**



Monthly data as of October 2022

Source: Dane, EConcept

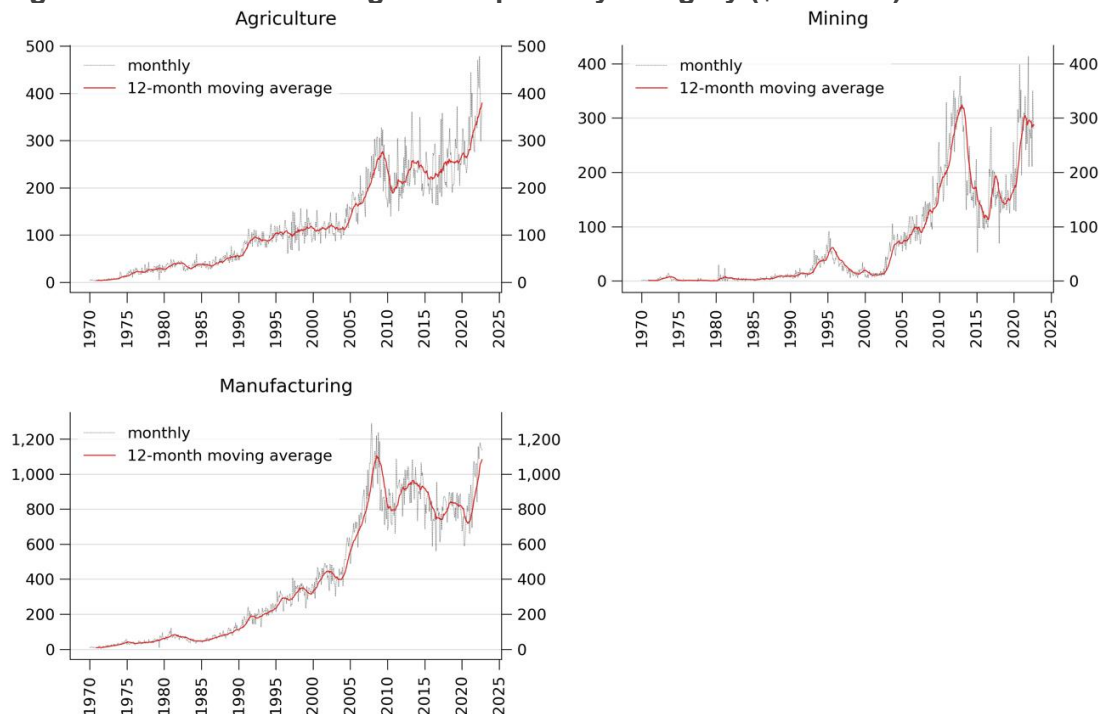
A closer look at non-traditional goods exports by category (Figure 22) shows a good performance across the board. Agriculture exports (which, of course, do not include coffee), are the best performers, but mining exports (mainly gold) and manufacturing exports are also performing exceptionally well on the margin.

Now let us focus on services exports. While the goods export numbers used here come from monthly data published by Dane, services exports come from the quarterly balance of payments data published by the Central Bank. To build Figure 23, we broke down services exports into five categories based on values exported: (i) travel, (ii) other business services, (iii) transport, (iv) telecom, IT, and information services, and (v) the rest bundled together (in the "other" category).

In our previous report, we documented a continued recovery in services exports as a whole. Here is what has happened. Even though business services and transport are on the rise, by far tourism is behind the

increase in services exported, which in Q3 posted a record high of \$1.75 billion. Again, we think the more competitive exchange rate is doing the trick for services, but especially for tourism.

**Figure 22. Non-traditional goods exports by category (\$ Millions)**



Monthly data as of October 2022

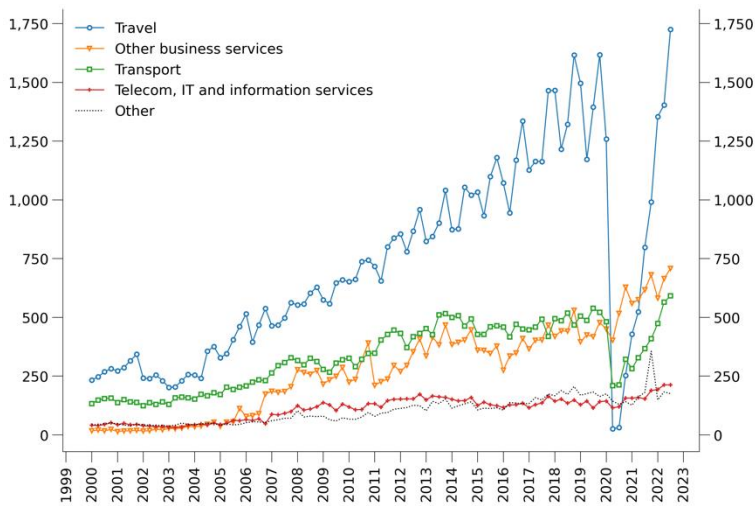
Source: Dane, EConcept

Looking at exports of goods and services as a whole (using quarterly BoP data as of Q3 2022), two comments are in order. First, goods exports are far bigger than services exports; the ratio between the former and the latter currently stands at than 5:1. However, this ratio reached 10:1 a decade ago.

