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HIGH INFLATION ANALYSIS AND ITS IMPACT ON PRIVATE BANKING

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INTRODUCTION

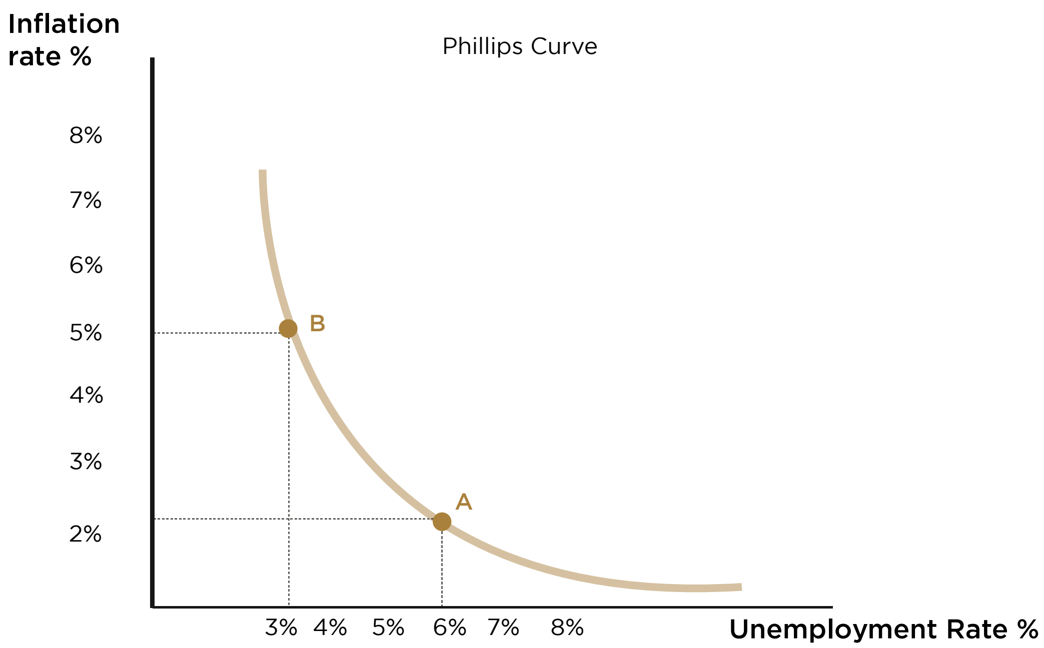
Inflation in most western advanced and developed economies has been rising at a fast pace since the middle of 2021. Central bankers worried a few years ago that inflation would remain at too low of a level between 2014 and 2019, for instance hovering around 1% and 1.5% in the eurozone. Nowadays the current inflation is far above the ECB's target of 2%. In September 2022, the one-year inflation rate was respectively 8.2% and 9.9% in the United States of America and in the eurozone, while Belgium inflation was at 11.3%. The worldwide inflation was not foreseen by the standard economic models used by official and private sector forecasters (Furman, 2022).

So how did we get to this noticeable situation? The following discussion puts different reasons behind the recent rise in inflation and why nobody saw inflation coming. Further we investigated the impact of inflation on private banking and how to hedge our portfolio management against inflation.

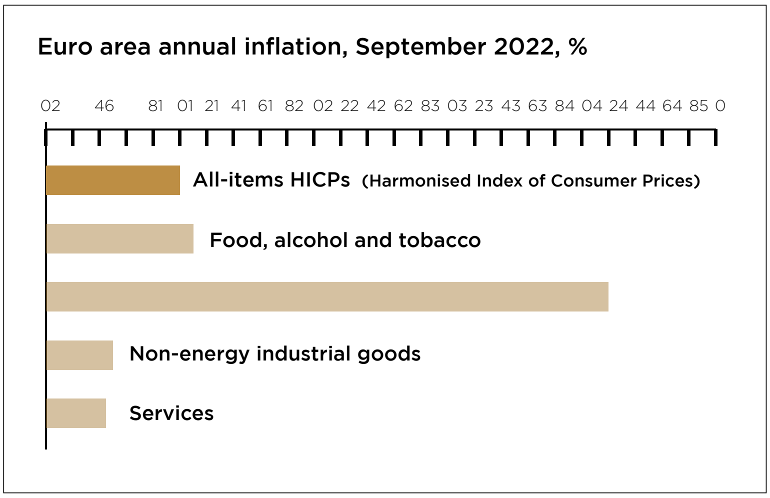
WHAT LED TO HIGH INFLATION?

