

Data for

Option Prices, Analyst Expectations, and Stock Returns

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September, 2026

Version 1.0

We provide the option-implied expected excess returns used in [Martin, Rodenkirchen, Wagner, and Wang \(2026\)](#), from January 1996 to August 2025, at the level of the S&P 500 index and at the level of individual index constituents, for forecast horizons of $h = 30, 91, 182$, and 365 days. The index-level measure follows [Martin \(2017\)](#) and the stock-level measure follows [Martin and Wagner \(2019\)](#). Section [1](#) provides an overview of the data files. Section [2](#) describes the sample and the underlying data. Section [3](#) summarizes how the measures are constructed.

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1 Files and variables

We provide four comma-separated files, at daily and at month-end observation dates:

	Index level	Stock level
Daily	<code>svix.market.daily.csv</code>	<code>oiret.daily.csv</code>
Month-end	<code>svix.market.monthly.csv</code>	<code>oiret.monthly.csv</code>

All files carry the observation date in column `date`, in YYYY-MM-DD format; the two frequencies share the same trading-day calendar, i.e. the month-end files are subsets of the daily files, observed on the last trading day of each calendar month. Both stock-level files identify securities by CRSP PERMNO in column `permno`.

The remaining columns hold the expected excess returns, one per horizon, with the horizon in days appended to the variable name:

Column	Symbol	Description
<code>exp_ret_market_h</code>	$\text{OIRet}_t^{(h)}$	index-level expected excess return over h days
<code>exp_ret_stock_h</code>	$\text{OIRet}_{i,t}^{(h)}$	stock-level expected excess return over h days

with $h \in \{30, 91, 182, 365\}$, so that, for instance, `exp_ret_stock_91` is the stock-level measure at a 91-day horizon. In the data, all $\text{OIRet}_t^{(h)}$ and $\text{OIRet}_{i,t}^{(h)}$ are per annum.

2 Data and sample

The sample runs from 4 January 1996 to 29 August 2025, determined by the availability of options data, and covers the S&P 500 index and its constituent stocks. A stock is included only on days on which it is a member of the index.

CRSP. Index membership and market capitalizations are obtained via WRDS:

- Daily index constituents come from the S&P 500 constituent list as adapted by WRDS (`dsp500list_v2`).
- Market capitalizations, used for the value weights $w_{i,t}$ in equation (3) below, are computed from the CRSP Daily Stock File V2 (`dsf_v2`) as price times shares outstanding.

OptionMetrics IvyDB US. Option and price data also come from WRDS, using the daily files:

- Volatility surface (`vsurfd`): prices and strikes of synthetic out-of-the-money puts and calls, from which the risk-neutral variances are computed.
- Zero curve (`zerocd`): the continuously compounded zero-coupon rates used for the risk-free rate and for forward prices.
- Security prices (`secprd`): spot prices of the index and of individual stocks.

Merging CRSP and OptionMetrics. The two sources are linked with the OptionMetrics CRSP Link provided by WRDS, `wrdsapps_link_crsp_optionm.opcrsphist`, which assigns a CRSP PERMNO to each OptionMetrics security identifier and hence to each option-implied measure. PERMNO is the identifier reported in the released stock-level files.

3 Construction

Throughout this section we fix horizon h and, for ease of reading, suppress it from the notation: $\text{OIRet}_{i,t}$ stands for $\text{OIRet}_{i,t}^{(h)}$; every quantity below refers to the same horizon or maturity h .

Let $R_{f,t+h}$ denote the gross risk-free rate from t to $t+h$, with h measured in days, so that $h/365$ is the horizon as a fraction of a year. Write

$$\text{SVIX}_t^2 = \frac{365}{h} \text{var}_t^* \left(\frac{R_{t+h}}{R_{f,t+h}} \right), \quad \text{SVIX}_{i,t}^2 = \frac{365}{h} \text{var}_t^* \left(\frac{R_{i,t+h}}{R_{f,t+h}} \right)$$

for the annualized risk-neutral variances of the h -day return on the index and on stock i , respectively. The risk-neutral variances can be measured from option prices. For any security with spot price $S_{i,t}$ and h -day forward price $F_{i,t}$, we compute

$$\text{SVIX}_{i,t}^2 = \frac{365}{h} \frac{2}{R_{f,t+h} S_{i,t}^2} \left\{ \int_0^{F_{i,t}} \text{put}_{i,t}(K) dK + \int_{F_{i,t}}^\infty \text{call}_{i,t}(K) dK \right\}, \quad (1)$$

where $\text{put}_{i,t}(K)$ and $\text{call}_{i,t}(K)$ are prices of out-of-the-money put and call options with strike K expiring at $t+h$ (Martin, 2017). Equation (1) applies to the index as well, with the index spot, forward, and option prices in place of those of stock i .

We discretize equation (1) over the strikes available in the volatility surface, and we require at least two out-of-the-money puts and two out-of-the-money calls for the integral to be evaluated.¹ Forward prices are $F_{i,t} = S_{i,t} e^{rh/365}$, with r the continuously compounded zero-coupon rate at h days to maturity taken from the zero curve.

At the index level, we measure the equity premium of Martin (2017),

$$\text{OIRet}_t = R_{f,t+h} \text{SVIX}_t^2. \quad (2)$$

¹The OptionMetrics volatility surface data has changed since Martin and Wagner (2019) was written; in 2019 the range of absolute deltas was widened, for the history as well as going forward. Hence, the values in the updated data do not exactly reproduce those of Martin and Wagner (2019) in the overlapping sample. We also compute the index-level measure from the volatility surface, for consistency with the stock-level measure, as in Martin and Wagner (2019); whereas Martin (2017) uses option price data.

The stock-level measure of expected excess return is that of [Martin and Wagner \(2019\)](#),

$$\text{OIRet}_{i,t} = R_{f,t+h} \left[\text{SVIX}_t^2 + \frac{1}{2} \left(\text{SVIX}_{i,t}^2 - \overline{\text{SVIX}_t^2} \right) \right], \quad (3)$$

where $\overline{\text{SVIX}_t^2} = \sum_j w_{j,t} \text{SVIX}_{j,t}^2$ is the value-weighted average of the stock-level risk-neutral variances of S&P 500 constituents.

To obtain the effective h -day option-implied expected excess return multiply OIRet_t and $\text{OIRet}_{i,t}$ by $h/365$.

References

- Ian W. R. Martin. What is the expected return on the market? *Quarterly Journal of Economics*, 132(1):367–433, 2017.
- Ian W. R. Martin and Christian Wagner. What is the expected return on a stock? *Journal of Finance*, 74(4):1887–1929, 2019.
- Ian W. R. Martin, Moritz Rodenkirchen, Christian Wagner, and Andrew Wang. Option prices, analyst expectations, and stock returns. Working paper, 2026.