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# Payout policy through the financial crisis: The growth of repurchases and the resilience of dividends ☆

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ABSTRACT

We compare the payout policies of US industrials and banks over the past 30 years to better understand dividends, especially for banks. For industrials, dividends grow strongly after 2002, when the declining propensity to pay reverses. Banks have a higher and more stable propensity to pay dividends and resist cutting dividends as the 2007–2008 financial crisis begins. Before the crisis, increases in repurchases push payouts to historic levels. These findings are broadly consistent with the idea that banks use dividends to signal financial strength while agency costs of free cash flow better explain industrial payouts.


## 1. Introduction

Why firms pay dividends has been a puzzle for more than 50 years. According to Miller and Modigliani (1961), absent taxes and other frictions, dividends should be a matter of indifference to investors and firms. With personal taxes, it is harder to understand why firms pay dividends (Black, 1976). Dividends are even more puzzling today given the availability of stock repurchases, which offer greater flexibility, tax advantages, and other benefits (Guay and Harford, 2000; Skinner, 2008). Fama and French (2001) report that the propensity of US industrials to pay dividends declines from the 1970s through the late 1990s.

We show that dividends are resilient. For industrials, the fraction of dividend-payers and aggregate real dividends increase steadily after 2002. For these firms, repurchases now exceed dividends in most years, but dividends also increase. The financial crisis of 2007–2008 has a modest effect on industrial dividends.

Dividends are more important for banks, which do not display the declining propensity to pay evident for industrials. The large majority of banks consistently pay dividends from 1980 to 2008. Banks also repurchase, but repurchases rarely represent more than one-third of bank payouts and never exceed dividends. During the crisis, most large banks reduced dividends but many did so

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relatively slowly, suggesting a reluctance to cut. Some banks maintained dividends while reporting losses. In 2008 aggregate bank dividends exceeded aggregate bank earnings by 30%.

Overall, we show a staggering upsurge in the magnitude of payouts beginning around 2001. Before the crisis, repurchases by industrials grew to more than twice the level of dividends, with total payouts peaking at $673 billion in 2007, well over twice the maximum for the 1990s (in real terms). For banks, payouts grew from $34 billion in 1998 to $71 billion in 2007 but were tilted more heavily toward dividends. From 2001 to 2007, US firms paid out cash that, both in absolute terms and relative to earnings, exceeded levels at any time in recent history, with aggregate and median payout ratios approaching 100%. Since the crisis, payouts for industrials have rebounded and are again close to historic highs.

We compare the payouts of industrials and banks to shed light on why dividends survive. We focus on banks instead of financial firms because banks are important in their own right, because bank payouts received considerable attention during the crisis, and because banks are more homogeneous than financials generally. The payout regularities we observe for banks are similar to but more pronounced than what we observe for financials (we provide results for financials in the Internet Appendix).

A key distinguishing feature of dividends is the implied commitment: Managers' reluctance to cut dividends is one of the strongest empirical regularities in corporate finance (Lintner, 1956; Brav, Graham, Harvey, and Michaely, 2005; DeAngelo, DeAngelo, and Skinner, 2008). This commitment forms the basis for two explanations for dividends. First, because dividends represent an ongoing commitment to pay out cash, they help address the agency costs of free cash flow (Jensen, 1986) as well as other forms of expropriation, such as tunneling, that are important in the family and closely held firms prevalent in Asian and emerging markets (LaPorta, Lopez-de-Silanes, Shleifer, and Vishny, 2000; Dittmar, Mahrt-Smith, and Servaes, 2003). Second, the commitment inherent in dividends signals managers' confidence in their firms' underlying profitability and financial strength (Miller and Rock, 1985; Baker and Wurgler, 2012).

The fraction of industrials that pay dividends declined to a low of 15% in 2002 but then rebounded, increasing to 28% by 2012, and was not greatly affected by the crisis. During the 1990s, aggregate real industrial dividends grew at an average rate of less than 2% annually, while repurchases grew strongly and exceeded dividends by the end of the decade. After 2001, industrial dividends grew at 9% annually through 2007, declined by a total of 5% during 2008 and 2009, and then rebounded to levels above the 2007 peak. The growth of repurchases over 2001 to 2007 is even more impressive. By 2007, repurchases were more than twice as large as dividends. In 2008 and 2009, industrials cut repurchases sharply but then increased repurchases to levels that again exceeded dividends. In recent years, industrials paid out historically high fractions of their earnings, with total payouts reaching 90% of aggregate earnings.

Banks have a number of characteristics that distinguish them from industrials (Berger, Herring, and Szego, 1995; Calomiris and Wilson, 2004; Diamond and Dybvig, 1983; Kashyap, Rajan, and Stein, 2002; Laeven, 2013). Banks create liquidity by taking deposits that are more liquid than their assets, are highly levered, and rely on deposits and short-term sources of financing. It is hard for outsiders to assess the quality of bank assets, making them inherently opaque.

These features of banks provide a natural role for dividends. By paying and increasing dividends, bank managers signal to external constituents, including depositors and short-term creditors, that they are confident about bank solvency. This is critical, because if these groups begin to doubt a bank's solvency, its funding model breaks down, leading to runs and other costs of distress.[1] Dividends thus help address banks' inherent fragility. The fact that banks are a relatively homogeneous group, exposed to largely common shocks, reinforces the value of dividends as signals.

Because repurchases do not involve an ongoing commitment, they are less useful as signals (although there is nothing inherent about repurchases that precludes them from being a signal). Changes in dividends per share (DPS) are easy to observe and widely reported; Baker and Wurgler (2012) argue that dividends serve as reference points for investors. It is harder to reliably assess the magnitude of repurchases. Per share amounts are not computed or reported, amounts are not tied to specific periods, and, in many instances, a repurchase is announced and then implemented over two to three years, making it hard for investors to track amounts (Ikenberry and Vermaelen, 1996; Vermaelen, 1981).

The literature contains extensive evidence on the payout policies of industrials but little evidence on payout policies of banks. The possibility that banks use dividends as signals to depositors receives little attention. Forti and Schiozer (2012) provide evidence that banks use dividends as signals to depositors in Brazil. Kauko (2012) provides a simple model based on Diamond and Dybvig (1983) to argue that banks use dividends to signal solvency to depositors.

We show that the declining propensity for industrials to pay dividends (Fama and French, 2001) is not evident for banks. At least 80% of banks consistently paid dividends over the past 30 years. Aggregate real dividends for banks increased steadily after the early 1990s, with annual growth in the 5–10% range. The majority of banks increased DPS each year. Since 1980, the fraction of banks that increased DPS in a given year varies from 60% to 80%. In contrast, the fraction of industrials that increased DPS fell from nearly 40% in 1981 to around 10% in recent years, while the fraction that held nominal DPS constant increased from less than 60% in the early 1980s to 90% in the early 2000s. So banks increased dividends, both in aggregate and per share, more consistently than industrials.

Bank dividends received considerable attention during the crisis, when many banks continued to pay dividends as their financial situation worsened and, in some cases, as they received bailout money (Acharya, Gujral, Kulkarni,

[1] Acharya, Gujral, Kulkarni, and Shin (2011) observe that dividend cuts can shake the confidence of banks' short-term lenders, inducing runs. Table A1 shows that a significant fraction of deposits held by the largest 20 US banks are not insured.