

Gross Profit Effect Sharpe Ratio by bin

| Portfolio bin at Formation Date | Mean Excess Return | Standard Deviation of Excess Returns | Sharpe Ratio |
|-------------------------------------|--------------------------|---|-----------------|
| 1. High Gross Profit to Asset Total | 0.90% | 4.62% | 0.19 |
| 2 | 0.73% | 4.99% | 0.15 |
| 3 | 0.73% | 4.88% | 0.15 |
| 4 | 0.57% | 4.92% | 0.12 |
| 5. Low Gross Profit to Asset Total | 0.41% | 5.01% | 0.08 |
| Long_Short: High_Low | 0.48% | 3.11% | 0.16 |

Gross Profit Effect Factor Regression Results

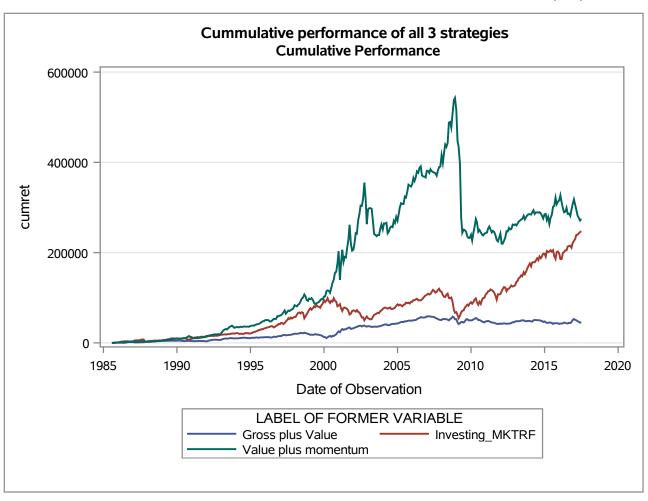
| Obs | bin | _TYPE_ | alpha_capm | mktrf_capm | alpha_ff3 | mktrf_ff3 | smb | hml |
|-----|-------------------------------------|--------|------------|------------|-----------|-----------|-------|--------|
| 1 | 1. High Gross Profit to Asset Total | PARMS | 0.25 | 0.97 | 0.32 | 0.95 | -0.12 | -0.25 |
| 2 | 1. High Gross Profit to Asset Total | Т | 2.65 | 46.15 | 3.70 | 47.37 | -4.14 | -8.12 |
| 3 | 2 | PARMS | 0.03 | 1.05 | 0.12 | 1.01 | -0.07 | -0.32 |
| 4 | 2 | Т | 0.27 | 46.80 | 1.38 | 48.85 | -2.43 | -10.05 |
| 5 | 3 | PARMS | 0.02 | 1.05 | 0.06 | 1.02 | 0.04 | -0.11 |
| 6 | 3 | Т | 0.29 | 55.75 | 0.75 | 53.80 | 1.36 | -3.80 |
| 7 | 4 | PARMS | -0.13 | 1.03 | -0.20 | 1.07 | -0.03 | 0.22 |
| 8 | 4 | Т | -1.31 | 46.88 | -2.16 | 49.85 | -1.13 | 6.75 |
| 9 | 5. Low Gross Profit to Asset Total | PARMS | -0.29 | 1.04 | -0.30 | 1.04 | 0.04 | 0.04 |
| 10 | 5. Low Gross Profit to Asset Total | Т | -2.74 | 44.14 | -2.81 | 42.45 | 1.16 | 0.94 |
| 11 | Long_Short: High_Low | PARMS | 0.53 | -0.07 | 0.62 | -0.09 | -0.16 | -0.29 |
| 12 | Long_Short: High_Low | Т | 3.34 | -2.04 | 3.96 | -2.51 | -3.09 | -5.14 |

Summary stats of monthly returns for all 3 strategies

The MEANS Procedure

| Portfolio bin at Formation Date | N Obs | Variable | Label | N | Mean | Median | Std Dev | Minimum | Maximum | 1st Pctl |
|------------------------------------|----------|---|---|-------------------|-------------------------------------|---------------------------------------|-------------------------------------|--|-------------------------------------|--|
| Long_Short: High_Low | 384 | value_momentum GPR_Value Market_Portfolio | Value plus momentum Gross plus Value Investing_MKTRF | 384 384 384 | 0.0073031 0.0021539 0.0067419 | 0.0080000 0.000600000 0.0115500 | 0.0495532 0.0290198 0.0440703 | -0.3038000 -0.1112000 -0.2324000 | 0.2509000 0.1258000 0.1247000 | -0.1607000 -0.0822000 -0.1072000 |

| Portfolio bin at Formation Date | N Obs | Variable | Label | Skewness |
|---------------------------------|----------|---|---|---------------------------------------|
| Long_Short: High_Low | 384 | value_momentum GPR_Value Market_Portfolio | Value plus momentum Gross plus Value Investing_MKTRF | -1.0972278 0.3071067 -0.9120727 |



