Growth in the Age of Cheap Capital

He had bought a large map representing the sea,
Without the least vestige of land:
And the crew were much pleased when they found it to be
A map they could all understand

– Louis Carroll, "The Hunting of the Snark"

Dividends at Wholesale

On November 28, 2012, Costco Wholesale Corp (COST) announced that it would pay a special dividend of $7 per share on December 18 to holders of record December 10. The move came ahead of what most observers expected to be a year-end increase in taxes on investment income. News reporters were quick to point out that in paying a special dividend during 2012, Costco would allow its shareholders to collect that dividend while the federal taxes on it are still at the current rate of 15%, rather than whatever, presumably higher, rate would apply in 2013. For some of Costco's biggest holders, like founder and Board member James Sinegal, the difference could be substantial. According to recent filings, Mr. Sinegal owns nearly 935,000 shares of COST, so his dividend was something like $6.5 million. If taxes on dividends rose even modestly, Mr. Sinegal's savings would come to hundreds of thousands of dollars.

Based on 433 million shares outstanding, the Costco special dividend amounted to just over $3 billion. Costco generally carries about that much cash on its balance sheet; as of September 2, 2012, Costco's financial statements reflected $3.5 billion in cash and another $1.5 billion in short-term investments. But Costco didn't just pay the dividend out of its cash on hand. The company also announced on November 28 that it planned to borrow $3.5 billion in the public bond market. In effect, Costco borrowed $3.5 billion, turning around to pay the bulk of the proceeds of those borrowings to its shareholders.

While the timing of Costco's move suggests that the company paid its special dividend in response to prospective tax changes, another factor likely informed the company's

750 Menlo Avenue – Suite 300 – Menlo Park, CA – 94025 – (650) 566-0200 Office –
(650) 566-0210 Facsimile

decision. Given its otherwise low leverage and the current interest rate environment, Costco was able to borrow at unusually low rates. According to its regulatory filings, the company borrowed $3.5 billion by issuing approximately equal amounts of three-, five-, and seven-year notes at coupon rates of 0.65%, 1.125%, and 1.7%, respectively. In borrowing at such low interest rates, Costco may have found a bargain that would have made it most loyal customers proud. Those rates are so low, in part, because of the Federal Reserve's current policies, which are holding all rates low. By borrowing and paying a special dividend, Costco lowered its cost of capital, raising the value of the company.

Costco's financing move illustrates one way companies have responded to the way the Fed's policies have lowered the cost of capital for businesses. The low cost of capital has also generally encouraged business investment, probably added to the pace of mergers and acquisitions, and possibly even contributed to some businesses' decisions to bring back to the US production they had previously moved overseas. Yet even if low interest rates have led to more business investment, overall growth in employment has remained tepid. That may be because while capital has been cheaper than usual, the cost of labor has adjusted more slowly. Many of the investments businesses have undertaken have had the purpose of streamlining or automating production, in effect substituting capital for labor. The result has been strong corporate profitability, but weak employment.

The Capital Structure Problem

When we invest in the securities markets, we sometimes forget that we're performing an essential function in our economic system by providing capital to productive enterprise. After all, businesses need capital to finance everything from inventory and accounts receivable to real estate, plant, and equipment. A business that seeks to finance itself out of its own cash flow limits its own rate of growth. To grow faster, the business must seek outside capital. Broadly speaking, that financing can take two principal forms: equity financing, in which the firm sells off shares representing ownership rights, and debt financing, in which the firm borrows money and promises to repay the loans with interest. The corporate Treasurer's problem is to decide what form of financing is cheapest, in the sense that it offers the firm's existing owners the most favorable share of the returns on future investment. With equity financing, the cost takes the form of dilution of existing holders, and with debt financing it comprises the interest charges and the risk of bankruptcy.

The academic literature doesn't offer corporate decision-makers much help in deciding how much equity and debt to use to finance their businesses. The most important work on the subject is the classic theorem of Franco Modigliani and Merton Miller, which says, in essence, that in a perfectly liquid capital market, the value of the

firm is the net present value of the cash flows it produces, regardless of how the firm finances itself. The mix of debt and equity simply represents the way the firm has chosen to divide up claims against those cash flows.[1] In other words, the firm's choice of capital structure does not affect its value.

