Cátedra Valenciaport de Economía Portuaria

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INTRODUCTION

The year 2022 has come to an end, a year in which the war in Ukraine and its implications for the energy and food commodity markets, the Chinese government's "COVID-zero" policy or an unprecedented inflation in almost half a century in the developed countries, which provoked the energetic (and very late) response of these countries' Central Banks, substantially complicated the macroeconomic scenario forecast, both in the West and in the rest of the world. The year 2023 is not looking any better, with the word "recession" for many economies and even in global terms, in the analyses of most analysts and major international economic institutions.

In this Quarterly Report, we choose to start our reflections by shining the *Spotlight* on what is probably the most favourable element in addressing this difficult situation, at least in the West: a labour market that, despite the vicissitudes of the last three years, is proving remarkably resilient.

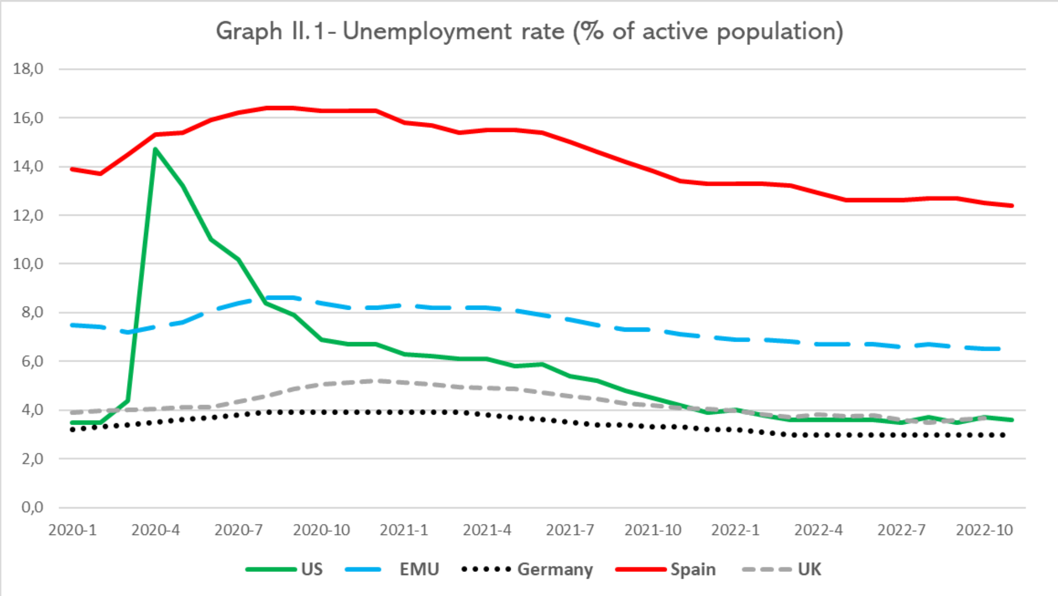
Next, in the *International Reference Prices* section, we will analyse the recent evolution of interest rates (monetary tightening continues, less intense, but with the prospect of extending over time...not too long), of commodities (with a downward trend in the last quarter in those most affected by the previous increases) and of the main international currencies, with the noteworthy reversal of the movements of the dollar and its main counterparts in the last three months compared to what was witnessed in the rest of 2022.

In *Understanding the Quarter in Seven Keys*, we will begin by quantifying the cumulative negative impact of two shocks that will find their way into the history books, and not just the economic history (the COVID-19 pandemic and the Russian invasion of Ukraine), to continue with a series of elements that seem critical to understanding what may happen in 2023, from the evolution of the less volatile components of inflation, the savings rate or the debt markets in the West to the implications of the new post-"COVID-zero" Chinese policy, among others.

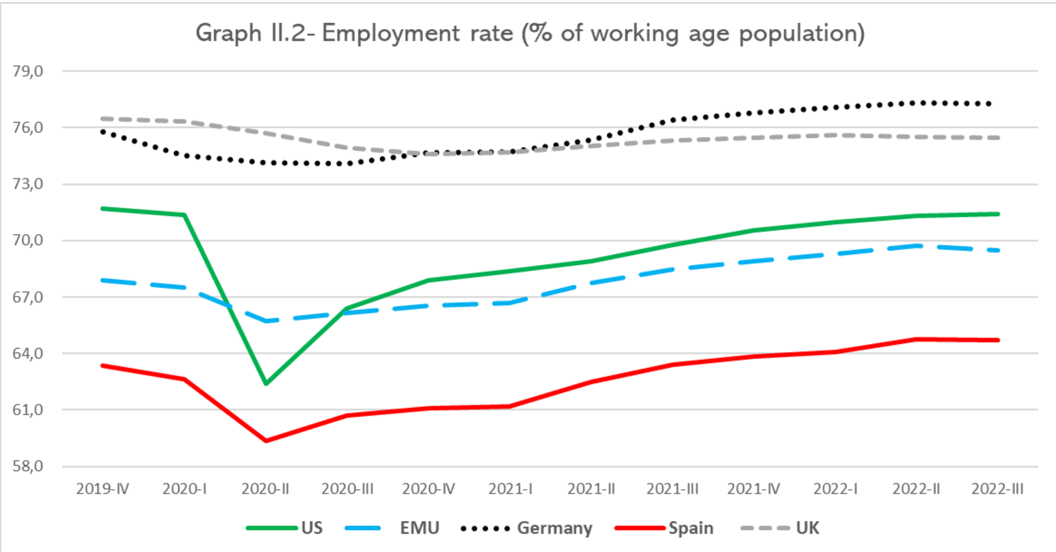
Finally, in the section *The World in Two Variables*, we will present the evolution of two key variables linked to economic growth since the beginning of the 21st century: advances in labour productivity, as a fundamental source of this growth in the medium and long term, and the investment rate, necessary to sustain its continuity, all for our regular selection of developed, emerging and developing countries.

With this third *Quarterly Report*, which we present within the framework of the *Valenciaport Chair in Port Economics*, we hope that readers will find guidance in unravelling the situation of the world economy in these complex years.

II.- SPOTLIGHT: that resilient labour market



Source: Own Elaboration. Data: Eurostat; OECD; Federal Reserve of St. Louis



Source: Own Elaboration. Data: Eurostat; OECD; Federal Reserve of St. Louis

Tightening monetary conditions, a decline in purchasing power due to inflation that has long been excessive, a reduction in public aid and subsidies, continuing geopolitical tensions, a fall in wealth after a historically bad year in the financial markets, problems in the real estate, residential and commercial sectors, high uncertainty that generates doubts for investment processes... in short, a long list of factors for which a year of stagnation (in the best of cases) is anticipated for the western economies. And it will not be much better for the rest of the world, which is also affected by similar difficulties, plus what have become unmanageable debt problems in more than a few developing countries.

In contrast, at least in the West, there seems to be a crucial point of resilience to the crisis, the labour market situation. Despite the severe turbulence since 2020, the unemployment evolution over the past three years has been very favourable, as Graph II.1 reveals. After the rise in spring 2020, which was roughly marked depending on the type of support measures articulated by governments in response to COVID-19, rates have returned not only to pre-pandemic levels but, in some cases, to decades-long lows and even to record lows (as in the case of the Eurozone). For the most part, this evolution is due to positive factors, such as this exceptional fiscal and monetary support to activity or the business preference for keeping workers, even at times of lower demand, which have been challenging to find in certain fields in the wake of the pandemic, on the understanding that the problems were temporary.

It is also true that, especially in the Anglo-Saxon world, there is a worrying factor formally reducing unemployment, the insufficient recovery of the labour force after COVID-19. As Graph II.2 shows, while Europe surpassed its pre-pandemic employment rate several quarters ago, the United States has only managed to regain that level in the most recent months, and the United Kingdom is still a point below it[1]. In fact, for working-age populations of similar size when the pandemic broke out (around 164 million people) in the Eurozone, the figure has risen by 2.4 million by the third quarter of 2022, compared with only 0.9 million in the United States.

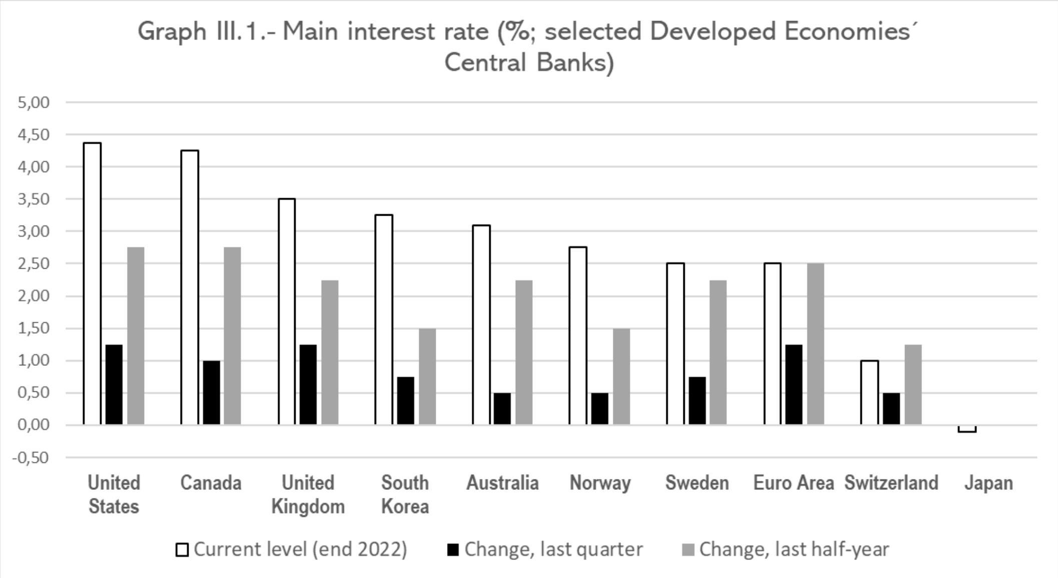
In any case, with greater activity and lower unemployment, the Western economies as a whole are in a favourable situation for workers, who thus have a cushion against the difficulties mentioned at the beginning of this reflection... and greater bargaining power to put upward pressure on wages, thereby at least partially offsetting the excessive inflation of the last year and a half. This process is already underway, more noticeably in the United States than in Europe[2], and can strengthen the purchasing power of most families. Of course, it may also initiate a cycle of further price rises and lead Central Banks to raise interest rates further. We will return to this in the second of our *Quarter's Keys.*

[1]To be fair, and beyond post-pandemic developments, it should also be noted that the British employment rate is, for example, eleven points higher than the Spanish rate, although that gap has narrowed by more than two points since 2019.

