# dun & bradstreet

# When Slow or Negative Payment Experiences Accelerate

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## ABSTRACT:

Dun & Bradstreet found that stocks with the fastest increase in the number of slow or negative payment experiences month over month underperform those with slowest increase. The underperformance is statistically significant after adjusting for the Fama-French 3-factor model + MOM (aka FF3+MOM).

## ATTRIBUTE PEXP_S_N.PC

**Definition:** *pexp_s_n.pc* =percentage change in *pexp_s_n* month over month[1]

*Pexp_s_n* is the number of trading relationships between the subject and its suppliers that have a summarized experience that includes any slowness or derogatory experience. If the summarized experience is slow or viewed negatively, the experience is counted once. If the payment manner is "split," for example Prompt - Slow, one half is added to the count. Absent means no CSAD or no slow or negative payment experiences.

## SUMMARY

When companies have increasing *pexp_s_n* month over month, i.e. positive *pexp_s_n_.pc*, it is a sign of deteriorating short-term cash flow. Conversely, negative *pexp_s_n.pc* is an indication of improving short-term cash flow.

Here, we study how companies with high *pexp_s_n.pc* perform versus those with low *pexp_s_n.pc*, and versus the stock market index. The universe is the S&P Total Market Index (S&P TMI), from 2005 – 2016. At the end of month T we rank stocks in the universe based on ranking sorted by *pexp_s_n.pc*, and compare the top x% with bottom x%, on the total return for month *T+1*.

TABLE 1 show that companies increasing *pexp_s_n* the fastest, underperform those increasing the slowest (or decreasing the fastest), by 23 bps per month (top 5% vs bottom 5%); or by 37 bps per month (top 10% vs bottom 10%), etc.

| Index | var | pcThr | Spread | StdErr | tStat | pVal | Conf | Mth | numL | numS |
|-------|-----|-------|--------|--------|-------|------|------|-----|------|------|
| TMI | pexp_s_n.pc | 0.05 | -23.4 | 17.1 | -1.4 | 0.164 | 83.6 | 133 | 182 | 181 |
| TMI | pexp_s_n.pc | 0.1 | -37.1 | 10.4 | -3.6 | 0 | 100 | 133 | 353 | 354 |
| TMI | pexp_s_n.pc | 0.2 | -28.6 | 7.4 | -3.9 | 0 | 100 | 133 | 702 | 704 |