The Covid-19 pandemic of 2020 was the first and major shock. At first sight, it justified a remarkable degree of monetary stimulus since there were legitimate fears of a depression. The Federal Reserve announced a schedule of asset purchases (quantitative easing) that made its balance sheet expand to a record share of GDP (Gross Domestic Product). The ECB (European Central Bank) gave advancing guidance that deposit rates would stay negative extending well beyond one year. Many experts expected long-lasting scars from the Covid-19 recession, probably over-influenced by the experience lessons from the great financial crisis. Instead, the economy rebounded quickly before central bankers had projected (Reis, 2022).

A second set of shocks came originally in the supply sector. The production of microchips hit capacity constraints and the global value chains broke down as new waves of the Covid-19 pandemic led to a closing of borders. Policy makers interpreted this shock as a temporary markup shock, the third channel in terms of the Phillips curve.



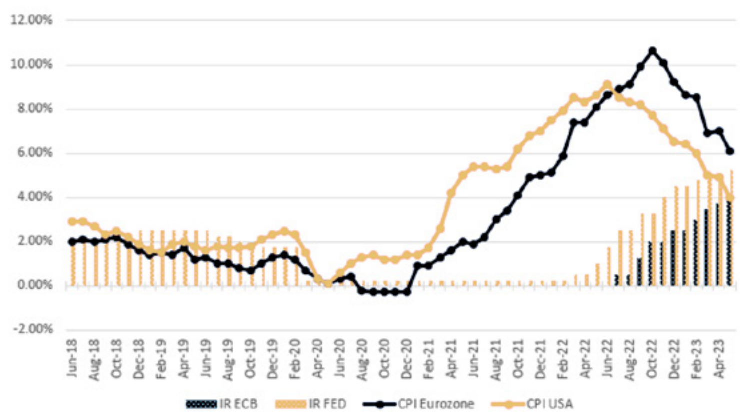
Last but not least, the surge in energy price following Russian invasion. Eurostat, the statistical office of the European Union, concluded that energy has the highest annual rate in September 2022 with 40.8%. Statbel, the statistical service of the Belgian federal government of Economics Department, determined that electricity became 84.7% more expensive compared to last year, gas even 126.5%. Since financial sanctions were attributed to Russia, experts expect that European nations will face higher rates of inflation and a total supply chain disruption (Mbah & Wasum, 2022). Russia is not only the world's biggest exporter of natural gas and oil, but is also the major exporter of these commodities to Europe (Bhattarai et al., 2022). The response of the ECB was again a temporary markup shock, as opposed to a shock to potential output. The ECB tolerated a sharp increase in inflation, predicting it to be short-lived... (Reis, 2022).



WHAT INFLATION LOOKS LIKE TODAY? AND COMPARED TO INTEREST RATES?

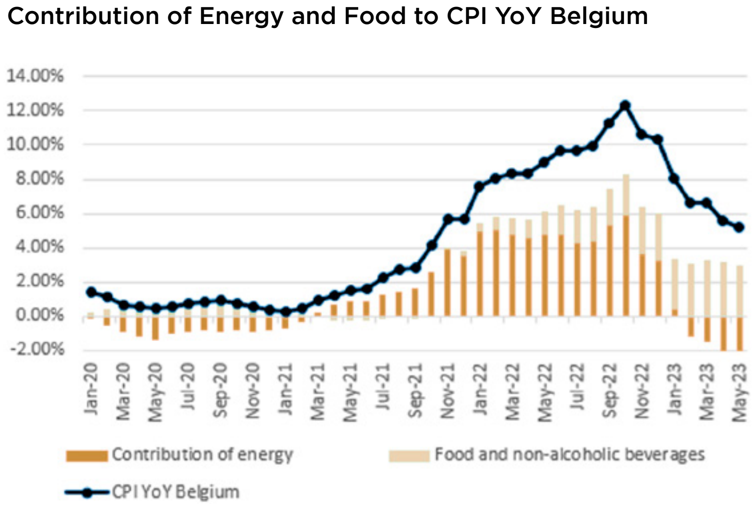
The first graph below shows the inflation level versus the interest rates over the last five years. Inflation is reflected using the Consumer Price Index YoY (CPI YoY) while interest rates are provided by central banks. It focuses on the United States of America and the eurozone. From below 2% levels prior to the Covid-19 pandemic, levels of inflation are respectively 4.0% CPI YoY and 6.1% CPI YoY. Against the rise, central banks are using mechanisms to fight it, mainly raising interest rates. The United States has taken a more aggressive approach compared to Europe to contain inflation, with interest rates at 5.25% (FED), while the eurozone lags at 4.0% (ECB). A pitfall to avoid is to believe that if inflation increases, it is because the central bank allowed it to rise, because there are external factors out of their control.

