Breathing New Life into an Old Indicator:
New Knowledge from the Advance-Decline Line

The first known written record of the Advance-Decline Line has been traced back to the late 1920s. Although it is simple in both concept and in computation, it has remained a very important tool in measuring the forces of Supply and Demand at work in the stock markets for more than 80 years. One of the earliest professional applications of the Advance-Decline Line was as an element of the Lowry Analysis of the New York Stock Exchange, first published in 1938 by L. M. Lowry. As a part of his initial research leading up to the launching of the Lowry Analysis, he developed an historical record of Advances and Declines, Upside Volume, Downside Volume, Points Gained and Points Lost on the NYSE dating from January 1933. His successor firm, Lowry Research Corporation, has continued to compile these statistics on a daily basis throughout the past 80 years.**

A big part of the beauty of the A-D Line lies in its simplicity. That is, it is nothing more than a count of the number of stocks that advanced in price on a particular day minus the number of stocks that declined in price, with the net difference accumulated over time to create what is known as the Advance-Decline Line. The importance of the A-D Line emerges when its trend patterns over a period of time are compared to the trend patterns of a major price index. For example, if the A-D Line is rising to new highs ahead of, or at the same time as, a comparative major price index is rising to new highs, the uptrend is viewed as positive and healthy. On the other hand, caution is warranted if the A-D Line begins to erode, declining noticeably over a period of months while the comparative major price index increases to new rally highs.

Figure 1: Advance-Decline divergence prior to the September 3, 1929 market top

** see Appendix
Figure 2: Advance-Decline divergence prior to the October 2007 market top

A ‘negative divergence’ of the Advance-Decline Line from a major price index shows that fewer and fewer stocks are participating in the uptrend, usually due to a contraction in investor buying enthusiasm as stocks increasingly appear to be over-valued. Signs of extreme selectivity are typically found prior to major market declines. And, therein lies the importance of the Advance-Decline Line. Of the fifteen major bear markets (generating losses of -20% or more) occurring in the 80 years between September 1929 and March 2009, thirteen of the fifteen cases (86.7%) were preceded by several months of significant negative divergence between the Dow Jones Industrial Average and the NYSE Advance-Decline.

It is not unusual to encounter Advance-Decline Lines created from small subsets of stock market data, such as the 30 component stocks of the Dow Jones Industrial Average. However, the most comprehensive approach to constructing an Advance-Decline Line, and the one most commonly used to warn of an impending market top, is to include all of the stocks listed for trading on the New York Stock Exchange, and to compare that indicator to one of the broad price indexes, such as the DJIA, or in more recent years, the S&P 500 Index. However, this indicator has an important limitation – the quality of the data.

Since about 1990, the NYSE has allowed securities other than domestic common stocks to trade on the New York Stock Exchange. Those securities include closed-end bond funds (that match the trends of bonds, not stocks) plus a proliferation of interest-sensitive non-convertible preferred stocks and REITs (which mimic the movements of the bond market, rather than the stock market), plus ADRs of foreign stocks (that do not necessarily follow the trends of domestic common stocks). For the record, Exchange Traded Funds (ETFs) are traded on the Arca
Exchange and are not included in NYSE trading statistics. The non-operating companies detailed above currently comprise approximately 52% of the issues listed for trading on the NYSE. Thus, the A-D Line can be easily distorted by the non-operating company listings. At times, particularly when bonds are in a strong trend, either up or down, and domestic common stocks are in a quiet, sideways trend, investors may not recognize that bonds, rather than stocks, are dominating the movements of the Advance-Decline Line and, as a result, may make important mistakes in their equity strategies.

Figure 3: Traditional Adv-Dec Line vs. Lowry’s OCO Adv-Dec Line 2001-2002

For example, in July and August, 2001 (Figure 3), when the Dow Jones Industrial Average was moving in a sideways, indecisive pattern, the “all-issues” Advance-Decline Line began to rise vigorously, leading many investors to conclude that the internal strength of the stock market was improving. In actuality, it was bonds, not stocks, showing strength. A number of highly regarded equity analysts encouraged investors to buy equities aggressively in August, 2001, based primarily on the strength of the Advance-Decline Line. But, history shows that the equity market was actually weakening, while demand for bonds was gaining strength. The Advance-Decline Line was giving off a false signal. In the weeks that followed, the Dow Jones Industrial Average plunged -20.7%, exacerbated by the tragedies of September 11, 2001. The NYSE “all-issues” Advance-Decline had lost its integrity.