[2] Based on some announcements of wage increases by major Japanese companies, wage increases in Japan in 2023 may reach a historically high level.

III.- INTERNATIONAL REFERENCE PRICES

A.- Main interest rates



Source: Own Elaboration. Data: National Central Banks.

As usual in this section, Graph III.1 shows recent monetary policy movements in the major developed countries. As anticipated three months ago, monetary tightening has continued, but with less intensity than in the previous quarter. Thus, rate hikes for the ten selected economies as a whole have fallen from 1125 basis points in 2022:III to 775 b.p. in 2022:IV, and the upward movements of 0.75% in a single decision, which became common in previous months, have turned into more moderate hikes of half or a quarter of a point. Of course, Japan remains in a separate category, given that its benchmark rate has remained unchanged since 2016.

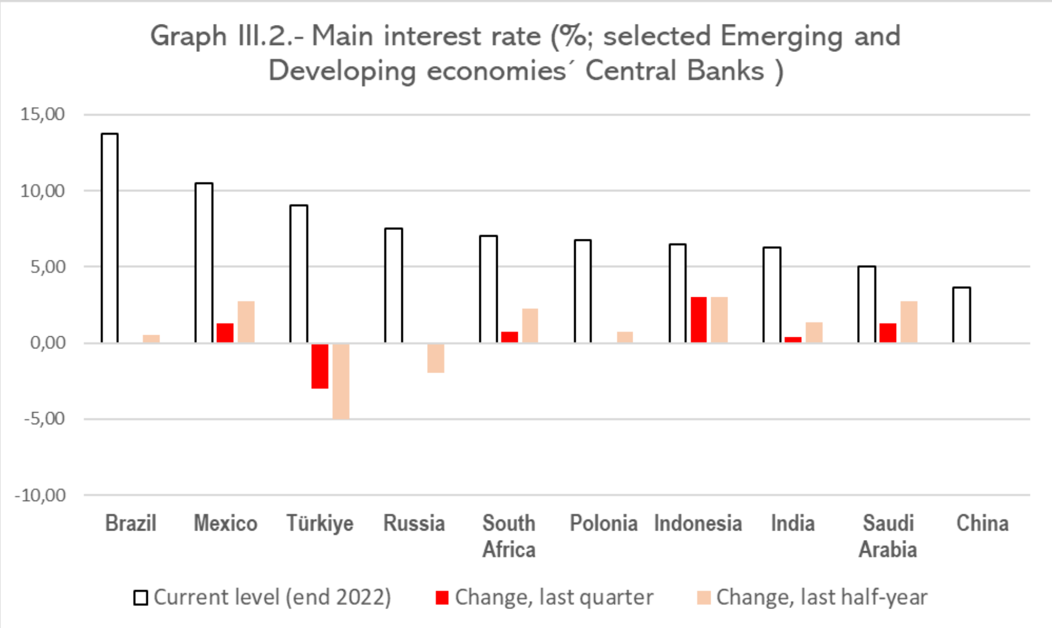
The already accumulated intensity of the rate hikes in the last six months, plus the simultaneous reduction in the degree of quantitative easing along with the prospect of a recession, albeit not an intense one, in 2023, will force the Central Banks, as we have also commented in previous *Reports*, to continue attenuating the pace of rate hikes (and the number of those remaining). Of course, in a wicked game, the optimism of the markets in this respect (which is reflected in the notable rises in both fixed income and equities at the beginning of 2023) reduces the efficiency of the rate hikes, forcing them to tighten up the language even more, and perhaps even to go beyond the restrictive measures envisaged.

Nevertheless, we do not anticipate more than two or three additional hikes of 25 basis points in almost all cases, including the United States, except for the European Central Bank (its central rate is still much lower than that of the Anglo-Saxon countries). Christine Lagarde's forcefulness in her last press conference[3] makes it almost ineludible that there will be at least another 50 basis point hike and no less than a similar tightening thereafter. More on this in the section *Understanding the Quarter in Seven Keys*.

[3] "We have more ground to cover, we have longer to go".

Nonetheless, it seems likely that the tightening monetary cycle, once again clearly overdue, will come to an end before the end of spring 2023 in the West... although perhaps then there may be some rate hikes in Japan under a new Central Bank governor.

Concerning the largest emerging economies, Graph III.2 reveals how, predictably, this monetary tightening is hardly continuing (360 b.p. for the aggregate of the ten countries). Having started earlier and having brought rates to much higher levels in the West, this process has, in almost all cases (Türkiye remains in its parallel reality), contained the previous worrying levels of inflation. Moreover, in recent months, the dollar's depreciation has helped to reduce the impact of imported inflation (foreign purchases often denominated in the US currency) and has eased the job of the monetary authorities. Only Indonesia, a country that had not altered its monetary policy in recent years, has recently initiated a necessary effort to curb the inflationary threat, with a cumulative increase of 300 b.p. in three months.



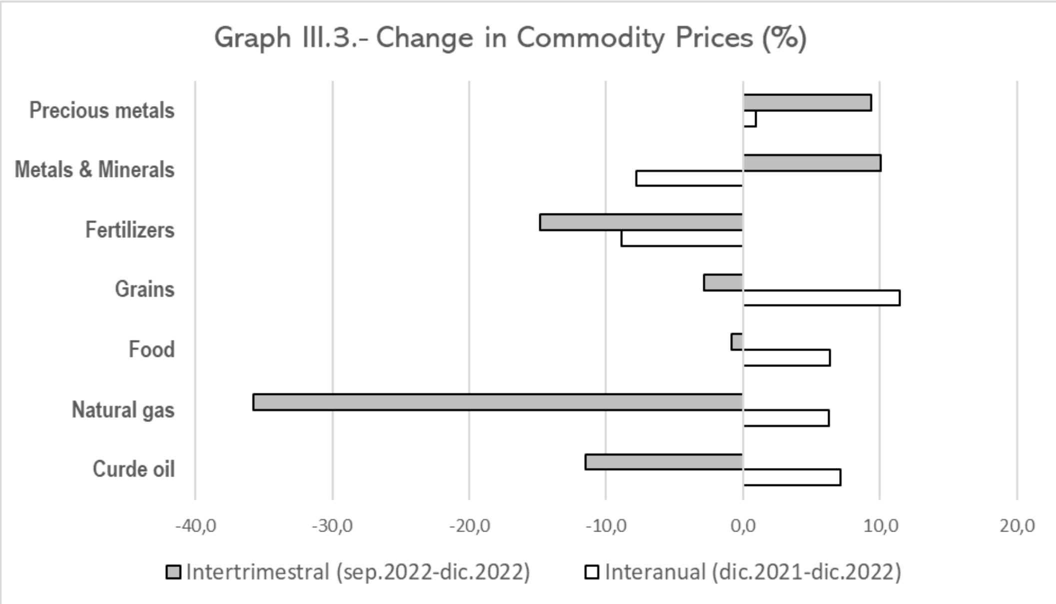
Source: Own Elaboration. Data: National Central Banks.

B.- Raw materials prices

During the last three months of 2022, the prices of many commodities continued to reverse the sharp rises experienced since the start of the COVID-19 recovery, rises accentuated in many cases after the Russian invasion of Ukraine. Indeed, as Graph III.3 shows, the falls in the final quarter of the year just ended in energy commodities (especially natural gas) and foodstuffs (especially cereals) have been of sufficient magnitude to leave the cumulative increase in 2022 at levels (below 10%) which, although uncomfortably high, are far from the alarming figures of the middle of the year. In some cases, such as fertilisers, the recent decline has been of such a magnitude that it has led to a fall for 2022 as a whole (not, of course, if we take into account the previous year).

However, beware of the difference between these movements on the international markets and the pass-through to the final consumer, which is not yet perceptible, especially in the case of foodstuffs. The complexity of the supply processes and the fact that the price pass-through has only been partial (to preserve demand) means that we still have to wait to see a moderation in these prices.

But the relief generated by these commodity price reductions in 2023 will be very opportune.



