

GLOBAL FIXED INCOME / RESEARCH NOTE

One Dollar, Five Bond Markets: How Armenia Pulled Ahead

A 2014-2026 comparison with US Treasuries, German Bunds, UK Gilts and Emerging-Market Debt

1 January 2014 to 26 October 2026 | Income reinvested for all five investments; unhedged USD returns.

The main finding: Armenia's government-bond index outperformed all four selected bond ETFs, even after allowing for a 1.00% annual expense.

4.76x

Ending value of the Armenian investment
USD 1 becomes USD 4.76 after assumed expenses

12.95%

Annualized USD return
G5I after the same expense assumption

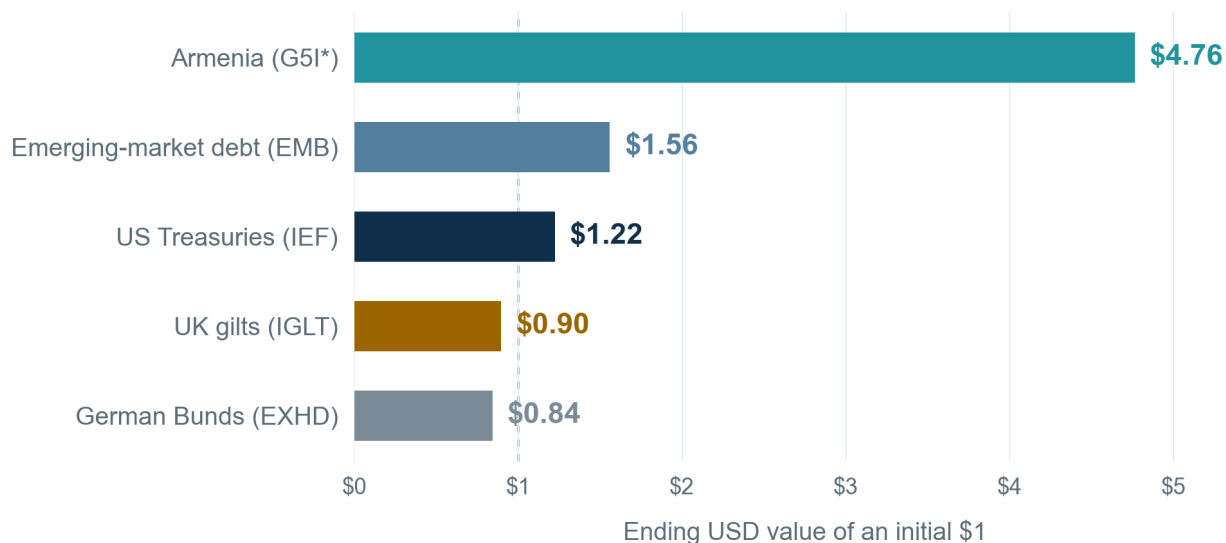


Figure 1. Value of an initial USD 1 at the common endpoint. G5I* includes an illustrative 1.00% annual expense; ETF returns already include their fund expenses.

Why Armenia led. With income reinvested across all five investments, Armenia delivered substantially stronger local-currency returns. Dram appreciation further increased its USD return.

What the comparison does not imply. G5I is a theoretical index, not an investable fund. Differences in credit risk, duration and liquidity remain; higher historical returns do not guarantee future performance.

The following pages provide the return tables, currency effects, cost sensitivity and assumptions.

Detailed returns and the path of growth

Full-period returns and annualized performance

Investment	Local amount start to end	Local total return	Local annualized	Ending USD value	USD total return	USD annualized
US Treasuries (IEF)	USD 1.0000 to 1.2231	+22.31%	+1.58%	USD 1.223	+22.31%	+1.58%
Germany (EXHD)	EUR 0.7276 to 0.7546	+3.71%	+0.28%	USD 0.843	-15.68%	-1.32%
UK gilts (IGLT)	GBP 0.6040 to 0.6707	+11.05%	+0.82%	USD 0.895	-10.50%	-0.86%
Emerging markets (EMB)	USD 1.0000 to 1.5592	+55.92%	+3.53%	USD 1.559	+55.92%	+3.53%
Armenia (G5I*)	AMD 405.6400 to 1,718.5449	+323.66%	+11.92%	USD 4.762	+376.21%	+12.95%

Table 1. Each investment begins with USD 1, converted at the opening exchange rate. G5I* deducts an illustrative 1.00% annual expense. ETF returns already include their fund expenses.

