

## Financial Stability and Stock Returns Revisited<sup>1</sup>

### Issue

Most investors would intuitively view firms with stable revenues, earnings, cash flows, and book values as having less “fundamental risk” than those with more volatile financials. While historic financial stability reduces uncertainty around near-term future financials, that benefit might be offset by stable firms having weak long-term growth prospects or expensive valuation levels. How does historic financial stability correlate with future stock returns? Does it matter how historic stability is measured or which financial statement line item is being examined? What are the investment characteristics of stocks with high financial stability?

### Research Approach

To answer these questions, we selected five key financial statement items for each stock: Sales, Operating Income, Net Income, Operating Cash Flow, and Common Equity. Using rolling four-quarter data from the last three years, we calculated stability using the measures in Table 1.

Metric	Formula
Coefficient of Variation (CV)	(Standard deviation of quarterly changes over last 12Q) / Abs Value (Avg 12Q value)
Trend Line Fit	Modified R-Sq from regression thru last 12Q
Net Increases	# of quarterly increases minus # of decreases

Each measure captures financial stability in a different but incomplete way, with financial data posing specific statistical problems needing to be addressed. For example, to ensure that low CV values were driven by the formula numerator and not negative denominators, we created a modified CV by using the absolute value of each stock’s 12-quarter average in the denominator. After that modification, the CV statistic directly measures stability, but it still ignores the direction of quarterly changes.

Our next stability measure, the R-Squared statistic from trend line regressions, quantifies how closely data points fit a trend line, with values ranging between zero (no fit) and one (perfect fit). However, R-Sq also ignores the direction of change, e.g., stocks whose sales went straight up or straight down would both have R-Sq values of 1.0. To “fix” this shortcoming, we created a modified R-Sq

statistic that reversed the sign of the R-Sq values for stocks whose trend lines had a negative slope.

Our third stability measure, the net number of quarterly increases in a financial statement item, captures directional change but not magnitude, but we made no modifications to this metric that gauges financial stability in terms of growth persistence.

We evaluated our financial stability metrics using MSCI US IMI members (excluding REITs), approximately the largest 2300 market cap stocks at each point in time. Each month from November 2001 – May 2025, we ranked stocks into uniform quintiles in ascending order (i.e., most stable stocks in quintile 1) and computed subsequent 12-month equal weighted buy-and-hold excess returns vs the test universe. Information Coefficients (correlation between ranks and subsequent returns), excess return magnitude, and return variability were used to gauge factor predictive strength. We also used correlation analysis to assess how financial stability metrics align with various other risk/return factors.

### Results

Table 2 summarizes a fascinating relationship between recent financial stability and subsequent returns.

Stability Metric	Avg Stdev		Avg Exc Return %					Avg Stdev Tot Ret%				
	IC	IC	Qn1	Qn2	Qn3	Qn4	Qn5	Qn1	Qn2	Qn3	Qn4	Qn5
Mod CV 4Q Sales	0.082	0.097	0.57	1.39	1.81	0.40	-2.74	34.8	38.0	41.8	46.7	57.5
Mod CV 4Q OpInc	0.071	0.118	0.25	0.40	0.60	0.20	-0.16	29.9	37.4	43.5	51.7	56.3
Mod CV 4Q NetInc	0.051	0.116	0.06	0.13	-0.31	0.44	0.92	31.8	39.4	43.8	49.8	55.4
Mod CV 4Q OpCF	0.074	0.099	0.56	0.40	1.16	0.24	-1.01	31.1	37.6	44.2	47.8	58.2
Mod CV 1Q ComEq	0.069	0.102	0.05	0.82	1.07	0.03	-1.17	33.0	35.3	40.3	49.9	61.7
Mod R-Sq 4Q Sales	0.034	0.081	0.98	0.21	0.13	0.49	-0.34	38.4	40.9	41.7	44.3	52.1
Mod R-Sq 4Q OpInc	0.059	0.081	1.11	0.62	0.72	0.70	-1.56	35.3	37.4	40.5	47.2	55.2
Mod R-Sq 4Q NetInc	0.050	0.080	0.68	0.30	0.63	0.51	-0.60	34.3	37.4	40.7	45.8	57.4
Mod R-Sq 4Q OpCF	0.038	0.066	0.60	-0.10	0.91	0.39	-0.31	37.3	36.9	39.9	44.4	57.1
Mod R-Sq 1Q ComEq	0.023	0.064	0.22	-0.79	-0.56	0.41	2.08	35.1	38.5	42.0	46.1	57.0
Net #Inc 4Q Sales	0.039	0.076	0.52	-0.30	-0.24	-0.40	-0.57	39.4	41.9	43.0	46.5	55.7
Net #Inc 4Q OpInc	0.065	0.082	1.23	0.58	0.29	-0.26	-1.95	36.0	39.3	42.6	46.4	59.6
Net #Inc 4Q NetInc	0.061	0.085	0.82	0.28	0.52	-0.23	-1.12	34.9	38.5	42.8	47.6	62.0
Net #Inc 4Q OpCF	0.042	0.065	1.19	0.53	-0.89	0.16	-1.64	39.4	40.5	44.8	48.9	53.6
Net #Inc 1Q ComEq	0.049	0.074	0.18	0.19	0.24	-0.17	-0.29	36.6	37.5	39.9	46.4	63.8
Average All Metrics	0.054	0.086	0.60	0.31	0.41	0.20	-0.70	35.1	38.4	42.1	47.3	57.5

To no one’s surprise, the right panel of Table 2 shows a strong positive correlation between financial stability and subsequent return volatility. Much profound is Table 2’s left panels revealing that stocks of firms with greater

<sup>1</sup> This study is largely an update of RIR’s May 2018 Research Brief, which we believe is one of our most interesting studies over the years.

financial stability have modestly *outperformed*, while stocks with the most volatile financials (quintile 5) have significantly underperformed. To the extent that high financial volatility represents undiversifiable risk, these results violate the basic return/risk relationship from financial theory!

