GL BAL REPORT

2023 SECOND Semester Edition





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Credits

Introduction

The Global Report is an international macroeconomics project that aims to share an economic vision written exclusively by students from various finance and business student associations from the world's leading universities. It is a unique opportunity to connect students and readers from a multitude of backgrounds, but who share the same passion in economics and finance.

After nine successful editions, the project's greatest ambition is still the same: to establish a periodic exchange of information between as many financial companies as possible, connecting five continents in a single document and providing a broad view of the economies of many countries, from their perspective, with reliable information and easy language to all readers.

The Global Report was idealized by the Brazilian Liga de Investimentos UFRJ in 2016 and since then, several participants around the world have participated in the project, such as finance associations from Sweden, United Kingdom, Switzerland, France, Russia, Colombia, South Africa, Portugal, Kenya, and others.

This Global Report was written by Liga de Investimentos, The Investment Society University of Lagos, Finance club UoM, Minho Investment Association, The Finance Association, Invest Soc, CESA Investment Club and B&R Beurs.



The Investment Society University of Lagos

First of its kind in any Nigerian University, we aim to teach, educate, groom and prepare members for elite careers in finance, investment and consulting. As a society that thrives on knowledge; we also aim to provide our members with the strong foundation necessary to lunch a successful career – whilst also working hard to achieve excellent academic grades.



Macro Insights and Economic Developments

Introduction

In 2023, Nigeria has faced significant economic challenges, including high inflation and currency devaluation. President Bola Ahmed Tinubu announced the removal of petrol subsidies, which strained the Nigerian National Petroleum Corporation (NNPC)'s financial operations. The removal of subsidies alleviated the burden on NNPC. but also impacted the Nigerian economy. Inflation soared from 16.8% in April 2022 to 22.79% YoY in June 2023. The removal of subsidies strained the budgets of low-income households, but saved over 1 trillion Naira (approximately \$1.32 billion) just two months after the subsidy removal. The transport industry experienced an average increase of 80%, affecting goods and services prices and driving up inflation. The removal of subsidies reduced domestic demand for imported petroleum products, impacting international trade. The removal of subsidies also reduced the purchasing power of Nigerians, affecting their standard of living.

Cash crunch & credit restrictions

On October 26, 2022, the Central Bank of Nigeria (CBN) announced a move to redesign the currency (N200, N500, and N1000 notes) and introduce new notes into circulation to replace the old ones.

The CBN originally announced a deadline of January 31, 2023 for the use of old notes but later pushed it back to February 10, 2023 due to pressure from banks, politicians, and corporate organisations who stated that the deadline was unrealistic due to large amounts of cash still in circulation and outside of banks.

This policy, which was widely criticised by Nigerians, led to a severe cash crunch across the country. Businesses and

individuals were unable to access cash, and there were widespread reports of banks running out of money.

The Central Bank of Nigeria defended the policy, claiming that it was important to combat counterfeiting and increase the functioning of the Nigerian financial system. According to the CBN, the policy's goal was to "help check counterfeit notes, strengthen the economy, reduce cash management expenditure, promote financial inclusion, enhance CBN's visibility of the money supply, and reduce cash funded kidnapping and terrorism."

According to the CBN, 85% of cash in circulation is held outside of banks, with the majority of these monies being employed for unlawful operations or stored underground. Prior to the currency redesign, there were 3.2 trillion naira in circulation, of which only 500 billion was stored in the banking sector, with the remainder held primarily in people's houses. This is why they intended to take stock of the currency outside banks and bring it back into the financial system so that they could keep proper track of the money in circulation and also use it as a means of controlling inflation, which has been trending upwards in recent months.

Many Nigerians, however, thought that the strategy was executed in a hasty and disorderly way, causing undue suffering. Millions of Nigerians were unable to obtain the funds they required to satisfy their basic necessities, and companies were not spared. A few Nigerians were killed while attempting to obtain cash to support their daily necessities. According to data from the EFInA Access to Financial Services in Nigeria 2020 Survey, just a little over 50% of Nigerians have bank accounts, and the country ranks low in terms of financial inclusion per country.

Between January and March, the cash shortage had a significant impact on

economic activity, practically bringing the economy to a standstill owing to the inability to acquire cash for everyday economic operations. Money demand increased. Other individuals, notably point-of-sale (POS) agents, went so far as to sell the money at a premium of more than 30% for personal gain, while other banks were reported to have stockpiled the new notes, exacerbating the policy's impact.

Nigeria's financial crisis negatively impacted private sector productivity, with the Purchasing Managers Index (PMI) falling to 44.7 points in February and 42.3 points in March 2023. The CBN Naira redesign policy was the primary cause of the sharp decline, leading to a cash shortage that negatively impacted businesses. The real GDP growth for Q1 2023 declined to 2.3%, and small businesses closed during this period, affecting productive activities. About 25 states in Nigeria suffered a shortage in internally generated revenue and struggled with cash crunch in Q1 2023.

The Federal Government was hauled before the Supreme Court in February 2023, which issued an interim order prohibiting the CBN from carrying out the February 10th deadline for the phase-out of the old Naira. Ten states filed contempt charges against the Federal Government and the CBN for non-compliance with the court order. However, Nigeria's currency reform yielded several fintech successes, such as Chinese-backed businesses OPay and Palmpay, which have 30 million registered users. The Central Bank received 1.9 trillion naira in three months after the redesign, with 800 billion naira still to be exchanged for the new notes.

Overall, while the policy was well advised, the timing and limitations of the policy made it have an overall adverse effect on the Nigerian economy and much of the purpose was in fact not achieved.

FX unification, rate reform and impact on select sectors

Under the guidance of a fresh captain, the grand voyage known as the Nigerian economy set sail on a new course. This remarkable journey is marked by a series of transformative reforms, which include a major policy shift in foreign exchange management in Nigeria. This policy is in a bid to improve FX supply, enhance customer confidence, discourage speculation, and ensure the overall stability and efficiency of the FX market.

Before the new and current reform, Nigeria operated a dual foreign exchange system. This system has left room for a wide gap between the official rates set by the Central Bank of Nigeria and the parallel markets leading to great inefficiencies and instability in the foreign exchange markets.

The Central Bank of Nigeria published a directive that reforms unified all FX rates by the CBN, re-introduced the Willing Buyer and willing Seller model, and ceased the RT 200 FX Programme and Naira4Dollar Programme.

Major sectoral impacts:

Oil and Gas sector: International Oil Companies have been granted permission to sell foreign currency to commercial banks instead of the Central Bank of Nigeria (CBN), marking the end of a three-year ban. This change is expected to result in more earnings from foreign exchange sales that better reflect market dynamics.

Consumer goods sector: Possible increased foreign exchange obligations or losses due to the impact of currency devaluation.

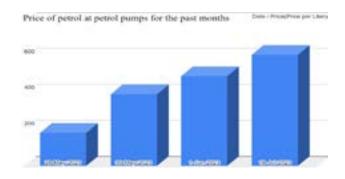
Industrial goods sector: The exchange rate unification could lead to a higher demand for domestically raw materials as businesses contend with rising expenses.

In general, this reform was expected to increase transparency and liquidity in the foreign exchange market, reduce speculation and volatility in the exchange rate, and improve investor confidence in the Nigerian economy. However, the reform has also had some negative effects such as a sharp depreciation of the naira against the dollar, increased inflationary pressures and reduced disposable income for households.

Subsidy Removal & Hike in Petrol prices, impact on government revenue

Nigeria, as an oil-producing country, heavily relies on its petroleum sector for revenue and energy needs. Previously, the government subsidised petrol prices to make it affordable for its citizens. However, fluctuations in global oil prices, economic challenges, a dwindling foreign reserve and changes in the domestic market have a direct impact on petrol rates.

In 2023, Nigeria witnessed a significant increase in petrol rates when the newly inaugurated president, Bola Ahmed Tinubu announced the removal of petrol subsidies during his inaugural speech. Tinubu declared, "the fuel subsidy is gone," adding that it was unsustainable as rising costs could not be justified as resources diminished, leading to public concern and economic challenges. The subsidies were originally proposed to end June 30, 2023 but the price increase and implications were instantaneous with transport prices doubling immediately in response to the fuel rate hike. The petrol prices were increased from 185 Naira per Liter to 617 Naira per liter with expectation of further increase in price. The rate hike pushed inflation up to 22.79% YoY in June 2023. Nigeria has since then had a 28% drop in petrol usage in June compared to the subsidy period in May.

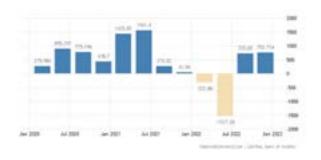


Date	Reason for Price Hike
30-May-2023	President Tinubu announces removal Of Subsidy
01-June-2023	NNPC confirms removal of subsidy
18-July-2023	NNPCL Increases prices at its stations

Last time the country attempted removing subsidies was 2012 leading to a nationwide protest

The removal of fuel subsidies in Nigeria has been attributed to several factors, including the impact on cash flow for the National Petroleum Company (NNPC), economic challenges, fluctuations in the global oil market, the decline in the value of the Nigerian naira, lack of refineries, corruption, market efficiency, attracting investments, and reduced smuggling. The NNPC spent over 400 billion Naira monthly on subsidising petrol prices, which cost the government \$10 billion in 2022. Economic factors like inflation, currency devaluation, and dwindling oil reserves also influence the cost of importing refined petroleum products. The decline in the value of the Nigerian naira reduces the government's purchasing power, making it more challenging to afford the financial burden of subsidising fuel prices. Removing subsidies can also improve market efficiency, attract private investors, reduce smuggling, and protect government revenues.

Nigeria Foreign Direct Investment over time



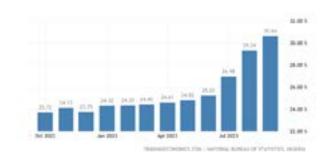
The removal of petrol subsidies in Nigeria has led to a significant increase in petrol prices, causing inflation and affecting the cost of living. The removal of subsidies aimed at improving government finances can strain low-income households' budgets, as funds allocated to subsidies can now be reallocated to public infrastructure, healthcare, and education. The cost of transportation has increased by 80%, affecting goods and services, leading to price hikes and inflation. The lack of subsidies has reduced domestic demand for imports, reducing the need for imports. The increase in transport prices and production due to the removal of subsidies further drives up inflation and reduces Nigerians' purchasing power.

Persistent rising inflation and the response of the Nigerian government.

Over the past months, Nigeria has recorded a continuous rise in inflation. This is majorly attributed to the cash crunch, FX Unification and removal of fuel subsidy amongst other macroeconomic challenges being faced by the country.

Food inflation surged from 29.34% in August 2023 to 30.64% in September 2023 on a year-on-year basis. The increase in food inflation can be attributed to rising prices of oil and fat, bread and cereals, fish, potatoes, yams, fruits, meat, vegetables, milk, cheese, and eggs.

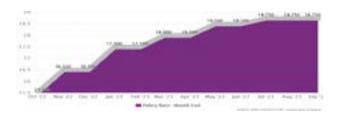
Core inflation, formerly referred to as "all items less farm produce," has been reconstituted as "all items index less farm produce and energy" as a result of deregulation and the elimination of fuel subsidies in the energy sector. Core inflation soared year over year to 21.84% in September 2023 from 21.15% in August 2023. The most substantial price increases were observed in passenger transport by road, passenger transport by air, medical services, vehicle spare parts and maintenance, and repair of personal transport equipment, among others.



Interest rate:

To combat the inflationary pressures, the Nigerian government has hiked the interest rate cumulatively by 325 basis points since October 2022 (year on year), when the interest rate stood at 15.5% and is now at 18.75% as of October 2023. In September 2023, the MPC also reduced the asymmetric corridor.

Interest rate progression in Nigeria



According to the Central Bank, the interest rate was raised to reduce inflationary pressure, narrow the negative real interest rate margin, restore investor confidence, and

boost remittances. Nigeria's inflation rate was 16.8% as of April 2022. The rate was at an all-time high of about 18% a year ago, but dropped to 15% in November 2021. It has been on an upward trend since then, which explains why the Central Bank took a preemptive measure to tame it.

Nigeria's inflation is at its highest level in over a decade, largely due to a combination of economic and social issues. The country's import-dependent economy, poor government policies, infrastructure issues, insecurity, and weak local manufacturing sector contribute to the problem. The informal sector's weak link with the formal financial sector hinders data capture and understanding of the economy's structure. Factoring in the informal sector in economic performance metrics can help create a better approach to solving the inflation problem. However, concerns about the timing of interest rate hikes, such as high unemployment and poverty, remain.

Policy Reform: Signing of Student Loan Bill.

The Students Loan Bill, signed into law on June 12, 2023, by President Bola Ahmed Tinubu, is aimed to facilitate interest-free loans for Nigerian students, particularly those from indigent backgrounds. The act majorly is to ensure that financial constraints do not hinder higher education in universities, polytechnics, and colleges of education. The President signed the Student Loan Bill into law, to enhance higher education for indigent students in Nigeria.

With this change to the law, the bill is now an Act.

The student loan bill is a piece of legislation that aims to improve the rate of higher education in Nigeria, by reducing financial constraints. With the law in place, students can now apply for this loan, and use it to fund their higher education. The law established the Nigerian Education Loan Fund

which will manage and disburse the funds to qualified students.

This law will have a significant impact on Nigeria's educational system, and it could potentially extend to sectors like technology and finance. The Nigerian Education Loan Fund, established under the law, will be managed and administered by various stakeholders, including the Central Bank of Nigeria and commercial banks. It reportedly includes mechanisms for monitoring academic performance, ensuring timely loan repayment, and preventing fraudulent practices.

The funding for the initiative is diversified, with sources ranging from education bonds, a percentage of taxes, levies, and duties collected by the Government, profits from natural resource exploitation, to donations and other contributions.

For Repayment, beneficiaries of Nigeria's student loan will commence repayment two years after completion of the National Youth Service Corp (NYSC) programme.

Employers will deduct 10% of the salary at source and remit it to the Student Loan Fund. If the beneficiary changes jobs, they have to communicate that within 30 days of resuming the new job. Also, if they are self-employed, they shall remit 10% of the total profit monthly to the fund. Beneficiaries will have 60 days to submit all relevant documents related to their business to the loan committee.

The Nigerian CBN had launched the Global Standing Instruction (GSI) in 2020 to address issues with Nigeria's student loan Act, which has been in place since 1972 under Yakubu Gowon's regime. The Act allows lenders to debit BVN-LINKED accounts or wallets of loan defaulters, leveraging advancements in Nigeria's payments space. However, the fund must address potential backdoor tactics by government and bank officials and Nigeria's poor identity and addressing system.

Conclusion

In conclusion, the removal of petrol subsidies and the subsequent rate hike in Nigeria had significant implications for the economy and its citizens. While it aimed to improve government finances and reduce the strain on the budget, it also led to inflation, increased cost of living, and higher transportation expenses. The removal of subsidies had a cascading effect on various sectors, including transportation, goods and services, and imports. The government saved a substantial amount in subsidy removal, but it came at the cost of increased economic challenges for the people. The impact of this policy change highlighted the complexity of managing economic reforms in a country with a diverse and often vulnerable population. The government's ability to balance fiscal responsibility with the welfare of its citizens remains a critical challenge.



Finance Club UoM

Finance Club UoM is a student non-profit organization, which was founded in 2015 by undergraduate students of University of Macedonia. We are aiming at connecting students with modern financial science, as well as bridging the gap between the job market and the academic communit



Greek Government Bonds Analysis

Government Bonds Unveiled: A brief Overview.

A government bond is a financial instrument issued by a government to finance its financial obligations and expenses, otherwise bonds are loans. They are traded on the secondary market and are proof of debt or right to distributed profits. Furthermore, bonds have different duration, for instance there are bonds with terms of two, five, and ten years. Sovereign bonds may provide regular interest payments, often referred to as coupon payments.

From an investor's perspective, bonds are typically the most secure assets. This is primarily because they are considered almost entirely risk-free due to the government's backing. A country's reputation for reliability and creditworthiness is a key factor. This is supported by the country's ability to meet its debt obligations, which can be accomplished through taxation or by issuing new currency. However, as with any investment, the bond market carries its own set of risks. Additionally, during periods of global economic downturns and times of policy and trade instability, bonds often maintain their prominence in the market.

Considering the economic aspect, the rising demand leads to price increases, which, in turn, can negatively impact their overall performance. This has led to a prevalence of negative interest rates and bond yields in the global market to a significant extent.

Down on the wheel of history.

