Reaching for Income or Clientele?
Empirical Analysis of Insurers' Investments in Dividend Stocks

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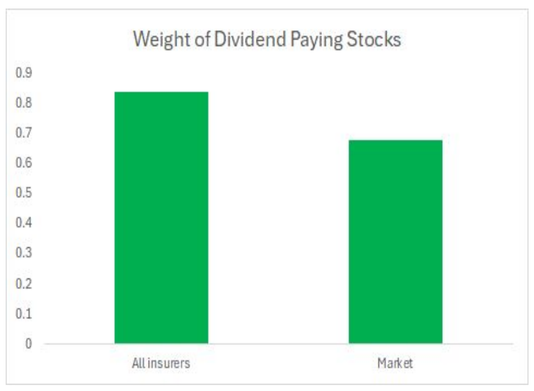
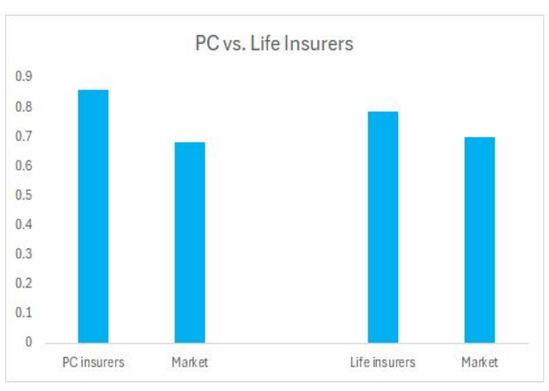
Abstract

Anecdotal evidence suggests that insurance companies, as institutional investors, may heavily invest in dividend-paying stocks, particularly those offering high dividend yields. We confirm this by demonstrating that insurance companies hold a larger proportion of dividend-paying stocks in their portfolios compared to the overall market's share of such stocks. We investigate two hypotheses potentially associated with dividend stock investments by insurers. One is the reaching-for-income hypothesis – dividend stocks are highly demanded when interest rates are low. The other is the dividend clientele effect – some investors would invest in dividend stocks regardless of interest rates because of their preference. Our empirical evidence demonstrates that insurers' investments in dividend stocks remain stable over time. This finding challenges the "reaching for income" hypothesis and instead supports the "dividend clientele" argument.

Holding of Dividend-paying Stocks by Insurance Companies





Two Competing Stories for Insurers' Dividend Stock Investments

Explanation 1: Reaching for Income

Investors optimize their the current and future income of their portfolio. Thus, when interest rates are low, such investors buy high dividend stocks to compensate for the low-interest income received on deposits and bonds

Jiang and Sun (2020) find that when interest rates fall, households increase their asset allocations in income-oriented equity funds, such as dividend-paying funds.

Daniel, Garlappi, and Xiao (2021) find that low interest rates lead to significantly higher demand for income-generating assets such as high-dividend stocks.

Explanation 2: Dividend Clientele

Investors may prefer dividend paying stocks due to their operation attributes, tax advantages, etc.

Grinstein and Michaely (2005) find that institutional investors tend to avoid stocks not paying dividends but they do not seem favoring stocks paying high dividends

Graham and Kumar (2006) investigate the dividend clientele effect: as a group, retail investors prefer nondividend paying stocks; older and low-income investor prefer dividend-paying stocks.

Measuring Dividend Preference

Graham and Kumar (2006): "Do dividend clienteles exist? Evidence on dividend preferences of retail investors"

Excess weight in dividend-paying stocks, EWD, of an insurer *i* in month *t*.

Step 1: Compute the fraction of dividend paying stocks in insurer *i* portfolio, $w_{i,t} = \frac{\sum_{j=1}^{n_{i,t}^d} p_{j,t} q_{j,t}}{\sum_{j=1}^{n_{i,t}} p_j q_j}$ ($n_{i,t}^d$ and $n_{i,t}$ are the number of dividend-paying stocks and the number of stocks at time *t*);

Step 2: Compute the fraction of dividend paying stocks in the market portfolio based on the market capitalization, $w_{m,t} = \frac{\sum_{j=1}^{n_{m,t}^d} p_{j,t} q_{j,t}}{\sum_{j=1}^{n_{m,t}} p_j q_j}$ ($n_{m,t}^d$ and $n_{m,t}$ are the number of dividend-paying stocks and the number of stocks at time *t*);

Step 3: Take the difference: $EWD_{i,t} = w_{i,t} - w_{m,t}$.

