SUMMARY & OVERVIEW

In this note we use the S&P500 as a proxy to help answer the following question: how good is the stock market at predicting recessions? As we'll demonstrate, its track record is quite solid.

We think examining this is a worthwhile endeavor particularly for us, simply because we're using data from publicly traded companies as the foundation for evaluating the state of the U.S. economy. Investors, by contrast, are using a lot of the exact same data, but they're using it to help them figure out what to pay for stocks. You might say then that investors are looking at the "micro" and we're looking at the "macro."

Equity investors' decisions about what to pay for stocks therefore send important directional signals for how they're interpreting the data coming out of publicly traded companies. Because markets are very good at predicting definable questions, and because most companies are ultimately subject to the rising or falling tides that undergird the economy in general, the stock market has historically been a good barometer for predicting our impending economic fortunes. **As we'll show in this note, since 1965, when the S&P500 has a drawdown (i.e. "decline") of 15-20%, a recession has historically followed (or been ongoing) about 50% of the time, while greater declines of 25-30% put recession likelihoods at closer to 70-80%.** A 15% market decline then ought to be a wake-up call to forecasters, while something greater than that ought to be a red alert.

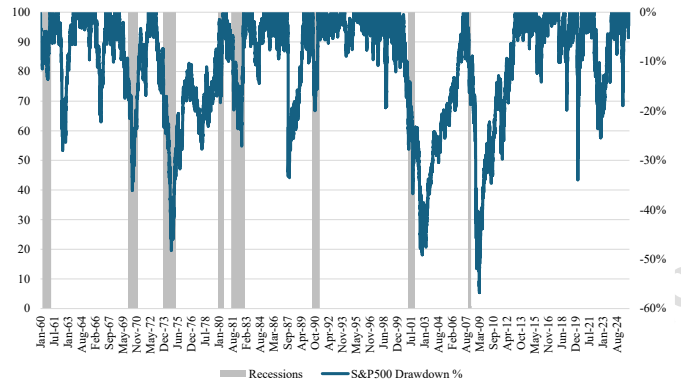
Definitions and conditions are key to this analysis, so before we go any further, let's clarify a few things:

- First, a "drawdown" for us begins when a given threshold is reached (15%, 20%, etc.) and ends when the previous market peak from which that drawdown began is surpassed (so in other words, the market makes new all-time highs).
- Second, we don't double-count "double-dips". So the '00-02 bear market, for example, counts as one only drawdown, despite there being multiple "bear market rallies" throughout that period.
- Third, we say a drawdown "predicts" a recession when it happens either before (figure 6-12 months later) or essentially coincidently with a recession, especially since recessions are always dated after the fact. Our goal is to be fair here, not excessively technical or academic. Frankly, a simple but sane look at the S&P's drawdowns relative to the timing of recessions (see the chart on the next page) is as good a judge as any.
    - *By way of example, we'd absolutely give the market credit for the '01 recession, even though the market didn't bottom until well after that in October of 2002. Why? Because by the time the recession started, the market had already declined 19%, and by the middle of the recession, declines had exceeded 30%.*

We then compare the recession hit rates of the market to that of economists by using the Philadelphia Fed's "Anxious Index." This dataset comes from the Phila Fed's Survey of Professional Forecasters, where each quarter they ask economists for the probability that real GDP will decline in the quarter after the survey is taken. Because the survey does not explicitly ask about recession odds (which is technically *two* quarters of negative real GDP in a row), however, the Anxious Index is only an indirect recession proxy rather than an explicit probability indicator. That said, its probably the best we've got, especially given it's a key part of the oldest running quarterly survey of macroeconomic forecasters in the United States.