In the late 19th and early 20th centuries, Greece issued four government bonds traded on the London market, a crucial borrowing venue in the 1920s. These bonds were: the Monopoly Loan of 1887,

the Bonds Loan of 1910, the five per cent Loan of 1914, and the Refugee Loan of 1924. The Monopoly Loan's interest rate surpassed the minimum set by the 'Law of Control' and varied yearly based on disposable revenues. The Bonds' Loan had a 4% interest rate with a fifty-year amortization period. The Refugee Loan, uniquely, aimed at resettling refugees after the Asia Minor crisis and was considered a safer investment by Moody's. Ratings assigned were 'Baa' for the Refugee Loan and 'Ba' for the Monopoly Loan, Bonds Loan, and 1914 Loan. Greek bonds' value on the London Stock Exchange significantly declined due to developments in Asia Minor. These gold-denominated loans were semi-annually repaid according to contract terms.

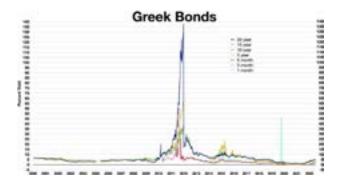
In 1981, Greece became a member of the European Union. Foreign investors emerged as the primary purchasers of Greek government bonds as the country started issuing bonds in foreign currency (ECUs) in the late 1980s, intensifying such transactions in the 1990s (OECD (1990); OECD (1991); OECD (1992)). Greek government bonds in this period often offered relatively high yields to attract investors and were denominated in the Greek drachma. The credit ratings of these bonds were lower than those of many Western countries due to fiscal challenges. This was influenced by the significant reliance on long-term bonds for government borrowing just before and after Greece entered the Eurozone. Accumulating substantial public debt, much of it in the form of government bonds, Greece issued this debt in various currencies, including the euro after adopting it in 2001.

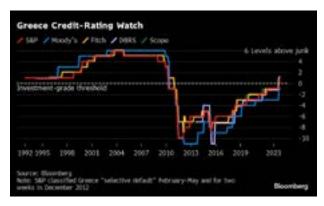
The onset of the Greek bond market crisis can be traced back to October 10, 2009, when the Greek Government announced an upward revision of the estimated budget deficit for 2009, initially from 7% to 12%, and ultimately to 15.6% of GDP. Investor confidence in Greece

started declining in December 2009, as all three leading rating agencies downgraded the sovereign bond (Fitch and Standard & Poor's from A- to BBB+ and Moody's from A1 to A2, all with a negative outlook). This raised concerns about Greek government bonds being excluded from ECB market operations. Yields on two-year Greek government bonds rose from below 2% in early December 2009 to a peak of 6.5% in early February 2010, subsiding to around 5.5% later that month. The yields then surged from 4.5% in late March to over 18% in early May, dropping below 7% by mid-May, following a financing package and news of the ECB's large-scale intervention to combat the European financial crisis. In April, the European Union's statistical authority revealed that Greece's national debt was larger than initially reported. The International Monetary Fund and Eurozone governments provided emergency loans of \$147 billion for Greece to meet debt repayments. In the second quarter of 2010, as 10-year-old bonds matured, the government lacked funds to repurchase them or obtain new debt at high yields, bringing Greece close to sovereign default.

In mid-June 2010, there was another episode of concern among investors when Moody's, following Standard & Poor's move in late April, similarly downgraded Greece's government bond ratings to 'junk' (from Ba1 to A3), indicating a higher but still relatively low risk of default. Yields on twoyear Greek government bonds increased from 7.5% to 10% before easing to 9.5% in early July. By March 2011, Moody's became the first major rating agency to lower Greece to single-B status. In May of the same year, European finance ministers suggested talks with bondholders to extend Greece's debt repayment schedule. Two weeks later, Moody's downgraded Greece to Caa1, reflecting a 50% probability of default. In early June, Berlin proposed extending the maturities on Greek bonds by seven years. Shortly after, Standard & Poor's responded by downgrading Greece to CCC. Yields on two-year bonds dropped to as low as 7.25% by mid-October. In March 2012, after a complex process, a majority of private holders of Greek government bonds agreed to exchange their bonds for new ones with less than half the face value and a low interest rate. Greece returned to the international bond market in July 2014, issuing a 5-year bond and raising around €1.5 billion. In November 2014, a well-received 7-year bond was issued, raising approximately €2.5 billion, signaling increased confidence in Greek bonds.

In January 2015, Greece issued a 5-year bond, raising around €2.5 billion, despite ongoing economic challenges. This issuance garnered significant investor interest. In July 2015, Greece introduced a 3-year bond with a yield of approximately 11.9%, marking its first bond sale after reopening financial markets following the resolution of the debt crisis. Additionally, in August, Greece launched a 5-year bond, raising approximately €1.4 billion with a yield of about 8.05%. In July 2016, a 3-year bond was published, raising around €3 billion with a yield of approximately 4.63%. By February 20, 2017, the Greek finance ministry reported a government debt load of €226.36 billion, increasing by €2.65 billion in the previous quarter. In the subsequent July, Greece issued a 5-year bond, raising about €3 billion with a yield of around 4.625%. By mid-2017, the yield on Greek government bonds approached pre-2010 levels, indicating a potential return to economic normalcy. According to the International Monetary Fund (IMF), Greece's GDP was estimated to grow by 2.8% in 2017. In March 2019, Greece sold 10-year bonds for the first time since before the bailout. In March 2021, Greece sold its inaugural 30-year bond since the 2008 financial crisis, raising €2.5 billion.





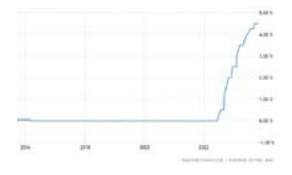
Analysis is the key to understanding.

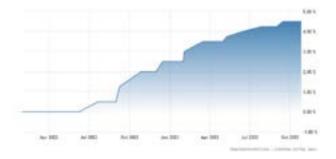
The year started recording losses of 2.72%, regarding the prices. The downturn in the Greek bond market was anticipated considering the unpredictability of inflationary pressures in the Eurozone bond markets. In this context, the interest rate curve shifted upwards in January. The exit to the markets was the first for this year, and it occurred just a few days after Fitch raised the economy's outlook from "stable" to "positive," maintaining our nation's rating on the BB scale. Geopolitical activities and the risks associated with skyrocketing energy prices have caused instability and investor flight to conventional safe havens, which has resulted in large losses for the Greek bond market in February. In particular, the Government Bond Index had a decline in February, falling 4.87% to settle at 633 points. Nevertheless, the index appears to be on a stabilizing trajectory as of the beginning of March. One probable explanation is market expectations for the ECB to adopt a more dovish monetary policy in response to the

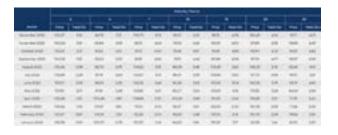
uncertainty in financial markets and energy prices caused by Russia's sanctions. The sovereign bond market's downward trend, the unpredictability of the situation and inflationary pressures contribute to the decline. By the end of March, the Government Bond Index had dropped by 0.69% to 628 points, while its average yield had risen by more than 2%. Despite the difficult international environment for Greek bonds, S&P proceeded to upgrade the credit rating by one notch to BB+. The Greek bonds though had already priced in this, so they received no further boost (620 points, April). The downward trend in the bond market continued in May. However, the government bond market had comparatively fewer losses than in April, with the Government Bond Index declining 2.42% at 589 points, thanks to the country's expected exit from the enhanced supervision program at the end of August. The Government Bond Index registered significant drops in mid-June reaching 569 points. Afterwards, following the announcements by the officials of the European Central Bank (ECB) regarding the protection of government bonds in the European periphery countries from speculative attacks in the context of the ECB's increase in the key interest rate, there was a significant reversal in the downward trend of government bonds prices. Here was a significant reversal direction of government bonds tendency, resulting in a more modest decline of 1.38% by the end of the month. In general, the government bond market increased in July, while losses began in early August and were extended in the first week of September. More precisely, at the end of July, the Government Bond Index topped 600 points, and in September at 551 units. The domestic bond market had remarkable volatility in October, recorded 1.17% growth, reaching 557 units, and the previous month's bearish pattern in Greek government bonds was overturned. Moody's and Fitch both

reported a significant recovery in economic activity and an improvement in the Greek economy's debt level. In November, the government bond market continued bullish, the index registering a 3.62% rise by the end of the month, reaching a total of 580 points. 2023 began optimistic as the investor regained their confidence because of decreasing inflation and higher-than-expected economic activity projections. Specifically, 1.2% earnings were generated in January (586 on 1/19/2023). The primary factors driving the increase in government bond prices throughout the ECB's crucial cycle of rate hikes were two significant developments. First, the Public Debt Management Organization (PDMO) successfully issued a new 10year bond on January 17. Second, at the end of January, Fitch raised Greece's credit rating from BB with a positive outlook to BB+ with a stable outlook, a one-notch improvement.

The correlation between price and yield in bonds is inverse. Consequently, there was a rising trend in yields, which we will examine below along with the variations in rates. Until July 21, 2022, interest rates in the eurozone were at 0 and then the European Central Bank (ECB) set the annual percentage rate to 0.5 percent. It had not increased since March of 2016. This slightly affected the yields of the month, although their upward trend continued until the end of the year even with further increases at cost of borrowing. Historically, during periods of peak interest rates have outperformed interest-bearing notes and treasury funds.



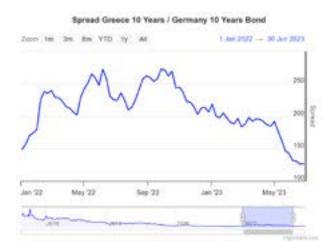




According to data from the European Union's statistics agency, Eurostat, Greece's primary budget surplus for 2022 was 0.1%. On bank balance sheets, the percentage of loans that are currently non-performing has decreased from over 50% in 2016 to about 7%.

Comparability with other states.

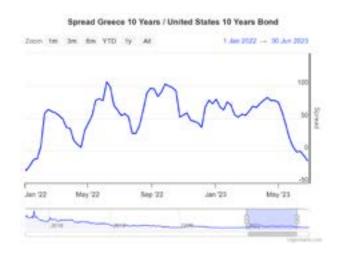
Greek government bond yields followed the trend of foreign bond yields in the euro area. Consequently, after experiencing a significant rise in 2022 due to major interest rate hikes, Greek sovereign bond yields, along with those of other euro area countries, decreased during the first half of 2023. This decrease is obvious through the yield spreads observed between Greek government bonds and those of other euro area nations. Notably, the increase in the yield spread of the Greek 10-year bond compared to the equivalent German bond in 2022 has now been completely reversed as shown in the diagram below. German bonds are widely acknowledged as the safest assets in the eurozone, making them a reference point for evaluating yields across other European government bonds.



The 10-year spread of Greek bonds compared to German bonds exhibited fluctuations, raising concerns in 2022 as it widened to 265.4 bps in May and further to 272.2 bps in June. Despite a brief narrowing in March, it expanded again in July, influenced by factors such as ECB policy expectations. The model suggests the spread is relatively overvalued, but market dynamics, risk tolerance, and credit rating concerns play roles. A tightening to 202.8 bps took place in November, reaching the lowest in eight months, but risk balance remains uncertain, indicating potential fluctuations ahead. For the first semester of 2023, despite an increase in Greek bond yields, the spread against the German 10-year bond fell to 183.8 points in February. In March, the interest rate spread rose to 198.2 bps, signaling a potential marginal widening based on Greek economic factors. Despite favorable indicators, the fair price for the 10-year spread is estimated at 205 bps. In April-June, a strong upward movement was recorded, with the Greek 10-year bond yield dropping by 53 bps to 3.67%, accompanied by a substantial narrowing of the spread to 128 bps at the end of June. The "fair" value for the spread is approximated at 147 bps, suggesting relatively expensive valuations with an implied upward risk balance.

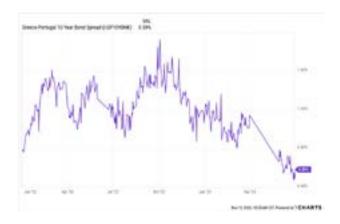
When comparing the 10-year Greek government bond to that of the United States—a country with a notably distinct

economy from Greece's and situated outside the European Union—we observe significant deviations in the spread prices. Notably, these spreads fluctuate at much lower levels than those above, even turning negative. This raised the possibility of a decline in demand, potentially resulting in a decrease in the bond's price. In such a scenario, investors might exhibit reduced willingness to pay premium prices for the bond, creating a challenge for the bond issuer to secure funding at a lower cost. This is because diminishing demand often prompts investors to seek higher yields, impacting the overall cost for the bond issuer. The first remarkable variation occurred in February, expanding to 63.6 bps. After substantial alterations variations, it reached 106 bps in June. However, a significant decrease was observed toward the end of July, dropping to 26.7 bps, and further to 35.8 bps in December 2022. Entering 2023, a bearish trend is evident in these spreads. More specifically, the prices switched mainly in positive but downward levels, reaching their lowest point in the last 18 months at -15.7 bps on June 23. This suggests that investors were willing to accept lower yields on Greek bonds in exchange for the perceived safety and stability of the United States economy. Several factors contributed to these variations, including the historical rise in inflation in both countries and a significant increase in interest rates.



At this point it would also be important to compare the ten-year Greek bond with that of Portugal, as it is a country with similar characteristics, especially in terms of population and GDP since they are quite close in numbers. Now we will analyze the evolution of spreads between Greece and Portugal with a chart that has percentage data as it is another approach to the analysis of spreads apart from that with numerical data. It is noteworthy that basis points (bps), serving as the fundamental units, constitute 1% in this context.

Analyzing the following chart of the difference in yields, we notice that there were fluctuations like those analyzed above for 2022 and for 2023 accordingly. In contrast to the situation in the United States, we observe a return to positive spreads in this context. However, it is worth noting that the magnitudes of these positive spreads are not as huge as those witnessed in Germany. Starting from relatively low levels at the beginning of January 2022 at 0.77% (77 bps) it reached 1.62% (162 bps) in 3 months and then basically follows a downward trend, reaching 1.00% (100 bps) in mid-April. Along the way, after several ups and downs, it reached the highest price of the last 9 months, 1.93% (193 bps) at the end of October. At this stage, it is crucial to emphasize that while spread rises, often indicates increased perceived risk or uncertainty associated with Greek bonds compared to Portuguese bonds. Investors may demand higher yields for holding Greek bonds as opposed to Portuguese, reflecting concerns about economic conditions, fiscal policies, or other factors specific to Greece that make its bonds less attractive or riskier in the eyes of the market. From October 2022 onwards, these spreads progressively decrease, culminating in a lower level than the one observed at the commencement of 2022, standing at 0.59% (59 bps) by the end of June 2023.



In conclusion, the purpose of calculating spreads is indeed to assist investors in assessing the risk associated with a bond. The risk is higher when the yield spread is larger. Overall, these spread figures offer valuable insights into how Greek bonds are perceived in the global market and their relative risk compared to other countries, making them a useful tool for investors and policymakers.

The impact to the citizens life

In conclusion, the purpose of calculating spreads is indeed to assist investors in assessing the risk associated with a bond. The risk is higher when the yield spread is larger. Overall, these spread figures offer valuable insights into how Greek bonds are perceived in the global market and their relative risk compared to other countries, making them a useful tool for investors and policymakers.

To examine how citizens' daily lives are affected, it is not sufficient to analyze government bonds alone but overall fiscal policy. This is because bonds determine the total dept, indirectly impacting civilian's economic situation, unlike employment, taxation and subsidies which have a direct affect, more specifically:

At the first month of 2022 the state of Greece has to face a lot of challenges which is the result of covid and the energy crisis. More specifically these are: shortages in the healthcare equipment, an economy that has not recovered from the epidemic,

increased prices at fuel, electricity and basic essentials. At the same time Greece has to provide support to the households that cannot pay off their depts. The fiscal policy that Greece followed was made from a lot of different decisions.

