Applied Corporate Finance

Payout Policy

Rui Silva

Modigliani-Miller Revisited

- Modigliani and Miller (1961) demonstrate that in perfect and complete capital markets, payout policy is *irrelevant* to firm value.
  – Investors wanting cash can just sell shares

- Assumptions:
  1. Information is costless and equally available to everyone.
  2. There are not contracting or agency costs.
  3. There are no taxes.
  4. There are no transactions costs associated with purchasing or selling securities.
  5. No investor or firm can individually influence the price of securities.

Theories & Determinants of Dividends

- Asymmetric information: Signalling
  - Confidence in future earnings;
  - Low investment opportunities.
- Agency theory: FCF problem
  - Too much cash around loosens managerial discipline
  - Investor protection laws
- Tax Preferences:
  - The preference for a payout policy depends on the difference between the dividend tax rate and the capital gains tax rate.
    - E.g., much lower taxes on capital gains leads to a strong preference from buybacks over dividends.
- Other financing frictions that could lead to need for precautionary or transactional cash holding motives:
  - Keep cash if external financing is very costly or investment opportunities are fleeting (e.g., R&D, acquisition opportunities).

Dividends and Information

- Managers' beliefs about information in payout decisions
  - Over 80% of managers say that dividend and repurchase decisions convey information to investors.
  - 88% believe there are negative consequences to reducing dividends.
    - There is not a similar stigma around repurchase decisions.

- Dividend Smoothing
  - Management believes that investors prefer stable dividends with sustained growth
    - 88% said they desire to maintain a smooth dividend stream
  - Thus, firms raise their dividends only when they perceive a long-term sustainable increase in the expected level of earnings
    - 78% said they are reluctant to make changes that may have be reversed in the future.

Dividends and Information

- Dividend Signalling Hypothesis
  - When a firm increases its dividend:
    - It sends a positive signal to investors that management expects to be able to afford the higher dividend for the foreseeable future.
  - When a firm decreases its dividend:
    - It may signal that management has given up hope that earnings will rebound in the near term.
- Mixed Signals? Perhaps.
  - When a firm increases its dividend, it might instead signal a lack of investment opportunities.
- Empirical work has had difficulty finding strong support for signalling theories, but stock price reactions to dividend policy changes are consistent with them containing information.

Dividends and Agency Theory

- There are conflicts of interests between corporate insiders and outside investors.

- The insiders who control corporate assets can use these assets in ways that are detrimental to the outside investors.
  - Divert corporate assets to themselves (ex: perks)
  - Investments that give private benefits (e.g., empire building)
  - Dittmar & Mahrt-Smith (2007) find that an additional dollar inside a poorly governed firm may be valued as low as $0.42
    - As much as $1.62 in a well-governed firm.

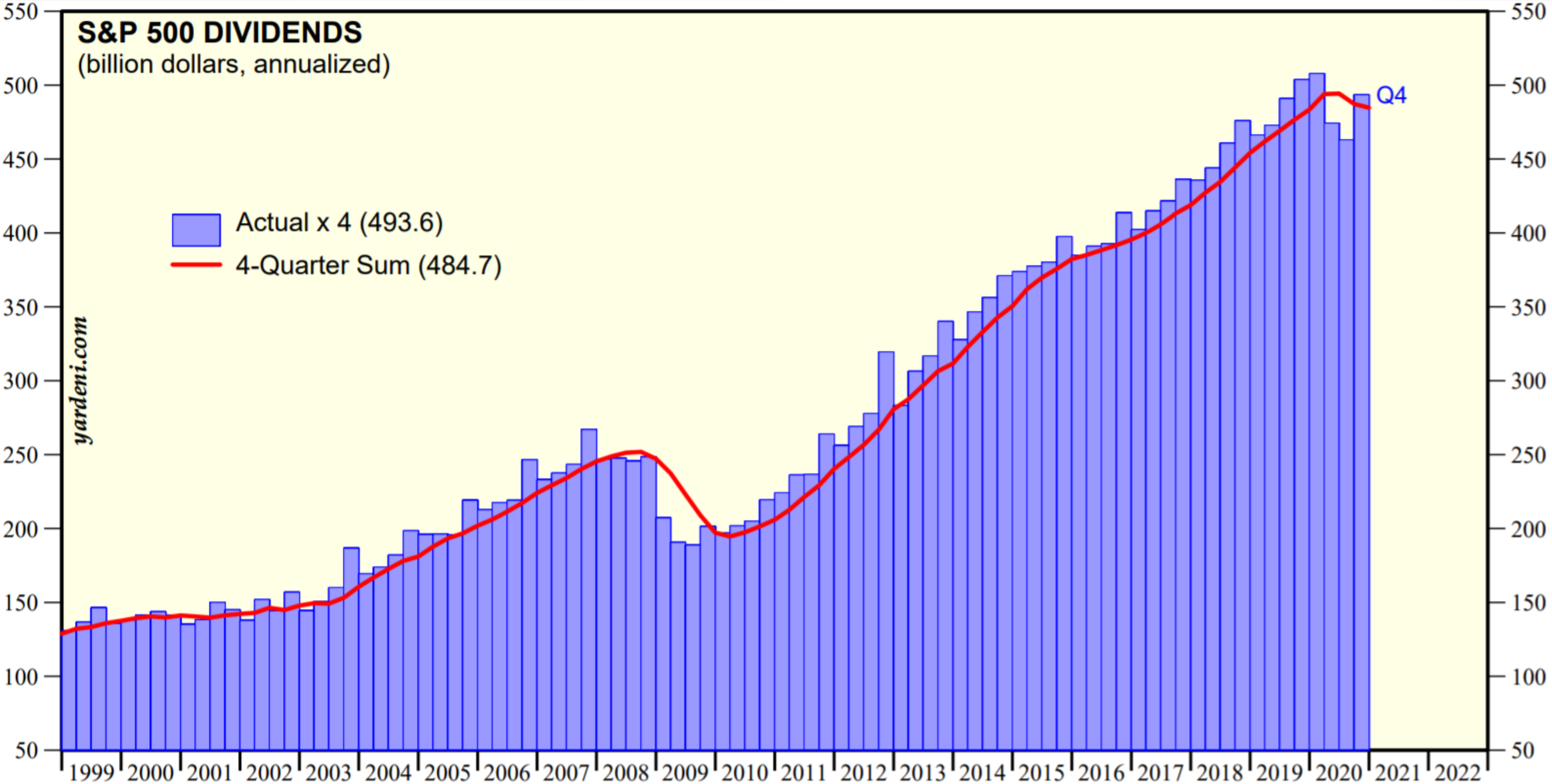
- Dividends may mitigate the problem:
  - By paying dividends insiders are no longer capable of using these earnings to benefit themselves.
  - The possible need to come to the capital markets to raise funds and gives outside investors a chance to exercise some control

