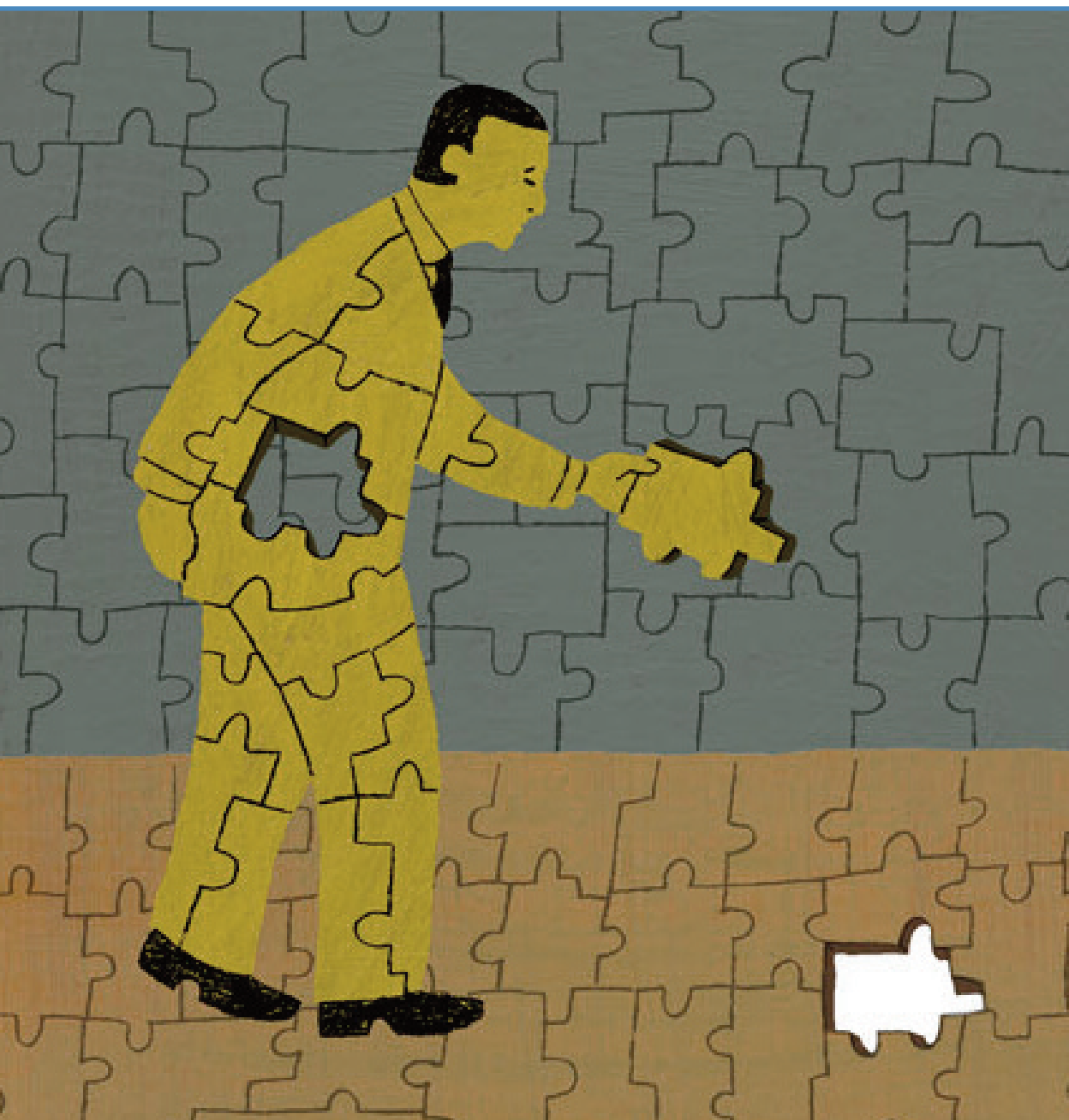


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Unintended Consequences: How higher investor taxes impact corporate finance decisions

J.P.Morgan

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1. Unintended consequences of tax increases

Reduced tax receipts coupled with unprecedented stimulus spending are putting pressure on U.S. public finances. U.S. public debt to gross domestic product (G.D.P.), for example, is expected to grow from 64% in 2006 to 94% by the end of the year.¹ Hence, many decision-makers anticipate that taxes will increase in the near future, in an attempt to generate revenue and reduce the budget deficit.² With the 2001 and 2003 tax cuts scheduled to expire at the end of this year, it is widely believed that the taxes on long-term capital gains, and especially on dividends, will increase for high earners starting in January 2011.

Should senior decision-makers care about an increase in taxes on shareholder distributions? Do these taxes affect corporate finance decisions?