In January 2022 Greece's fiscal policy shifted focus to address inflation, a key threat to the economy affecting purchasing power. Measures included boosting household income through allowances, supporting the energy-stricken population with 400 million euros. New frameworks protected vulnerable borrowers amid the energy crisis which was put in force in later in 2022 was issued since the two governmental programs 'GEFIRA I' and 'GEFIRA II' which was designed to cover part of the household's monthly instalment were coming to an end. Greece issued a 10-year bond, took steps for enhanced surveillance exit, and implemented various measures to assist households in managing tax and financial obligations. To combat unemployment, the government, through OAED, created numerous job positions. Also Greece participated in the RRF for substantial funding. In the energy sector, Greece initiated steps for an LNG Import Terminal and formed agreements with the Russian company Gazprom. In February 2022, the war between Russia and Ukraine will take place changing many economic factors. The reason of this is that Russia is an essential energy supplier for the world as well as Ukraine is an important grain producer. Greece fiscal policy proceeded with household energy crisis support measures similar as in January 2022. Moreover another 170 million euros were allocated at the agricultural sector for the same purpose. The Greek state administered reductions in the property tax (ENFIA) and took actions toward modernizing the national social security entity (EFKA). Lastly the majority of covid regulations that was in power were disactivated. In March 2022 new factors will

join and intensify the inflation that Europe populations are experiencing. EU will issue multiple sanctions against Russia. In response Russia's government announced that the country's resource exports will be only conducted in rubles. EU countries, including Greece have begun to examine emergency plans for food sufficiency and scenarios for minimizing the need for Russian energy resources, along with actions that can be taken in that direction. Significant emphasis was given to the construction of the Greek-Bulgarian natural gas pipeline (IGB), expected to be completed in June 2022 and be operational by September of the same year. In addressing the population's need, Greece created a supplementary budget of 2 billion euros, foreseeing an increase in state expenses. A profit ceiling was established on specific products and government interventions of 1,7 billion euros based on income criteria were under consideration. In August 2022 the EU voted the 5th package of sanctions, including a coal embargo. On the Russian side, there was a halt in the supply of natural gas to Bulgaria and Poland due to their refusal to pay in rubles. In this context, Greek government has decided to increase lignite production by 50% and double subsidy for natural gas. Simultaneously, scientific research for natural gas and oil deposits were scheduled in six regions of interest. A significant event was the early repayment to the IMF, two years ahead of schedule and the return to the markets with a reissuance of a 2020, 7-year bond, raising 1.5 billion euros. Last the minimum wage was increased by 50 euro from 663 to 713 euros. In May 2022 the tension in the Russian-EU relationship continued, leading to new rounds of price escalations. The EU imposed new sanctions, now including measures against Russian oil. Greece following EU payment instructions, paid her obligations toward Russian company Gasproom ensuring gas flows to the state. The RePowerEU program

highlighted three energy projects of Greece (IGB, FRSU) and during the same month the smooth progress of the Eastmed pipeline was announced (connects Greece/Crete/Cyprus). The Greek economy was concerned about non-performing loan reserves. Moreover, a decision to disconnect from the Hellenic Financial Stability Fund until 2025 was made. In June 2022 significant reductions in natural gas flows were making it more challenging for European countries to achieve the 80% coverage goal. The Greek government has responded to the developments through the power pass/fuel pass allowances and the elimination of the electricity price adjustment clause, along with guidelines for billing. Nevertheless, strict measures regulating market operations have not been implemented. In July 2022 the Nord Stream suspended its operation for maintenance reasons raising concerns in the European market. European countries reached an agreement after continuous negotiations to limit natural gas consumption. In this context, electricity production from lignite in Greece doubled and a new decade-long development plan for DESFA (National Natural Gas System Operator) was established, with a budget increase from 542 million to 856 million euros. In the same month, the compensation mechanism for electricity producers becomes operational and additional rules on electricity bills and methods of charge publications are imposed. Furthermore, the government initiated the process for providing fuel pass 2 subsidy. In August 2022 the Russian company Gasproom warned EU for important price rises due to the increased production costs resulting from sanctions. Facing this situation, the EU was preparing to implement stringent energy saving measures. To expand support against the energy crisis, the total state subsidy provided by the Greek government increased to 1.136 billion the month of August. Also plans of an additional

supplementary budget was being developed. Worth mentioning is that the market was witnessing a notable rise in fee announcements by electricity provides. Last but not least Greece exited the enhanced surveillance regime. In September 2022 EU held multiple meetings to decide its further course. Meanwhile, Russia warned that imposing any export ceiling would lead to its withdrawal from contracts. Greece adapting to the times, increased account allowance with a state budget of 1.9 billion euros. Additionally, an energy-saving clause was announced, new initiatives to be implemented by the end of 2022 and throughout 2023, extra bonuses for households reducing consumption by 15%, an expansion of ceiling of profit on more products and new charging profile that will be conducted though scales. In October 2022 in Europe ongoing negotiations are trying to determine the path that the Union should follow. In the same month, OPEC+ reduced oil production. In the Greek reality there is a reinstatement of the heating allowance, an emergency funding of 64 million to municipalities and school committees, the selection of exception categories from the solidarity contribution tax and changes in the legal framework regarding retirement age and conditions. Noteworthy is that Greece enters the market for the third time with the reissue of a 5-year bond with a floating interest rate. In November 2022 EU under the pressure of circumstances made changes to its fiscal regulations. Meanwhile the Greek government introduced a new measure in order to face the energy crisis, the consumer basket, consisting of 50 products with published prices and weekly updates. Additionally, The Greek state prepared a budget of the year 2023 and reissues a 10-year bond. At this period society express concern about foreclosures and the Bank of Greece is warning about the critical situation of the non-performing loans. In December 2022 new escalations

were being observed in the energy market. The EU decided to impose a cap on oil and natural gas prices. In response, Russia prohibits the sale of oil to any country adopting the cap. In Greek reality, the creation of Santa Claus's basket was decided, consisting of children toys and following the consumer basket philosophy. Furthermore, the market pass was announced, a subsidy aimed at assisting household in 2023. Last but not least an aid of 600 euros was granted to Greek police and coast guard personnel. At this point we can make the observation that Greek households are experiencing a period of uncertainty where they cannot get though alone. Continuous subsidies and successive measures, easy to be changed based on the events, now characterize daily life. The same applies to the unstable global climate full of sanctions and retaliations.

An optimistic forecast

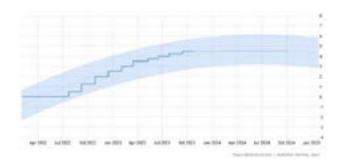
In the upcoming financial landscape, various forecasts and market indicators suggest a dynamic scenario. Most econometric models anticipate the Euro Area Interest Rate to follow a trend of 4.00 percent in 2024, gradually decreasing to 2.75 percent in 2025 over the long term. Industry projections align with this, foreseeing a rate reduction in 2024 alongside a decline in government bond rates.

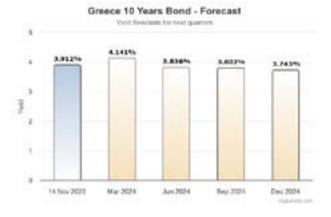
The market's consensus, particularly from Bloomberg, suggests that yields to maturity will likely decrease in 2024. This anticipated decrease is expected to result in higher bond prices, with the US 10-year yield estimated to rise from 2.28% to 3.77% compared to the German 10-year yield by the end of 2024.

In this context, Greece has outlined plans to raise approximately 7 billion euros from debt markets in 2024. This will involve the issuance of both new short-term and long-term bonds, and private investors will

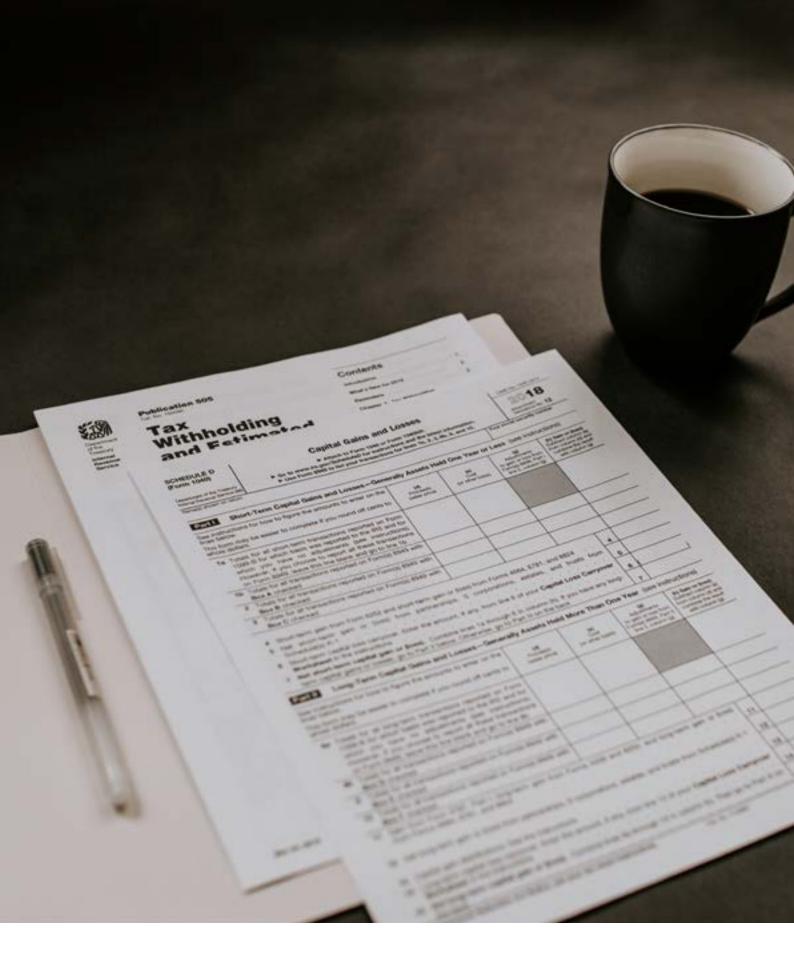
have the opportunity to participate in two auctions. Additionally, Greece intends to maintain liquidity in specific sections of the yield curve by periodically launching bonds of up to €500m each.

Against this backdrop, the Greece 10-year Government Bond Yield is forecasted to reach around 4.141% by the end of March 2024, highlighting the expected trajectory of the country's bond market amidst these broader financial movements.



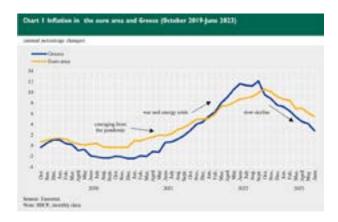


Generally, predictions report that the public debt will persistently decrease in the upcoming years, reaching 145.3% of GDP in 2028 from its current level of 168% this year. The proportion of Greek government revenue to GDP is projected to decline incrementally, 46.4% in 2024 and 2025, 45.9% in 2026, 44.4% in 2027, and 43.5% in 2028. Similarly, general government spending is anticipated to decline from 48.9% of GDP in 2023 to 44.7% in 2028.



Inflation

1- Overview



The inflationary challenges faced by Greece persisted in the aftermath of the pandemic crisis. The confluence of navigating the post-pandemic reality, coupled with stringent obligations imposed by the European Union during the preceding economic crisis spanning 2009 to 2018, created a politically charged atmosphere in the country. The situation further intensified with the eruption of the Russia-Ukraine conflict in Europe, precipitating a global energy crisis with profound repercussions for Greece and the broader European context.

Examining the graphical representation in Chart 1, a discernible upward trajectory in Greek inflation becomes apparent, commencing around May 2021. This upward trend mirrored that of the Euro area but eventually surpassed it. As the conflict in Ukraine escalated and geopolitical instability prevailed, inflation not only strengthened but also assumed a persistent character. Notably, Chart 1 illustrates a noteworthy surge in inflation from March to September 2022. Supply-side disruptions, particularly manifest in distortions within global energy and food markets resulting from the war and subsequent sanctions, exacerbated the inflationary pressures.

However, amidst these challenges, the Greek economy exhibited resilience and registered a robust growth rate of 5.9% in 2022. This growth was attributed to buoyant private consumption, significant investment

activities, and a revival in tourism during the summer season, contributing substantially to the overall economic performance.

Following a lucrative summer period, there was a discernible reversal in the inflationary trend, gradually returning to levels comparable to those in Europe. Nevertheless, a sustainable normalization in inflation levels was not achieved until June 2023. Despite the remarkable economic growth, the inflationary pressure persisted, culminating in an overall inflation rate of 9.6% for the year 2022.

In the economic landscape of Greece in 2022, the resurgence from the Covid-19-in-duced crisis was notable, particularly evident in the dynamics between Gross Domestic Product (GDP) and inflation. Initially severely impacted due to heavy dependence on tourism and hospitality, Greece experienced a commendable recovery, with GDP reaching pre-pandemic levels and registering an impressive growth rate of 5.2%, according to the International Monetary Fund (IMF).

The first half of the year contributed significantly to this economic rebound, fueled by resurging exports and a historic peak in the tourism sector. These factors played a pivotal role in swiftly restoring GDP to pre-pandemic conditions. However, challenges emerged in the latter part of 2022, as the rise in energy costs and a challenging external environment posed obstacles to sustained economic expansion. This, in turn, led to a more restrained economic outlook for the second half of the year, with the IMF forecasting a GDP growth rate of 1.8% for 2023.

Against this backdrop, the issue of inflation became prominent. In 2022, inflation in Greece reached a record-high level of 9.2%, primarily driven by escalating energy prices and their cascading effects on various components. The surge in inflation posed significant challenges to the economic land-scape, necessitating careful consideration in policy formulation.

The juxtaposition of robust GDP growth and soaring inflation highlights the intricate economic dynamics at play. While GDP demonstrated resilience and rapid recovery, inflation surged to unprecedented levels, presenting policymakers with a delicate balancing act. The forecasted moderation of inflation to 3.2% in 2023, as energy prices stabilize and monetary tightening takes effect, underscores the ongoing challenges of managing inflation while sustaining economic recovery.

Looking ahead, the interplay between GDP and inflation in Greece remains a critical focus. Policymakers must navigate the nuanced economic scenario, considering the need for sustainable growth alongside measures to address inflationary pressures. The anticipated improvement in the unemployment rate suggests positive strides in the labor market, adding another layer of complexity to the economic landscape. Adaptive and targeted policy measures will be essential to foster stability, resilience, and a balanced trajectory for both GDP and inflation in Greece.

2- Impact of inflation

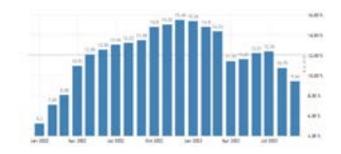
The effects of inflation are extensive and can have a significant influence on individuals, businesses, and the broader economic context. While a reasonable and managed rate of inflation is frequently seen as an indicator of a robust economy, excessive or unstable inflation can undermine a currency's buying power, resulting in lower living standards and financial insecurity for consumers. Furthermore, inflation can have an impact on interest rates, the distribution of income, the value of assets, and the competitiveness of exports, all of which contribute to shaping a nation's economic stability and the welfare of its population. In light of the increase in inflation in Greece, the effects on the sectors of savings, food prices, imports, and exports

will be analyzed, with a focus on the period 2022-2023.

Food prices

Food prices can act as both a cause and a consequence of inflation, and the dynamics may vary depending on specific economic conditions. As a consequence of inflation it impacts the cost of living. Inflation, when pervasive, erodes the purchasing power of a currency. As a result, the prices of goods and services, including food, may rise to reflect the decreased value of money. In this sense, food prices can be a consequence of general inflationary pressures.

Percentage change in food prices due to inflation.

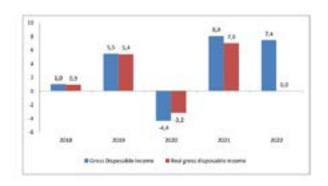


The expense of food in Greece rose by 9.44 percent in September 2023 compared to the corresponding month of the preceding year. The average food inflation in Greece stood at 2.63 percent between 2000 and 2023. During this period, it reached its peak at 15.48 percent in December 2022, while its lowest point was recorded at -3.00 percent in June 2014. It's noteworthy that the mean inflation rate is 12 percent, and the recent inflation trends in Greece from April to September have consistently hovered around or below this 12 percent mark. This suggests a relatively stable inflationary environment, which can have implications for economic planning and consumer expectations. Monitoring these trends will be crucial to assess any potential impact on various sectors and the overall economy.

Households' disposable income

Inflation can impact household disposable income in several ways, influencing the purchasing power and financial well-being of individuals and families. Inflation leads to a general increase in the prices of goods and services over time. When prices rise, the purchasing power of a given amount of money diminishes. As a result, households may find that their income can buy fewer goods and services than it could before, reducing their standard of living.

Gross disposable income vs real gross disposable income (current prices, % y-o-y)



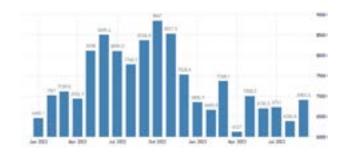
Inevitably, the recent surge in prices seems to have exerted a substantial impact on the disposable income of households. The available statistical information from ELSTAT on quarterly non-financial sector accounts for households and non-profit institutions catering to households (depicted in Figure 3.8) reveals a noteworthy upswing in the gross disposable income of households at current prices during 2021 and 2022. This increase was driven by policy measures addressing the pandemic and the energy crisis, coupled with a resilient labor market. However, the real (deflated) gross disposable income, particularly in 2022, appears to have been entirely diminished by the surging inflation, remaining stagnant while the nominal gross disposable income grew by 7.4%. This suggests a private consumption deflator of 7.5%.

