# AIQ

#### IN THIS ISSUE

Feature

Sections

Data Maintenance5	
Stock Analysis	
Market Review8	

The Opening Bell Monthly is a publication of AIQ Systems David Vomund, Chief Analyst P.O. Box 7530 Incline Village, Nevada 89452

# Opening Bell Monthly

VOL. 7 ISSUE 8

AUUST 1998

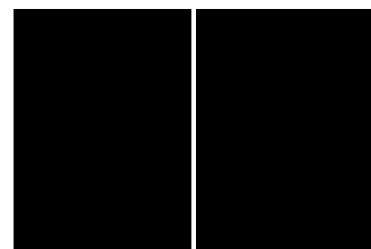
#### SHARING TECHNIQUES

## HOW TO GET A 'GIFT OF MONEY' A Model Based on the On Balance Volume and Money Flow Indicators

By Ralph Clock and Tytus Biniakiewicz

From the Editor:

Several years ago AIQ user Ralph Clock attended a seminar at which Marc Chaikin, developer of the Money Flow indicator, was the keynote speaker. Ralph was inspired by Chaikin's presentation on the use of indicators that utilize both price and volume. When he went back to his office, he began searching for stocks with a positive divergence on Money Flow and On Balance



**Ralph Clock** 

*Volume.* A year later he was convinced the concept worked and put it into practice.

Early this year, Ralph had the good fortune of meeting Tytus Biniakiewicz who was interested in doing an internship on technical analysis as part of an MBA at Pepperdine University. As part of the internship, Tytus documented and put to the test the strategy implemented by Ralph. This article is a condensed version of his study.

#### Tytus Biniakiewicz

Ralph began using AIQ software in 1992 and has led the Orange County AIQ Users Group for the last four years. He can be reached at 2981 Quedada, Newport Beach, CA 92660. Phone 949-640-7890. Fax 949-640-8778.

Tytus completed his MBA and is currently seeking employment in the field of technical analysis. He can be reached at rojber@earthlink.net. Phone 310-445-9739.

#### SHARING TECHNIQUES continued . . .

#### **OBJECTIVES**

The foremost objective of equity investing is to make money. Ralph Clock claims that there are "gifts of money," identifiable with his model, present in the market. The model is designed to capitalize on the potential extraordinary gains of tickers exhibiting certain technical characteristics. In order to qualify for the "gift of money" distinction, the performance of the model based on the hypothesis presented below has to prove to be both:

- superior with respect to the average market performance, and
- reasonably reliable.

#### GENERAL HYPOTHESIS

The model assumes that technical indicators incorporating trading volume of the tickers have trend predictive qualities, often signaling the direction of the price movement prior to the actual • movement. Utilization of this phenomenon to select securities based on divergence analysis results in "gifts of money." Stocks that exhibit a positive divergence of On Balance Volume (OBV) and Money Flow (MF) indicators versus the price of the security outperform the market on average.

#### PLEASE SEND CORRESPONDENCE TO:

Opening Bell Monthly G.R. Barbor, Editor P.O. Box 7530 Incline Village, NV 89452

AIQ Opening Bell Monthly does not intend to make trading recommendations, nor do we publish, keep or claim any track records. It is designed as a serious tool to aid investors in their trading decisions through the use of AIQ software and an increased familiarity with technical indicators and trading strategies. AIQ reserves the right to use or edit submissions.

For subscription information, phone 1-800-332-2999 or 1-702-831-2999. © 1992-1998, AIQ Systems

#### METHODOLOGY

Most technical indicators, like relative strength or moving averages, are characterized as trend-following indicators, because they reflect the historical price trends and, as such, are not reliable predictors of the future. These indicators completely ignore the aspect of trading volume, which constitutes an important factor in evaluating the ticker's behavior and predicting the future trend, especially when analyzed in relation to price behavior.