Figure 1

Potential corporate finance implications of a dividend tax increase	
✓ COST OF CAPITAL	Will investors require a higher pre-tax return on equity? Which industries will be most affected?
✓ VALUATION	Would a higher cost of capital reduce equity values? How much of the expected tax increase is already reflected in valuations?
✓ CAPITAL ALLOCATION	Will higher hurdle rates make some projects less appealing?
✓ CAPITAL STRUCTURE	Will increased double taxation on equity make debt financing more attractive?
✓ DISTRIBUTIONS	Will buybacks be more attractive relative to dividends? Will firms accelerate the timing of special dividends?
Source: J.P. Morgan	

Not all shareholders pay taxes and not all firms pay dividends. Yet, dividends have constituted about 20% of total shareholder returns for S&P 500 firms over the last two decades (up to 50% in some industries), and an even higher fraction this last decade. Compounding the issue for high dividend firms is that they are more likely to have tax-paying retail investors. Thus, this tax increase may have a significant impact for some firms. We highlight the characteristics of firms likely to be most affected by higher dividend taxes. More importantly, we explain **how higher dividend (and capital gains) taxes can increase the cost of capital, reduce valuations and the allocation of capital, and tilt the scale in favor of debt and buybacks relative to equity and dividends.**

EXECUTIVE TAKEAWAY

In light of the significant uncertainty surrounding the dividend and capital gains tax rates next year, senior decision-makers should evaluate the corporate finance implications of potential distribution tax increases. While taxes are not necessarily the key driver of financial policy, they could affect hurdle rates, valuation, capital allocation, leverage and shareholder distribution decisions.

¹ Office of Management and Budget, “Table 7.1 - Federal Debt at the End of Year: 1940-2015.”
² This report examines the implications of a potential increase in the dividend and capital gains tax rates. We do not, however, attempt to forecast the outcome of any future legislation on this topic.

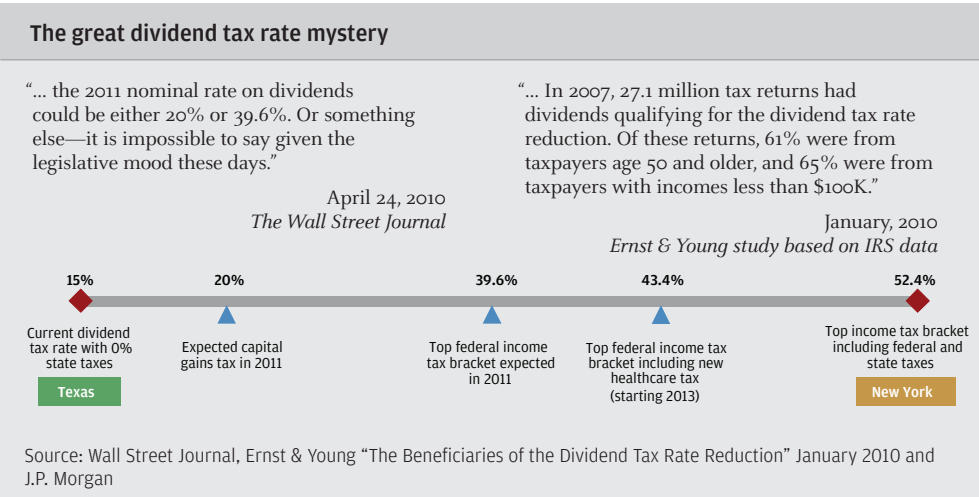
2. Higher taxes on shareholder distributions?

As part of legislation enacted in the spring of 2003, tax rates on qualifying dividends were reduced from an individual’s ordinary income tax rate to 15%, while tax rates on long-term (i.e., more than 12 months) capital gains were reduced from 20% to 15%. The legislation followed a lively debate on ways to mitigate the **double taxation on equity capital** in the United States (and enhance U.S. competitiveness relative to other countries). While in the traditional “C-corporation,” interest payments on debt are tax deductible for corporations but taxable at the investor level, **payments to shareholders are not deductible at the corporate level but are still taxed at the personal level.**

Under the current legislation, tax rates on dividends and capital gains revert to pre-spring 2003 levels, i.e., the ordinary income tax rate for dividends and 20% for long-term capital gains, in January 2011. Further, in the absence of new legislation, the top marginal income tax bracket will revert from 35% to 39.6% and, starting in 2013, a new healthcare tax on high earners could bring the effective dividend tax rate to over 43%, before any incremental state and local taxes.

While there is still time for Congress to extend the current dividend tax rate, it is expected that both dividend and long-term capital gains taxes will increase next year. There is, however, considerable uncertainty regarding the magnitude and impact of a potential dividend tax increase, which may be applied only to taxpayers with income levels above certain income thresholds. Under the current formulation, an extension of the tax level is categorized as a tax decrease. As a result, under the recently enacted “pay-as-you-go” (PAYGO) legislation, the reduction in tax receipts from this extension would have to be offset with budgetary cuts elsewhere.³ This increases the challenge of keeping the tax rate at the current lower level.