Fortunately, in 1990, Lowry Research analysts quickly spotted the changes in NYSE listings and their potential for causing data distortions. As a result, a new Advance-Decline data series was created, called Lowry’s Operating-Companies-Only (OCO) data, which removes all of the closed-end bond funds, interest-sensitive preferred stocks, REITs, and ADRs. Thus, investors can be certain when they use Lowry’s OCO data to view the Advance-Decline Line, they are always seeing the movements of nothing other than the common stocks of all domestic operating companies listed for trading on the New York Stock Exchange.
While eliminating non-operating companies from the computation is a major factor in preserving the integrity and the value of the Advance-Decline Line, there are other unique characteristics to the indicator that are important to understand. For example, when the Advance-Decline Line begins to diverge from the major price index during the latter stages of a bull market, it indicates that some stocks that were previously participating in the rallies have dropped out of the uptrend and may now be declining. But, the NYSE “all-issues” Advance-Decline Line, or even Lowry’s OCO Advance-Decline Line, does not provide any help in identifying which stocks are weakening. Are the weak stocks occurring in a single Sector? Or, are they to be found in one or more Industry Groups? Or, is it just individual stocks randomly walking away from the uptrend? This would be important information for any portfolio manager trying to maximize Alpha. But, until recently, there have been no easy answers.

There have also been times, not necessarily associated with major market tops, when one or more of the big-cap, mid-cap, or small-cap segments has been out of favor with investors, thus moving in distinct trends opposed to the trend of the broad market. In many cases, these opposing trends are not easily observed using a single consolidated Advance-Decline Line since weakness in one segment can be offset by strength in another segment. Yet, these unseen opposing patterns can frustrate portfolio managers and wreak havoc in the performance of broadly diversified equity portfolios. For example:

- From late November 1971 to mid-December 1972 – an entire year – the NYSE “all-issues” Advance-Decline Line plunged at the same time the DJIA gained +30.4%.
- From early January 1977 to mid-July 1977 – more than half the year – the DJIA steadily declined by -14.5% at the same time that the NYSE Advance-Decline Line rose steadily through almost the entire period.
- From January 2000 to mid-April 2002, the DJ Industrial Average fell by –16.2%, the S&P 500 Index lost –26.7%, and the NASDAQ Composite plunged by –69.0%. During that same time, the S&P 400 Mid-Cap Index and the S&P 600 Small-Cap Index rose on a trend basis to new all-time highs throughout the entire 28 month period.

It would be easy to conclude, even from these few examples, that the Advance-Decline Line “just doesn’t seem to work all of the time”. But, that is not the case. In each of the examples shown above, the Advance-Decline Line was working just fine and providing critically important information. But, the causes of these divergences are too complex to be observed in a single consolidated indicator. It is essential to understand that stocks are not homogenous. All stocks do not advance, or decline, together. There are times when some segments of the stock market are in trends that are diametrically opposed to the trends of other segments. And, this is where the beautiful simplicity of the Advance-Decline Line can reveal a major shortcoming at especially critical points in time. To clarify, let’s briefly re-visit the three examples listed above from a somewhat different perspective.

- If three separate Advance-Declines had been available to investors in 1971 – one for big-caps, another for mid-caps, and a third for small-caps, they would have seen that, from late November 1971 to mid-December 1972, both mid-cap and small-cap stocks had become unattractive to investors and they were rolling over into individual bear markets. They would have also seen that, at the same time, investors were aggressively accumulating big-cap stocks, centered around a particular group of big-caps commonly referred to at the time...
as the “Nifty Fifty”. Since mid-cap and small-cap stocks usually account for about 85% to 87% of the stocks listed on the NYSE, the single Advance-Decline Line, which combines the movements of the big-cap, mid-cap, and small-cap segments, turned sharply lower, while the Dow Jones Industrial Average, based on only big-cap stocks, registered an impressive gain of +30.4%. But, it is important to recognize that if an investor had been encouraged to buy stocks based exclusively on the new highs in the DJIA, and had held a broadly diversified portfolio of stocks across all three segments throughout 1972, the results would have undoubtedly been a significant net loss in the mid-caps and small-caps, at the same time that the big-caps showed strong gains. But, three Advance-Decline Lines – two declining sharply and one rising, would have alerted investors to re-allocate their portfolios into big-caps. Additionally, this entire period of negative divergence in the Advance-Decline Line provided a critical early-warning sign of the approaching 1973-1974 bear market that drove even the big-cap DJIA down -50% by December 1974.

