

# Frontier Markets – Is inflation that bad?

October 2021

The pace of recovery all over the world has varied widely, but with vaccinations trending higher and a restart for global capital expenditures, it's easier to expect it will keep going both in Frontier and small Emerging Markets.

However, as lockdowns become less frequent and economies reopen, inflation begins to emerge. While everyone is waiting for central bankers to start taking action, this brief white paper will review the extensive literature on the impact on stock prices and explain why inflation might be a good sign for Frontier Markets but a painful indicator for more developed countries.

## Breakdown inflation: long and short-run

The relationship between inflation and stock market performance is an important one for investors. This interaction has been analysed extensively within the available literature.

For stock investors, shares can act as a hedge against inflation in the long run. This means that the monetary value of a stock or portfolio can appreciate over an inflationary period so that the 'real' wealth it stores – the goods or services it can be exchanged for – remains constant despite higher prices. In the case where inflation stems from higher input costs (known as cost-push inflation), for example, once businesses have had enough time to adapt to the inflationary pressures and to adjust their own prices, revenues will increase, and regular profit rates may resume. The higher input costs are simply passed on to consumers after a period of price revision.

On the other hand, the short-term dynamic is less favourable since businesses do not have enough time to adjust to the rising prices environment. In this case, the relationship between equity prices and inflation is (quite frequently) an inverse correlation.

Based on this, a long-term investment perspective could be itself a good way of weather fairly unscathed through high inflation periods. As a long-term investor, you could hedge against inflation and protect the value of your stored wealth by allowing your portfolio to pass increased costs on to consumers over time.

## The impact on value and growth stocks

The effect of inflation can also vary significantly from sector to sector. Stocks are commonly broken down into subcategories: value and growth.

Inflation has generally tended to affect growth stocks more than value stocks. A standard method used to value stocks involves calculating the present value of expected future cash flows by applying a 'discount rate' to obtain a valuation (Discounted Cash Flow, DCF, method). The discount rate is dependent on interest rates – the higher the rate, the lower the present value of future cash flows, and therefore the lower the valuation attributed to the investment. The other relevant point is that the further into the future a cash flow occurs, the lower the present value of that cash flow will be. To better understand this, the 'present value' formula is as follows:

$$PV = \sum_{k=1}^{n} \frac{C_k}{(1+i)^k}$$

where, PV is the present value,  $C_k$  is the future cash flow amount, i is the interest rate (frequently called the 'discount rate'), and n is the number of periods.

Many growth stocks have relatively low cash flows now, but are expected to generate significant flows in the future, while many value stocks have strong cash flows now, but are expected to grow at a slower pace.

Since interest rates are usually increased to control high inflation, the corollary is that in times of high inflation, growth stocks will be more negatively impacted than value stocks, as the cash flows their valuations are based on will be discounted more. This suggests a positive correlation between inflation and the return on value stocks and a negative one for growth stocks.

## Inflation in Frontier Markets

Considering what said above, an environment where growth prevails on value, tend to be more affected by period of high inflation, both in the short and in the long-run.

According to MSCI, half of the MSCI World Index is considered to be growth, while for the MSCI Emerging Markets the growth component is even bigger, standing at almost 65% of the index. Frontier Markets, on the other hand, are not divided into value and growth stocks, the latter being a minimal component. This could be one of the reasons why the literature has attributed a small but positive correlation between frontier markets equities and inflation. This is the case for Nigeria, Kenya, Morocco, Zimbabwe, Vietnam, Pakistan, Bangladesh, Jordan, Saudi

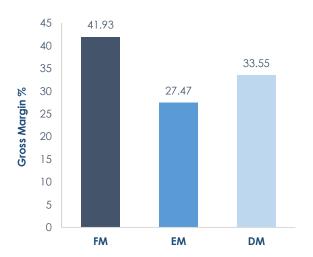
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Arabia and Kuwait, where researchers have found inflation having a positive relationship with stock market returns especially in the long-run<sup>1</sup> - contrary to what the literature says about more developed countries.

The earnings outlook is particularly strong for companies that stand to earn greater profits as the value of sales increases. Both prices and input costs rise in an inflationary environment, but a high proportion of costs are fixed for a company with high gross margins<sup>2</sup>, putting them in a better position to maintain or increase profit levels as their revenues climb. Exhibit 1 says Frontier Markets have an edge compared to Emerging and Developed Markets.

Exhibit 1: Gross Margin % for MSCI Frontier Markets Index, MSCI Emerging Markets Index and MSCI World Index.

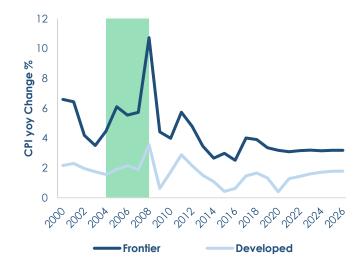


Source: MSCI, Bloomberg Data as of September 30th

#### A look at recent history

Despite being thought of as more unstable countries, after a period of adjustment - physiological for rising economies - inflation in Frontier Markets has stabilised at the same level as Emerging Markets, and, according to the latest IMF data, it is estimated to maintain that level also in the next years (Exhibit 2).

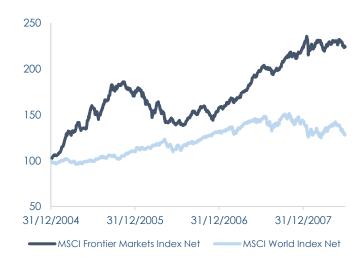
Exhibit 2: Historical CPI year-over-year Change % for Frontier and Developed Markets from 2000.



Source: IMF, Kallisto Partners Data as of September 30th

Even if not in the same exact way, history does have a tendency to repeat itself and, taking a closer look, rising inflation in the last 20 years (the green shaded area in Exhibit 2) has meant good performances for Frontier Markets when compared to Developed countries (Exhibit 3).

Exhibit 3: MSCI Frontier Markets Index Net and MSCI World Index Net performances between 31/12/2004 and 30/06/2008



Source: MSCI, Bloomberg, Kallisto Partners

<sup>&</sup>lt;sup>1</sup> See the related literature in references.

<sup>&</sup>lt;sup>2</sup> Gross margin represents the percent of total sales revenue that the company retains after incurring the direct costs associated with producing the goods and services sold by a company.



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#### Conclusion

Investors and businesses continuously monitor the level of inflation, whose increment is generally considered a concern. Post pandemic rising inflation and its potential effects have been and still are one of the most discussed topics by the financial community.

We believe it is too early to pick a side in the debate about the staying power of recent inflation, especially considering that year-over-year prints still compare today's prices to a very low base in the pandemic's history. Nevertheless, having an overview of how inflation has historically impacted equity markets is useful.

The research tells us inflation negatively affects markets more in the short term than in the long run, having a more powerful negative impact on growth stocks rather than value stocks. This could explain why Frontier Equity Markets, mainly composed of value stocks, usually show a positive correlation with inflation, especially in the long-run.

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