Figure 2



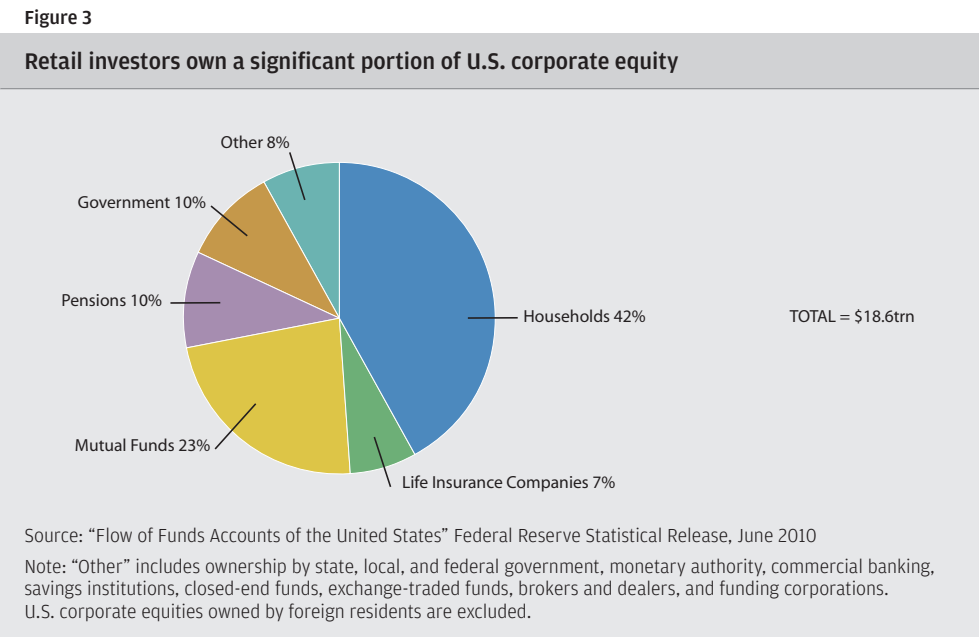
EXECUTIVE TAKEAWAY

At the end of 2010, the current 15% tax rate on dividends and long-term capital gains will expire, in the absence of an extension. Estimates of the new potential dividend tax rate vary widely.

³ The Statutory Pay-As-You-Go Act of 2010 (PAYGO) is part of Public Law 111-139, enacted on February 12, 2010. The act requires that all new legislation changing taxes, fees, or mandatory expenditures, taken together, must not increase projected deficits. In other words, new proposals must either be “budget neutral” or offset by savings.

3. How tax-sensitive are your investors?

Decision-makers often dismiss the impact of increasing tax rates on shareholder distributions because many institutional investors, such as university endowments and pension plans, are tax-exempt. In addition, other institutional investors such as mutual funds manage money for taxable investors, but their performance is typically evaluated on a pre-tax basis. Federal Reserve data on U.S. corporate equity ownership reveal, however, that U.S. households hold almost 42% of corporate equity, relative to only 23% held by mutual funds, 10% by private pension funds, 10% by public retirement funds, and 7% by life insurance companies (Figure 3).⁴

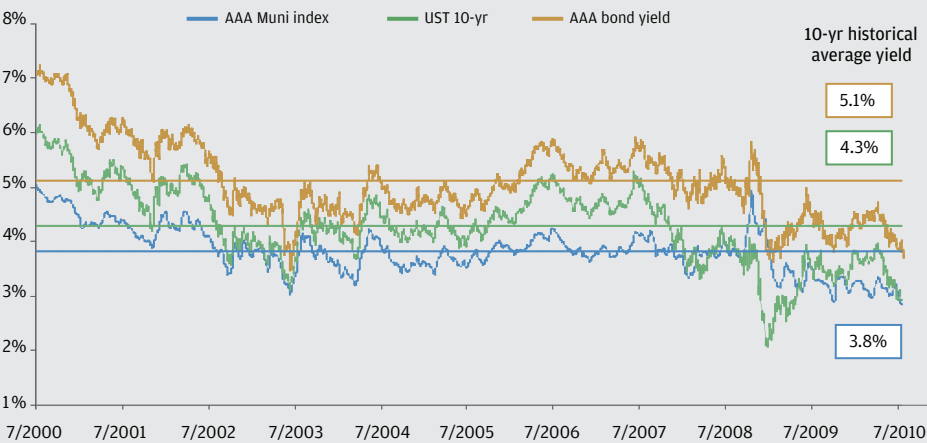


While institutional investors might be less sensitive to changes in shareholder distribution taxes, retail investors are typically focused on their after-tax returns. The pricing and ownership of municipal bonds provides clear evidence of retail investor focus on after-tax returns. Municipal bonds are typically exempt from federal income taxes and, for in-state residents, from state and city taxes. In Figure 4, we show that AAA municipal bonds typically trade at lower yields than AAA corporate bonds and even U.S. Treasury bonds, which are taxed at the federal and state level. Since credit risk cannot explain the difference in yield (especially in the case of U.S. Treasury bonds), this example shows that investors account for the tax impact when determining their pre-tax required return on investment. In fact, if the pricing difference between AAA municipal bonds and AAA corporate bonds is mainly related to the difference in tax treatment, the yields imply that the marginal investor is taxed at 25% on ordinary income. Thus, firms with significant (tax-sensitive) retail ownership are likely to be more impacted by changes in the dividend tax rate.

⁴ See James Poterba, “Taxation and Corporate Payout Policy,” American Economic Review 2004, for a long time series of U.S. household ownership of corporate equity (1929-2003). Note that this paper includes the portion of mutual funds held by households as part of the calculation, while we show mutual funds separately.

Figure 4

AAA municipal bonds typically trade at lower yields relative to AAA corporate bonds and even U.S. Treasury bonds (10-year maturity)



Source: Bloomberg
Note: All yields refer to bonds with a maturity of 10 years

Which firms attract more retail (tax-sensitive) investors?

Firms can look at their ownership structure to gauge the impact of higher dividend and capital gains taxes. For the largest non-financial S&P 500 firms, we find that **large firms with a stronger brand image, higher dividend yields and lower leverage have significantly higher retail ownership** (Figure 5).

