

Unique Software for Thinking Traders

PHASE PROSPECTING ANALYSIS



By using the **Phase Rover** tool, traders can create **Tandem Studies** to determine when different market developments taking place and trade accordingly. As part of the **Phase Prospecting** analysis strategy, Tandem Studies are a most valuable, long-sought addition to Technical Analysis that is simply bound to significantly increase the accuracy of trading decisions

A screenshot of the Phase Rover software interface. The window title is "Phase Rover". The interface is divided into several sections. On the left is a list of study types, with "BarsDifference" selected. The main area contains fields for "Tandem Study name" (BarsDifference), "Description" (The Bars Difference shows the difference between the number of bars in the first phase and that in the second phase...), "Primary Phase" calculation (return CurrentPhaseBarsNumber()), "Secondary Phase" calculation (return CurrentPhaseBarsNumber()), "Tandem Study result" calculation (return PrimaryPhaseValue() - SecondaryPhaseValue()), "Display" options (Secondary Phase value checked), "Phase value location" (At the end of Phase selected), "Mark Tandem Study as" (Trend Line), "Color" (Green), "Style" (dashed line), "Suffix of Tandem Study's result", "Precision" (3), and "Font" (Sample). Buttons for "New", "Copy", "Delete", "Import/Export", "Edit...", "Insert", and "Close" are visible.

Tradecision's Phase Rover

What is Tandem Studies

Tandem Study is an utterly novel way of looking at the market and anticipating the market developments that can take place in the immediate future. It's a tool whose main purpose is analysis of the structure of the market. The essence of Tandem Study is an in-depth juxtaposition of two adjacent market phases, – the Primary phase and the Secondary phase. For each phase, the medium, extreme or accumulated value of the phase parameter is calculated. The value can reflect the momentum, energy, acceleration/deceleration, buying/selling pressure, volume or volatility. The formulas for the Primary and Secondary phases can be different. The values, derived for each of the phases, are compared or otherwise used in the calculation of the result for a specific Tandem Study.

A typical problem Tandem Study is designed to solve is answering the question how strong a new market phase will be after the completion of the current phase and what the duration of the new phase will be. For example, one can use Tandem Study to determine whether a bullish trend will continue after a strung-out, convoluted correction and whether the continuation will be strong enough to profit from it. Similarly, when a sideways move is over, it's possible to determine whether its breakthrough will be significant enough to profit from it by applying Tandem Study to the two previous phases. The phases can include the sideways move and preceding bullish or bearish trend.

Two Pillars

The Phase Prospecting method is pillared upon and combines two major approaches. The first approach is separating the price movement from the market noise by smoothing. The second approach consists in analyzing and taking into consideration the peculiarities of different market phases and how these peculiarities influence both the psychological state of the traders and the consequences this state may have on the future market developments.

In the first case, the likelihood of a trend continuing or reversing is assessed by **smoothing the price information for different time periods**. This is done to remove the noise. A number of diverse methods are applied, the best-known one being Moving Average. The length of the MA should be varied according to the different periods. When the market is trending sharply, the periodicity of the MA should also be adjusted. The novelty in using this tool in Tandem study consists in applying it to **different periods of time and analyzing the price information separately for the different phases of the market**. This kind of smoothing is the more optimal one: price information is smoothed within a market phase. As soon as the phase changes, the price information and other kinds of market-related information are analyzed differently. **As a result, the trader receives a separate set of price values to be analyzed for each of the market phases**. This allows fully taking into account the specifics of each of the phases that become the determining factors in the anticipation of the new market phase.

The second approach, used in Tandem study is rooted in trading psychology. This approach consists in analyzing the behavior of the market players based on the peculiarities of the current and previous market phases.

For example, the behavior of the market and it's participants during the current phase will be different after a weak bullish trend in the previous phase and a strong bullish trend in the previous phase. Tandem Study allows taking into account the important differences between the phases and their influence on the state of the market and behavior of its participants.

Importance of Phase Analysis

Tandem Study is based on the premise that for medium-term analysis of a stock or commodity in the present-day, fast-changing and interdependent markets, the most important are the two most recent market phases and later history plays a very unimportant part. Given this, the attempts to trace the more complicated structure of the market (price movement pattern) by using such approaches as, for example, the Elliott Waves, are becoming less and less efficient. Due to the psychological aspects and time limits for the arrival and processing of new information, the previous phase of the market is the most important for the current moment. The phase that immediately precedes the previous one also has a considerable influence.

Certainly, the overall state of the market and industry on the whole is extremely important, just like inter-market analysis. However, for the analysis of a specific security the most important is the analysis of the phase the security is in. This kind of analysis we call Phase Prospecting consists of the following components or stages:

- Determining the likelihood of different lengths, stability and force for the current phase;
- Determining the likelihood that a phase will change for several scenarios;
- Determining the likelihood of making a profit and evaluating the related risk for the more feasible scenarios.