Despite the apparent growth in nominal terms, the impact of soaring inflation seems to have entirely eroded the real purchasing power of households, keeping the real income stagnant.

Imports

Inflation's impact on imports is multifaceted. Changes in consumer demand play a crucial role, as inflation can reshape purchasing power, prompting consumers to cut back on spending, particularly on imported goods. This decline in demand can contribute to a reduction in the importation of certain products. Additionally, inflation may elevate production costs, making it more cost-effective for a nation to import goods rather than produce them domestically. This shift in production dynamics can lead to an uptick in imports. Furthermore, inflation's influence extends to trade balances, affecting the relative costs of imports and exports. Higher inflation may alter the competitiveness of a country's exports, influencing trade balances and subsequently impacting the volume and composition of imports.

Quantities of exports influenced by the impact of inflation



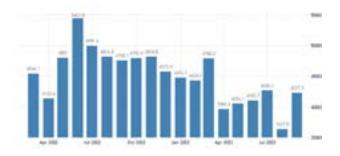
The latest data on imports in Greece reveals a notable increase, reaching 6903.60 EUR million in September compared to 6383.60 EUR million in August 2023. The long-term average import value from 2001 to 2023 stood at 4347.61 EUR million, showcasing a consistent trajecto-

ry. It's interesting to note the peak import value recorded in October 2022 at 8847.00 EUR million, underscoring a period of substantial economic activity, while the lowest value observed in August 2001 at 1919.00 EUR million reflects historical fluctuations. This data provides insights into the dynamic nature of Greece's trade activities and their responsiveness to economic conditions over the years.

Exports

Inflation can exert a significant impact on exports through various channels. Elevated inflation rates may erode a country's competitiveness in the global market by increasing production costs, including labor and raw materials. This rise in costs can render exported goods relatively more expensive, potentially diminishing demand from foreign consumers. Exchange rate fluctuations influenced by inflation can also play a role, as a depreciating currency may make exports more attractive but can simultaneously lead to increased production costs. Moreover, inflation's influence on trade balances and overall economic stability can further shape a nation's export performance, influencing the volume and composition of exported goods.

Quantities of exports influenced by the impact of inflation



The recent surge in Greece's export performance is noteworthy, with a notable increase to 4227.20 EUR million in Septem-

ber from 3637.50 EUR million in August 2023. This robust export growth contributes to the overall economic dynamics, showcasing resilience and adaptability. The long-term average export value from 2001 to 2023 is 2133.24 EUR million, underlining the substantial expansion witnessed in recent months. It's particularly remarkable that June 2022 marked an all-time high export value of 5437.80 EUR million, indicating a period of robust international trade. Conversely, the record low in August 2002 at 691.90 EUR million serves as a reminder of historical fluctuations. This data reflects the dynamism and responsiveness of Greece's export sector to evolving economic conditions.

3- Causes of Inflation

Inflation, an extensive economic phenomenon, is not confined to a single sector of the economy but spread through various fields, impacting the daily lives of individuals and the dynamics of markets. Understanding the causes of inflation in these diverse sectors is pivotal for economists, policymakers, and individuals alike. The year 2022-2023 in Greece was marked by economic developments that had a significant impact on inflation across various sectors. By examining these factors, we aim to gain insight into the complex web of economic forces that drive rising prices in sectors such as energy and food. Inflation, a constant concern in economic circles, was particularly noteworthy during this period.

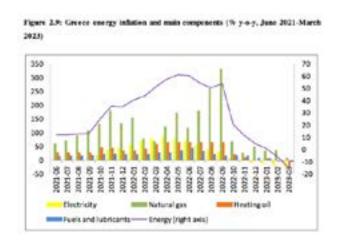
Energy crisis:

Electricity is a remarkable component that contributes to pushing inflation to its highest level since 2022, because the energy cost has ripple effect across the entire production process, it has an impact on the prices of various products we use,

particularly those with significant industrialization. In September 2022, the monthly (yearly) inflation rate 53,8%, surpassing the Euro Areas rate of 40,7%. Electricity prices surged by 37.3% in Greece, while natural gas nearly doubled, increasing by 97.8% in the first half of 2022. The cause of the growing increase in the price of electricity tariffs is the war in the invasion of Ukraine by Russia on February 24, 2022, led to significant instability in euro area energy markets, as highlighted by the European Central Bank in April 2022. Greece's nearness to the conflict, coupled with its heavy dependence on fossil fuel imports from Russia and existing pandemic-related bottlenecks, has raised and worsened energy prices. The imposition of stringent measures on the Russian energy sector, especially concerning on coal and oil (such as bans on imports and cutting-edge technology for Russian oil and gas development). The increased risk of disruptions to natural gas supplies from Russia significantly raised the prices of all fossil fuel energy sources (oil, coal, natural gas) to unprecedented levels.

As we can see in the chart, energy prices in Greece were on the rise starting from October 2021, with significant annual increases. Natural gas prices played a major role in driving up energy costs, surging by almost 335.0% year-on-year in September 2022, that is a substantial increase from the 60.6% recorded in June 2021. At the same time, heating oil prices witnessed a notable rise, increasing by 65.1% year-on-year in September 2022, up from 28.9% in June of the previous year. This indicates a consistent growth trend since April 2022, partly due to heating oil subsidies. Additionally, electricity prices picked up speed, reaching a 30.5% from one year to the next increase in September 2022, compared to the 0.7% seen in last June. From October 2022 onwards, all elements related to energy began to follow a declining path, despite some

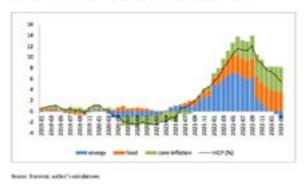
fluctuations, especially for natural gas and heating oil. Electricity and heating oil saw faster declines. Finally, we can observe that in the first quarter of 2023, energy prices continue to decrease significantly, resulting in low energy related inflation.



Food Prices:

In addition to the energy crisis, another notable factor contributing to inflation is the surge in food prices, significantly impacting the daily lives of ordinary individuals. Beginning from March 2022, the conflict in Ukraine triggered a significant energy crisis. This crisis not only increased the proportion of the energy sector but also resulted in higher prices for farming products and the expenses associated with goods and services, as indicated core inflation. Rising energy prices and the decreasing purchasing power, can make it more expensive for businesses to produce things, and this cost often gets passed on to consumers. Furthermore, higher energy prices can also increase the costs of transporting and making various products, influencing their prices in the market. In September 2023, food prices in Greece raised by 9.44% compared to the previous year. On average, this prices have increased by 2.63% from 2000 to 2023. These supply chain changes show how global events that may not seem connected can affect everyday prices, putting pressure on households and causing inflation in the economy.

Figure 2.6: Greece inflation decomposition (% y-e-y and pp. contributions)



The chart offers a more detailed analysis of each component's impact on overall inflation. In the case of Greece, energy items were responsible for more than half of the inflation from November 2021 to May 2022. Starting in March 2022, the war in Ukraine has triggered a complete energy crisis, which had the dual impact of boosting the energy sectors. On the other hand, it led to an increase in the prices of agricultural products, as well as the cost of goods and services measured by the core inflation. Based on the provided data, it's evident that the trends in energy and food inflation during the specified period have shown some interesting dynamics. From January to September 2022, energy inflation remained relatively stable at around 5%, while food inflation steadily increased from 5% to 9% from January to May 2022 and then maintained an 8% level until September.

Starting from October 2022 to January 2023, both energy and food inflation experienced steady decreases. Energy inflation dropped from 3% to 0%, and during the same period, food inflation also declined from 5% to 3%. The most notable observation is that by February and March 2023, energy inflation even turned negative at -1% and -2%, respectively. In contrast, food inflation consistently decreased and eventually reached 3% by March 2023. At this point an important note is that the last two months (February, March) energy inflation took negative prices and food inflation had still positive prices.

4- Anti-Inflation Policies in Greece (period 2022-Q1 2023)

Most used policies to control inflation according to standard economic theory

In a situation of high inflation, monetary policy can have a key role to play. The standard response of a central bank would be to raise official interest rates. This is an example of a contractionary or deflationary policy. Higher interest rates reduce aggregate demand, leading to a slower rate of economic growth and (eventually) lower demand-pull inflation. Up until March 26, 2020, the Federal Reserve also managed the money supply through reserve requirements, or the amount of money banks were legally required to keep on hand to cover withdrawals in order to control bank loans and therefore money supply. Another tool of monetary policy is open market operations (OMOs) such as reverse repurchase agreements which refers to the buying and selling of Treasury securities. OMOs are a tool with which the Federal Reserve increases (by buying Treasuries) or decreases (by selling Treasuries) the money supply and adjusts interest rates.

One policy option for a government might involve gradually lower import tariffs, perhaps as part of a wider trade agreement with other countries. A smaller tariff could have the effect of reducing import prices leading to an outward shift of short run aggregate supply.

Supply-side policies are measures designed to increase the competitiveness and efficiency of the economy, putting downward pressure on long-term costs, and therefore helping to control inflation. These policies might include government tax relief for business investment and also state funding to fast-forward major infrastructure projects in sectors such as transport, energy and

power supply, telecoms, and health care (effective for controlling long-term inflation) One option for governments is to subsidize product prices for households.

Another option is controlling the federal funds rate which is the rate that banks lend each other money overnight.

Less popular policies according to modern economic theory are price controls, wage controls or wage indexation, that are used rarely and only in exceptional circumstances.

The case of Greece

The Greek government focused the battle against inflation mainly in two different targets. The one is to restrain the rapid increase in energy prices and the other to economically assist the citizens, especially the most vulnerable ones, during this crisis. Both targets are addressed to European and national level by the Greek government.

The government since the start of the crisis has introduced a variety of social measures, such as energy allowances and subsidies, as well as tax reliefs. On the86th International Thessaloniki Fair, held in September 2022, the PM announced 21 measures, which will support 2.3 million vulnerable citizens. In particular the PM announced that the heating allowance will be increased to 300 million and the criteria will be broadened in order for 1.3 million households to benefit.

Energy Crisis – Natural Gas

Energy prices played a crucial role in the overall increase of the inflation level in Greece due to the impact of the Russia – Ukraine war. The Greek government has been going to great lengths to mitigate the impact of energy inflation on households and companies and to limit its rise, spending €9.8bn or 5.4% of GDP between September 2021 and October 2022, the fourth highest

percentage of GDP in the EU, mostly on horizontal subsidies, without income criteria, or, until October 2022, even any incentives to reduce energy demand. A preliminary assessment of these measures suggests that inadequate targeting of vulnerable households means that, despite the high levels of expenditure, policy has not substantially alleviated the regressive impact of inflation, especially on households with lingering financial fragility from the previous two economic shocks experienced since 2010.

In the first half of 2022 Greece registered the highest pre-tax electricity price among member-states. Subsidies might have exceeded indirect taxes and so the post-tax price was lower, but it still remained the second highest in the EU. The energy cost in production is significant and so is its pass through to producer and consumer prices. In July 2022, the Greek government also attempted to increase competition in the retail electricity market and to decouple the retail price of electricity from the volatile international gas wholesale price by establishing a mechanism that recoups revenues above the real operating cost of electricity producers.

By October 2022, it had allocated, according to some estimations a total of €9.8bn or 5.4% of GDP to support measures, the fourth highest percentage among EU member states, only two places below Germany and one place above the Netherlands (Sgaravatti et al. 2022), both countries with much more fiscal space. The public fiscal measures taken have been financed by the special Support Fund for the Energy Transition. In addition to the general government budget, the revenues of this Fund came from the expected increased revenues for Greece from auctions of the carbon trading allowances, the surpluses of the Special Account for Renewable Energy Sources (thanks to higher electricity prices) which have been redirected to the Fund and from windfall

revenues from the price cap- ping mechanism in the wholesale market.

Personal Property Control of the	Cost (in sultime mores)	Date of application
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Some of the main effective subsidy campaigns that the Greek Government launched were: The Fuel Pass, a subsidy for the fuel costs of vehicles and motorcycles, owned by persons fiscally residing in Greece (one vehicle/motorcycle per person) with income of up to €30,000 to cover the increased costs of mobility fuel for the months of April to June. Its estimated costs were €60m. An extension of the measure ('Fuel Pass 2') was announced in July, with higher but still flat subsidies to cover increased costs of consumption for the period of July to September 2022 with an estimated cost of €200m. In parallel, the government announced subsidies in the price of diesel twice during 2022. Then there was th Power Pass that was provided for residential electricity consumers with net household income of up to €45000 for the electricity connection of their main residence and the university private accommodation (situated in Greece) of any dependent members of the family (for up to 3 student residences per family). The subsidy covered up to 60% of the increased electricity costs

The measures taken by the Greek government were not limited to subsidies

but also included some regulatory interventions and some taxation. In June, legislation was introduced (which came into force from 1st August 2022) which eliminated the adjustment clause in variable price electricity contracts, forces electricity supply companies to publicise their prices a month in advance and allows consumers to switch to a different provider at short notice without penalties, all in an attempt to improve transparency and increase competition in the retail electricity market, to increase the pressure on electricity providers to contain their price increases.

Food Prices

According to the Hellenic statistical authority the CPI in December 2022 increased by 7.2% compared with the corresponding index in December 2021. (Reference year 2020=100.0)

The 7.2% increase of the Overall CPI in December 2022, compared with the corresponding index in December 2021 is, mainly, due to the changes in the group food and non-alcoholic beverages due to the increase, mainly, in the prices of: bread and cereals, meat, fish, milk-cheese and eggs, oils and fats, fruit, vegetables, sugar-chocolates-sweets-ice creams, food n.e.c., coffee-cocoa-tea, mineral water-refreshments - fruit juices. Specifically, 15.5% of the 7.2% increase in the CPI rate, is explained by the inflation in food prices.

As far as the policies are concerned, from November 2, the Greek government decided to launch a "basket" allowing all households to find one product in 31 categories (bread, milk, pasta, rice, meat, etc.) at a discounted price in supermarkets making more than €90 million in turnover per year.

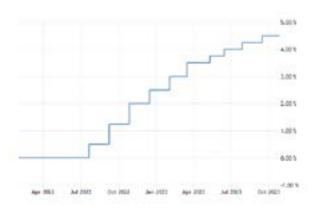
In agreement with the Ministry of Development and Investment, all the chains must provide one product for each category at a low price and advertise it on the inter-

net or in advertising brochures. Those who fail to do so in time risk a fine of €5,000 per day of delay.

This measure, which comes into effect on November 2, should last at least until the end of March, according to the ministry, knowing that the list of products may be updated as and when necessary.

On 17th of December 2022 Greek PM announced a new income support campaign - the Market Pass. It is a government programme for financial aid, designed to tackle the increase in household expenses, caused by the sharp rise in the consumer price index and food prices. It ran for 6 months, from February 2023 to July 2023 and is still active for August, September, and October 2023. Households - according to specific income criteria – are receiving a voucher that covers 10% of the cost of their purchases, up to a maximum of €220 per month, for single-person households. For larger households, the amount increases by €100 for each household member, up to a maximum of €1,000.

European Monetary Policy



On the EU level Finance Ministers agreed, on Friday 9 September 2022, to act together to protect households and businesses from the rabid rise of prices. They also agreed to coordinate their fiscal policies with the monetary policy of the European Central Bank (ECB). Moreover, the governments of the eurozone states committed to allocate almost 300 billion euros, as a eu-

rozone total, to assist citizens and businesses cope with the increase of prices and the energy crisis.

Starting from July 2022 and still going on, European Central Bank used aggressive monetary policy, hiking the official interest rate level 10 times, reaching the level of 4.5% on October 2023. As inflation in Europe starts reaching the ECB'S goal of 2%, interest rates will be stabilized so consecutive hikes will not affect the economy on other aspects.



Liga de Investimentos

Liga de Investimentos of Polytechnic School/UFRJ is the first organization at the Federal University of Rio de Janeiro with the objective of making the connection between the students and the financial market. Our mission is to build strong relationships with the industry and fight to bridge the gap between students, big investments companies and management consulting firms serving as a primary contact point on campus by recruiting programs, case studies, informative events and workshops.



Why is Brazil a risky country to invest in?

Introduction

In the global investment landscape, the choice of a destination to allocate financial resources is a decision that demands thorough and prudent analysis. Brazil, with its vast territorial expanse, natural resources, cultural diversity, and a history of economic ebbs and flows, often emerges as a tempting option for investors seeking lucrative opportunities. However, beneath this alluring facade, lies a set of complex challenges that render Brazil a country renowned for its financial risks, including the persistent specter of inflation.