When people say that tourism is becoming more relevant, they are right. We have experienced an important change in the importance of services. However, we are a long way away from being able to say that services exports could compensate for the loss of oil and coal exports (which still represent more than 50% of goods exports).

**Figure 23. Services exports (quarterly, \$ Millions)**



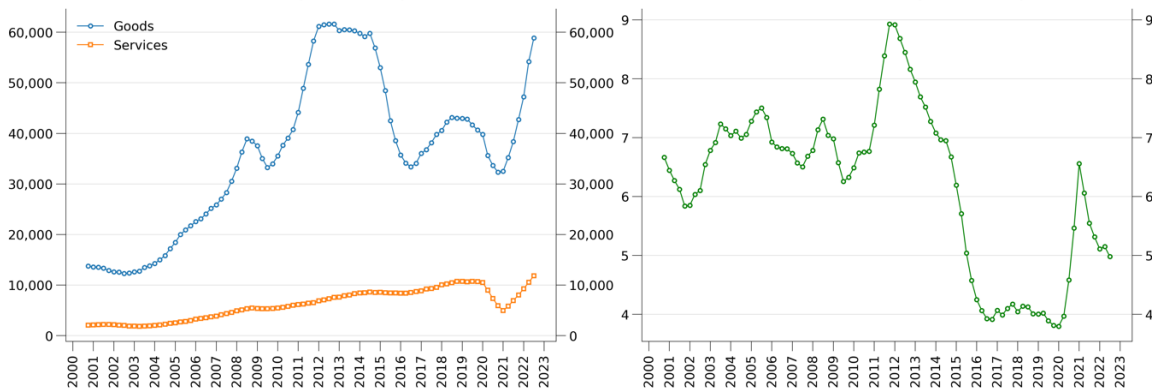


Quarterly data as of September 2022

Source: Central Bank, EConcept

**Figure 24. Goods and services exports**

USD Millions (4-quarter rolling total)



Quarterly data as of September 2022

Source: Central Bank, EConcept

## “The future ain’t what it used to be” -- Yogi Berra

2023 will be the decisive year for the Petro administration. They have endeavored to embark Colombia on a productive change away from extractive energy industries, and toward others with less cost to the environment. This is going in the right long-term direction, but the Petro team has decided to adopt it in a, from our point of view, reckless period of five years, instead of stretching it out over one or two decades.

The tax reform and the policy of not approving new exploration licenses would lead to the acid test of this new productive recipe being known sooner rather than later. Something that accelerates these effects is the fact that the international inflation situation, possible recession, and war accentuates the risks.

We have developed two macroeconomic scenarios for 2023. There are factors exogenous to the Colombian economy that will be decisive: Yes-or-No the U.S. lowers inflation quickly; Yes-or-No the dollar devalues worldwide, and capitals flow around the world again. Yes-or-No there is a solution in six months to the war in Ukraine, and its effects on energy and food prices are reduced. Yes-or-No La Niña phenomenon stops quickly, and the rains stop in Colombia.

There are also factors internal to the Colombian government policies and the attitude of Congress: Yes-or-No pension and health reforms are approved; Yes-or-No new oil and gas exploration is allowed; Yes-or-No the government spends all of the 2021 and 2022 tax reforms, or more, leading it to issue new debt and expose the jugular to international markets; and finally, Yes-or-No the economy regains momentum, which is currently receding at the end of this year.

Among these internal factors, our main concern is whether the proposed pension reform passes through Congress, given that the government's own funding sources would dry up, and the prices of all financial assets would fall, including those of TES and many real assets. In our opinion, this would prevent the exchange rate and interest rate from falling.

These Yes-or-No dilemmas posed lead to many possibilities. We are optimistic about inflation in the United States, and the end of the war before June, knowing that there are tremendous uncertainties on both fronts. With this, to solidify optimism for 2023 what is crucial is the attitude of the government on the hydrocarbons, pensions, and health fronts.

