

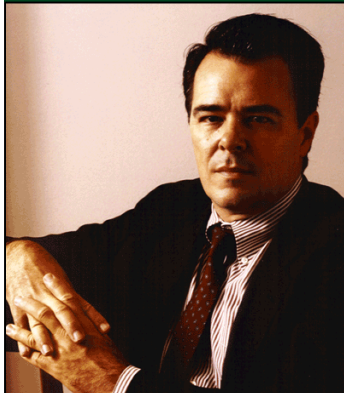
Rutledge Investment Strategies

Tracking Asset Market Shifts to Build Wealth

How the Dividend Tax Cut Will Work

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A dividend tax cut would raise the after-tax return on dividend paying assets above that on all other assets. The resulting thermal disequilibrium would lead investors to rebalance portfolios, driving dividend paying asset prices up relative to other assets. The Intrinsic Value of the S&P 900 would rise by 5.1% at a 20% tax rate, and 8.5% at a 0% tax rate, increasing net worth by \$481 billion, or \$799 billion, respectively. Differential effects vary widely by sector. There are huge potential further gains for companies that increase payout ratios and reduce debt.

Table 1
Impact of 20% Dividend Tax Rate on Stock Prices

Sector	Pre-Cut Cost of Equity	Dividend Payout (2001)	Post-Cut Cost of Equity	Cost of Equity Impact	Equity Capital Ratio	Cost of Capital Impact	Cost of Capital Sensitivity	Stock Price Impact	Pre-Cut Market Cap \$B	Market Cap Impact \$B
Consumer Discretionary	7.1%	52.0%	6.3%	-0.9%	42.5%	-0.4%	25.4%	9.3%	\$ 1,304	\$ 121
Consumer Staples	7.4%	45.2%	6.6%	-0.8%	43.3%	-0.3%	18.8%	6.3%	\$ 844	\$ 53
Industrials	7.2%	81.3%	5.8%	-1.4%	43.2%	-0.6%	21.7%	12.8%	\$ 1,060	\$ 135
Utilities	7.7%	56.0%	6.7%	-1.0%	33.7%	-0.3%	22.9%	7.7%	\$ 244	\$ 19
Materials	7.4%	115.3%	5.4%	-2.0%	44.0%	-0.9%	16.0%	14.1%	\$ 263	\$ 37
HealthCare	7.2%	33.2%	6.6%	-0.6%	46.9%	-0.3%	18.3%	4.8%	\$ 1,360	\$ 65
Information Technology	7.0%	12.8%	6.8%	-0.2%	65.7%	-0.1%	23.6%	3.2%	\$ 1,482	\$ 48
Financials	7.3%	47.0%	6.5%	-0.8%	11.9%	-0.1%	29.7%	2.8%	\$ 1,904	\$ 54
Energy	7.4%	37.1%	6.7%	-0.6%	59.5%	-0.4%	19.0%	7.2%	\$ 525	\$ 38
Telecommunications	7.3%	117.4%	5.3%	-2.0%	48.1%	-1.0%	20.9%	20.1%	\$ 394	\$ 79
S&P 900	7.2%	52.9%	6.3%	-0.9%	27.2%	-0.2%	21.2%	5.1%	\$ 9,381	\$ 481