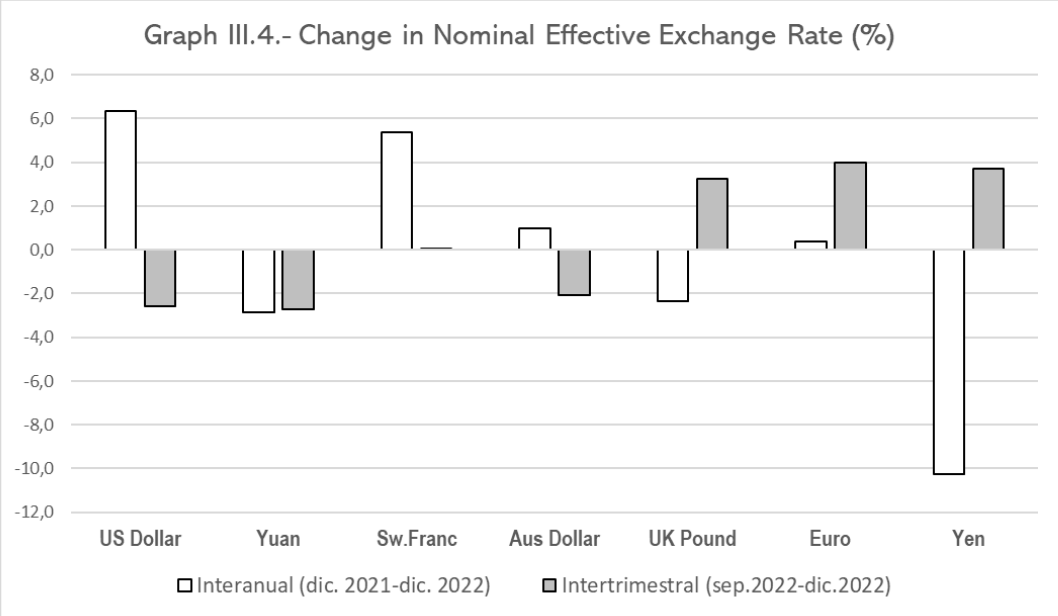
Source: Own Elaboration. Data: World Bank.

Conversely, over the past three months, Metals and Minerals have risen by an average of 10%, which only partially offset previous price declines. The impact on prices of poor Chinese growth in 2022 was considerable, so with greater dynamism in that economy from spring onwards (we will return to this issue later), these raw materials are the ones that will continue to show rising prices in 2023.

Finally, I would like to close this section with a special note. The year 2022, and especially its third quarter, according to data compiled by the World Gold Council, has witnessed an all-time record of gold purchases by the world's Central Banks (and other public entities). With this precious metal reaching its lowest price since the beginning of the pandemic, countries such as Russia, China and Türkiye, among others, have acquired these large volumes of gold, which, at least in part, cannot fail to be related to increasing reserves in alternative assets to the dollar, after the freezing of Russian assets denominated in this currency by the West in the wake of the invasion of Ukraine.

C.- Main currencies

Even more remarkable than the reversal in the price evolution of many commodities in the last months of 2022 has been the change in the trajectory of the major international currencies.



Source: Own Elaboration. Data: Bank for International Settlements.
Note: Upward (downward) movements imply appreciation (depreciation) of the currency vis-à-vis those of the country's trading partners as a whole.

Indeed, the unstoppable appreciation of the dollar during the first three quarters of 2022, analysed in our previous *Reports*, has turned into a loss in value of more than 2.5% against its trading partners as a whole in 2022:IV. Expectations of an early conclusion of monetary tightening by the Fed, as well as a majority conviction that the expected recession in 2023 in the West could remain in stagnation or close to stagnation[4], have led to this depreciation. Nevertheless, an appreciation for the year as a whole of 6.3% is quite remarkable.

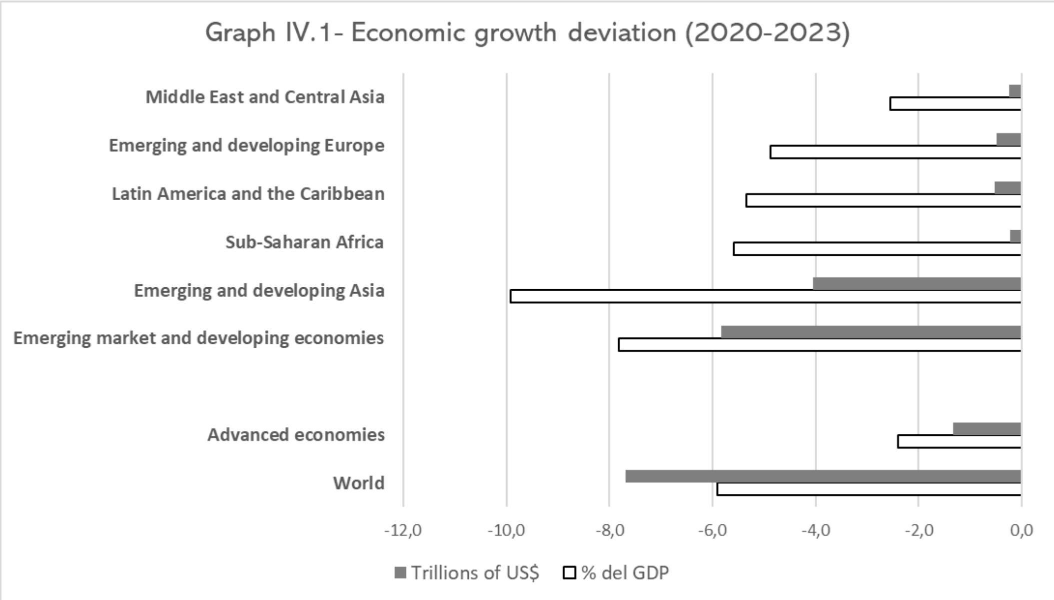
In the opposite direction, European currencies, whose monetary authorities are now expected to tighten further in the coming months compared to the Fed, have appreciated in the past quarter to such an extent that, for the euro, even earlier declines have been offset.

What is most striking, though, is the recovery of the yen by almost 4% (which, nevertheless, leaves an annual depreciation of its nominal effective exchange rate of more than 10%, the largest in decades). Behind this abrupt change are the direct interventions of the Central Bank of Japan in defence of its currency at its lowest moments (for a total of some 64 billion dollars), the better prospects for the Japanese economy following the end of the "COVID-zero" policy in China, or the modifications that the Japanese CB has established in its (widened) control band on the interest rates of 10-year public bonds, which some experts believe may anticipate the start of monetary tightening in the near future.

[4] Remember that severe crises tend to cause the appreciation of refuge currencies, such as the US dollar or the Swiss franc, which also stopped strengthening in the last quarter of 2022.

IV.- UNDERSTANDING THE QUARTER IN SEVEN KEYS

1.- A brief recap of the immediate past to start 2023: how much have the COVID-19 pandemic, and the Russian invasion of Ukraine cost the world economy, and how have these losses been distributed, even taking into account compensation from hugely expansionary macroeconomic policies from at least 2020 to mid-2022? Let us look at Graphs IV.1 to IV.3.

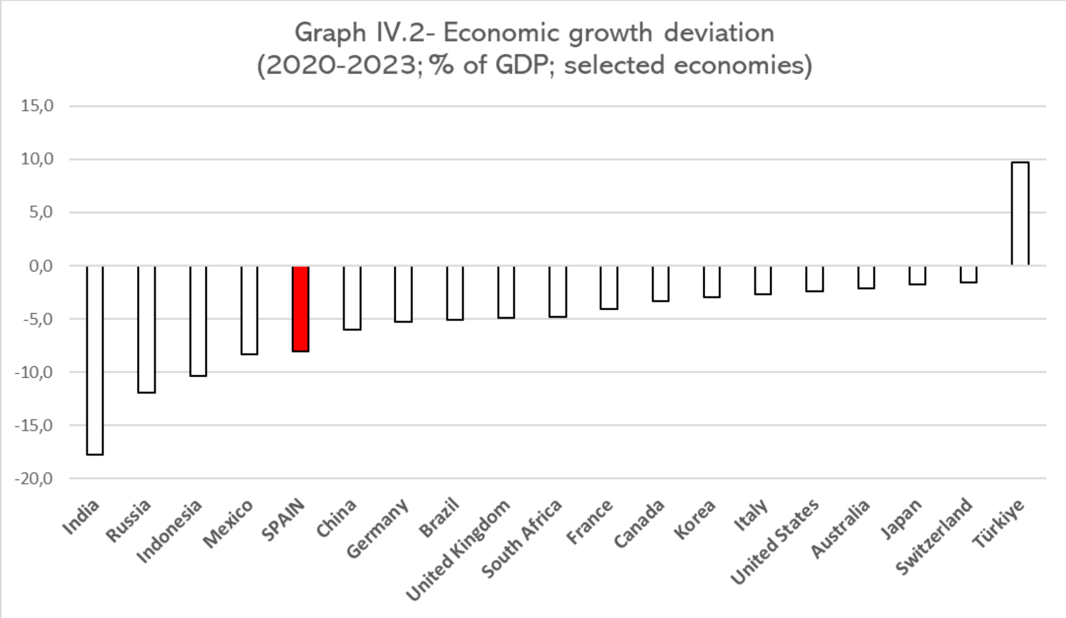


Source: Own Elaboration. Data and forecasts: International Monetary Fund.
Note: The dollar figure corresponds to international dollars at constant 2017 prices in purchasing power parity.

