

Counterpoint Global Insights

Wealth Transfers

Redistribution of Value via Capital Allocation

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Introduction

The core of capitalism is the private ownership of the means of production in the pursuit of economic profit. A company generates a positive economic profit when it earns a return on investment in excess of the opportunity cost of capital.

Competition is a feature of capitalism. A company earning a handsome economic profit will attract competitors that seek to wrest that profit away either by selling similar goods or services at a lower cost or by providing attractive substitute offerings.

Productive investment is the engine of capitalism. Companies spend on tangible or intangible assets with the expectation that future cash flows, discounted to the present, will be worth more than the outlay. Successful investment creates wealth because one dollar of investment is worth more than one dollar in value.

Creditors and equity holders provide the capital to invest. Creditors have a senior claim on cash flows and hence have lower risk and expected return than equity holders. Equity holders have a residual claim on cash flows, so they have higher risk and potential reward. Once a company is up and running, the primary source of investment capital tends to be cash that is generated internally. Since 1980, internal financing has supplied more than 90 percent of the capital for investment in the U.S.¹ This can come from retained earnings or other stakeholders, including suppliers.²

Capital allocation is arguably a management team's most important task. The goal of capital allocation is to put resources to their best and highest use so as to create long-term value per share for ongoing shareholders. You can think of capital allocation in two parts. One is investing in the business, which includes familiar forms such as capital expenditures, intangible assets, and mergers and acquisitions.

The other is transacting with securities that have prices that are based on corporate value, including buying and selling the debt and equity of a company. This introduces the potential for a wealth transfer, where one stakeholder benefits at the expense of another.

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Wealth Transfers

A wealth transfer occurs when a company buys or sells a mispriced security.³ We focus on equity. The intuition is straightforward and amounts to little more than “buy low and sell high.” The essential issue is whether executives can discern between price and value. In theory, they should have information about the prospects for their companies that investors lack. This can provide an opportunity to initiate a wealth transfer.

The empirical research on the topic comes to a few conclusions. First, companies can indeed time the sale and purchase of equity so as to benefit ongoing shareholders.⁴ Second, wealth transfers tend to be larger for sales of overpriced equity than they are for purchases of undervalued equity.⁵ Third, institutional investors are generally more discerning than individual investors when transacting with a company.⁶

Richard Sloan and Haifeng You, professors of accounting, find that companies buying and selling equity transfer one to two percent of the pre-deal market value from the transacting shareholders to the ongoing shareholders, measured five years after the event.⁷

An important implication of these transfers is that a stock’s dollar-weighted average return can be less than its time-weighted return. Total shareholder returns are generally reported using time-weighted returns. This concept is related to the observation that mutual fund investors generally earn lower returns than the funds in which they invest because of poor timing. For example, the dollar-weighted returns were 117 basis points lower than time-weighted returns for U.S. equity mutual funds for the 10 years ended December 31, 2020.⁸

Ilia Dichev, a professor of accounting, provides an example to make the point clear (we modify his numbers modestly).⁹ A company starts with 1,000 shares of a stock that trades at \$100 a share. The stock then doubles to \$200 and the company sells 1,000 shares. Finally, the stock returns to \$100.

It is obvious that the initial shareholders are flat on their investment and the new shareholders are down 50 percent. In fact, in this scenario the dollar-weighted return is -26.8 percent, measured using internal rate of return (IRR). But the time-weighted return is zero because the stock ended where it began.

This analysis is based on price change, which is what investors ultimately care about. Wealth transfers rely on a stock being mispriced, which presumes that price differs from intrinsic value. When we introduce value, we can observe that selling overvalued stock and buying back undervalued stock add to firm value per share. Symmetrically, buying back overvalued stock and selling undervalued stock subtract from firm value per share (see exhibit 1).

Exhibit 1: Wealth Transfers Via Equity Transactions

		Stock Price	
		Undervalued	Overvalued
Company	Sells	<ul style="list-style-type: none"> Buyers gain Ongoing holders lose 	<ul style="list-style-type: none"> Buyers lose Ongoing holders gain
	Buys	<ul style="list-style-type: none"> Sellers lose Ongoing holders gain 	<ul style="list-style-type: none"> Sellers gain Ongoing holders lose

Source: Counterpoint Global.

Let's return to our example. Say the intrinsic value of the firm at the outset is \$100,000 and that the price accurately reflects that value (\$100 per share x 1,000 shares outstanding = \$100,000). The stock rises to \$200, and the firm sells 1,000 shares. The new value of the firm is \$300,000 (\$300,000 = \$100,000 + \$200,000 in proceeds) and the value per share rises from \$100 to \$150 per share (\$150 = \$300,000 ÷ 2,000 shares outstanding). The wealth transfer is from the buying shareholders to ongoing holders, which becomes clear if the stock price declines to \$150 and matches its new value per share. Buying shareholders lose \$50 per share while the ongoing holders gain \$50. Note that the price regresses to a higher value.