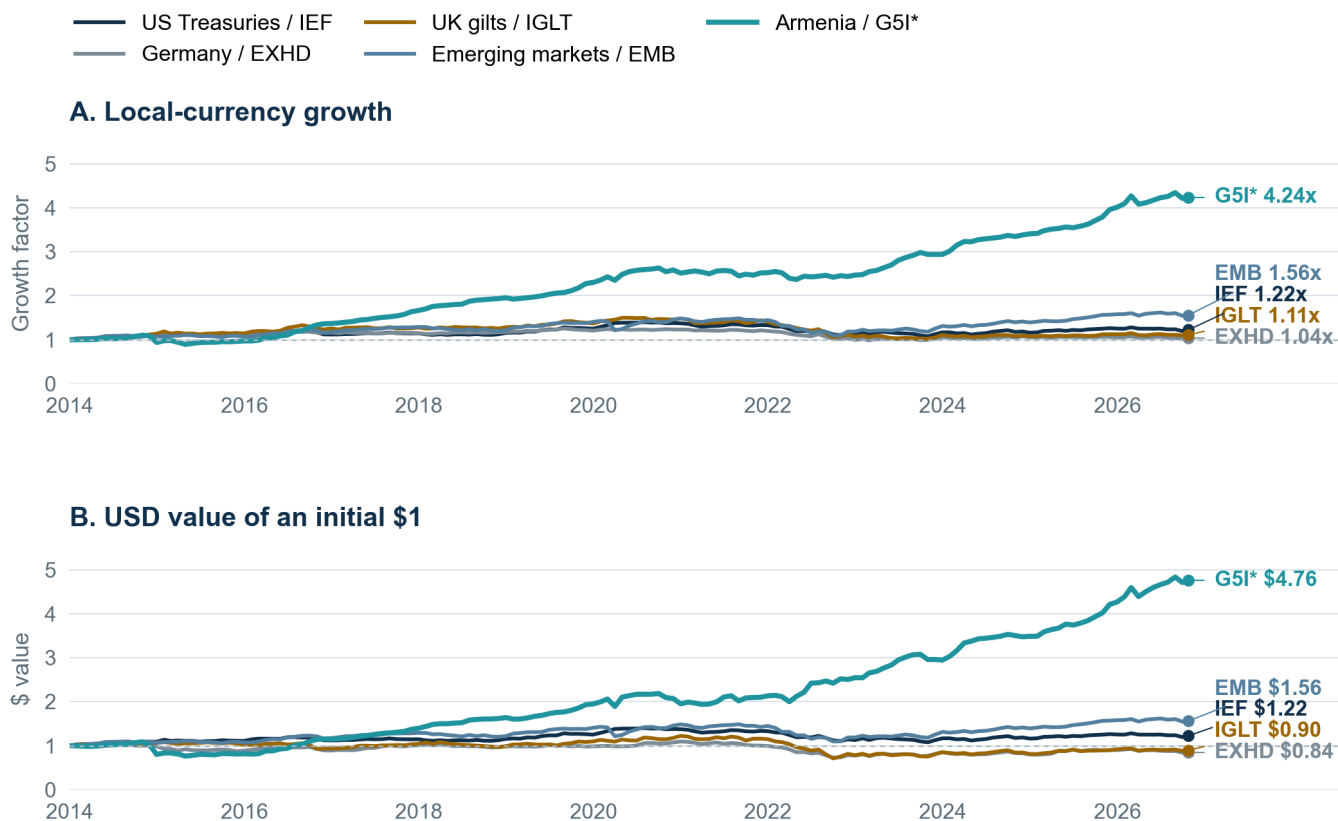


Figure 2. Local-currency growth and USD wealth, with all series rebased to 1. G5I* deducts an illustrative 1.00% annual expense. ETF returns already include their fund expenses. Sources: iShares, CBA and Dukascopy; KK Partners calculations.

Income, rates and currencies explain the gap

Currency attribution for a USD investor

Investment	Local total return	Currency change vs USD	FX contribution (pp)	USD total return	FX change in CAGR (pp/year)
US Treasuries (IEF)	+22.31%	+0.00%	+0.00	+22.31%	+0.00
Germany (EXHD)	+3.71%	-18.70%	-19.40	-15.68%	-1.61
UK gilts (IGLT)	+11.05%	-19.40%	-21.54	-10.50%	-1.68
Emerging markets (EMB)	+55.92%	+0.00%	+0.00	+55.92%	+0.00
Armenia (G5I*)	+323.66%	+12.40%	+52.55	+376.21%	+1.03

Table 2. Local total return plus FX contribution equals USD total return. The contribution includes the interaction between local returns and currencies.

After the expense assumption, G5I gains **323.66% in AMD**. The dram's 12.40% appreciation adds **52.55 pp**, bringing the USD return to **376.21%**. German and UK currency effects instead turn positive local returns into USD losses.

G5I's reported average portfolio coupons ranged from 10.01% to 12.29%. Its gross clean-price index rose 24.68%, well below total-return growth: coupons and reinvestment were central to the result.