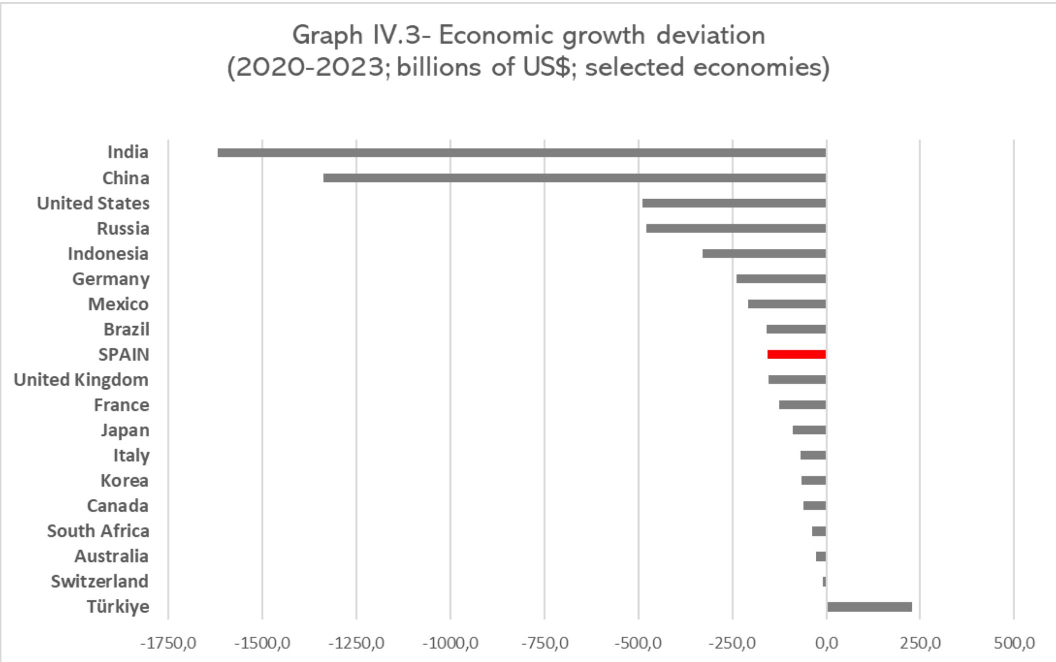
The first graph shows, by major geographical areas, the downward deviation (measured both as a percentage of GDP and in trillions of dollars) in real GDP growth between 2020 and 2023, taking into account the IMF forecasts made in October 2019 and those made in October 2022, which allows the impact of the events mentioned in our initial question to be reflected. The cumulative loss would be close to 6% of global GDP in 2019 or, in other words, almost 8 trillion dollars.

The difference between the deviation in the West (2.4% of GDP) and that of the rest of the world (7.8% of GDP and 75% of the monetary total) is substantial and shows the extent to which fiscal and monetary policy support in developed countries was much greater than in the rest of the world. Among the latter, it was emerging Asia (the most dynamic area of the world economy) that suffered the most significant loss with respect to forecasts (almost 10% of GDP in 2019, some 4 trillion dollars), while Middle East-North Africa was the least affected, primarily due to the additional flow of income for its hydrocarbon exporters as a result of the energy crisis arising from the situation in Ukraine.

The following two graphs illustrate (as % of GDP and in billions of dollars, respectively), and under the same estimation process, the differentiated impact for the main developed and emerging economies.



Source: Own Elaboration. Data and forecasts: International Monetary Fund.



Source: Own Elaboration. Data and forecasts: International Monetary Fund.
Note: The dollar figure corresponds to international dollars at constant 2017 prices in purchasing power parity.

In parallel with what is happening by geographical area, the most substantial impact can be found in the large Asian economies, with 3 trillion dollars less generated than expected in those four years in China and India alone (which would be the most affected country in relative terms, losing 18% of GDP in 2019, always measured in relation to what was expected before the pandemic). The last should come as no surprise, given that these are the economies with the highest growth in the absence of shocks as adverse as the recent ones, with a more limited scope than the West to compensate through macroeconomic policies, and, in addition, being commodity-importing countries. Russia's presence among the economies most affected (in what could be defined as selfinflicted damage) is not surprising either; however, in any case, the decline in Russian GDP in 2022-23 will be considerably smaller than initially anticipated with the outbreak of war.

For the already mentioned reason (expansionary fiscal and monetary activism), the selected Western countries show smaller negative deviations, Spain being the worst performer among them, with an adverse impact of 8.1% of GDP on expectations. The United States, for which the forecast before the Russian invasion of Ukraine was for a higher level of GDP at the end of 2023 *with* the pandemic than without it, also accumulates a negative differential when the effects of this invasion are incorporated (in particular, due to the greater and faster monetary tightening trigged by the invasion).

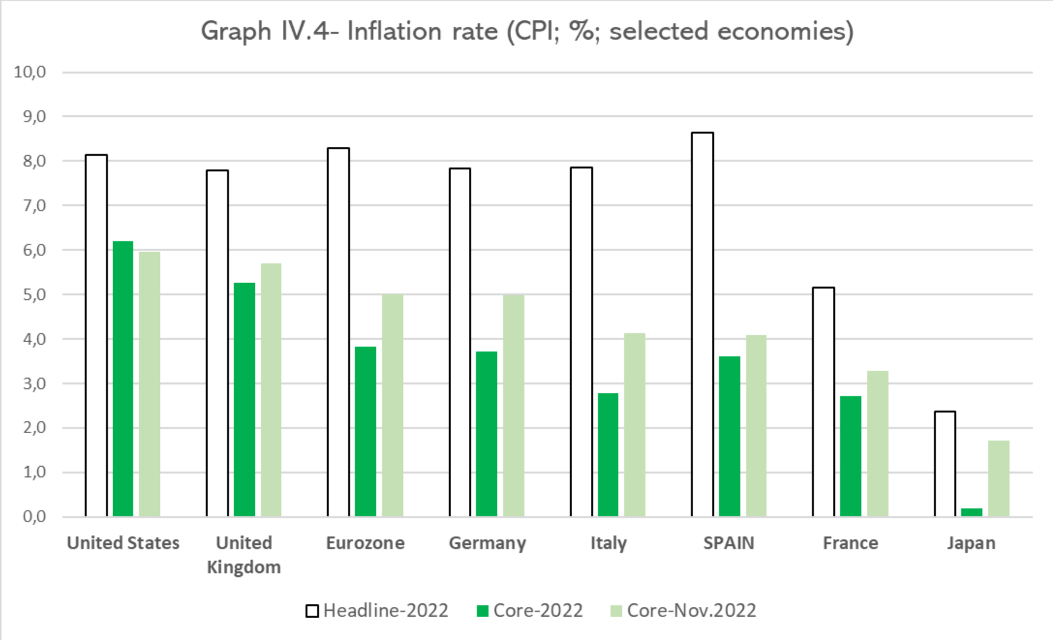
And a final, unavoidable comment on the only country on the list that has grown more than expected over the past four years (this would also be the case for many of the Middle East's oil and natural gas exporters, which do not appear here) despite the pandemic and the invasion: Türkiye. Here is an example of how an economic outcome can be prioritised above all other considerations: the Erdogan administration requires GDP to grow, and it certainly does. With average inflation in 2022 at 72 per cent!, the lira in free fall, a large current account deficit, rising poverty and inequality, and a marked institutional deterioration, it will be interesting to see what happens to this economy after the presidential elections in the middle of this year. That will be the time to face up to the actual situation in the country. Until then, however, GDP is growing.

2.- Let us turn our gaze to the immediate future. As we have already commented earlier in this *Report*, the near future will be conditioned, to a considerable extent, by the degree of monetary tightening in addition to that already performed in the last six months by the Western Central Banks. Although we have already summarised our expectations in this respect in the previous section, it is worth going deeper into the key aspects that will influence the intensity of this monetary contraction during 2023.

A first relevant notion is that, for this year at least, it will be necessary to set aside the evolution of headline inflation to focus attention on core inflation (remember, that which does not include the behaviour of energy and unprocessed food prices). It is well known that inflation rates close 2022 at an unacceptably high level, but with the fall in energy commodity prices (and, to a lesser extent, agricultural commodity prices), these rates have been falling. The pass-through to final consumers of this decline, plus a purely statistical base effect (comparison with the strong growth in 2022), will reduce headline inflation further from March 2023 onwards[5].

However, as Graph IV.4 reveals, core inflation rates are also very high and rising. Inflation in the services sector plays a significant role there, and there are widespread fears that levels of 4-5% may become entrenched, forcing a second round of interest rate hikes in the not-too-distant future. On what factors does their evolution depend?

[5] Although, in some countries, the removal of energy price reduction measures implemented by their governments as they expire will work in the opposite direction.



Source: Own Elaboration. Data: Eurostat; OECD; Federal Reserve of St. Louis.
Note: the data for 2022 correspond to the averages of the year-on-year rates of change of the CPI for the first eleven months of the year.

First, as we pointed out in our *Spotlight*, the behaviour of incomes, particularly wages. It is inevitable (and reasonable) that wage growth in 2023, even more so in a robust labour market, will be higher than in previous years of price stability, partly compensating for the loss of families purchasing power. But figures above 6% on average, as in the United States, make it very difficult to reduce inflation, which is essential. For the time being, wage behaviour in the European Union is more moderate. Still, the demands of numerous groups in various countries point to much higher figures that are difficult for the monetary authorities to accept (insofar as they would be passed on to a second round of price rises).

