
Dividend Restrictions and Search for income

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The dividend irrelevance theory of Miller and Modigliani (1961) claims that dividends are irrelevant to the firm value under some ideal conditions. However, in practice there are reasons to believe that this hypothesis is not accurate. According to Baker and Wurgler (2004), for example, investors are willing to pay higher prices for dividend-paying stocks. Also, Hartzmark and Solomon (2019) find some evidence on the non-neutrality of investors regarding dividend payments.

In Cáceres and Lamas (2023), we shed light on the relevance of dividend payments to investor asset allocation decisions and to stock prices. Specifically, we exploit supervisory restrictions on profit distributions targeted to euro area banks during the pandemic (European Central Bank, 2020a), an exogenous shock to payouts in these institutions. Our empirical analyses show that mutual funds with a special demand for dividends were more inclined to sell bank stocks after restrictions were announced, while this was not the case with alternative income-generating bank securities. Furthermore, we document a negative price impact on bank stocks more exposed to dividend-oriented funds. With these exercises, we uncover the role of search for income in mutual fund trading decisions, as well as its impact on price formation in stocks.

The particular design of dividend restrictions offers an ideal testing ground to isolate search for income from other motivations to trade bank stocks. Unlike managerial dividend cuts, which can signal negative corporate performance, dividend restrictions were a supervisory measure implemented uniformly across all banks, regardless of their individual circumstances. Moreover, they were a response to the Covid-19 pandemic, and not to pre-existing vulnerabilities in the banking industry. Thus, they provide variation in dividends without conveying any negative information about specific firms. This allows us to explore search for income motivations in portfolio decisions.

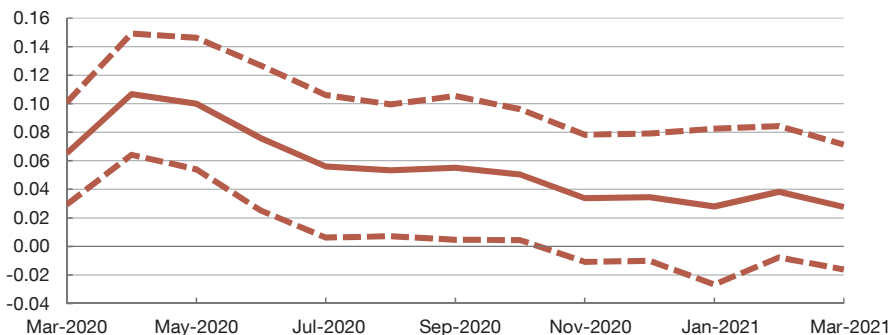
We utilize Lipper for Investment Management (Lipper), a large data repository that stores information on mutual funds' portfolios at the fund-security level, to explore the importance of stock payouts in the investment behavior of mutual funds, as well as its impact on price formation. We focus on funds that distribute dividends to their shareholders, given that investing in dividend-paying stocks is likely crucial for them to pass on this income stream to their shareholders (see, for example, Harris et al., 2015). We further enlarge this group with a small subset of funds whose name includes the words "dividend" and/or "income", as their investment strategies are probably dividend-oriented too. This overall set of mutual funds is referred to as "dividend funds".

In the empirical exercises, we first show that dividend funds were more responsive than other funds to dividend restrictions, being more likely to sell bank shares after the policy shock (see Figure 1). Interestingly, the likelihood of selling bank stocks was similar to that of other funds before the policy intervention (parallel trends), and did not change during the policy shock in shares unaffected by these restrictions, such as those of Swiss banks.

Second, we study the preferences of mutual funds between holding bank stocks and Additional Tier 1 (AT1) contingent convertible debt, or CoCos, during the policy intervention. CoCos are securities issued by banks that present some equity-like characteristics (e.g., their holders may absorb losses if the bank fails), but that were not subject to distribution constraints during the pandemic. Since they offer high coupon payments (interest income), these instruments could have been appealing to income investors in this period. We find that after the ECB measure was announced, while being more likely to sell bank stocks, dividend funds were less likely to sell CoCos when compared to other funds. This result holds after adding bank fixed effects, or when considering stocks and CoCos issued by the same bank. Thus, dividend funds were not just reducing their exposure to bank risk when selling stocks (otherwise, they would have sold CoCos as well). This pattern is consistent with search for income motivating their trading decisions. Furthermore, this result uncovers possible effects of supervisory distribution limits on securities beyond bank stocks.

Figure 1

Probability of selling bank stocks over time



NOTES: The figure displays the outcome of monthly regressions (one for each month between March 2020 and March 2021) in which the dependent variable is a dummy equal to 1 if a fund sells bank stocks that were held in its portfolio in February 2020, while the explanatory variable is a dummy that identifies dividend funds. The regressions also include fund family, fund asset type and bank fixed effects. In particular, the figure represents the estimated coefficients and the estimated 95% confidence intervals associated with the dummy identifying dividend funds. If, for example, the point estimate is 0.10, this means that the cumulative probability of selling is 10 pp higher in dividend funds when compared with non-dividend funds, at the given date.

Finally, we explore the price consequences that the exposure to dividend funds had for bank stocks after the policy announcement. We show that bank shares more exposed to dividend funds (i.e., those in which the ownership of these funds is greater) experienced negative abnormal returns immediately after the policy announcement (near -4%). This did not happen to the shares of other banks. This latter result supports our hypothesis that the policy measure was not an information shock, since otherwise all bank stock prices would have adjusted downwards, and that variation in dividends explains market reaction.

Overall, our research contributes to the literature on search for income as a fundamental driver of trading decisions by some investors. To the best of our knowledge, we are the first to uncover investor demand for income from a policy shock unrelated to managerial decisions. Our results support the idea that dividend payments are not irrelevant to (income) investors and that search for income can influence price formation in the stock market. In addition, our work reveals the potential side effects associated with dividend restriction policies, a topic largely unexplored in the literature. In particular, the negative price reaction in bank stocks held by income investors suggests that bank managers may cater to

shareholders by paying out dividends, and that not doing it can have implications for stock prices.

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