

Do Stocks Protect Against Inflation? Evidence from S&P 500 Returns and U.S. Inflation, 1983–2025Author: **Marc Bou Mansour¹***Affiliation:*

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Abstract:

This study examines whether U.S. stock returns move with inflation, a question at the heart of the Fisher hypothesis and of the common belief that equities protect purchasing power. Using 43 annual observations from 1983 to 2025, I relate S&P 500 total returns (dividends reinvested) to December-to-December U.S. consumer price inflation. I estimate ordinary least squares regressions for nominal and real returns with Newey–West standard errors, and I add non-parametric tests, an expected versus unexpected inflation decomposition, inflation-regime comparisons, sub-period estimates, and outlier exclusions. Average annual returns were 13.36% in nominal terms and 10.24% in real terms, while inflation averaged 2.84%. Inflation shows no statistically significant relationship with nominal returns (slope = 0.29, $p = .868$) or with real returns (slope = -0.71 , $p = .682$), and it explains less than 1% of the variation in either. The estimates are too imprecise to reject a zero relationship or a one-for-one hedge ($p = .691$). The only visible pattern is weaker real returns in the four years with inflation of 4.5% or more (3.58% versus 10.93%), but that difference is not statistically significant. In this sample, annual inflation is not a reliable guide to annual stock returns: equities cannot be counted on as a short-run inflation hedge, but they are not shown to be systematically harmed by moderate inflation either.

Keywords:

Inflation, Stock Returns, S&P 500, Fisher Hypothesis, Inflation Hedge, Real Returns

Introduction:

Few questions worry investors more than what inflation does to the value of their savings. Inflation erodes the purchasing power of cash and fixed-income assets, and a widespread belief is that stocks, as claims on real assets and on firms that can raise their prices, should protect investors when prices rise. The recent past put that belief to the test. Measured from December to December, U.S. inflation reached 7.04% in 2021 and 6.45% in 2022, the two highest readings in the 43 years studied in this paper. The S&P 500 returned +28.71% in 2021 and -18.11% in 2022 (see Appendix A). Almost identical, very high inflation therefore coincided with opposite stock market outcomes in consecutive years.

Economic theory gives a clear starting point. Following Fisher (1930), if stocks are claims on real assets, nominal returns should rise one-for-one with expected inflation and real returns should be left unaffected. The evidence has not been kind to that idea. Bodie (1976) and Fama and Schwert (1977) found stock returns to be negatively related to inflation, and Fama (1981) argued that this pattern reflects the link between inflation and real economic activity. Later work showed that the picture depends on the horizon and on the source of inflation: Boudoukh and Richardson (1993) found that nominal returns rise with inflation over multi-year horizons, and Cieslak and Pflueger (2023) show that inflation driven by demand and inflation driven by cost shocks have very different implications for asset returns.

The problem is that investors and students are left with conflicting messages: stocks are described both as an inflation hedge and as a casualty of inflation. Much of the evidence behind these messages comes from older samples, from monthly or multi-year horizons, or from models that are hard to replicate. What is missing is a transparent and fully replicable annual test that runs through 2025, so that it includes the post-pandemic inflation surge, reports nominal and real returns side by side, separates expected from unexpected inflation, and checks whether the result survives across inflation regimes, sub-periods, and outlier years. This study addresses that gap. The main research question is: Did annual U.S. stock returns move systematically with inflation between 1983 and 2025? It is broken into four specific questions:

- RQ1: Is annual inflation significantly related to nominal S&P 500 returns, and can a one-for-one (Fisher) relationship be rejected?
- RQ2: Is annual inflation significantly related to real (inflation-adjusted) returns?
- RQ3: Does the relationship differ for expected versus unexpected inflation?
- RQ4: Do returns differ across inflation regimes, and are the results stable across sub-periods and robust to outliers?

To answer these questions, the study has four objectives: (1) to describe nominal returns, real returns, and inflation over 1983–2025; (2) to estimate and test the regression relationship between inflation and both types of return; (3) to compare returns across low- and high-inflation years; and (4) to check the stability of the findings using non-parametric tests, sub-periods, and outlier exclusions.

The study matters in practice because portfolio allocation and retirement planning often rest on the assumption that equities preserve purchasing power in inflationary times. It matters in theory

because it tests the Fisher hypothesis and the inflation-illusion arguments on a modern sample that contains both the long disinflation of the 1980s and 1990s and the inflation surge of 2021–2022.