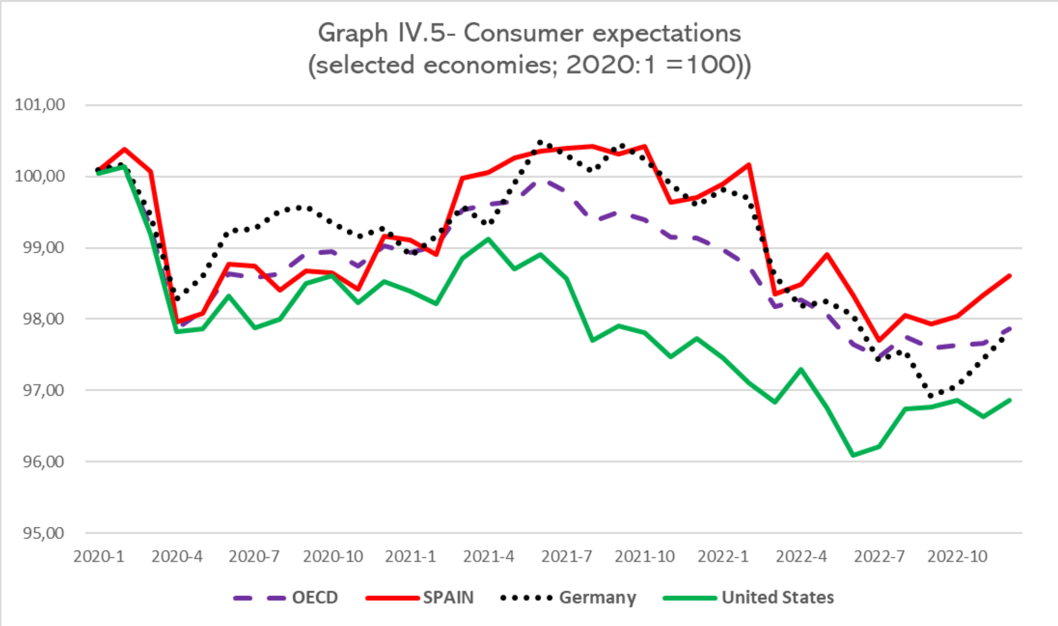
The essential idea that the cost of negative external shocks that reduce national income should be spread across all types of agents does not seem to take hold in the West. If everyone tries to maintain their pre-shock situation, the overall outcome will inevitably be worse.

Second, it is becoming increasingly necessary for Western governments to make the subsidies and aid they have been granting in recent years to companies and domestic economies more precise with respect to time and benefitted groups. For now, it is imperative to maintain them for the groups most affected by the double crisis (pandemic, Ukraine). Yet, they cannot maintain the generosity of the past because of the pressure they generate on demand and the impact on public debt. The outlook for this change also varies from country to country.

Third, inflation expectations, which, on the contrary, after a long period of upward pressure, seem to be rapidly absorbing the idea that prices will soon grow less, although it will still take some time to return to the flagship 2%.

And finally, consumer confidence. It is always positive when consumer confidence rises, as it has been doing in recent months (see Graph IV.5) after a long period of pessimism.

The deployment of accumulated household purchasing power in some countries (we shall return to this in a moment) can mean the difference between growth, even if it is meagre, and recession. But, on the other hand, a consumer euphoria (unlikely, of course) that would put pressure on excessive inflation would complicate monetary management. So optimism is best, but not too much; subtle balance.

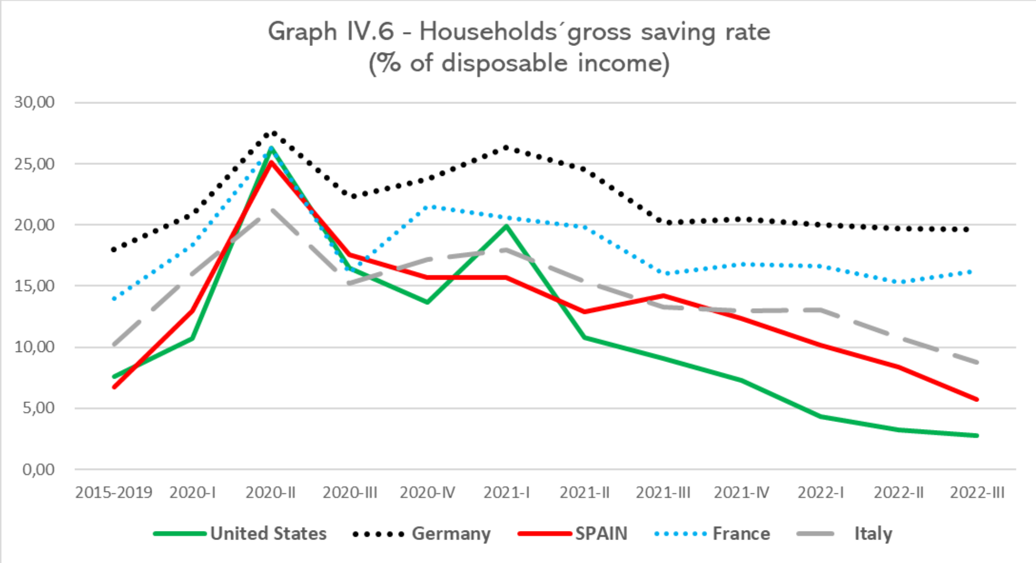


Source: Own Elaboration. Data: OECD.

3.-

We return to an issue already addressed in previous *Reports*, the accumulated spending capacity or, in other words, the excess savings maintained after the surge in savings (out of obligation and precaution) during the first quarters of the pandemic. Graph IV.6 shows the evolution of the household saving rate in the United States and the four largest European economies.

The surplus savings forced by COVID (government subsidies plus the inability to spend due to restrictions that affected mainly services with more personal contact) can be estimated at approximately 3 trillion dollars, taking the United States and the European Union together. As can be seen in the graph, 2022 has seen both the United States and some Europeans, especially in the southern part of the continent, already having lower savings rates than before the pandemic, so it can be assumed that they have already used some (but not all) of this surplus savings. In other economies, especially in central and northern Europe, although savings rates are already lower than in 2020 and 2021, they are clearly above pre-pandemic levels, indicating great prudence in their accumulated household resources use.



Source: Own Elaboration. Data: Eurostat; Federal Reserve of St. Louis.

Certainly, high inflation is still squeezing households' real spending margin, but there is undoubtedly potential for additional demand in the West as a whole, albeit unevenly distributed across countries. There is no previous record for two shocks of the type and time concentration experienced in recent years, so it is not feasible to anticipate how or when these surplus savings will be used. Nevertheless, and with the already analysed resilient labour market[6], this spending margin is the element that has reinforced the idea that a recession in 2023, even if it occurs in some economies, will be brief and mild.

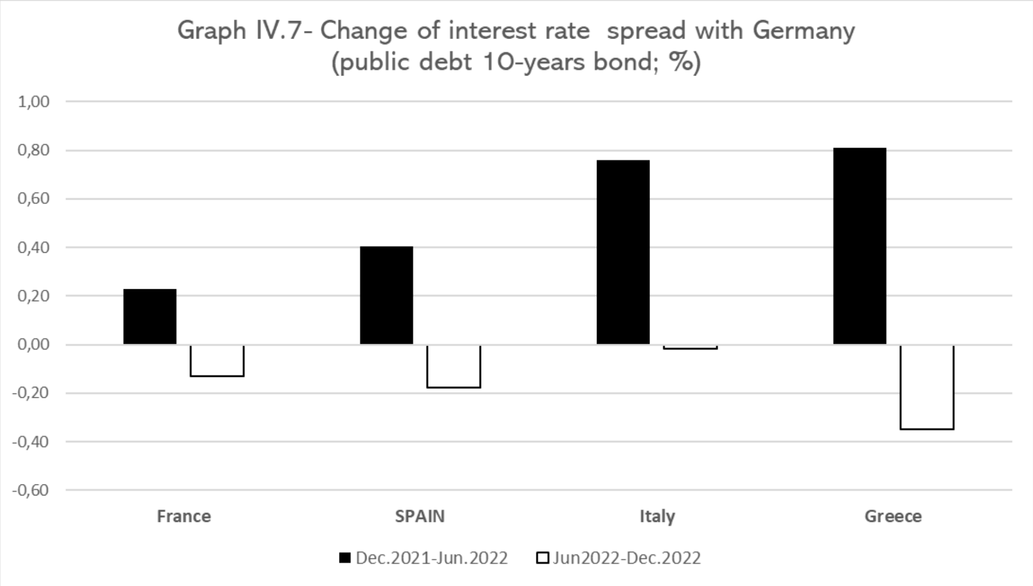
Because there will be no more adverse shocks, will there?

4.-

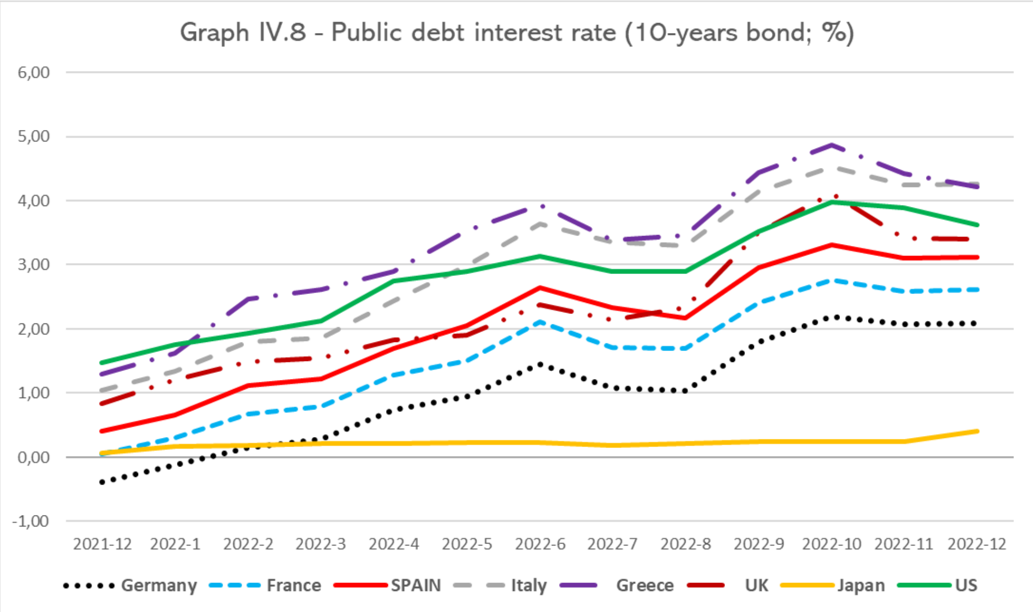
We will now devote a few thoughts to Western public debt, which soared from 71% to 123% of GDP between 2007 and 2020 (118% in 2021), initially as a consequence of and in response to the Great Recession, COVID-19 and the Russian invasion of Ukraine. But we shall not turn now our attention to the past, but to the present and the immediate future. We will do so with one piece of good news, two severe concerns and a moment to remember.