OBV and MF reflect the trend of both price and volume, describing the

"Stocks that exhibit a positive divergence of On Balance Volume (OBV) and Money Flow (MF) indicators versus the price of the security outperform the market on average."

relationship between them and thereby attempting to provide insight into the future security price movement. The indicators reflect the general tendencies of the investors in the market. Based on OBV and MF, it is possible to determine whether a stock is being accumulated or distributed by investors and it is possible to take advantage of the demand trend if it is not yet reflected in the price (i.e., a divergence between them is present).

Divergence analysis is an integral part of technical analysis. A positive divergence occurs when the price of a security moves lower at the same time that the security's technical indicators move higher. Since the indicators often lead price action, a positive divergence is a bullish sign.

In light of this reasoning, the model focuses on selecting tickers which are being accumulated but have not yet exhibited major price movements. They are actually in a temporarily depressed market position. The larger the positive divergence, the larger the "rubber band stretching" effect between the current market price and the price potential based on the investors' interest in the stock, which in turn should lead to eventual equilibrium achieved by catapulting the price upward.

#### SELECTION CRITERIA

Find stocks, which have not recently enjoyed investors' favor and are currently trading in a relatively flat base. The price fluctuation in this recent CONSOLIDATION PERIOD should be minimal, or at least reasonable considering the usual past performance of the particular stock,

even if the current short-term trend is predominately downward sloping.

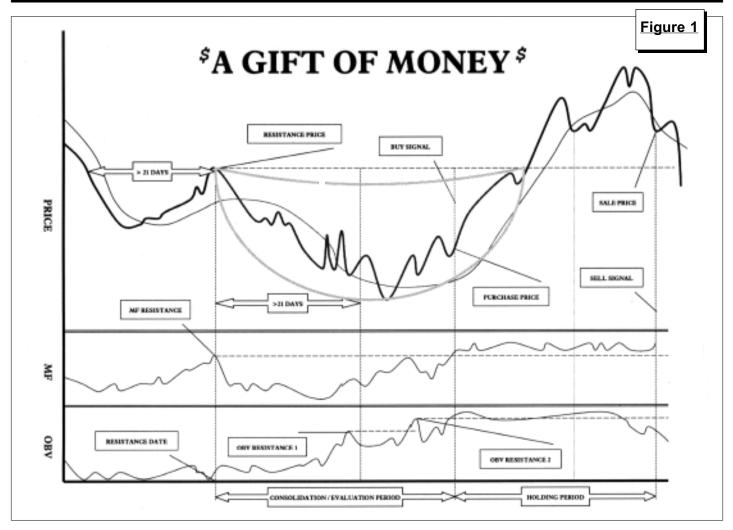
 The period should be in existence for no less than 21 trading days. The best stocks to examine are typically those that experience a consolidation/ correction in their medium-long range upward trend or appear to be on the verge of ending their medium-long range downward trend.

The stocks will be in a cup formation, having fallen from the top of the rim formed by the last price peak and consolidating at the base of the cup. The magnitude of the fall determines the depth of the cup, while the duration of consolidation determines its width.

Locate a price peak directly preceding the CONSOLIDATION PERIOD, which at the time of formation constituted at least a 21-day high. Always assume the price to be the day's close, unless otherwise specified. This price becomes the RESIS-TANCE PRICE, and the date on which it occurred is a RESISTANCE DATE. This point forms the left side of the rim of a cup.

Identify the peaks of OBV and MF indicators within the first 21 trading days of the CONSOLIDATION PERIOD following the RESISTANCE DATE. Usually, either the OBV or MF, or both, will have peaked on the RESISTANCE DATE. These peaks become the OBV RESISTANCE and

#### SHARING TECHNIQUES continued . . .



MF RESISTANCE levels, correspondingly; however, they are not fixed permanently but rather may require continual adjustment as the performance monitoring progresses within the EVALUATION PERIOD.

Follow the stock's performance throughout the EVALUATION PERIOD, looking for the OBV and MF to be increasing and approaching their respective highs that were previously assigned as resistance. Whenever one of the indicators crosses its current corresponding resistance but the other does not, continue to upgrade that indicator's peak levels by assigning a new OBV RESISTANCE and MF RESISTANCE. This procedure should be followed until both indicators break into new highs simultaneously, establishing a new high in the OBV and MF levels in the same trading day above the most recent OBV RESISTANCE and MF RESISTANCE, correspondingly. This is the BUY SIGNAL.