Factors that Influence Dividend Policy

- Taxes
  - Tax preference for/against dividends relative to capital gains.
- Earnings volatility
  - Because of the reactions to dividend cuts, firms with volatile earnings are sometimes reluctant to commit to dividends.
- Investment opportunities/financial flexibility
- Flotation costs
  - For smaller firms, the relative high costs of accessing external capital may discourage payouts.
- Contractual restrictions
  - E.g., bank loan covenants
- Ability to maintain dividends: Dividend coverage ratio
  - Dividend Coverage = Net Income / Dividends
  - This does not capture earnings volatility.

Dividend Policy: Recent Trends (1)

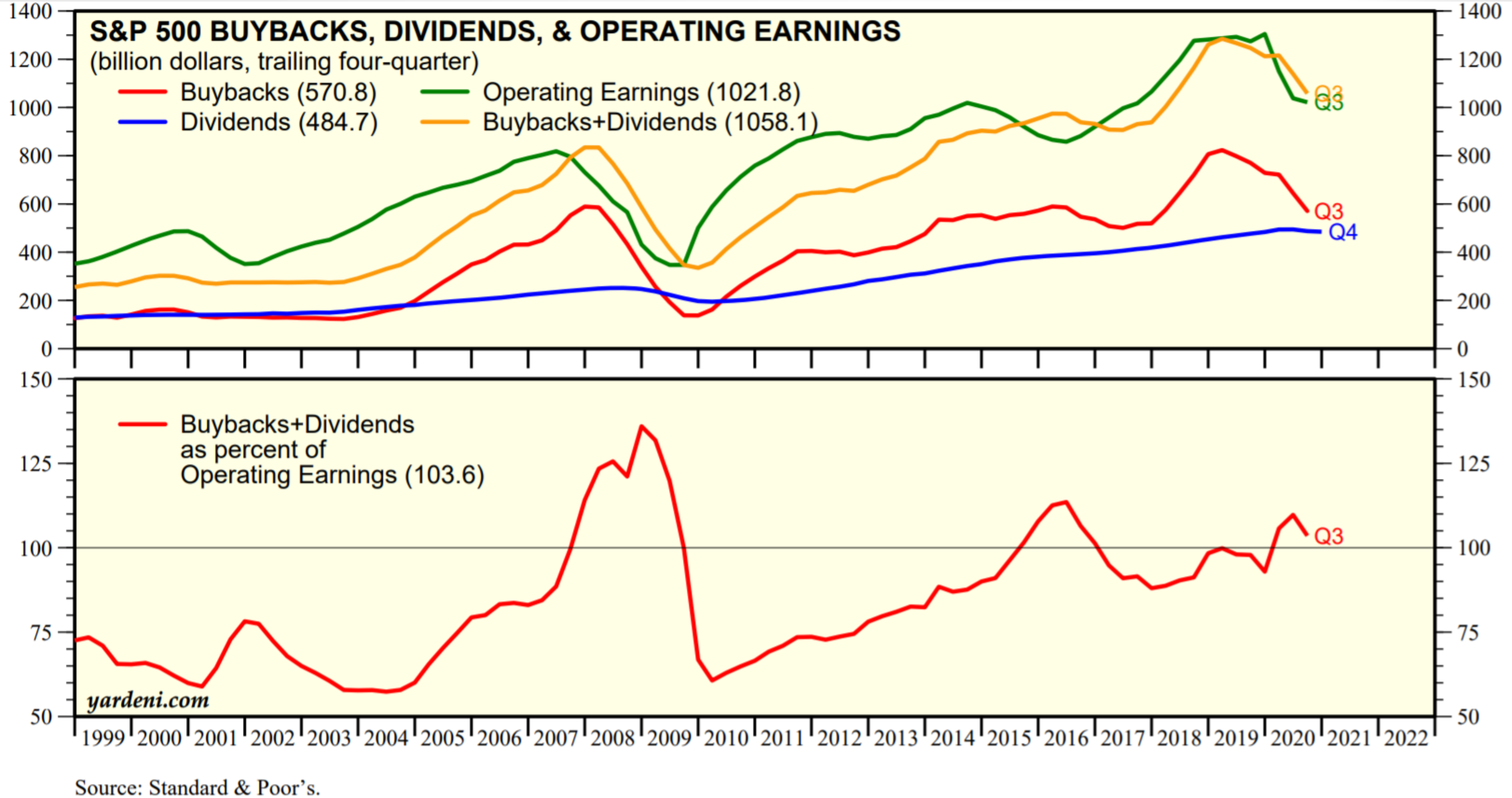
Dividend Payments (S&P 500, 1999-2020)



Source: Standard & Poor's.