In spite of Modigliani and Miller, if we look at the behavior of real-world companies, it's hard to escape the conclusion that capital structure is a matter of deliberate choice, so it actually must make a difference. One reason a company might have for borrowing is that debt has tax advantages. Interest a company pays on its debt is tax-deductible, whereas dividends it pays on its stock are not. The disadvantage of debt is that it can lead to financial distress or even bankruptcy if the company's fortunes sour. Debt also exerts leverage on equity owners' returns, increasing their gains when the firm succeeds and reducing them when the firm does poorly. On the other hand, a company that seeks financing by selling stock dilutes both the existing stockholders' returns and their ownership position in the company.

Generally speaking, a company with steady cash flows is likely to have more capacity to carry debt than one with variable cash flows. Traditional debt, after all, imposes a fixed, contractual obligation on the company, which it has to meet before it can make any distribution to shareholders. A company whose business is risky enough that it can't predict its cash flow at all probably shouldn't borrow much, but a company with steady cash flows may be able to borrow quite a bit, confident that it can service its debt and still have plenty for shareholders.

So let's go back to Costco. The financial press took exception to Costco's borrowing, apparently just to give cash to its shareholders, and particularly to its insiders. But this critique was misplaced. After all, the dividend is nothing more than a distribution of property — in this case, cash — to the people that already own it, the shareholders. Large holders enjoyed a large payout, of course, but small holders received their appropriate share too. And while the borrowing increased Costco's leverage, the increase was moderate, from around 20% of total capital (at book value) to around 40%. This wasn't some giveaway or expropriation of value. It wasn't a mortgaging of Costco's future at the expense of future generations of shareholders. The best way to understand Costco's action is that the company simply shifted its capital structure in response to changes in the relative cost of debt and equity. The market seemed to agree — the day Costco announced the dividend and debt issue, the company's stock jumped by about +6%.

---

[1] The Modigliani-Miller theorem has spawned an enormous academic literature. The original paper is Modigliani, F. and Miller, M. H. (1958). The Cost of Capital, Corporate Finance and the Theory of Investment. *American Economic Review,* 48, 261-97.

[2] Of course, investors will have differing views regarding both a company's prospects and the return they

By borrowing to pay a special dividend, the company made a taxable distribution of cash in anticipation of a likely change that would increase the tax on all dividends. The company also increased its leverage, perhaps indicating its confidence that it will be able to avoid financial distress for the foreseeable future, and suggesting that Costco's board believes that higher leverage is more likely to increase equity holders' returns than reduce them.

The Source of Value

The real test of whether Costco's borrowing really represented a bargain was in the market. As I have noted, the market's reaction was enthusiastic, increasing Costco's market capitalization by around 6%, or $2.6 billion, at the time of the announcement of the dividend and debt issuance.

What was the source of the increase? It wasn't merely the dividend itself. When companies pay dividends, their balance sheets shrink by the amount of the payout, and their share prices drop accordingly. On December 6, the ex-dividend date for the $7 special dividend, COST dropped from $105.95 to $98.47 — a $7 change for the dividend, and $0.48 in daily market fluctuation.

We generally think of the value of a company's stock as representing the present value of the company's future cash flows, discounted at some suitable rate. So the increase must have come from one or a combination of three sources: an indication of a value-enhancing change in corporate strategy; a signal that future cash flows will be stronger than previously anticipated; or a drop in the rate at which market participants found it appropriate to discount those expected future cash flows. Let's take each of these in turn.

Change in strategy. Markets do sometimes view dividend announcements as favorable strategy signals. We sometimes read reports of companies whose market capitalizations (the market value of their stock outstanding) aren't much more than the value of the cash on their balance sheets. It seems as though if we bought a stock like that, we'd be buying the cash, with the business thrown in for free. Assuming the company's physical assets have value, what the market is really saying in such a case is that the company's current management is systematically *destroying* value, that the company's ongoing business subtracts value from the company's assets. When a company like that declares a special dividend, the market sometimes cheers because in paying out the cash, management is saying that they won't continue to invest that cash in value-destroying ventures.

