



DuPont Analysis

Based on current levels of life expectancy, it took approximately 39 generations of human beings to have worked their way from the first bronze coins (2600 B.C.) to the latest innovation in currency – the Bitcoin (2009). More realistically, because human life expectancy doubled between those points in time, it probably took closer to 54 generations to reach the present moment.

I want to introduce this sweeping timeframe because it sets the stage for a larger discussion appropriate for the New Year. Framed in a positive light, this discussion is about our work and the ample harvest of 2013. But it is also about the ever-present struggle between *labor* and *capital*, and our proximity and participation on both sides of that battlefield. It's a weighty topic, but one I'm confident will provide reflection heading into 2014, as well as a valuable lesson in securities analysis.

These days, the term the media uses for the struggle between labor and capital is "the wealth gap." I'm sure you've seen a variety of data points that quantify the situation, so I won't repeat what you already know. Instead, I want to offer you a new conceptual framework to understand this social dynamic, particularly its causation, which I think will be more constructive.

A business owner's primary concern is encapsulated in *return on equity* or ROE. Expressed as a percentage, it tells you how much your company earns relative to the amount of ownership you have. The deeper academic history of the ratio traces back to 1917 when F. Donaldson Brown was hired to run the treasury department of the DuPont Corporation. During Brown's tenure, DuPont took a large stake in the General Motors Corporation, which was struggling at the time. Brown was called on to help restructure GM's financial situation. When GM regained its footing a couple years later, Alfred Sloan (GM's Chairman) credited Brown for the turnaround. The insightful methodology he used to achieve those results is known today by the moniker "the DuPont Analysis."

Put concisely, he explained that ROE is a function of three factors. The first is *profitability*, the second is *turnover*, and the last is *leverage*. That means your business's final results are the byproduct of your profit margin, how many times you can reproduce that margin in a given year, and how much money you can borrow to concentrate those returns against your primary investment.

Return on Equity

$$\text{ROE} = \text{Profitability} \times \text{Turnover} \times \text{Leverage}$$

$$\text{ROE} = (\text{Net Income}/\text{Sales}) \times (\text{Sales}/\text{Assets}) \times (\text{Assets}/\text{Equity})$$

Each of these factors plays directly into the wealth gap. Corporations are structured to encourage management decisions that strike the optimal balance between each factor for the primary benefit of owners. In practice, what that means is that a huge number of sharp minds are constantly working to refine these elements for businesses across the globe. Managers are highly incentivized to achieve these results on behalf of owners. It's a remarkable amount of intellectual and physical force all driving in one direction.

On the other side of the coin you have government, labor organizations and market competition pushing back in the opposite direction. The balance and interplay between each of these factions is a story that reaches back before the first bronze coins in Athens.

To understand the DuPont methodology, it's useful to describe exactly how each factor serves the owner's interest, and also offer a brief status update on the factor in 2014. The first, profit margin, is easy. It's the basic foundation of business transactions and needs no explanation in terms of how it benefits owners. As for the status of margins, in the previous letter I showed how operating margins in the S&P 500 have reached new all-time highs, approaching 11%, well above long-term averages. As far as the pendulum goes, the capital side of the battlefield has more advantage in profit margins than it has ever had in U.S. history.

Turnover, however, is more convoluted. Over the last 15 years, the U.S. economy has become progressively more asset-light. That means more of the country's GDP is being generated by activities that don't require lots of physical plant, equipment, inventory, and increasingly, office space or staff.

Twitter is the ultimate example of that trend. With only 2400 employees and \$35 billion in shares outstanding, the company is trading for approximately 60x its tangible asset value. Twitter doesn't even own, but rather leases their computer processing power. That boils down to a whole lot of market value for 2400 sit/stand desks, some computers, and a corporate campus. It also illustrates how physical assets have increasingly become vestigial organs to many modern corporations. Asset-lightness generally leads to lower ongoing capital requirements for a business, which in turn results in better financial performance and further concentrates wealth into the hands of the owners.

Finally, you have leverage which is simply borrowed money being put to work in the business. Leverage is unique because it's the one factor the government formally subsidizes by allowing interest on borrowings to be deducted for tax purposes. Borrowing is attractive to business owners because it lets them control large amounts of assets relative to their primary equity investment. It essentially lets them jettison shareholders (who are costly) and replace them with loans (which are cheaper), and come out the other side with a bigger business held in a smaller number of hands. It is also the factor that lets them take full advantage of limited liability laws, improving the risk/reward skew of their investments.

As we enter 2014 corporate leverage levels in the S&P 500 are running about 33% higher than the average back to 1960 as measured by the debt/equity ratio. The main attraction is the low interest rates available in the bond markets. The process of jettisoning owners and replacing them with loans is cooking along at rates approaching those seen in 2007, when all-time highs were reached. This process treats the remaining owners very well provided conditions in the wider economy don't deteriorate.

One concise conclusion can be drawn from all this. **It pays to be an owner these days, and it pays a lot.** Each Dupont string has been pulled to high levels of historical tightness, and owners are very pleased with the results. This fact is seen starkly on the household level. The Federal Reserve's recent release of the *Survey of Consumer Finances* showed that wage-earners had a median net worth in 2010 of \$55,200, while business owners had a median net worth of \$285,600, a factor of 5 higher. The spread on the mean statistics was even larger. That difference is greater than the difference between being college or high-school educated.

Therein lies some concern going forward. Both labor and government are getting increasingly disgruntled with owners taking such outsized portions of society's output – and rightly so. The recent pressure for higher wages for fast food workers is a good example. Fast food companies have been making record profits, yet also taking record advantage of taxpayer dollars through social programs for their underpaid employees. Limits are being tested and pushed everywhere in this regard.