Figure 4: Big-Caps versus Small-Caps During 1977

• Throughout most of 1977, big-cap stocks were viewed by many aggressive investors as stodgy behemoths unable to benefit from emerging technologies. At the same time, the small-cap and mid-cap stocks, which were viewed as the opportunities of the future, were in strong uptrends. But, in 1977 the average investor did not have easy access to see the improving small-cap and mid-cap Advance-Decline Lines, or the steadily rising small-cap and mid-cap price indexes, such as the Amex Composite shown in Figure 4. As a result, most investors spent much of 1977 losing money in big-caps as the DJIA lost -14.5%, or
missing out on a period of impressive gains in small-cap and mid-cap stocks. Again, multiple Advance-Decline Lines, covering big-caps, mid-caps and small-caps, would have provided an easy way to spot areas of changing strength and weakness.

• The 2000-2003 bear market was generally thought of as a broad-based decline, primarily because most financial publications and stock market websites provide easy access to charts and statistics for only the major big-cap price indexes, such as the DJIA and the S&P 500 Index. During the first 28 months of that decline the DJIA was down by –16.2%, the S&P 500 Index had lost –29.0%, and the NASDAQ Composite had plunged by –69.0%. And yet, what investors could not see, because of a lack of access to multiple Advance-Decline Lines, was that, throughout that period, the mid-cap and small-cap Advance-Decline Lines rose steadily. Investors would have clearly seen that the majority of stocks, particularly in the mid-cap and small-cap segments, were actually still in what Lowry Research referred to at the time as a “stealth bull market” in the midst of a big-cap bear market. This unusual dichotomy was confirmed by new all-time highs in the S&P 400 Mid-Cap and S&P 600 Small-Cap Indexes in mid-April 2002. Consider, for a moment, the potential competitive advantage of this information. While one “long-term” oriented portfolio manager was theoretically suffering double-digit losses in big-cap stocks, another more pragmatic portfolio manager might have been earning double-digit profits in mid-cap and small-cap stocks during the first half of 1977. The more favorable outcome would have undoubtedly been easier to achieve if an investor had access to Lowry’s multiple Advance-Decline Lines for measuring the internal conditions of a deceivingly diverse stock market.

Some of the lessons to be learned from these few, but historically representative, examples might include the following:

• From time to time, the stock market is not homogenous. Some market segments can move in different, or even opposite, trends than other segments. Often, there are bear markets within bull markets and bull markets within bear markets. Therefore, it is difficult for any one Advance-Decline Line, or any one price index, such as the DJIA or the S&P 500, to accurately represent the varying trends of the segments making up the broad market.
• There is no way to accurately anticipate these changes in investor preference, but having multiple Advance-Decline Lines constantly available ensures that investors will be aware of, and can quickly capitalize on, the opportunities these divergences afford.
• Traditionally, big-caps have always represented a small minority (approximately 10% to 15%) of the stocks listed on the NYSE. Mid-caps usually account for 35% to 45% of NYSE-listed stocks. And, small-caps generally represent about 45% to 55% of NYSE listed stocks. Thus, it is essential to know how each of the segments is functioning.
• Effective Alpha creation and Risk Management involves minimizing exposure to weakening segments and maximizing exposure to strengthening segments. Thus, portfolio managers would be well served to have regular daily access to three separate Advance-Decline Lines – one for big-caps, one for mid-caps, and one for small-caps. Being able to compare and contrast the three major segments on an ongoing basis provides an essential tool to determine if and when divergent trends, and their resultant opportunities for profit, are emerging.
Figure 5: An example of multiple Advance-Decline Lines in Germany

Figure 6: An example of multiple Advance-Decline Lines in India
Most portfolio managers abhor a single major sell-signal for the broad market because they usually provide so little time to react. However, as shown in Figure 6, multiple Advance-Decline Lines applied to the Indian stock market prior to the major top in November 2010 served to emphasize the deterioration of internal market strength that occurred on a segment-by-segment basis prior to the final peak in the popular big-cap Nifty Index. For example, in Figure 6, Lowry’s Indian Small-Cap Advance-Decline Line began to diverge from the major price index in mid-July, 2010, almost five months before the final market top in the Nifty Index. Armed with solid evidence that the small-caps were beginning to weaken, a portfolio manager could have started culling small-cap stocks as they individually failed to participate in the continuing general market advance. The proceeds from those sales could have then been reinvested in either mid-caps or, more likely, in big-caps for the balance of the bull market.

