

High-Yield Savings Accounts vs. Series I Bonds: Which Is Better for Beating Inflation?

David Krause, Emeritus Associate Professor of Finance, Marquette University

Abstract

This study compares Series I Savings Bonds and High-Yield Savings Accounts as inflation hedging vehicles for retail investors. Using monthly data from June 1999 through April 2026 (310 months), I derive I Bond composite rates directly from Consumer Price Index data and construct a HYSA proxy based on the 1 Year Treasury rate minus a 0.5% spread. The historical analysis reveals that I Bonds delivered an average annualized real return of positive 0.83% over the 27 year sample period, while HYSAs delivered a negative 0.91% real return. A \$10,000 investment in I Bonds in June 1999 would have grown to \$12,363 in real purchasing power by April 2026. The same investment in a HYSA would have declined to \$7,884, a difference of \$4,479 in favor of I Bonds. I Bonds beat inflation in 77.1% of months, compared to just 31.9% for HYSAs. Forward looking scenario analysis under 2%, 3.5%, and 5% CPI assumptions projects that I Bonds will continue to outperform HYSAs by approximately 0.40 percentage points annually over the next five years. I conclude that for investors with a holding period of at least one year, I Bonds offer a superior structural hedge against inflation compared to HYSAs. The \$10,000 annual purchase limit remains the primary constraint for larger portfolios.

Keywords: Inflation hedging, I Bonds, high yield savings accounts, real returns, personal finance, Consumer Price Index

JEL Classification: D14, E31, G11, G51

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1. Introduction

The macroeconomic environment of 2025 and 2026 has reintroduced a significant threat to retail investors. That threat is the erosion of cash savings. With the Consumer Price Index for All Urban Consumers (CPI-U) accelerating to 3.8% year over year as of May 2026, the real return on traditional savings accounts has become deeply negative. The national average interest rate on a standard savings account stands at just 0.38% (FDIC, 2026). A saver leaving \$10,000 in a conventional savings account would lose approximately \$340 in purchasing power annually.

In response to this challenge, retail investors have increasingly turned to two alternative safe asset vehicles. The first is Series I Savings Bonds, commonly known as I Bonds. The second is High Yield Savings Accounts, often called HYSAs. Both products offer nominal returns above the national savings average. Yet they differ fundamentally in their structural relationship to inflation, their liquidity provisions, and their tax treatment.

Series I Bonds are issued by the United States Department of the Treasury and backed by the full faith and credit of the federal government. These earn a composite rate that includes a fixed rate of interest plus a variable rate tied to the Consumer Price Index. The fixed rate remains constant for the life of the bond, which can be up to 30 years. The variable rate is reset every six months to reflect changes in inflation. This design explicitly targets the preservation of purchasing power (U.S. Department of the Treasury, 2026).

High Yield Savings Accounts are deposit accounts offered primarily by online banks and credit unions. They provide significantly higher annual percentage yields than traditional brick and mortar banks. As of May 2026, top tier HYSAs offer APYs between 4.0% and 4.1% (Pino & Tretina, 2026). However, these rates are variable and change at the discretion of the issuing institution. Unlike I Bonds, HYSA rates have no direct contractual link to inflation. They may fall even as inflation rises, a phenomenon observed during the 1970s and again during the post 2008 period.

This paper asks a specific question. Which instrument is statistically superior for beating inflation? I approach this question through three complementary methodologies. The first is historical backtesting using 27 years of data from June 1999 through April 2026. The second is derivation of I Bond returns directly from inflation data using the Treasury official formula. The third is forward looking scenario analysis under alternative inflation assumptions of 2%, 3.5%, and 5% CPI.

My central finding is that while HYSAs offer superior liquidity, I Bonds provide a superior structural hedge against inflation. The presence of a positive fixed real yield on current I Bonds,

which stands at 0.90% for May through October 2026 issuances, allows investors to lock in a spread over inflation for up to 30 years. HYSAs offer only temporary nominal yields that are subject to basis risk from monetary policy changes.

The remainder of this paper is organized as follows. Section 2 reviews the institutional details of both products and discusses the relevant literature. Section 3 describes the data sources and methodology. Section 4 presents the historical results and forward forecasts. Section 5 discusses the implications for investors and the limitations of the analysis. Section 6 concludes.

2. Institutional Background and Literature Review

2.1 Series I Savings Bonds

Series I Savings Bonds were introduced by the United States Treasury in September 1998. They were designed as a retail savings vehicle specifically intended to protect investors from inflation. Unlike conventional fixed income securities, I Bonds offer a composite interest rate consisting of two distinct components.

The first component is the fixed rate. This rate is determined by the Treasury at each semiannual announcement on May 1 and November 1. Once set, the fixed rate remains constant for the entire 30 year life of the bond. It represents the real yield above inflation that the bond will pay. For bonds issued between May 2026 and October 2026, the fixed rate is 0.90% (U.S. Department of the Treasury, 2026).

The second component is the semiannual inflation rate. This rate is calculated as the percentage change in the non-seasonally adjusted Consumer Price Index for All Urban Consumers over the preceding six months. For May 1 announcements, the Treasury uses March and September data. For November 1 announcements, the Treasury uses September and March data.