From most indications, nothing in Costco's dividend or debt announcements suggested that the company was changing strategy. The news reports at the time seemed

to tell us to take at face value the company's two main explanations — that it was accelerating its dividend payment in anticipation of increased tax rates, and that it was taking advantage of its ability to raise capital on advantageous terms. By borrowing to fund the dividend, Costco also made sure that it would keep its total capital base roughly unchanged. So in Costco's case, we can probably rule out the hypothesis that the market viewed the announcement as a signal of some value-enhancing shift in corporate strategy.

Change in expected future cash flows. If Costco's move didn't signal any change in strategy, then it probably doesn't signal any change in the company's ability to generate cash flows. However, the company's management probably knows more than most market participants about the firm's prospects. The coupled announcements of a special dividend and a debt issue may signal to the market that management has confidence in the company's future prospects, and can borrow without materially increasing the chances that the company would run into financial troubles for the foreseeable future. Such a signal could improve the market's assessment of the company's future cash flows without indicating a change in the company's actual prospects.

Costco's announcement may well have had a favorable signaling effect. Based on the market's reaction, investors believe that the company will not have any difficulty servicing its modestly increased debt, and that confidence extends to the market's assessment of the company's earning potential.

Change in discount rate. The most technical, but also probably the most important, change that Costco's announcement likely signaled was a reduction in the company's cost of capital. Reducing the firm's cost of capital was probably one of management's principal objectives in borrowing to pay the special dividend. The special dividend reduces the value of the company's shareholders' equity, and the borrowing replaces that equity with debt financing.

When a company raises debt capital, the cost of that debt is easy to determine — it's simply the interest rate the company has to pay. Costco's interest rate on its new debt is astonishingly low, averaging around 1.25% per year, and even less if we remember that the company can generally take a tax deduction for the interest. Based on the market value of the company's equity, Costco replaced a little less than 10% of its equity capital with this 1.25% debt. Did the trade reduce the company's overall cost of capital?

While determining a company's cost of debt is generally straightforward, estimating its cost of equity is more problematic. Generally speaking, a company's cost of equity capital is the expected (in the statistical sense of a long-term average) return investors

require to induce them to buy the company's stock.[2] In principle, the price of a company's stock then represents the present value of its expected (again in the statistical sense) future cash flows, calculated using that cost of capital as a discount rate.

Although we can't know Costco's cost of equity capital with any certainty, we can probably say safely that most investors would look for an expected return well in excess of 1.25% to justify the risk of investing in the company's stock. So at first blush, we might assume that borrowing $3 billion at 1.25% and using that money to replace equity capital must have reduced Costco's overall financing costs. Unfortunately, the analysis isn't quite that simple. By taking on debt, Costco has increased its leverage, and hence the riskiness of the cash flows available to equity holders. The company has also (if only slightly) increased its chance of bankruptcy in the future. So at the same time that Costco replaced some of its equity with cheaper debt, it also increased the risk, and hence the cost, of its remaining equity.

How do we weight the cheapness of the new debt against the increase in the cost of the remaining equity? This question takes us back to Modigliani and Miller. Their theorem suggests that the two effects just offset each other, leaving the company's overall cost of capital unchanged. But the world of the Modigliani-Miller theorem is an ideal world with no taxes or frictional costs, and one in which interest rates arise in a perfectly competitive market. When the stock market greeted the news of Costco's financing change with a marked uptick in the company's valuation, part of the response was due to an improvement in the company's tax position. But the interest rate Costco is paying on its new debt is so extremely low that the company probably did, in fact, lower its overall cost of capital. It did so by taking advantage of the artificially low interest rates that are the result of the Federal Reserve's current monetary policy.