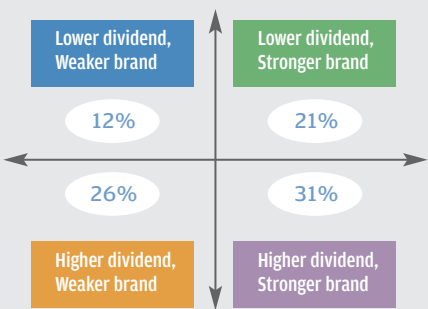
Figure 5

Dividend yield and brand power are key drivers of retail ownership

Sample criteria (94 firms)

- ✓ S&P 500 companies
- ✓ Companies included in the 2009 BrandFinance® Global 500 annual report
 - Brand score measures the strength, risk and future potential of a brand relative to its competitors
- ✗ Excludes financial companies

Median retail ownership by category¹



Source: J.P. Morgan
Note: Full sample includes 94 non-financial S&P 500 companies in the 2009 BrandFinance® Global 500 annual report. Brand score measures the strength, risk and future potential of a brand relative to its competitors.

¹ Firms grouped by “greater than median” metrics; median dividend yield of 1.75% and median Brand score of AA-
Estimated regression: % retail ownership = 2.7x(Dividend yield) + .01x(Brand score) + .11xLog(Sales) - .135x(Leverage) - 0.35; R2 =47.2%

But some sectors may benefit (on a relative basis)

Surprisingly, certain high-dividend paying sectors with high retail investor ownership may benefit from higher dividend taxes (on a relative basis). Under the 2003 legislation, dividends paid by real estate investment trusts (REITs) and master limited partnerships (MLPs) were excluded from qualified dividend income and, therefore, did not benefit from the lower (15%) tax rates. Since dividend income in these sectors is already taxed at ordinary income rates, these firms should benefit, all else equal, from increasing dividend taxes on qualifying dividends relative to other high dividend paying stocks. **Additionally, low dividend paying sectors that provide most of their returns in the form of capital gains may also benefit, at the margin.**

EXECUTIVE TAKEAWAY

The extent to which firms are affected by changes in the dividend tax rate depends on the composition of their shareholder base. Specifically, firms with a high portion of tax-sensitive retail investors are more likely to be affected. We find that retail investors tend to invest in larger firms, with stronger brands, lower leverage and higher dividend yield. On the other hand, high dividend sectors that did not benefit from the current 15% dividend tax rate (e.g., REITs and MLPs) may benefit from the dividend tax increase on a relative basis.

4. Corporate finance implications of a higher dividend tax rate

4.1 How do higher distribution taxes affect the cost of equity?

The basic premise for our analysis of the relation between the dividend tax rate and the cost of equity is that investors ultimately care about after-tax returns rather than pre-tax returns. If indeed investors focus on after-tax returns, as the evidence suggests, then a higher dividend tax rate would lead to a higher cost of equity. We illustrate the potential effect of higher dividend taxes in Figure 6. In this example, investors expect a 9.25% after-tax return to compensate them for the risk of an equity investment. We assume that all investors are taxable and that they hold the stock in perpetuity (recognizing that these assumptions magnify the impact of the tax increase). Further, we assume a pre-tax dividend of \$5 growing at a 5% annual rate.

Figure 6

Upper-end estimates of the valuation impact of dividend tax changes for tax-sensitive investors owning high dividend stocks				
	Tax-exempt investor	Current 15% tax rate	20% tax rate	39.6% tax rate
Dividend paid	\$5	\$5	\$5	\$5
After-tax payoff	\$5	\$4.25	\$4	\$3.02
Dividend growth	5%	5%	5%	5%
Post-tax required return on equity	9.25%	9.25%	9.25%	9.25%
Implied pre-tax cost of equity	9.25%	10.0%	10.3%	12.0%
Market value of equity ¹	\$118	\$100	\$94	\$71

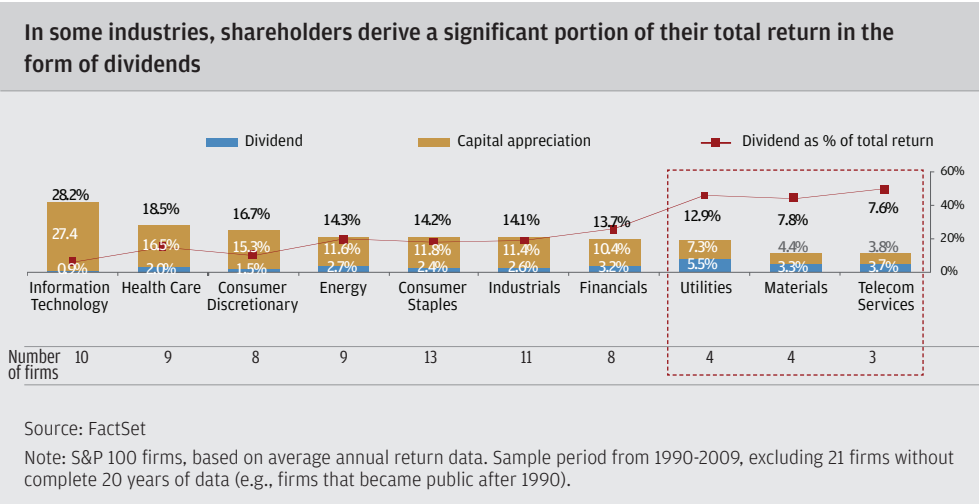
Source: J.P. Morgan (illustrative example)
Note: Analysis assumes that the marginal equity investor is a full taxpayer, holding the stock in perpetuity.
¹ Assumes an all-equity firm with 5% perpetual growth rate