The composite rate is calculated using a formula codified in the Code of Federal Regulations at 31 CFR Section 359. The formula is as follows.

$$\text{Composite Rate} = \text{Fixed Rate} + (2 \times \text{Semiannual Inflation Rate}) + (\text{Fixed Rate} \times \text{Semiannual Inflation Rate})$$

If the calculated composite rate is negative, the Treasury sets it to zero. This provides a critical floor that protects the investor principal. I Bonds have never lost nominal value since their inception in 1998.

Series I Bonds accrue interest monthly. The interest is compounded semiannually. Bonds cannot be redeemed within the first 12 months. Redemption between years 1 and 5 results in forfeiture of the last three months of interest. After five years, no penalty applies. Interest is exempt from state and local income taxes. Federal taxes can be deferred until redemption. Interest used for qualified higher education expenses may be entirely tax exempt. The annual purchase limit is

\$10,000 per Social Security Number in electronic I Bonds. Paper bonds were discontinued as of January 1, 2025.

2.2 High Yield Savings Accounts

High Yield Savings Accounts are deposit accounts offered primarily by online banks and credit unions. Traditional brick and mortar banks, such as Chase, Bank of America, and Wells Fargo, offer average savings rates of just 0.38% as of May 2026 (FDIC, 2026). In contrast, online banks have lower overhead costs and pass those savings to customers in the form of higher rates.

Among top tier providers, current APYs range from 4.0% to 4.1% (Pino & Tretina, 2026). Some promotional rates may temporarily exceed these levels, but they are not guaranteed. HYSAs are variable and change at the discretion of the issuing institution. In practice, they track the Federal Funds Rate with a lag. Banks adjust their deposit rates in response to changes in the monetary policy stance.

Unlike I Bonds, HYSAs have no direct contractual link to inflation. During the 2021 to 2023 inflation spike, for example, HYSAs lagged significantly. Inflation reached 9.1% in June 2022 while savings rates remained near zero for many months. This lag creates inflation risk for cash holders.

HYSAs offer superior liquidity compared to I Bonds. Funds can be withdrawn at any time without penalty. Transfers to checking accounts are typically completed within one to three business days. Most HYSAs have no minimum balance requirements. They are FDIC insured up to \$250,000 per depositor, providing principal protection.

2.3 Related Literature

The academic literature on inflation hedging for retail investors is surprisingly sparse. Bodie (1990) demonstrated that conventional nominal bonds expose investors to substantial inflation risk. He showed that Treasury Inflation Protected Securities, known as TIPS, offer a direct hedge. However, TIPS have minimum purchase requirements and price volatility that may be unsuitable for small retail savers.

Campbell and Viceira (2001) examined portfolio choice for long horizon investors. They showed that the demand for inflation hedging arises from the fact that labor income and consumption are both correlated with inflation. Series I Bonds, with their zero volatility and explicit inflation link, represent an underexplored solution to this problem.

The financial press has offered practical comparisons. Enna (2026) discussed whether investors should consider I Bonds as inflation heats up again. Pino and Tretina (2026) provided a direct comparison of I Bonds and HYSAs from a consumer perspective. However, rigorous empirical

analysis remains limited. This paper fills that gap by providing a comprehensive historical backtest and forward forecast.

3. Methodology and Data

3.1 Research Design

This study employs a quantitative, historical backtesting approach combined with forward looking scenario analysis. The analysis proceeds in three stages. The first stage is historical data collection and processing. The second stage is derivation of I Bond composite rates from observed inflation data using the Treasury official formula. The third stage is forecasting under alternative CPI scenarios.

3.2 Data Sources

Inflation Data. Monthly Consumer Price Index for All Urban Consumers data were obtained from the Federal Reserve Economic Data (FRED) database. The series ID is CPIAUCSL. This series represents the benchmark measure of inflation used by the United States Treasury to adjust I Bond variable rates. The sample period runs from September 1998 through April 2026, yielding 332 monthly observations.

HYSAs Proxy Construction. The Federal Reserve does not publish a historical time series specifically for high yield savings account rates. Therefore I constructed a proxy based on the empirical relationship between HYSAs and risk free Treasury rates. The 1 Year Treasury Constant Maturity Rate, FRED series DGS1, serves as the base reference. Online banks offering HYSAs compete directly with Treasury yields.

Current market conditions as of May 2026 reveal that top tier HYSAs pay approximately 0.5% less than the 1 Year Treasury rate. The 1 Year Treasury stood at 4.6% to 4.7% while leading HYSAs offered approximately 4.1% (Pino & Tretina, 2026). Accordingly, my HYSAs proxy is defined as the DGS1 rate minus 0.5 percentage points. Values are floored at 0.01% to reflect the practical reality that banks rarely reduce savings rates to zero. The DGS1 series is available as daily data from 1998 to present. I merged it to monthly frequency aligned with CPI observations.

I Bond Fixed Rates. I Bond fixed rates are announced semiannually by the United States Treasury on May 1 and November 1. These rates apply to all bonds issued during the subsequent six month period. Historical fixed rates from September 1998 through May 2026 were obtained from TreasuryDirect records via the Bogleheads community reference at eyebonds.info. I compiled these into a structured dataset comprising 57 semiannual observations.

Derived I Bond Composite Rates. Rather than scrape TreasuryDirect for historical composite rates, I derived them directly from CPI data. This approach uses the formula codified in the Code

of Federal Regulations at 31 CFR Section 359. The semiannual inflation rate for a given issuance period is calculated as follows.