By this time, the price is usually already moving on the right side of the cup. Of course, it is ideal if the signal to buy occurs before the price starts to advance or has advanced just minimally, thereby allowing full exploitation of the movement. But this does not occur often. With strong growth and levels of OBV and MF, the purchase can be made nearly anywhere on the right side of the cup, as well as the base.

Purchase the securities the next trading day at the opening price if it exceeds the 28-day moving average and does not exceed the RESISTANCE PRICE by more than 5%. The 28-day moving average price floor is designed to eliminate stocks which exhibit an extremely unreasonable relationship between price and volume trends that is difficult to explain. The 5% price ceiling above the RESISTANCE PRICE is designed to eliminate the stocks, which have already experienced their catapulting advance, or stocks for which the indicators are preceded by the price movement, inhibiting the chance for picking up the "gift of money." Hold the securities until the SELL SIGNAL.

The SELL SIGNAL occurs when the price drops below the 28-day moving average and is not supported by the levels of OBV and MF. Sell if after closing below the 28-day moving average the stock fails to advance above that close the next trading day – unless the OBV and MF indicators

Sharing Techniques continued on page 4

#### SHARING TECHNIQUES continued

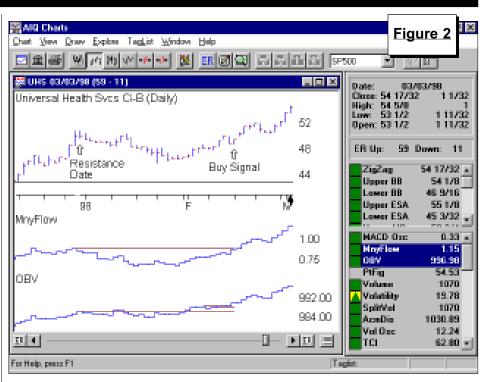
on that day are above the OBV RESIS-TANCE and MF RESISTANCE, respectively, and either of the following is true:

- the BUY SIGNAL occurred within the past 21 trading days, or
- the ticker made a new high in price within the past 21 trading days.

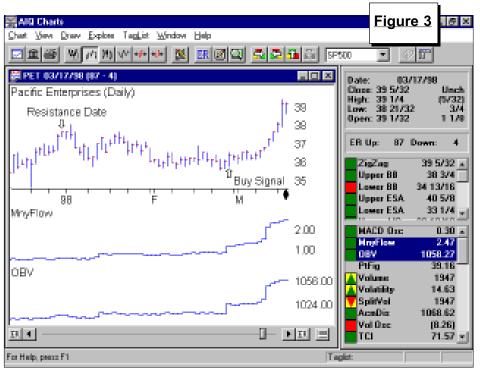
The sale is assumed to occur when the market opens the following trading day. This methodology for the SELL SIGNAL protects from disposing of the security before the upward trend resulting from the "rubber band stretching" is exhausted. Even if the stock is still depreciated relative to its demand and experiencing volatility caused by this situation or other market forces (such as a bearish period on the market), the price appreciation is nevertheless expected to occur in the near future, if the indicators remain strong. A graphical description is found in **Figure 1**.

#### **EXAMPLES**

An example of this approach is found in **Figure 2.** Universal Health Services (UHS) topped out on December 31, 1997. This becomes the



resistance date. Looking at the activity during the 21 days after the resistance date, Money Flow hit its high on December 31. On Balance Volume was the stronger of the two indicators and had moved above its December 31 and January 12 resistance by the end of the 21-day period. It wasn't until February 13 that On



Balance Volume and Money Flow both moved above their resistance levels.