In concrete terms, our two key scenarios for 2023 are:

**1) External positive + internal pragmatic:** GDP would grow between 2.2% and 3% real; the exchange rate would fluctuate between 4,500 and 4,800 COP/USD. Inflation would fall to 7% by the end of 2023; the unemployment rate would remain in single digits for most of the year; the Banrep interest rate would reach 8.25% in December; the current account deficit would reach 4% of GDP; and the fiscal deficit at 3.4%, over-complying with the fiscal rule

**2) Negative external + ideological internal:** GDP would grow between 0.8% and 1.4% real; the exchange rate would fluctuate between 4,800 and 5,300 COP/USD. Inflation would fall to 7.5% by the end of 2023; the unemployment rate would reach 11.5; the Banrep rate at 8.5%; the current account deficit would reach 3% of GDP; and the fiscal deficit to 4.2%, failing to comply with the fiscal rule.

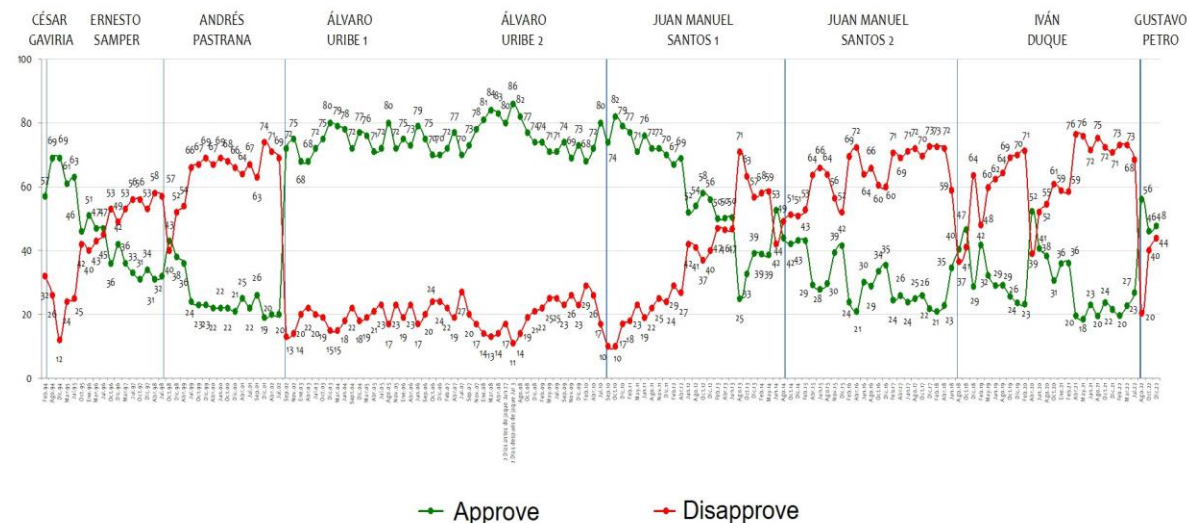
Although scenarios 1) and 2) don't seem that different, they would mark the fork in the road for the rest of the government. Recall the Yogi Berra quote, "When you come to a fork in the road, take it." The ideological attitude that would stubbornly maintain the original vision would lead to the economy not taking off and instead of a good 2023 we end up living a darker year that would complicate not only the economy but also social tensions and governability. Colombia would enter 2024 weak, with gloomy omens for the second half of the government.

On the contrary, the pragmatic way out, aided by a world scenario that is less difficult than the current one, would materialize the fact that Colombia is cheap for international investors. The people who want to invest would have a golden opportunity solidified by a government that has adjusted to what is possible and not to what is ideal. The government could "surf" the wave of growing non-traditional exports that have already started to gradually replace the traditional ones and would obtain a positive fiscal and a manageable external scenario.

For the time being, Petro's favorability in the polls looks stable. His negate is rising yet his positive has stabilized in Dec. (Figure 25).

**Figure 25. Petro's favorability, Dec. 2022, Invamer Poll**

Do you approve or disapprove Gustavo Petro's performance as President of Colombia?



Source: Invamer.

## **Possible effects of excessive increments in the minimum wage**

Banco de la República's technical staff has written the most comprehensive study to date on the effects of the minimum wage (MW) on inflation, employment, and income distribution. It was published in the September 2022 issue of *Ensayos sobre Política Económica*, its technical journal.

First, it states a truism for Colombia, namely that it exhibits the highest ratio between the MW and the median salary (close to 90%) among the OECD countries. The average within that group is 50%. Second, it concludes that the minimum wage is frequently mistakenly understood to be a redistributive mechanism whereas, apparently, it does not play that role. Or, if anything, it operates rather in the opposite direction, namely, worsening fairness problems in Colombia.

We present the study's results: a 100 bp increase in the nominal MW would generate an increase of between 22 and 29 bp in quarterly core inflation. Considering the 67.6% participation of the basic goods basket in Total CPI, the effect would be between 15 and 20 bp on total inflation. Hence, in the current scenario, an increase of 15% would induce a 2.25%-3% shift upward in CPI inflation; and a 20% increase could be associated with one between 3-4%.