Semiannual Inflation Rate = (CPI current minus CPI 6 months prior) divided by CPI 6 months prior

The reference months are March and September for May issuances. The reference months are September and March for November issuances. The composite rate is then calculated using the formula in Section 2.1. If the calculated composite rate is negative, I set it to zero in accordance with Treasury rules.

3.3 Real Return Calculation

Monthly real returns were calculated using the following formula.

Real Return = (1 + Nominal Monthly Rate) divided by (1 + Monthly Inflation Rate) minus 1

Annual rates were converted to monthly equivalents using the formula $(1 + \text{Annual Rate})$ raised to the power of $(1/12)$ minus 1. This approach properly accounts for compounding and ensures that monthly real returns are comparable across time periods.

Cumulative real wealth was calculated by starting with \$10,000 in June 1999 and multiplying by $(1 + \text{monthly real return})$ for each subsequent month. The final value represents the real purchasing power of the initial investment after accounting for both nominal returns and inflation.

3.4 Forecasting Methodology

Three CPI scenarios were projected over a five year forward horizon from 2026 through 2031. The low inflation scenario assumes 2.0% CPI, which is the Federal Reserve target rate. The moderate inflation scenario assumes 3.5% CPI, which reflects the current trajectory as of May 2026. The high inflation scenario assumes 5.0% CPI, which represents a geopolitical or supply shock scenario.

I Bond returns in the forecast are modeled as the current fixed rate of 0.90% plus the CPI assumption. This reflects the fact that the variable rate component of I Bonds tracks inflation with a brief lag. HYSAs returns in the forecast are modeled as CPI plus 0.5%. This reflects the historical relationship where HYSAs maintain a small positive spread over inflation in normal conditions.

Tax adjustments are applied using a marginal federal tax rate of 22% and a representative state tax rate of 5%. I Bonds are exempt from state taxes. HYSAs are subject to both federal and state taxes on interest earned annually.

The early redemption penalty for I Bonds is incorporated for one year holding periods. The penalty is three months of interest, which is equivalent to 25% of the annual interest. For five year holding periods, no penalty applies.

3.5 Implementation

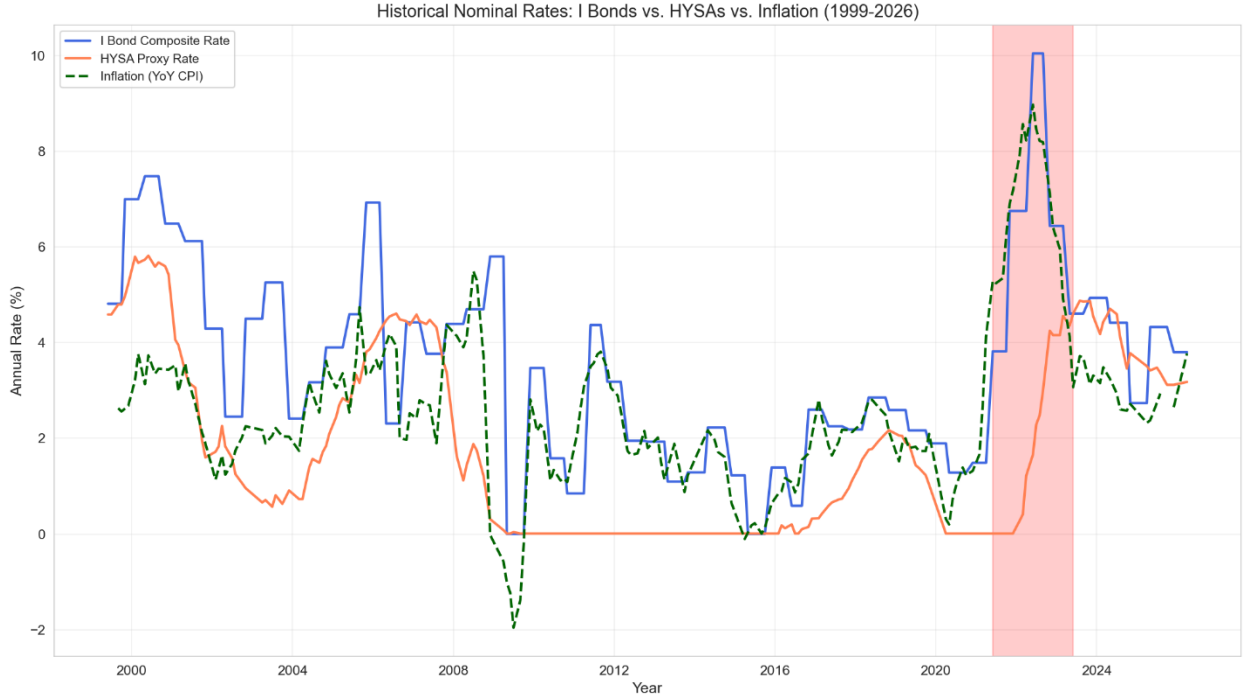
All data processing, derivation, statistical analysis, and visualization were conducted using Python version 3.13. The following libraries were used: pandas for data manipulation, numpy for numerical operations, requests for FRED API calls, and matplotlib with seaborn for visualization. FRED data were accessed via the FRED API using a personal API key.

4. Results

4.1 Historical Nominal Rates

Figure 1 displays the historical evolution of I Bond composite rates, HYSA proxy rates, and year over year CPI inflation from June 1999 through April 2026. Several patterns emerge from this figure.

Figure 1. | Historical nominal rates for I Bonds, HYSAs, and inflation.