A second example is found in Figure 3. Pacific Enterprises (PET) reached a high on December 31, 1997. Over the next 21 days, the stock drifted lower but On Balance Volume and Money Flow were strong and had moved above the December 31 level. Over the next 21 days, Money Flow's highest point came on January 14. This became its resistance date. On Balance Volume's high came on January 20. By February 5, On Balance Volume had moved above its resistance level but Money Flow had not. On February 13, the situation reversed, where Money Flow finally broke above its resistance but On Balance Volume was lower than it was on February 5 – so no buy signal yet. On February 26, PET rose on heavy volume sending both OBV and Money Flow above their resistance levels. That was the buy signal.

#### TESTING RESULTS

As a quick test of this investment process, we encountered 53 observations satisfying the described selection criteria in the months of February and March of 1998. We found AIQ's

#### SHARING TECHNIQUES continued . . .

Accumulation/Distribution report to be helpful in identifying candidates.

The price performance for each observation was evaluated against the performance of the S&P 500 for the same period. Out of 53 observations, the tickers outperformed the S&P 500 37 times, a success rate of 70%. When the market was bullish, as signified by positive S&P 500 performance, the tickers beat the market even more often: 29 out of 39 cases, or 74%. In bearish periods, the success rate was still better than average, at 57%, or 8 out of 14 times.

The individual tickers outperformed the S&P 500 by an average of 12.3% over an average holding period of 55.7 days.

Our performance study has some limitations. It took place over a short time horizon which occurred during a bullish period for the market and the study could be to some extent biased and/or improper. We do pledge our integrity on attempts to reduce bias in the selection process. The analyzed stocks were chosen from a population exhibiting clear and definitive trends in OBV and MF and are therefore not representative of the entire market. The testing did help us gain more confidence in a system that was already in place and being successfully used.

#### CONCLUSIONS

When the procedures outlined in this article are followed with accuracy, the model successfully predicts the future stock trends and provides excellent support for investment selection based on technical analysis. Those tickers that show a positive divergence in OBV and MF versus price consistently outperform the S&P Index. Our objectives of having a reliable model with performance superior than the market have been met.

It is our opinion that performance can be substantially improved by lowering the ceiling of the purchase price and thereby limiting the selection to less popular stocks. These stocks usually exhibit a greater lag between the movement of the indicators and the price, resulting in a better chance to exploit the price advances with this strategy.

Another factor that may increase returns is to look at the momentum of OBV and MF. Naturally, the greater the momentum of the indicators during the purchase decision, the greater the chance for success. This factor, which can be easily evaluated visually by examining the slope of the indicator lines, reduces inappropriate selections. ■

#### STOCK DATA MAINTENANCE

#### The following table shows past and future stock splits and large dividends:

Stock	Ticker S	Split/Div	. Approx. Date	Stock	Ticker Sp	lit/Div.	Approx. Date
TCA Cable TV	TCAT	2:1	08/06/98	<b>Boston Acoustics</b>	BOSA	3:2	08/18/98
Granite Construction	GVA	3:2	08/10/98	Ameritrade Holding	AMTD	2:1	08/18/98
Premier Parks Inc.	PKS	2:1	08/10/98	SuperValu Inc.	SVU	2:1	08/19/98
Level3Comm.	LVLT	2:1	08/10/98	Becton Dickinson	BDX	2:1	08/21/98
Bank of NY	BK	2:1	08/14/98	Dendrite	DRTE	2:1	08/22/98
FCNB Corp	FSNB	4:3	08/17/98	Allegience Corp.	AEH	2:1	08/26/98
Watsco Inc.	WSO	3:2	08/17/98	Aptar Group Inc.	ATR	2:1	08/26/98
Turner Corp.	TUR	3:2	08/17/98	Eaton Vance	ETN	2:1	09/01/98
Smith (AO)	AOS	3:2	08/18/98				

#### Trading Suspended:

360 Communications (XO), Beneficial Corp (BNL), ENOVA Corp (ENA), Greet Tree Financial (GNT), La Quinta Inns Inc. (LQI), Medusa Corp. (MSA), Pacific Enterprises (PET), Tracor Inc. (TTRR)

#### Name/Ticker Changes:

Cognizant Corp (CZT) to Nielson Media Research Inc. (NMR) Dun & Bradstreet Corp (DNB) to Donnelly (R.H.) Corp. (RHD) Showbiz Pizza Time (SHBZ) to CEC Entertainment Inc. (CEC)