Dividend Policy: Recent Trends (2)

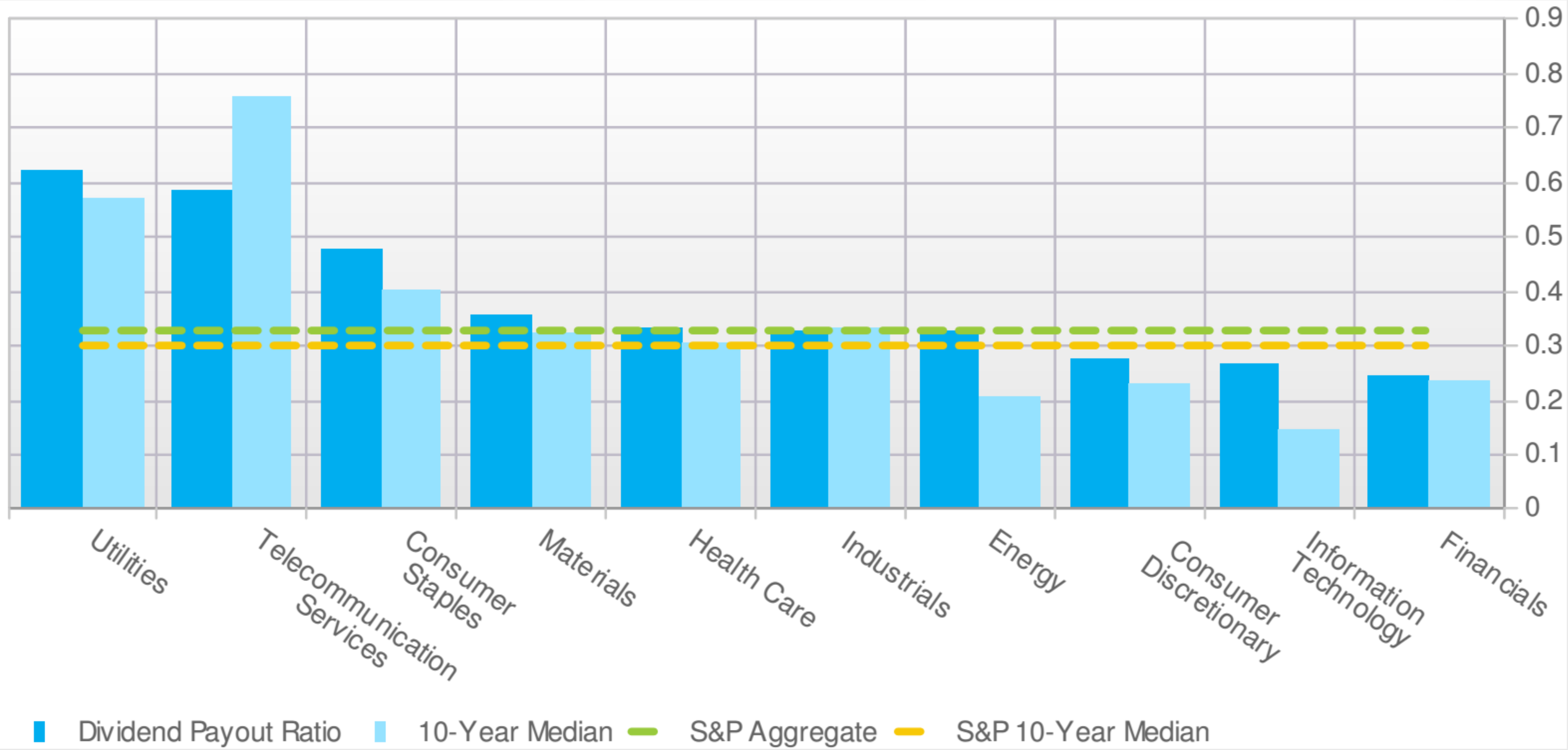
Dividends and Buybacks relative to Earnings (S&P 500, 1999-2020)



Source: Factset

Dividend Policy: Recent Trends (5)

Dividend Payout Ratio by Industry (S&P 500, 2005-2015)