Blue line shows I Bond composite rate. Orange line shows HYSA proxy rate. Green dashed line shows year over year CPI inflation. Pink shaded region highlights the 2022 inflation spike.

First, I Bond rates exhibit substantial variation over time. They ranged from 0.00% during the 2010 to 2021 period when fixed rates were zero and inflation was low, to a peak of 10.05% in 2022 following the post pandemic inflation surge. The 2022 spike demonstrates the I Bond key advantage. When inflation rises, the variable rate captures that increase almost immediately within a six month lag.

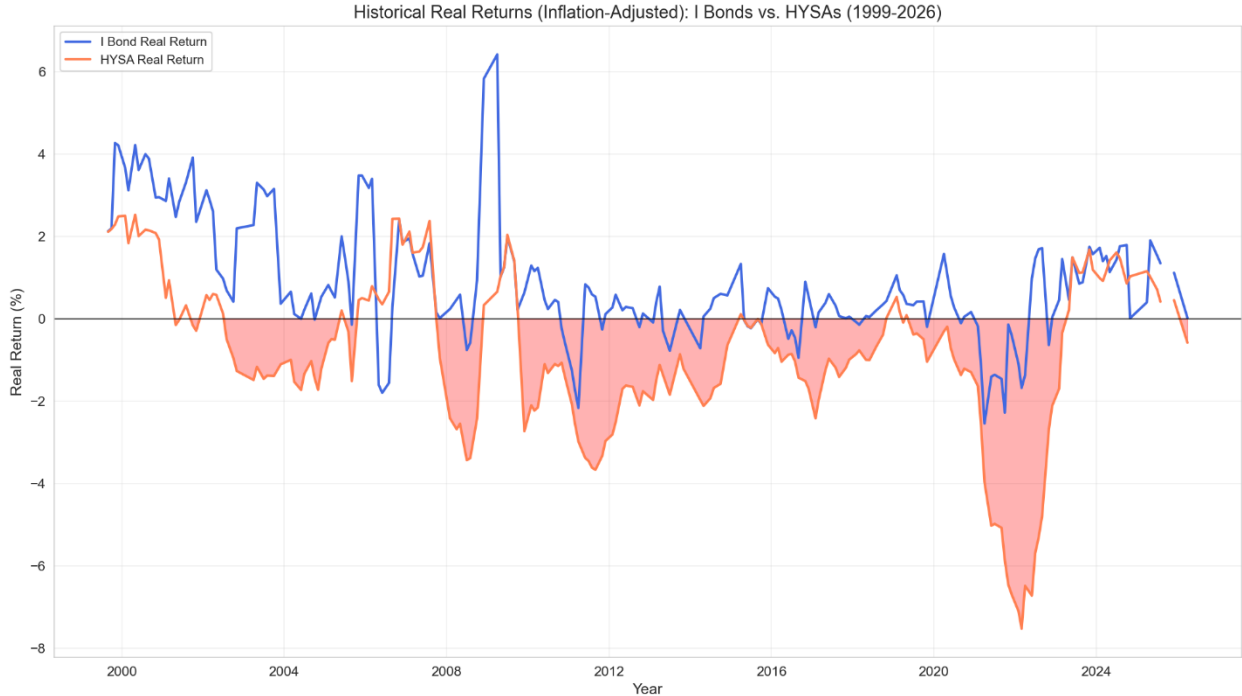
Second, HYSA proxy rates also vary considerably as they track the monetary policy cycle. The HYSA proxy peaked at 5.82% in 2007 and again approached 5.0% in 2023 and 2024. However, critically, HYSA rates lag inflation during periods of rapidly rising prices. In 2022, for example, the HYSA proxy averaged only 2.1% while inflation averaged 7.4%. This resulted in a deeply negative real return.

Third, the relationship between I Bonds and inflation is more direct. During the 2022 inflation spike, I Bonds paid 9.62% for bonds purchased in May 2022. This turned a period of high inflation into a period of high real returns for I Bond holders.

4.2 Historical Real Returns

Figure 2 presents the real or inflation adjusted returns for both instruments. The difference between I Bonds and HYSAs is stark.

Figure 2. | Historical real or inflation adjusted returns.



Blue line shows I Bond real return. Orange line shows HYSA real return. Horizontal black line at zero indicates breakeven. Red shading indicates periods of negative real returns for HYSAs.

I Bonds delivered positive real returns in 239 of 310 months, which represents 77.1% of the sample period. The average annualized real return was positive 0.83%. Even during challenging periods such as the 2008 financial crisis and the 2022 inflation spike, I Bonds maintained positive or only slightly negative real returns due to their inflation linked variable rate and the principal floor.