Literature Review:

The starting point for almost all work on inflation and asset returns is Fisher (1930), who argued that nominal interest rates adjust one-for-one to expected inflation so that real rates stay unaffected. The logic extends naturally to equities. A firm owns real assets and sells goods whose nominal prices rise with the general price level, so its nominal cash flows and share price should rise with inflation, leaving real returns unchanged. If this is right, stocks should be a good hedge against inflation.

The empirical record of the 1970s turned against this reasoning. Bodie (1976) reported that common stock returns were negatively related to inflation and concluded that stocks were a poor hedge, at least over short horizons. Fama and Schwert (1977) reached a similar conclusion, reporting a negative relationship between stock returns and inflation. These results were puzzling because they contradicted the Fisher logic that stocks are claims on real assets, and they launched a search for explanations that has produced three main strands.

The first strand argues that inflation is a proxy for something else. Fama (1981) suggested that the negative relation between stock returns and inflation is not causal: inflation is negatively related to real activity, and stock prices respond to expected real activity, so inflation appears to hurt stocks only because it signals weaker output. Geske and Roll (1983) added a fiscal and monetary channel, in which a fall in stock prices signals weaker activity, which leads to larger deficits and money creation, and in turn to higher inflation. The second strand argues that investors misjudge inflation. Modigliani and Cohn (1979) proposed that investors discount real cash flows at nominal rates and ignore the gain that shareholders of indebted firms enjoy when inflation erodes nominal debt, so equities are undervalued when inflation is high. Ritter and Warr (2002) found support for this view and linked the bull market of 1982–1999 partly to the decline in inflation, and Campbell and Vuolteenaho (2004) argued that mispricing caused by inflation illusion helps explain how stock valuations have moved with inflation. The third strand argues that the link may be rational. Bekaert and Engstrom (2010) showed that high expected inflation has tended to coincide with high uncertainty about real growth and high risk aversion, both of which raise the returns investors require from stocks.

Two further findings shape how the relationship should be tested. First, the horizon matters. Boudoukh and Richardson (1993) found that over multi-year horizons nominal stock returns do increase with inflation, although by less than one-for-one, while real returns remain negatively related to long-run inflation. Second, the source of inflation matters. In a review of the evidence,

Cieslak and Pflueger (2023) distinguish “good” inflation, linked to demand shocks, from “bad” inflation, linked to cost-push shocks, and show that these have different asset-pricing implications. If so, the annual relationship between inflation and returns should be weak and unstable rather than fixed, because different episodes are dominated by different kinds of inflation.

Taken together, the literature suggests three positions that can be tested with data. Under a full hedge (Fisher, 1930), the slope of nominal returns on inflation is one and the slope of real returns is zero. Under a perverse hedge (Bodie, 1976; Fama & Schwert, 1977), both slopes are negative relative to those benchmarks, meaning nominal slopes below one and real slopes below zero. Under no reliable relationship, which is what the proxy, illusion, and risk explanations combined with a changing source of inflation would imply at an annual frequency, both slopes are statistically indistinguishable from zero. Most of the classic evidence was produced on samples that end before the 1990s, while the more recent contributions are reviews or valuation studies rather than a simple, replicable annual test. This paper links directly to that gap: it applies a transparent test of the three positions to 1983–2025, a window that spans the long disinflation and the 2021–2022 surge.