CPI YoY versus Interest Rate



Data Source: investing.com

The second graph shows the growing importance of the energy and food components in the Belgian inflation rate between 2020 and 2023. In December 2022, a third of the inflation was provided by "energy" while a fourth was provided by "food and non-alcoholic beverages".



Data Source: Statbel

Phillips curves of various types have been a major component of many macroeconomic models for the past years. Nevertheless, studies have shown that the NAIRU[1] Phillips curve-based inflation forecasts have been no more accurate than the forecast from a naive model, that inflation over the next year will be equal to inflation over the previous year. Atkeson & Ohanian (2001) conclude that NAIRU Phillips curves are not useful for forecasting inflation. That's why the Phillips curve[2] with anchored expectations failed to predict the inflation of 2021, because the Phillips curve can essentially never predict high inflation. They find out that for the last 15 years, economists have not produced a version of the Phillips curve that makes more accurate inflation forecasts than those from a naive model that presumes inflation over the next four quarters will be equal to inflation over the last four quarters. Even with an enormous fiscal stimulus that cut the unemployment rate to the likely impossibly low level of 1%, the inflation rate would still be predicted to remain beneath 3% (Furman, 2022).

IMPACT OF THE CURRENT MACROECONOMIC SITUATION ON PRIVATE BANKS?

The banking industry today enjoys several advantages, compared to past years that would appear to contribute to their ability to generate revenues. Technological progress, for instance, allowed multimarket banks for geographic expansion and acquisitions of small single-market banks since this exerted more competitive pressure and brought more deleterious effects on the performance of small, single-market banks. Alfani & Rustandar (2013) studied the impact of exchange rate of Rupiah/Dollar and inflation to the level of national private banking profitability. In their studies, they concluded that external factors, such as the exchange rate of the United States and inflation rates significantly influence the national private banking profitability on the Return On Asset (ROA) form. There is also a strong correlation between inflation and profitability of banks (Hooshyari & Moghanloo, 2015). Note, however, that this relationship was observed over periods when inflation was under control, with interest rates close to zero.

1. The baseline unemployment rate is known as the Non-Accelerating Inflation Rate of Unemployment (NAIRU), and modern specifications based on it are known as NAIRU Phillips curves (Atkeson & Ohanian, 2001).

2. This curve predicts a correlation between reduction in unemployment and increased rates of wage rises within an economy.

HOW TO PROTECT PORTFOLIOS AGAINST INFLATION

The last ten years have been characterised by an environment of low inflation and low or negative interest rates in Western countries and to some extent in emerging Asia. This era is now over and we must currently adapt to an environment where inflation is rising and persisting and volatility is increasing. Therefore, portfolios must consider the new risk of inflation and its side effects on interest rates and economic growth.

However, there is no single and simple solution to protect securities portfolios against inflation. The objectives of every investor must be considered. An analysis of the composition of the portfolio will identify the asset classes that are sensitive to inflation. Several criteria play a role in the (re)composition of a portfolio adapted to the economic context.

- Which asset classes in the portfolio are inflation sensitive/insensitive?
- How volatile are the assets in the portfolio?
- Against which economic and market scenario is the portfolio best/least well protected?
- How will the portfolio resist a rise in interest rates (reaction of central banks to inflation), a rise in the price of raw materials and energy costs, a rise in prices everyday consumer goods and services?
- Against what type of inflation is the portfolio protected/vulnerable?

It is also crucial to take into account a reversal of the situation and prevent the strategy put in place to protect the portfolio against inflation from becoming a handicap when it falls back, like a significant position in Inflation-Linked Bonds (ILBs), a disproportionate cash position or investments in stocks that outperform in periods of inflation such as energy, and other commodities that follow the evolution of prices, but underperform when inflation decreases.

WHAT ARE THE SCENARIOS TO CONSIDER?

The scenarios must consider economic developments (growth, stagnation, or recession), the development of interest rates and the financial markets for the various asset classes. Globalisation, which has allowed prices of goods manufactured in low-wage countries to be maintained, has kept inflation particularly low. But this balance has been challenged since the Covid-19 crisis.