In this study, we will meticulously explore the underlying reasons that make Brazil a fertile ground for uncertainties and financial risks. We will address issues ranging from economic volatility, characterized by fluctuating inflation rates, to the persistent shadow of corruption, analyzing how these factors impact investment decisions. Furthermore, we will examine the tangible consequences that investors may face when venturing into such a challenging environment.

As we progress in this critical analysis, we will also take a closer look at the measures taken by authorities and civil society to mitigate the risks associated with investing in Brazil. Understanding these initiatives is crucial for any investor looking to balance the risks and rewards of participating in the Brazilian market.

Our journey in this study will lead us to a deeper understanding of the complexities and nuances that characterize the investment environment in Brazil, providing a balanced view of the opportunities and challenges that await those who choose to tread this path.

Inflation

When the topic of inflation is brought up in Brazil, the ghosts of the past haunt us. For many years, our country suffered from extremely high inflation rates and was disappointed by numerous economic plans that, instead of combating them, only exacerbated the issue.

What caused the onset of hyperinflation in Brazil was the same as in European countries that had previously experienced this affliction. However, Brazil did not suffer defeat in any wars nor had to pay outrageously high reparations. Nevertheless, the external debt due to the 1970s, the rise in oil prices in 1979, and the end of foreign investments in 1982 had similar consequences, causing hyperinflation to peak in the early 1990s.

Firstly, addressing the increase in external debt. During the period from 1968 to 1973, the Brazilian economy was growing at an incredibly rapid pace. Optimism and growth were so high that the period became known as the "economic miracle." In this sense, the Brazilian government, using an expansionary monetary and fiscal policy, was engaged in the construction of monumental projects such as the Rio-Niterói bridge, which began construction in 1968. In addition to the bridge, we can mention projects like the Trans-Amazonian highway, the Itaipu hydroelectric power plant, and the Angra Nuclear Power Plant.





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It's also important to note that the external economic scenario during this period was extremely positive and optimistic, allowing Brazil to borrow money at very low interest rates. However, unfortunately, nothing lasts forever.

In 1973, the first oil shock occurred, causing the previously rosy external scenario to turn completely dark. The United States, the largest financier of the "economic miracle," raised international interest rates, causing Brazilian debt to increase significantly, and access to credit became extremely difficult. However, despite this highly unfavorable situation, Brazil continued at its rapid pace and, unlike the rest of the world, continued with its expansionary policies, accumulating more debt. In summary, the years of the highest economic growth in Brazil quadrupled the external debt, increased unemployment, and led to inflation reaching nearly 100% per year.

In the early 1980s, inflation was already a significant concern in Brazil, reaching 110% per year in 1980. However, the situation became even more concerning in 1982 with the end of foreign investments.

Firstly, it's necessary to point out that Brazil's external debt, which was 50% private and 50% public in the early 1970s, reached 90% public in 1983. With high debts and empty coffers, Brazil began to default on its obligations, becoming poorly regarded on the international stage and losing foreign investments in 1982.

Firstly, it's necessary to point out that Brazil's external debt, which was 50% private and 50% public in the early 1970s, reached 90% public in 1983. With high debts and empty coffers, Brazil began to default on its obligations, becoming poorly regarded on the international stage and losing foreign investments in 1982.

With the interruption of external loans, the deficit was increasingly financed with internal debt. As a consequence, a

widespread fiscal crisis occurred, with domestic public debt growing to 50% of GDP and maturities becoming incredibly short.

However, another contributor to Brazil's hyperinflation was the unsuccessful economic plans of the 1980s. These plans significantly increased inflation until it reached its peak in 1989: 1790% per year.

Cruzado Plan

José Sarney became President of Brazil after the unexpected death of President Tancredo Neves. Like every Brazilian leader in the 1970s and 1990s, José Sarney had inflation as one of his biggest enemies. As traditional methods of inflation control were not effective, the Cruzado Plan attempted to forcibly control price increases by prohibiting stores and supermarkets from raising product prices.

To monitor stores and supermarkets, what became famous in Brazil as "Sarney's Inspectors" were created—civilians who monitored and reported if any institution increased product prices without government authorization.

The plan was a complete disaster; price freezes led to empty shelves in supermarkets and fueled an illegal parallel market. When the situation became unsustainable, the plan was abandoned, and what economists like to call the "spring effect" occurred: inflation skyrocketed.

Taxa anual de inflação

%	Ano	%	Ano
110,2	1980	19,3	1970
95,1	1981	19,5	1971
99.7	1982	15,8	1972
211.0	1983	15.5	1973
223,8	1984	34.6	1974
235,1	1985	29,4	1975
65.0	1986	46.2	1976
415.8	1987	38,8	1977
1037,6	1988	40,8	1978
1782.9	1989	77,2	1979

Fonte: IGP/FGV (Índice Geral de Preços — Fundação Getúlio Vargas).

Solution: Real Plan

After inflation peaked in 1990, in 1993 during Itamar Franco's government, the Real Plan was initiated. The economic plan was implemented in three stages: first, the stabilization of public accounts; second, the introduction of a new currency, the Real Value Unit; and finally, the actual introduction of the Brazilian real. Another significant aspect of this period was the large-scale privatization of state-owned companies, especially during Fernando Henrique Cardoso's government.

Despite facing resistance from the population, the plan showed rapid improvements. Inflation, which was previously at 50% per month, dropped to 1% in July 1994.

Corruption

Throughout the years, Brazil has been facing a lack of international confidence and difficulty to attract international investment. This long lasting situation can be explained by multiple factors but mainly by the following four: legal uncertainty, tax complexity, poor transport infrastructure and debt.

The first problem, legal uncertainty, can be summarized by saying that the country's legal system is not stable nor clear, on top of that it is slow. To analyze this subject more deeply it is important to understand the point of view of investors. Independently of the economic and political situation, it is important to understand what are the rules under which a potential business will operate, given those rules it is time to evaluate its viability. The constant changes in the brazilian legislation cause doubt whether the current conditions for a profitable endeavor will remain the same in years to come. Another legal obstacle is the complexity to fully comprehend brazilian law, which sometimes will be cloudy. The bureaucracy in the judiciary system is also a

problem because it can make lawsuits last for years, sometimes even more than a decade. In line with that there is the need for a vast amount of documentation to keep operating legally. These legal circumstances disencourage investments in the country making other markets more attractive by simply having a better judiciary system.

A similar problem is the tax complexity. Brazil has many different taxes and is charged in three different spheres, the municipal, state and federal. That means there are three different entities that charge various intricate taxes and mischarging and confusion is something that happens frequently. According to a report produced by the International Bank, Brazil occupies the 124th position in the tributary ranking in terms of complexity. This condition tends to drive investment away, since it is so complicated to conduct the tributary aspect of a business in the country.

One of the main bottlenecks in Brazil is its transport infrastructure. Considering the continental size of the country, it is crucial that the different regions are well connected and that transportation is cheap and efficient. Unfortunately the reality is that 86% of total transportation in Brazil is made by roadway, which compared to maritime and railway means of transport is the most expensive, slowest and inefficient one. The ideal scenario would be a robust rail network (currently Brazil has a small one for specific stretches) that transports big volumes at a low cost. The government's choice to invest in a roadway network instead of a railway one costs time and money to the companies and also increases maintenance expenditures because of the fast deterioration of roads. Despite the inefficient transport system, the very extensive coast in Brazil is a competitive advantage that is not explored. Ships are mainly used for international transportation but in Brazil's case it can also be used as an internal mean of

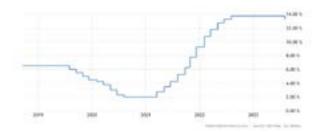
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transportation since the coasting navigation is able to connect various regions. A good example are the minerals explored in the north region that will be processed in the southeast region. This transportation involves a very large volume and a very long distance. This type of transportation is especially important when we consider large volumes, the fact that a single ship can carry the equivalent of 1500 times the amount carried by an interlink semi-trailer truck shows how much efficiency is gained by ships. The coasting navigation is a cheaper and faster way to make this logistic and just like this example there are many situations where coasting navigation would be the best alternative. The possibility of using that resource is positive for Brazil but it has to be more developed. Another issue regarding maritime transportation is the portuary capacity in Brazil that isn't able to attend the demand properly and physically don't support bigger ships that become more common every day. This situation makes it much more difficult for industries to settle in the country and disrupts the entire supply chain for many businesses.

Actions trying to reverse the situation

In the latest years, the Brazilian population has been gaining consciousness around the fact that the political and fiscal scenario has to change so the economy can grow again and Brazil can become a more stable country. The increasing battles against corruption and the more hawk actions of the Central Bank of Brazil are also important factors in the transformation of the economical conditions in the country.

Since the pandemic, the President of the Central Bank of Brazil has defended actions to decrease inflation and the expansion of economic activity, this tendency would be soon replicated by the vast majority of countries around the world, for instance USA, Germany and United Kindom. This acted out as an important way to contain the growing inflation in the country and valorize the BRL in comparison to the dollar.

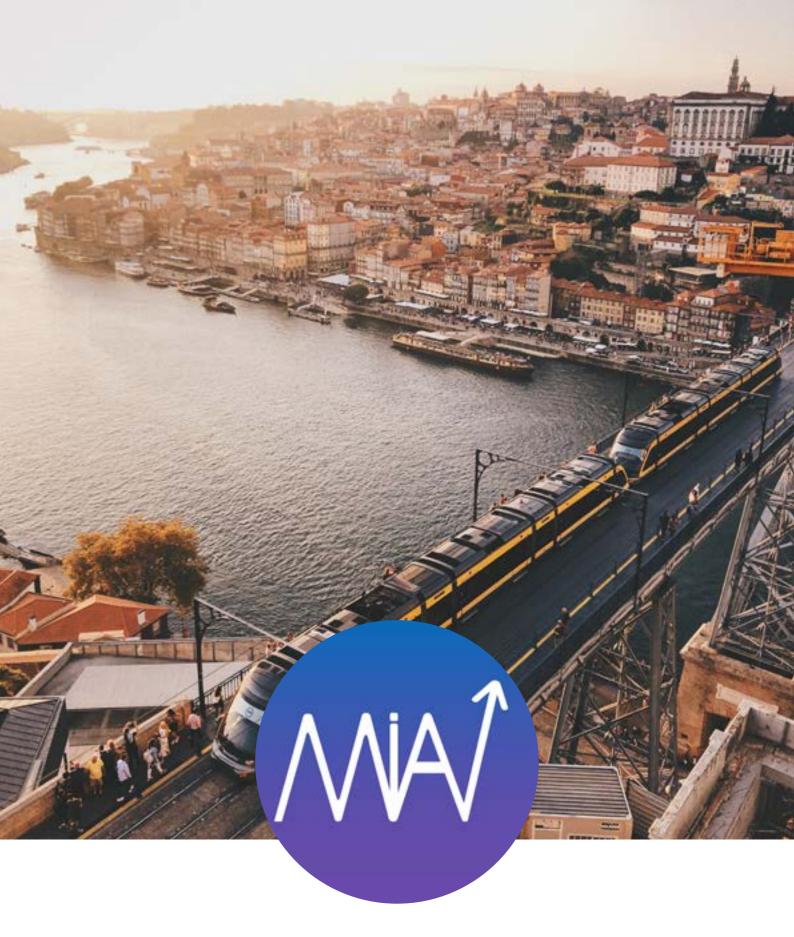


Another relevant tool for stabilizing the economy was the Tax Framework("Arcabouço Fiscal), a provisional measure that stated goals for the government in order to be able to spend more money, but also fixing a limit of how much could be spent. Simplifying, if the government achieves its goals for the first semester, it will be able to despend more money in the second semester. This project was received with a lot of optimism by the stock market, who saw it as an opportunity for Brazil to control and decrease its debt.

The Tax Reform proposed this year was also received well by the public, that is because the reform extinguishes five taxes in order to substitute them by only two. The project can help the economy to grow, as the population will have more money to invest or spend. Specialists say that the GDP can grow by 2% higher thanks to this reform. Even though the bill is exciting, it will take approximately ten years to be fully established and begin to function, so it will take some time before we can enjoy its effects.

All of this actions in the last three years have helped Brazil to climb in the Fitch Rating of long term credit from a BB- to a BB, as the world is seeing the South American country as more stable and reliable for the years to come. There still is a long way to go in order to decrease all of the risks of the country, but we seem to be heading in the right direction.

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Minho Investment Association

The Minho Investment Association (MIA) is a non-profit organization whose main focus is financial education. Our mission is to transform financial content and make it simple and objective, so that anyone feels capable of making their own financial decisions.



World Youth Days

Introduction

Analyzing the history, it is evident that Portugal is indeed a country that has a strong connection to the Catholic region, given all the traces and monuments present in its heritage. That being said, in today's days, despite the country being considered a secular state, it can be observed that there is a great dominance of this religion in society and the economy.

Consequently, due to all this prominence, any economic occurrence related to this theme will contribute to a possible significant impact on the local and national economy. The city of Sanctuary of Fátima is a region heavily dependent on religious tourism (similar to Santiago de Compostela) and is proof of the impact that this influence has annually on the country's financial resources.

For example, in 2017, the centenary of a religious event in the city was celebrated, featuring the presence of the Pope in the celebrations, leading to a sudden increase of 20 million euros to the municipality in just 2 days.

Similarly, in August of this year, Portugal hosted a globally scaled celebration called the World Youth Day (WYD), an event that brings together millions of Catholics from around the world, especially young people, promoting peace and friendship among continents, peoples, and cultures.

Sanctuary of Fátima

As measured, Sanctuary of Fátima is considered the religious capital of Portugal, annually attracting millions of visitors and pilgrims from around the world to participate in religious celebrations and explore the sacred site. Thus, the effect on the Portuguese economy is notable and multifaceted.

Tourism is one of the primary ways in which the Sanctuary positively contributes

to the country's financial situation, given its high exposure to tourists and pilgrims. Local businesses thrive due to the constant flow of people and transactions. Consequently, various local enterprises heavily depend on the revenues generated by this industry segment, including shops, restaurants, bakeries, supermarkets, and a variety of service providers catering to the needs of visitors. The increased demand for services and products stimulates the local economy, fosters entrepreneurship, and creates job opportunities.

The celebrations held at the sanctuary also play a significant role, attracting crowds of pilgrims and visitors from around the world. During these events, nearby cities also experience an uptick in various activities, such as fully booked hotels and restaurants, as well as increased demand for transportation and entertainment services. This not only generates additional revenues but also encourages advance planning and investment in the necessary infrastructure and logistics to accommodate consumers.

Analyzing the performance of the Sanctuary of Fátima in 2022, it generated 18.67 million euros in revenue and had expenses of 17.7 million euros, resulting in a profit of almost one million euros.

In summary, this domain of Portuguese cultural heritage clearly contributes as a spiritual center that attracts financial resources for the Catholic Church. Its role as a globally renowned religious destination strengthens the local and national economy, maintaining the city of Sanctuary of Fátima and the surrounding areas as attractive destinations for visitors from all parts of the globe.

World Youth Day

In a study conducted by PwC in collaboration with the Instituto Superior de Economia e Gestão (ISEG), the impact of the World Youth Day on the Portuguese econo-

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my was analyzed. However, even after the occurrence of this event, the exact values of the world's largest Christian event have not been determined. Nevertheless, in the mentioned study, conducted conservatively to avoid significant discrepancies between predictions and subsequently determined values, some conclusions were reached.

Firstly, it is essential to outline that the project was carried out by the Catholic Church in collaboration with the government, involving an investment of 161 million euros. Despite the social repercussions of this budget, given its perceived high cost, the entities involved argue that the economic return of this event would have justified the investment. Regarding the actual return, its veracity is still to be determined, but the President of the Republic considered the celebrations to have been "a success for Portugal."

According to the study, it is estimated that the World Youth Day would have an impact on Gross Value Added (GVA) between 411 and 564 million euros and in terms of production, between 811 and 1100 million euros. In addition to these direct results, there was an increase in the number of temporary jobs to cope with the abnormal surge in demand.

On the other hand, this episode also had less positive consequences in the daily lives of the local population. During the mentioned period, Portugal was experiencing a problem of real estate inflation throughout the country, particularly in Lisbon. Due to the abnormal increase in accommodation demand, property owners raised rental prices even further, giving preference to pilgrims over the local population.

Finally, from a long-term perspective, it is foreseeable that many people will want to visit Portugal in the future, potentially leading to an enhancement of the country's image and reputation. In this alignment, an increase in national revenue

from this sector, reflected in the national GDP, is also expected. Another prediction is that these circumstances may result in growth in less sought-after tourism in the country, driven by the demand for unique and distinct experiences.