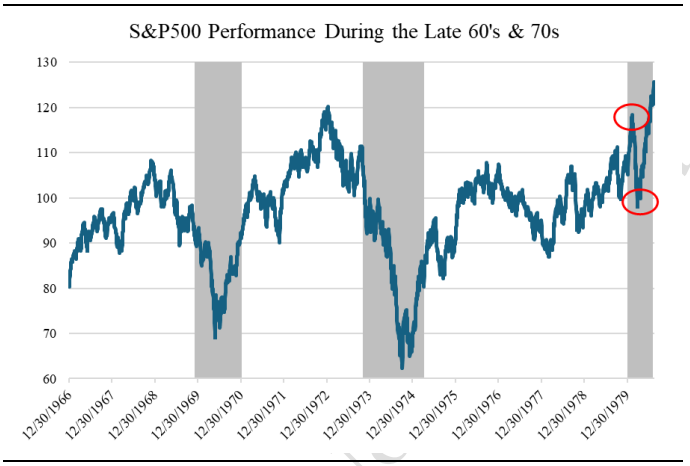
THE MARKET'S RECESSION PREDICTING TRACK RECORD

According to the National Bureau of Economic Research (NBER), which is the nation's recession-dating committee, there have been eight recessions since 1965. By contrast, the S&P500 has declined by 10% or more 22 times over that period, by 15% or more 14x, by 19% or more 13x, and by over 20% (historically the threshold for a "Bear Market") 10x. Below is a chart showing these historical S&P500 drawdowns compared to recessions. As you can see, there's considerable overlaps between significant drawdowns and recessions (grey bars).



Source: Yahoo! Finance, *The Curb Economist*

Importantly, however, by using the definition that we do (where a drawdown only ends after the market makes new all-time highs), the 1980 recession (which we'll call the "Carter Credit Contraction") is consequently excluded. The reason for this exclusion is only because the market was still working its way out of the nasty bear market of the mid 1970s, and therefore hadn't made new highs to that point. It therefore didn't even have a chance to "drawdown" using our definition. Our denominator then in this analysis will only be 7 recessions rather than the 8 that have technically occurred. For what it's worth, the market declined almost 20% in just over a month in February and March of 1980 (one of the most abrupt falls on record), so it was far from asleep at the wheel.



Source: Yahoo! Finance, *The Curb Economist*

Now here is a table for all drawdowns exceeding 10% with context. The date is the day where the peak of the drawdown was reached, for reference.

Drawdown #	Peak Decline Date (Trough)	Max Decline (%)	Recession?	Context
1	25-Oct-60	-13.56%	No	1960 Recession
2	26-Jun-62	-27.97%	No	Flash Crash of 1962
3	7-Oct-66	-22.18%	No	1966 Credit Crunch
4	5-Mar-68	-10.11%	No	Early 1968 Dip
5	26-May-70	-36.06%	Yes	1969-70 Bear Market
6	3-Oct-74	-48.20%	Yes	1973-74 Oil Crisis
	1Q-2Q 1980		Yes	Carter Credit Contraction
7	12-Aug-82	-27.11%	Yes	Double-Dip Recession
8	24-Jul-84	-14.38%	No	1983-84 Mid-Cycle Correction
9	4-Dec-87	-33.51%	No	Black Monday
10	30-Jan-90	-10.23%	No	Early 1990 Dip
11	11-Oct-90	-19.92%	Yes	Gulf War Recession
12	27-Oct-97	-10.80%	No	Asian Financial Crisis
13	31-Aug-98	-19.34%	No	Russian Default / LTCM
14	15-Oct-99	-12.08%	No	Pre-DotCom Correction
15	9-Oct-02	-49.15%	Yes	Dot-Com Bubble Burst
16	9-Mar-09	-56.78%	Yes	Great Financial Crisis
17	11-Feb-16	-14.16%	No	2015-16 Energy/China Slump
18	8-Feb-18	-10.16%	No	"Volmageddon"
19	24-Dec-18	-19.78%	No	2018 Christmas Eve Selloff
20	23-Mar-20	-33.93%	Yes	COVID-19 Crash
21	12-Oct-22	-25.43%	No	2022 Inflation/Rate Hikes
22	8-Apr-25	-18.90%	No	"Liberation Day" Shock

Source: Yahoo! Finance, Google Gemini, *The Curb Economist*

If we start by using a 10% decline as the opening recession-predicting-threshold, the market has a 32% hit rate. A 10% drawdown occurred in each case of recession, though the market feared recession in 15 other cases as well that never came. It therefore didn't "miss" any recessions by *not*

predicting them, it just predicted recessions too often.