The contemporary debate surrounding the Fisher hypothesis and equity inflation hedging is increasingly informed by advanced predictive analytics and the study of alternative asset classes. While classical studies relied on linear regressions to track market responses to inflation, modern financial research highlights the necessity of employing analytical adeptness—such as vector autoregression (VAR)—to untangle the complex interrelatedness of macroeconomic variables (Bejjani, Toros, Elia, & Jabbour Al Maalouf, 2024). Furthermore, forecasting economic quadrants and asset returns amidst inflationary shocks now frequently utilizes ensemble machine learning (Nasser, Yammine, Harouny, & Khalife, 2025), just as deep learning models are deployed to capture the pronounced effect of investor sentiment on S&P 500 prices during market volatility (Khalife, Yammine, El Bazi, Zaki, & Jabbour Al Maalouf, 2025). When traditional equities fail to provide a reliable buffer against purchasing power erosion, literature shows that investors pivot to alternative resilience strategies. This shift includes quantitative comparative analyses of non-fiat assets like gold and Bitcoin (Beainy & Kamel, 2026), as well as the adoption of physical gold as a critical household financial resilience mechanism in fragile, inflationary economies (Jabbour Al Maalouf, Sfeir, Nehme, & Mawad, 2026). During periods of severe financial distress or systemic collapse, specific behavioral and demographic predictors also drive the adoption of decentralized cryptocurrencies as alternative safe havens (Aoun, Youssef, & Jabbour Al Maalouf, 2026; El-Chaarani, Mawad, Mawad, & Khalife, 2025). Ultimately, assessing the hedging capacity of U.S. equities requires contextualizing these returns against the U.S. dollar's global structural dominance (Beainy, Kamel, Subrahmanyam, & Younis, 2025) and analyzing them through a comparative global equity perspective (Kamel & Beainy, 2025). Understanding these asset dynamics is further

complicated by the need to navigate operational disruptions (Subrahmanyam & Beainy, 2027), predict corporate financial distress accurately (Elia, Toros, Sawaya, & Balouza, 2021), and account for how the market integration of sustainability-oriented indices (Kaspard, Kamel, Khalil, & Beainy, 2026) and nonlinear economic growth (Athari, Sassine, Agyemang, Kirikkaleli, & Saliba, 2026) dictate market sustainability in vulnerable governance environments (Athari, Saliba, Khalife, & Salameh-Ayanian, 2023).

Methodology:

Research design

I used a quantitative, time-series design with annual observations for the United States from 1983 to 2025 ($n = 43$). The window begins in 1983, the first year with complete inflation data in the compiled table I used, and ends in 2025, the last complete calendar year available when this paper was prepared. The incomplete year 2026 is excluded. Annual frequency was chosen so that calendar-year stock returns and December-to-December inflation cover exactly the same twelve months, and because it keeps the analysis simple enough to replicate in a spreadsheet. The cost of this choice is a small sample, which is discussed in the limitations.

Data sources

Stock returns are S&P 500 total returns in percent (price change plus reinvested dividends) from US500 (n.d.). I cross-checked all 43 values against a second source (Slickcharts, n.d.) and found no differences. Inflation is the percentage change in the U.S. Consumer Price Index for All Urban Consumers (CPI-U, all items) from December to December, as compiled by US500 (n.d.). To check its quality, I compared the 2024 and 2025 values in the table (2.89% and 2.68%) with the Bureau of Labor Statistics December releases, which report 2.9% and 2.7% (U.S. Bureau of Labor Statistics, 2025, 2026). All 43 observations used in the analysis are listed in Appendix A, so every result in this paper can be reproduced.

Variables

Table 1 defines the variables. Real returns are computed with the exact Fisher relation rather than by simple subtraction. Expected inflation is proxied by the fitted value of a first-order autoregression of inflation on its own lag, and unexpected inflation by the residual of that regression, an approach that follows the spirit of the expected/unexpected split used in earlier studies (Fama & Schwert, 1977). Because this proxy uses the lagged value, models using it start in 1984 ($n = 42$). The cut-offs for inflation regimes are a judgment call: 3% is close to the sample mean of 2.84%, and 4.5% isolates the four years of highest inflation. The three sub-periods (1983–1999, 2000–2012, and 2013–2025) were chosen to be of similar length in the last two cases and to separate the long disinflation from the later years.

Table 1
Variable Definitions

Variable	Symbol	Definition
Nominal return	R_t	S&P 500 total return in calendar year t , in % (dividends reinvested)
Inflation	π_t	Percentage change in CPI-U (all items), December to December of year t
Real return	r_t	$r_t = [(1 + R_t/100) / (1 + \pi_t/100) - 1] \times 100$
Expected inflation	$\pi_{e,t}$	Fitted value from the regression $\pi_t = a + \rho\pi_{t-1} + u_t$
Unexpected inflation	$\pi_{u,t}$	Residual (u_t) from the same regression
Inflation regime	HIGH	Groups: below 3% vs. 3% or more; and below 2%, 2%–3.5%, 3.5%–4.5%, 4.5% or more

Note. Regime and sub-period definitions are described in the text. Sub-periods: 1983–1999, 2000–2012, 2013–2025.