#### STOCK ANALYSIS

# **BOTTOM FISHING** -USING AN EDS SCREENING MODEL

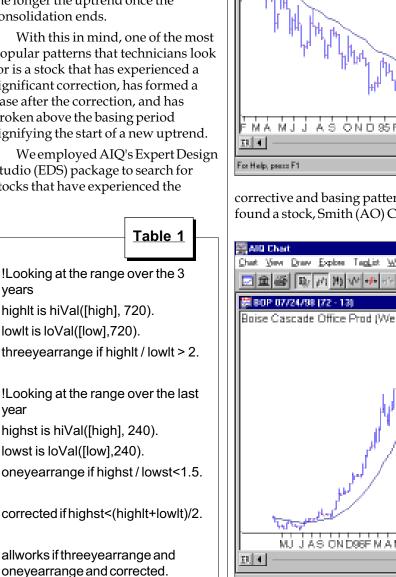
By David Vomund

DAVID VOMUND

n technical analysis, it is commonly accepted that there are four stages to the investment cycle. There is the uptrend, consolidation at the top, downtrend, and finally the consolidation or basing period at the bottom. The longer the basing period the longer the uptrend once the consolidation ends.

With this in mind, one of the most popular patterns that technicians look for is a stock that has experienced a significant correction, has formed a base after the correction, and has broken above the basing period signifying the start of a new uptrend.

We employed AIQ's Expert Design Studio (EDS) package to search for stocks that have experienced the





corrective and basing pattern. We found a stock, Smith (AO) Corp.

(Figure 4), which has the pattern that we were looking for and began to



years

year

#### STOCK ANALYSIS continued . . .

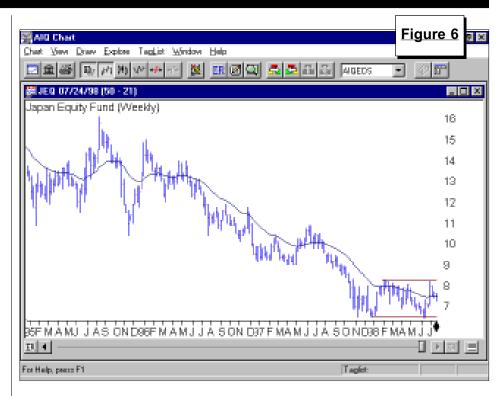
program EDS so it would find AOS and other stocks with the same pattern.

This pattern can be spotted using daily or weekly charts. I prefer the weekly format because the resulting breakout has longer lasting implications. After some experimenting, the EDS file that gave the results we were after is found in **Table 1**. This EDS file is written for daily analysis.

The first section of the EDS file looks at the price range of the stock over approximately a three-year period. The highest price of the stock over the last three-years is divided by the lowest price over the same three years. This ratio must be at least two, meaning the stock either rose by at least 100% or fell by at least 50%.

The next section looks at the price range over the last year. This period represents the basing period. This time, the high price divided by the low price must be less that 1.5.

The rule named "corrected" is our way of making sure that the basing period has taken place after a correction rather than an advance. This rule states that the high price over the last year is less than the average of the three-year high and low prices.



Finally, the "allworks" rule simply states that the above rules are true.

This screening model simply looks for stocks that have experienced a significant correction and then a basing pattern over the last three years. We did not add a rule which shows that the basing period is over.



Instead, we'll draw trendlines and then use the Trendline Breakout Report to alert us to breakouts. This reports lists all the securities that have broken a trendline in the last five days.

The trendlines are drawn to help identify support and resistance levels. The troughs, or reaction lows, are called support.

After a big correction, stocks rarely make a "V" shaped bottom. More often, the low looks more like a "W" where a low is formed, the stock rallies, and then retests the previous low. A horizontal trendline can be drawn connecting the lows of this double-bottom pattern.

