

Investing with fundamentals changes in an inflationary environment. The following from our value expert Brandon will explain how to find solid companies that'll perform in this macro environment.

If I had a dollar for every time someone on Twitter mentioned inflation, I'd be on a beach sipping margs without a care. "*Inflation? Never heard of her!*"

Prices are rising for necessities like gasoline, eggs, meat, and mortgages. These price changes then ripple across the entire economy.

Consumers spend less, leading to contracting/declining business growth and even *less* spending. Inflation becomes a wrench thrown in the gears of the "<u>Economic Machine</u>."

The consequences of inflation affect asset prices, investing strategies, and forward returns.

At MO, we believe it's a lot more important to <u>know where you stand</u> than to try and <u>predict where</u> <u>you're going</u>. And if you can accurately diagnose the current environment then you can more *effectively* weigh potential paths forward.

That's why we created this **Primer on Value Investing & Inflation**. Think of it as your map to navigate a potentially sticky, higher for longer, inflationary environment. And if <u>The Druck is right</u>, get comfy. Because we may be spending the next decade here.

This Primer breaks down inflation analysis from value investors such as Buffett, Klarman, and Aswath Damodaran. We've pulled what we think are the most essential parts from each source and added current examples where appropriate.

We've included the original source material too so you can go deep down the inflationary rabbit hole if you so choose.

Consider this a living document. We'll add sources, insights, and analysis over the coming months, so please don't hesitate to reach out and contribute.

Understanding Inflation's Effect on Asset Values



Before we dive into hot takes from investing legends, it's crucial to set our base understanding of inflation and its effect on asset values. Let's start with Inflation Theory 101 via Itamar Drechsler and Alexi Savov. (You can read their deck here.)

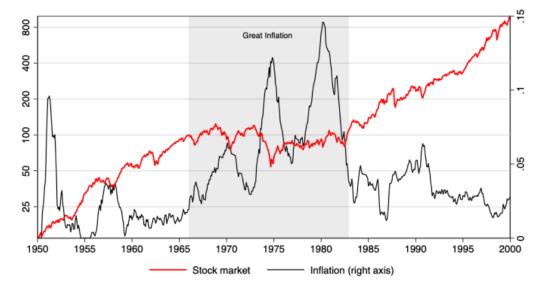
Here's how inflation affects asset prices according to academic theory:

- Nominal Bonds: Prices decline since payouts are fixed
- <u>Stocks</u>: Stock prices are **neutral** since inflation is the rate at which firms increase prices
- <u>Real Estate/Commodities:</u> Value should be **neutral** to inflation

We care about stocks, so let's see how they performed during The Great Inflation of 1965-1982.

Stocks: Zero Returns For A 17-Year Span

Stocks went nowhere during the 17-year inflationary period between 1965-1982:



Stocks and Inflation: the historical evidence

This data differs from the academic theory that claims stocks pass-through inflation via higher prices.

So what happened? Let's dive into how inflation affects the primary driver of stock returns: **future** cash flows.

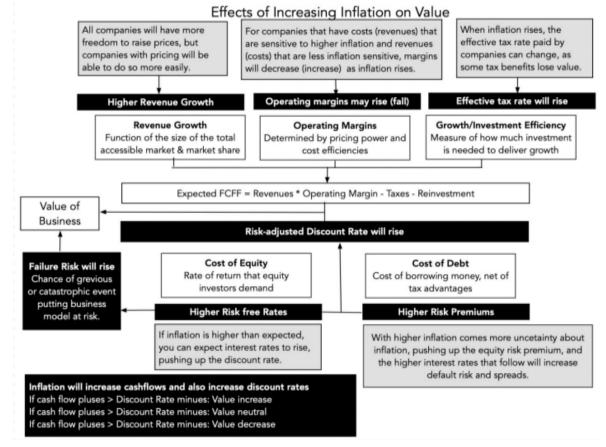
How Inflation Affects A Company's Cash Flows

As a reminder, the value of any stock is the sum of all future cash flows discounted at an appropriate COPYRIGHT 2022 MACRO OPS — ALL RIGHTS RESERVED // DO NOT DISTRIBUTE



interest rate (think: return hurdle).

I love this graph from <u>Aswath Damodaran</u> showing how increasing inflation affects equity value:



We can split the above diagram into two parts: **Revenue**, **Margins**, **and Taxes** and **Discount Rates**. Let's break each piece down into a more digestible format.

- **Revenues**: Companies can "get away with" raising prices since prices for other goods/services are also rising.
- Operating Margins: Margins may rise (or fall) if a company's COGS are highly indexed (or not) to inflation.
- **Tax Rates**: Effective tax rates rise as higher inflation leads to lower perceived value of tax benefits

Inflation isn't a blanket "good" or "bad" for stocks. It's company-specific. Can a business increase prices while maintaining its margin profile because its COGS inputs aren't susceptible to inflation? If so, inflation is great for that company.



Higher Risk Premium = Lower Expected Values

It's easy to get overly academic about discount rates. Here's the most important thing to know about them:

A discount rate is an investor's expected return hurdle to allocate capital to an idea.

Inflation acts as an amplifier to an investor's discount rate. Here's what I mean. The last decade saw historically low interest rates (0-2%).