Table 2 also reveals that CV financial stability metrics had the strongest relationship with subsequent returns despite the fact that the other two metrics capture stability and directional change (i.e., growth). We also note that stability measures for all the financial statement line items provided similar performance. Given investor attention to earnings, one might have expected the earnings-related metrics to be the least effective (i.e., already discounted in prices).

We next turned our attention to understanding how financial stability is associated with other investment characteristics. In terms of correlation, we found that *how* stability was measured was more important than which financial statement line item was being evaluated. For example, the five CV-based metrics were highly correlated with one another, but much less correlated to the ten metrics based on the two directional stability measures, R-Sq and Net Increases (which were highly correlated with one another). As a result, we were able to select a single financial statement item – Operating Income – to highlight the general correlation tendencies of all 15 stability metrics with common return and risk factors in Table 3.

<b>Factor</b>	<b>Mod CV 4Q OpInc</b>	<b>Mod R-Sq 4Q OpInc</b>	<b>Net #Inc 4Q OpInc</b>
<b>Mod CV 4Q OpInc</b>	<b>1.00</b>		
<b>Mod R-Sq 4Q OpInc</b>	<b>0.07</b>	<b>1.00</b>	
<b>Net #Inc 4Q OpInc</b>	<b>0.07</b>	<b>0.84</b>	<b>1.00</b>
<b>FY1 EPS / Price</b>	<b>0.17</b>	<b>0.21</b>	<b>0.23</b>
<b>Sales / Price</b>	<b>-0.04</b>	<b>-0.10</b>	<b>-0.06</b>
<b>5Y Estd EPS Gth</b>	<b>-0.23</b>	<b>0.12</b>	<b>0.14</b>
<b>3Y % Sales Gth</b>	<b>-0.12</b>	<b>0.41</b>	<b>0.38</b>
<b>Beta</b>	<b>0.16</b>	<b>0.01</b>	<b>0.00</b>
<b>Market Cap</b>	<b>0.26</b>	<b>0.22</b>	<b>0.23</b>
<b>12M Price Chg</b>	<b>0.03</b>	<b>0.14</b>	<b>0.16</b>
<b>Analyst Rating</b>	<b>-0.10</b>	<b>0.15</b>	<b>0.13</b>
<b>Short Interest Ratio</b>	<b>0.23</b>	<b>0.13</b>	<b>0.13</b>
<b>12M Price Volatility</b>	<b>0.42</b>	<b>0.19</b>	<b>0.20</b>

Table 3 shows that all three stability metrics tended to favor stocks (i.e., have positive correlations) with higher E/P ratios and market caps, and lower short interest, beta, and stock price volatility. We also see large correlation differences between measuring stability using CV vs R-

Sq or Net Increases. For example, the CV metric was negatively correlated with EPS growth, sales growth, and analyst ratings while the R-Sq and Net Increases metrics were positively correlated to those growth-driven factors. The CV stability metric was also more highly correlated with price volatility and short interest than the directional stability metrics. Collectively, these correlations reveal that it matters how one measures financial stability, and suggest that using more than one metric may provide a more holistic assessment of financial stability.

### **Conclusion**

Financial theory asserts that a portfolio of less risky firms should provide below average returns. Without getting lost in the debate about how to best define risk, most investors would agree that firms whose revenues, earnings, cash flows and book values are more stable through time are fundamentally less risky than those with larger quarterly financial fluctuations. Therefore, one would expect that stocks of firms with greater financial stability would have lower returns than those with more volatile financials. However, this study shows that stocks with stable financials have historically *outperformed* stocks with less stable financials, absolutely and especially on a risk-adjusted basis.

If firms with stable financials are less risky and provide higher returns, why wouldn't everyone invest in these stocks (and eventually arbitrage away their return/risk advantage)? Good question. One might hypothesize that high financial stability may come at the cost of reduced growth prospects or expensive valuation levels, but Table 3 shows that the R-Sq and Net Increases measures are positively correlated with historic and forecasted growth and all three measures are positively correlated to earnings valuation. The correlation statistics in Table 3 also show that CV-based stability measures have little correlation with stability measures based on R-Sq or Net Increases, suggesting that combining alternative stability measures may be fruitful.

In recent years, researchers have labeled firms with lower investment intensity, lower external financing requirements, lower financial leverage, higher profitability, and higher asset utilization as being of superior "quality" than the average firm. RIR would add financial stability to the list of quality characteristics that seem to be rewarded with above-average returns. Given that there is no informational, institutional, or behavioral barriers to investing in "high quality" stocks, we doubt this outperformance will persist long-term. Take advantage of this opportunity while you can!