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End of the sample period- Portfolio values: Strategy wise

| Obs | Strategies | Year | Month (December) | Cummulative Returns(\$) |
|-----|---------------------|------|---------------------|----------------------------|
| 1 | Gross plus Value | 2016 | 12 | 52806.025 |
| 2 | Investing_MKTRF | 2016 | 12 | 225830.888 |
| 3 | Value plus momentum | 2016 | 12 | 317877.929 |

Sunday, May 9, 2021 10:35:25 PM **7 Mean excess return, standard deviation and Sharpe Ratio: Strategy wise**

| LABEL OF FORMER VARIABLE | Mean Excess Return | Standard Deviation of Excess Returns | Sharpe Ratio |
|-----------------------------|--------------------------|---|-----------------|
| Gross plus Value | 0.490% | 2.914% | 0.168 |
| Investing_MKTRF | 0.949% | 4.407% | 0.215 |
| Value plus momentum | 1.005% | 4.982% | 0.202 |

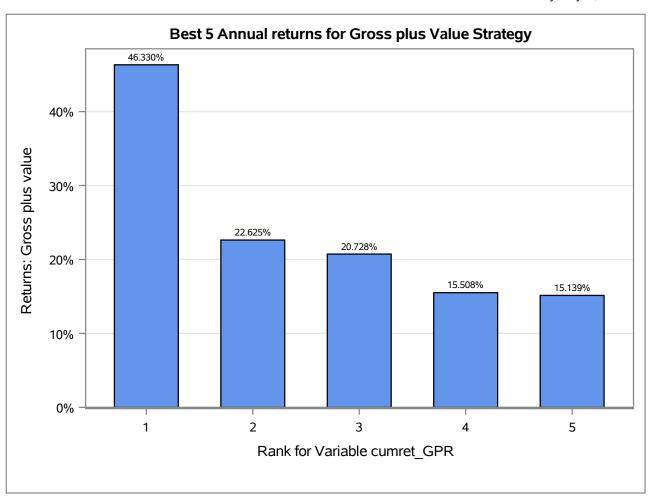
| Obs | bin | _TYPE_ | alpha_capm | mktrf_capm | alpha_ff3 | mktrf_ff3 | smb | hml |
|-----|---------------------|--------|------------|------------|-----------|-----------|--------|---------|
| 1 | Gross plus Value | PARMS | 0.588 | -0.145 | 0.275 | -0.000 | -0.008 | 0.999 |
| 2 | Gross plus Value | Т | 3.999 | -4.398 | 24.812 | -0.046 | -2.174 | 251.468 |
| 3 | Investing_MKTRF | PARMS | 0.275 | 0.999 | 0.275 | 1.000 | -0.008 | -0.001 |
| 4 | Investing_MKTRF | Т | 24.876 | 402.150 | 24.812 | 389.046 | -2.174 | -0.288 |
| 5 | Value plus momentum | PARMS | 1.229 | -0.333 | 1.032 | -0.247 | 0.034 | 0.637 |
| 6 | Value plus momentum | Т | 4.995 | -6.027 | 4.483 | -4.620 | 0.446 | 7.726 |