Let us start with the positive. It is confirmed, as Graph IV.7 shows with some significant examples, the success achieved by the intervention scheme (merely presented, not used) defined by the European Central Bank to halt the increase in interest spreads on the Eurozone countries' public debt that occurred during the first half of 2022. Since the presentation of the Monetary Transmission Protection Instrument (TPI), not only have the spreads with respect to Germany not continued to increase but they have been appreciably reduced.

[6] With all due respect to those in the technology and financial sectors who are experiencing rather the opposite.



Source: Own Elaboration. Data: European Central Bank.



Source: Own Elaboration. Data: European Central Bank; OECD.

Now let us turn to the first of the potential problems. The conclusion of the extension of quantitative easing by the major Western Central Banks (Japan aside), first by ending additional purchases and then by ending the reinvestment of money from maturing assets, thus reducing the total amount accumulated (the ECB will initiate this step in March 2023), implies a significant challenge. It is necessary to find private investors willing to absorb an additional amount of debt that, for the Eurozone alone, is estimated at a quarter of a trillion euros, a figure even higher for the United States, at a time when emerging world's large public buyers do not seem inclined (quite the contrary) to increase their assets in dollars.

With rates clearly on the rise (Graph IV.8), for the time being, investors seem to relish the opportunity to lock in some positive returns on what are, in principle, safe assets.

Indeed, 2023 is off to a strong start in Western bond markets. That said, not everyone is convinced that, with a complete withdrawal of Central Banks, the financing of some governments is guaranteed without an appreciable increase in spreads vis-à-vis more stable countries. The spotlight, as so often, is on Italy.

Second concern. Central Banks will inevitably suffer losses as the price of the massive volumes of bonds they hold in their portfolios fall (always in tandem with rising interest rates). Some of them (Belgium, the UK) have already indicated that these losses may exceed their available reserves. Is this a cause for concern?

Well, what would be dramatic for a private investor is not dramatic, though, for the official currency issuer. A central bank can't go bankrupt in the current monetary-financial model. That said, some suggest that, in any case, such a situation might require formal State backing of the Central Bank's solvency, compromising the monetary authority's independence. From our perspective, and if one believes (which requires some faith) that Central Banks have behaved in a manner truly independent of the governments' needs (and the demands of markets) since 2008, it would be more worrying if Central Banks were to raise rates less than necessary to facilitate the States' financing than the (greater) losses they would have to assume with more energetic rate rises.

This last, however, supposes a remarkable change of scenery compared to previous years. In the decade ending in 2021, the ECB alone earned 200 billion euros in profits from its growing debt portfolio, an amount earmarked for operating expenses, increasing reserves... and sending the surplus to national treasuries; this (relatively modest, it must be said) income will disappear for them for a while.

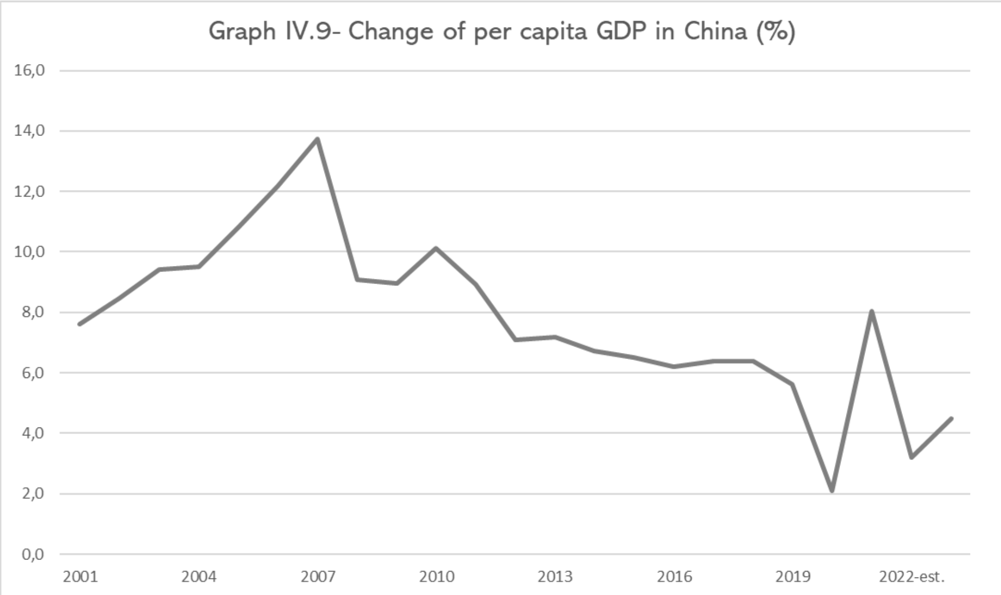
And the final note in this area: with the widening of the fluctuation margin tolerated by the Central Bank of Japan on the Japanese government bond curve, the upward pressure on bond rates has led to the disappearance of bonds with negative interest rates, one of the most significant singularities of the past decade in the financial markets. It should not be forgotten that they peaked at over 18 trillion dollars at the end of 2020, primarily because of purchases by Western Central Banks.

V.-

Beyond the Western economies, nothing is more critical for global growth than resolving the necessary but clumsily executed process of abandoning the "COVID-zero" policy by the main engine of growth since the Great Recession, China.

It is difficult to understand (beyond the fact that the 25th Communist Party Congress had consolidated unprecedented power for President Xi Jinping since Mao Zedong, and once power was secured, it was more feasible to make policy changes) what can justify the speed with which the Chinese government has moved from mass confinements and tight restrictions to almost complete removal of anti-COVID measures, with no prior preparation of the health system and in the middle of winter. It seems hardly credible that a limited number of street protests, probably seen more outside than inside the country, are behind this abrupt change. More likely, and with the economic perspective underlined here, that the cost, especially to local and regional governments, of the severe disease control measures and the disruptions to activity caused by them would have become unbearable.

Nevertheless, and apart from the hundreds of thousands of deaths caused by the chaotic opening (which officially will be reduced discreetly), the impact of the new policy in the first months of the year will be overtly negative for the economic activity in China; this will set up a year's 2022 continuation in which the officially forecast growth of 5.5% will not be even remotely achieved, continuing a downward trend from the peak of Chinese growth a decade and a half ago (Graph IV.9). Although this slower pace was inevitable, like in any other economy, as the country became more prosperous, recent shocks (as we have already shown in the first *Quarter's Key*) have thoughtfully[7] worsened the recent trajectory of the Chinese economy.



Source: Own Elaboration. Data: International Monetary Fund.

However, barring catastrophic developments in the health situation, the normalisation of life in China should, from spring onwards, give a considerable boost to the country's economic growth, which should thus become the key to easing the challenging year ahead for the world economy.

Both financial and key industry and construction commodity markets are already anticipating a robust Chinese recovery, to which fiscal, monetary and, especially in the housing sector, regulatory easing must be added. The Chinese government requires, not only in economic terms but also for its damaged reputation, a substantial advance in GDP once the first months of 2023 are passed. One would bet that this will be the case... albeit at the cost of aggravating certain existing domestic imbalances, including excessive debt and the dubious profitability of many investments.

[7] Along with other factors to which we may return in a future *Report*.

VI.-

But of course, in our profile of the year ahead, we cannot forget Russia's intervention in Ukraine. An early agreed (and implausible) resolution would be the best news for the global economy. A worsening of the situation or the emergence of severe conflicts in the Middle East or Southeast Asia would be the worst-case scenario. But this is not the place for military or strategic reflections, so we shall devote a thought to the recent European (and all Western) sanctions on the sale of Russian hydrocarbons.

At the very least, the term "peculiar" comes to mind when one has to assess the tenor of these sanctions, which, in essence, denotes that they are intended to reconcile so many things that they turn out to be decaffeinated. These contradictory objectives include penalising Russia, not increasing the energy cost for European consumers excessively, not suffering the diversion of hydrocarbons to other geographical areas - Asia - that pay more for them, or serving the individual interests of certain EU countries. In fact, Russia has never before collected as much money from its natural gas and oil exports as it had in 2022.