Source: Factset

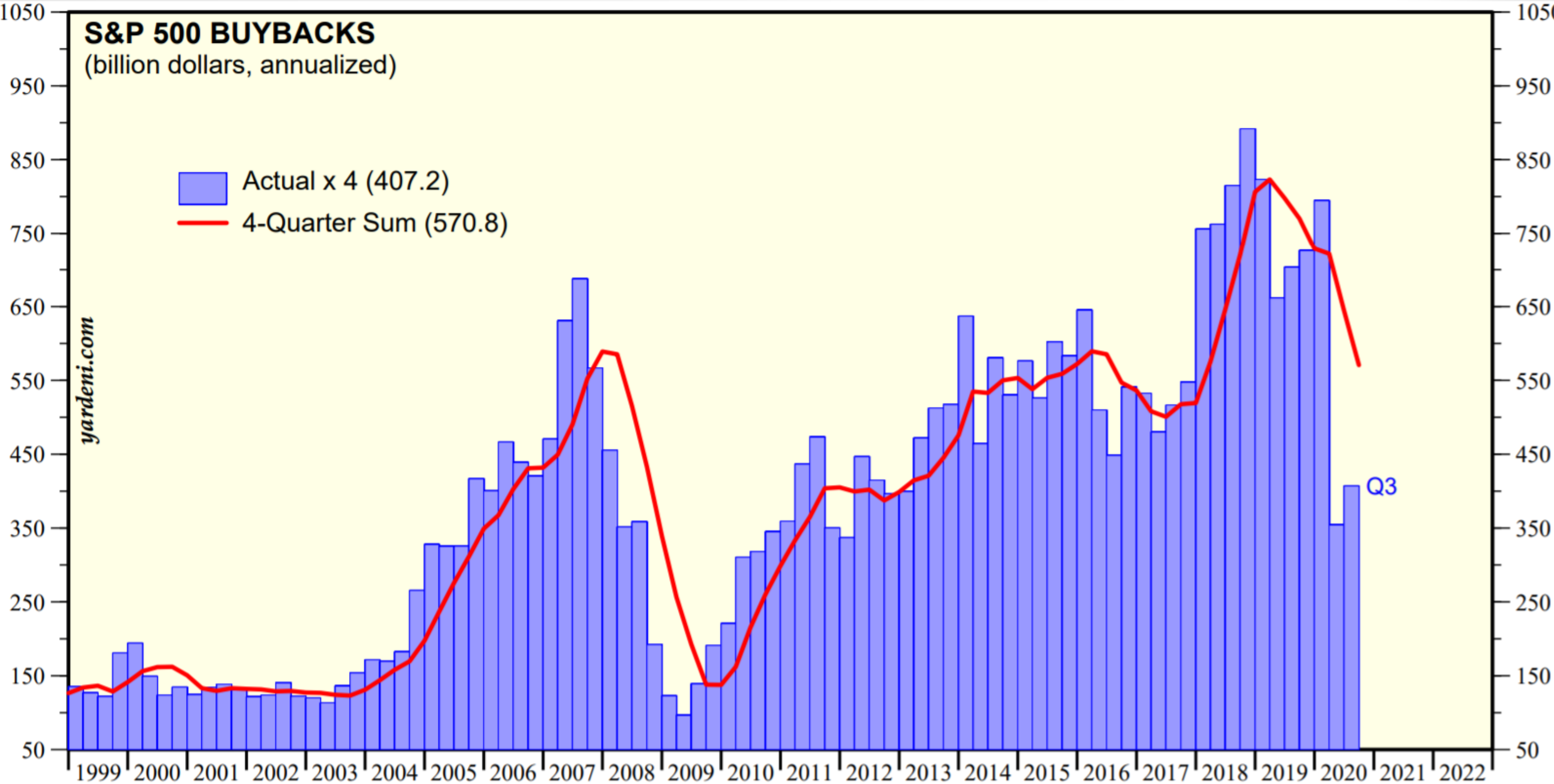
Share Buybacks (Repurchases)

- Motives for buying back shares include the following:
  - Signal that the stock is undervalued.
  - Flexibility of distributing cash without the expectation of cash dividends.
    - Similar to declaring a special dividend
  - Tax efficiency when the tax rate on capital gains is less than that of cash dividends.
  - Offset share increases from employee stock option exercises.

- Some countries place limits on repurchases (e.g., Canada), or require shareholder approval (e.g., UK, France, Germany)

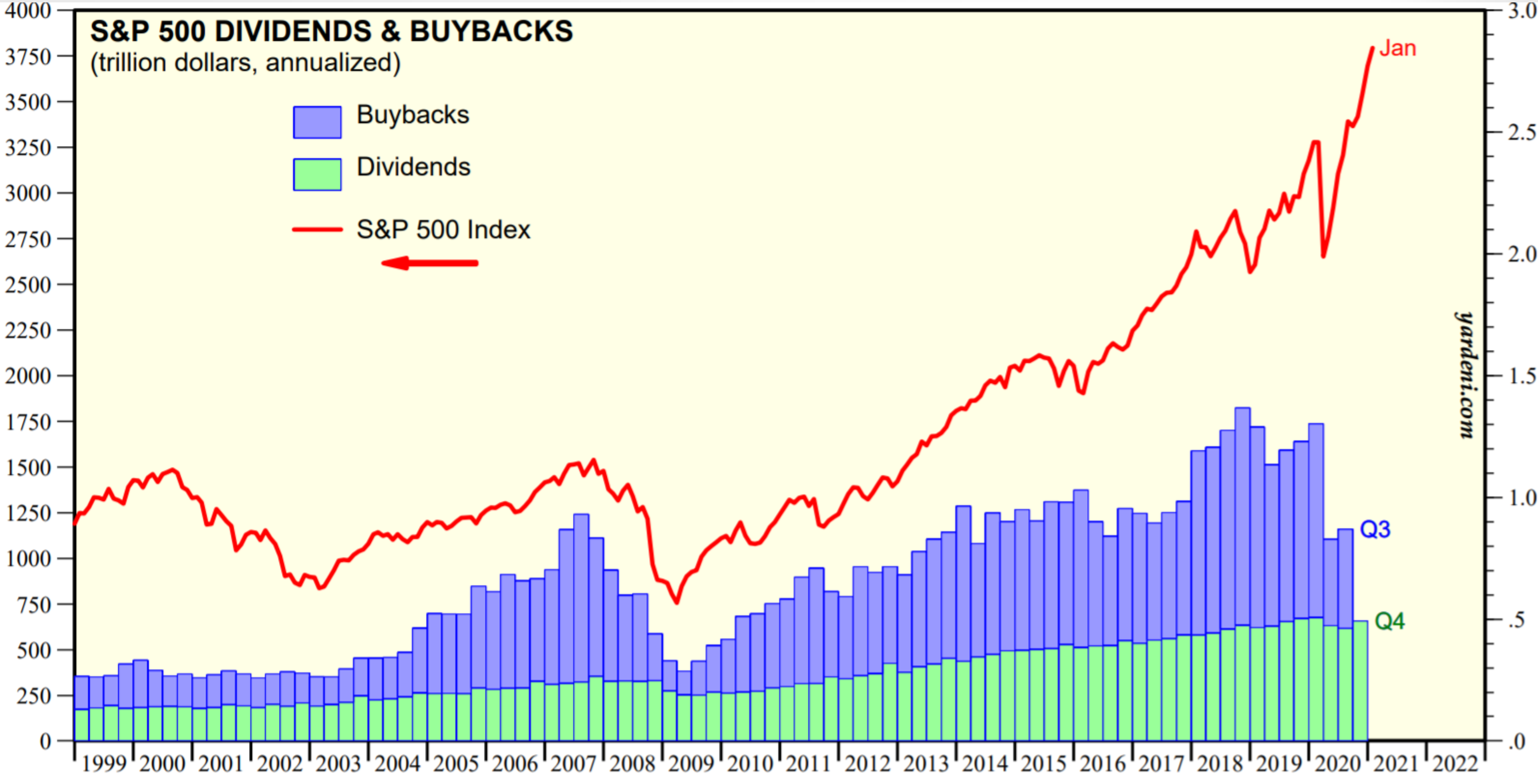
- Usually executed through open market purchases, but occasionally through tender offer.