Empirical models and hypotheses

Three regression models are estimated. Model 1 tests the relationship between inflation and nominal returns, Model 2 tests the relationship with real returns, and Model 3 splits inflation into its expected and unexpected parts:

$$R_t = \alpha_1 + \beta_1 \pi_t + \varepsilon_t \quad (1)$$

$$r_t = \alpha_2 + \beta_2 \pi_t + \varepsilon_t \quad (2)$$

$$R_t = \alpha_3 + \beta_3 \pi_{e,t} + \beta_4 \pi_{u,t} + \varepsilon_t \quad (3)$$

The hypotheses follow the three positions identified in the literature review. For RQ1, I test $H_0: \beta_1 = 0$ (no relationship) and, separately, $H_0: \beta_1 = 1$ (a full Fisher hedge). For RQ2, I test $H_0: \beta_2 = 0$, which is the Fisher prediction for real returns. For RQ3, I test $H_0: \beta_3 = 0$ and $H_0: \beta_4 = 0$. For RQ4, I compare mean returns between inflation regimes with Welch's t -test, which does not assume equal variances, and with the Mann–Whitney U test, and I re-estimate Model 1 for each sub-period and after excluding influential years. All tests are two-sided at the 5% level.

Estimation and diagnostics

The models are estimated by ordinary least squares (OLS). Because annual returns and inflation may show serial correlation, I report both conventional standard errors and Newey–West heteroskedasticity- and autocorrelation-consistent standard errors with two lags (Newey & West, 1987). I use the Durbin–Watson statistic to check for residual autocorrelation and the Shapiro–Wilk test to check whether residuals are normally distributed. Since stock returns are not normally distributed, I add Spearman rank correlations and the Mann–Whitney test as distribution-free

checks. All calculations were done in Python 3 with the NumPy and SciPy libraries; the OLS and Newey–West routines were coded directly and the code is available on request.

With 43 observations, precision is limited. The standard error of the slope in Model 1 (1.76) implies that only slopes larger than about ± 3.6 in absolute value could be detected as significant at the 5% level. A non-significant result therefore means that the data are inconclusive about small and moderate effects, not that such effects are proven to be zero. This point is taken into account when interpreting the results.

Results:

Descriptive statistics. Table 2 summarizes the data. Between 1983 and 2025, the S&P 500 delivered an average nominal return of 13.36% per year (median 16.00%) and an average real return of 10.24%. Compounded, the nominal return was 12.03% per year against 2.83% inflation, or 8.94% in real terms. Inflation averaged 2.84% with a standard deviation of 1.46, ranging from 0.11% to 7.04%. Stock returns were far more volatile than inflation (standard deviation 16.52 versus 1.46). Real returns were positive in 34 of the 43 years.

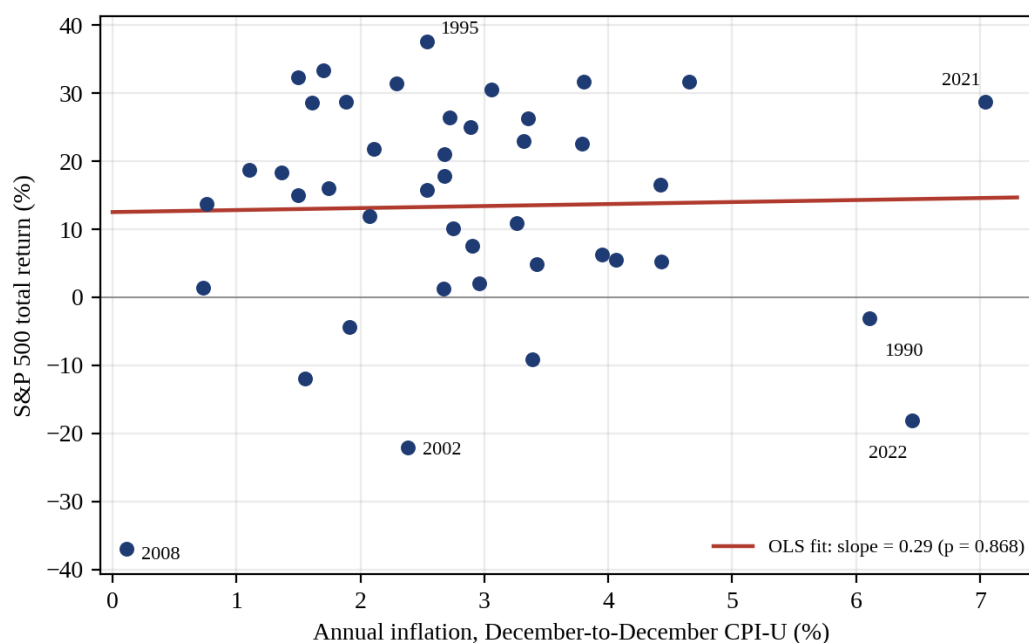
Table 2

Descriptive Statistics, 1983–2025 ($n = 43$, % per year)