As investors we are certainly part of the ownership society, but we are also very much a part of the laboring, taxpaying, and consuming camp as well. The war at hand is actually a civil war. Without a healthy middle-class to consume the products and services offered by the companies we own, the future looks increasingly bleak for everyone – from top to bottom. In my opinion, that dynamic was evidenced in the weak sales growth of 2013, despite the strong earnings numbers.

The pendulum always swings. It is extremely unlikely that profit margins have achieved a higher "new normal" above 10%. Margins will revert towards the mean at some point. Asset-light businesses will

certainly remain an important part of innovation in the United States, but real tangible assets remain critical to providing people with the goods and services required to maintain standards of living. Access to leverage and government subsidized interest rates are being taken for granted. They shouldn't be.

The Wall Street Journal recently had an interesting article that offered advice from a variety of business leaders. The one who practices value equity investing most similarly to us was Seth Klarman, the head of Boston's Baupost Group. He wrote about a mentor named Wally Carruci and his short but pithy expression:

"You have to feed the birdies when they're hungry."

As we enter 2014, we have a fair bit more bird seed in our pockets than we did in early 2013. Due to strong performance in U.S. stocks, we were also able to move some of that seed from one pocket (U.S. shares) into the other pocket (international shares) on favorable terms. Nevertheless, in aggregate, we have yet to actually take seed out of our pockets and feed it to the birds. We still have many more dollars at risk than at any time in the past 3 years.

In 2014 you should look down the pike and be honest with yourself about your liquidity needs, and if you have any near-term life goals that would be jeopardized by a major double digit portfolio drawdown. U.S. stocks are no longer being sold at attractive levels. In fact, they are being sold at levels that are worse than average based on a number of our preferred indicators. From my perch as an industry participant, I also increasingly see the signs of retail buying and institutional selling. That process inevitably leads to a hollowing out of the market. A significant correction is becoming more likely, especially as people begin to consider the 2014 mid-term elections. All 435 seats in the House, the 33 seats of Senate Class II, and 38 governorships will be contested. Hotly.

Despite these warning signs, the table below shows the appetite of the birds remains healthy:

Annual Performance					
	SP500 TR	MSCI	BUSABI	HFRX EH	
2008	-37.0%	-40.3%	5.2%	-25.5%	
2009	26.4%	30.8%	5.9%	13.2%	
2010	15.1%	12.4%	6.6%	8.0%	
2011	2.1%	-5.0%	7.9%	-19.1%	
2012	16.0%	16.5%	4.2%	4.3%	
2013	32.4%	27.4%	-2.0%	10.8%	

Benchmark Key

SP500 TR	S&P 500 Total Return Index	– Source: Standard & Poor's Financial Services LLC
MSCI	MSCI World Index	– Source: MSCI Inc.
BUSABI	Barclays Capital U.S. Aggregate Bond Index	– Source: Barclays Bank PLC
HFRX EH	HFRX Equity Hedge Index	– Source: Hedge Fund Research Inc.

Like Wally said, if you're going to feed them, it's best to feed them when they're hungry. Seth Klarman explains, "What [Wally] meant on a deeper level is that when people want to take you out of an asset for a full price, don't hold out for the last dollar." Since a large number of factors came together to our benefit as owners in 2013, we should not only be grateful, we should protect our expectations with a healthy dose of realism. When stock market returns outstrip the real economic value created by our businesses by a large margin as they did this year, we have entered the casino and left conservative business behind.

As a result, we won't spend much energy this year thinking of new ways to allocate equity money, or reaching for the last dollar. We will spend much more time thinking about what gains can be crystallized in a tax efficient manner and build our cash and bond cushions further. Until volatility returns to the markets, few screaming deals will be found. I much prefer to work on screaming deals because they are quantifiable. Investor's willingness to keep paying ever-higher multiples against earnings, however, is not.

This outcome is by no means bad, or even uninspiring. In fact, it offers up the trade the whole game is about. We get to exchange heightened risk and uncertainty for a currency far more valuable than U.S. dollars – *time*. They don't print more of it, it's always trades down, and our spending decisions with it ultimately mean the most to the people around us.

So please do let me know how your personal goals are evolving in 2014.

I'm delighted to spend my time listening.

Best,

A handwritten signature in black ink, appearing to read "Harold A. Hallstein IV". The signature is fluid and cursive, with a large loop at the beginning and a trailing end.

Harold A. Hallstein IV
Sankala Group LLC
T: (720) 310-0605
F: (866) 892-0819



This communication should not be considered by any client or prospective client as a solicitation or recommendation to effect, or attempt to effect any transactions in securities. Any direct communication by Sankala Group LLC with a client or prospective client will be carried out by a representative that is either registered or qualifies for an exemption or exclusion from registration in the state where the prospective client resides. Sankala Group LLC does not make any claims or warranties as to the accuracy, timeliness, suitability, completeness, or relevance of any information presented in this communication, or by any unaffiliated third party. All such information is provided solely for illustrative purposes.

Different types of investments involve various degrees of risk, and there can be no assurance that the performance of any specific investment or investment strategy, including those undertaken or recommended by Sankala Group LLC will be profitable or equal any historical performance. All investments carry some risk of partial or complete capital loss. No client or prospective client should assume that this communication serves as a substitute for personalized advice from Sankala Group LLC or from another investment professional. Sankala Group LLC is not an attorney or an accountant, and no portion of the communication should be interpreted as legal, accounting or tax advice. As a condition of receiving this communication, each client and prospective client agrees to release and holds harmless Sankala Group LLC and its officers, employees and agents from any and all adverse outcomes resulting from actions which are independent of receipt of personalized individual advice from Sankala Group LLC.