Buyback Policy: Recent Trends



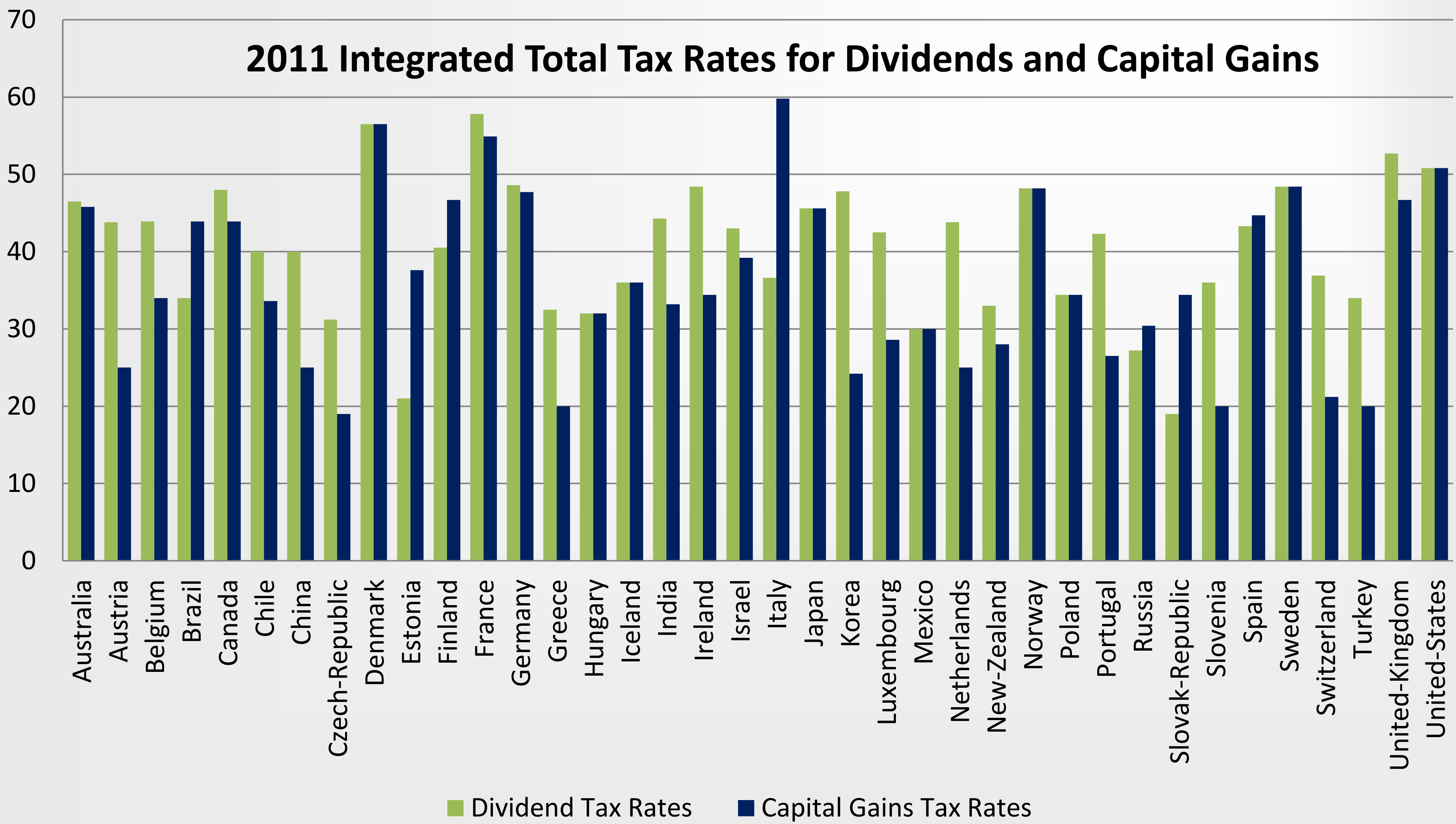
Source: Standard & Poor's.

Payout Policy



Source: Standard & Poor's.