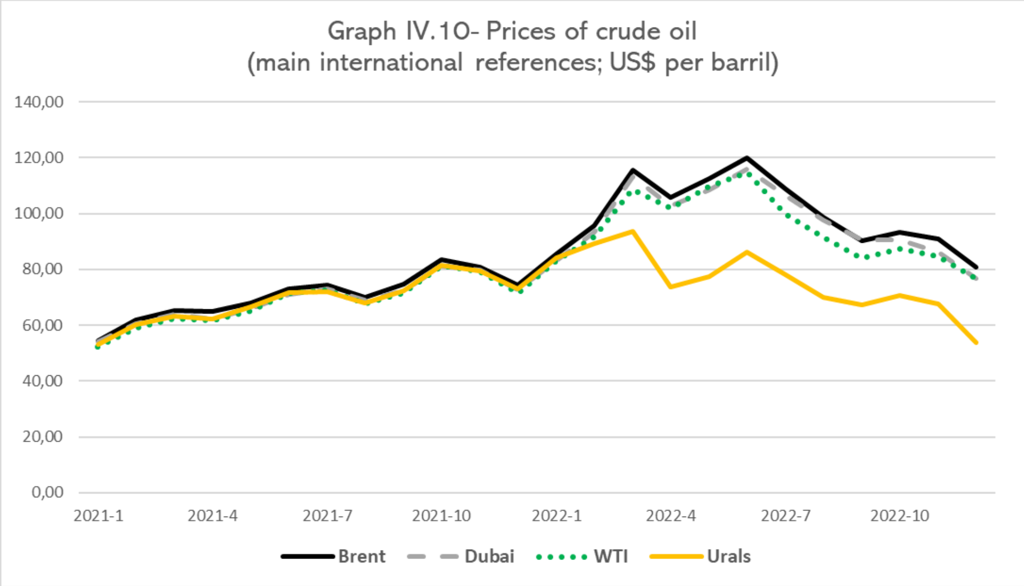
Let's see. Since the beginning of this year, the European Union has stopped receiving Russian crude oil transported by ship... although not by pipeline. Just the opposite is true for gas, for which flows by pipeline have fallen to a minimum... while LNG imports from Russia are at their highest level on record.

In addition, it is stipulated that Russia will not be allowed to sell oil to any other country at more than 60 dollars per barrel; those who do not respect this limit, apart from the anger of the United States and the European Union[8], will be excluded from essential services, including insurance in this oil's transport, services generally provided by Western companies. Predictably, Russia says it will not sell oil to any country that respects the Western cap, has purchased additional ships for transport and will directly insure them.

The reader must be anxious to know who is complying with the Western limit and risking cutting off Russian supplies. As it turns out, all of them and none of them. Because, as Graph IV.10 shows, Russian (Urals-type) oil, whose price had been on a par with the three international benchmarks (Brent, WTI, Dubai), has been selling at a considerable discount of between 20 dollars and 35 dollars per barrel since the start of the invasion of Ukraine. With the current price of these benchmarks below 80 dollars (falling as the global economy slows), Russian oil is being sold, with no need for a cap, at less than... 60 dollars per barrel.

Sanctions are not very punitive, one might say.

[8] Displeasure that has been of little concern so far to China, India or Pakistan, to give a few examples of countries that, since the beginning of the invasion, have increased their purchases of Russian hydrocarbons.



Source: Own Elaboration. Data: World Bank; NESTE.

VII.-

We will close our *Quarter Report's Keys* with a brief reflection on two pieces of legislation, one American, already underway, and the other European, soon to be implemented, which have opened an intense debate.

Let's start with the Biden Administration's Inflation Reduction Act (IRA) which, as usual in US legislation, covers much more than its name suggests. In particular, the controversy is over the 369 billion dollars earmarked for the green transformation of the US economy, aid biased towards those who produce in the United States, with equal treatment only for those who produce in Canada and Mexico. Evidently, there is a fear in South Korea, Japan and the European Union for the preferable location of industries critical to the new green economy in North America or the relocation to the US of companies already operating in Western Europe or developed Asia.

Alternatives? Denouncing the US move at the WTO (does anyone still care what the WTO says?); negotiating directly with the Biden administration (limited in how much it can modify the IRA by a Congress in which it no longer has a majority); or seriously reducing Europe's state aid requirements and matching (or exceeding) US subsidies. Without giving up on the second option, the idea of moving towards the third is gaining ground. There are too many companies and quality jobs with a future at stake.

Although on a different level, the green transformation is also behind the recently approved new EU regulation, the Carbon Border Adjustment Mechanism (CBAM), which, in contrast to the previous case, does exactly what its name suggests: establishes a charge on importers for the carbon content generated in the production process of purchases made outside the European Union. This mechanism is intended to compensate European producers for the costs of the emission permits they must purchase under the EU's internal Emission Trading System (ETS).

Although a similar scheme articulation is expected in other economies (at least in some developed ones), in the present case, the European proposal has raised criticism from the EU's main trading partners, who see the Mechanism as an example of sophisticated protectionism. Particularly contentious is the fact that multiple European producers in critical sectors receive free permits to emit, and although they are in a transition period towards the free permits elimination, their free emission permits would still be in force with the CBAM in place, which would openly violate WTO rules (again, does anyone still care what the WTO says?). Anyhow, the risk of trade retaliation is perceptible. But with the ETS in place and emission permits becoming more expensive in the future, if the EU does not arbitrate a mechanism such as CBAM, it also runs a severe risk of relocation of critical, energy-intensive industries.

V.- THE WORLD IN TWO VARIABLES

Following the pattern initiated in previous reports, we will conclude this *Report* with the presentation of two macroeconomic indicators of interest that allow us to compare the three main groups of world economies: developed countries, emerging countries and developing countries. We kindly remind the reader of the structure followed in this analysis. The ten countries with the largest populations in each group are selected. The data for the largest (by far the largest in each case, which would distort the weighted average if they were included in the aggregate), respectively, the United States, China and India, are shown separately. Data for the other nine countries in each group are weighted according to their weight in the world economy (measured in Purchasing Power Parity) and shown together. See the *Annex to the July 2022 Report* for population data and share of world GDP for the 30 selected economies.

The temporal approach followed is as follows: using annual data, we will go through what has happened since 2000 in the following sub-periods: 2000-2007, a phase of strong global growth, especially in the non-developed world; 2008-2011, the central years of the Great Recession, which mainly affected North America and Europe but had broad global repercussions; 2012-2019, again an expansionary period, much less dynamic than the previous one, especially for the non-Western world (with crises in many countries in these areas during the sub-period), and with growth sustained by increasing indebtedness (in quite a few countries in the three groups) and highly expansionary monetary policy in the developed world. The following is the initial year of the pandemic associated with COVID-19 (2020) and the initial rebound year (2021).

In this *Report*, we will show the evolution of variables closely linked to economic growth: first, the primary source of growth, at least in the medium and long term, i.e. labour productivity[9]. We will then review the trajectory of the investment rate (in physical capital) in the selected economies, an essential factor for anticipating the attainable growth level in the future.

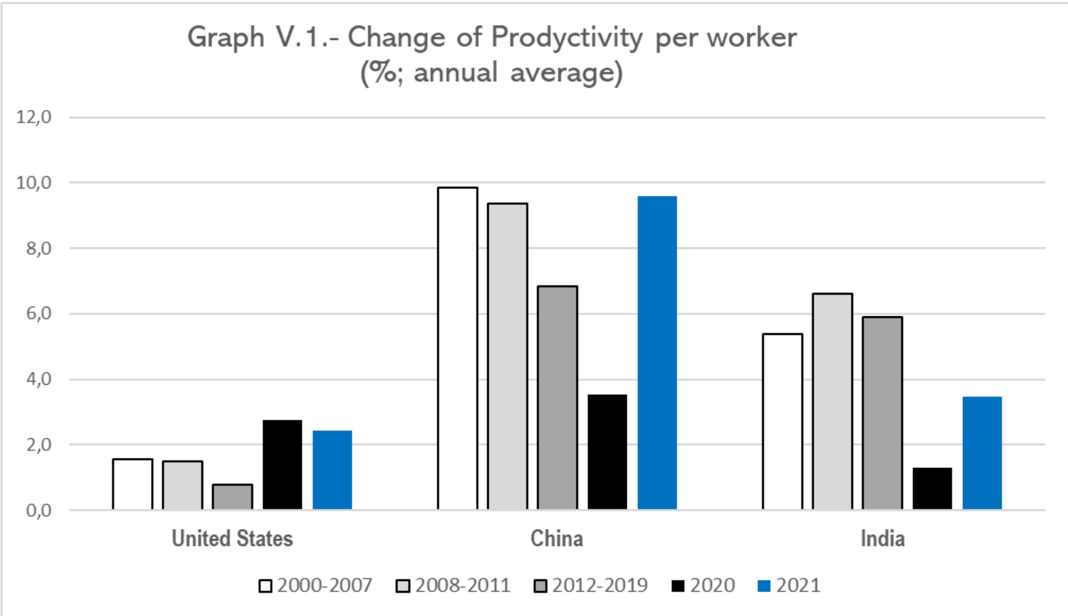
V.1.- PRODUCTIVITY PER WORKER EVOLUTION

Graphs V.1 and V.2 reproduce the behaviour of this indicator with the chosen country grouping and in the sub-periods explained.

Starting with the developed economies, it is worth highlighting this essential variable's mediocre (and declining) trajectory for growth. The results would be even more remarkable if we were to look at the continuous fall in productivity growth from the 1970s to the present day. With growth averaging less than 1% per year, this is one of the major structural problems of Western economies. Note in the first graph that the situation, although not favourable, is somewhat less worrying in the United States.

[9] Productivity per hour worked reflects much more accurately than productivity per worker used here the meaning of this variable, which is to express the efficiency in using the productive factors at the employee's disposal. However, the lack of data on hours worked in many non-developed countries forces us to use productivity per employee.