Conclusion

In summary, the profound relationship between Portugal and the Catholic faith has shaped not only the country's history but also its economy. Sanctuary of Fátima, as the religious capital, is a living example of this connection, where religious tourism strengthens the local economy and actively contributes to Portugal's image and reputation globally.

Looking to the future, religious celebrations in Portugal are not just fleeting moments of spirituality but also catalysts for economic growth. The country can anticipate reaping long-term benefits, from accelerating urban regeneration projects to a lasting boost in this sector.

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Inflation

Introduction

Currently, it is observed that young Portuguese individuals are leaving their parents' homes at an increasingly later age due to the lack of economic conditions to purchase or rent a home. Housing costs often constitute the largest expense for many households, so continuous increases in this segment lead to the postponement or cancellation of other expenses and future investments.

This situation has been worsening due to various external factors, such as strong immigration and the increasing acquisition of properties by foreigners, resulting in a progressively scarce supply. Similarly, internal factors, like the robust acquisition of properties for economic purposes, hotels, and local accommodations, and an inefficiency in inflation protection policies, have significantly contributed to this context.

Inefficient Political Measures

In order to uncover the alienated reason behind the rising prices in the housing market, which has been recorded for several months, it is necessary to seek justifications that have underpinned this inflated behavior.

One of the main measured reasons reflects on the measures implemented by the Government in 2022 to stabilize and prevent a sharp increase in this sector, limiting the rise in rents to 2%. However, there is a peculiarity in this conjecture, as it only applied to existing contracts; consequently, rents in new contracts experienced an increase of approximately 30%. This is clarified by the fact that, when this measure came into effect, housing owners entered into contracts with much higher values to circumvent the implemented framework.

In summary, the deliberate action taken by the Government may have intensified

the demand from landlords for new contracts due to the mentioned limitation, demonstrating a lack of regulation on the part of the relevant government authority, which had serious repercussions on the health of the Portuguese economy and the well-being and quality of life of the population.

Local Accommodation & Interest Rates

The increase in tourism has also played a significant role in the housing crisis experienced in Portugal, as the notable growth in this sector has boosted the popularity of short-term accommodation platforms, such as Airbnb. This has led to the diversion of some potentially available long-term rental properties for tourist purposes. This further diminished the available supply in the residential rental market, resulting in unaffordable price increases for those seeking to rent a home, especially in regions with higher demographic importance such as Lisbon and Porto.

Another factor that has eagerly contributed to this scenario is the rise in European bank interest rates, notably the Euribor. As these frameworks expand, central banks also tend to increase benchmark interest rates to control inflation, making mortgage loans more expensive and restricting access to property for many buyers.

Lisbon as the Place with the Highest Rents in Portugal

The rise in house prices and rental values has outpaced that of salaries, making access to housing more challenging, especially in major cities such as Lisbon and Porto. In light of this, the cost of properties has contributed to accentuating inequalities in Portugal.

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Source: Housing Anywhere International Rent Index

In the represented graph, it is evident that in the 2nd quarter of 2023, Lisbon stands out negatively, as it has the highest average rental price compared to other European cities, with a value of €2400. The data collected are from the International "Housing Anywhere" index, which analyzed 64 thousand properties in 23 European cities and concluded that Lisbon is the most expensive city in Europe to rent an apartment.

Using the analyses and justifications mentioned earlier, we can easily explain this occurrence. Firstly, due to the growing popularity of the region as a preferred tourist destination, driving demand for residential properties. The expansion of this segment has also created short-term rental opportunities, influencing the increase in traditional rental prices. In addition, the real estate market has been influenced by foreign investment, with international buyers seeking properties in the city.

The Portuguese capital exhibits a wide variation in the rental values of properties compared to other measured cities. Amsterdam emerges as the second most expensive city, with an average rent of €2275, reflecting high demand for housing in one of the most densely populated cities in Europe. Rome and Paris are also among the cities with higher rents, with values above €1800. On the other hand, Turin stands as the most affordable city, with an average rent of €900, followed by Budapest with €1100.

According to data provided by the National Institute of Statistics, the average net salary in Portugal is €1420, and the minimum net wage is €729.80. Based on this information, we can conclude that, given the current situation, it is almost financially impossible for a family to rent a house in Lisbon with just the average salary. Even if it were possible, it would not meet other primary needs such as food, electricity, and water, nor would it be able to create a small savings fund for emergencies.

Therefore, the weight of housing in the budgets of families makes Portugal one of the most vulnerable countries in Europe to price shocks, as 25% of families do not have liquid assets to accommodate increases.

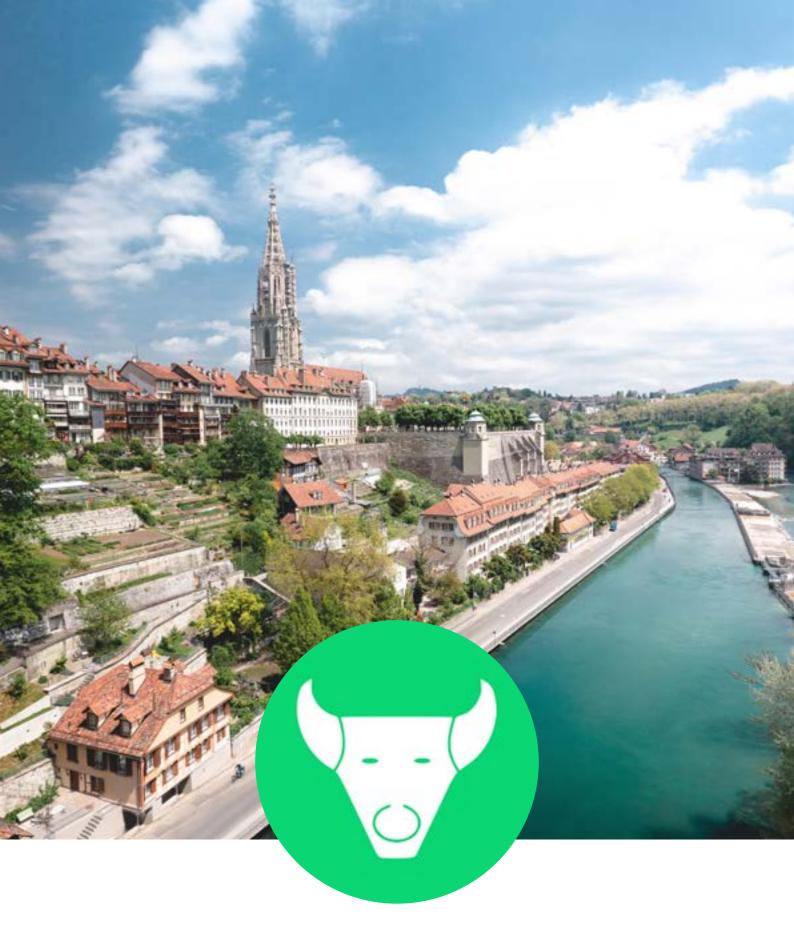
Conclusion

In summary, the real estate inflation dominating Portugal is a phenomenon that poses several significant challenges for society, the economy, and public policies. The rise in property prices has benefited some investors and property owners but has simultaneously created barriers to access housing and hindered the sustainable development of cities.

To address this challenge, it is crucial for the Portuguese government to adopt stable policies that promote the growth of the real estate sector while considering the need for affordable housing for the population. Additionally, transparency and continuous monitoring of this commercial segment are crucial to avoid speculative bubbles.

Therefore, the collaboration between the government, private sector, and civil society is essential to find solutions that balance economic growth with quality of life and equal opportunities for all citizens.

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The Finance Association

Made up of twenty EPFL students, TFA aims to build links between the campus and the financial sector. The association is involved in a number of projects, including organising a trading game, workshops and conferences, producing a podcast and writing articles.



Switzerland economy in brief & the Credit Suisse bankruptcy

1- Switzerland economy in brief

1.1- Solution: Real Plan

With a Human Development Index (HDI) of 0.962, putting it at the top of the rankings, Switzerland is the archetype of what we call a developed country, and as such is included in the MSCI World Index. of which it represents 2.84%. Nestled in the middle of Europe and with a population of just 8.6 million, the country is nevertheless home to companies that are leaders in their field and have large market capitalization. The MSCI Switzerland index is dominated by the three behemoths Nestlé, Roche and Novartis, which together account for more than 50% of the index. Contrary to popular belief, the financial sector is only the third largest in Switzerland, after healthcare and consumer goods. In the twenty largest capitalizations, only two are banks (Crédit Suisse, which will be absorbed by UBS and UBS itself) and three are insurances (Zürich Insurance, Swiss RE and Swiss Life). Moreover, the watch industry is not well represented because several brands are not listed on the market. This is the case of Rolex and Tudor (24.8% of market share) which is a foundation, or brands such as Patek Philippe and Audemars Piguet (6.1% and 3.4% of market share) which are still controlled by the founding families. There are also international groups like LVMH (with its brand Tag Heuer, Hublot, Bulgari, Zenith and 7.7% of the market share) which own several brands.

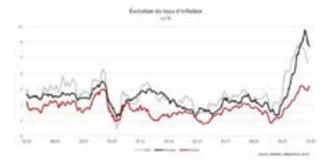


These sectors and industries in general also hire lots of people. On the other hand, the country has a chronic labor shortage. As a result, foreigners represent around a third of the working population and are attracted by the high salaries. In fact, according to UNECE statistics (2020), Switzerland has the highest gross average monthly wages with 7'713\$ against 4'045\$ for Germany and 3'616\$ for France. Of these, 79% come from Europe, as their arrival is facilitated by agreements between countries, and they already speak a national language. The rate of foreign workers has been increasing for 25 years and it is not on the point of stopping as the fertility rate is about 1.39 children per woman.



The country is renowned for its stability and durability, and its currency is known as a store of value. The Swiss franc (CHF) has risen steadily against the neighboring euro,

increasing the purchasing power of Swiss citizens, who have also not had to worry about inflation, which has been particularly low in the country for 30 years. Even in the after Covid years when other countries suffered from inflation, it was relatively benign in Switzerland with a maximum at 3%.

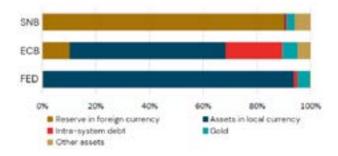


To understand these monetary and economic phenomena that benefit Switzerland, we are going to look at how its central bank, the Swiss National Bank (SNB), operates.

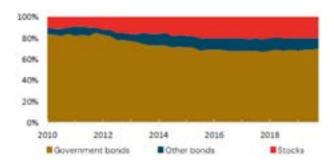
1.2- Specificity of the Swiss National Bank

As the country's central bank, the SNB has a monopoly on issuing currency and is responsible for conducting the country's monetary policy in consultation with the political authorities. According to its mandate, this policy must be conducted "in such a way that the currency retains its value, and the economy can develop optimally", because "a well-organized and stable monetary system is one of the main conditions for a prosperous economy". Even if this objective seems simple and common sense, it can prove difficult to achieve. If the currency appreciates against other currencies, Swiss exports will fall, putting the country's economy at risk. But freezing the exchange rate, as was previously the case with the euro, requires the bank to issue a lot of money to buy foreign currencies on its own market, which could ultimately lead to uncontrollable inflation. The key interest rates imposed must also be negative, which generates capital flight. To understand the

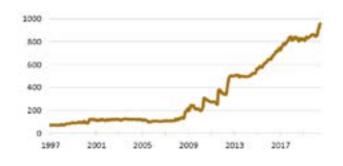
compromise reached by the SNB, we will look at its balance sheet and compare it with that of other central banks:



Compared with the ECB and the FED, the SNB holds most of its balance sheet in foreign currencies, whether in government bonds (70%) or corporate bonds (10%), but also in equities, which account for 20% of foreign currencies:



As such, the SNB, which replicates equity indices, is one of the world's largest investors. As such, it can be considered an investment fund for the benefit of Swiss citizens. The drawback of this technique is that the bank's balance sheet is sensitive to fluctuations in foreign markets, but it also benefits from their performance, particularly that of the equity market, and its valuation has been multiplied by 10 in less than 20 years, enabling it to issue more money without risk.



The only problem is that the SNB is a prisoner of the policies of the other central banks as Switzerland is a small country. It must keep increasing its balance sheet to prevent the CHF from rising. If it stopped and decided to invest in the Swiss economy, the equity markets would rise, but there would also be a risk of inflation spreading to other assets, which goes against its mandate. To do so, the balance sheet of the BNS is 135% of the Swiss GDP which is way more than for ECB or FED.

1.3- Switzerland's economic resilience

Switzerland's economic resilience, prominently exhibited during and after the COVID-19 era, is rooted in its adaptive strategies and unwavering commitment to innovation.

Across its different sectors such as healthcare, consumer goods, and finance, the nation's well-diversified industries form a solid foundation, allowing it to deftly navigate the challenges posed by the pandemic and its aftermath.

The continued emphasis on research and development sustains a culture of innovation, ensuring Switzerland's enduring competitiveness on the global stage. Clear and transparent regulations, coupled with a history of fiscal responsibility, foster an environment conducive to business growth, attracting both domestic and international investments.

Concurrently, Switzerland's investment in education aligns its workforce with evolving industry needs, a key contributor to the nation's sustained economic stability. In the dynamic landscape of the post-COV-ID era, Switzerland's strategic blend of economic diversification, innovation, and robust governance reaffirms its position as a resilient economic powerhouse in the heart of Europe.

2- Credit Suisse: A Tale of Swiss Heritage and Global Financial Influence

This expansive article unveils the compelling narrative of Credit Suisse, a name synonymous with the banking industry, not just in its Swiss homeland but globally. We chart the institution's journey from its humble Swiss beginnings to its rise as a global financial powerhouse and the recent challenges it has faced. This exploration is structured into four distinctive segments, providing a holistic view of the bank's evolution, the obstacles it encountered, its profound impact on the financial sector, and the implications of its recent struggles.

2.1- The Historical Evolution of Credit Suisse

Credit Suisse's saga begins in 1856 with its foundation by Alfred Escher, a visionary in Swiss politics and business. Initially established as "Schweizerische Kreditanstalt" (SKA), the bank was pivotal in financing Switzerland's railroad network and industrial expansion, marking the start of a journey that would see it become a cornerstone of the Swiss economy. The late 19th and early 20th centuries witnessed Credit Suisse's foray beyond national borders, with its first international office in New York in 1870, followed by a strategic branch opening in Basel in 1905 after acquiring Oberrheinische Bank. These expansions were not merely geographic but represented the bank's evolving business models and service diversification.

Credit Suisse's transformation throughout the 20th century into a global financial giant was marked by significant mergers and acquisitions. These included CS First Boston in 1990, Bank Leu, and Volksbank in the early 90s, later additions like Brazilian wealth manager Hedging-Griffo in 2007, and

parts of Morgan Stanley's wealth management business in 2013. During this phase, Credit Suisse transitioned from a primarily domestic institution to an international financial juggernaut, demonstrating proficiency in merging varied business cultures, financial specializations, and operating methods. As the century turned, the bank had cemented its status as a top-tier global financial institution, offering a broad spectrum of services in asset management, investment banking, and private banking. This shift towards becoming a universally integrated bank highlights Credit Suisse's strategic insight and its capacity for adaptability within the ever-shifting landscape of the finance industry.

As we proceed, this article will further explore the intricate web of financial scandals, managerial upheavals, and the eventual bankruptcy that shook Credit Suisse, culminating in an analysis of its impact on both the Swiss and the global financial ecosystems. This narrative aims to provide a detailed and insightful look into the rise, the challenges, and the transformation of one of the world's most prominent banking institutions.

2.2- Financial scandals and problems

Credit Suisse, a major player in the financial sector, has faced a series of challenges that have significantly impacted its reputation. Accusations of aiding tax evasion, involvement in complex financial schemes, and issues related to loans in Mozambique have contributed to a turbulent period for the bank.

The bank also confronted allegations of manipulating foreign exchange rates and was embroiled in a money laundering scandal. Adding to these troubles, Credit Suisse found itself during the Greensill Capital and Archegos Capital Management debacles. The collapse of Greensill raised concerns about the bank's risk management and due dili-

gence processes, while the Archegos incident exposed vulnerabilities in its risk management policies.

Credit Suisse's Tax Evasion Saga: A \$2.6 Billion Guilty Verdict in 2014

In 2014, Credit Suisse got into hot water with a major tax evasion scandal. They admitted to helping U.S. taxpayers file false income tax returns, and the bank pleaded guilty to conspiracy charges. This came after a long investigation that led to indictments of eight Credit Suisse executives since 2011. As part of the deal, Credit Suisse had to pay a whopping \$2.6 billion in fines. This was a record amount for a criminal tax case, with \$1.8 billion going to the U.S. Treasury, \$100 million to the Federal Reserve, and \$715 million to the New York State Department of Financial Services.