Investors required *lower return hurdles* than alternative investments like bonds or corporate debt. Return hurdles declined because investors asked themselves, "can I generate at least a 2%+ return on this investment at the current price?"

That's a low hurdle, so the answer (in most cases) was yes. However, the opposite happens in high inflation environments.

Higher inflation **raises** discount rates because it **increases** the return hurdle on an investment. Today's market is a perfect example. Investors can lock in 4% returns on 2-year government paper.

So your hurdle rate automatically jumps from 2% to 4% **before** considering a public equity's investment risk.

And as we saw above, higher inflation brings higher corporate risk as the cost of capital increases and investors have less certainty about the future. I like how US Economist Peter Bernstein puts it (emphasis added):

"When inflation is low, you feel that you know more about the future, and are much more willing to take risks."

Here's a helpful short-hand distillation of the above points:

- Higher Inflation = Higher Discount Rate
- Higher Discount Rate = Higher Return Hurdle
- Higher Return Hurdle = Lower Equity Values

Think about it this way. Investors could buy Bank Certificates (i.e. CDs) yielding 11% in 1980. How cheap would stocks have to be in that environment to warrant the risk of investing in public companies?



Here's Aswath's explanation on how inflation impacts equity values (emphasis added):

"In periods when **inflation is higher (lower) than expected**, individual companies **can benefit**, **be left unaffected or be hurt by inflation**, depending on whether the **benefits of inflation (higher revenue growth and margins) are greater than, equal to or less than the costs of unexpected inflation** (higher risk free rates, higher risk premiums, higher default spreads and higher taxes)."

Warren Buffett calls inflation a *"far more devastating tax than anything that has been enacted by our legislatures."* Here's his example of the "inflation tax" assuming a 5% inflation rate (emphasis added):

"The inflation tax has a fantastic ability to simply consume capital. It makes no difference to a widow with her savings in a 5 percent passbook account whether she pays 100 percent income tax on her interest income during a period of zero inflation, or pays no income taxes during years of 5 percent inflation. Either way, she is "taxed" in a manner that leaves her no real income whatsoever. Any money she spends comes right out of capital. She would find outrageous a 120 percent income tax, but doesn't seem to notice that 6 percent inflation is the economic equivalent."

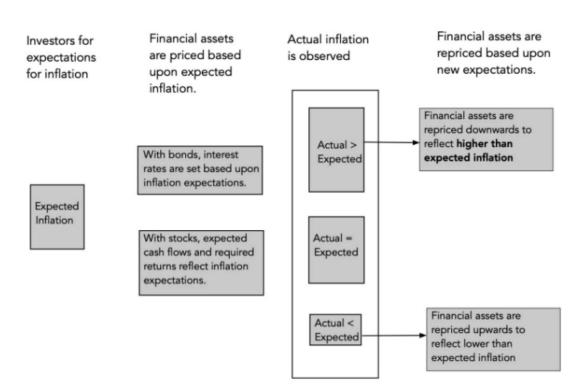
I want to cover one more aspect of inflation, **expectations**.

Second-Order Effects of Inflation: Expectations

Inflation affects a company's cash flows and its value/price. However, the real driver of asset prices isn't inflation itself but *expected* inflation. And the varying degrees of expectations miss/deliver.

Check out Aswath's chart below on how expectations regarding inflation drive asset prices:





It's not high inflation that's bad for stocks, but rather unexpected high inflation. Aswath expands on this idea in his <u>Invest Like The Best podcas</u>t with Patrick O'Shaghnessy (emphasis added):

"Expected inflation to me is the more benign part of inflation. **The part of inflation that's deadly is unexpected inflation, which is inflation coming in higher or lower than expected.** When inflation is unexpected, you've not had a chance to adjust to it.

We fell back on, "Inflation's always been low," because that's the only thing we knew. So, I think it's the unexpected inflation that I think is so damaging. What we're seeing in markets right now is markets are trying to adjust to what's the true inflation going to be. I mean, we all agree that the 8%, 9% that we're seeing is probably too high a number, that some of it is supply chains, COVID excuses that were given early on.

But we all also I think finally agree that we're not going to go back to 1% or one and half percent inflation, which is what we had in the last decade. The question of where we fall between the one and a half and the 8 or 9% is what's driving markets. If inflation subsides back, the most benign scenario, goes back to 2%, which is supposedly the fed's target, that's the most benign scenario. But that scenario is becoming a lower and lower probability scenario the further we get into this process. At this point, the question is, will it go to 3? Will it go to 4? Will it go to 5? And adjusting from a 2% expectation to a 5% expectation is devastating for all financial assets. It's not just stocks. It's not just bonds. In any type of financial asset."



By this point we have an academic understanding of inflation and how it impacts various asset classes. We also know how inflation *actually* affects companies and stock prices.

Given inflation's "fantastic ability to consume capital," we should do everything in our power to avoid investing in businesses that can't withstand inflation.

But how do we do that? How can we invest so that we're insulated from the damages of high inflation?

We'll discuss that in the next post.

Your Macro Operator,

Alex

P.S: If you have questions on any of this, or if you want to skip ahead, check out our FAQ here.