Another methodology suggests that an increase in the nominal MW by 1% will increase median inflation (without some regulated goods and services), accumulated between January and May, of 16 bp between January and May. The MW does not seem to have persistent effects on the monthly variations of individual prices.

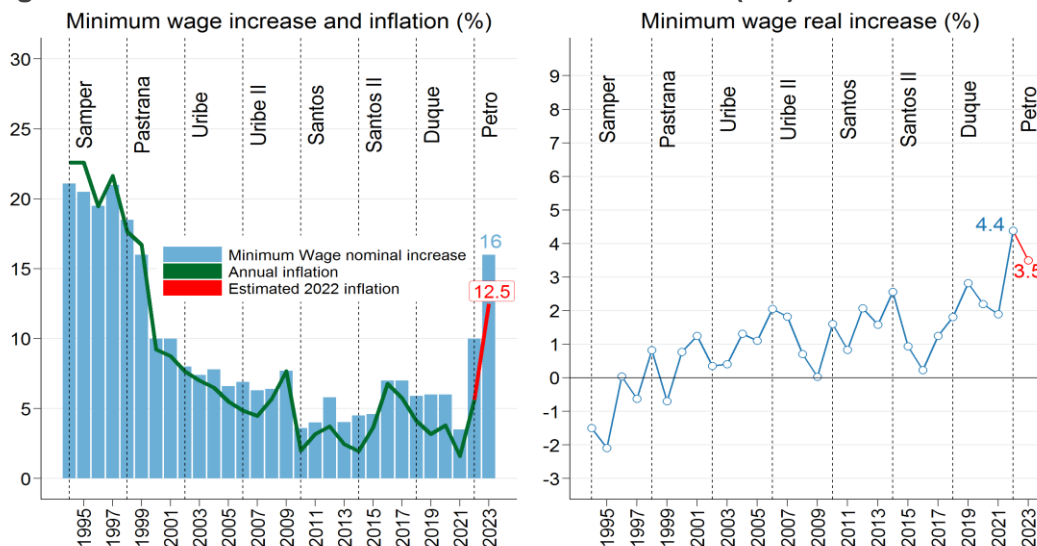
Using an Instrumental Variables methodology increases in the MW are shown to affect quarterly core inflation; the estimated coefficient suggests that increases of 100 bp in the MW push quarterly core inflation by 14.4 bp; that is, 9.5 bp over total inflation. Lastly, an approach, based on the Input-Output Matrix, suggests that between 2010 and 2019, for every 100 bp increase in the nominal MW, the CPI increased 14.4 bp.

Basically, the different methodologies yield quite consistent ranges of influence from MW increases on CPI inflation. However, interestingly, the technical staff concludes that: "The previous estimations suggest that, in conditions of macroeconomic stability, the monetary authority does not need to react in any special way to control the transfer of the increases of the MW to inflation."

What about the effects of the MW on employment? The results show that the MW increases job destruction, reduces job creation, increases dismissals, and reduces hiring. Specifically, a 1% increase in the real MW produces, on average, a reduction of 46,000 jobs per year during the period analyzed (2010-2019). The effects tend to be larger in the smallest firms (20 employees or less) and the youngest (less than six years since incorporation).

The results on income distribution measured by real monthly per capita households' income indicate that an increase of 0.01 in the real monthly MW, relative to the median family income per capita, decreases the value of the 10th quantile of the distribution; that is, the income of the lowest 10% of monthly family income per capita. The effects on the value of the other quantiles are positive and increase with the quantile, which translates into an increase in income inequality, measured by the Gini coefficient. Hence, MW determination during the last decade in Colombia did not help the poorest families (Figure 26).

**Figure 26. Nominal MW increase and annual inflation (left) and real increases 1994-2022**



Source: Central Bank, EConcept calculations.

The current MW negotiations are about to have sizeable effects on many social and economic variables. At least two main factors are officially considered in the negotiation: i) annual inflation -which is estimated to close 2022 near 12.5%- , and ii) total productivity -estimated by Dane at 1.2%. Adding these increments, the increase for 2023 should be between 13.7% and 14%.

Figure 26 shows MW increases and annual inflation during the last seven presidential periods. Real increases have been the norm during this century. One year ago, Ivan Duque's administration increased the nominal MW by 10%, with real growth of 4.4%, when compared with past inflation as it closed at 5.6%. Of course, when compared with the 2022 inflation rate, from a forward-looking perspective, such an increment looks less problematic.

After three weeks of negotiations between the national government, labor unions, and employers the MW increase for 2023 came in at 16%. The latter represents a real growth of 3.5%, a value that stands below Duque's 4.4% increase. The government already issued a decree de-indexing many public sector prices

from the MW, to reduce the fiscal impact of a real rise. All in all, since the MW increase exceeded the sum of inflation and productivity (14%), we expect that it will impact inflation, employment, and income distribution, especially for the poorest echelon of the population.