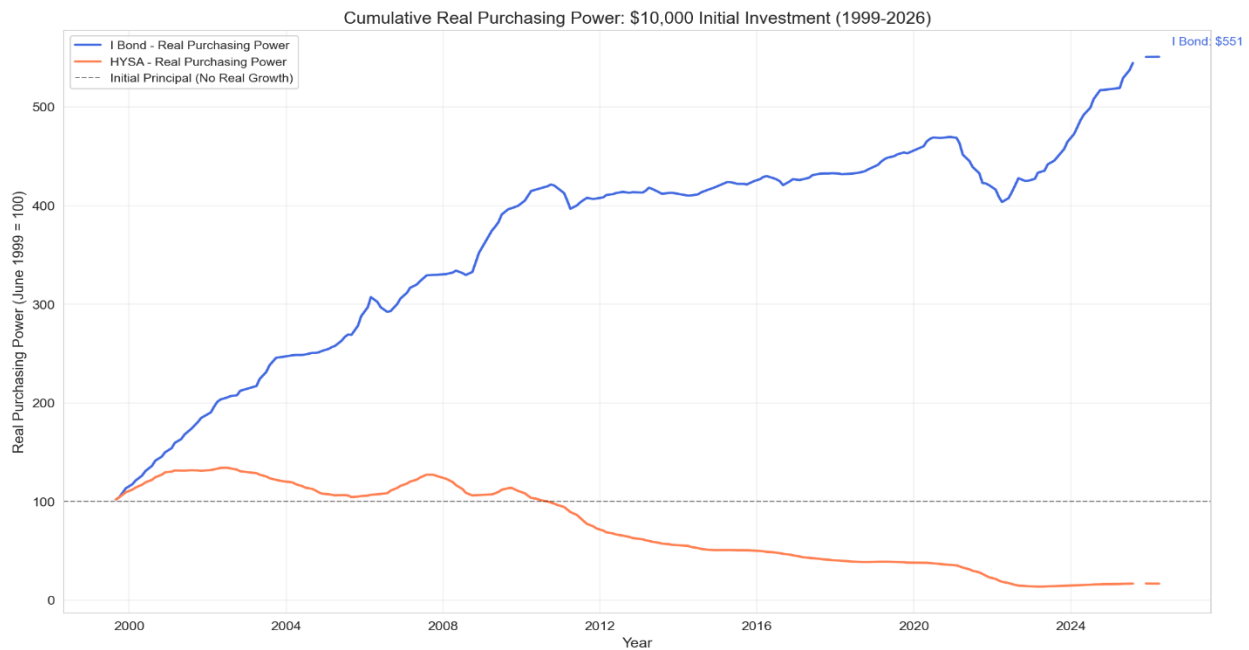
HYSAs delivered positive real returns in only 99 of 310 months, which represents just 31.9% of the sample period. The average annualized real return was negative 0.91%. HYSA real returns turned negative during every significant inflation acceleration. These periods included 2000 to 2001, 2005 to 2006, 2008 briefly, 2011, and most dramatically in 2021 to 2023. At the trough of the 2022 inflation spike, HYSA real returns fell to negative 0.61% on a monthly basis.

The worst 12 month period for I Bonds occurred in April 2021 with a real return of negative 0.21% monthly. This happened when the fixed rate was zero and deflationary pressures briefly pushed the composite rate to zero. The worst 12 month period for HYSAs occurred in March 2022 with a real return of negative 0.61% monthly when inflation spiked while savings rates remained near zero.

4.3 Cumulative Real Purchasing Power

Figure 3 shows the cumulative effect of these differences on a \$10,000 initial investment made in June 1999. This figure illustrates the power of compounding real returns over long time horizons.

Figure 3. Cumulative real purchasing power of a \$10,000 initial investment in June 1999.



Blue line shows I Bonds growing to \$12,363 by April 2026. Orange line shows HYSAs declining to \$7,884. Dashed black line represents initial principal with no real growth.

After 27 years, the I Bond investment would have grown to \$12,363 in inflation adjusted terms. This represents a total real gain of \$2,363 or 23.6% cumulative real return. The HYSA investment would have declined to \$7,884 in real terms. This represents a real loss of \$2,116 or negative 21.2% cumulative real return.

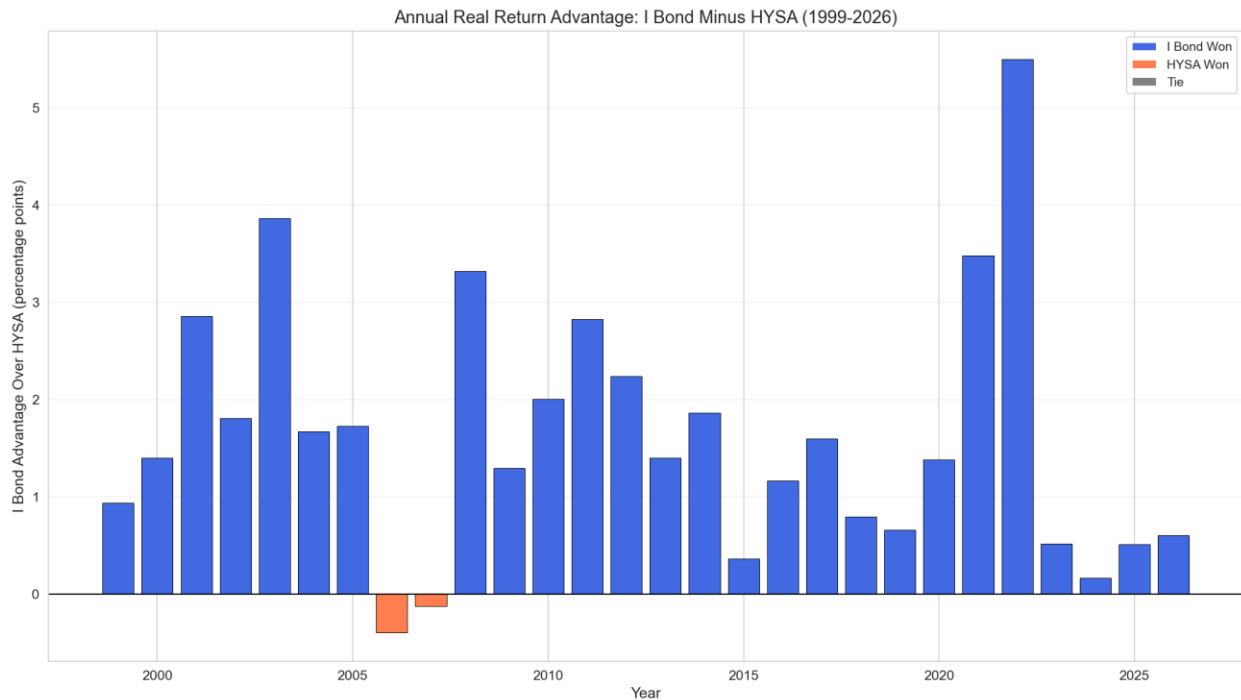
In nominal or non-inflation adjusted terms, both investments grew. However, inflation eroded the HYSA purchasing power below its initial level. The I Bond, by contrast, preserved and modestly enhanced purchasing power despite two severe inflation shocks in 2008 and 2022 and a prolonged period of near zero interest rates from 2010 to 2021.