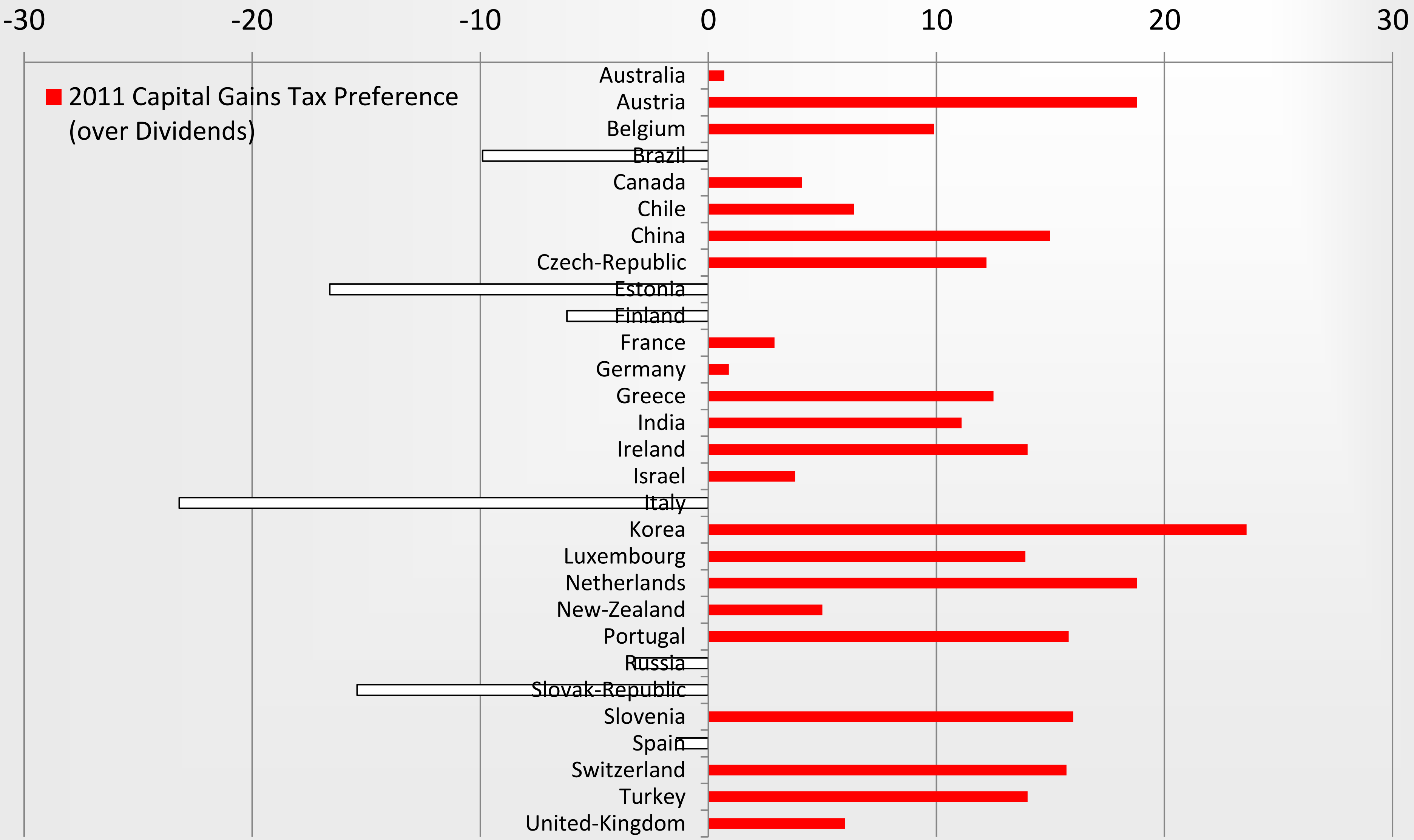
Taxes: Dividends vs. Capital Gains (1)



Note: Integrated rate takes into account both corporate and personal taxes

Source: Ernst & Young Whitepaper (2012)

Taxes: Dividends vs. Capital Gains (2)



Note: This plot contains only those with non-zero difference.

Source: Ernst & Young Whitepaper (2012)

And Finally... A Behavioural Explanation

- Catering Theory of Dividends: Baker and Wurgler (JFE 2004)
  - When investor demand for dividends is high and arbitrage is limited, a stock price premium could appear for payers relative to nonpayers.
  - Firms may cater to this implied investor demand to capture this “dividend premium”.
  - Changes in demand may come from “investor sentiment”
    - investors often prefer more “bond-like” stocks that pay stable cash flows and are easier to value.
    - At other times, investors have a greater appetite for risk.
  - Measures of the dividend premium correlates positively with aggregate dividend activity.
- However, this dividend premium is correlated with measures of firm maturity
  - could just be the agency motivations of mature firms in disguise.
  - Cannot explain why dividends are ‘sticky’.

Evidence from a Survey (Brav et al 2005)

- Survey of 384 financial executives (256 public, of which 166 pay dividends, 167 repurchase shares, and 77 do not pay out).
- Maintaining the dividend level is a priority on par with investment decisions. The same is not true for buybacks.
  - Managers express a strong desire to avoid dividend cuts, except in extraordinary circumstances.
  - Would rather raise external funds than cut dividends
- Beyond maintaining the level of dividends per share, payout policy is a second-order concern:
  - increase in dividends are considered only after investment and liquidity needs are met.
- Two reasons dominate why nonpayers might initiate dividends:
  - a sustainable increase in earnings
  - demand by institutional investors.
- Tax treatment matter, but is not a top consideration.