Central bank policy also plays an important role. In contrast to previous years, the Fed and to a lesser extent the ECB have adjusted their targets and now consider inflation targeting a higher priority than supporting the economy and financial markets.

The composition of portfolios will thus be determined according to the target scenarios.

Below an overview of the inflation factors and their impact according to different predefined scenarios. It should be noted that interest rates are the result of high inflation and are a means of combating it.

Scenario	Growth	Labour cost	Supply chain	Commodities	Global inflation	Interest rates
Sunbeam	High impact	Moderate impact	Low / moderate impact	Low / moderate impact	Low impact	Low impact
Overheated	High impact	High impact	High impact (disruptions)	Moderate to high impact	High impact	High impact
Moderate	Moderate impact	Moderate impact	Moderate impact	Moderate impact	Moderate impact	Moderate impact
Soft downturn	Low impact	Low impact	Low impact	Low impact	Moderate / low	Moderate / low impact
Hard landing	Negative impact	Low impact	Low impact	Low impact	Low / negative	Low impact
Staglation	High impact	Moderate/ high impact	Low impact	Moderate to high impact	High impact	High impact

Source: Square Management Belgium

- **Sunbeam:** steady growth with low inflation; accommodative monetary policy;
- **Overheated:** steady growth with high inflation; supply chain under stress, central banks are determined to fight inflation (monetary tightening);
- **Moderate:** moderate economic growth and inflation;
- **Soft downturn** or soft-landing slowdown of inflation without a big rise in the unemployment rate and an economic recession;
- **Hard landing:** significant economic slowdown following a period of high growth;
- **Stagflation:** sluggish growth with persisting high or moderate inflation.

HOW TO COMPOSE AND ADAPT A PORTFOLIO TO COUNTER INFLATION

Portfolios are in most cases composed of equities, bonds and to a lesser extend of cash and commodities such as agriculture, energy, and metals (e.g. gold), to the detriment of bonds which offered a low return profitability.

Asset classes and financial product choices are often selected to perform well in a low inflation environment, as has been the case over the past decade and they performed pretty well during that time. With the Covid-19 crisis, the share of technology stocks has increased in portfolios. Since the start of the war in Ukraine, the energy companies have made huge profits, while over the past ten years the market capitalisation has hardly increased.

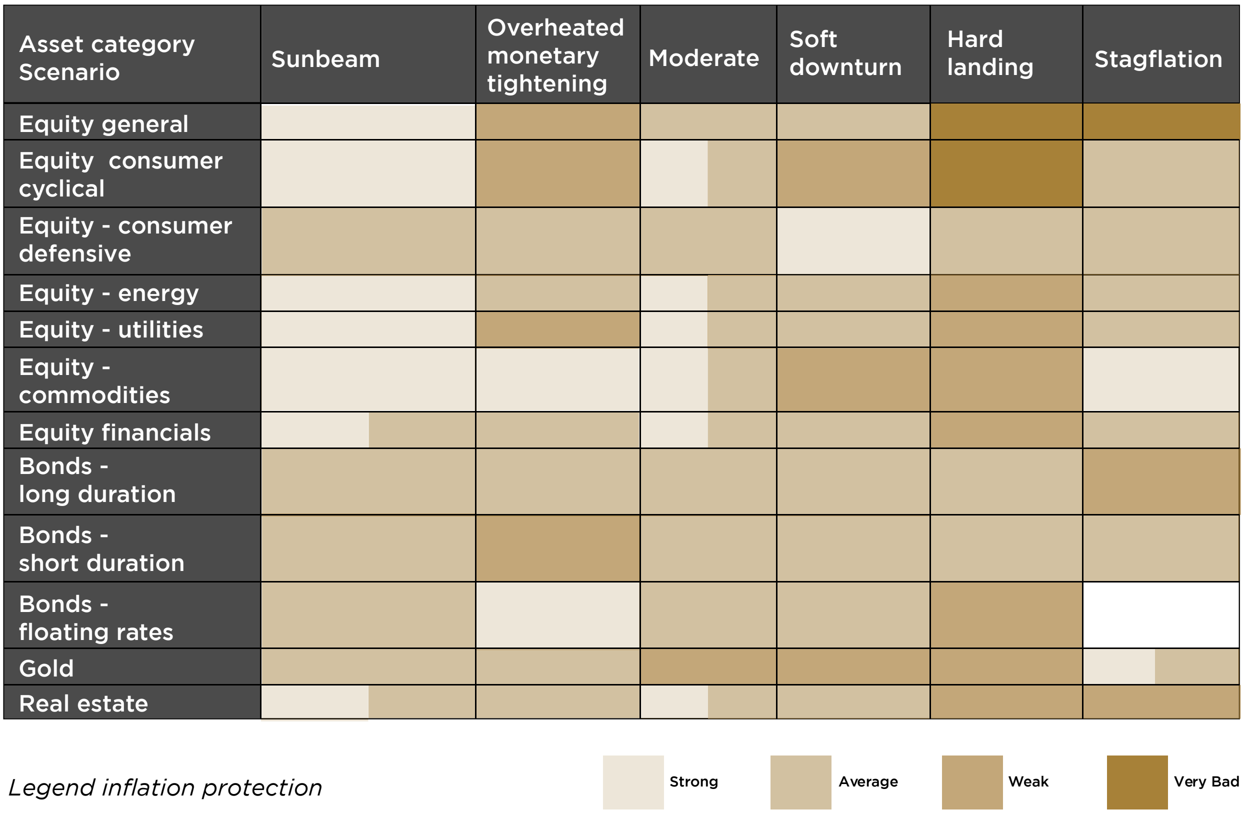
But in an inflationary and rising rate environment, growth stocks performed poorly or even negatively. The rise in interest rates, which were at abnormally low levels (close to zero or negative), also has a significant impact on the valuation of portfolio bond positions.