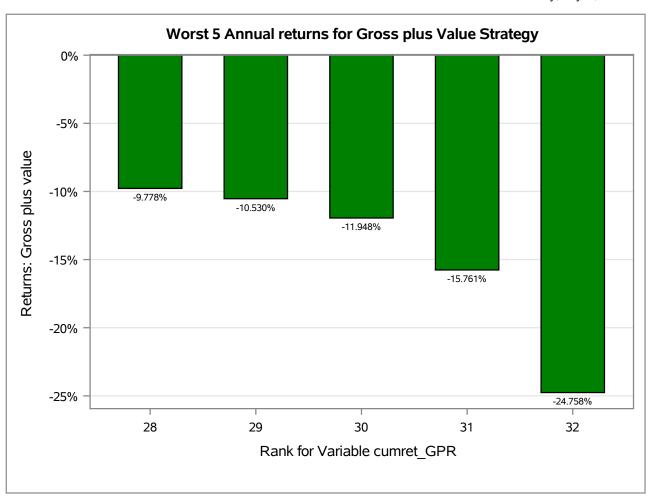
Factor Regression Results

| year | Returns: Gross plus value | Returns: Value plus momentum | Returns: Investing_mktrf |
|------|---------------------------------|------------------------------------|-----------------------------|
| 1985 | -1.761% | 1.543% | 7.910% |
| 1986 | 7.783% | 17.008% | 9.580% |
| 1987 | -4.229% | -4.070% | -3.747% |
| 1988 | 12.596% | 6.747% | 10.898% |
| 1989 | -3.572% | 21.953% | 19.049% |
| 1990 | -11.948% | 6.777% | -13.043% |
| 1991 | -10.530% | -1.752% | 27.784% |
| 1992 | 22.625% | 25.989% | 6.022% |
| 1993 | 15.508% | 40.459% | 7.995% |
| 1994 | -1.242% | 2.432% | -3.953% |
| 1995 | 4.573% | 19.918% | 29.718% |
| 1996 | 5.814% | 11.742% | 15.232% |
| 1997 | 15.139% | 25.973% | 24.783% |
| 1998 | -9.443% | 10.612% | 18.621% |
| 1999 | -24.758% | -0.767% | 19.714% |
| 2000 | 46.330% | 79.329% | -16.700% |
| 2001 | 15.056% | -2.216% | -14.690% |
| 2002 | 9.989% | 39.119% | -22.418% |
| 2003 | 2.864% | -15.435% | 30.471% |
| 2004 | 6.601% | 6.185% | 10.631% |
| 2005 | 9.078% | 24.890% | 2.998% |
| 2006 | 10.660% | 3.424% | 10.159% |
| 2007 | -15.761% | 3.913% | 0.976% |
| 2008 | 1.326% | 21.597% | -37.776% |
| 2009 | -4.326% | -52.575% | 28.235% |
| 2010 | -3.970% | 1.405% | 17.354% |
| 2011 | -8.164% | -0.537% | 0.435% |
| 2012 | 8.666% | 8.108% | 16.253% |
| 2013 | 2.059% | 8.244% | 35.179% |
| 2014 | -1.799% | -0.045% | 11.708% |
| 2015 | -9.778% | 10.501% | 0.079% |
| 2016 | 20.728% | 0.385% | 13.266% |

| Obs | Gross plus value | Ranking_Gross plus value | Value plus Momentum | Ranking_Value plus Momentum | Investing_mktrf | Ranking_Investing_mktrf |
|-----|---------------------|-----------------------------|------------------------|-----------------------------------|-----------------|-------------------------|
| 1 | 22.625% | 2 | 25.989% | 4 | 27.784% | 5 |
| 2 | 15.508% | 4 | 40.459% | 2 | 29.718% | 3 |
| 3 | 15.139% | 5 | 25.973% | 5 | 30.471% | 2 |
| 4 | 46.330% | 1 | 79.329% | 1 | 28.235% | 4 |
| 5 | 20.728% | 3 | 39.119% | 3 | 35.179% | 1 |

| Obs | Gross plus value | Ranking_Gross plus value | Value plus Momentum | Ranking_Value plus Momentum | Investing_mktrf | Ranking_Investing_mktrf |
|-----|---------------------|-----------------------------|------------------------|-----------------------------------|-----------------|-------------------------|
| 1 | -11.948% | 30 | -4.070% | 30 | -13.043% | 28 |
| 2 | -10.530% | 29 | -1.752% | 28 | -16.700% | 30 |
| 3 | -24.758% | 32 | -2.216% | 29 | -14.690% | 29 |
| 4 | -15.761% | 31 | -15.435% | 31 | -22.418% | 31 |
| 5 | -9.778% | 28 | -52.575% | 32 | -37.776% | 32 |





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% of Months and years with positive returns (>0)

| Strategy | % of positive months | % of positive years |
|--------------------|-------------------------------|------------------------------|
| Variable_GPR | 51.30% | 56.25% |
| Variable_ValMom | 60.16% | 75.00% |
| Variable_MrktPortf | 62.76% | 78.13% |