With today’s 15% dividend tax rate, an equity investment in this firm has to offer a 10.0% pre-tax return to satisfy the 9.25% after-tax requirement. If the dividend tax rate increases to 39.6%, then the investment needs to offer a 12.0% pre-tax return to deliver the required 9.25% after-tax return. If the tax rate for the marginal investor increases to 20%, then the increase in the cost of equity would be only 30 basis points. Clearly, if investors are not fully taxable and if returns are not all in the form of dividends, then the impact on the cost of equity is likely to be much lower than the upper-end estimates we show in our example.

4.2 How would higher cost of equity affect stock prices? Do current equity values already reflect the tax increase?

If we use the expected return on equity discussed in the previous section to value the price of equity, then a \$5 pre-tax dividend stream growing at 5% forever is worth \$100 assuming a 15% tax rate. At the higher rate, the identical pre-tax dividend stream is only worth \$71. While in our example we assume that the full return is in the form of dividends and that the marginal investor is a full taxpayer, the actual effect of the tax increase is likely to be appreciably smaller, but of course still negative.

Figure 7



Our example demonstrates the upper end of the potential valuation impact of higher distribution taxes. If a smaller portion of the total return is in the form of dividends and if fewer investors are tax-sensitive, then the cost of capital and valuation impact diminishes. In Figure 7, we show that the importance of dividend returns varies across industries. For example, **shareholders of utilities, materials, and telecom companies in the S&P 100 earned about 50% of their total returns in the form of dividends over the last two decades** (and the importance of dividends has been even higher in the most recent decade). Not surprisingly, firms in these industries are likely to be more severely impacted by an increase in the dividend tax rate than firms in information technology. Similarly, academic researchers have found that the 2003 dividend tax cuts led to an increase in equity prices, especially for high dividend-paying stocks.⁵

Some other factors mitigate the **future** valuation impact of a higher dividend tax rate. If investors expect such an increase, current equity valuations are likely to already reflect some of the impact of an increase on shareholder distribution taxes. Tax increases are not necessarily permanent, however, and dividend taxes may be reduced again in a different economic environment.

⁵ Auerbach and Hassett, “The 2003 Dividend Tax Cuts and the Value of the Firm: An Event Study,” NBER paper 2005, found that a one percentage point increase in dividend yields led to a 1.5 percent higher abnormal return around key announcements regarding the 2003 dividend tax cut.

It is difficult to determine conclusively how much of the likely dividend tax increase has been priced in already. There will be no single-day surprise announcement of an increase. Instead, news of various possible outcomes and their likelihood will gradually trickle into the marketplace until we know with certainty what the new tax environment will be for 2011. In the meantime, many other factors continue to affect equity valuations, including economic growth (or lack thereof), interest rates, sovereign risk, regulatory risk, technological change, etc. While investors assume that the highest tax rate outcome is possible for dividends, it is likely that they have not assigned a 100% probability to it yet. Hence, an increase in the dividend tax rate to 39.6% could lead to further downward pressure on equity values.

4.3 A higher cost of capital will reduce corporate investing

In the previous section, we explain how higher distribution taxes (and in particular, dividend taxes) increase the cost of equity capital and are likely to put downward pressure on equity valuations. How does this affect the capital allocation process? To allocate capital to new projects, firms determine whether the return they expect to generate on these investments will exceed their cost of capital or hurdle rate. The cost of capital is the weighted-average of the cost of equity and the (after-tax) cost of debt. If the cost of equity capital increases and the cost of debt remains unchanged (or even increases following the expected rise in the ordinary income tax), then the weighted-average cost of capital will increase (unless firms change the weights of debt and equity – to be discussed in the following section).

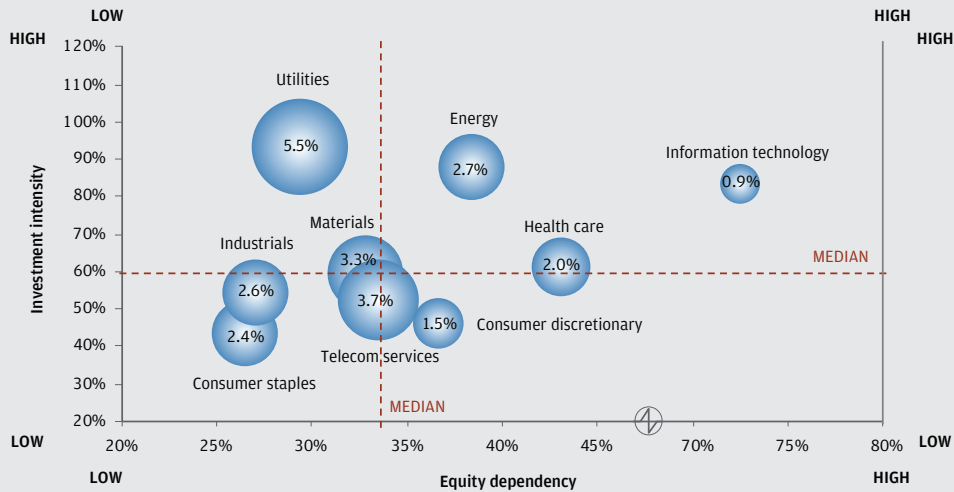
The impact of a significant tax increase on the weighted-average cost of capital will be more pronounced for capital-reliant firms that invest more than they generate in cash flow each year and/or that rely more on the equity market to finance future growth. In Figure 8, we sort the industry groups in the S&P 500 by their investment intensity and their equity dependency. **Investment intensity** defines a firm's dependence on outside capital and we measure it as capital expenditures plus R&D divided by cash flow from operations (CFO). **Equity dependency** is measured as the proportion of equity in the firm's capital structure. For example, health care and technology firms invest heavily in R&D to finance their future growth and, due to the nature of their assets and cash flow profile, rely mostly on equity financing. Utility firms utilize their assets to access cheaper debt financing in addition to equity, but their high capital expenditures and elevated dividend yield increase their reliance on outside capital markets. This means that their cost of capital and capital allocation decisions will be sensitive to changes in the dividend tax rate.