Table 2
Impact of 0% Dividend Tax Rate on Stock Prices

Sector	Pre-Cut Cost of Equity	Dividend Payout (2001)	Post-Cut Cost of Equity	Cost of Equity Impact	Equity Capital Ratio	Cost of Capital Impact	Cost of Capital Sensitivity	Stock Price Impact	Pre-Cut Market Cap \$B	Market Cap Impact \$B
Consumer Discretionary	7.1%	52.0%	5.7%	-1.4%	42.5%	-0.6%	25.4%	15.5%	\$ 1,304	\$ 202
Consumer Staples	7.4%	45.2%	6.1%	-1.3%	43.3%	-0.6%	18.8%	10.5%	\$ 844	\$ 88
Industrials	7.2%	81.3%	4.9%	-2.3%	43.2%	-1.0%	21.7%	21.2%	\$ 1,060	\$ 225
Utilities	7.7%	56.0%	6.0%	-1.7%	33.7%	-0.6%	22.9%	12.7%	\$ 244	\$ 31
Materials	7.4%	115.3%	4.1%	-3.3%	44.0%	-1.5%	16.0%	23.3%	\$ 263	\$ 61
HealthCare	7.2%	33.2%	6.3%	-0.9%	46.9%	-0.4%	18.3%	7.9%	\$ 1,360	\$ 108
Information Technology	7.0%	12.8%	6.7%	-0.3%	65.7%	-0.2%	23.6%	5.4%	\$ 1,482	\$ 80
Financials	7.3%	47.0%	6.0%	-1.3%	11.9%	-0.2%	29.7%	4.7%	\$ 1,904	\$ 89
Energy	7.4%	37.1%	6.3%	-1.1%	59.5%	-0.6%	19.0%	11.9%	\$ 525	\$ 63
Telecommunications	7.3%	117.4%	4.0%	-3.3%	48.1%	-1.6%	20.9%	33.4%	\$ 394	\$ 132
S&P 900	7.2%	52.9%	5.8%	-1.5%	27.2%	-0.4%	21.2%	8.5%	\$ 9,381	\$ 799

Summary

The Bush dividend tax cut will be the biggest event to hit the asset markets since the 1981 Reagan tax cuts. It will have a huge impact on asset prices, interest rates, growth, and the dollar. It will create a host of opportunities for investors to make money. It will also create a wave of restructuring, recapitalization, and acquisition events among US companies.

Conceptually, a dividend tax cut would impact stock prices in two phases. Initially, it would work by raising the after-tax return on dividend paying assets above that on all other assets. The resulting thermal disequilibrium, characterized by an unsustainable gap between after-tax returns, would lead investors to individually attempt to rebalance their portfolios, selling non dividend paying assets to buy dividend paying assets.

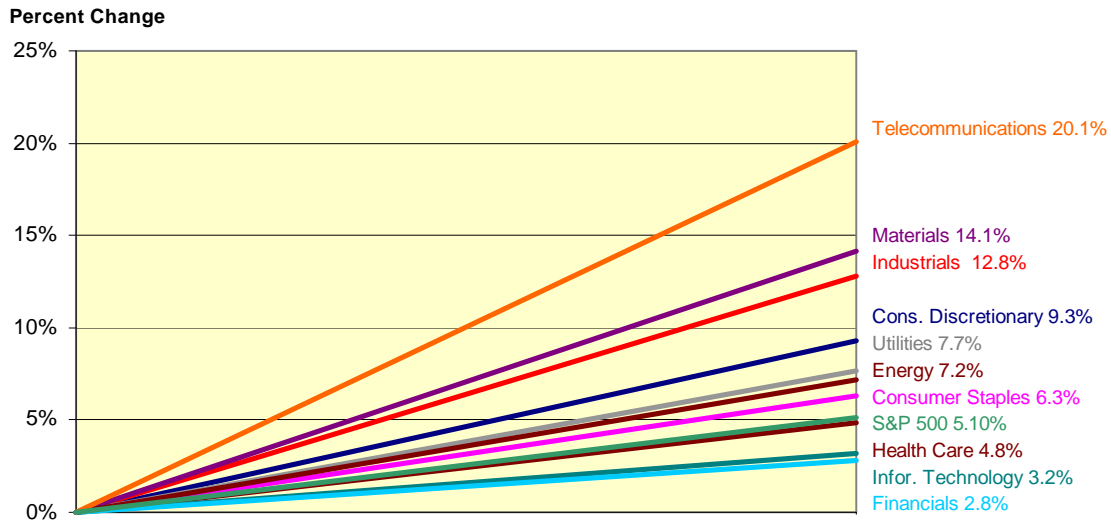
Collectively, these attempts would drive the prices of dividend paying assets up relative to all other assets, which would reduce the after-tax return gap until returns were driven back in line. These price changes would increase the market value of equities, as well as the net worth of investors.

A reduction of the dividend tax rate from 38.6% to 20%, for example, would increase the Intrinsic Value of the S&P 900 by 5.1% and increase investors' net worth by \$481 billion.

A reduction of the dividend tax rate from 38.6% to 0% would increase the Intrinsic Value of the S&P 900 by 8.5% and increase investors' net worth by \$799 billion.