Low Interest Rates and Capital Costs

Costco's special dividend and debt issue highlight one of the less-discussed aspects of the Federal Reserve's policy of unusually low interest rates, its influence on the cost of capital for businesses. By keeping rates exceptionally low, the Fed has enabled businesses to raise (or maintain) capital at an unusually low cost. This should have the generally stimulative effect of encouraging business investment. The idea is that some investments that businesses would consider unattractive, or marginal, at higher rates could pencil out favorably a low rates. The effect should be most pronounced for longer-term projects,

[2] Of course, investors will have differing views regarding both a company's prospects and the return they would say justifies the risk of holding its stock. A stock's market price represents the balancing point at which buying and selling interests, representing the range of such views, just offset one another.

whose present values a lower discount rate would increase the most. Let's look at some of the possible effects of lowered capital costs.

Increased business investment. The main effect of lower capital costs should be an increase in business investment. Generally speaking, a business investment increases the value of the firm that undertakes it if its return exceeds its cost of capital. When the cost of capital is low, more possible investments meet that hurdle.

Substitution of capital for labor. Not every capital investment a company makes results in a new product or an expanded market. Companies often undertake capital projects with the objective of lowering their long-term costs. These projects can take the form of investments in automation, in effect substituting capital for labor. If capital is unusually cheap, but labor is not, then companies may look for ways to reduce the labor input in their production processes. This could be the reason we continue to see increases in the productivity of labor and in corporate profits, while unemployment remains stubbornly high. Ironically, if this goes on long enough, it could result in enough downward pressure on wages to threaten the type of deflation the Fed has been trying to prevent.

Repatriation of production from overseas. Recent news reports have suggested that a growing number of US companies are contemplating bringing back to the US some of the production operations they had shifted to low-wage countries over the past couple of decades. Apple Computer, for example, announced not long ago that they plan to resume some production of Macintosh computers in the US. As with the substitution of capital for labor in general, these sorts of changes typically involve capital investments in new production processes aimed at reducing cost and complexity relative to the long supply chains involved in manufacturing offshore. But while bringing manufacturing back to the US will tend to create some jobs here, we shouldn't expect Apple or any other company to be replacing low-wage jobs in China with an equivalent number of high-wage jobs in the US. Rather, we should expect them to replace low-wage jobs in China with more highly-automated processes here. That will create some high-wage jobs here, but not as many as it displaces overseas.

Mergers and acquisitions. While many firms find themselves with substantial quantities of inexpensive capital available, they won't all necessarily have available a commensurate set of opportunities to invest that capital in new plant and equipment, product development, or marketing initiatives. The managements of some companies seeking growth and controlling large amounts of capital, but unable to identify new investment opportunities, will look to grow by acquisition.

Of course, mergers don't by themselves generate economic growth; they just change the ownership of existing assets. In fact, mergers can work against growth in the broader

economy. When a CEO justifies a merger on the basis of "synergies," that generally means combining and shrinking overlapping departments. If a combination results in increased concentration in an industry, the merger may create a degree of monopoly power, which will tend to result in higher prices and lower production. The result may be a boost to corporate profits, without a corresponding boost to economic growth or employment.

Conclusion — The Jobless Recovery

The Dow Jones Industrial Average recently achieved an all-time record high, marking a complete rebound to its 2007 levels after the crisis of 2008 and 2009. The market's strength has reflected strong corporate earnings over the past several years. Yet at the same time, the official unemployment rate remains close to 8%, and hiring has been painfully slow for nearly five years. The explanation for this apparent discrepancy reflects the unusually low cost of capital that is a direct result of the Federal Reserve's policy of keeping interest rates exceptionally low. The low cost of capital has finally begun to encourage firms to invest, but continued high costs of labor have resulted in many of the investments made by management to have taken the form of substituting capital for labor. The result is that capital has earned solid returns, while labor continues to languish.

The recovery in corporate earnings and the attractive returns the markets have provided investors in recent months may yet stimulate a broader recovery that finally boosts employment. But the trend of the past couple of years has been toward rewarding capital, and leaving labor behind. The one consolation is that the Fed's statements that they plan to keep interest rates low until the unemployment rate falls to acceptable levels suggest that they're aware of the issue.

– Jonathan Tiemann
Menlo Park, California
April 19, 2013

Tiemann Investment Advisors, LLC is an SEC-registered investment advisor based in Menlo Park, California. For more information, please send your request to information@tiemann.net or visit www.tiemann.net.

Copyright © Tiemann Investment Advisors, LLC 2013.