Short Detour on Cash Holdings

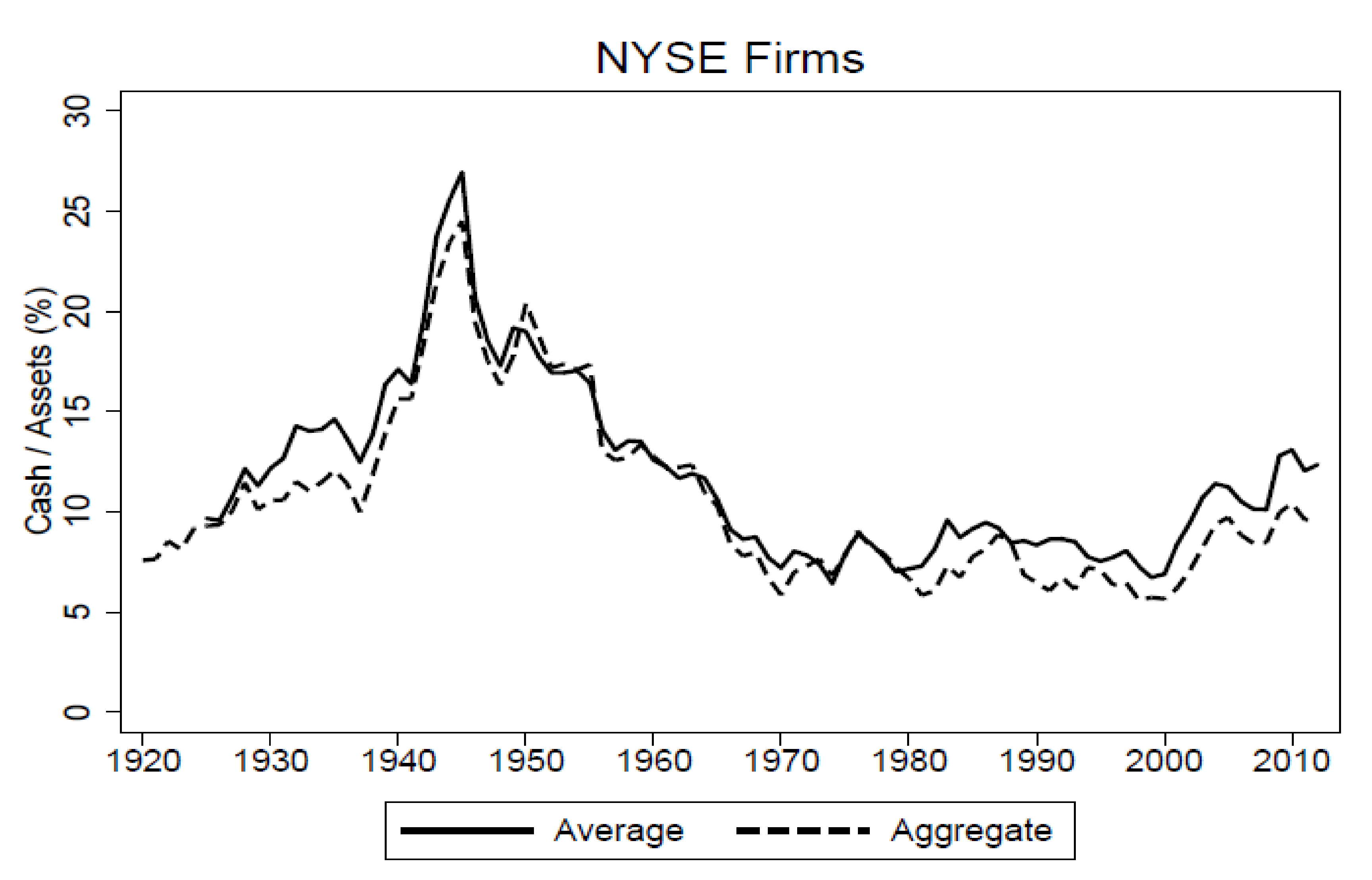
Cash Holdings

- A company that does not payout to investors can:
  - Reinvest its retained earnings
  - Hold cash

- There is currently a large debate about (excessive) cash holdings by some companies.
  - For example Apple has almost $200B worth of cash

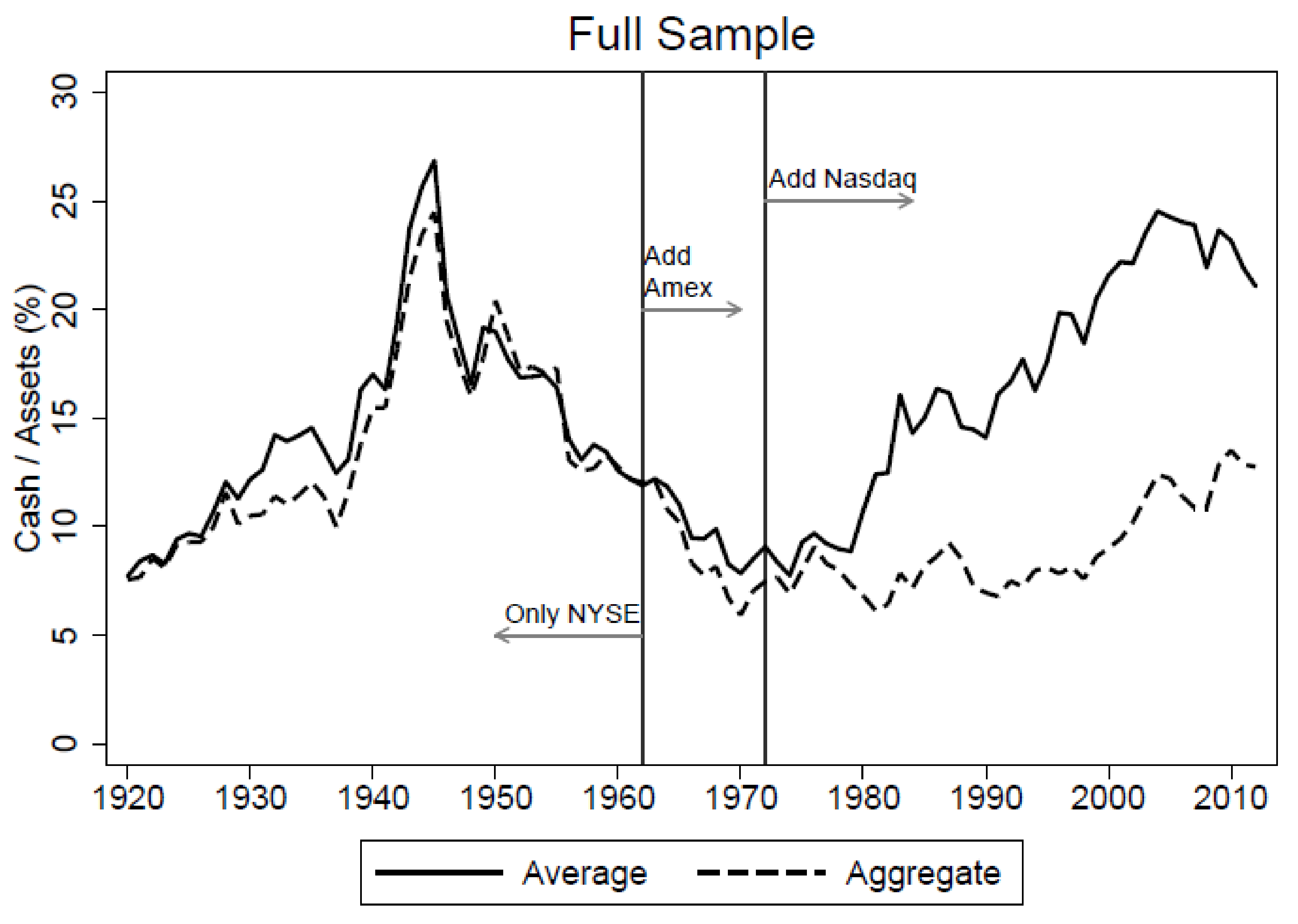
- Similar arguments that help explain payout policy also determine cash holdings