While it is challenging to predict the precise impact of higher dividend taxes on capital allocation, higher dividend taxes increase the cost of capital, and with a higher cost of capital, fewer projects will be attractive. A reduction in the business sector's capital investment would not help the long-term level of potential GDP.⁶ In addition, the **current uncertainty around future taxes, together with many other uncertainties, may have already led many corporations to delay their investment decisions** (see quote).

⁶ A recent OECD report estimated that an increase of one percentage point in the cost of capital might lead to a reduction in the long-term level of potential G.D.P. of 2.2% ("Gauging the Impact of Higher Capital and Oil Costs on Potential Output," July 2010).

Figure 8

Industries that rely on equity capital to finance future growth will be adversely affected by a higher dividend tax rate



Source: J.P. Morgan

Note: S&P 500 firms, excluding financials; “Investment intensity” defined as $(\text{Capex} + \text{R\&D})/\text{CFO}$; “Equity dependency” defined as $\text{Equity}/(\text{Debt} + \text{Equity})$. “Equity” defined as common stock plus additional paid-in capital. Size of sphere represents industry average dividend yield. Based on average of last 10 years of data.

“Willingness to invest in a given period depends not only upon risk-discounted returns but on the rate of arrival of new information. When there is high “information potential” (usually when the environment is in a state of flux or uncertainty), a wait-and-see approach is most profitable and investment is low.”

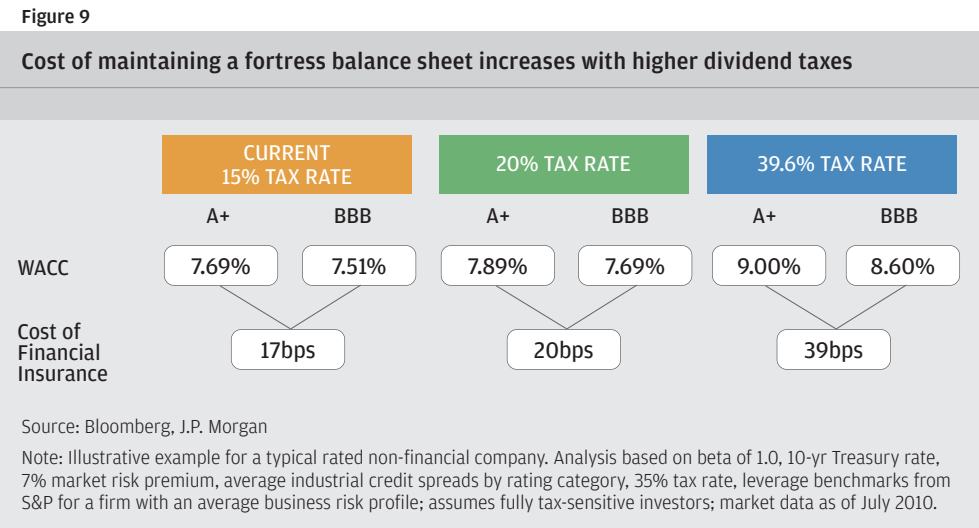
Ben Bernanke’s Ph.D. dissertation, M.I.T., 1979

4.4 Increased double taxation on equity makes debt more attractive

Depending on the firm’s capital structure, operating income will accrue to investors as debt interest or equity income (paid out in the form of dividends or buybacks or retained in the company). Under the current U.S. tax system, debt interest is taxed at the personal level (but deductible at the corporate level), while payments to shareholders are taxed both at the corporate level and the investor level.⁷ Increasing the dividend tax rate will amplify the double taxation on equity, making debt more appealing on a relative basis. In the same vein, hybrid capital – long-dated, subordinated, debt-like securities with deferrable coupons that receive partial equity treatment from the rating agencies – will also become more attractive on a relative basis.

⁷ Not all countries have a double taxation on equity. In fact, several countries adopt a dividend imputation tax system in which at least some of the tax paid by the company can be utilized as a tax credit to the shareholder receiving dividends.