We can start with the same intrinsic value and price and see what happens if the company buys back undervalued stock. Now assume the stock drops from \$100 to \$50 and the company repurchases 500 shares. The value of the firm decreases to \$75,000 (\$75,000 = \$100,000 - \$25,000 repurchase cost) but the value per share increases to \$150 per share (\$150 = \$75,000 ÷ 500 shares outstanding). The wealth transfer is from the selling shareholders to the ongoing holders if price and the new value align. Selling shareholders lose \$50 per share and ongoing holders gain \$50.

A company that sells overvalued stock increases the value per share for the ongoing holders. But it should be noted that those holders would be better off selling alongside the firm. A company that buys undervalued stock also augments value per share. But in this case, ongoing shareholders improve their situation by doing nothing.

This analysis is relevant for stocks that gain attention through social media and appeal primarily to retail investors. These are colloquially called "meme stocks" because the individuals who buy them commonly react to ideas developed and spread on the Internet.¹⁰ Consider that the net daily purchases of U.S equities and exchange-traded funds by individuals at the height of popularity for meme stocks was roughly 10 times the level of purchases in 2019 before major online brokerage firms moved to zero commissions.¹¹

The large price changes of these stocks suggest mispricing. These stock price spikes present an opportunity for a wealth transfer via corporate action.

We designated value in our example so as to illustrate the point. But in reality, determining intrinsic value is much more difficult. To simplify our analysis, we use the average target price of the sell-side analysts who cover a stock as a proxy for intrinsic value. As is generally known, target prices are not very accurate and tend to be optimistic. This means that realized prices tend to fall short of the target.¹² The math of wealth transfers still works, but the magnitude of the effect is muted if the target price is higher than the intrinsic value.

The recent case of GameStop, a retailer of video games and consumer electronics, is an example of equity issuance executed at a price that substantially exceeded value as implied by the target price of analysts. On April 9, 2021, GameStop had 65.3 million shares outstanding and the stock closed at \$158.36. Between June 9 and June 22, GameStop sold 5 million shares at an average price of \$225.20 per share. During the time of the sale, the average target price was \$65.48.

The intrinsic value increased from \$65.48 to \$76.84 per share, a gain of more than 17 percent, as a result of the issuance.¹³ On August 11, 2021, the stock closed at \$158.78. Measuring stock price returns from roughly two months before the issuance to two months after reveals an IRR of -1.4 percent but a time-weighted gain of 0.3 percent.

Another noteworthy aspect of the transaction is that the company added more than \$1.1 billion to its balance sheet. This introduces a capital allocation opportunity and risk. The capital creates additional wealth if it is deployed into the operations and earns a return in excess of the cost of capital. But an investment below the cost of capital is a drag on the value of the operations.¹⁴

AMC Entertainment Holdings, a movie theater chain, is another company with equity that qualified as a meme stock. The company sold stock in a similar fashion. Indeed, its actions had an even larger impact on intrinsic value than was the case for GameStop. AMC chose to deploy some of its cash into a gold mine company, Hycroft Mining, hence diversifying away from its core operations.¹⁵

Conclusion

Companies can affect wealth in a couple of ways. First, they can make investments in their operations that earn in excess of the cost of capital. This activity benefits capital providers. But sustaining returns above the cost of capital is challenging because of competition and the inevitable maturation of various markets for goods or services.

Companies can also transfer wealth by buying or selling mispriced stock. The evidence shows that in the aggregate companies do sell high and buy low, which means that transacting shareholders fare worse than ongoing holders.

Astute investors focus on a management's ability to allocate capital and tend to focus on investments in the business. This is appropriate. But investors should also be aware of the impact of management actions with regard to their own stock. The essential guide is the gap between price and value.

Finally, many investors count on mispriced stocks regressing toward their value per share over time as a means to generate excess returns. Wealth transfers show that actions by management can change the value per share without any change in the underlying fundamentals of the operations.

Please see Important Disclosures on pages 7-9

Endnotes

¹ Board of Governors of the Federal Reserve System, Division of Research and Statistics, Flow of Funds Accounts Table F.103. See <https://www.federalreserve.gov/releases/z1/20220310/z1.pdf>, page 18.

² This can be seen through analysis of the cash conversion cycle, a measure of how long it takes to convert investments in inventory into cash. Companies with a negative cash conversion cycle receive cash for the goods or services they produce before they have to pay their suppliers. This timing difference is a source of cash as long as the business grows.

³ Wealth transfers can happen by other means as well. One of the best examples is captured in the principal-agent problem. In this case, the principal is the shareholder and the agent is the manager of the business. The problem arises when the agent enriches his or herself, for instance through unnecessary perquisites, that transfer wealth from the principal to the agent. Other potential but more ambiguous cases include leveraged recapitalizations, where companies borrow money to repurchase stock, and spinoffs.