Effects vary widely by sector, as shown below in Chart 1; the biggest effects will occur in sectors with high dividend payout ratios and no debt. In the Telecommunications sector, for example, the reduction to a 20% dividend tax rate would increase equity value by 20.1%; the reduction to a 0% dividend tax rate would increase equity value by 33.4%.

Chart 1
Stock Price Impact of a 20% Dividend Tax Rate



These initial effects will be followed by a second round of potentially larger stock price increases as managers alter company strategies to take advantage of the new tax regime. One-time special dividends to distribute excess cash, increased payout ratios, and issuing new shares to reduce debt will all increase value. These opportunities, which are concentrated in sectors with low payout ratios, like Information Technology, could be huge. Raising the dividend payout ratio in the Information Technology sector to 100%, for example, would increase equity values by 42.1% in the case of a 0% dividend tax rate.

Why a Dividend Tax Rate Cut Makes Sense

Dividends are currently taxed twice, once at the corporate level, then again at the investor level, which makes it hard to get a dollar of profit into an investor's pocket. Consider, as an illustration, XYZ Corporation. At current tax rates XYZ has to earn \$2.51 in pretax profits to put \$1.00 of dividends in its shareholders' pockets.

Out of the \$2.51 of pretax profits it pays \$0.88 (35% of pretax profits) in corporate income taxes to the IRS, leaving \$1.63 in after-tax profits. If it pays that \$1.63 to investors as a dividend, the investor who receives the dividend pays an additional \$0.63 (38.6% of dividend income at the top marginal rate) to the IRS, leaving exactly \$1.00 in his pocket.

Double taxation makes dividends an extremely leaky and inefficient bucket for carrying profits from the corporation to the investor. Overall, \$1.51 (60%) of XYZ's original \$2.51 has gone to pay taxes; only \$1.00 (40%) found its way to the investor. In comparison, both interest payments and capital gains are more efficient channels for paying profits to investors. It would cost XYZ only \$1.63 in interest payments to put a dollar of after-tax income in investors' pockets, since interest is deducted as an expense at the corporate level. Better still, XYZ could put the same after-tax dollar in investors' pockets by delivering only \$1.25 in the form of capital gains—tax free to the corporation; 20% tax rate to the individual—by reinvesting profits to generate growth or by “investing” its after-tax profits in stock buybacks.

Not surprisingly, corporate managers have figured this out; paying dividends has gone out of style. Only 20.8% of public companies paid dividends in 1999, down from 66.5% as recently as 1978. Those that do pay dividends are paying out a lower share of profits or using stock buybacks in their place.

Double-taxation of dividend income has given rise to serious inefficiencies in capital markets. It has diverted capital away from business ventures that produce reliable, large, and growing free cash flow streams for their owners in favor of companies that produce no profit but offer a hope of future capital gain. This distortion of managerial incentives was a material contributor to the excesses of the stock market boom in the late 1990s and to the severity of the subsequent correction. It also created the presumption in the minds of many managers that they should avoid paying profits to investors, which contributed to the governance scandals that were exposed by declining equity values in the past few years.

Cutting the dividend tax rate at the investor level to zero would promote more efficient use of capital among competing uses by removing the existing distortion among the after-tax returns that guide investor behavior. Here's how it would work.

How a Lower Dividend Tax Rate Affects Stock Prices

The way to understand the dividend tax cut is to focus on the economy's capital accounts by analyzing the effects of changes in the dividend tax rate on relative asset demands, therefore on asset prices and investment spending. This framework has its roots in the laws of thermodynamics—the most trusted principle in physics, chemistry, and biology.

Here's how it will work. Start with the example of a zero-growth company XYZ, discussed above, that has no debt and pays out 100% of its after-tax profits as dividends. Last year, the company paid shareholders a dividend of \$1.63 per share. Shareholders paid 38.6% (their marginal income tax rate) of the dividend, or \$0.63, to the IRS and put the remaining \$1.00 in their pockets. XYZ's stock price is \$20 per share. Shareholders earned a 5% after-tax return on their investment— $\$1.00/\20.00 —which is exactly equal to the after-tax return on all other assets.