The 2022 interest-rate shock

Investment	Local return	USD return
IEF	-15.23%	-15.23%
EXHD	-17.21%	-22.04%
IGLT	-23.83%	-31.86%
EMB	-18.03%	-18.03%
G5I*	-2.16%	+19.36%

Table 3. Calendar-year 2022 total returns. G5I* deducts an illustrative 1.00% annual expense. ETF returns already include their fund expenses.

Rising market yields reduce existing fixed-rate bond prices. The 2022 sell-off shows how capital losses can outweigh income, particularly after a low-yield starting period. IEF's price fell 8.37% over the full study, yet reinvested income produced a positive 22.31% total return.

Bond ETFs maintain market exposure as their portfolios change. Their return is different from buying one ten-year bond in 2014 and holding it to its 2024 maturity.

Returns from EUR and GBP perspectives

Each view begins with one unit of the investor's currency. All five are positive in EUR and GBP; the ranking remains G5I*, EMB, IEF, IGLT and EXHD.

Ending wealth and annualized returns

Investment	Ending EUR value	EUR total return	EUR annualized	Ending GBP value	GBP total return	GBP annualized
US Treasuries (IEF)	€1.504	+50.45%	+3.24%	£1.518	+51.75%	+3.31%
Germany (EXHD)	€1.037	+3.71%	+0.28%	£1.046	+4.61%	+0.35%
UK gilts (IGLT)	€1.101	+10.09%	+0.75%	£1.110	+11.05%	+0.82%
Emerging markets (EMB)	€1.918	+91.79%	+5.21%	£1.935	+93.45%	+5.28%
Armenia (G5I*)	€5.857	+485.75%	+14.79%	£5.908	+490.84%	+14.87%

Table 4. Each view begins with EUR 1 or GBP 1. G5I* deducts an illustrative 1.00% annual expense. ETF returns already include their fund expenses.

Currency contribution in EUR and GBP

Investment / investor currency	Local total return	Currency change vs investor	FX contribution (pp)	Investor total return	FX change in CAGR (pp/year)
IEF / EUR	+22.31%	+23.00%	+28.13	+50.45%	+1.65
IEF / GBP	+22.31%	+24.07%	+29.44	+51.75%	+1.72
EXHD / EUR	+3.71%	+0.00%	+0.00	+3.71%	+0.00
EXHD / GBP	+3.71%	+0.87%	+0.90	+4.61%	+0.07
IGLT / EUR	+11.05%	-0.86%	-0.96	+10.09%	-0.07
IGLT / GBP	+11.05%	+0.00%	+0.00	+11.05%	+0.00
EMB / EUR	+55.92%	+23.00%	+35.87	+91.79%	+1.69
EMB / GBP	+55.92%	+24.07%	+37.53	+93.45%	+1.76
G5I* / EUR	+323.66%	+38.26%	+162.09	+485.75%	+2.87
G5I* / GBP	+323.66%	+39.46%	+167.17	+490.84%	+2.94

Table 5. FX contribution is measured in percentage points of the total return. Own-currency investments have no FX contribution.

Currency translation applies the same multiplier to every ending growth factor, so it changes absolute returns but preserves the ranking. These investments are unhedged; a hedged share class would produce different results.

The same investments in three currencies

The investor's currency changes the gains and losses, while Armenia's lead persists in each view.