⁴ Amy Dittmar and Laura Casares Field, "Can Managers Time the Market? Evidence Using Repurchase Price Data," *Journal of Financial Economics*, Vol. 115, No. 2, February 2015, 261-282; Richard G. Sloan and Haifeng You, "Wealth Transfers via Equity Transfers," *Journal of Financial Economics*, Vol. 118, No. 1, October 2015, 93-112; Ilona Babenko, Yuri Tserlukevich, and Pengcheng Wan, "Is Market Timing Good for Shareholders?" *Management Science*, Vol. 66, No. 8, August 2020, 3542-3560; and Dinis Daniel Santos and Paulo Gama, "Timing the Market with Own Stock: An Extensive Analysis with Buying and Selling Evidence," *International Journal of Managerial Finance*, Vol. 16, No. 2, 2020, 141-164.

⁵ A related finding is that "IPO firms underperform the market for the three and five years after the IPO." From Michelle Lowry, Roni Michaely, and Ekaterina Volkova, "Initial Public Offerings: A Synthesis of the Literature and Directions for Future Research," *Foundations and Trends in Finance*, Vol. 11, No. 3-4, 2017, 154-320.

⁶ R. Jared DeLisle, Justin D. Morscheck, and John R. Nofsinger, "Share Repurchases and Wealth Transfer Among Shareholders," *Quarterly Review of Economics and Finance*, Vol. 76, May 2020, 368-378; Randolph B. Cohen, Paul A. Gompers, and Tuomo Vuolteenaho, "Who Underreacts to Cash-Flow News? Evidence from Trading between Individuals and Institutions," *Journal of Financial Economics*, Vol. 66, Nos. 2-3, November-December 2002, 409-462; and John R. Nofsinger and Richard W. Sias, "Herding and Feedback Trading by Institutional and Individual Investors," *Journal of Finance*, Vol. 54, No. 6, December 1999, 2263-2295.

⁷ Sloan and You, "Wealth Transfers via Equity Transfers" and Ulrike Malmendier, "Behavioral Corporate Finance," in B. Douglas Bernheim, Stefano Della Vigna, and David Laibson, eds., *Handbook of Behavioral Economics—Foundations and Applications 1* (Amsterdam: North Holland, 2018), 277-380.

⁸ Amy C. Arnott, "Mind the Gap 2021: A Report on Investor Returns in the United States," *Morningstar*, August 31, 2021.

⁹ Ilia D. Dichev, "What Are Stock Investors' Actual Historical Returns? Evidence from Dollar-Weighted Returns," *American Economic Review*, Vol. 97, No. 1, March 2007, 386-401.

¹⁰ The Merriam-Webster dictionary defines a meme as "an idea, behavior, style, or usage that spreads from person to person within a culture."

¹¹ Spencer Jakab, *The Revolution That Wasn't: GameStop, Reddit, and the Fleecing of Small Investors* (New York: Portfolio/Penguin, 2022), 139.

¹² Stefano Bonini, Laura Zanetti, Roberto Bianchini, and Antonio Salvi, "Target Price Accuracy in Equity Research," *Journal of Business Finance & Accounting*, Vol. 37, Nos. 9 and 10, November/December 2010, 1177-1217; Mark T. Bradshaw, Lawrence D. Brown, and Kelly Huang, "Do Sell-side Analysts Exhibit Differential Target Price Forecasting Ability?" *Review of Accounting Studies*, Vol. 18, No. 4, December 2013, 930-955; and Mark T. Bradshaw, "The Use of Target Prices to Justify Sell-Side Analysts' Stock Recommendations," *Accounting Horizons*, Vol. 16, No. 1, March 2002, 27-41. Target prices can be improved through the use of distributions. See Guy Weyns, Juan-Luis Perez, Barry Hurewitz, and Vlad Jenkins, "Morgan Stanley's Risk-Reward Views: Unlocking the Full Potential of Fundamental Analysis," *Journal of Applied Corporate Finance*, Vol. 23, No. 2, Spring 2011, 59-68; Patricia M. Dechow and Haifeng You, "Understanding the Determinants of Analyst Target Price Implied Returns," *Accounting Review*, Vol. 95, No. 6, November 2020, 125-149.

¹³ Here's the math. The company's implied intrinsic value before the transaction was \$4,276 million, or 65.3 million shares times \$65.48 per share. The company sold stock worth \$1,126 million, the product of 5 million

shares and a price of \$225.20. The new value of the firm is \$5,402 million, or \$4,276 plus \$1,126 million, which divided by the new shares outstanding of 70.3 million ($65.3 + 5.0$ million) equals \$76.84 per share.

¹⁴ "Investment" is one of the factors (others include size, value, momentum, and quality) in a number of prominent factor models that seek to explain equity returns beyond the output of the capital asset pricing model. The common way to measure investment is the growth in assets, and the general conclusion is that rapid asset growth is associated with poor subsequent total shareholder returns. More recent work parses asset growth into investment and non-investment components. Rapid asset growth as the result of investment growth does not predict poor returns. By contrast, rapid asset growth as the result of equity issuance but without investment does. See Michael Cooper, Huseyin Gulen, and Mihai Ion, "The Use of Asset Growth in Empirical Asset Pricing Models," *Working Paper*, August 2020.

¹⁵ Alexander Gladstone and Caitlin McCabe, "A New Meme-Stock Frenzy Led AMC to Gold Mine Stake," *Wall Street Journal*, March 15, 2022.

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