Cost of capital is, however, only one of the factors driving the capital structure decision. Firms may also consider financial flexibility, downside protection, capital market access, etc., as key drivers of their long-term capital structure choice. In fact, most large firms that have the choice prefer to have a slightly higher current cost of capital if this provides them with more flexibility and predictable debt market access. For example, almost 80% of mega cap (>\$50 billion) firms are rated A- or better, even though their cost of capital may be lower at a BBB credit rating. In today's dividend tax rate environment, the cost of capital difference between BBB and A+ ratings is minimal. For example, as we show in Figure 9, if all returns are in the form of fully taxed dividends of 15%, a typical large firm pays a cost of capital increment of about 17 basis points (0.17%) to ensure more flexibility and downside protection (i.e., a capital structure consistent with an A+ rating vs. a BBB rating). At the 39.6% tax rate, the same firm would pay a 39 basis point cost of capital premium to preserve a fortress (A+) balance sheet. We are not arguing that a fortress balance sheet would be less valuable, but rather that **a higher dividend or capital gains tax rate will increase the cost of maintaining a fortress balance sheet**. Hybrid capital, however, could reduce the insurance cost of maintaining financial flexibility by combining equity-like features with tax-deductible coupons.

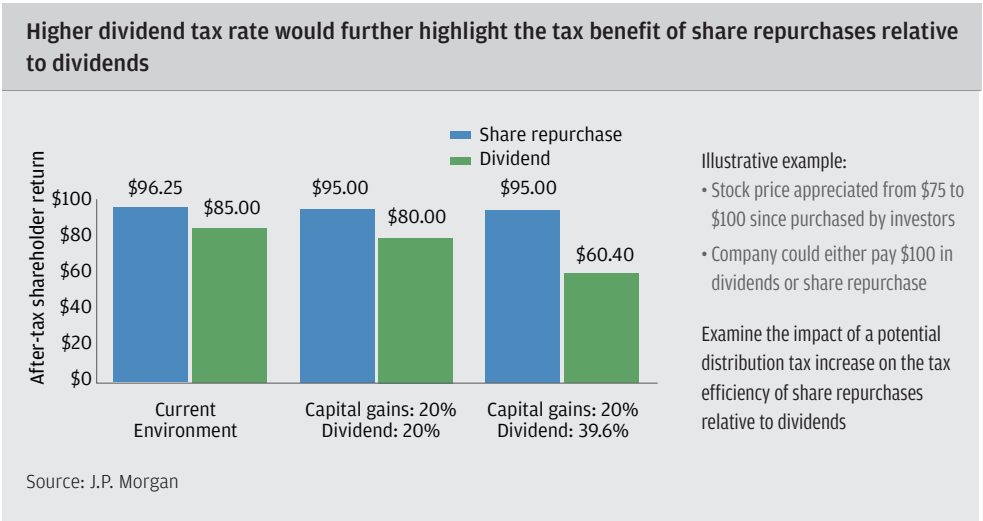


4.5 Buybacks become more attractive relative to dividends, but special dividends may become timely

Several factors influence shareholder distribution policy and, specifically, the choice between dividends and share repurchases. These factors include the signaling effect, investor preferences, cash flow sustainability, EPS impact, flexibility and taxes. In this section we will focus on the potential effect of a larger increase in the dividend tax rate relative to capital gains taxes. It is often not understood that share repurchases are more tax-effective than dividends even today, when the tax rate on qualifying dividends is equal to the long-term capital gains tax rate (see Figure 10). First, while taxes on dividends have to be paid immediately, shareholders can elect not to sell shares when a firm is executing a buyback, and therefore postpone the (potential) recognition of capital gain, reducing the present value of their tax liability. Second, the dividend tax is applied to the full distributed amount, whereas capital gains taxes for shareholders who sell an equivalent dollar amount of shares apply only to the gain (if any).

The expected increase in the relative tax advantage of buybacks (illustrated in Figure 10 below), coupled with their flexibility, could lead more firms to prioritize share buybacks over dividends. At the very least, some firms may choose to avoid significant dividend increases and wait for more clarity. On the other side of the spectrum, firms with major shareholders (e.g., family-owned firms) that were planning to distribute excess cash or capital in the form of a special dividend may now decide to accelerate this distribution to avoid a higher tax rate in 2011.

Figure 10



EXECUTIVE TAKEAWAY

An increase in the dividend tax rate would lead to a higher pre-tax cost of equity. As a result, equity valuation might be under pressure, corporations may reduce their investing due to higher hurdle rates, and debt might become more attractive relative to equity. In addition, higher dividend taxation relative to long-term capital gains further accentuates the existing tax benefit of share repurchases relative to dividends, making buybacks more attractive for some firms.

5. Action plan

The uncertainty around the dividend tax rate next year has numerous implications for the financial strategies of U.S. corporations. While earning growth, balance sheet strength, liquidity needs and well-balanced shareholder distribution policy will continue to drive corporate finance decisions, **a materially higher dividend tax may impact almost all aspects of financial policy for dividend-paying firms with tax-sensitive investors.**

Decision-makers should reconsider the tradeoffs between common dividends, special dividends and share repurchases. Specifically, firms might choose to postpone major increases to their common dividend until there is more certainty regarding the dividend tax rate next year. On the other hand, in lieu of a significant increase to common dividends, firms may utilize the lower tax rate this year to accelerate the distribution of excess liquidity via special dividends, a strategy commonly used by firms with concentrated ownership. In addition, the relative tax advantages of share repurchases may increase appreciably.