Portfolios must now face increased risks: market volatility, rising bond rates, rising production costs linked to inflation, supply chain under pressure...

There is no simple and straightforward solution to counter inflation and the risks associated with it. It also depends on the investor's objectives and risk appetite. It is therefore important to analyse the client's objectives and the different scenarios that may arise before any implementation of an investment strategy and portfolio adjustment.

The table below shows the sensitivity of the different asset classes to the resurgence of inflation, for a medium-term horizon (3-5 years).

5. FATF (Financial Action Task Force) report of June 2021 entitled «Money laundering generated by environmental crime».



Source: Square Management Belgium

Looking ahead to what second semester of 2023 will bring, authors' opinions tend towards:

- Above target inflation which, according to economic experts, will persist for the next 6 months. It should then progressively go down, but without reaching the 2% target for the American and European central banks;
- Weak growth in EU economy, even a slight recession;
- A decrease continuation in the value of the dollar against the euro, after the peak reached in 2022.

In this context a suitable portfolio management strategy could consist in:

- Preference to overweight in equities over bonds;
- It is recommended to select companies which have little or no debt given the increase in the cost of credit, are not energy-intensive, pays high dividends, and are less prone to stock market volatility;
- Emerging equity markets have growth potential given more subdued inflation levels and the expected recovery in consumption in China. This potential is a source of opportunity, despite a risk to be considered: emerging economies can suffer from rising interest rates when they are highly indebted.

CONCLUSION

Three times in a row in a short period of time, a set of shocks pushed the inflation up. Three times in a row, central bankers interpreted them using the lenses of the Phillips curve and concluded that monetary policy should be kept loose. Three times in a row, this diagnosis was plausibly right but disputable, and the risk was that inflation would rise too much and too persistently. After all, in all three cases this risk became reality. A detailed policy framework should be robust to shocks, and it should correct misdiagnoses (Reis, 2022). In the medium to long term, structural factors such as the shift to greener energy, the investment backlog as well as demographic changes in Europe and key supply markets are likely to stoke inflationary pressure.

Predicting inflation is tough, understanding what to do about it is even tougher. The current institutional regime that is in place today, based on independent central banks with inflation targets that set interest rates predictably, has served the advanced economies very well over the previous thirty years. It seems unwise to throw it out after one year of high inflation (Reis, 2022). On the other hand, central bankers must think about changing the inflation target itself. Given the decline in equilibrium interest rates, a higher target, like 3%, would give more room for policymakers than the current 2% one (Furman, 2022).

SQUARE RESEARCH CENTER:

Researchers at the Square Research Center work on inflation forecasting models to offer innovative and relevant solutions. These models make it possible to incorporate the uncertainty that may be inherent in forecasting a variable such as inflation, facilitate the generation of economic scenarios for stress-testing, and provide a more forward-looking approach to understanding future risk. Their approach is based on the seminal *Adrian, Boyarchenko and Giannone* (2019) model and is available on request.

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