*Table 1: TMI is the S&P Total Market Index; pcThr is the percentage threshold used in constructing long/short portfolio; Spread is the return difference between top and bottom group; StdErr, tStat, pVal, Conf are standard error, t-statistics, p-value, and confidence interval of the Spread; Mth is the total number of months tested; numL, numS are the average number of stocks in the Long (top group) and Short (bottom group) portfolio.*
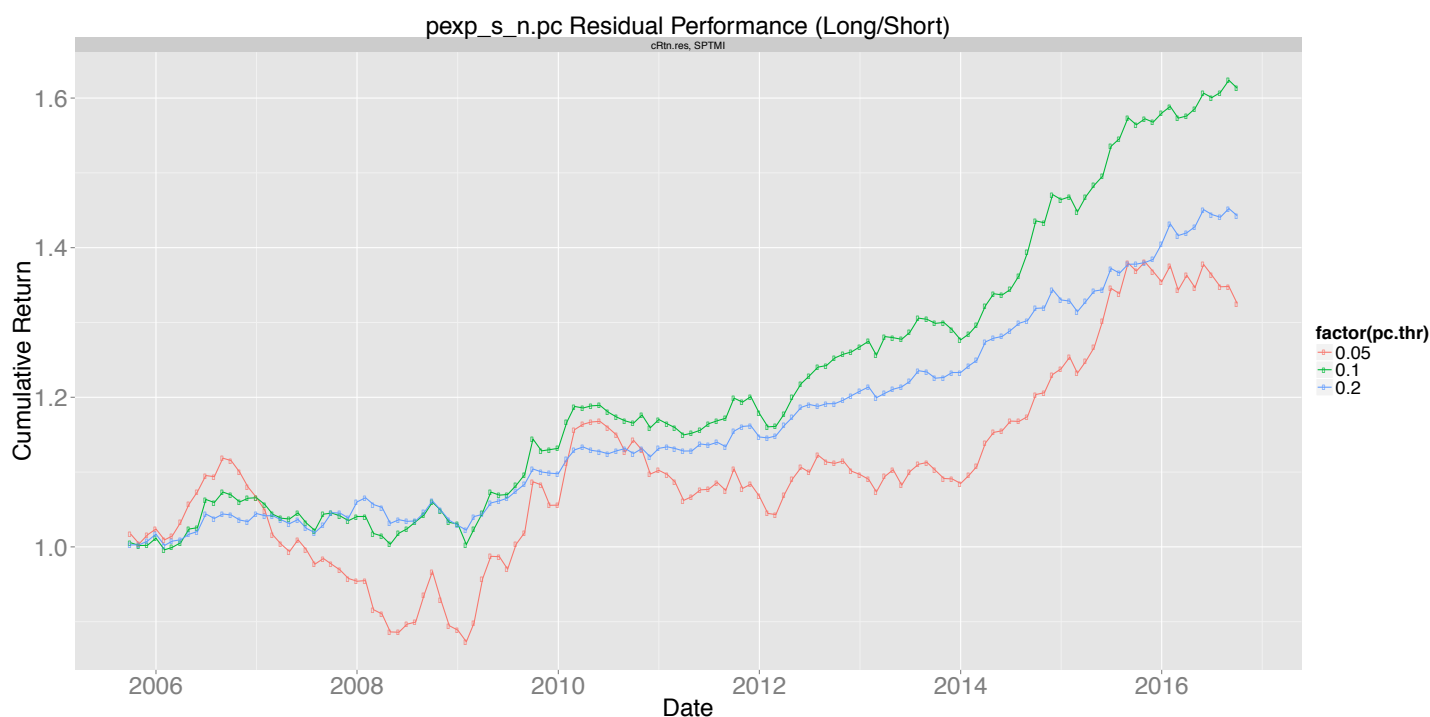
[1] We've applied a statistically rigorous process to identify attributes that have predictive power in separating cross-sectional stock returns. The D&B dataset used here is Credit Score Archive Database (CSAD, 2004-2016), which contains about 140 attributes – some of them are further transformed to make suitable for testing. In each document, we present one attribute for illustration purpose. The attribute shows from a unique and proprietary angle how D&B data and analytics helps to enhance stock returns. The complete list of attributes identified, with test statistics, is available upon request.

TABLE 2 shows that after removing exposure from the FF3 + MOM, the spread shows -23 bps alpha monthly (top 5% vs bottom 5%), or -37 bps (top 10% vs bottom 10%).

| pcThr | xRet | vMxF | vSMB | vHML | vMom |
|---|---|---|---|---|---|
| 0.05 | -23 (-1.3) | -0.02 (-0.5) | 0.11 (1.4) | 0.01 (0.2) | 0.1 (1.7) |
| 0.1 | -36.7 (-3.5) | -0.01 (-0.3) | 0.02 (0.5) | -0.01 (-0.2) | 0.02 (0.4) |
| 0.2 | -27.9 (-3.8) | -0.01 (-0.7) | 0.03 (1) | 0.01 (0.2) | 0.04 (1.4) |

*Table 2: Performance difference between top and bottom group. pcThr: is the percentage threshold use in constructing long/short portfolio; xRet is the alpha (excess return) after adjusting for the FF3 + MOM; vMxF, vSMB, vHML, vMom are the portfolio exposure to the FF3 + MOM. The t-stat of the coefficients are in parenthesis.*

The chart below shows the cumulative performance of the *inversed* alpha in Table 2.

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