As mentioned in the previous section, a higher dividend tax rate may lead to a higher cost of capital and higher hurdle rates. Companies should reevaluate the attractiveness of potential investment opportunities, especially ones financed mostly with equity to be raised over the next few years. Alternatively, if senior management believe they will need equity in the near term, and that a potential increase in the dividend tax rate is not fully reflected in its current equity valuation, they should consider the benefits of accelerating their equity raise.

Figure 11

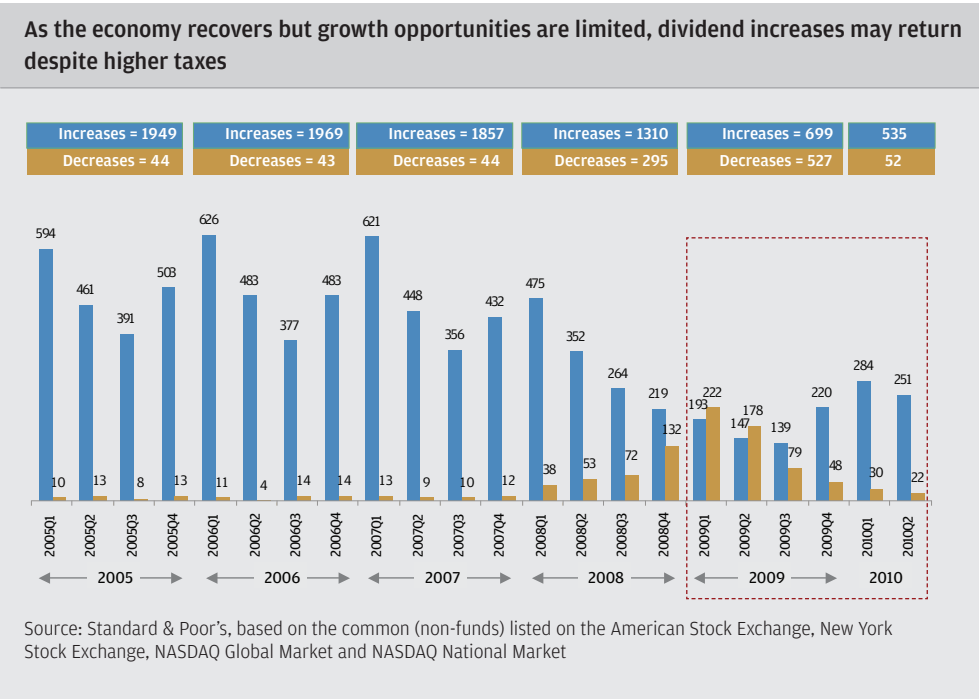
Higher dividend tax rate implications on shareholder distribution policy	
Action plan	
Special dividend	<div>✓ Accelerate special dividends to avoid higher tax rate in 2011</div> <div>✗ Deviate from prudent financial policy with overly aggressive distributions</div>
“Big bang” dividend increase	<div>✓ Wait for more clarity before a large dividend increase or initiation</div> <div>✗ Eliminate/cut dividends without considering all aspects</div>
Buybacks	<div>✓ Consider buybacks as a flexible, more tax-efficient distribution alternative</div> <div>✗ Ignore potential impact of buybacks on trading liquidity and float</div>
Future capital raises	<div>✓ Accelerate existing plans to raise equity</div> <div>✗ Determine optimal capital structure solely based on cost</div>
Capital allocation	<div>✓ Evaluate the potential effect of a dividend tax increase on project hurdle rates</div> <div>✗ Abandon value-creating projects due to incremental cost of financing</div>
Source: J.P. Morgan	

What to expect?

Dividends will increase because of liquid balance sheets, sluggish growth and the necessary catch-up after the crisis: Although we highlight that a higher dividend tax rate reduces the relative attractiveness of dividends, the tax on distributions is only one of the many factors affecting corporate payout policy. As the economy recovers and corporations face lower levels of uncertainty with limited growth opportunities and cash-rich balance sheets, senior decision-makers may decide to increase dividends as a way to distribute cash to shareholders. This signals their bullish view on future cash flows and their desire to provide predictable cash returns to shareholders.⁸ In fact, since the beginning of 2010, we have witnessed the highest number of quarterly dividend increases in two years (Figure 12). Thus, even if a dividend tax increase adversely impacts the number and magnitude of future dividend increases, we may still see a significant number of quarterly dividend increases. This reflects the conditions we mentioned above together with the catch-up phenomenon of many firms that slowed down dividend increases over the last two years because of the crisis.

Firms will maintain fortress balance sheets, but pay more for them: Similarly, despite the marginal benefit of debt under a higher dividend tax rate, many corporations acknowledge the benefit of maintaining a fortress balance sheet in the face of an uncertain macroeconomic environment. The benefits of greater financial flexibility, downside protection and access to capital markets will be offset by a now higher cost of equity. Hence, we continue to recommend a prudent approach to capital structure, even if higher taxes on equity returns increase the cost of a fortress balance sheet.

Figure 12



⁸ Economic growth itself could potentially be higher if one believes that the tax receipts from a higher dividend tax would be efficiently utilized by the government to stimulate the economy.

EXECUTIVE TAKEAWAY

While taxes are by no means the only drivers of a well-balanced financial policy, decision-makers should evaluate how a higher dividend tax rate could affect hurdle rate, leverage and shareholder distribution decisions.

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