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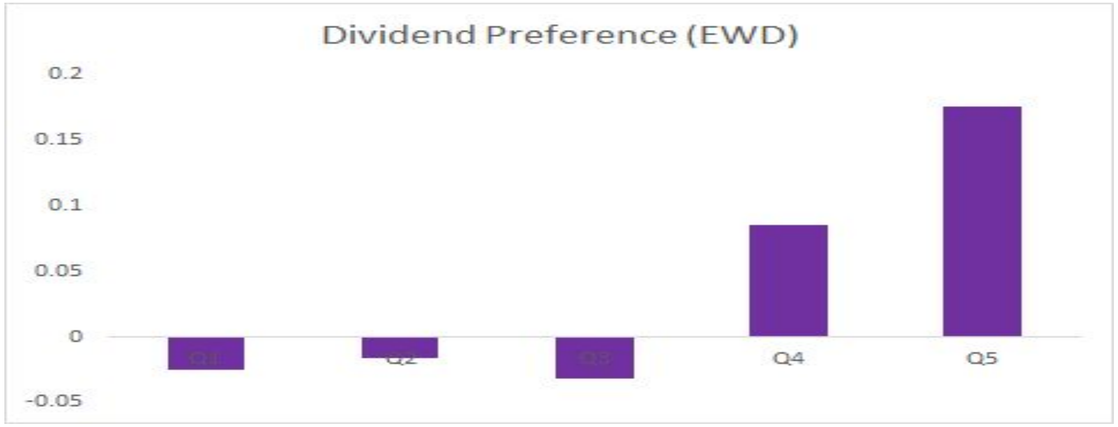
Data

- Insurers' stock holding: National Association of Insurance Commissioners (NAIC)
- Market data: Center for Research in Securities Prices (CRSP)
- Financial data: Compustat's North American Industrial Annual file
- Sample:
  - includes all U.S. common stocks listed on the NYSE, Amex, and Nasdaq that are covered in Compustat
  - 29,557 insurer-year observations
  - Sample period: 1998-2023



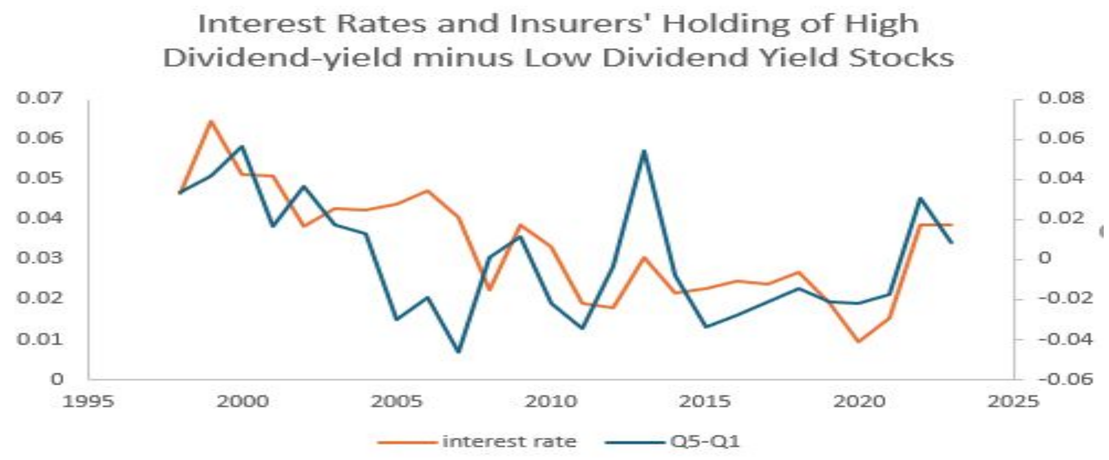
Quintile groups are developed based on individual stock dividend yield ratios.

Recap and Expectations

Insurers prefer dividend stocks, especially high-dividend stocks

Dividend clientele effect versus reaching for income effect

- If reaching for income dominates, dividend preference measure is negatively related to market interest rates;
- If dividend clientele dominates, dividend preference measure is uncorrelated or positive correlated with market interest rates.



Regression Results:

(1) Time series analysis: Regress the average EWD of the top quintile group onto interest rate

$EWD^{Q5}_t = -0.2 + 0.84*Int_{t-1} + e_t$
(t=-2.48) (2.93)

(2) Cross sectional Persistence: Regress EWD quintile ranks in year t onto quintile ranks in year t-1

$EWD\ Rank_{i,t} = 0.41 + 0.80*EWD\ Rank_{i,t-1} + e_{i,t}$
(4.04) (10.73)

(3) Panel Regression: Regress individual firm EDW onto firm characteristics, interest rates and life insurance indicator

$EWD_{i,t} = 0.76 + 0.05*Size_{i,t-1} - 0.01*Leverage_{i,t-1} - 0.02*Age_{i,t-1} + 0.36*Int_{t-1} + 0.05*Life + e_{i,t}$
(9.77) (3.09) (-0.38) (-0.18) (2.96) (4.13)

Conclusions

- Insurers prefer dividend stocks, especially high-dividend stocks;
- Insurers' holding of dividend-paying stocks are persistent over time;
- The aggregate insurers' dividend persistence measures across all insurers and for individual insurers are positively associated with interest rates;
- The evidence supports the dividend clientele hypothesis while inconsistent with the reaching for income hypothesis for insurance companies.

References

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