The Mid-Cap Advance-Decline for the Indian stock market began to diverge from the Nifty price index in mid-September 2010, almost two months before the final early-November 2010 market top. Once again, the portfolio manager would have been alerted to begin culling mid-cap stocks as they failed to participate in the continuing advance in big-cap stocks. But, with two of the three segments warning of an increasingly selective, and thus an increasingly fragile market, the portfolio manager would probably not have aggressively reinvested the proceeds in big-cap stocks. Rather, the classic warning signs called for holding at least some of the proceeds in defensive cash equivalent accounts.

The Large-Cap Advance-Decline Line for India began to weaken in early October 2010, and failed to match the new highs in the Nifty price index in early November 2010. Accordingly, with all three segments diverging from the popular big-cap price index, the portfolio manager would have undoubtedly continued to build defensive positions started a month earlier, rather than to reinvest the sale proceeds, and would have thus been well positioned to endure the -28% decline in the Nifty Index over the next year.

Utilized in this intuitive manner, multiple Advance-Decline Lines provide investors with a wealth of additional information over that provided by just a single consolidated Advance-Decline Line, guiding gradual shifts in portfolio composition as market conditions inevitably change, and as major market tops evolve. The creation of Alpha might be summarized as being in the right place at the right time. And, the application of multiple Advance-Decline Lines is an important step in the right direction. In the years ahead, multiple Advance-Decline Lines will undoubtedly become the state of the art in Supply/Demand Analysis. They are already just one of the state of the art features of the Lowry Analysis. Multiple Advance-Decline Lines, covering large-cap, mid-cap, and small-cap stocks, are among the many measurements of the forces of Supply and Demand that comprise the Lowry Analysis of the U.S. equity markets as well as 22 additional major stock exchanges around the World.

Respectfully submitted,

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Paul Desmond is the President of Lowry Research Corporation, located in Palm Beach Gardens, Florida. Lowry Research was founded in 1938, and is the nation’s oldest continuously published stock market analysis based exclusively on the Law of Supply and Demand. Lowry Research has been honored in 2009, 2010, 2012, and 2013 as one of the Best Equity Research and Strategy firms in the World by the Technical Analyst Magazine of London. Paul is a Past President of the Market Technicians Association and is a Founding Member of the American Association of Professional Technical Analysts. He was honored as the recipient of the prestigious Charles H. Dow Award, sponsored by Dow Jones & Co. in 2002 for his paper on 90% Upside and Downside Days, titled Identifying Bear Market Bottoms and New Bull Markets. Paul was also honored in 2009 as the Technical Analyst of the Year by the Technical Analyst Magazine of London.

Where do the multiple Advance-Declines currently stand in your favorite markets? For the answers to these and any other questions about multiple Advance-Decline Lines, or to learn more about Lowry Research and our analysis of Supply vs. Demand, please contact us at the address shown below. Ask about a free, no obligation trial subscription to the analysis of your choice.

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APPENDIX:

** The analysts of Lowry Research Corporation recently completed a multi-year research project intended to examine the forces of Supply and Demand at work on the New York Stock Exchange for the years leading up to, and the years following, the 1929 Stock Market Crash. That event is undoubtedly one of the most important times in stock market history but, until the Lowry Research project was completed, very few hard statistics were available, and little was known about the forces of Supply and Demand at work throughout the last half of the 1920s decade and the bear market years that followed. The intended goal of this study was to determine whether, or not, there were clear and persistent warning signs of deteriorating investor Demand, and increasing desire to sell, months in advance of the September 3, 1929 peak in the DJIA.

The resulting database, manually extracted and compiled from the archived pages of the Wall Street Journal and the New York Times, includes, among many other data items, a daily record of Advances and Declines, Upside Volume, Downside Volume, Points Gained and Points Lost on the NYSE, covering the period from June 30, 1925 through December 31, 1932. This new data tied in to the original Lowry database beginning in January 1933. Thus, Lowry Research’s entire database of the NYSE now covers a period of more than 87 years. This is undoubtedly one of the largest databases of stock market statistics in existence. A similarly structured database covering 22 major global markets in the Americas, Asia, and Europe dates from January 2007 to the present time.