In thermodynamics, if you put a hot object and a cold object into contact, heat will flow from the hot to the cold object until they reach thermal equilibrium where there is no temperature difference. You can try this yourself by placing a steaming hot dog and an icy cold can of soda into your child's lunch pail in the morning and ask them to report what they find when they open it to eat lunch. (Your child may learn some physics. Even better, they may start making their own lunch.)

If you put two objects together that are the same temperature, however, nothing will happen. Physicists call this situation *thermal equilibrium*.

This principle works in asset markets just as well as in lunch pails; only in economics we call it arbitrage and we refer to thermal equilibrium as portfolio balance. Unlike heat, however, money runs uphill, from low after-tax return to high after-tax return investments. Just like in physics, asset markets reach thermal equilibrium when after-tax returns are equal.

Our XYZ company example, above, is in thermal equilibrium because all assets have the same 5% after-tax return. There is no opportunity for investors to improve their net worth position by trading one asset for another. Regardless of what they own, they will earn 5% after-tax.

The dividend tax cut changes all that. Assume the government passes a law that makes XYZ dividends tax-free. (A good lobbyist will do that.) The company still pays the same dividend to the investor, but now the investor gets to pocket the entire \$1.63.

Now the investor earns $\$1.63/20.00 = 8.15\%$ on his investment after taxes. This is far better than the 5% investors are earning on other investments. This metaphorical temperature differential means that asset markets are no longer in thermal equilibrium. An investor can improve his position by selling one of his 5% assets and using the proceeds to buy XYZ stock. As all investors try to do so—they all have the same information—they will run into a traffic jam. They will all try to sell 5% assets to people who are trying to do the same thing, and will all try to buy XYZ stock from people who are also trying to buy XYZ shares. In this situation, we know one thing for sure; the price of XYZ shares will go up.

How much? If the market capitalization of XYZ is small compared with the market, so we can ignore the effects on other asset prices, the price of XYZ will rise until after tax returns are again equal and thermal equilibrium has been reestablished. This will happen when the price of XYZ has risen to \$32.60, at which price its owners will earn an after-tax return of $\$1.63/\$32.60 = 5\%$ on their capital.

Where did the extra value come from? It is the present value of the cash flow stream that has been diverted from the IRS to investors.

Cutting the dividend tax rate from 38.6% to zero has increased the Intrinsic Value of XYZ stock from \$20 to \$32.60, an increase of 63%, which equals the ratio of $(1 - \text{old tax rate})$ and $(1 - \text{new tax rate})$.

Analytically, we can describe this as a decline in XYZ's cost of equity capital, the return it must pay investors to remain competitive with other uses for their capital. A decline in the cost of capital increases equity values as a multiple of current after-tax profits.

Estimating the Dividend Tax Cut Impact on Equity Prices

The mechanism through which a reduction in the dividend tax rate from the current maximum rate of 38.6% to 20% increases equity values is shown in Table 1. The logic applies in exactly the same way to the case of reducing the dividend tax rate to 0%, which is shown in Table 2.

Table 1 shows that a reduction in the tax rate on dividend income from the current maximum rate of 38.6% to 20% would reduce the cost of equity capital—the return a company must pay investors to attract equity capital—for the companies represented in the S&P 900 by 90 basis points (0.9%), from 7.2% today to 6.3%. The reduction in the cost of equity capital varies from 200 basis points for Telecommunications companies to 20 basis points for Information Technology companies, since the former pay out essentially all earnings as dividends while the latter pay essentially no dividends. (I have used data on payout ratios for 2001, the last full year of data available from Compustat, to make the calculations. In a rigorous valuation we would use, instead, estimates of expected payout ratios over the life of the investment, which would change the reported numbers in Table 1 and Table 2 somewhat.)

Lower cost of equity translates into lower cost of overall capital to the extent a company's capital structure is made up of equity, rather than debt. (The Equity Capital Ratio data measures equity capital (including both common and preferred equity) as a percent of total capital. The decrease in cost of capital varies from 10 basis points for the Information Technology sector to 100 basis points for the Telecommunications sector, and equals 20 basis points for the broad market as represented by the S&P 900.

A lower cost of capital increases the Intrinsic Value of a company's equity—the present value of future free cash flow less debt—by reducing the discount rate used to estimate present values. As in the case of bonds and real estate securities, the impact of a 100 basis point reduction

in cost of capital on Intrinsic Value will depend on the shape of the expected future cash flow stream.

