

18 Oct 2026 · Study: Gold market risk · Research note 13

Best day of the week for gold: 20 years of XAUUSD weekday returns

Huyen X. Vu · Quantex Research, AlgoTrade Pte. Ltd., Singapore · ORCID 0000-0002-2209-842X

Abstract

Is there a best weekday for gold? Using 5,138 daily XAUUSD closes from 2005 to 2024 we compare the mean, median and share of up days by weekday, with sign tests corrected for five comparisons. Friday was the strongest day (mean +0.127%, up on 56.3% of Fridays; $p = 0.000050$) and the only weekday that passes the test; it was the best weekday in both decades and positive in 18 of 20 years. Monday was the weakest (mean -0.031%). The edge is small: the Friday–Monday gap is 0.158 percentage points against a typical daily move of 1.078%.

Keywords: gold; XAUUSD; day-of-the-week effect; calendar anomalies; sign test

JEL: G14; Q02

Highlights

- **Friday was the strongest day.** Mean +0.127%, median +0.134%, up on 56.3% of Fridays (572 of 1,016).
- **Monday was the weakest day.** Mean -0.031%, median 0.000%, up on 49.6% of Mondays. It was the only weekday with a negative mean.
- **Friday passes a strict test.** Its sign test p -value is 0.000050, below the 0.01 level we use for testing 5 weekdays at once. It also rose more often than the other four days (p 0.004). No other weekday passes at 0.01.
- **It held in both decades.** Friday was the best weekday in 2005-2014 (+0.163%) and in 2015-2024 (+0.090%). Friday had a positive mean in 18 of 20 years.
- **The edge is small.** The gap between the Friday and Monday means is 0.158 percentage points. A typical day moved 1.078% up or down (standard deviation).

1. Introduction

Is there a best day of the week for gold? We took 5,138 daily closes of XAUUSD from January 2005 to December 2024 and grouped each day's return by weekday. For each weekday we show the mean, the median, the share of up days, the best and worst day, and a simple test of whether the up count could be chance.

2. Data and method

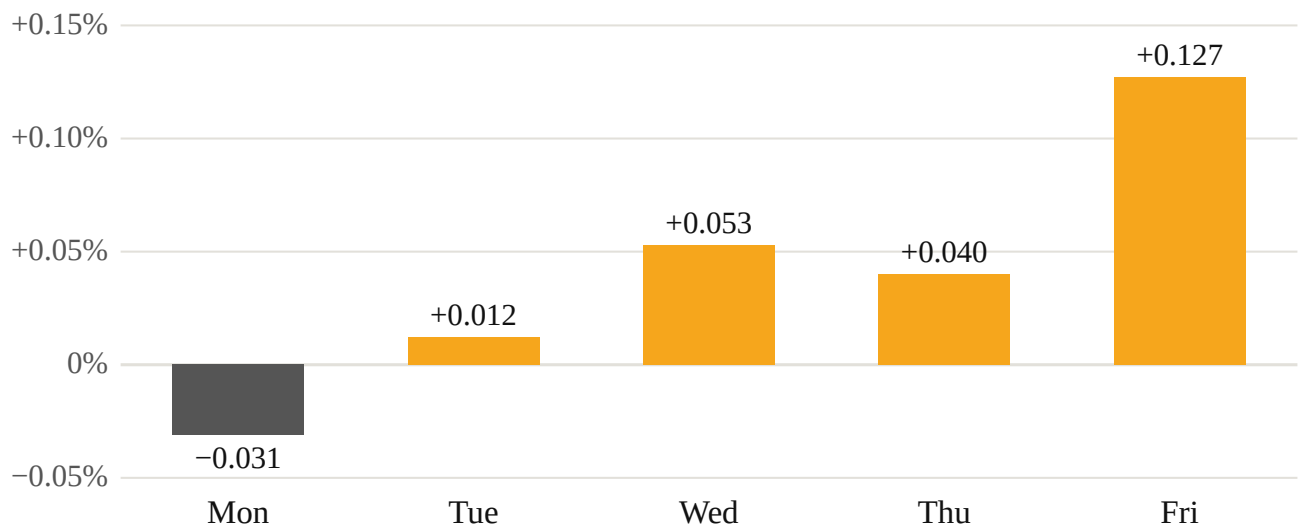
Method

1. **Data:** daily XAUUSD bars from the public dataset "xauusd-gold-price-historical-data-2004-2025" on Hugging Face (file XAU_1d_data.jsonl), the same file as notes 08, 09, 11 and 12. Window 3 Jan 2005 to 31 Dec 2024, 5,138 days, the same days as note 08. 2004 is a part year and 2025 has long gaps, so both are left out.
2. **Daily return:** close divided by the previous available close, minus 1. The first day uses the 30 Dec 2004 close. The weekday is the broker's server date of the bar. There are no Saturday or Sunday bars.
3. **Holes and holidays:** the two known holes (November 2005 and November 2006, Thanksgiving Thursday and Friday missing) make the next Monday span three trading days, so those 2 days are left out. 74 other days follow a single missing weekday (a holiday) and are kept.