Series	Mean	Median	SD	Min	Max	Compound
Nominal total return	13.36	16.00	16.52	−37.00	37.58	12.03
Inflation (CPI-U)	2.84	2.68	1.46	0.11	7.04	2.83
Real total return	10.24	13.36	16.13	−37.07	34.17	8.94

Note. Compound = geometric average annual rate. Nominal returns include reinvested dividends. Real return = $[(1 + \text{nominal}) / (1 + \text{inflation}) - 1] \times 100$.

RQ1: Inflation and nominal returns. Table 3 (Model 1) shows that the slope of nominal returns on inflation is 0.29 (SE = 1.76, $p = .868$), with an R^2 of .001. The 95% confidence interval for the slope runs from −3.26 to 3.85. Newey–West standard errors give the same conclusion ($p = .879$). The hypothesis of no relationship cannot be rejected, and neither can the hypothesis of a one-for-one Fisher relationship ($t(41) = -0.40$, $p = .691$; Newey–West $p = .715$). The Pearson correlation is .03 ($p = .868$) and the Spearman rank correlation is $-.02$ ($p = .922$). The Durbin–Watson statistic of 2.12 shows no residual autocorrelation, while the Shapiro–Wilk test ($p = .019$) indicates non-normal residuals, which is why the rank-based checks are reported. Figure 1 plots the data.

Figure 1*S&P 500 Total Return and Inflation, 1983–2025*

Note. Each point is one calendar year. The line is the OLS fit of Model 1. Selected years are labeled.

RQ2: Inflation and real returns. For real returns (Model 2), the slope is -0.71 ($SE = 1.72$, $p = .682$), with an R^2 of .004 and a 95% confidence interval from -4.18 to 2.76 . The Newey–West p -value is .709, and the Spearman correlation is $-.08$ ($p = .592$). The Fisher prediction of a zero slope for real returns cannot be rejected. Inflation explains less than one half of one percent of the variation in real returns.

Table 3*Regression Results: Inflation and Stock Returns*

Parameter	Estimate	SE (OLS)	SE (Newey–West)	p (OLS)	p (NW)	R ²
Model 1: Nominal return on inflation (n = 43)						
Intercept (α_1)	12.52	5.61	6.93	.031	.078	—
Inflation (β_1)	0.29	1.76	1.92	.868	.879	.001
Model 2: Real return on inflation (n = 43)						
Intercept (α_2)	12.26	5.47	6.84	.031	.080	—
Inflation (β_2)	-0.71	1.72	1.88	.682	.709	.004

Parameter	Estimate	SE (OLS)	SE (Newey–West)	p (OLS)	p (NW)	R ²
Model 3: Nominal return on expected and unexpected inflation (n = 42)						
Intercept (α_3)	21.50	15.00	14.94	.160	.158	—
Expected inflation (β_3)	-2.97	5.24	5.41	.575	.586	—
Unexpected inflation (β_4)	0.62	1.92	2.24	.748	.783	.011

Note. NW = Newey–West standard errors with two lags. The 95% confidence interval for β_1 is [-3.26, 3.85] and for β_2 is [-4.18, 2.76]. Test of $\beta_1 = 1$: $t(41) = -0.40$, $p = .691$. Inflation is measured in percentage points.

RQ3: Expected and unexpected inflation. The autoregression of inflation on its lag gives $\pi_t = 1.85 + 0.34\pi_{t-1}$, with an R^2 of .118, so past inflation explains only a small part of current inflation. In Model 3 (Table 3), the coefficient on expected inflation is -2.97 (SE = 5.24, $p = .575$) and the coefficient on unexpected inflation is 0.62 (SE = 1.92, $p = .748$). Neither is statistically significant, with or without Newey–West standard errors ($p = .586$ and $.783$), and the model explains 1.1% of the variation in returns.