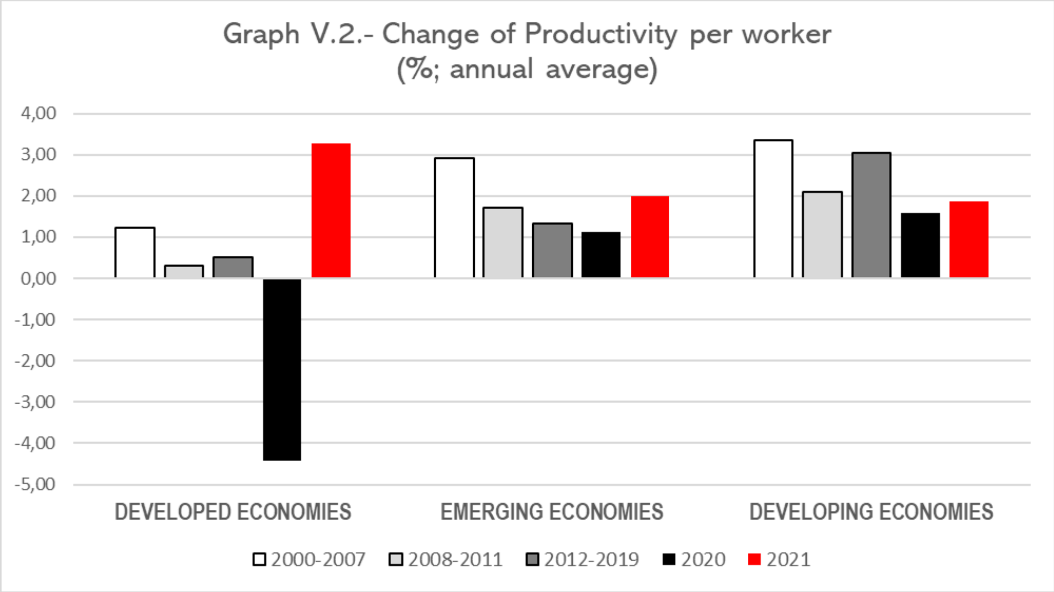
The other note to stress is this variable's behaviour during the pandemic, a behaviour quite uneven between the United States and all other economies. Thus, while in the rest of the world, there is a sharp decline in productivity growth in 2020 (including an unprecedented drop in the rest of the Western economies), with a strong recovery in 2021, the trajectory in the United States is the opposite. The explanation, of course, lies in the COVID-19 pandemic response. The sharp decline in GDP was widespread. However, many countries, especially in the West, made an effort to protect employment in the face of what was presumed to be (and was, in economic terms) a short-term shock. With much less activity and similar employment, measured productivity falls. With the 2021 recovery, the process is the opposite. In the United States, where employment was not protected (aid to families took the form of direct cheques to them, regardless of their employment situation), we can logically observe an inverse evolution in these two years.



Source: Own Elaboration. Data: International Monetary Fund.

Regarding non-Western economies, although with higher growth rates (expected, on the other hand, given the much greater room for improvement in production efficiency), the trend is equally worrying, with a continued decline (greater in emerging countries than in developing ones) that could put a notable brake on the advance of per capita income in these countries. Only if this trend coincides with a sharp fall in hours worked (which would mean that productivity per hour is rising strongly, even if productivity per worker does not) would we be talking about a potentially positive result, in which GDP grows less but individuals' leisure time increases (assuming they willingly work less). In the absence of data, there is no reason to think this option is correct.

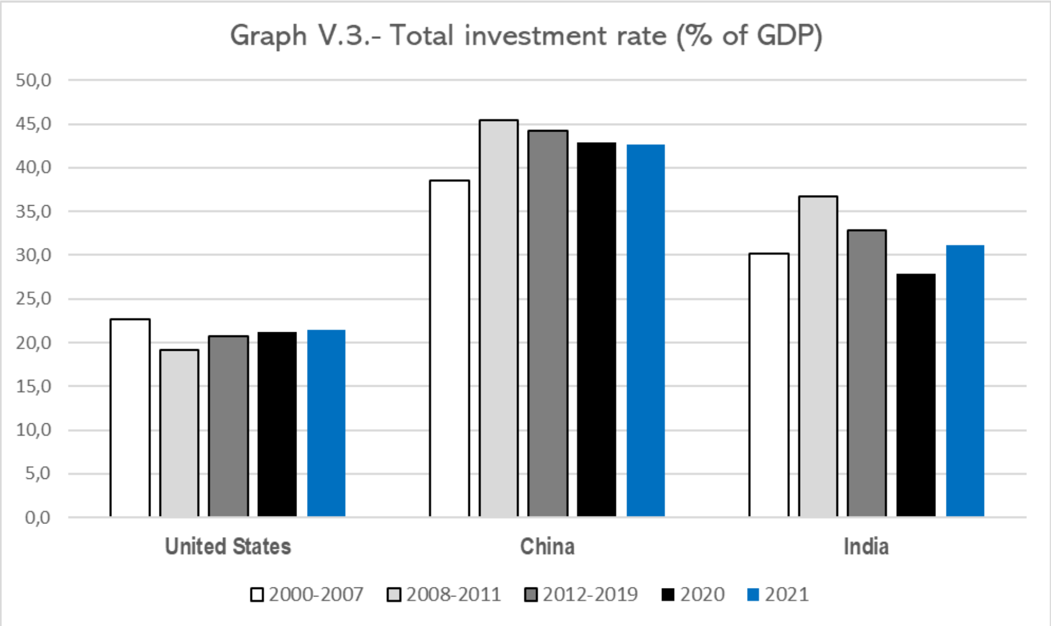
Finally, it is noteworthy that the trajectory of the two large Asian economies is not different from that of the emerging and developing world in general, especially in China, but growth rates (see Graph V.1) are still considerably more dynamic than in the rest of the large international economies.



Source: Own Elaboration. Data: International Monetary Fund; World Bank.

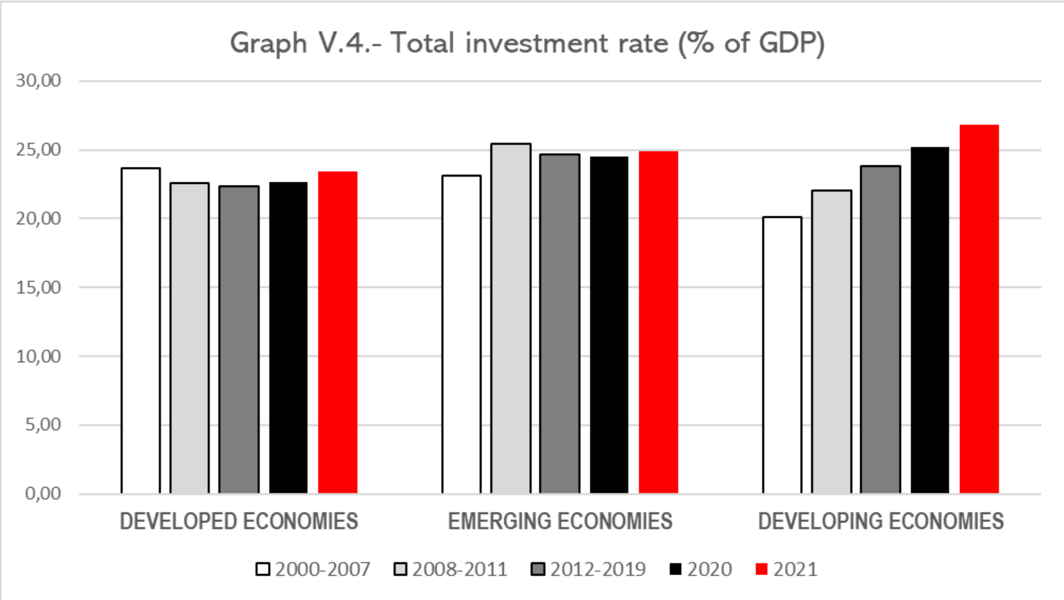
V.2.- INVESTMENT RATE EVOLUTION

Graphs V.3 and V.4 show the trajectory of total physical capital investment rates in the economic areas defined in our analysis.



Source: Own Elaboration. Data: International Monetary Fund.

Regarding the leading economies in each area, no surprises. Rates that remain at a (rather modest) 20% of GDP in the United States contrast with the well-known rates of over 40% that the Chinese economy continues to experience. Although they have been seen as key to the country's spectacular growth for decades, they must now be considered excessive because of the limitation they imply for domestic consumption and, above all, because the profitability of these investments is decreasing while the derived imbalances, especially in the construction sector, are very worrying. India has continued to fall short of Chinese levels of investment, which has severely constrained the take-off of its economy, mainly because of infrastructure deficiencies. However, if it is to remain above 30%, as before the pandemic, the Indian economy must accelerate the resolution of these problems. The Modi administration's strategy of moving towards the Chinese model (more manufacturing, less relative dependence on certain services for economic growth) anticipates the sustention of this investment rate or even its increase.



Source: Own Elaboration. Data: International Monetary Fund; World Bank.

When it comes to the groups of economies (Graph V.4), at least a couple of observations are in order. First, the investment rates similarity and stability in developed and emerging countries. With much greater scope for growth (and for making economically and socially profitable investments) in the latter, this result is worrying because we are referring to rates of barely 25%. But among these emerging countries, there is an essential difference by geographical area reproduced in the developing economies: all the Southeast Asian economies in our sample, except for the Philippines and Thailand, show investment rates systematically above 30% of GDP. These levels are remarkable for the rest of the countries, for which we only find similar figures for Tanzania or Ethiopia. In many of these countries, from Brazil to South Africa, from Pakistan to Egypt, the investment effort is, simply and sadly, totally insufficient to ensure robust economic growth in the respective countries.

Lastly, worth bearing in mind that the investment rate in the emerging world is rising, which is positive but still very insufficient, as well as being conditioned by the aforementioned geographical disparity. On the other hand, the severe debt problems triggered by COVID-19 and the implications of the Russian invasion of Ukraine on the prices of critical imports for these countries cast severe doubts on whether this upward trajectory can be sustained over the forthcoming years.