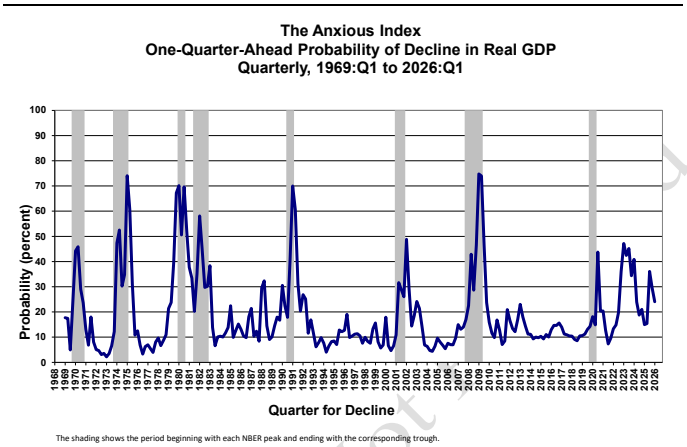
As the table below shows, if we use thresholds of 15%, 19%, 20%, 25% and 30%, the S&P500 has correctly forecasted recessions 50% of the time (7 out of 14), 54% of the time (7 out of 13), 60% of the time (6 out of 10), 67% of the time (6 out of 9) and 83% of the time (5 out of 6), respectively. Interestingly, the market's only miss on recession where it declined by greater than 30% was the October 1987 crash. While this shows the market clearly isn't infallible, its track record is pretty good, especially using larger declines as recession thresholds.

Drawdown	# of Times	Hit Rate
10%	22	32%
15%	14	50%
19%	13	54%
20%	10	60%
25%	9	67%
30%	6	83%

Source: Yahoo! Finance, *The Curb Economist*

HOW DO ECONOMISTS FARE IN PREDICTING RECESSIONS?

As we noted earlier, we'll use the Phila Fed's "Anxious Index" as the proxy for economists' recession predicting power. The most recent survey, for example, taken in the 4th quarter of 2025, showed an Anxious Index of 24%, which indicates that forecasters believe there is a 24% chance that real GDP will decline in the first quarter of 2026. Below is a chart showing how this data looks relative to recessions going back to 1968.



Source: Philadelphia Fed, *The Curb Economist*

There's a couple things that jump out at you upon first glance of the chart:

- First, the chart does tend to spike around recessions, indicating increased bearishness from economists around periods of economic contraction
- Second, the chart tends to max out around 70% (indicating economists think there's a 70% chance of negative GDP in the next quarter). This happened in 1975, 1980 and 1982, 1991 and 2009. This tells you that even in seemingly the ugliest economic scenarios, economists seem to top out in their predictions for recession at around a 70% chance
- In three recessions (early 1970s, the '01 recession, and the COVID recession), the Index actually peaked below 50%, even while we were in the middle of recession.
    - One of these instances was actually the COVID recession. On the one hand, this seems remarkable given the abruptly halting nature that economic activity followed during that period. On the other hand, economists could arguably get more of a pass here because of the steep and short nature that the 2020

COVID recession followed. It could very well be that by the time economists turned negative, they were already turning positive again, and the survey's timing (which appeared to be done in February and May of 2020) resulted in the Anxious Index missing the greatest degree of bearishness.

- A closer look at the chart, however, shows that economists' expectations for negative GDP growth actually tend to peak just as the recession is *ending*. So even if we decided to liberally use 50% as the threshold for economists being very negative and feeling highly convinced about recession, they do seem to routinely be late to the party.
- Lastly, while you can't tell just from observation, the series average since 19.3%. That means that in a given quarter, economists think there's almost a 1 in 5 chance that the economy could contract next quarter.

All this probably tells us that a decent amount of the time, economists are a fairly optimistic bunch. This is actually pretty rational, simply because the economy spends the vast majority of its time *not* in recession. It does, however, seem to affect their predictive power when it comes to recessions.