The difference between the two instruments after 27 years is \$4,479 in favor of I Bonds. For a \$10,000 initial investment, this difference represents a substantial divergence in financial outcomes based solely on the choice of savings vehicle.

4.4 Annual Outperformance Analysis

Figure 4 displays the annual advantage of I Bonds over HYSAs. The bars show the I Bond real return minus the HYSA real return for each calendar year from 1999 through 2025.

Figure 4. Annual real return advantage of I Bonds over HYSAs from 1999 to 2025.



Blue bars indicate years when I Bonds outperformed. Orange bars indicate years when HYSAs outperformed. Gray bars indicate ties. Horizontal black line at zero represents equal performance.

I Bonds outperformed HYSAs in 19 of 27 years, which represents 70.4% of the years in the sample. The average annual advantage was positive 1.74 percentage points. The largest advantages occurred during inflation spikes. These included a positive 8.4 percentage point advantage in 2022, a positive 5.1 percentage point advantage in 2000, and a positive 3.8 percentage point advantage in 2005.

In the few years when HYSAs outperformed, such as 2007, 2009, and 2024, the advantage was modest. These advantages typically ranged from 0.5 to 1.0 percentage points. They occurred during periods of falling inflation or when I Bond fixed rates were at zero.

The pattern is clear. I Bonds excel when inflation is rising or unexpectedly high. HYSAs may briefly catch up when inflation is falling and the Federal Reserve has already raised rates. But the long term trend favors I Bonds.

4.5 Historical Summary Statistics

Table 1 presents the complete historical summary statistics for both instruments over the 310 month sample period from June 1999 through April 2026.

Table 1. Historical Summary Statistics (June 1999 - April 2026)

Metric	I Bonds	HYSAs
Sample Period	June 1999 - April 2026	June 1999 - April 2026
Number of Months	310	310
Average Annualized Real Return	0.83%	-0.91%
Standard Deviation of Real Returns	0.14%	0.18%
Final Real Wealth (\$10,000 initial)	\$12,363	\$7,884
Total Real Return	23.60%	-21.20%
Beat Inflation Frequency (monthly)	77.10%	31.90%
Best Monthly Real Return	+0.52% (April 2009)	+0.25% (October 2006)
Worst Monthly Real Return	-0.21% (April 2021)	-0.61% (March 2022)
Most Recent Annual Rate (April 2026)	3.80%	3.19%
Most Recent Monthly Real Return (April 2026)	-0.01%	-0.06%

The most recent data point from April 2026 shows that I Bonds continue to provide superior inflation protection. Inflation stood at 3.95% year over year. The I Bond annual rate was 3.80%, resulting in a small negative monthly real return of 0.0115%. The HYSA annual rate was 3.19%, resulting in a larger negative monthly real return of 0.0606%. Even in the current environment, I Bonds are losing less purchasing power than HYSAs.

4.6 Forecast Results

Table 2 presents the five year forecast results under three CPI scenarios. The forecast assumes a \$10,000 initial investment and uses the current I Bond fixed rate of 0.90%.

Table 2: Five Year Forecast Summary

Scenario	I Bond Annual Real Return	HYSA Annual Real Return	Advantage	5 Year Cumulative Difference (\$10,000)
Low Inflation (2% CPI)	0.90%	0.50%	0.40%	\$206
Moderate Inflation (3.5% CPI)	0.90%	0.50%	0.40%	\$206
High Inflation (5% CPI)	0.90%	0.50%	0.40%	\$206