4. **Tests:** exact two-sided sign test (binomial, 50%) on up vs down days; the 14 flat days are left out. Bonferroni level $0.05 / 5 = 0.01$. Second test: each weekday's up count against the up share of the other four days (exact binomial). t-stat = mean / (SD / square root of days).
5. **Cross-check:** 2,706 up, 2,418 down and 14 flat days, a largest rise of +10.99% (17 Sep 2008) and a largest fall of -9.06% (15 Apr 2013), the same as note 08.

3. Results

Gold return by day of the week



Mean daily return in %, XAUUSD, 2005 to 2024 (1,016 to 1,036 days per bar). Source: our calculation on the Hugging Face daily file (see Method).

Gold (XAUUSD) daily return by weekday, 2005 to 2024

Weekday	Days	Mean	Median	SD	Up days	Sign test p
Monday	1,019	-0.031%	0.000%	1.045%	49.6%	0.950
Tuesday	1,034	+0.012%	+0.061%	1.074%	53.1%	0.046
Wednesday	1,036	+0.053%	+0.065%	1.066%	53.1%	0.037
Thursday	1,033	+0.040%	+0.030%	1.099%	51.3%	0.401
Friday	1,016	+0.127%	+0.134%	1.103%	56.3%	0.000050
All days	5,138	+0.040%	+0.054%	1.078%	52.7%	0.000061

Best and worst single day by weekday

Weekday	Best day	Worst day
Monday	+3.85% (1 Dec 2014)	−9.06% (15 Apr 2013)
Tuesday	+5.55% (4 Nov 2008)	−6.41% (13 Jun 2006)
Wednesday	+10.99% (17 Sep 2008)	−5.48% (22 Oct 2008)
Thursday	+4.28% (11 Feb 2016)	−4.96% (16 Oct 2008)
Friday	+7.38% (21 Nov 2008)	−6.94% (10 Oct 2008)
All days	+10.99% (17 Sep 2008)	−9.06% (15 Apr 2013)

Daily return = close divided by the previous available close, minus 1. The weekday is the broker's server date of the bar. "Up days" = share of days with a positive return. Best and worst day = the single largest rise and fall for that weekday. SD = standard deviation of the daily return. Sign test p = chance of an up/down split at least this uneven if each day were a coin flip (two-sided; flat days left out). Source: our calculation, file weekday_stats.csv.

More up days, not bigger ones

Friday's average up day was +0.804% and its average down day −0.750%, close to the all-days figures of +0.761% and −0.767%. So most of Friday's lead comes from how often it rose, not from bigger moves.

Size is close for every weekday. The standard deviation ran from 1.045% to 1.103%. Monday had the lowest, but it also holds the largest fall in the sample: −9.06% on 15 Apr 2013. The largest rise was +10.99% on 17 Sep 2008, a Wednesday.

Is any weekday a real edge?

Gold rose over these 20 years, so up days were more common than down days: 52.7% of all 5,138 days were up (sign test p 0.000061). A test against 50% partly measures that trend. So we also compare each weekday with the other four days.

- **Friday:** sign test p 0.000050. Against the other four days, where 51.9% of moving days were up, p is 0.004. Its mean is 3.66 standard errors above zero. Friday passes both tests at the 0.01 level.
- **Monday:** sign test p 0.950. Against the other four days (53.5% up), p is 0.020. That is below 0.05 but not below 0.01.
- **Tuesday and Wednesday:** sign test p 0.046 and 0.037, below 0.05 but not below 0.01. Against the other days they look normal (p 0.803 and 0.708).
- **Thursday:** sign test p 0.401. No sign of an edge.

Why 0.01? We tested 5 weekdays. With 5 tries, one weekday can pass at 0.05 by luck. The Bonferroni rule divides 0.05 by 5.

Does it hold over time?

Gold (XAUUSD) mean daily return by weekday, two halves

Weekday	2005-2014 mean	Up days	2015-2024 mean	Up days
Monday	-0.028%	49.7%	-0.034%	49.4%
Tuesday	-0.001%	52.4%	+0.025%	53.8%
Wednesday	+0.076%	54.6%	+0.030%	51.5%
Thursday	+0.019%	52.0%	+0.062%	50.7%
Friday	+0.163%	56.7%	+0.090%	55.9%
All days	+0.046%	53.1%	+0.035%	52.2%

Mean daily return and share of up days, split into two 10-year halves. Source: our calculation, file weekday_by_era.csv.