One way to quantitatively approach the question of economists' "hit rate" is to look at a table and see what economists are typically forecasting for the quarter a recession actually starts, and then to look at what they're forecasting the next two quarters after that as well (in theory in those quarters things likely become a bit clearer to decipher, but hardly ever obvious). The below table does just that.

Recession	1st Qtr of Recession	Above Series Avg?	2nd Qtr of Recession	Above Series Avg?
1969	24.32	1	44.23	1
1973	12.22	0	47.35	1
1980	70.13	1	50.56	1
1982	20.23	1	35.18	1
1990-91	17.86	0	41.54	1
Dot-Com Burst	10.91	0	31.65	1
GFC	16.95	0	22.51	1
COVID	18.14	0	14.88	0
Avg.	23.85		35.99	
Series Avg.	19.29			

Source: SEC Filings, *The Curb Economist*

What this table tells us is that historically, for quarters where recessions actually started, economists have only thought recession was about 24% likely, which isn't far above the series average of 19%. So it's fair to say that three months out, economists aren't very good at seeing coming recessions.

If we move one quarter forward (where we're now in the recession but still don't technically know it), economists are still only predicting a 36% chance of a contraction. In this case, yes, economists are almost twice as bearish as they normally are about the pending state of the economy, but the absolute odds of recession are still pretty low. It's therefore hard to say their predictive power here is very good either.

If a recession happens to last a third quarter, it's only then where economists are predicting a better than 50% chance of recession. "Better late than never" seems to be the apt phrase here, but given economists as a group are still only calling recession odds a coin flip 6-9 months after the fact, it's hard to use this as evidence that their recession-predicting track record is "good." This is a little bit like saying economists deserve credit for saying the house "might" be on fire when the fire department has already shown up to fight the flames.

The most favorable read of economists' track record might be to grade them on a curve, where anything approaching a 50% chance of recession is the equivalent of economists "calling" for a recession, even though the absolute chance is still only a coin clip. It's one thing to mentally adjust the data

ourselves in this fashion, but it's quite another to simply give economists greater credit for recession predictions simply because they collectively tend to be too optimistic (and then subsequently too late as well). This seems to be the definition of "grade inflation."

In this vein, the other thing that stands out about the Anxious Index chart is the lack of "false alarms." It's exactly this that economists tend to give the stock market a hard time about. Economists' disdain for the stock market's predictive power ultimately derives from the notion that the market shifts its views about the economy around much more than economists do, and this is what produces MIT economist Paul Samuelson's sarcastic claim that the stock market had predicted 9 out of the last 5 recessions.

But this begs the question: is it actually better that we have fewer false alarms, or better that we have more of them? If we're making policy, fewer false alarms means the Federal Reserve is likely going to act too late to avoid unnecessary damage to incomes and jobs. Too early might mean the Fed cuts rates sooner than it ought to and maybe has to deal with greater inflation as a result. We at *The Curb Economist* would argue that damage not done with perhaps a bit more inflation temporarily is far better than more damage done with less inflation and lost jobs.

CONCLUSION

In conclusion, we know this exercise has nuance to it. Our question from the beginning was how good the market was at *predicting* recessions. It's therefore not lost on us that in several instances of large market declines that we claim to be "predictive" (the 1990 and 2007-09 recessions come to mind), the market had actually only modestly declined by the time the recession technically started. Does this really constitute "predicting" a recession then? And as we've noted, economists could take issue with us using the Anxious Index as a recession proxy even though it's only asking about next quarter's GDP, not a recession.

All this being said, we know this important question can be a scientific academic exercise. But it really doesn't have to be, and we don't think it should be. Defining recessions is in and of itself just as much art as it is science. In the case of the 1990 recession, for example, yes, the market had only declined about 2% from its peak when the recession technically started in July of 1990. But it subsequently declined another 18% over the next five months. That is clearly a signal that something undesirable was coming for the economy.

The case of the 2007-09 recession and corresponding drawdown is even more telling. Yes, the market had only declined 6% peak to trough when the recession technically started in December 2007. But over the next three quarters, the market declined by 12, 15, and 35% versus the prior peak. By the fall of 2008, the stock market wasn't subtle about what it thought was coming down the pipe for the American economy.