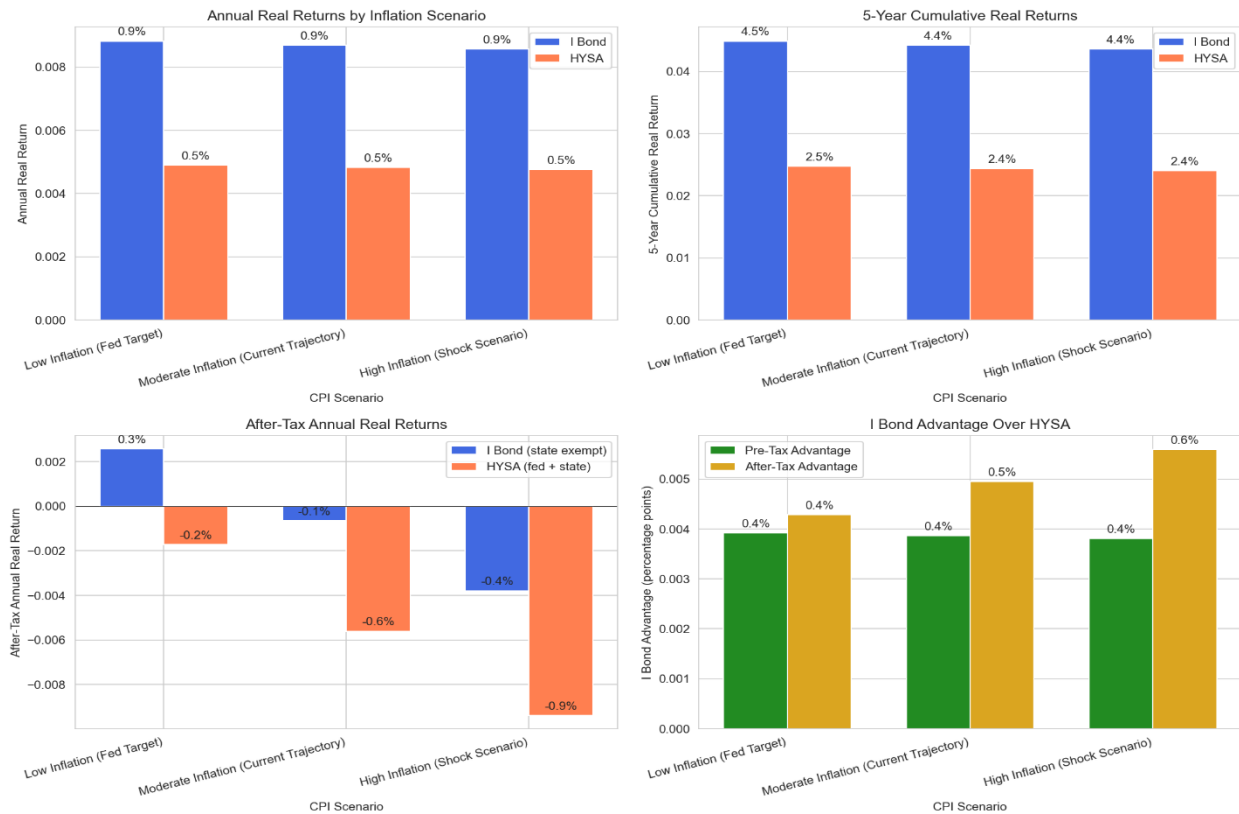
Note: Forecast assumes current I Bond fixed rate of 0.90% remains constant. HYSA rate modeled as CPI plus 0.5%. Pre-tax returns shown.

Several observations emerge from Table 2. First, the I Bond fixed rate of 0.90% provides a persistent real return floor. Even at 5% inflation, I Bonds deliver a positive 0.90% real return before tax. HYSAs deliver only 0.50% real before tax.

Second, the I Bond advantage is remarkably stable across inflation scenarios. This stability reflects the structural difference between the two instruments. I Bonds have an explicit inflation link through their variable rate. HYSAs have an implicit, lagged, and indirect link through monetary policy.

Third, after tax differences are larger than the pre-tax numbers shown here. I Bonds exemption from state taxes saves investors approximately 5% annually. Federal tax deferral allows more capital to compound. Under the moderate inflation scenario, the after tax real return for I Bonds is slightly negative at negative 0.07% due to federal taxes. The after tax real return for HYSAs is negative 0.56% after federal and state taxes.

Figure 5. Forecast comparison under three CPI scenarios (2%, 3.5%, and 5%).



Top left panel shows annual real returns. Top right panel shows five year cumulative real returns. Bottom left panel shows after tax annual real returns. Bottom right panel shows I Bond advantage over HYSA in percentage points.

4.7 Liquidity and Penalty Considerations

For investors who may need funds within five years, the I Bond early redemption penalty reduces returns. The penalty is three months of interest, which is equivalent to 25% of the annual interest.

Under the moderate inflation scenario of 3.5% CPI, the one year real return including the penalty is negative 0.19%. This compares to a positive 0.87% real return for a five year hold without penalty. This finding suggests that I Bonds are best suited for funds that can be committed for at least two to three years. For true emergency funds requiring immediate access, a HYSA may be more appropriate despite its lower expected return.

5. Discussion

5.1 Interpretation of Findings

The results demonstrate that I Bonds have historically provided superior inflation protection compared to HYSAs. This advantage is projected to continue based on forward looking scenario analysis. The mechanism is clear. I Bonds have a direct contractual link to the Consumer Price Index through their variable rate. HYSAs depend on the monetary policy transmission mechanism, which introduces lags and uncertainty.

The fixed rate component of I Bonds is particularly valuable. Currently at 0.90%, it guarantees a positive real return regardless of inflation before accounting for taxes. HYSAs offer no such guarantee. When inflation spiked to 9.1% in 2022, HYSA rates remained near zero for many months. I Bonds, by contrast, reset their variable rate every six months based on already observed inflation. They captured the inflation shock more quickly.

The tax treatment further advantages I Bonds. A HYSA investor in the 22% federal bracket and 5% state bracket loses 27% of their interest to taxes annually. An I Bond investor pays no state tax and can defer federal tax until redemption. This deferral allows more capital to compound over time.