Resistance is the opposite of support and represents a price level or area over the market where selling pressure overcomes buying pressure and a price advance is turned back. Resistance trendlines can be drawn connecting the high points of the security during the consolidation. Whereas the support line will almost always be horizontal, the resistance trendline may be slanted.

Stock Analysis continued on page 8

# AIQ Opening Bell

#### STOCK ANALYSIS continued . . .

We ran this EDS screening on July 24 and found several stocks that fit the pattern we were after. **Figures 5, 6, and 7** show some of the stocks that passed the screening along with trendlines. Traders can either buy when the stock nears the lower support line or wait for a break above the upper resistance line.

This is a very long-term model so a break above the consolidation pattern can have long-term implications. For many users, this model may be too long-term. For those users, you can simply change the data variables in the EDS model.

Expert Design Studio owners can download this EDS file off AIQ's web page by going to www.aiq.com. Choose *Technical Support* from the menu on the left, and then select *TradingExpert 4.1 and Expert Design Studio.* ■

David Vomund publishes VIS Alert, a weekly investment newsletter. For a sample copy go to **www.visalert.com** or call (702) 831-1544.

### AIQ 1998 LAKE TAHOE SEMINAR

Hyatt Regency Hotel Incline Village, Nevada

Thursday thru Saturday October 8, 9, 10

Keynote Speakers:

- Roy Blumberg
- Jerry Favors

All-day Options Session on Wednesday, October 7 (optional) featuring **David Shultz** and **Lawrence McMillan** 

For reservations or more information, call **800-332-2999** 

#### MARKET REVIEW

July was an active month for AIQ's market timing model. At the start of the month, the model was in a bullish mode from the June 16 buy signal. This lasted until July 21, when a 100 down signal was registered. From June 16 to July 21, the S&P 500 rose 7.1%, the Nasdaq Composite rose 12.9%, and the Russell 2000 rose 4%. The Phase indicator decreased on July 21 so the sell signal was confirmed on that day.

This was a timely signal as the market immediately went sour. Between the July 21 sell signal and July 29, the S&P 500 fell 3.4%, the Nasdaq Composite fell 4.9%, and the Russell 2000 fell 6.6%.

On July 29, the AIQ timing model registered a 98 buy signal. This signal initially looked promising as the Dow rose 111 the following day but sellers once again emerged. By the end of the month this signal is still not confirmed as the Phase indicator has decreased each day after the buy signal.

We've been in a two-tiered market where the largest blue chip stocks have done well while most of the broader market small company stocks are in a bear market. A look at the S&P 500 and the Russell 2000 tells the story. Figure 8 shows the Point & Figure chart on the S&P 500 which we introduced last month. A month ago the S&P 500 broke above its consolidation range registering a Point & Figure triple top buy signal in the process. This bullish pattern is still valid as the S&P 500 has simply moved back into the consolidation area. A.W. Cohen, the father of Point & Figure charting, estimated that a security tests its breakout about 50% of the time after a triple top buy signal. Therefore, the corrective phase that we are experiencing in the S&P 500 is a normal process unless the index falls below 1060 which would bring the current column of Os lower than the previous column of Os.

To duplicate this Point & Figure chart, set the value for the \$500 to

\$2000 price range to 100, which equates to a \$12.50 box size.

At the same time that the S&P 500 has an overall bullish pattern, the broader market is collapsing. The Russell 2000 is down about 4% this year and has corrected 15% since its April high. Amazingly, the average stock on the New York Stock Exchange is down 24% from its 52 week high, the biggest such decline since 1990. On the Nasdaq, the average stock has declined an even more dramatic 35%.

The S&P 500 is overstating the health of the market but even within the S&P 500 index, its performance is a result of a very limited amount of stocks. According to the Wall Street Journal on July 30, just five stocks – Microsoft, Lucent Technologies, General Electric, Wall-Mart, and Pfizer – provided a quarter of the index's return.

What does this mean to our analysis? The performance of the large-cap versus small-cap stocks demonstrates the importance of good asset allocation (see Opening Bell November 1997). The weekly RSMD SPX indicator on the Russell 2000 has been in a downtrend all year implying that small company stock investing should be avoided. ■