The investigation found that, up until 2009, Credit Suisse was running an illegal cross-border banking business. They knowingly helped thousands of U.S. clients hide money in undeclared accounts, keeping their offshore assets and income away from the IRS. Credit Suisse used shady tactics like using fake entities, lying on IRS forms, destroying account records, and making fund withdrawals through various methods.

Apart from the financial penalties, Credit Suisse had to spill the beans on all its cross-border activities, cooperate in providing account information, and set up programs to follow U.S. laws. This guilty plea was a big deal, showing that even big banks must face the music when they break the rules.

The Mozambique loan scandal

Between 2012 and 2016, Credit Suisse got into a mess with Mozambique's loans. They arranged \$1.3 billion in loans with Mozambique's Finance Minister, Manuel Chang, aiming to boost the country's tuna fishing in-

dustry. The plan was to pay back the loans with money from tuna fishing and the growing natural gas business in Mozambique.

However, things took a turn for the worse. Chang wasn't honest with investors, his own government, the International Monetary Fund (IMF), and the banks, including Credit Suisse, that issued the loans. This dishonesty created a big financial problem, raising serious concerns about how things were being handled.

Because of the lack of transparency, kickbacks benefiting Credit Suisse bankers, and the risk of loans being misused by Mozambican officials, Credit Suisse faced heavy fines. Regulators in the UK, US, and Europe slapped the bank with nearly \$500 million in fines.

In October 2021, Credit Suisse admitted to wire fraud, marking a big step in acknowledging their role in the Mozambique loan mess. As part of making amends, the bank also agreed to forgive \$200 million of Mozambique's debt. This admission of wrongdoing and debt forgiveness showed the serious consequences when banks like Credit Suisse get involved in messy financial situations, especially on an international level.

Credit Suisse's 2022 Money Laundering Scandal: Legal Reckoning in Switzerland

In the 2022 money laundering scandal, Credit Suisse faced serious legal troubles. The bank became the first major Swiss bank to go through a criminal trial. Swiss prosecutors sought approximately 42 million Swiss francs (about \$45 million) in compensation from Credit Suisse. The charges were related to allegations that the bank allowed a Bulgarian cocaine trafficking gang, associated with Evelin Banev, to launder millions of Euros in cash between 2004 and 2008.

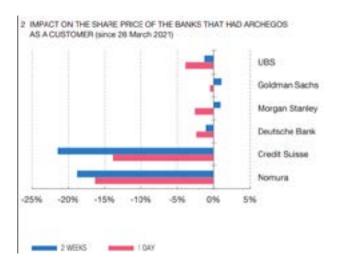
On June 27, 2022, the Federal Criminal Court of Switzerland found Credit Suisse, along with one of its former employees, guilty

for not doing enough to prevent the money laundering crime. Therefore, the court imposed a fine of CHF 2 million and ordered the confiscation of assets worth more than CHF 12 million held by the drug gang in accounts at the bank. Additionally, the court required the bank to surrender over CHF 19 million, the amount that could not be confiscated due to internal deficiencies at Credit Suisse. In response to the verdict, Credit Suisse expressed its intention to appeal.

Archegos Capital and Greensill Capital

The Archegos and Greensill incidents posed significant challenges for Credit Suisse, laying bare critical errors that impacted the bank's stability and reputation. Archegos Capital Management, entrusted with managing Bill Hwang's wealth, engaged in high-risk trading strategies that resulted in substantial losses, around \$5.5 billion. Credit Suisse, serving as a primary broker for Archegos, failed to adequately assess the associated risks, leading to regulatory scrutiny and a loss of confidence in the bank's risk management practices.





In a parallel scenario, Greensill Capital, a company specializing in supply chain finance, faced severe difficulties due to its complex and high-risk business model. Greensill provided short-term loans to companies based on their invoices, packaging these debts into securities sold to investors. The company's heavy reliance on a single client, Sanjeev Gupta, and exposure to illiquid assets led to insolvency when Gupta's business encountered financial challenges. Credit Suisse's involvement through funds investing in Greensill's securities resulted in significant losses, drawing attention to the bank's risk management practices.

Both episodes underscored systemic weaknesses in Credit Suisse's risk assessment, oversight, and compliance mechanisms. The failure to discern the risks associated with Archegos' trading strategies and Greensill's precarious business model resulted in substantial financial repercussions, regulatory scrutiny, and a pronounced decline in market confidence. To address these challenges, Credit Suisse initiated a comprehensive restructuring effort, aiming to recover from the setbacks and restore credibility within the financial industry.

2.3- Acquisition of Credit Suisse by UBS

After the banking chaos in March 2023, the entire global banking sector took

a hit. The S&P Banks index plummeted by a whopping 22% in just two weeks until March 18, 2023. This turmoil raised concerns about how banks would cope with the Federal Reserve and other central banks increasing interest rates.

Now, let's dive into the Credit Suisse situation. The Saudi National Bank (SNB) was the major player, holding nearly 10% of Credit Suisse. On March 15, 2023, when Bloomberg TV asked SNB chairman Ammar Al Khudairy if they might invest more in Credit Suisse, he responded with a firm "no." He cited various reasons, including regulatory rules kicking in if they exceeded 10%. However, his comment triggered a financial shake-up. Panic ensued, Credit Suisse's bonds dipped, and its stock plunged by up to 31% that day. Credit Suisse attempted to buy back some bonds but needed assistance.

Swiss authorities stepped in, going against their own post-2008 rule of not using public funds to save a bank. They provided Credit Suisse with a lifeline of 50 billion Swiss francs (\$55 billion). However, people were withdrawing their money like there's no tomorrow. Credit Suisse's credit default swaps, like insurance against bankruptcy, skyrocketed, signaling investor skepticism despite the central bank's reassurances.

Because of lingering resentment over Switzerland bailing out UBS in 2008, a similar rescue for Credit Suisse wasn't an option. The plan was to find a buyer, and Swiss authorities told UBS, "You're merging with Credit Suisse, no negotiations." UBS wasn't thrilled but had to go along with it. The idea was that Credit Suisse collapsing would tarnish Switzerland's reputation. Even Swiss diplomats considered moving funds away from the sinking ship. U.S. company BlackRock thought about acquiring parts of Credit Suisse but backed out. Switzerland preferred a domestic solution.

Fast forward to April 2023, and Credit Suisse is bleeding money, while UBS is gain-

ing new deposits. The Swiss government, Swiss National Bank, and the Swiss Financial Market Supervisory Authority (FINMA) collaborated in an emergency meeting. They invoked emergency powers to allow UBS to acquire Credit Suisse without consulting shareholders and provided UBS with a guarantee of CHF 9 billion (\$9.6 billion) for potential losses.

Now, the authorities emphasize that it's not a bailout; it's a business move. UBS's chairman refers to it as an "emergency rescue." The plan is to merge the banks, a process expected to take a few years. As of April 2023, UBS anticipates a significant profit from this acquisition. However, there's a twist – the Swiss government agrees to pay UBS up to CHF 9 billion if things go south. Come June, the contract is signed, with the Swiss government committing to cover the first CHF 5 billion of any losses for UBS.

But in a surprising turn in August, UBS decides it doesn't need the CHF 9 billion backstop and concludes the CHF 100 billion 'liquidity backstop' with the Swiss National Bank. The Swiss Finance Minister states that Swiss taxpayers are no longer at risk. Yet, less than a month later, Switzerland is discussing a publicly guaranteed 'liquidity backstop' for its major banks.

2.4- Impact on the Swiss and global economy

The Big Surprise

The global financial crisis of 2007-2008 brought attention to the too-big-to-fail issue, resulting in regulatory reforms to resolve problems in systematically critical financial institutions. One such innovation in this area was the introduction of contingent convertible bonds (CoCos), which were viewed as critical for enabling prompt recapitalization of troubled banks. FINMA's recent decision to unexpectedly write off Credit Su-

isse's Additional Tier 1 (AT1) CoCos as part of an emergency package raises essential questions about the effectiveness of post-crisis reforms and how claims between debt and equity are prioritized.

CoCos bonds principle

CoCos, a junior source of capital compared to the debt but senior from an equity point-of-view, are valuable in recapitalizing a financially troubled bank. The CoCos' claim is achieved by either converting into equity or undergoing a principal write-down upon the occurrence of predetermined conditions. These triggers can either be determined by mechanical factors, such as capital ratios, or discretionary factors, such as supervisory judgment. As per Basel III regulations, CoCos designed for regulatory capital must incorporate a discretionary Point of Non-Viability (PONV) trigger. The FINMA write-off of Credit Suisse's AT1 CoCos, which included a PONV trigger, resulted in a significant market response and sparked discussions regarding the traditional order of claims.

Credit Suisse's CoCos' treatment

The recent crisis at Credit Suisse, compounded by the collapse of Silicon Valley Bank, prompted swift action from Swiss authorities, who opted for a merger with UBS instead of a conventional resolution. In contrast to the Bear Stearns rescue during the 2008 crisis, which bailed out creditors and created a moral hazard, Credit Suisse took a different approach by significantly writing down their AT1 bonds.

Although this decision was legally grounded in the CoCo contracts, it raised questions about the transparency and complexity of CoCo mechanisms, causing confusion and debate in financial markets.

The Credit Suisse crisis highlights the need for clear and straightforward CoCo de-

signs. Even investors required clarification on the distinctions between going-concern — activated to strengthen a bank's capital before it reaches insolvency, helping to keep the bank operational — and gone-concern CoCos — used when a bank is near or in insolvency, as part of the bank's failure management strategy — as well as the implications of multiples triggers. The discretionary nature of PONV triggers has created pricing challenges and legal risks, making it essential to simplify CoCo designs. One proposed solution involves allowing the issuing bank to convert the fixed income claim into equity, providing predictability and reducing regulatory involvement in the conversion decision.

By way of conclusion, the Credit Suisse crisis illustrates the limitations of current approaches to resolving too-big-to-fail issues in systemically important financial institutions. While CoCos played an intended role in this scenario, reassessing CoCo designs and regulatory strategies is necessary. Regulators should prioritize enhancing the role of contingent capital like CoCos, focusing on more transparent, standard, and flexible mechanisms. The proposed alternative CoCo design, offering an option for equity conversion to the issuing bank, is a step in the right direction, ensuring more effective and predictable recapitalization during crises.



Invest Soc.

Our vision is to provide the platform for members to develop into well-rounded, empowered graduates who possess the entrepreneurial instinct and critical success factors needed to compete in the local and global workplace. We aim to provide holistic, business-focused practical education at every major tertiary institution in South Africa



Maintaining Optimism through Dark Times

Introduction

South Africa has a rich history of overcoming adversity. The world watched the country emerge from an oppressive regime under Apartheid as a democracy focused on bettering the lives of all South Africans. South Africa has the most industrialised economy in Africa and ranks as the continent's third largest economy by GDP with a value of US\$ 406 Billion (Trading Economics, 2023). The country ranks 6th on the continent in terms of GDP per capita with a value of US\$ 6 019.

While the country has made many strides in terms of transforming the economy to be more inclusive, there are many challenges within the borders of the continent's southern-most country. The country is plagued by chronic unemployment and inequality which have been defining characteristics of the nation over many years. Ironically, the dark times are both figurative and literal as South Africa is experiencing persistent rolling blackouts also known as loadshedding which hinders the country's ability to keep the lights on. While many things in South Africa are creating a dark cloud over the country and its economy, it is vital that focus is placed optimistically on driving positive strides as the country moves into the future. South Africa has overcome adversity in the past and its resilient people will continue to do so.

Inequality

One of the most quoted economic facts about South Africa is that the nation consistently ranks as the most unequal country on Earth with a Gini coefficient of 0.67. One glimpse into any of our cities would demonstrate this in abundance. From the beachfront mansions of Clifton in Cape Town, a 20-minute drive would show you the destitution of Imizamo Yethu. The richest square mile in Africa is Sandton with

its towering skyscrapers while a mere 5km away lay the slums of Alexandra.

This model of extreme inequality has been shown to be unsustainable for building a country and has detrimental impacts on all citizens both rich and poor. For example, numerous sociology and criminology studies have shown that the reason South Africa has such significantly high crime rates is not solely due to poverty but due to the large degree of inequality witnessed in the country. The juxtaposition of extreme wealth next to extreme poverty creates the circumstances that increase the likelihood for violent crime to occur. This is evidently seen as less wealthy countries do not deal with such high levels of violent crime but South Africa remains a unique case where a high degree of violence is perpetrated without any external impetus such as drug trafficking.

One of the major challenges to addressing inequality simply lays with the fact that millions of people do not earn any form of income at the bottom end of the spectrum. The high levels of structural unemployment is discussed further in the next segment but job-generating growth remains the biggest tool to address inequality in South Africa.

Furthermore, to mitigate the impact and harm of the levels of inequality in this country a strong social safety net is required in a country in South Africa. South Africa already has one of the most robust social security mechanisms for a middle-income country that primarily focuses on direct cash transfers or grants similar to Bolsa Familia in Brazil. Like Bolsa Familia, the social security system in South Africa has shown an immensely positive social impact that has directly improved the worst impacts of poverty especially amongst children.

This mitigating effect on inequality can be seen when a specific type of grant called the social relief of distress grant was discontinued in the middle of the Covid-19 pandemic, it became a major contributing

factor to a period of civil unrest in July 2021 that saw over R50 billion (R\$13 billion) in infrastructure damage along with hundreds of deaths. The distress grant was re-introduced soon after this as a means to soothe a restless and impoverished society.

Additionally, other forms of social infrastructure need to be introduced that reduce the impact of all forms of inequality such as spatial inequality that results in the most desperate unable to seek for work because they cannot afford transport. Investing in public transport networks is another effective way to address inequality meaningfully.

Unemployment

The latest unemployment statistics in South Africa show nothing short of a catastrophe. The official unemployment rate stands at 31.9% with an expanded unemployment rate which includes discouraged work seekers standing at 41.2%. The data becomes even worse when specific demographics are analysed. Black African women have the highest unemployment rate sitting at 39.8% highlighting the continued patriarchal and racialised systems that continue to plague the labour market and South African society. Furthermore, youth unemployment stands at an eye-watering 58%.

A look at South Africa's population pyramid indicates that South Africa has the most ideal conditions for productive economic expansion where the bulk of the population lies within the working age bracket of 15-64 years, however, this potential is being squandered as a large proportion of citizens lay idle without work and destitute. So, how did South Africa's economy end up with such a large degree of unemployed individuals.

There are numerous factors but one of the foremost factors is a skill mismatch between what the economy needs and what skills the public has to offer. Focus over the last two decades has shifted to more tradi-

tional forms of education while more technical and vocational forms of training have been less emphasised and prioritised by government. This is despite skills in these vocational areas being required to build a middle-income country's economy like South Africa's. This is seen with how many vocational and training schools across the country have seen decreased enrolment with many of them closing their doors entirely.

Additionally, one of the best performing sectors in the South Africa's economy continues to be the financial services sector which has resulted in the continued process of financialisaton within the South African economy. Financialisaton refers to the continued increase in the size and influence of financial services and financial products within an economy. Although South Africa's finance sector can be commended, there are challenges and problems that are presented with the shift towards a finance dominated economy. Firstly, the economic contribution and expansion of the finance sector to GDP statistics far outstrips its impact on unemployment within the country as few jobs are created relative to its total economic contribution which results in the continued expansion of the economy on paper while having a stagnation in job growth. Furthermore, financialisaton often leads to less labour-generating fixed investment in the real economy as capital is rather invested into non-productive financial products which do not help the South African economy meaningfully. This can perpetuate inequality and unemployment while failing to improve South Africa's labour market or macroeconomic environment.

Another factor contributing to unemployment has been the impact of liberalisation and de-industrialisation (which is often followed by financialisation) within the South African economy. One of the most concerning statistics about the latest job numbers is that South Africa continues to witness a de-

cline in the number of manufacturing jobs which remains a decent form of work and one of the primary ways decent work in the economy can be created. As a consequence of inadequate industrial policy and continuous rolling blackouts, the South African economy has de-industrialised and continued to shift away from secondary sector exports which continues to raise alarm as to how South Africa plans to achieve labour-inclusive economic growth that can address the high degree of unemployment within the country. This is because manufacturing and export-led growth is seen by most economists as a sure-fire means to generate growth in an economy like South Africa's.