Given all this, we think you can draw the following conclusions:

- First, the stock market's historical track record of predicting recessions is generally quite good, especially if we use 25-30% declines as the threshold (which produces a 70-80% hit rate). Paul Samuelson had a point when he made his famous quip, but Samuelson's claim, which was meant to insult the market's predictive power and defend economists', was ultimately too simplistic. If we use a 5% decline as the threshold, then sure, the market gets recession calls wrong a good amount of the time. But we can adjust for this and move our threshold higher to increase the odds that a recession is either already happening,

or imminent. We don't have to use a 5% or 10% decline to conclude the market is predicting recession. Market declines of 15% ought to be a splash of cold water to the face of forecasters, with greater declines of 25-30% indicating a very high likelihood of recession.

- Second, Samuelson failed to ask the logical follow up question: as opposed to who? Or what? Economists' forecasts would be the logical alternative to using the stock market, and it's likely exactly this that Samuelson was hoping to remind people of with his remark. But as we've shown, a cursory look at the Anxious Index chart makes it *seem* like economists might have a decent track record at predicting recessions, but a closer examination indicates otherwise. A more careful review produces the alternative conclusion that economists' pessimism—to the extent it comes at all—often comes too little, and too late, with their profession often only making recession a 50/50 shot 6-9 months into a contractionary period. Calling the winner of the game when there's a minute left in the 4th quarter and the outcome is more or less decided has limited value to policymakers, or to investors.
- Third, it's true economists tend to have fewer false alarms than the market in predicting recessions, but this is just the flip side of the same coin we just discussed. Economists tend to be overly optimistic and come around to seeing recession too late. Because they're harder to convince that a recession is coming, they naturally are going to have fewer false alarms. It's not clear why they should get credit for this.
- Fourth, we gave hard numbers for the stock market's recession-predictive-power using various decline thresholds, but providing an actual number for economists' track record of predicting recession is ultimately problematic, simply because they don't really ever "predict" recessions. There is only one example dating back to 1965 where economists got notably pessimistic before, or even at the beginning, of a recession (1980). Thus, while deciphering whether the stock market "predicted" a recession isn't without its own challenges, it's even harder to answer it with respect to economists.
    - Even if you wanted to grade economists on a curve and claim that a 50% threshold is the equivalent of economists "calling a recession," the fact that it's usually (at least) a quarter or two late makes even that angle a hard one to sell. In reality, a 50% threshold still indicates just that: a 50% chance of recession. Grading economists on a curve ultimately therefore doesn't seem all that fair, even if they do seem to have fewer false alarms once this threshold is approached (ironically the only false alarm in the history of the Anxious Index is during 2023, where to date we have not had a recession, but where we at *The Curb Economist* think we did actually have one).
- Fifth, for both policy and investing purposes, it's probably better to be early than late in making recession calls. Being early—which is what we often see from the stock market—has the advantage of potentially preventing unnecessary damage from happening, though perhaps with the cost of slightly higher inflation. The opposite, which is the end of the spectrum where economists tend to hang out, results in less inflation, but only because the

economic damage from job losses and GDP declines has had more time to take hold, which usually lessens inflation. The former seems preferable to the latter, which is another reason why we think the market is a better prognosticator than economists.

The ultimate goal of this note was to demonstrate the power of the stock market in predicting recession. Economists have historically had disdain for the predictive power of the stock market, but they ignore its conclusions at their own peril. **It's for this reason that we think our research at *The Curb Economist* can be an important compliment to economists' existing processes and data.** Our data is ultimately the same data that investors use to price stocks. Thus, because of its strong predictive power, the financial releases and accompanying management guidance that often comes with them can help forecasters adjust their predictions quicker and more accurately than if they were only using traditional government data only. This is why we use data from publicly traded companies as our foundation for economic analysis, we hope that you'll give it a shot too.

As always, we appreciate your time, and if you have any questions, comments, concerns, or anything else, feel free to reach out to us at TCE@thecurbeconomist.com. Happy New Year!