The Intrinsic Values of companies with front-loaded cash flow streams—those for which the bulk of free cash flow occurs in the early years—would be relatively insensitive to changes in the cost of capital. The technical term for this is short *duration*, the time-weighted average maturity of future cash flows. Those with back-loaded cash flow streams—high-growth companies with negative cash flow in the early years—will be strongly impacted by a reduction in the cost of capital. These are securities with long durations.

Our estimates of the sensitivity of Intrinsic Value per 100 basis point reductions in the cost of capital—21.2% for the S&P 900—is shown in Table 1 for the overall market as well as its ten component sectors. The column labeled Stock Price Impact shows estimates of the impact of the dividend tax cut on the Intrinsic Value of the S&P 900 and its component sectors, taking all these factors into account. Although overall stock prices should increase by just over 5%, the sectoral impacts vary widely, from roughly 3%, for the Information Technology and Technology sectors, to 20% for the Telecommunications sector.

These stock price increases will increase market capitalization and investors' net worth by \$481 billion, with increases concentrated in Industrials (\$135B), Consumer Discretionary (\$121B), Telecommunications (\$79B), and Health Care (\$65B).

Manager Response: The Next Wave of Restructuring and Refinancing

This is only the beginning. Astute managers will soon learn that companies that take advantage of the new, lower, tax rates will have lower capital costs and become tougher competitors than others. Over time, they will adapt their business practices to the new tax regime. The irony is that the sectors, industries, and companies that will initially benefit most from the lower dividend tax rate will have the least flexibility to improve their value, while those that initially benefit the least have the most to gain by changing behavior.

Many technology companies, for example, like Microsoft, have strong cash profits and large cash balances, but pay no dividend. They will have enormous latitude to increase their share prices by introducing a dividend and paying large special dividends out of current cash balances. Other companies that are principally debt-financed will benefit very little initially, but have broad scope to increase value by selling shares to reduce debt.

Shareholders will exert pressure on managers to increase dividend payouts and deleverage their businesses. Managers who own stock or stock options will gladly agree to do so. They will increase payout ratios out of current profits and sell new stock to finance growth. And, they will sell new stock to repay debt. Both will increase stock prices. The upward limit of the resulting rise in stock prices ranges between 50% and 60% for different sectors. This could add 5% or more per year to total returns for several years as companies adjusted to new tax rates.

Investment Strategy

Preferred stocks, with high dividend yields, 100% payout ratios, and implicit 100% equity financing, represent the most efficient way to place a bet on the initial gains on dividend paying stocks. Straight preferred stock could take on many of the characteristics of debt. Convertible preferred stock issued by companies with low common stock payout ratios (therefore, big upside from strategy change) are also attractive.

Common stock of companies or industries with big dividend payout ratios (Verizon, SBC, BMY, IDU) are also attractive ways to benefit from the initial price increase. The subsequent gains will accrue to companies or industries with flexibility to increase payout rates, pay meaningful special dividends, or refinance capital structure (MSFT, CSCO, INTC, and SUNW).

Watch out for a head fake with Real Estate Investment Trusts (REITs) and Master Limited Partnerships (MLPs), and other securities with high dividend yields which could be singled out for exclusion from the benefits of the tax cut. In many cases they already have special tax status which allows them to avoid double taxation, and are treated as pass-through vehicles, similar to S-Corporations. If they get the lower tax rate they will be wonderful investments. If they are singled-out for exclusion, however, income-seeking investors will sell these assets to buy other securities.

Treasury bonds, along with other fixed-income securities, are clear losers. In the past year, investors have parked tons of money in Treasuries and bond funds waiting for a better day. If the dividend tax cut ushers in that better day, as I believe it will, bond yields will rise and bond prices will fall substantially.

Hard assets that pay no dividends, such as land, commodities, and precious metals will be affected in a similar way as investors shift from hard assets, which pay no dividends, to dividend paying securities. Because of this, the dividend tax cut should be viewed as at least a mild deflationary impulse on goods prices and inflation rates. I will analyze the impact of these changes on growth, investment, inflation, interest rates, and the dollar in a separate paper. 📄