Friday was the best weekday and Monday the worst in both halves. Friday's mean fell from +0.163% to +0.090%, but it still passed the sign test at 0.01 in 2015-2024 (p 0.009). Year by year, Friday was the best weekday in 8 of 20 years and had a positive mean in 18. Monday had a positive mean in only 7 of 20 years.

Holidays, gaps and Monday

The file has no Saturday or Sunday bars. So the Monday return runs from the Friday close to the Monday close and includes the weekend. 74 days came after a missing weekday, such as a Monday after a holiday Friday. 26 of them were Mondays. We kept them and used the previous available close. Without those days the Monday mean is -0.035%.

Two days were left out, the same as in notes 08 and 11: 28 Nov 2005 and 27 Nov 2006. Both came after a two-day hole for Thanksgiving. Putting them back moves the Monday mean to -0.028%.

4. Discussion

What this means for an EA

- A "long on Friday" filter has the best support of any weekday here. But the average Friday was only +0.127%. Spread, swap and slippage come off that. Test any weekday rule on data the rule did not see.
- Do not size risk by weekday. Every weekday moved about the same amount. For how wide a day gets by hour and session, see note 10. For the daily range by year and month, see note 11.
- Compare with the month view in note 12: no calendar month passed its test, while Friday does here. The weekday effect is clearer but tiny per day.

5. Limitations

Limits

- **One data source.** Not checked against a second feed. Other brokers close the day at other hours, which moves some hours from one weekday to the next.
- **Broker day.** The weekday is the broker's server day, not New York or London time.
- **Price only.** No spread, swap or slippage is included. We did not test a trading rule.
- **Small effects.** A daily mean of +0.127% is small next to normal daily moves. Three weekdays passed the plain test at 0.05; only Friday passed at 0.01. Every number here comes from our own script. The data ends in 2024 for

this note.

Appendix

Related notes

- The same question by calendar month: Gold seasonality by month: 20 years of XAUUSD returns.
- Which hours and sessions make the daily range: XAUUSD average range by hour and session.
- How wide a gold day is by year and by month: XAUUSD average daily range: 20 years of gold data by year and month.

FAQ

What is the best day of the week for gold?

From 2005 to 2024 Friday was the best day on average: a mean return of +0.127% and a median of +0.134%, with gold up on 56.3% of Fridays. Friday was also the best weekday in both 2005-2014 and 2015-2024.

What is the worst day of the week for gold?

Monday. Its mean return was -0.031% and its median 0.000%, and gold rose on only 49.6% of Mondays. The Monday return runs from the Friday close to the Monday close, so it includes the weekend.

Is the Friday effect in gold real?

It passes our tests on this data. The sign test p-value is 0.000050, below the 0.01 level we use for 5 weekdays, and Friday rose more often than the other four days (p 0.004). But the effect is small: +0.127% a day against a typical daily move of 1.078%, before spread and swap.

Does the weekday matter for a long-term gold buyer?

Very little. Monday was the only weekday with a negative mean (-0.031%) and Friday had the highest (+0.127%), but a typical day moved 1.078% up or down. Over all 5,138 days gold rose on 52.7% of days, with a mean of +0.040% a day.

References

- XAUUSD daily data: Hugging Face, ZombitX64/xauusd-gold-price-historical-data-2004-2025 (file XAU_1d_data.jsonl, revision ff6469dc, downloaded 18 Oct 2026). The dataset card names the Kaggle dataset "novandraanugrah/xauusd-gold-price-historical-data-2004-2024" as its source.

Declarations

- **Author:** Huyen X. Vu, Quantex Research, AlgoTrade Pte. Ltd., Singapore (ORCID 0000-0002-2209-842X).
- **Data availability:** Daily XAUUSD prices from a public dataset (Hugging Face, ZombitX64/xauusd-gold-price-historical-data-2004-2025), as described in the Method section. Our calculation files are available on request.
- **Use of AI tools:** Data processing, analysis code and drafting were assisted by AI tools (Claude, Anthropic). The author checked the results and is responsible for the content.
- **Conflict of interest:** The author is the founder of AlgoTrade Pte. Ltd., which develops and runs systematic trading models.
- **Funding:** No external funding.
- **Peer review:** Not yet peer reviewed. Comments are welcome at info@quantex.com.sg.
- **How to cite:** Vu, H. X. (2026). Best day of the week for gold: 20 years of XAUUSD weekday returns. Quantex Research, AlgoTrade Pte. Ltd. <https://quantex.com.sg/research/2026-10-18-gold-day-of-week-returns/>