Cash Holdings for NYSE firms



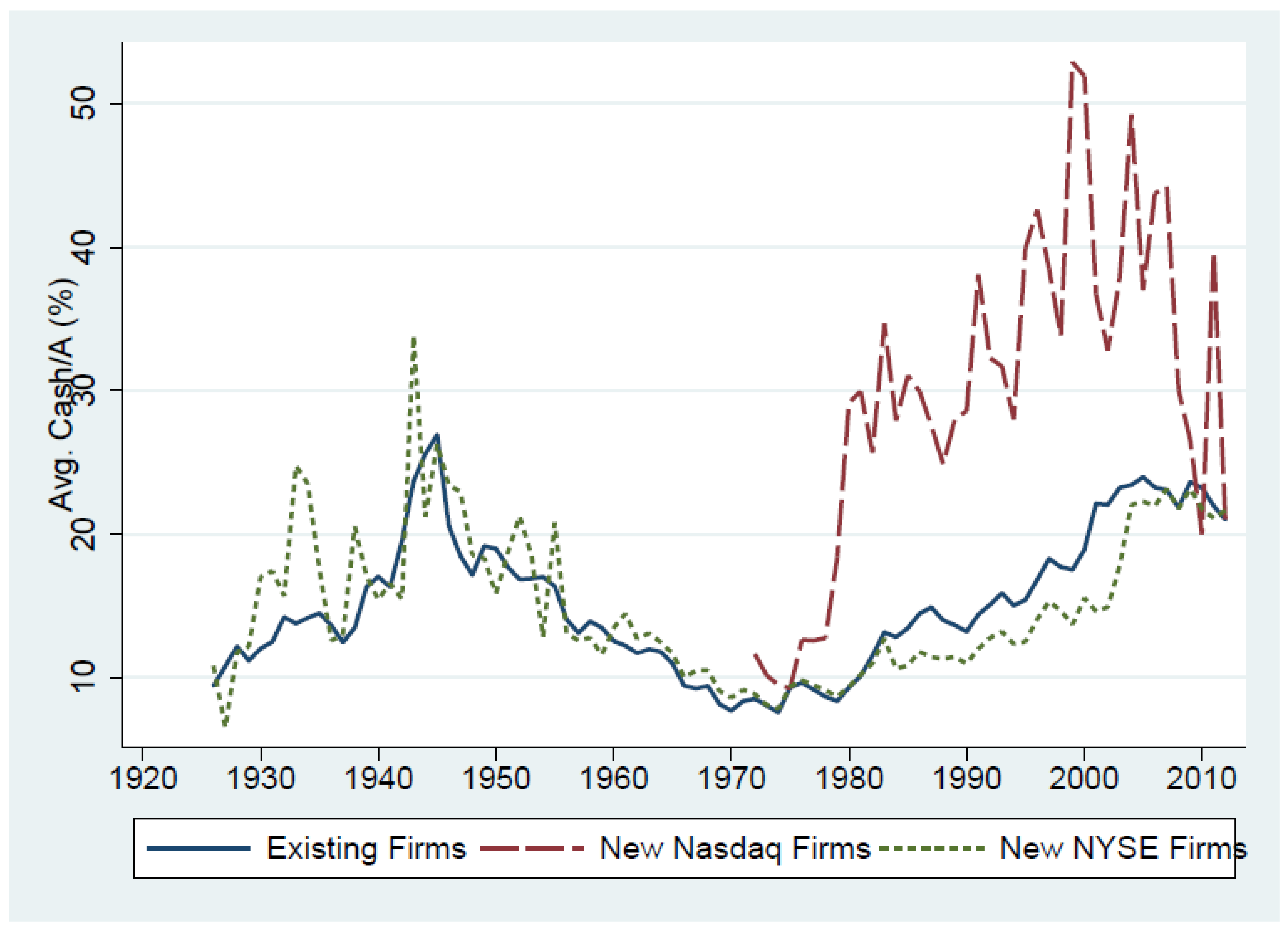
Source: Graham and Leary (2015)

Cash Holdings including NASDAQ firms



Source: Graham and Leary (2015)

Cash Holdings including NASDAQ firms



Source: Graham and Leary (2015)

Take Away points on Cash Holdings

- On average cash holdings are not as high as t may seem.
  - Other points in history had similar levels
- A big part of the change in cash holdings in the recent years is driven by a composition effect
  - High Growth firms in technology and healthcare enter with large cash holdings
  - Earnings are now more concentrated in a few large firms
- Taxes are also a primary driver.
  - A lot of the cash held is outside of the US
  - Repatriation taxes have to be paid if the cash is sent back
  - Difference between US corporate tax and foreign corporate tax has increased over time
  - This can account for a large part of the recent evolution of cash
  - These results are by the same authors but is still not included in the paper.