RQ4: Regimes, sub-periods, and robustness. Table 4 and Figure 2 group the years by inflation level. Mean real returns were 10.23% in years with inflation below 2%, 11.61% between 2% and 3.5%, 10.18% between 3.5% and 4.5%, and 3.58% in the four years with inflation of 4.5% or more. Splitting the sample at 3% inflation, the mean real return was 11.13% in the 27 lower-inflation years and 8.75% in the 16 higher-inflation years, a difference that is not statistically significant (Welch $t = 0.48$, $p = .635$; Mann–Whitney $p = .642$). Mean nominal returns were almost identical in the two groups (13.37% versus 13.34%; Welch $p = .996$). The four years with inflation of 4.5% or more had a mean real return of 3.58% compared with 10.93% in all other years, but with only four observations this difference is also not significant (Welch $t = -0.62$, $p = .578$; Mann–Whitney $p = .614$).

Table 4

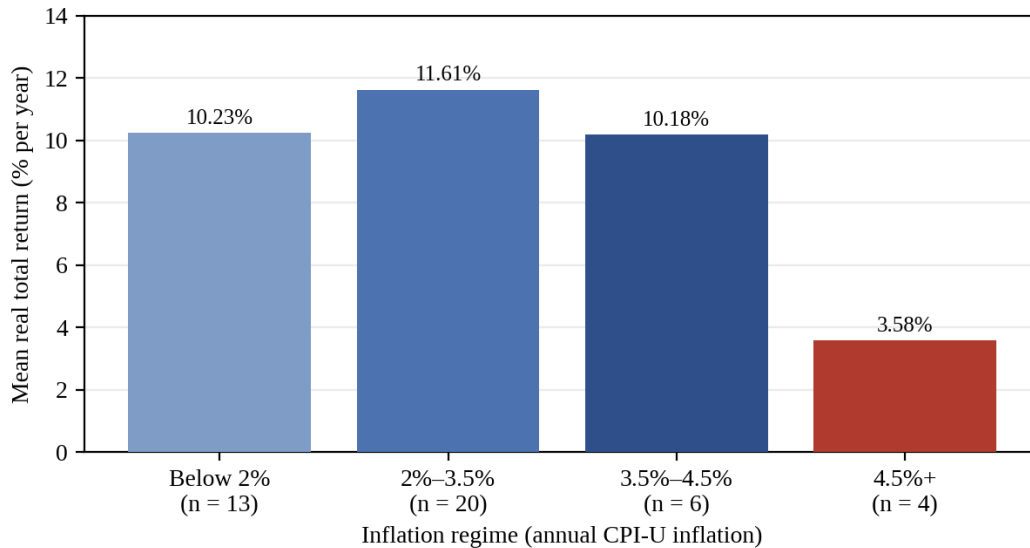
Stock Returns by Inflation Regime, 1983–2025

Inflation regime	Years	Mean nominal (%)	Mean real (%)	Years with negative real return
Below 2%	13	11.76	10.23	3 of 13 (23%)
2% to below 3.5%	20	14.72	11.61	4 of 20 (20%)
3.5% to below 4.5%	6	14.65	10.18	0 of 6 (0%)
4.5% and above	4	9.80	3.58	2 of 4 (50%)

Note. Inflation is December-to-December CPI-U change. Regimes are defined in the Methodology section.

Figure 2

Mean Real Total Return by Inflation Regime



Note. Bars show the average real total return in each regime; n is the number of years.

Table 5 shows that the absence of a significant relationship holds across all robustness checks. Dropping 2008, 2022, both years, or 2021 and 2022 leaves the slope of nominal returns on inflation insignificant in every case (p -values from .398 to .971). The estimated slope is negative in the 1983–1999 sub-period (-3.93 , $r = -.40$), positive in 2000–2012 (6.07 , $r = .34$), and slightly negative in 2013–2025 (-0.99 , $r = -.13$), but none of the three is significant. Prior-year inflation does not predict the following year's return (slope = -1.01 , $p = .570$), and changes in inflation are not significantly related to returns either (slope = 0.92 , $p = .554$).