The unemployment crisis is seen as the biggest concern amongst most South Africans and there is no easy solution to resolving this multi-faceted challenge. A strategy that focuses on multiple areas simultaneously is required to address the crisis in any meaningful manner. Promising solutions include embarking on a massive public infrastructure drive and re-invigorating industrial policy in the country revolving around the green energy transition such as a shift to green hydrogen or solar panel manufacturing. These sentiments were expressed within the South African Renewable Energy Master Plan. In tandem with these interventions, significant emphasis needs to be placed on adapting the national education strategy to service the needs of the current South African economy.

Loadshedding

It is difficult to comment on the economic state of South Africa without mentioning the shortcomings of the state-owned electricity utility Eskom. Eskom is responsible for about 90% of electricity generation in South Africa (Eskom, 2021). Furthermore, they conduct the transmission and distribution of this electricity.

Nevertheless, South Africa has been

experiencing load-shedding (rolling blackouts) since 2005 (Akpeji et al., 2020). Akpeji et al. (2020) claim that it costs the South African economy approximately R54 billion (roughly R\$14 Billion using exchange rates from November 2023) for 27 consecutive days of stage one load-shedding. This number holds for fourteen, nine and seven consecutive days of stages two, three and four respectively. The detrimental effects of load shedding on the South African economy are seriously alarming. 17 years since the beginning of load shedding, News 24 (2022) confirmed that the longest consecutive number of hours characterised by rolling blackouts was set at a total of 475 hours in September 2022. Thus, the South African government and Eskom have failed completely in addressing the energy crisis.

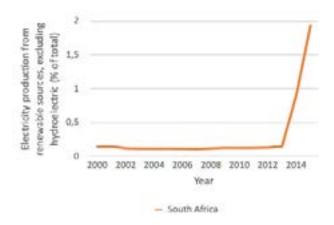
It is clear that loadshedding has immense consequences for the South African economy. Thus, it is important to consider some reasons as to why the country has found itself in a position where the demand for electricity overpowers the supply.

A 1998 white paper published by the government predicted that South Africa would see significant shortages by 2007 if new power plants were not constructed (Rathi, 2022). Despite warnings, only in 2007 and 2008 did construction begin for two major coal-fired power plants namely Kusile and Medupi. The construction of these plants has been faced with delayed construction and design defects that have resulted in consequences in terms of their operationality. During this time, according to Rathi (2022), the older power stations were degrading to the end of their operational lifespan and toward decommission.

Orderson (2023) indicates South Africa's heavy reliance on coal as a means for electricity production, accounting for roughly 80% of the country's electricity generation. As was highlighted earlier, these stations are aging and new ones are not being built in a

timely manner. It is argued that this reliance on coal is a major contributor to the energy crisis the country faces and is moreover in contradiction to international environmental standards.

Thus, another topic of hot discussion in the energy sphere is that of renewable energy. In South Africa, the 2003 publication of the Renewable Energy White Paper (REWP) set targets for renewable energy sources contributions to the generation of electricity (Aliyu, Modu & Tan, 2017). The figure below shows the percentage contribution of renewable sources (excluding hydropower) to total electricity production (World Bank, 2022). There was hardly any change from 2000-2013 in South Africa. This therefore suggests an ineffectiveness of policy with reference to the REWP.



Nevertheless, South Africa has maintained its intention to increase renewable energy capacity as a potential solution to loadshedding. In 2011, the Renewable Energy Independent Power Producer Program (REIPPP) was introduced (Radebe, 2018). This would see a tender bidding process being introduced to allow for private electricity generators, also known as Independent Power Producers (IPPs), to supply renewably generated electricity. It is argued that increased privatisation in electricity generation may result in loadshedding being mitigated as pressure is alleviated from the country's electricity utility.

The Brightside

As is evident, the country of South Africa faces many challenges, but that is not to say it is without its positives.

Youthful Population

The country ranks 142 out of 227 countries for median age, (1 being the highest median age), with a value of 28 (CIA, 2020). This indicates that South Africa has a relatively youthful population. If the challenges around youth unemployment are resolved there is a great deal of potential with the upcoming generation to make significant strides in terms of the economic development of the country.

Wine

According to Wines of South Africa (2022), South Africa ranked eighth in international wine production. Approximately 270 000 people have employment in the wine industry in South Africa, contributing positively to the issues previously discussed. Overall, the wine industry is a shining light in the South African economy.

Gender equality

South Africa ranks 20th out of 146 countries on the WEF Gender Gap 2023 Index, ahead of developing countries including Switzerland, Denmark, Australia, and the USA (WEF, 2023). Thus, South Africa is among the world leaders in pushing gender equality forward.

Mining

The South African mining industry remains a key contributor to the economy. South Africa ranks 5th in terms of mining

contribution to GDP (WITS, n.d.). According to Cowling (2023), the South African mining sector contributes 7.53% to GDP and employs over 475 000 people. Furthermore, according to WITS (n.d.) the country has the largest known reserves in the world for Platinum-group metals, Manganese, Chromite, and Gold. South Africa is the 4th largest exporter of precious stones, metals and pearls under HS code 71 in the world with a export value of US\$ 52.4 Billion (OEC, 2023). This indicates the importance of the mining industry to South Africa, and it is clearly a sector that is contributing positively to the economy.

Concluding Remarks

Ultimately, South Africa faces key challenges that are hindering the trajectory of the economy. In this article we have explored the impact of loadshedding, inequality and unemployment. While these pose significant challenges to the country's ability to grow its economy, it is not all doom and gloom. There are many strengths that lie beneath the turmoil. It is important for South Africa to recognise its challenges so that they can be addressed but not lose focus of what the country has to be optimistic about. South Africa is a country of immense resilience, this has been apparent repeatedly throughout history and the country is able to overcome these challenges with the same resilience it has shown before.



CESA Investment Club

CESA is the best business school in Colombia. It was founded in 1975 by several entrepreneurs who had the vision of forming the future leaders of the country. It is well positioned in Colombia as a very good institution for future CEO's, founders and bankers.



Petro's political reforms and how they have affected the Colombian economy

In August 2022, Colombia witnessed a historic political shift as Gustavo Petro, a former guerrilla fighter and leftist leader, ascended to the presidency. Petro's election marked a departure from Colombia's traditional center-right political landscape, carrying with it the promise of sweeping reforms aimed at addressing deep-seated inequalities, environmental concerns, and societal transformation. At the heart of Petro's agenda lies a comprehensive set of political reforms, encompassing changes to the tax system, healthcare, labor laws, pensions, and land ownership. These reforms, driven by Petro's progressive ideology, seek to reshape Colombia's economic and social landscape, empowering marginalized communities, promoting sustainable development, and fostering a more equitable society.

The implementation of Petro's reforms has already begun to exert a noticeable impact on the Colombian economy. The proposed tax reforms, aimed at increasing revenue from higher-income earners and corporations, have raised concerns among some investors, potentially leading to a dampening of investment sentiment. On the other hand, other aspects of Petro's reforms, such as increased social spending and targeted investments in infrastructure and education, could potentially stimulate economic growth and create new employment opportunities. The government's focus on promoting renewable energy sources and transitioning away from fossil fuels could also attract investments in the green economy, fostering innovationnand creating a more sustainable future.

The long-term economic implications of Petro's reforms remain a subject of debate among economists and analysts. While some argue that the reforms could lead to increased economic inequality and reduced productivity, others believe that they could promote inclusive growth, reduce poverty, and enhance social mobility. The success of Petro's reforms will hinge on their effective implementation

and the ability to mitigate potential shortterm disruptions. Building consensus among stakeholders, addressing concerns of the private sector, and ensuring efficient allocation of resources will be crucial for navigating the economic crossroads ahead.

President Petro's political reforms represent a bold experiment in reshaping Colombia's economic and social trajectory. While the immediate impact on the economy may be mixed, the long-term implications could be transformative, leading to a more equitable, sustainable, and inclusive society. As Colombia embarks on this transformative journey, it is essential to carefully assess the potential economic impact of the reforms, address concerns of the private sector, and ensure effective implementation to maximize their positive impact. The success of Petro's reforms will depend on striking a balance between achieving long-term social goals and maintaining economic stability, paving the way for a more prosperous and equitable future for all Colombians.

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Foreign Direct Investment in Colombia

Foreign direct investment (FDI) is a flow of capital from one country to another with the objective of acquiring or establishing a company or participating in an existing company. FDI can have a significant impact on the economy of a country, as it can generate jobs, increase productivity, and promote innovation.

In the case of Colombia, FDI has grown significantly in recent years. In 2022, FDI reached US\$14.177 billion, an increase of 26.5% from 2021. This growth was due to a number of factors, including the economic reforms of the Colombian government, the improvement of the business environment, and the interest of foreign investors in the energy, mining, and manufacturing sectors.

FDI in Colombia is concentrated in the energy, mining, and manufacturing sectors. In 2022, these sectors represented 71.3% of total FDI. The energy sector is the leading recipient of FDI in Colombia. In 2022, it received US\$6.122 billion, an increase of 42.2% from 2021. This growth was due to investment in exploration and production of oil and gas, as well as the construction of new renewable energy plants. The mining sector is also an important recipient of FDI. In 2022, it received US\$2.985 billion, an increase of 23.4% from 2021. This growth was due to investment in exploration and production of minerals, such as coal, gold, and copper. The manufacturing sector also received significant foreign investment in 2022. In 2022, it received US\$4.060 billion, an increase of 22.3% from 2021. This growth was due to investment in manufacturing projects of basic products, such as food and beverages, and manufactured products, such as textiles and chemicals.

It is expected that FDI in Colombia will continue to grow in the coming years. The Colombian government has implemented a number of measures to attract more FDI, including simplifying investment processes, improving infrastructure, and promoting exports. In addition, the macroeconomic factors of Colom-

bia, such as economic growth, political stability, and financial soundness, are favorable for FDI. According to a study by the Bank of the Republic of Colombia, it is expected that FDI will reach US\$16.000 billion in 2023 and US\$18.000 billion in 2024. However, there are some risks that could slow the growth of FDI in Colombia. These risks include global uncertainty, volatility in commodity prices, and political instability in the region.

FDI can contribute to the economic development of Colombia in a number of ways. It can generate jobs, increase productivity, and promote innovation. FDI can create jobs directly and indirectly. Foreign investment projects often create direct jobs for workers involved in construction, operation, and operation of foreign companies. In addition, FDI can create indirect jobs through suppliers, contractors, and related companies. FDI can increase the productivity of Colombian companies through the transfer of technology and knowledge. Foreign companies regularly have advanced technology and knowledge that can be transferred to Colombian companies. This can help Colombian companies improve their efficiency and competitiveness. Finally, FDI can promote innovation in the Colombian economy through the introduction of new products, processes, and technologies. Foreign companies are typically at the forefront of innovation and can contribute to driving innovation in the Colombian economy.

In conclusion, FDI is an important factor for the economic development of Colombia. Foreign investment has grown significantly in recent years and is expected to continue to grow in the future. FDI can contribute to the economic development of Colombia in a number of ways. It can generate jobs, increase productivity, and promote innovation. The Colombian government has implemented a number of measures to attract more FDI. These measures, together with the favorable macroeconomic factors of Colombia, should contribute to further growth of FDI in the coming years.

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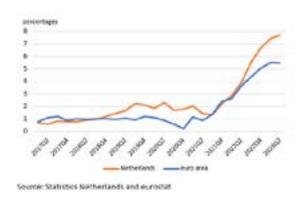
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Dutch inflation skies European averages, what is happening to the strong Dutch economy?

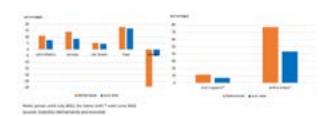
In October 2022 Dutch inflation rose to a record 16.8% and in July 2023 the Dutch core inflation (HICP excluding food and energy) was still tremendously higher than that of other countries in the eurozone. What could be the main reason for this and what do these inflation figures say about the overheating of the Dutch economy? (DeNederlandscheBank, 2022)

In July, both Dutch and Eurozone inflation were at a common level of 5.3%, as per the European Harmonised Index of Consumer Prices (HICP). Despite the failed negotiations of Dutch sports minister Helder on a long-term gas deal with Qatar, energy signals a significant decline in Netherlands' inflation throughout 2023, in contrast to the high figures noted at the close of 2022 (Winterman, P., 2022). The marked fluctuations in energy inflation are, in part, linked to recent modifications in the calculation of the CBS (Centraal Bureau voor de Statistiek). Notably, even excluding the influence of energy prices, Dutch inflation surpasses that of the Eurozone. For example, during the second quarter of 2023, the variance in core inflation (excluding energy and food) exceeded 2 percentage points. This is shown in figure 1 (DeNederlandscheBank, 2023):



Where does the high Dutch inflation come from?

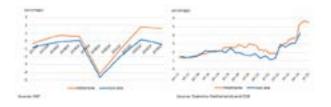
Due to COVID related regulations the high inflation is partially explainable. For example, the inflation rate in the services sector within the Netherlands remains influenced by the halving of tuition fees during the pandemic, which reverted to standard levels in September 2022. Moreover, the recalibration of the weights assigned to goods and services within Statistics Netherlands' inflation basket in January 2023, prompted by alterations in expenditure patterns, contributes to heightened inflation during the summer months. In the absence of these isolated factors, the divergence in core inflation between the Netherlands and the Eurozone would have been approximately 1 percentage point less, equating to less than half of the current disparity (DeNederlandscheBank, 2023). This already declares a part of the high inflation, however, since it is still way higher than the European average this still doesn't answer our research question. Therefore, we need to take a look at other factors. For example, the goods and services sector contributes to core inflation by having experienced an ascent of 11% in the Netherlands since the conclusion of the pandemic, compared to a 7% increment in the Eurozone. Notably, certain items, such as airline tickets and men's apparel, have witnessed a rapid escalation in prices within the Netherlands. Additionally, Dutch core inflation exhibited a relatively elevated trajectory in the years prior to the pandemic. The inflation rates in the Netherlands compared to the Eurozone are shown in the graph below. Figure 2 (DeNederlandscheBank, 2023):



The relatively elevated figure for Dutch inflation signifies a more pronounced overheating within the Dutch economy, persistently operating beyond its potential capacity. This is exemplified, notably, by a positive output gap—an indicator quantifying

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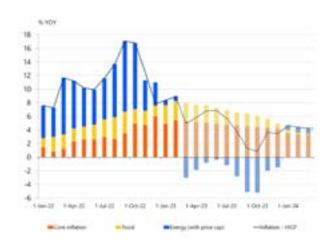
the disparity between actual and potential output in an economy, thereby offering insights into the degree of overheating or underutilization. As illustrated in Figure 3, the Dutch output gap, as reported by the International Monetary Fund (IMF), has sustained positivity over an extended period, surpassing the corresponding gap in the Eurozone. It is important to note a caveat: direct measurement of the output gap is unattainable, rendering these estimates susceptible to inherent uncertainties. Furthermore, wage growth in the Netherlands has consistently outpaced that of the Eurozone in recent years—a logical consequence of a tightly constrained labor market and heightened inflation—contributing concurrently to the escalation of core inflation. Figure 3 (DeNederlandscheBank, 2023):



What will the near future look like?

Although prices are no longer experiencing double-digit growth, the battle against high inflation persists. Anticipated for 2023 is an average inflation rate of 5.0% (refer to Figure 4). This projection factors in the implementation of a price cap and the considerable reduction in wholesale natural gas prices, resulting in a negative contribution from energy to the overall inflation rate this year. Concurrently, elevated inflation remains pervasive. Forecasts indicate that this trend will persist in the foreseeable future. With substantial government support to the economy and an anticipated collective wage growth averaging 5.6% this year, the environment remains conducive to sustained inflation. As of February, Collective Labour Agreement wages were already 4.9% higher than the previous year. Employers, aiming to offset increased labor costs, are likely to pass on the burden to consumers through price adjustments. The ability of consumers to accommodate these heightened prices is augmented by increased incomes. Taken together, amid a constrained supply side of the economy, these factors contribute to widespread inflationary pressures across a diverse spectrum of products and services. (van der Veen, M., Vrieselaar, N., 2023)

Rabobank expects that inflation will maintain its elevated trajectory into 2024, with an assumed rate of 4.4%. Moreover, wage growth is expected to persist at levels surpassing those observed pre-pandemic, where wages experienced an increase between 1.5% and 3.0%. Their assumptions further consider the continuation of the price cap in 2024, albeit with higher ceiling prices. It is likely that energy prices in 2024 will exceed the current ceiling prices, thereby reinstating energy as a positive contributor to inflation next year. Naturally, this forecast is enveloped in substantial uncertainty, given the challenges associated with predicting volatile oil, gas, and electricity prices. Additionally, the extent and nature of governmental support to households and businesses in the upcoming year remain uncertain, further contributing to the overall unpredictability of this outlook. Figure 4 shows that the inflation rates will not dive under 2% anytime soon (CBS, RaboResearch, 2023):



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