It is only after this phase-prospecting analysis that the entry point can be determined and the conditions for profitable and unprofitable exit and position size can be defined (including the money management strategy to be applied).

All the existing indicators, chart patterns and studies are intended to serve the traditional, standardized approach to trading. They are often understood and interpreted the same way in different market phases. We deem this approach to be wrong. For example, candlestick patterns should be interpreted differently in the different market phases. At first, one should determine the phase the market is currently in, and only then make the relevant indicator-based calculations, for example, those of the negative and positive volumes.

The same goes for the use of the trend indicators: the applied indicators should be interpreted differently for sideways moves, sharp uptrends and trends that move with the minimum momentum. This kind of approach will not only help increase the precision of the analysis, but it will also help divide the applied trading approaches according to certain areas of the market. The latter will enable the trader to identify phases with a higher or lower precision of the market analysis. In addition, it will be possible to identify those market phases, for which certain indicators work better.

Tandem Study as a formalized part of Phase Prospecting is a new addition to Technical Analysis that, when properly combined with the classical TA methods, can significantly increase its precision.

Characteristics

Longer-Term Approach

The Tandem Study method is used to analyze large “lumps” of the market. In this kind of analysis, the key role is played by an extensive duration of the analyzed market phase and the clarity of the market developments within it. The method will yield **much better results when applied to long, pronounced, “exhausting” phases**, whose influence on the current psychological state of the traders involved can be easily evaluated, rather than to quick phases with strong trends. This happens because “exhausting” phases reflect the whole panoply of feelings of a great majority of the traders, thus showing how prepared these traders are for taking part in the future market developments. Initially, the Phase Prospecting method is intended for medium- and longer-term traders who don’t use small market moves.

Versatility of the Combined Calculations

Unlike usual indicators, Tandem Study enables the trader to **combine different types of calculations**, such as, for example, those for a sideways move and an uptrend. In the first case, the oscillator method can be used, whereas the uptrend part can be calculated using trend indicators. The results can then be compared to make a conclusion about the possible correction or, once the correction has begun, to define the price target range. We believe that the above method is a lot more precise in predicting the target price range and future market behavior than, for example, the Fibonacci studies or the various popular indicators, since the latter don’t take into account the peculiarities of different market phases. Thus, the Phase Prospecting method allows identifying the more predictable situations.

Simplicity of Use

Tandem Study doesn’t need to be optimized. Moreover, the length of the required calculations doesn’t need to be selected. Unlike any classical technical indicators, Tandem Study doesn’t calculate values for a strictly predefined number of bars back, as is done, for example, by RSI(14), which is calculated using the price values of the 14 preceding bars. The market itself shows the necessary length of the calculations with its rises and falls. Also, with Tandem Study, you don’t need to adjust the length of the calculations to the changing market conditions, as needs to be done for the Adaptive Moving Average.

Narrow Focus and High Customizability

Each Tandem Study is created for some specific type of contiguous phases. The division into phases can be different depending on the trader’s goals and the trading methods he applies. The next chapter contains a table with phases and recommended value combinations for the more frequently occurring situations. Tandem Study can be used to analyze the likelihood of a trend’s continuation after a strong trend. That is why it may not be expedient to use a weak, simple correction in the Tandem study that is used to analyze market situations with protracted, deep and ambiguous corrections (complicated strong corrections). In fact, each Tandem Study presupposes that it should be used to analyze a certain pair of neighboring market phases. Using Tandem Study in a different combination makes no sense and may even be detrimental to the decision-making process.

Phases Combinations

Primary phase/ secondary phase	Strong Simple Correction	Weak Simple Correction	Sideway move	Strong Complex Correction	Weak Complex Correction
Strong Bull Trend	High	High	Low	Medium	Medium
Weak Bull Trend	Medium	High	Low	Low	Low
Sideway move	x	x	n/a	x	x
Weak Bearish Trend	Medium	High	Low	Low	Low
Strong Bearish Trend	High	High	Low	Medium	Medium

The table above illustrates the kind of phase division that is applied when the trader's task is determining the likelihood of the main trend's continuation after the correction is complete. The table shows, which combination of values from the different phases provides a higher degree of precision of the market analysis.

The table provides a total of 24 options, 6 of which have great prognostic ability, 6 – medium, 8 – small, and 4 options are not considered. A more detailed version of the table is beyond the framework of this document, but it's worth a mention that such tables are at first built using the expert method, and then tested on historical data (its best to create a separate table for different markets). The discrepancies between the expert opinion and the historical data value are thoroughly checked into to find out the reasons. A solely expert or solely statistical approach can be erroneous.

Note: After a sideway move, it's hard to tell the sideway breakthrough from the expanding sideway move. When the breakthrough and new trend are pronounced well enough, the formation can no longer be referred to as a correction. Therefore, the formation is a new trend and the sideway move completes all the previous moves, thus showing that the forces of supply and demand are roughly equal and any further movement is extremely difficult to forecast.

Our experience shows that it's not worth using a sideway move as the Primary phase if you have no special reason or special trading system to do that.