Table 5

Robustness Checks: Slope of Nominal Return on Inflation

Specification	n	Slope	SE	p	r
Excluding 2008	42	-1.39	1.62	.398	-.13
Excluding 2022	42	1.86	1.82	.313	.16
Excluding 2008 and 2022	41	0.06	1.69	.971	.01
Excluding 2021 and 2022	41	1.36	2.12	.524	.10
Sub-period 1983–1999	17	-3.93	2.36	.117	-.40
Sub-period 2000–2012	13	6.07	5.11	.260	.34
Sub-period 2013–2025	13	-0.99	2.30	.677	-.13

Specification	n	Slope	SE	p	r
Prior-year inflation → return	42	−1.01	1.77	.570	−.09
Change in inflation → return	42	0.92	1.55	.554	.09

Note. OLS estimates with conventional standard errors. Slope is the coefficient on inflation (or on the variable indicated) in a regression of the S&P 500 nominal total return. No estimate is significant at the 5% level.

Discussion and Conclusion:

Key findings. The study asked whether annual U.S. stock returns moved systematically with inflation between 1983 and 2025. The answer, on this evidence, is no. Inflation is not significantly related to nominal returns (RQ1) or to real returns (RQ2), and neither expected nor unexpected inflation has a significant coefficient (RQ3). The result does not depend on a handful of extreme years, and the sign of the estimated relationship changes across sub-periods (RQ4). The only visible pattern is that real returns averaged 3.58% in the four years with inflation of 4.5% or more against 10.93% in the other years, but this gap is far from statistically significant. Importantly, the data are also unable to reject a one-for-one hedge: the 95% confidence interval for the nominal slope runs from −3.26 to 3.85, which includes both zero and one. The fair reading is therefore that annual inflation carries little usable information about annual stock returns in this sample, and that the sample is too small to pin down the true relationship precisely.

Link to the literature. The findings do not reproduce the significantly negative relationship reported by Bodie (1976) and Fama and Schwert (1977), but they do not support a reliable hedge either. The negative sign in the 1983–1999 sub-period and the positive sign in 2000–2012 are consistent with the idea that the relationship changes over time, although neither estimate is significant. The pair of years 2021 and 2022, in which almost equal inflation came with returns of +28.71% and −18.11%, is consistent with the argument of Cieslak and Pflueger (2023) that what matters is why prices are rising rather than how fast. The weak real returns in the highest-inflation years also fit the valuation arguments of Modigliani and Cohn (1979) and Ritter and Warr (2002), but with four observations this can only be treated as suggestive.

Implications. For investors, the practical message is that equities should not be counted on to offset inflation from one year to the next. A portfolio that relies on stocks alone for inflation protection carries the full volatility of the market, which in this sample (standard deviation 16.52) was more than ten times that of inflation. Investors concerned about inflation may therefore prefer to hold assets whose payoffs are explicitly linked to prices, in addition to stocks, and to judge the effect of inflation on equities by its source and its horizon. For finance students

and researchers, the results show that a simple, fully replicable test can be informative even when it delivers a null result, and that the Fisher hypothesis is hard to confirm or reject with annual data.

Limitations. Several limitations should be kept in mind. First, the sample is small (43 annual observations), so the tests have low power and wide confidence intervals. Second, the study uses one country and one index, so the results may not carry over to other markets, sectors, or high-inflation economies. Third, the models contain no control variables such as real activity, interest rates, or monetary policy, so they cannot separate the channels described in the literature. Fourth, expected inflation is proxied by a simple autoregression, which is a crude measure of what investors actually expected. Fifth, the regime cut-offs (3% and 4.5%) are arbitrary, and the highest regime contains only four years. Sixth, the data come from compiled secondary tables; the returns were cross-checked against a second source and the two most recent inflation values against official releases, but the remaining inflation values were not independently verified. Finally, residuals are not normally distributed, although the rank-based checks lead to the same conclusions.

Future research. Future work could use monthly or quarterly data to increase the number of observations, and multi-year horizons to test the long-run relationship described by Boudoukh and Richardson (1993). It could add controls for economic activity, interest rates, and uncertainty; separate demand-driven from cost-driven inflation as suggested by Cieslak and Pflueger (2023); compare sectors and firms with different pricing power and debt levels; and extend the analysis to other countries, including high-inflation economies such as Lebanon. Testing whether the relationship differs before and after major shifts in monetary policy would also help explain why the sign changes across sub-periods.

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