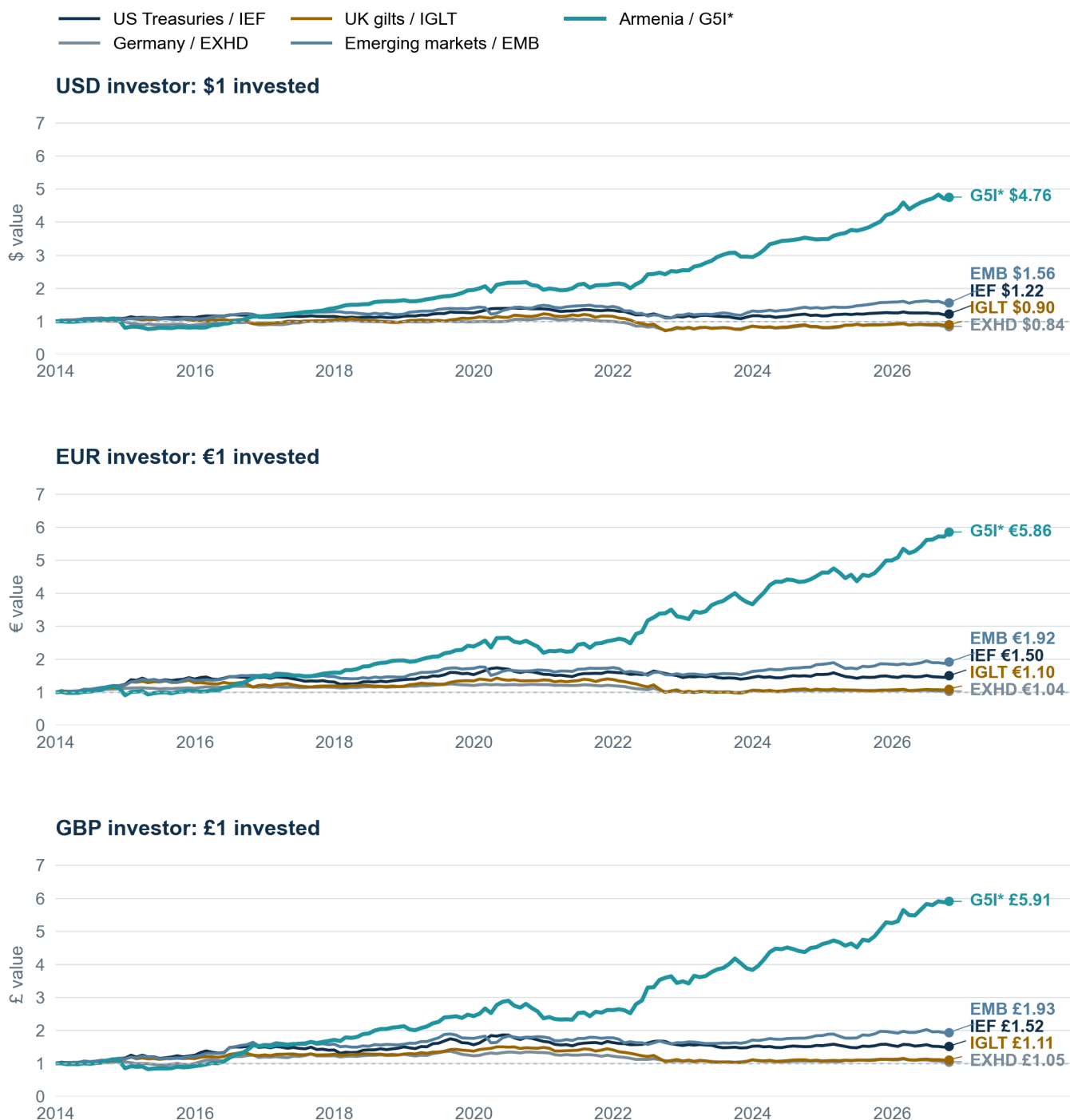


Figure 3. Wealth from an initial USD 1, EUR 1 or GBP 1. G5I* deducts an illustrative 1.00% annual expense. ETF returns already include their fund expenses. Sources: iShares, CBA and Dukascopy; KK Partners calculations.

Costs, assumptions and sources

Armenia: sensitivity to annual expenses

Annual expense assumption	Ending value of USD 1	USD annualized return	AMD annualized return
0.00% (gross index)	USD 5.413	+14.09%	+13.05%
0.50%	USD 5.077	+13.52%	+12.49%
1.00% (base case)	USD 4.762	+12.95%	+11.92%
1.50%	USD 4.467	+12.39%	+11.37%
2.00%	USD 4.189	+11.83%	+10.81%

Table 6. Hypothetical recurring expenses applied to G5I throughout the study; these are not realized returns of an existing fund.

The 1.00% assumption is a practical scenario, not a market average. AMFIX quotes 0.85% including custody and registrar fees; CAM quotes management fees of 0.4%-1.85% plus 0.15% custody, with other charges varying by class. These different products provide cost context, not G5I replication.

Scope. 1 January 2014 to 26 October 2026, using opening valuations at end-2013. Income is reinvested for all five investments, including ETF distributions. Annualized returns are compound growth rates over 12.82 years; inflation is not deducted.

Expenses. G5I is a theoretical index. The 1.00% annual expense is accrued continuously against its value throughout the period. ETF NAV returns already include fund expenses. Performance, entry/exit fees, trading costs, FX spreads and personal taxes are excluded.

Comparability. IEF holds 7-10-year Treasuries; EXHD covers German bonds with 5.5-10.5 years remaining; IGLT and EMB span maturities. G5I covers AMD government bonds with 5+ years remaining, uses curve-based valuations and reinvests coupon cash at the CBA deposit-facility rate.

Currency and risk. Returns use the last available exchange rate at each date; fixing times differ. Credit risk, duration, liquidity and valuation conventions remain unequal after the fee adjustment. Historical outperformance is not a forecast.

Sources

Data: IEF; EXHD; IGLT; EMB; G5I.

Index method: Central Bank of Armenia. FX: Dukascopy EUR/USD and GBP/USD; CBA AMD/USD reference rates.

Market context: Bank of England, December 2022; European Commission, 2020.

Expense references: Amundi-ACBA AMFIX; CAM Government Securities Fund. Sources accessed 27 October 2026. Calculations by KK Partners.