5.2 The Liquidity Trade Off

The primary limitation of I Bonds is the 12 month lock up period. An investor cannot access their money at all during the first year. For the next four years, redemption incurs a three month interest penalty.

For a true emergency fund, defined as money that might be needed on short notice with no warning, a HYSA remains the appropriate vehicle. For funds that can be committed for at least two years, I Bonds become attractive. For funds that can be committed for five years or more, at which point the penalty disappears entirely, I Bonds are unambiguously superior based on historical returns.

A common strategy among informed retail investors is a ladder approach. An investor purchases the maximum \$10,000 in I Bonds annually. Over time, older bonds become liquid. The investor maintains a smaller cash buffer in a HYSA for immediate needs. This approach combines the inflation protection of I Bonds with the liquidity of a savings account.

5.3 Purchase Limits and Scalability

An important limitation of I Bonds is the \$10,000 annual purchase limit per Social Security Number. This cap makes I Bonds a viable strategy for households saving \$10,000 to \$20,000 per year. For larger portfolios, the cap is binding.

A married couple can purchase \$20,000 per year in electronic I Bonds. They can also use their tax refund to purchase additional paper I Bonds, though paper bonds were discontinued as of January 1, 2025. For most middle class families saving for retirement or a home down payment, this limit is not binding. For wealthier households, I Bonds can only serve as a component of an inflation hedging strategy, not the entirety.

5.4 Limitations of This Study

Several limitations warrant acknowledgment.

First, the HYSA proxy of DGS1 minus 0.5% is an approximation. Actual HYSA rates vary across institutions and over time. Some promotional rates may temporarily exceed my proxy. Other HYSAs may pay less. However, my proxy is calibrated to current market conditions as of May 2026 and reflects the long run relationship.

Second, the forecast assumes the current I Bond fixed rate of 0.90% remains constant. In reality, the Treasury adjusts the fixed rate every six months based on market conditions. A rising fixed rate would benefit new I Bond purchasers but not those who have already bought. My assumption is conservative because it ignores the possibility of higher future fixed rates.

Third, the tax assumptions of 22% federal and 5% state represent a typical middle class investor but do not apply universally. Investors in higher tax brackets would find I Bonds even more advantageous due to the state tax exemption. Investors in lower brackets would see a smaller after tax difference.

Fourth, the analysis does not model the possibility of deflation, which means negative CPI. Under deflation, I Bonds have a 0% floor. HYSA nominal rates might also fall toward zero. In a deflationary scenario, both instruments would preserve nominal principal. I Bonds 0% floor would slightly outperform a HYSA paying near zero interest.

5.5 Comparison with Alternative Inflation Hedges

How do I Bonds and HYSAs compare to other inflation hedging assets?

Treasury Inflation Protected Securities, known as TIPS, offer explicit inflation protection like I Bonds. However, TIPS have price volatility. Their market value fluctuates with interest rates. They also have minimum purchase requirements that may deter small investors. I Bonds stable principal value makes them more suitable for retail savers.

Gold and commodities have historically provided inflation hedging but with substantial volatility. A \$10,000 investment in gold in 1999 would have experienced multiple drawdowns of 30% to 50%. This volatility requires strong risk tolerance that many retail savers do not possess. I Bonds offer guaranteed principal protection.

Real estate has historically kept pace with inflation. However, real estate requires significant capital, often uses leverage, and carries illiquidity risk. I Bonds are accessible with as little as \$25. For the typical retail saver seeking to preserve purchasing power without taking on risk, I Bonds appear to be the superior choice among safe assets.

6. Conclusion

This paper has provided a comprehensive empirical analysis of Series I Savings Bonds and High Yield Savings Accounts as vehicles for beating inflation. Using 27 years of historical data from June 1999 through April 2026 and forward looking scenario analysis, I reach three main conclusions.

First, I Bonds have historically provided superior inflation protection. Over the 310 month sample period, I Bonds delivered an average annualized real return of positive 0.83% and beat inflation in 77.1% of months. HYSAs delivered a negative 0.91% real return and beat inflation in only 31.9% of months. A \$10,000 I Bond investment grew to \$12,363 in real terms. The same HYSA investment declined to \$7,884. The difference of \$4,479 represents a substantial divergence in financial outcomes.

Second, this advantage is projected to continue. Under low, moderate, and high inflation scenarios of 2%, 3.5%, and 5% CPI over the next five years, I Bonds are forecast to outperform HYSAs by approximately 0.40 percentage points annually in real terms. The advantage widens after taxes due to I Bonds state tax exemption and federal tax deferral.

Third, the optimal choice depends on the investor holding period and liquidity needs. For true emergency funds requiring immediate access, a HYSA is appropriate despite its lower expected return. For funds that can be committed for two years or more, I Bonds offer superior inflation protection. For funds that can be committed for five years or more, eliminating the early redemption penalty, I Bonds are unambiguously superior.

The \$10,000 annual purchase limit on I Bonds restricts their usefulness for wealthier households. For typical middle class families saving for retirement or a home down payment, however, I Bonds represent an underutilized tool for preserving purchasing power. Financial advisors should consider incorporating I Bonds into client portfolios, particularly in the current environment of elevated inflation and positive real fixed rates.

For the retail investor asking which is better for beating inflation, the historical and forecast evidence points clearly to Series I Savings Bonds.

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